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February 2018

The Ranch

Transportation Impact Assessment

Prepared for:
The City of Antioch

The Ranch

Transportation Impact Assessment

Prepared for:
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Raney Planning & Management, Inc.

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FEHR PEERS

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1. Introduction

This report presents the analysis and findings of the Transportation Impact Assessment (TIA) for The Ranch (project) located in the City of Antioch, Contra Costa County. This chapter discusses the TIA purpose, study locations and analysis scenarios, analysis methods, criteria used to identify significant impacts, and report organization.

Study Purpose and Project Description

The study's purpose is to evaluate the transportation impacts of The Ranch, a residential and commercial development on approximately 550-acres in the southeastern portion of the City of Antioch, within the Sand Creek Focus Area, which is also referred to as Future Urban Area 1 ("FUA-1"), as shown on **Figure 1.** Two project variants are under consideration. The first would include market rate and age restricted active adult (55+) development (multi-generational). The second would contain only market rate development (traditional). Both scenarios propose to develop a 5-acre area on Deer Valley Road into a Village Center, which could include local serving commercial uses. The project would also include other community facilities, including a fire station site and parks. Conceptual project site plans are shown on **Figure 2A** and **2B**, with each project variant described below.

Multi-Generational Community

- 500 active-adult age restricted detached single-family units
- 807 traditional detached single-family units
- 5-acres of commercial with up to 54,000 square feet of neighborhood commercial, potentially including office and retail space (assumed to all be retail for the purposes of evaluating the highest trip generating option)
- 3.5-acres of public use including a fire station and trail staging areas
- 22-acres of park
- 2.5-acres of landscape area
- 194.5-acres of open space
- 36-acres of roadways

Traditional Community

- 1,137 traditional detached single-family units
- 5-acres of commercial with up to 54,000 square feet of neighborhood commercial, potentially including office and retail space (assumed to all be retail for the purposes of evaluating the highest trip generating option)
- 3.5-acres of public use including a fire station and trail staging areas
- 17.5-acres of park
- 3-acres of landscape area
- 199.5-acres of open space
- 36-acres of roadways

Vehicular access would occur from the future extension of Sand Creek Road, which would traverse the site and connect to Deer Valley Road to Dallas Ranch Road, a new roadway that would connect to Deer Valley Road at Wellness Way, and new driveways on Deer Valley Road serving the commercial site.

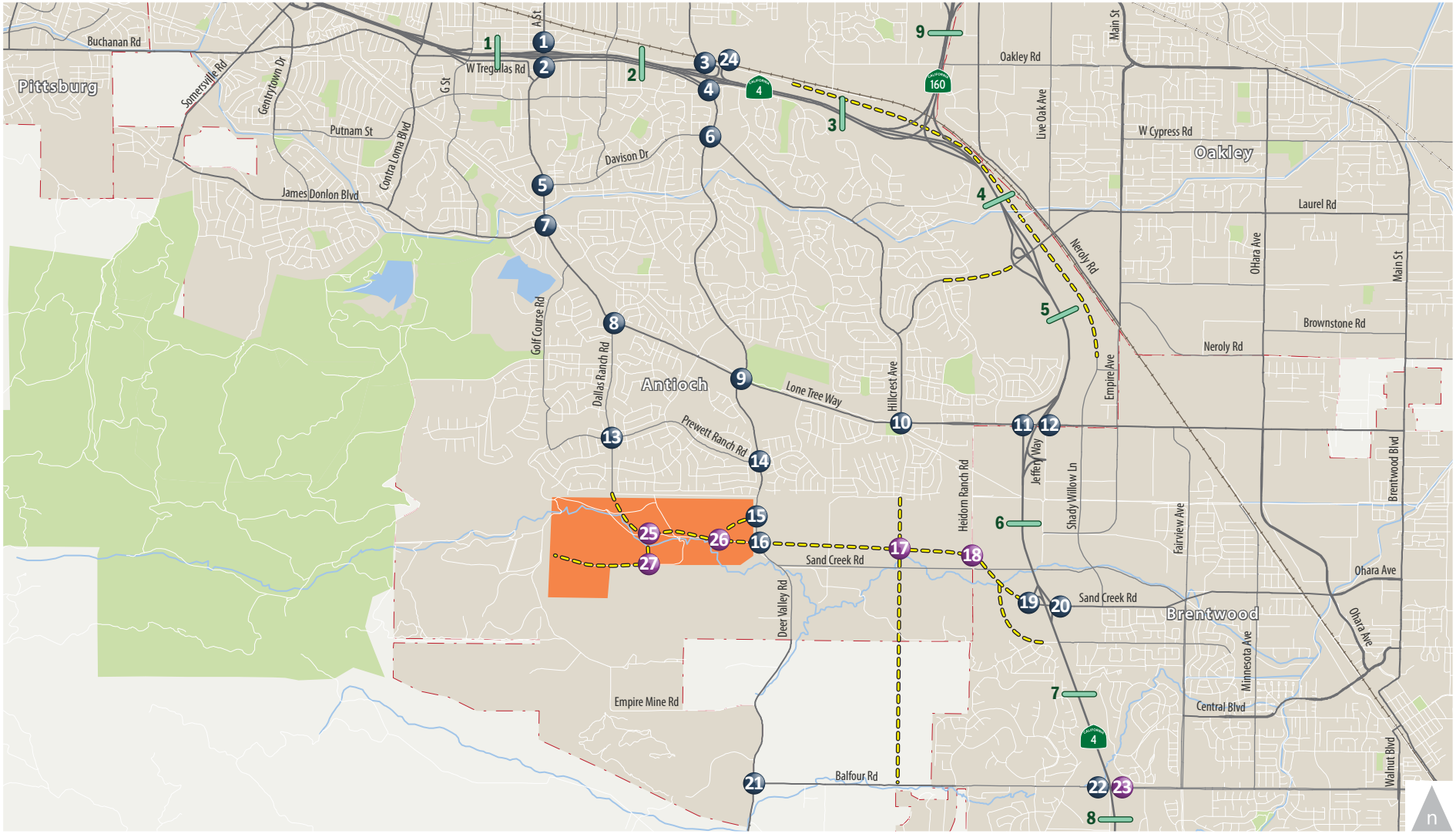
Sand Creek Road through the project site would ultimately be constructed as a four-lane arterial connecting to the current four-lane Dallas Ranch Road cross-section. As part of the project, the west side of Deer Valley Road would be widened to provide two travel lanes in the southbound direction through the intersection of Sand Creek Road (two travel lanes are already provided in the northbound direction), where Deer Valley Road would taper to maintain one travel lane per direction.

Study Locations and Analysis Scenarios

Project impacts on study area roadway facilities were determined by measuring the effect project traffic would have on intersections in the vicinity of the site during the morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak periods. The following intersections were selected based on a review of the Project location, estimates of the added traffic from the Project, and locations of planned roadways in the area:

1. Lone Tree Way/A Street/State Route 4 Westbound Ramps
2. Lone Tree Way/A Street/State Route 4 Eastbound Ramps
3. Hillcrest Avenue/Sunset Drive/Slatten Ranch Road
4. Hillcrest Avenue/State Route 4 Eastbound Ramps

5. Lone Tree Way/Davison Drive
6. Deer Valley Road/Hillcrest Avenue/Davison Drive
7. Lone Tree Way/James Donlon Boulevard
8. Lone Tree Way/Dallas Ranch Road
9. Lone Tree Way/Deer Valley Road
10. Lone Tree Way/Hillcrest Avenue
11. Lone Tree Way/State Route 4 Eastbound Ramps
12. Lone Tree Way/State Route 4 Westbound Ramps/Jeffery Way
13. Prewett Ranch Drive/Dallas Ranch Road
14. Prewett Ranch Drive/Deer Valley Road
15. Deer Valley Road/Wellness Way/Street A
16. Sand Creek Road/Deer Valley Road
17. Sand Creek Road/Hillcrest Avenue (future intersection)
18. Sand Creek Road/Heidorn Ranch Road (future intersection)
19. Sand Creek Road/State Route 4 Eastbound Ramps
20. Sand Creek Road/State Route 4 Westbound Ramps
21. Balfour Road/Deer Valley Road
22. Balfour Road/State Route 4 (analyzed as an at-grade intersection in the existing condition and Balfour Road/State Route 4 Eastbound Ramps in near-term and cumulative conditions)
23. Balfour Road/State Route 4 Westbound Ramps (near-term and cumulative conditions only)
24. Slatten Ranch Road/State Route 4 Westbound Ramps
25. Sand Creek Road/B Street (internal intersection)
26. Sand Creek Road/A Street (internal intersection)
27. B Street/C Street (internal intersection)



LEGEND

Project Site | Planned Future Roadway | Study Intersection | Future Intersection | Study Freeway Segment

Figure 1

Project Site Vicinity and Analysis Locations

Figure 2A

Conceptual Project Site Plan: Multi-Generational Community

Figure 2B

Conceptual Project Site Plan: Traditional Planned Community

The following freeway segments were evaluated:

1. State Route 4, west of Lone Tree Way/A Street
2. State Route 4, west of Hillcrest Avenue
3. State Route 4, west of State Route 160
4. State Route 4, west of Laurel Road
5. State Route 4, west (north) of Lone Tree Way
6. State Route 4, west (north) of Sand Creek Road
7. State Route 4, west (north) of Balfour Road
8. State Route 4, east (south) of Balfour Road
9. State Route 160, north of State Route 4

The following scenarios were evaluated:

- ***Existing*** – Existing (2017) conditions based on recent traffic counts.
- ***Existing with Project*** – Existing (2017) conditions with project-related traffic. Separate assessments of the multi-generational and traditional community were conducted.
- ***Near-Term without Project*** – Existing (2017) conditions with approved projects within the study area that could be constructed over the next five to ten years. Additional details are provided in Chapter 5.
- ***Near-Term with Project*** – Near-Term conditions with project-related traffic. Separate assessments of the multi-generational and traditional community were conducted.
- ***Cumulative without Project*** – Forecasts for the cumulative scenario based on traffic growth trends as described in both the Antioch and Brentwood General Plan EIR, and supplemented by a check of traffic forecasts for the study area in the most recent Contra Costa Transportation Authority Countywide travel demand model. The scenario reflects conditions over the next 20 to 25 years. Additional details are provided in Chapter 6.
- ***Cumulative with Project*** – Future forecast conditions with project-related traffic. Separate assessments of the multi-generational and traditional community were conducted.

Analysis Methods

The operations of roadway facilities are described with the term "level of service" (LOS). LOS is a qualitative description of traffic flow from a vehicle driver's perspective based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels of service are defined ranging from LOS A (free-flow conditions) to LOS F (over capacity conditions). LOS E corresponds to operations "at capacity." When volumes exceed capacity, stop-and-go conditions result and operations are designated LOS F.

Signalized Intersections

Traffic conditions at signalized intersections were evaluated using methods developed by the Transportation Research Board (TRB), as documented in the 2010 *Highway Capacity Manual* (2010 HCM) for vehicles using the analysis software Synchro 9.0. The HCM method calculates control delay at an intersection based on inputs such as traffic volumes, lane geometry, signal phasing and timing, pedestrian crossing times, and peak hour factors. Control delay is defined as the delay directly associated with the traffic control device (i.e., a stop sign or a traffic signal) and specifically includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The relationship between LOS and control delay is summarized in **Table 1.**

Unsignalized Intersections

For unsignalized (all-way stop controlled and side-street stop controlled) intersections, the 2010 HCM method for unsignalized intersections was used. With this method, operations are defined by the average control delay per vehicle (measured in seconds). The control delay incorporates delay associated with deceleration, acceleration, stopping, and moving up in queue. **Table 2** summarizes the relationship between LOS and delay for unsignalized intersections. At side-street stop controlled intersections, the delay is calculated for each stop-controlled movement, the left turn movement from the major street, as well as the intersection average. The intersection average delay and highest movement/approach delay are reported for side-street stop controlled intersections.

Table 1: Signalized Intersection LOS Criteria

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

Source: 2010 *Highway Capacity Manual*

Table 2: Unsignalized Intersection LOS Criteria

Level of Service	Description	Delay in Seconds
A	Little or no delays	≤ 10.0
B	Short traffic delays	> 10.0 to 15.0
C	Average traffic delays	> 15.0 to 25.0
D	Long traffic delays	> 25.0 to 35.0
E	Very long traffic delays	> 35.0 to 50.0
F	Extreme traffic, delays where intersection capacity exceeded	> 50.0

Source: 2010 *Highway Capacity Manual*

Freeway Segments

For freeway segments, the *East County Action Plan for Routes of Regional Significance,* CCTA has established the delay index as the Multimodal Transportation Service Objective (MTSO) for State Route 4 (SR 4) through the study area. The delay index is the ratio of travel time on a facility divided by the travel times that occur during non-congested free-flow periods. Should the delay index exceed 2.5 during either the AM or PM peak period, freeway operations would be considered deficient. This would equate to peak hour travel taking 2.5 times as long as off-peak travel or an average travel speed below 26 miles per hour assuming a non-congested free-flow speed of 65 miles per hour. The number of vehicles traveling in the high-occupancy vehicle (HOV) lane is also an MTSO.

Regulatory Setting and Significance Criteria

The project would have a significant impact on the environment if it would cause an increase in traffic which is substantial in relation to the traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, or delay and congestion at intersections), or change the condition of an existing street (e.g., street closures, changing direction of travel) in a manner that would substantially impact access or traffic load and capacity of the street system. Significance criteria are used to determine whether a project impact is considered significant and therefore requires mitigation. The City of Antioch strives to maintain LOS D operations at signalized intersections.

The following thresholds of significance were developed based on City of Antioch and East Contra Costa County Action Plan policies, as well as the CEQA Checklist criteria as shown below.

A. Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

    1. Would the operations of a study intersection not on a route of regional significance decline from LOS D (an average delay of 55 seconds for signalized intersections) or better to LOS E or F, based on the HCM LOS method, with the addition of Project traffic?

    2. Would the Project deteriorate already unacceptable operations at a signalized intersection by adding traffic?

3. Would the operations of an unsignalized study intersection decline from acceptable to unacceptable with the addition of Project traffic, and would the installation of a traffic signal based on the *Manual on Uniform Traffic Control Devices* (MUTCD) Peak Hour Signal Warrant (Warrant 3), be warranted?

4. Would construction traffic from the Project have a significant, though temporary, impact on the environment, or would Project construction substantially affect traffic flow and circulation, parking, and pedestrian safety?

B. Would the Project conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads and highways?

1. Would the operations of a study intersection on a route of regional significance decline from LOS high-D (an average delay of 55 seconds for signalized intersections) or better to LOS E or F, based on the HCM LOS method, with the addition of Project traffic?

2. Would the Project result in or worsen unacceptable conditions on State Route 4, based on delay index calculations, considering High Occupancy Vehicle (HOV) Lane usage?

    - The delay index should not exceed 2.5 during the AM or PM peak hour
    - HOV lane utilization should not exceed 600 vehicles per lane in the peak direction in the peak hour

C. Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

D. Would the Project substantially increase traffic hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

E. Would the project result in inadequate emergency access?

F. Would the Project conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Report Organization

This report is divided into ten chapters as described below:

- **Chapter 1 – Introduction** discusses the purpose and organization of the report.
- **Chapter 2 – Existing Conditions** describes the transportation system in the project vicinity, including the surrounding roadway network morning and evening peak period intersection turning movement volumes, existing bicycle, pedestrian, and transit facilities, and intersection operations.
- **Chapter 3 – Project Characteristics** presents relevant project information, such as the project components and project trip generation, distribution, and assignment.
- **Chapter 4 – Existing with Project Traffic Conditions** addresses the existing conditions with the project, and discusses project vehicular impacts.
- **Chapter 5 – Near-Term Traffic Conditions** addresses the near-term future conditions, both without and with the project, and discusses project vehicular impacts.
- **Chapter 6 – Cumulative Traffic Conditions** addresses the long-term future conditions, both without and with the project, and discusses project vehicular impacts.
- **Chapter 7 – Phasing Analysis** presents the results of a phasing analysis conducted for the project to identify impacts associated with each development phase.
- **Chapter 8 – Freeway Analysis** presents the results of the freeway analysis under existing, near-term and cumulative conditions.
- **Chapter 9 – Site Plan Review** describes project access and circulation for all travel modes. An assessment of significance criteria C through F is also provided.
- **Chapter 10 – Vehicle Miles of Travel** presents the results of the VMT assessment conducted for the site under existing conditions.

2. Existing Conditions

This chapter describes transportation facilities in the project study area, including the surrounding roadway network, transit, pedestrian, and bicycle facilities in the project site vicinity. Existing intersection operations are also described.

Roadway System

The project site is bound by existing single-family homes to the north, Deer Valley Road to the east, undeveloped land to the south, and Empire Mine Road, Black Diamond Mine Preserve and undeveloped land to the west in the City of Antioch. Antioch is located in eastern Contra Costa County, adjacent to the cities of Oakley and Brentwood, located east and southeast, respectively. Land uses surrounding the project site are residential, medical, vacant or agricultural.

Regional access to the site is provided by State Route 4, Lone Tree Way, Deer Valley Road and, once extended, Sand Creek Road. Dallas Ranch Road provides local access. The following discusses the roadways that would provide access to the site and are most likely to experience direct traffic impacts, if any, from the proposed project.

State Route 4 (SR 4) is an east-west freeway that extends from Hercules in the west to Stockton and beyond in the east. In the study area, SR 4 has a northwest/southeast orientation between SR 160 and Walnut Boulevard in east Contra Costa County. The facility is an eight lane freeway in the west to State Route 160, a six lane freeway from Route 160 to Laurel Road and a four lane freeway from Laurel Road to Sand Creek Road. Between Sand Creek Road and Walnut Boulevard, the facility is a two-lane highway with at-grade intersections at Balfour Road and Marsh Creek Road. Each intersection is signalized and operated by the California Department of Transportation (Caltrans). State Route 4 is a designated route of regional significance by the Contra Costa County Transportation Agency (CCTA). Routes of regional significance are roadways that connect two or more subareas of Contra Costa, cross County boundaries, carry significant through traffic, and/or provide access to a regional highway or transit facility.

Lone Tree Way is an east-west roadway located north of the Project site. The roadway provides two travel lanes in both directions to the west of Hillcrest Avenue, and three travel lanes in both directions east of Hillcrest Avenue. The posted speed limit is 45 miles per hour (mph). No on-street parking is permitted. Lone Tree Way is a designated route of regional significance.

Sand Creek Road is a four-lane, east-west roadway that extends east from State Route 4 through Brentwood. The posted speed limit is 45 mph. No on-street parking is permitted on Sand Creek Road. Class II bicycle lanes and sidewalks are provided along most of the roadway through Brentwood. Sand Creek Road from Brentwood Boulevard to its current terminus at State Route 4 is a route of regional significance. When constructed, the future extension of Sand Creek Road would also be a designated route of regional significance.

Deer Valley Road is a north-south roadway connecting Brentwood to Antioch. From south of Balfour Road to the project vicinity, it is two-lane rural road with adjacent areas mostly undeveloped and agricultural. Along the rural section there are no bicycle or pedestrian facilities, or paved shoulders. Around Sand Creek Road, Deer Valley Road starts to widen to provide two-travel lanes in each direction, sidewalks adjacent to developed parcels, and Class II bicycle lanes where the roadway provides two travel lanes in each direction. As part of the project, Deer Valley Road would be improved to its ultimate standard, which includes two travel lanes in each direction, bicycle lanes and sidewalks along the project frontage. Deer Valley has a posted speed limit of 45 miles per hour. Deer Valley Road is a designated Route of Regional Significance.

Dallas Ranch Road is a four-lane north-south roadway that would connect the proposed Sand Creek Road extension within the project site to Lone Tree Way. Two travel lanes are provided in each direction with bicycle lanes and sidewalks. No direct residential access is provided from Dallas Ranch Road. The posted speed limit on Dallas Ranch Road is 45 miles per hour although it is temporarily posted 25 mph approaching the southerly terminus.

Existing Pedestrian and Bicycle Facilities

Pedestrian facilities in the study area include sidewalks, crosswalks, pedestrian signals and multi-use trails. Improved roadways in the study area generally provide sidewalks on both sides of the street. No sidewalks are provided along Sand Creek Road along the Project frontage, but would be constructed with the project. At the signalized intersections in the area, crosswalks and pedestrian push-button actuated signals are provided. Bicycle facilities include the following:

- **Bike paths (Class I)** – Paved trails that are separated from roadways. These trails are also shared with pedestrians.
- **Bike lanes (Class II)** – Lanes on roadways designated for use by bicycles through striping, pavement legends, and signs.
- **Bike routes (Class III)** – Roadways designated for bicycle use by signs only; may or may not include additional pavement width for cyclists.

In the immediate project vicinity, portions of Deer Valley Road and Dallas Ranch Road provide Class II bicycle facilities with separate lanes designated for bicycle travel. Lone Tree Way in the vicinity has a striped shoulder that can be used by bicyclists along some roadway sections, but it is a not a designated bicycle lane. The Class I Mokelumne Trail is located north of the project site. The Mokelumne Trail ultimately connects to the Pittsburg/Bay Point BART Station. There are numerous existing Class I trails in the existing Dallas Rand Ranch and Prewett Ranch neighborhoods connecting residential neighborhoods to parks and schools.

Existing Transit Service

The Eastern Contra Costa Transit Authority (Tri Delta Transit) provides transit service in eastern Contra Costa County, serving the communities of Brentwood, Antioch, Oakley, Concord, Discovery Bay, Bay Point and Pittsburg. Thirteen routes operate on weekdays, with four routes operating on weekends. Three routes operate in the vicinity of the Project site, with Routes 379, 388, and 392 stopping at the Kaiser Medical Center on Deer Valley Road, opposite from the project site. Route 388 also has stops on Dallas Ranch Road and Prewett Ranch Road.

Routes 388 and 392 provide access to the Pittsburg BART station, with Route 388 providing weekday service on 30-to 60 minute headways and Route 392 providing weekend service on 60-minute headways. These routes also connect to Kaiser Medical Center, Sutter Delta Medical Center, Downtown Antioch, the Antioch Park-n-Ride lot location, the Pittsburg Park-n-Ride lot location and numerous schools.

Route 379 provides weekday school service with one morning bus from the Antioch Park-n-Ride lot location to Kaiser Medical Center.

In addition to the regular transit service to the study area, dial-a-ride door-to-door service within Eastern Contra Costa County is provided by Tri Delta Transit for disabled people of all ages and senior citizens.

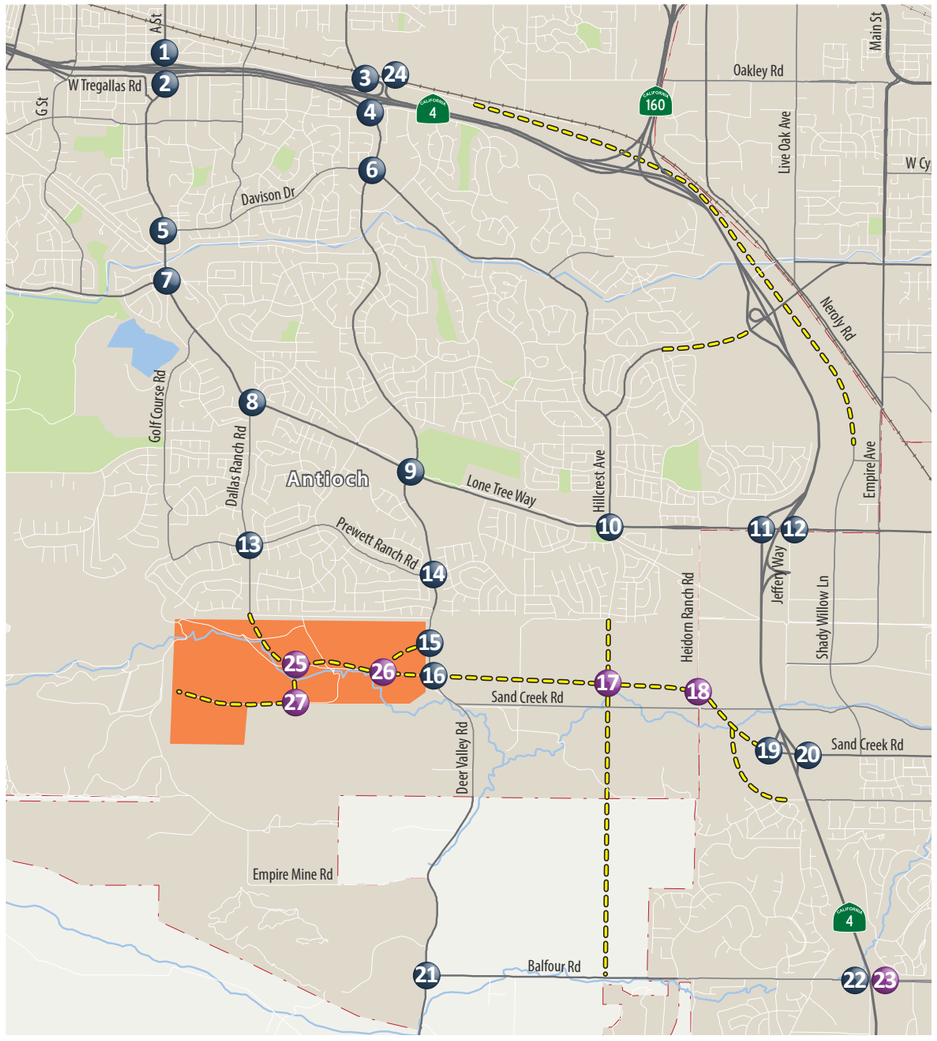
Bay Area Rapid Transit (BART) provides fixed rail transit to Eastern Contra Costa County. Currently, the terminus station is located in Pittsburg/Bay Point, approximately 13-miles from the project site vicinity. Weekday service is provided on approximately 15-minute headways and weekend service is provided on approximately 20-minute headways. Pittsburg/Bay Point Line connects to key regional employment centers, including Concord, Pleasant Hill, Walnut Creek, Oakland and San Francisco. Transfers to other lines can be made in Oakland.

An extension of BART, known as eBART, will provide an additional stop at Railroad Avenue in Pittsburg, and at Hillcrest Avenue in Antioch in the median of State Route 4. Timed transfers from BART to eBART will

occur at the Pittsburg/Bay Point BART station. The Hillcrest Avenue station is located at the Hillcrest Avenue Park and Ride lot location, approximately 4-miles from the project site. As of February 2018, BART is testing train operations and full passenger service is expected to start in May 2018. As part of expanded BART service to Antioch, Tri Delta Transit plans to adjust some transit routes to better serve the Hillcrest Avenue and Railroad Avenue stations.

Existing Traffic Counts

Weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak period intersection turning movement counts were collected at the study intersections, including separate counts of pedestrians and bicyclists, in August 2017 with area schools in normal session. Peak hour intersection vehicle volumes are summarized on **Figure 3** along with existing lane configurations and traffic controls. Bicycle and pedestrian counts are presented on **Figure 4**; as shown on Figure 4, existing bicycle and pedestrian activity at the study intersections is generally low. The traffic counts for existing conditions are provided in **Appendix A**.



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XX (YY) AM (PM) Peak Hour Traffic Volumes | Signalized Intersection | Stop Sign

Project Site | Planned Future Roadway | Study Intersection | Future Intersection

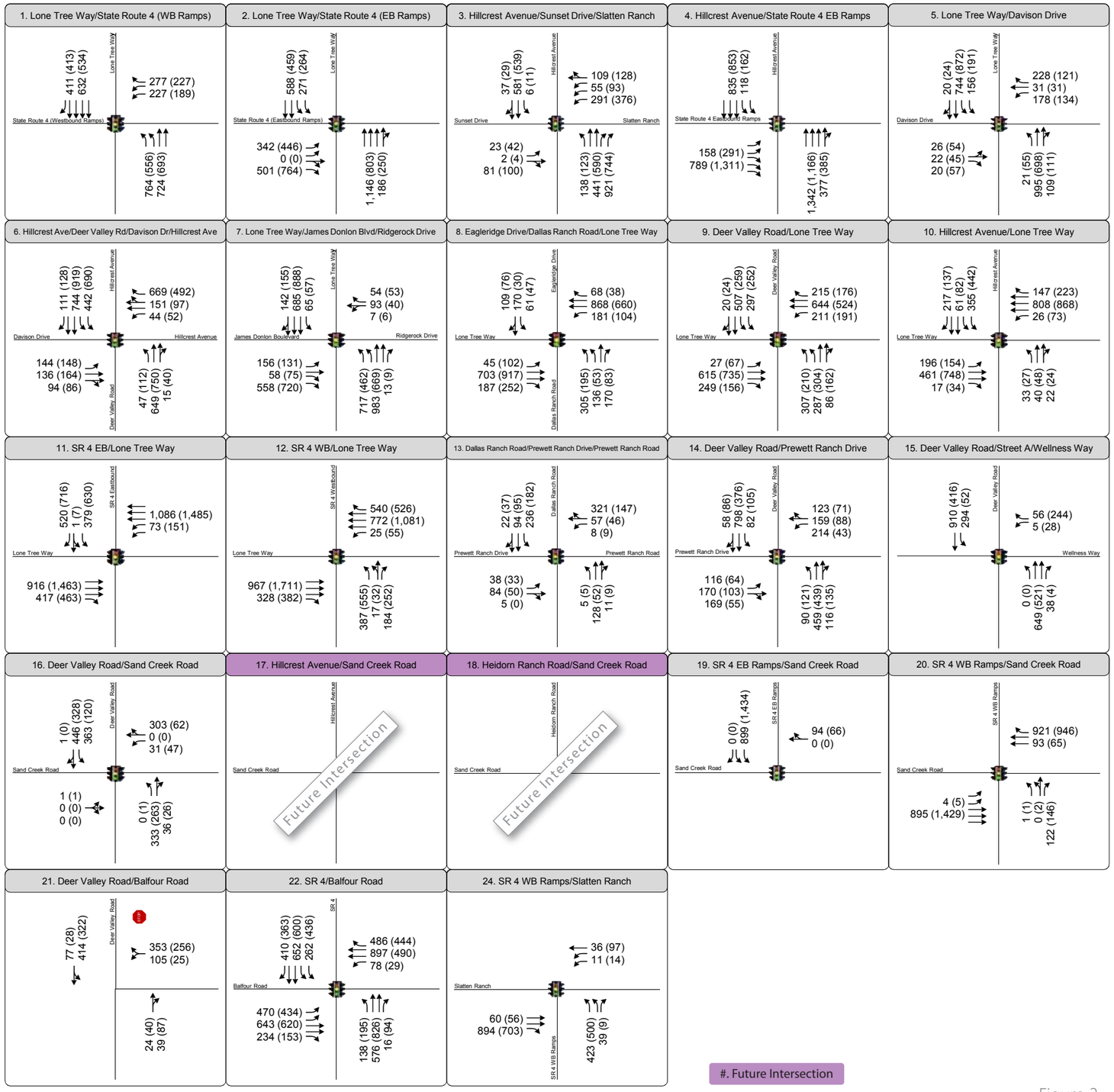
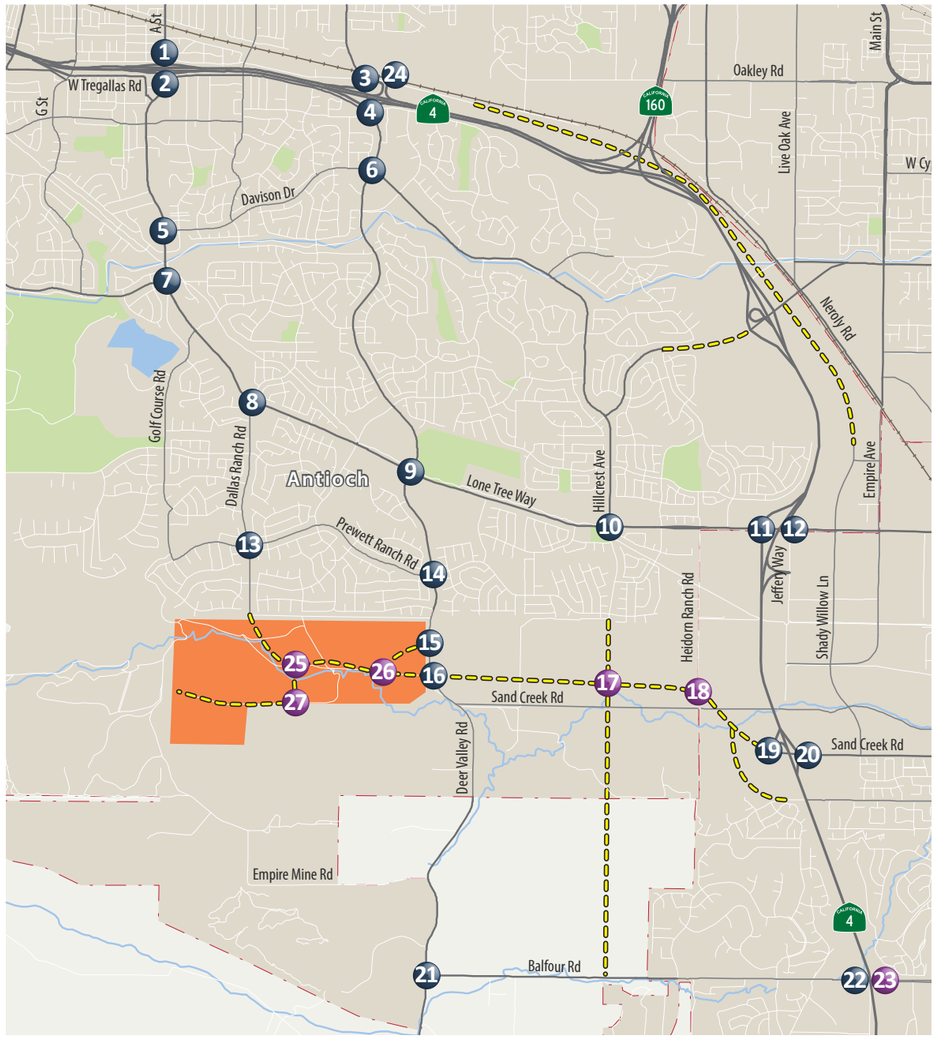


Figure 3

Existing
Peak Hour Traffic Volumes, Intersection Lane Configurations and Traffic Controls



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes | Signalized Intersection | Stop Sign

Project Site | Planned Future Roadway | Study Intersection | Future Intersection

Figure 4

Existing
Peak Hour Pedestrian and Bicycle Volumes

Existing Intersection Levels of Service

Existing intersection lane configurations, signal timings, and peak hour turning movement volumes were used to calculate the levels of service for the study intersections during each peak hour, using the Synchro 9.0 software program, as presented in **Table 3.** Observed peak hour factors[1] were used at all intersections for the existing analysis. Pedestrian and bicycle activity was also factored into the analysis. Detailed intersection LOS calculation worksheets are presented in **Appendix B**. As shown, signalized study intersections generally operate within the level of service standards set by the City of Antioch and Contra Costa County, except for the Hillcrest Avenue/State Route 4 Eastbound Ramp intersection, which operates at an overall LOS F during both the morning and evening peak hour. Poor operations are primarily due to the close proximity of the adjacent intersection (Hillcrest Avenue at Tregallas Road/Larkspur Drive), poor vehicle progression between closely spaced intersections which does not make efficient use of green time, and lane utilization imbalances for the eastbound right-turn movement from the off-ramp as well as the northbound through movement.

The unsignalized intersection of Deer Valley Road at Balfour Road currently experiences high levels of delay for vehicles turning from Balfour Road to Deer Valley Road during the morning peak hour. To assess the need for signalization of stop-controlled intersections, the Manual of Uniform Traffic Control (MUTCD) (Federal Highway Administration 2009) presents nine signal warrants. The Peak Hour Volume Warrant and the Peak Hour Delay Warrant was used in this study as a supplemental analysis tool to assess operations at the unsignalized intersections.[2] The Deer Valley Road at Balfour Road intersections currently meets peak hour signal warrants during the morning peak hour. **Appendix C** provides the existing conditions signal warrant worksheet.

[1] The peak hour factor is the relationship between the peak 15-minute flow rate and the full hourly volume: PHF = Hourly volume / (4 x (volume during the peak 15 minutes of flow)). The analysis level of served is based on peak rates of flow occurring within the peak hour because substantial short term fluctuations typically occurring during an hour.

[2] Unsignalized intersection warrant analysis is intended to examine the general correlation between existing conditions and the need to install new traffic signals. Existing peak-hour volumes are compared against a subset of the standard traffic signal warrants recommended in the MUTCD and associated State guidelines. This analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured traffic data and a thorough study of traffic and roadway conditions by an experienced engineer. Furthermore, the decision to install a signal should not be based solely on the warrants because the installation of signals can lead to certain types of collisions. The responsible State or local agency should undertake regular monitoring of actual traffic conditions and accident data and conduct a timely re-evaluation of the full set of warrants in order to prioritize and program intersections for signalization.

Table 3: Existing Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Delay[2]	LOS
1. Lone Tree Way/A Street/State Route 4 WB Ramps	Signal	AM PM	14 9	B A
2. Lone Tree Way/A Street/State Route 4 EB Ramps	Signal	AM PM	16 16	B B
3. Hillcrest Avenue/Sunset Drive/Slatten Ranch Road	Signal	AM PM	15 15	B B
4. Hillcrest Avenue/State Route 4 EB Ramps	Signal	AM PM	**86** **121**	**F** **F**
5. Lone Tree Way/Davison Drive	Signal	AM PM	17 15	B B
6. Deer Valley Road/Hillcrest Avenue/ Davison Drive	Signal	AM PM	26 26	C C
7. Lone Tree Way/James Donlon Boulevard	Signal	AM PM	21 17	C B
8. Lone Tree Way/Dallas Ranch Road	Signal	AM PM	31 16	C B
9. Lone Tree Way/Deer Valley Road	Signal	AM PM	34 25	C C
10. Lone Tree Way/Hillcrest Avenue	Signal	AM PM	19 21	B C
11. Lone Tree Way/State Route 4 EB Ramps	Signal	AM PM	16 39	B D
12. Lone Tree Way/State Route 4 Westbound Ramps/Jeffery Way	Signal	AM PM	8 12	A B
13. Prewett Ranch Drive/ Dallas Ranch Road	Signal	AM PM	18 14	B B
14. Prewett Ranch Drive/Deer Valley Road	Signal	AM PM	29 14	C B
15. Deer Valley Road/ Wellness Way/Street A	Signal	AM PM	7 5	A A
16. Sand Creek Road/Deer Valley Road	Signal	AM PM	11 7	B A
17. Sand Creek Road/ Hillcrest Avenue (future)	Signal	AM PM	-- --	-- --
18. Sand Creek Road/ Heidorn Ranch Road (future)	Signal	AM PM	-- --	-- --
19. Sand Creek Road/State Route 4 EB Ramps	Signal	AM PM	6 5	A A
20. Sand Creek Road/State Route 4 WB Ramps	Signal	AM PM	4 5	A A

Table 3: Existing Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Delay[2]	LOS
21. Balfour Road/Deer Valley Road	SSSC	AM PM	30 **(58)** 8 (13)	D **(F)** A (B)
22. Balfour Road/State Route 4	Signal	AM PM	45 38	D D
24. Slatten Ranch/State Route 4 WB Ramps	Signal	AM PM	9 8	A A

Notes:
1. Signal = signalized intersection; SSSC = side-street stop-control
2. Average intersection delay is calculated for all signalized intersections using the HCM method for vehicles.
Source: Fehr & Peers, 2017

Vehicle queues were also calculated by Synchro 9.0 and the queuing reports are provided in **Appendix D** along with a summary table. In the existing condition, average left-turn vehicle queues are contained within the available storage with the 95th percentile vehicle queue for some movements potentially extending beyond the available storage, including:

- Hillcrest Avenue/State Route 4 Eastbound Ramps (northbound through movement, AM and PM peak hour)
- Lone Tree Way/A Street at State Route 4 Westbound Ramps (northbound left-turn, AM peak hour)
- Hillcrest Avenue at Davison Drive/Deer Valley Road (eastbound left, AM Peak Hour; northbound left, PM peak hour)
- Lone Tree Way at James Donlon Boulevard/Ridgerock Drive (eastbound left-turn and northbound left-turn, AM and PM peak hours)
- Lone Tree Way at Dallas Ranch Road/Eagleridge Drive (westbound left-turn and northbound left-turn, AM peak hour)
- Lone Tree Way at Deer Valley Road (northbound left-turn, AM peak hour)
- Dallas Ranch Road at Prewett Ranch Drive/Prewett Ranch Road (southbound left, AM peak hour)

3. Project Characteristics

This chapter provides an overview of the proposed project components and addresses the proposed project trip generation, distribution, and assignment characteristics, allowing for an evaluation of project impacts on the surrounding roadway network. The amount of traffic associated with the project was estimated using a three-step process:

1. **Trip Generation** – The *amount* of vehicle traffic entering/exiting the project site was estimated.
2. **Trip Distribution** – The *direction* trips would use to approach and depart the site was projected.
3. **Trip Assignment** – Trips were then *assigned* to specific roadway segments and intersection turning movements.

Project Description

The approximately 550-acre project site is located in the southeastern portion of the City of Antioch, within the Sand Creek Focus Area. The site is bound by existing single-family homes to the north, Deer Valley Road to the east, undeveloped land to the south, and Empire Mine Road, Black Diamond Mine Preserve and undeveloped land to the west. The site is currently undeveloped with the exception of an agricultural facility on Snodgrass Lane between Deer Valley and Empire Mine Roads. This facility includes a cattle grazing operation, one residential structure, and various barns and outbuildings located in the eastern portion of the site that may be removed as part of the project (no trip credit was taken for the potential removal of existing uses such that if the existing uses are not removed, the conclusions of this study would not change). Sand Creek bisects the project site.

Two project variants are under consideration. The first would include market rate and age restricted active adult (55+) development (multi-generational). The second would contain only market rate development (traditional). Both scenarios propose to develop a 5-acre area on Deer Valley Road into a Village Center, which could include local serving commercial uses. The project would also include other community facilities, including a fire station site and parks.

Multi-Generational Community

- 500 active-adult age restricted detached single-family units
- 807 traditional detached single-family units

- 5-acres of commercial with up to 54,000 square feet of neighborhood commercial, potentially including office and retail space (assumed to all be retail for the purposes of evaluating the highest trip generating option)
- 3.5-acres of public use including a fire station and trail staging areas
- 22-acres of park
- 2.5-acres of landscape area
- 194.5-acres of open space
- 36-acres of roadways

Traditional Planned Community

- 1,137 traditional detached single-family units
- 5-acres of commercial with up to 54,000 square feet of neighborhood commercial, potentially including office and retail space (assumed to all be retail for the purposes of evaluating the highest trip generating option)
- 3.5-acres of public use including a fire station and trail staging areas
- 17.5-acres of park
- 3-acres of landscape area
- 199.5-acres of open space
- 36-acres of roadways

Vehicular access would occur from the future extension of Sand Creek Road which would traverse the site and connect to Deer Valley Road to Dallas Ranch Road, a new roadway that would connect to Deer Valley Road at Wellness Way, and new driveways on Deer Valley Road serving the commercial site.

Sand Creek Road through the project site would ultimately be constructed as a 4-lane arterial connecting to the current 4-lane Dallas Ranch Road cross-section (an assessment of Sand Creek Road through the site as a two-lane roadway was also conducted as presented in Chapter 9). As part of the project, the west side of Deer Valley Road would be widened to provide two travel lanes in the southbound direction through the intersection of Sand Creek Road (two travel lanes are already provided in the northbound direction), where Deer Valley Road would taper to maintain one travel lane per direction.

Project Trip Generation

Trip generation refers to the process of estimating the amount of vehicular traffic a project would add to the surrounding roadway system. Estimates are created for the daily condition and for the peak one-hour period during the morning and evening commute when traffic volumes on the adjacent streets are typically the highest. Project trip generation was estimated using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (9th Edition). Separate trip generation estimates were developed for each project alternative under consideration described on the previous page, as presented in **Table 4.**

The multi-generational project is expected to generate approximately 11,830 daily vehicle trips, including approximately 770 morning peak hour and 1,150 evening peak hour trips, including the trip generating potential of the commercial uses on Deer Valley Road. The traditional project is expected to generate approximately 13,130 daily vehicle trips, including approximately 910 morning peak hour and 1,340 evening peak hour trips, including the trip generating potential of the commercial uses on Deer Valley Road. In summary, the traditional community is expected to generate more vehicle trips than the multi-generational community, with 1,300 more daily trips, 140 more morning peak hour and 200 more evening peak hour vehicle trips.

For the commercial center, a portion of the trips could already be on the roadway system. These trips are typically referred to as pass-by or diverted trips. However, as the proposed uses are unknown and traffic volumes are relatively low on the portion of Deer Valley Road adjacent to the project site, no pass-by or diverted trip reductions were considered in this assessment. As the project components are better defined, the application of appropriate pass-by rates is recommended, especially in the calculation of potential fair-share contributions to mitigation measures.

Project Trip Distribution and Assignment

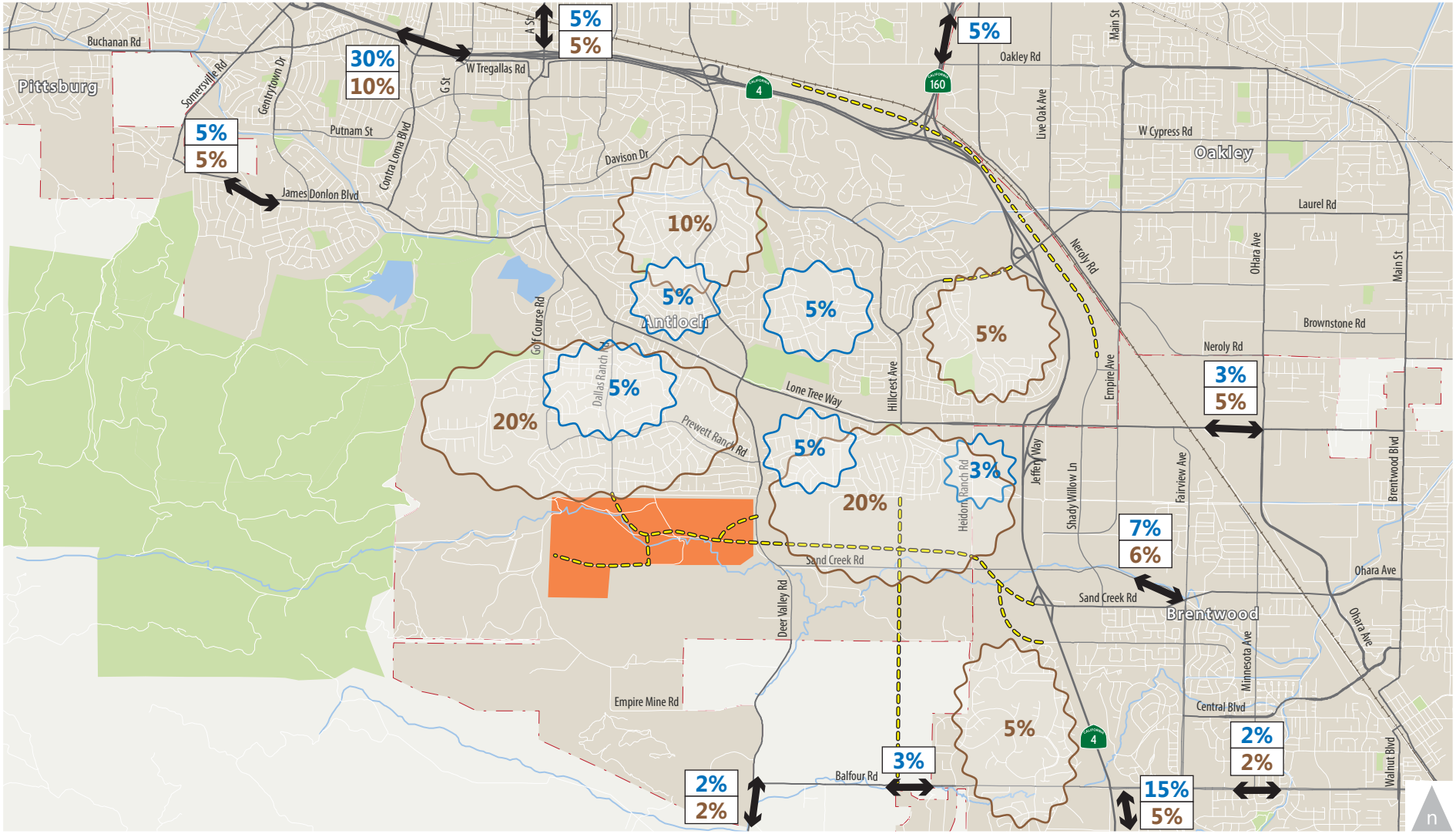
Project trip distribution refers to the directions of approach and departure that vehicles would take to access and leave the site. Estimates of regional project trip distribution were developed based on existing travel patterns in the area, a select zone analysis using the Contra Costa Transportation Authority (CCTA) travel demand model, and the location of complementary land uses, such as schools, employment centers, and retail/recreational opportunities. Separate estimates were developed for the residential and commercial portions of the project as they are likely to have different trip distribution patterns. The resulting trip distribution percentages are shown on **Figure 5.** Project trips where then assigned to the roadway network for each of the project alternatives, as show on Figure 6 for the existing roadway network, Figure 7 for the near-term roadway network, and Figure 8 for the cumulative roadway network.

Table 4: Vehicle Trip Generation Estimates

Use	Size	Weekday						
		Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Scenario 1 – Multi-Generational Community								
Age Restricted Single Family Homes[1]	500 dwelling units	1,840	40	70	110	80	55	135
Market-rate Single Family Homes[2]	807 dwelling units	7,680	151	454	605	508	299	807
General Commercial[3]	54,000 square feet	2,310	32	20	52	96	104	200
Total Project Trips		*11,830*	*223*	*544*	*767*	*684*	*458*	*1,142*
Scenario 2 – Traditional Community								
Market-rate Single Family Homes[2]	1,137 dwelling units	10,820	213	640	853	716	421	1,137
General Commercial[3]	54,000 square feet	2,310	32	20	52	96	104	200
Total Project Trips		*13,130*	*245*	*660*	*905*	*812*	*525*	*1,337*
Difference between Traditional and Multi-Generational Project		***1,300***	***22***	***116***	***138***	***128***	***67***	***195***

1. ITE land use category 251 - Senior Adult Housing – Detached (Adj Streets, 7-9A, 4-6P):
   Daily: (T) = 3.68 (X)
   AM Peak Hour: T = 0.22(X); Enter = 35%; Exit = 65%
   PM Peak Hour: T = 0.27(X); Enter = 61%; Exit = 39%
2. ITE land use category 210 – Single-Family Homes (Adj Streets, 7-9A, 4-6P):
   Daily: (T) = 9.52 (X)
   AM Peak Hour: T = 0.75(X); Enter = 25%; Exit = 75%
   PM Peak Hour: T = 1.0(X); Enter = 63%; Exit = 37%
3. ITE land use category 820 – General Commercial (Adj Streets, 7-9A, 4-6P):
   Daily: (T) = 42.7 (X)
   AM Peak Hour: T = 0.96(X); Enter = 62%; Exit = 38%
   PM Peak Hour: T = 3.71 (X); Enter = 48%; Exit = 52%

Source: *Trip Generation Manual* (9th Edition), ITE, 2012; Fehr & Peers, 2018.



LEGEND

Project Site

Planned Future Roadway

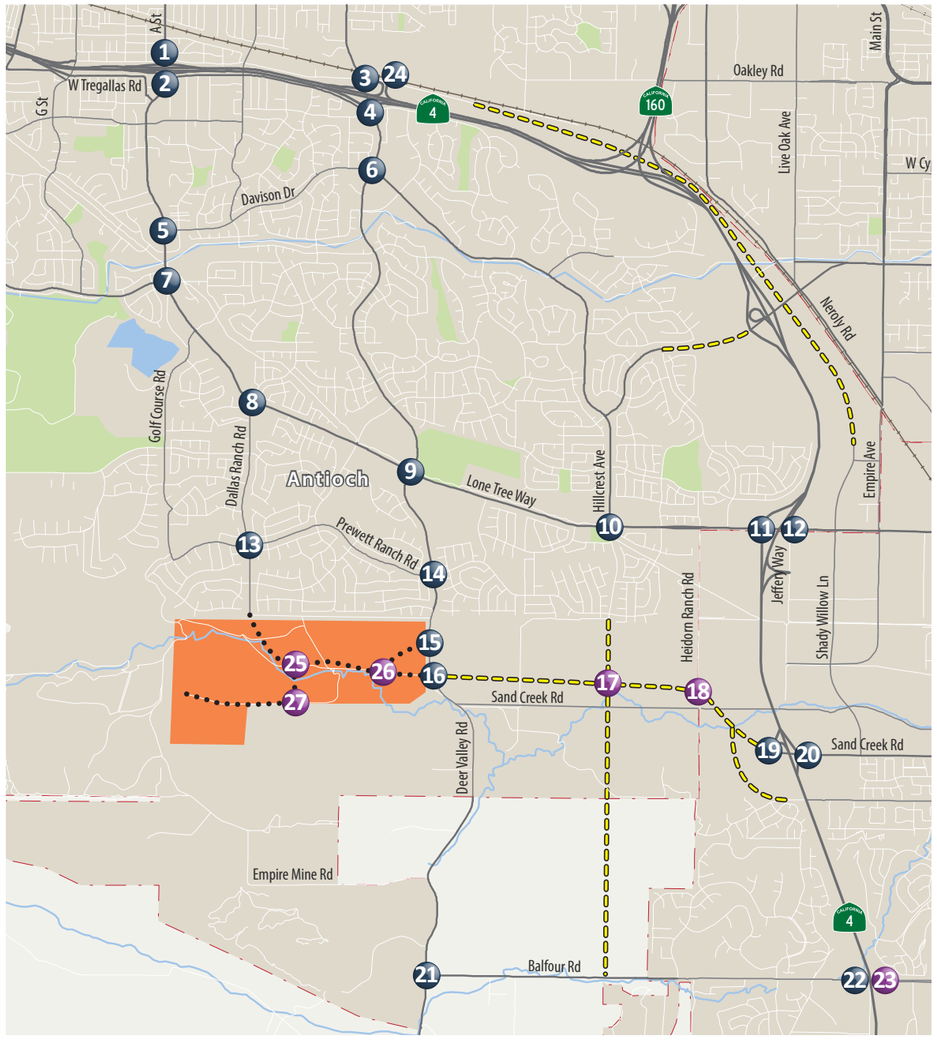
X% / Y%

Residential Trip Distribution

Retail Trip Distribution

Figure 5

Project Trip Distribution Percentages



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

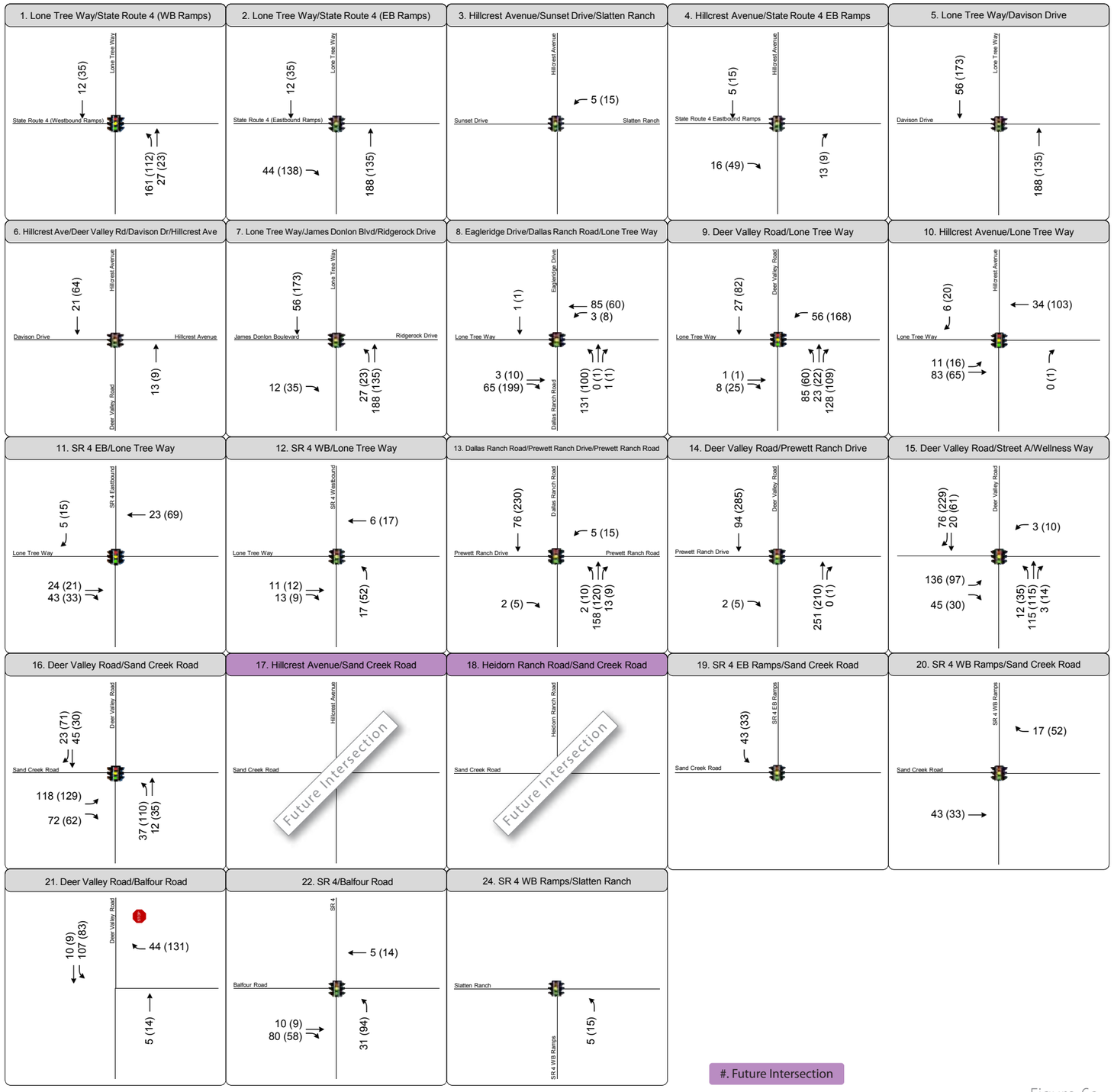
Project Site

Planned Future Roadway

Study Intersection

Future Intersection

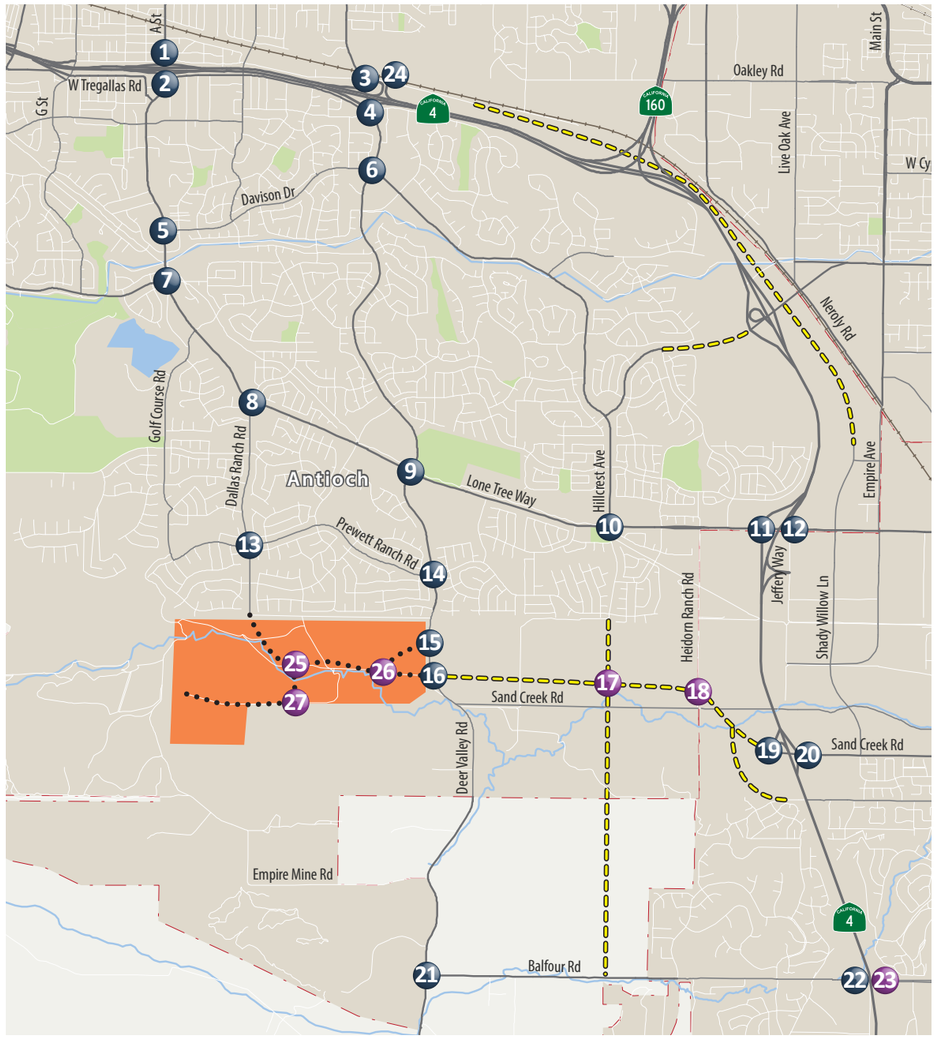
Roadway Improvements Expected to Be Complete



#. Future Intersection

Figure 6a

Project Trip Assignment
Existing Roadway Network, Multi-Generational Community



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Planned Future Roadway

Study Intersection

Future Intersection

Roadway Improvements Expected to Be Complete

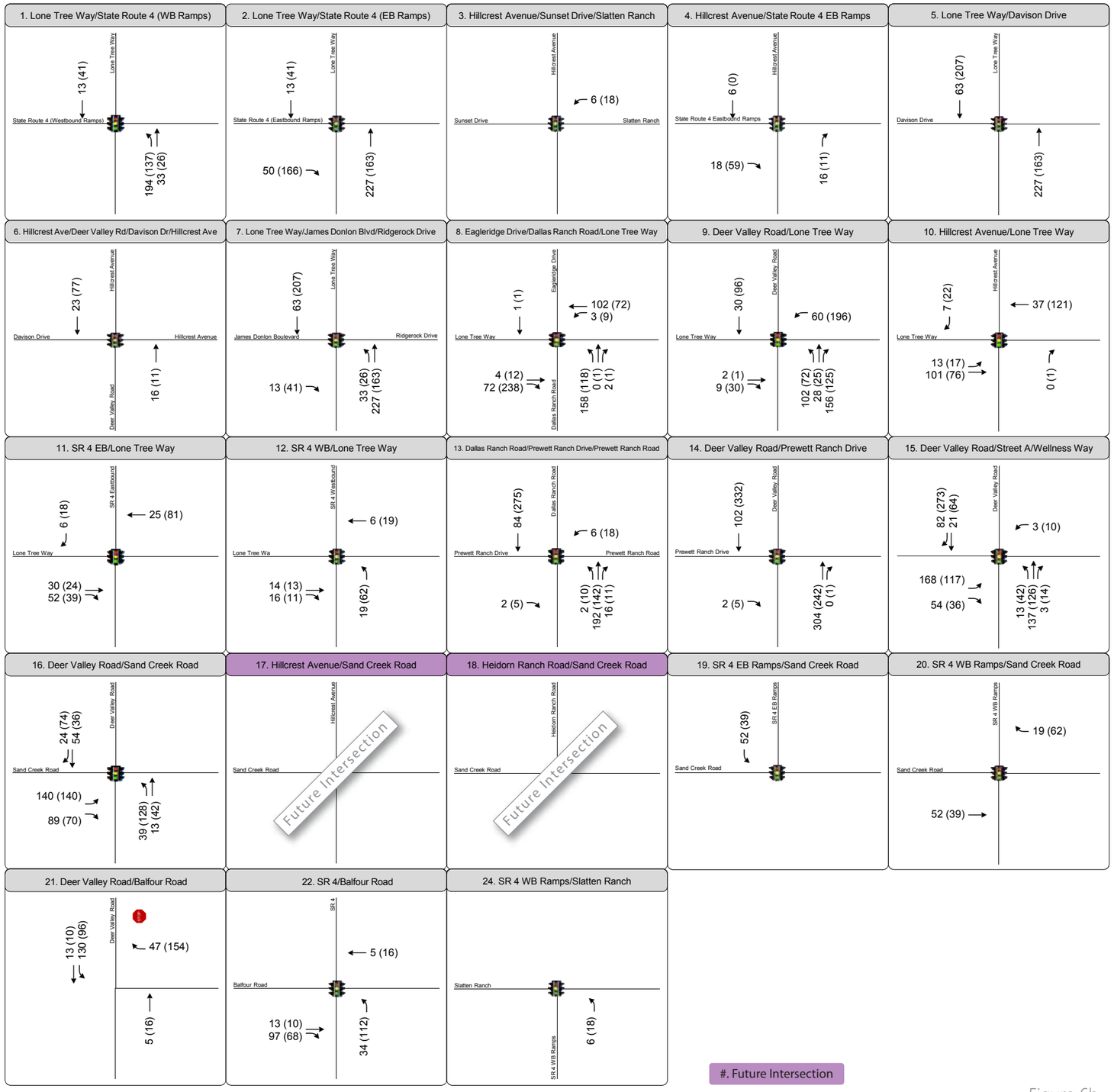
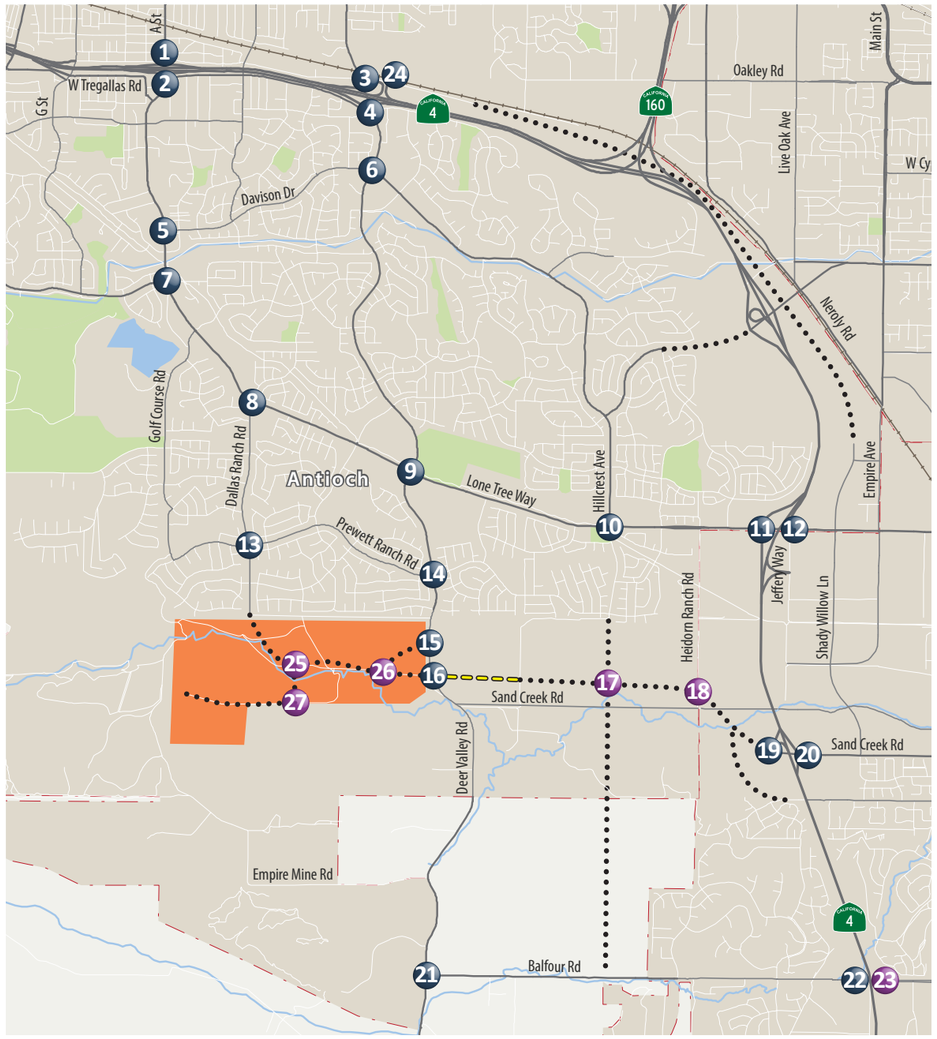


Figure 6b

Project Trip Assignment
Existing Roadway Network, Traditional Community



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes | Signalized Intersection | Stop Sign

Project Site | Planned Future Roadway | Study Intersection | Future Intersection

Roadway Improvements Expected to Be Complete

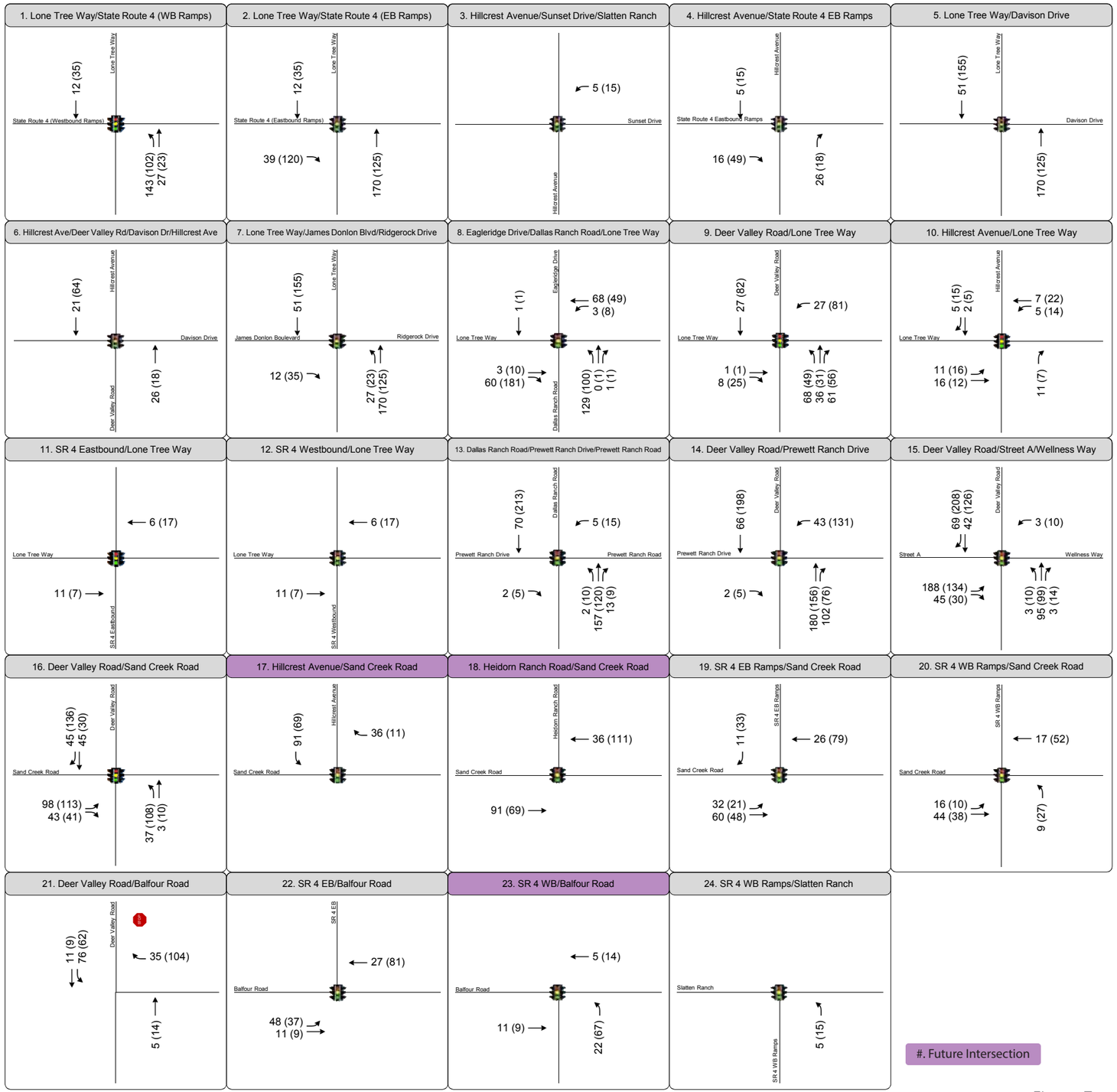
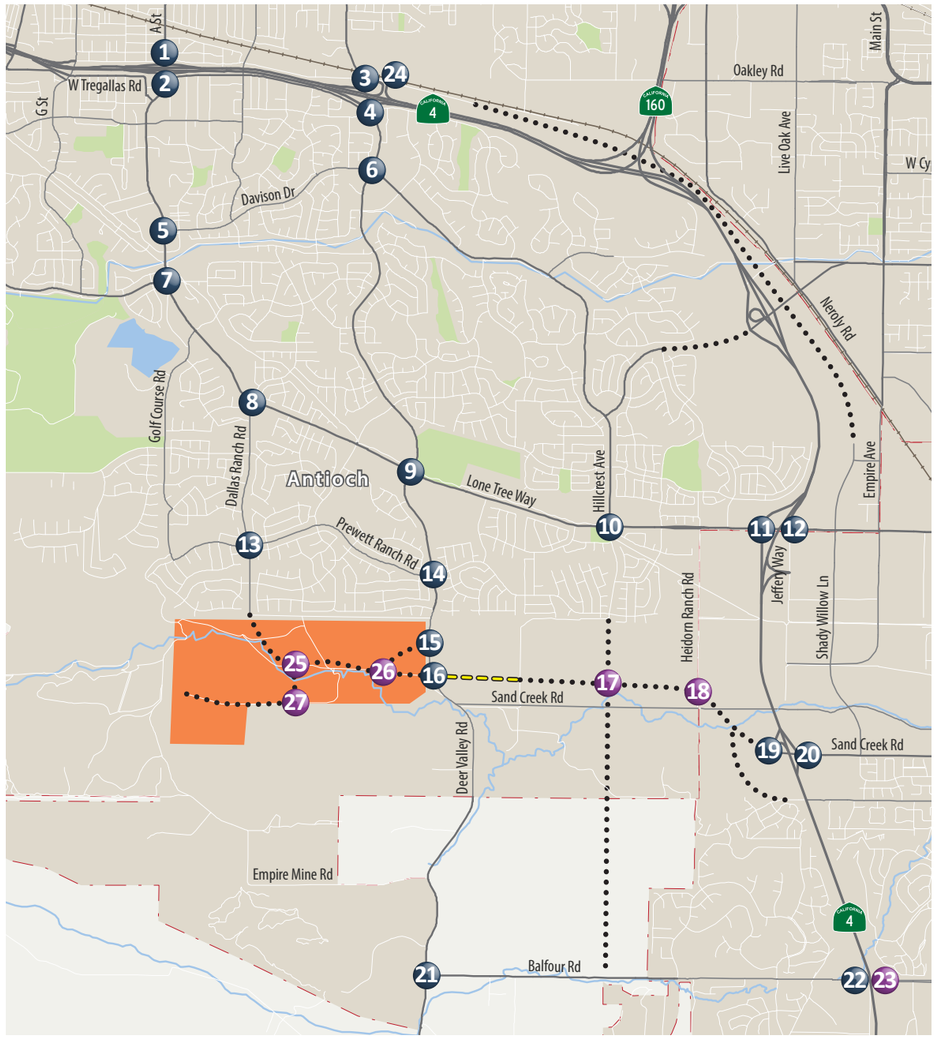


Figure 7a

Project Trip Assignment
Near-Term Roadway Network, Multi-Generational Community



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Planned Future Roadway

Study Intersection

Future Intersection

Roadway Improvements Expected to Be Complete

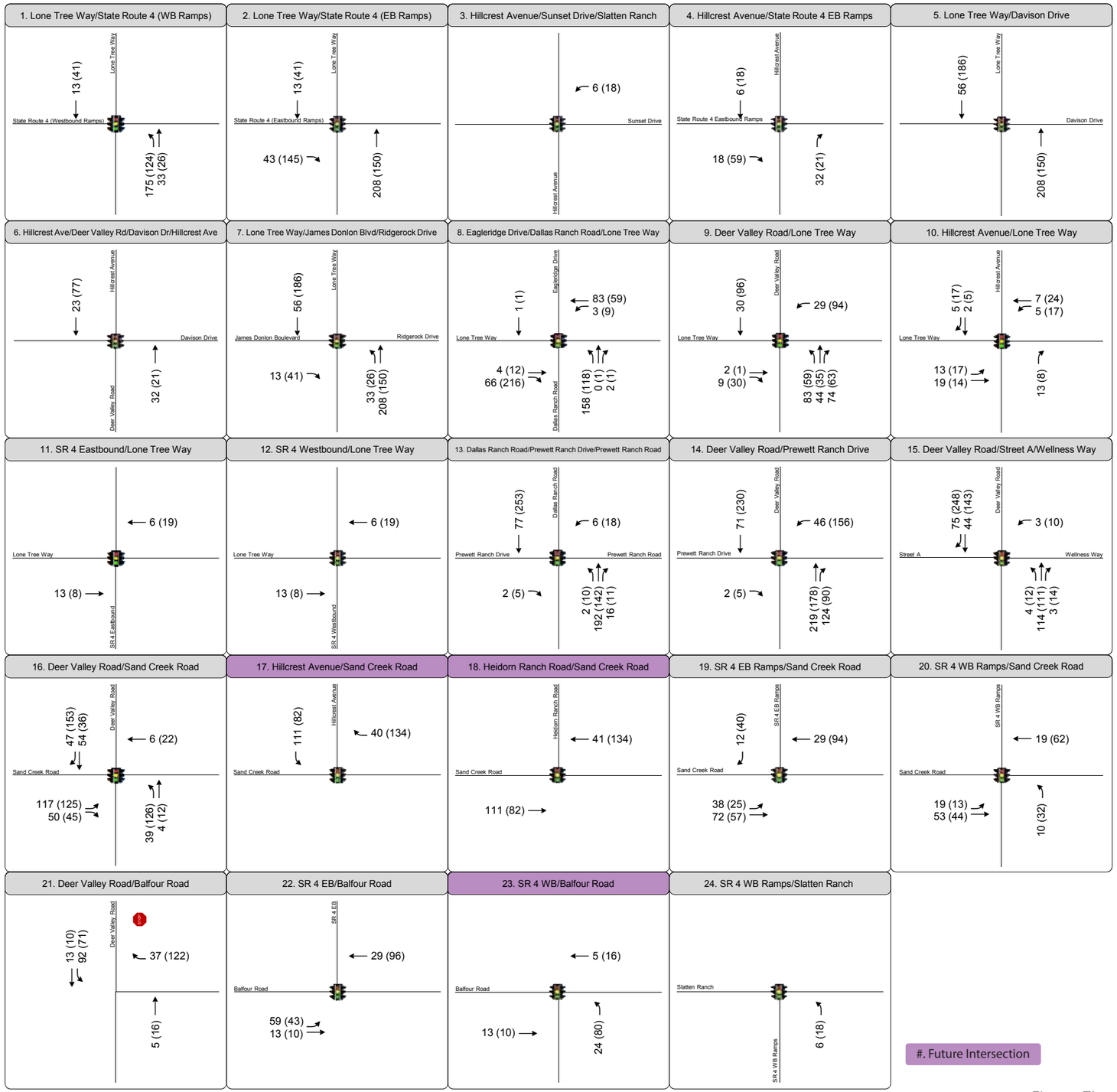
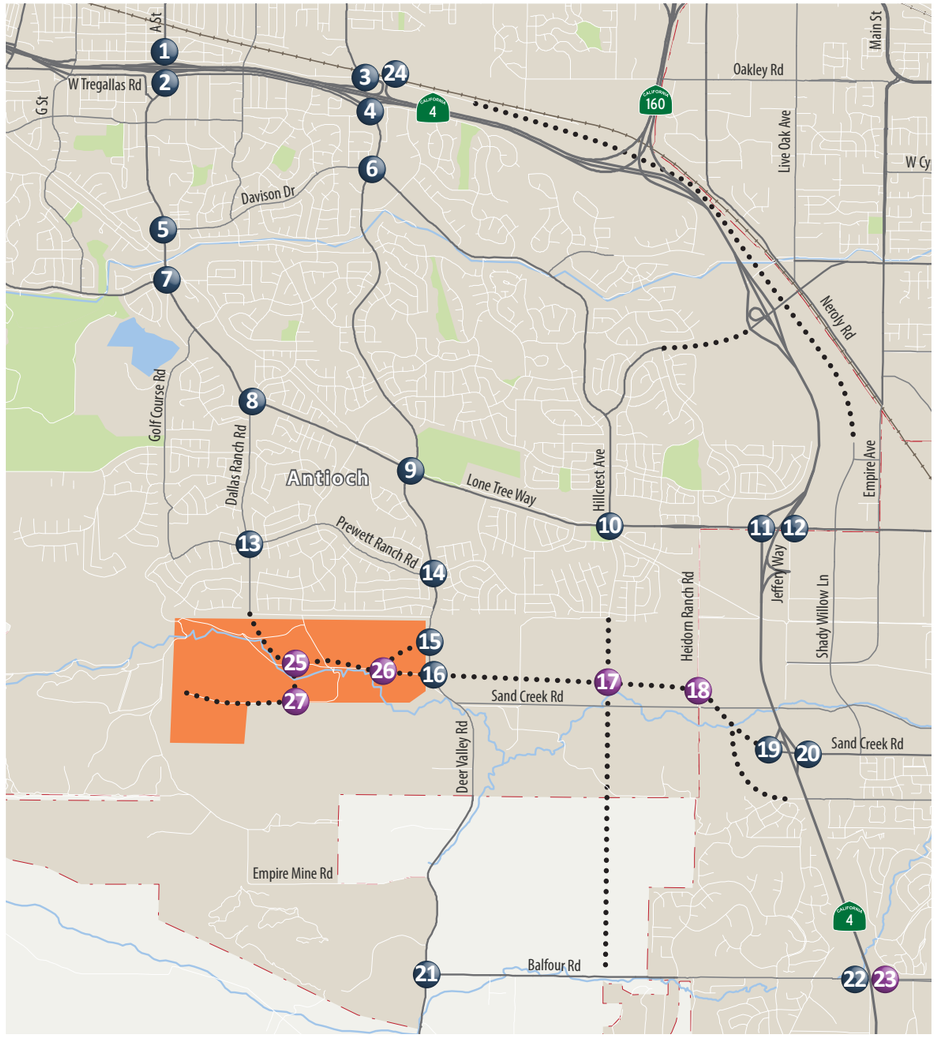


Figure 7b

Project Trip Assignment
Near-Term Roadway Network, Traditional Community



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Roadway Improvements Expected to Be Complete

Study Intersection

Future Intersection

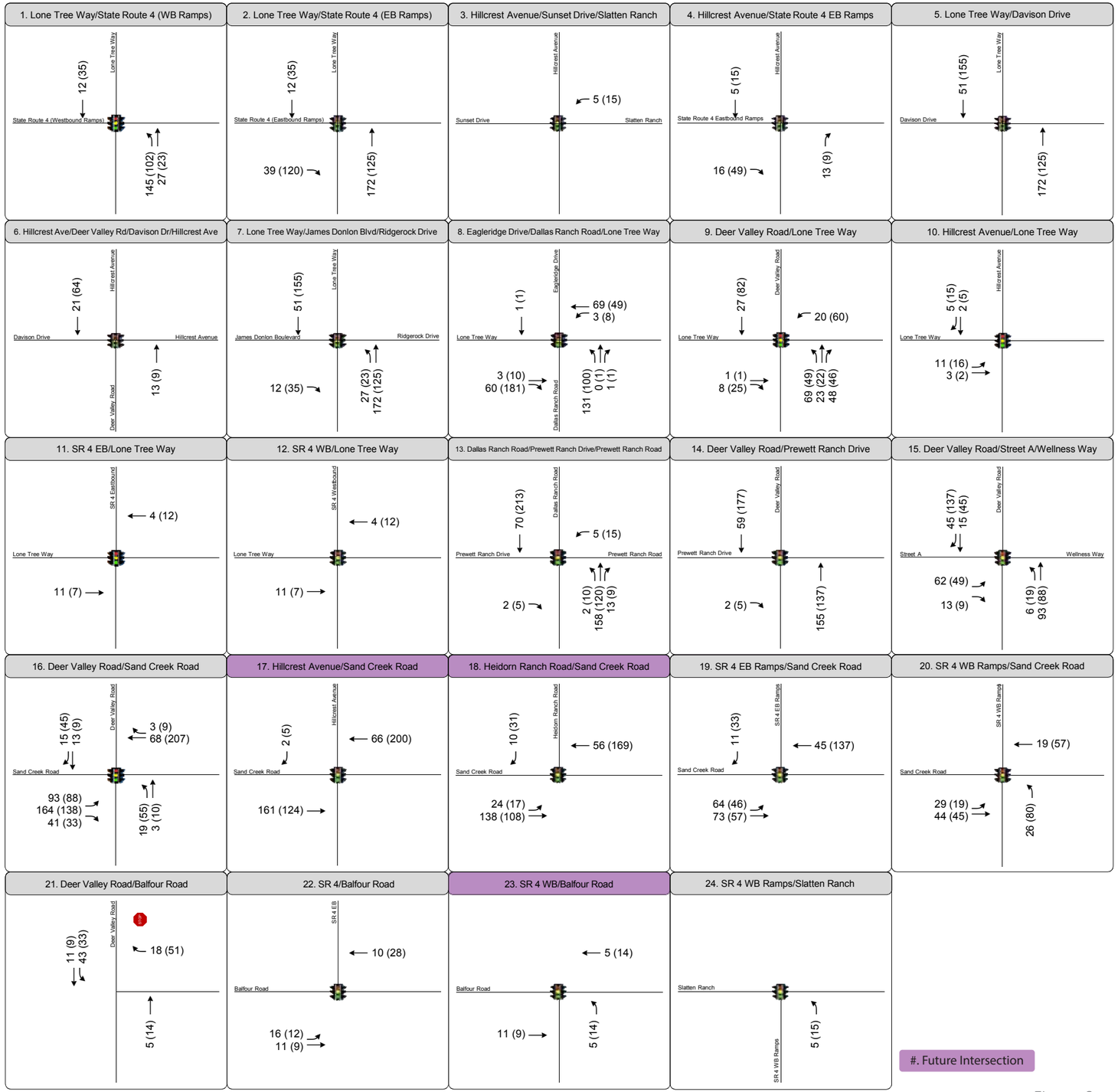
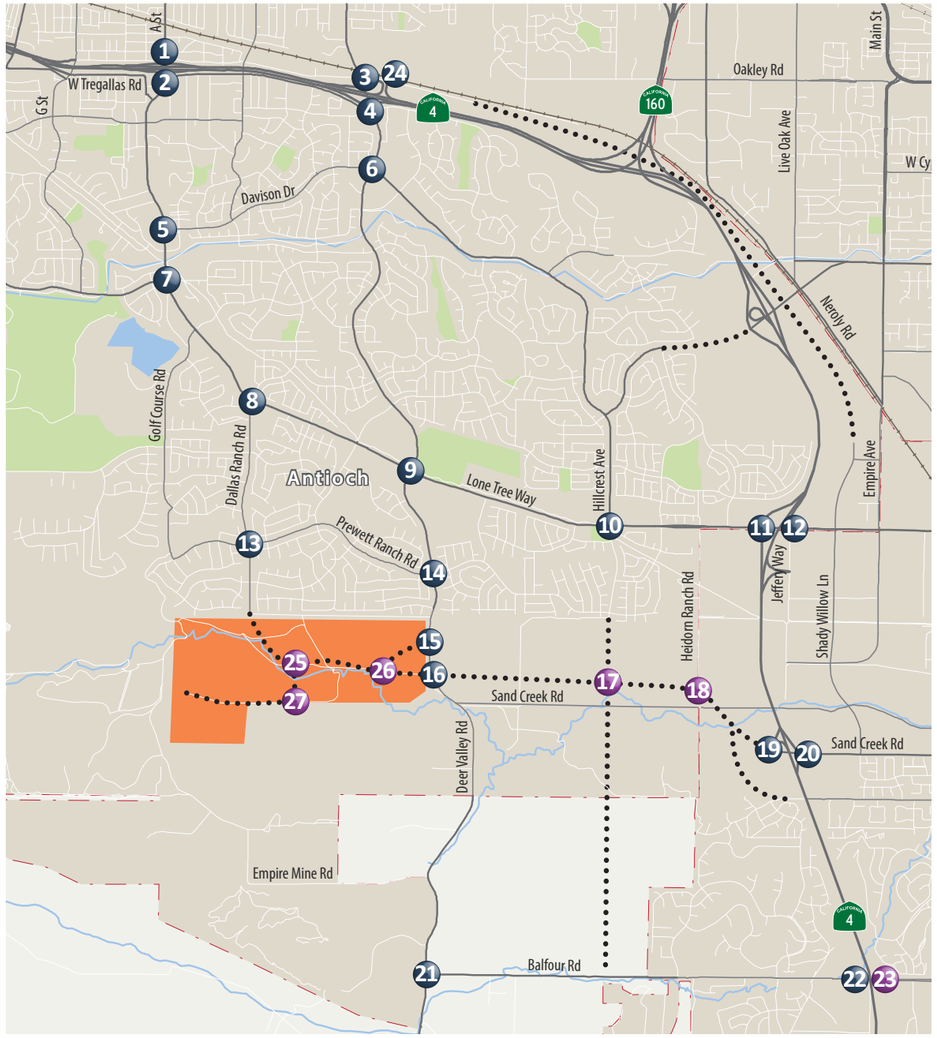


Figure 8a

Project Trip Assignment
Cumulative Roadway Network, Multi-Generational Community



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Roadway Improvements Expected to Be Complete

(#) Study Intersection

(#) Future Intersection

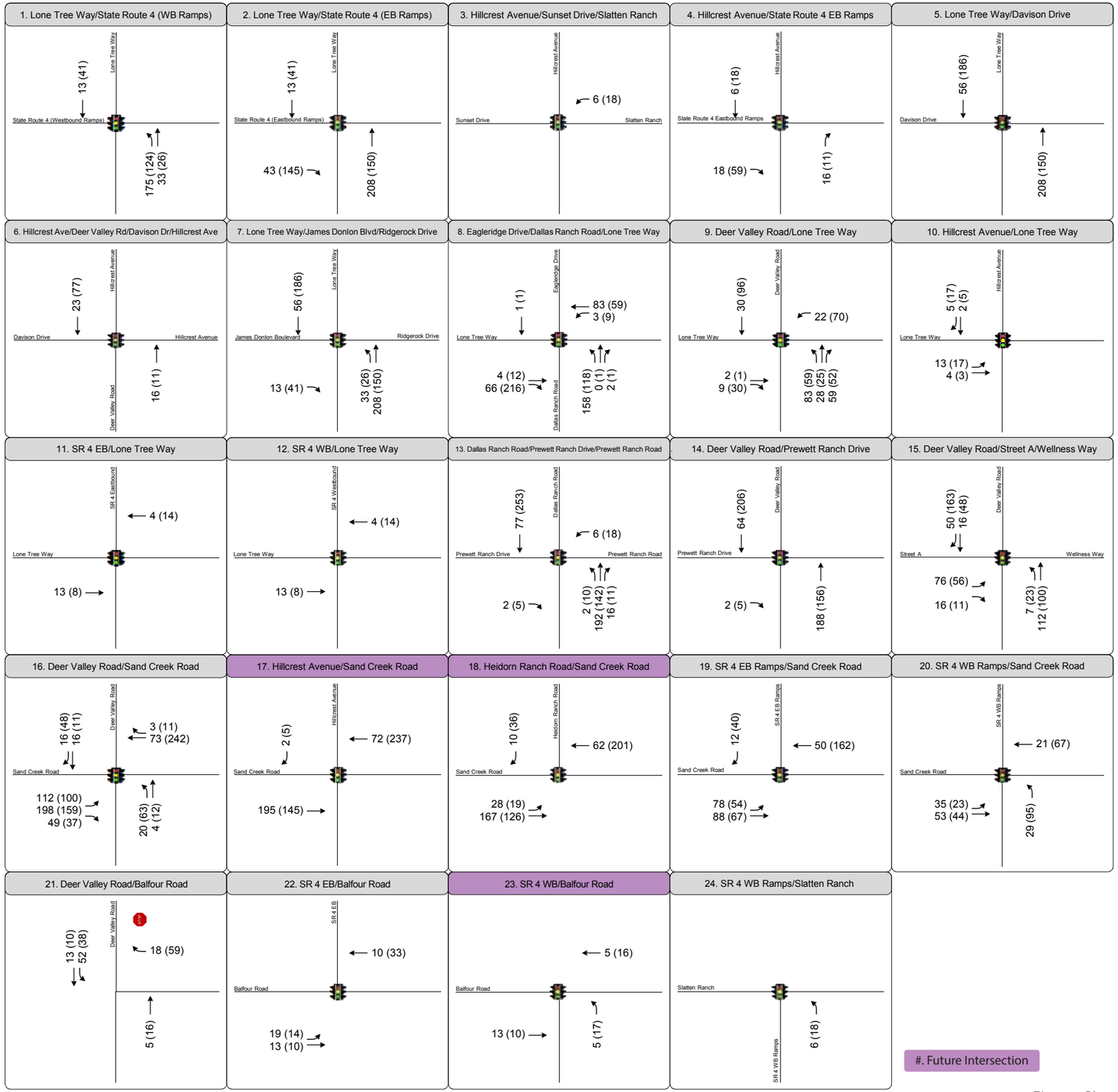


Figure 8b

Project Trip Assignment
Cumulative Roadway Network, Traditional Community

4. Existing with Project Conditions

This chapter evaluates potential off-site traffic impacts under Existing with Project conditions.

Existing with Project Traffic Volumes

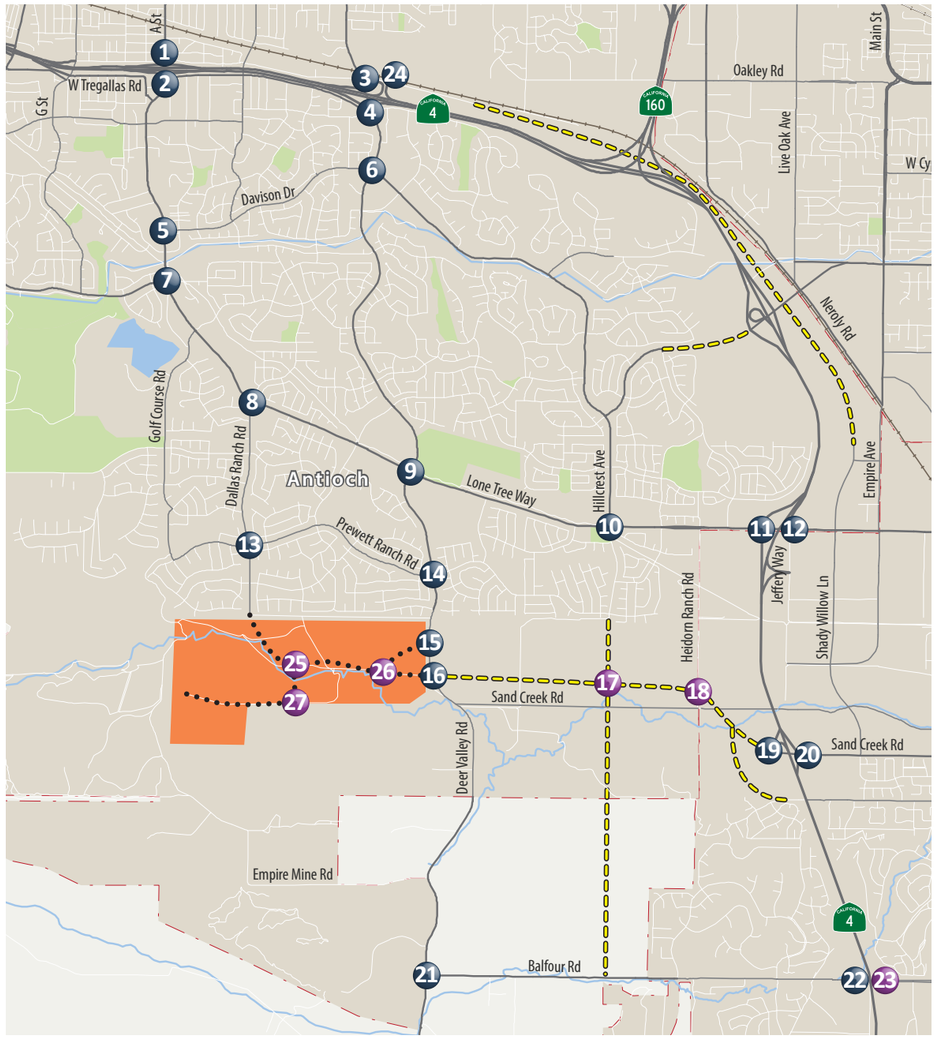
The project traffic volumes on Figure 6A and 6B were added to the existing traffic volumes from Figure 3 to estimate the Existing with Project traffic volumes, as shown on **Figure 9A** and **8B** for the multi-generational and traditional communities, respectively. As part of the project, roadway improvements would be constructed to extend Sand Creek Road from Deer Valley Road to Dallas Ranch Road, and Deer Valley Road would be improved along the project frontage to provide two travel lanes in each direction through the Sand Creek Road intersection, where it would taper to a two-lane cross-section. An assessment of on-site intersections is provided in the site plan review chapter.

Analysis of Existing with Project Conditions

Intersection Operations

Existing with Project intersection operations were evaluated using the same methods described in Chapter 1. The Existing with Project analysis results are presented in **Table 5**, based on the traffic volumes and intersection configurations presented on Figure 9A and 9B. Table 5 also includes the operations results for Existing conditions. The addition of project traffic would increase average delay at the signalized study intersections and would worsen already deficient operations at the Hillcrest Avenue at State Route 4 Eastbound Ramp intersection. No signalized intersections that are currently operating within the City's level of service standard are projected to degrade beyond the established level of service standard with the addition of project traffic in the existing condition.

Vehicle queues are expected to increase slightly with the addition of project traffic, but would be generally contained within the available storage space. For signalized intersections that are projected to operate at LOS D or better during the morning and evening peak hours, it is expected that vehicle queue spillback can be managed through signal timing adjustments which the City of Antioch periodically undertakes to optimize travel flow along major corridors.



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Planned Future Roadway

Study Intersection

Future Intersection

Roadway Improvements Expected to Be Complete

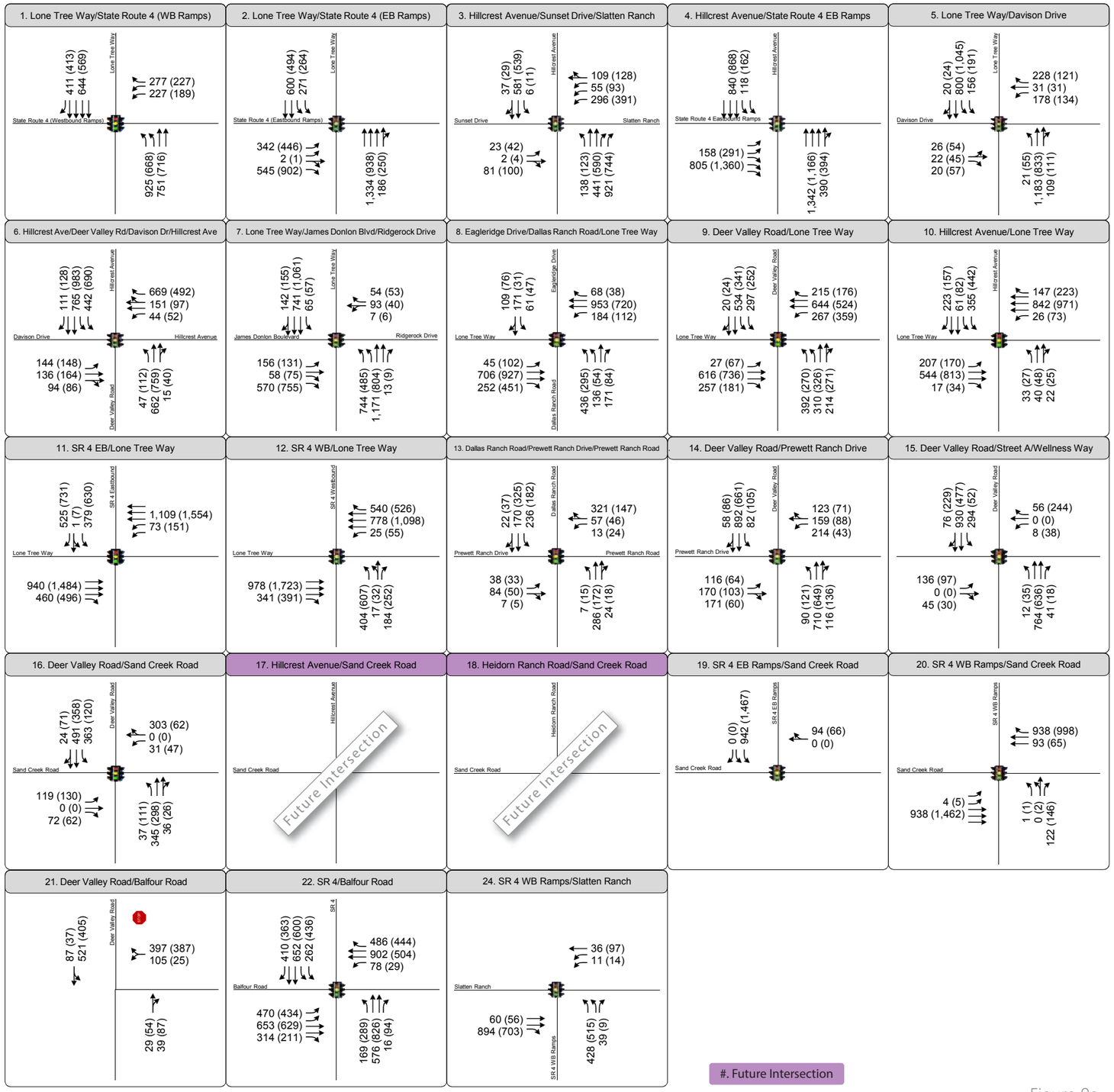
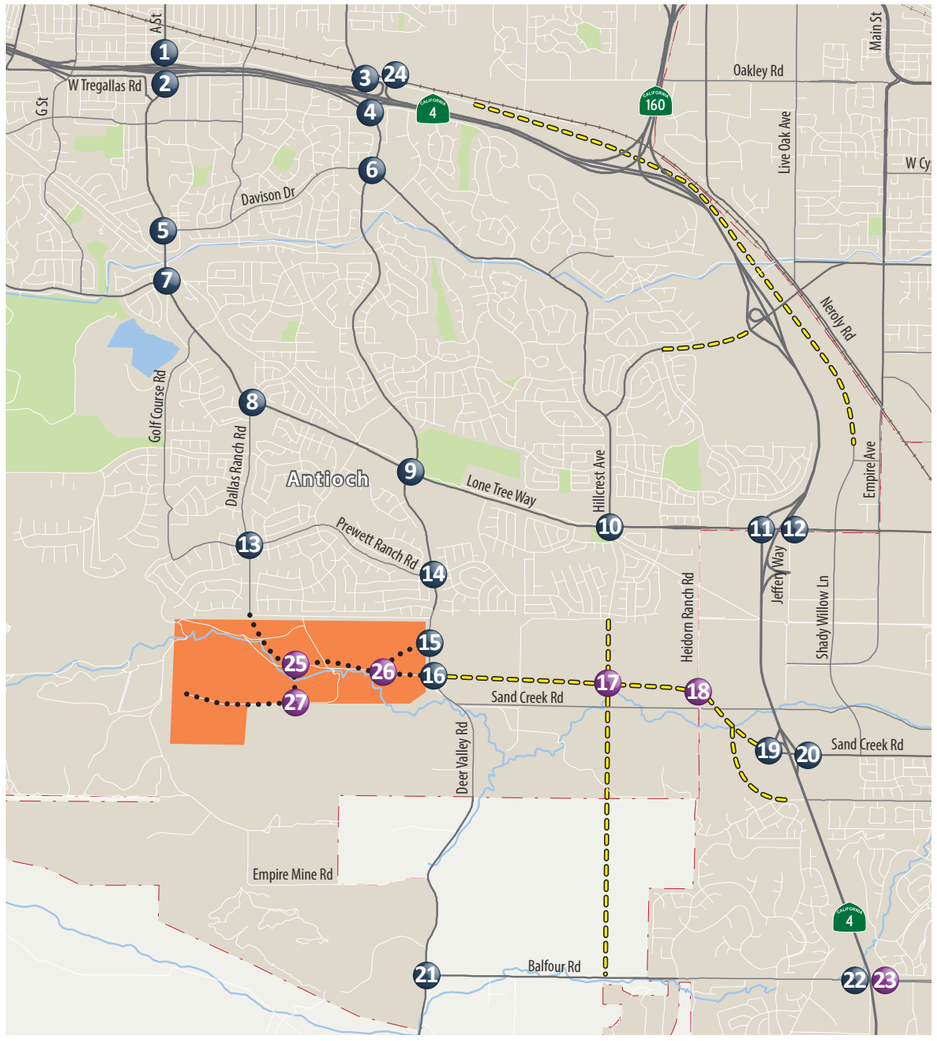


Figure 9a

Existing with Multi-Generational Project
Peak Hour Traffic Volumes, Intersection Lane Configurations and Traffic Controls



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Planned Future Roadway

Study Intersection

Future Intersection

Roadway Improvements Expected to Be Complete

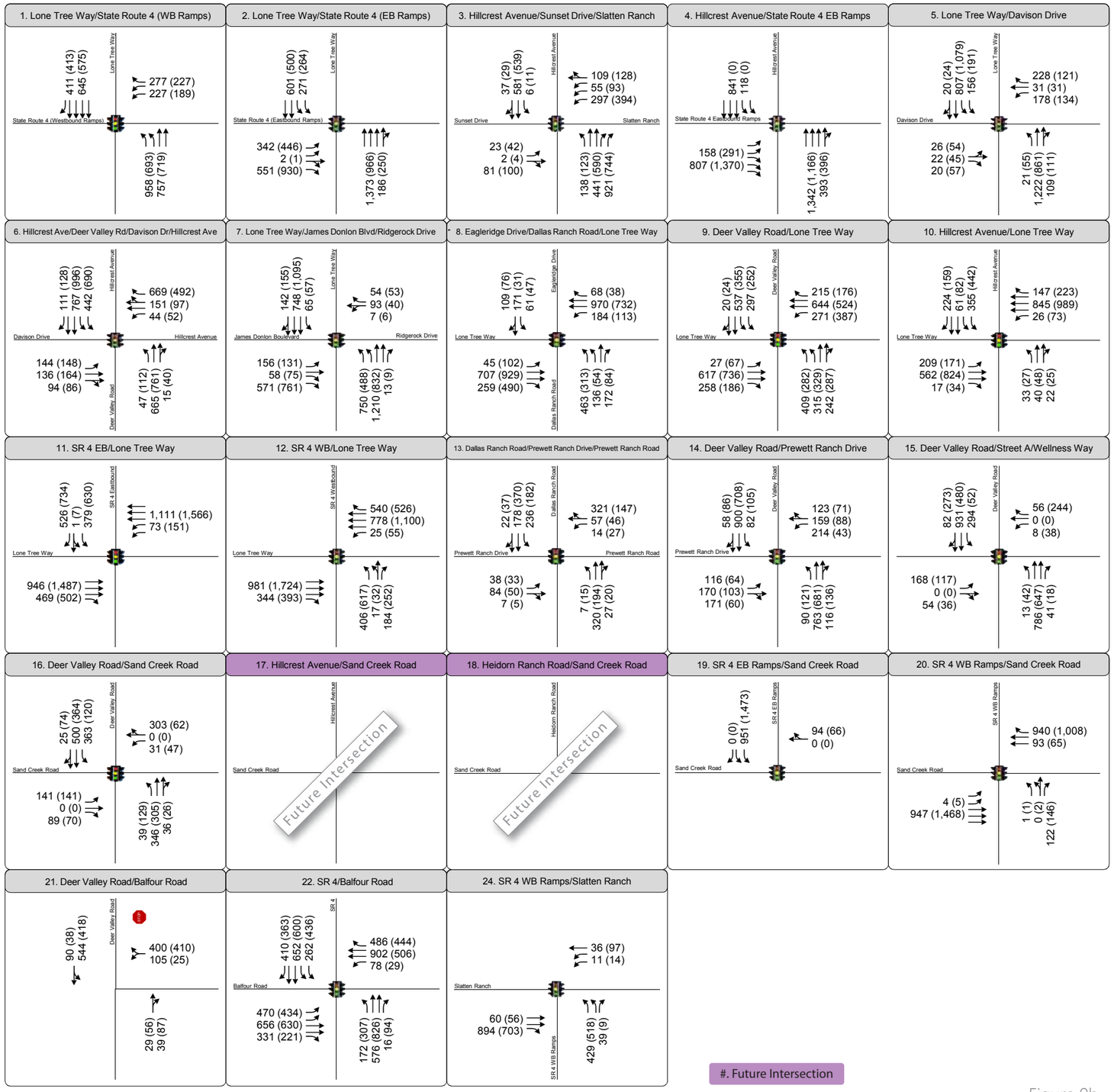


Figure 9b

Existing with Traditional Project
Peak Hour Traffic Volumes, Intersection Lane Configurations and Traffic Controls

Table 5: Existing With Project Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Existing		Existing with Multi-generational Project		Existing with Traditional Project	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
1. Lone Tree Way/State Route 4 WB Ramps	Signal	AM PM	14 9	B A	15 10	B A	16 10	B A
2. Lone Tree Way/ State Route 4 EB Ramps	Signal	AM PM	16 16	B B	18 17	B B	18 18	B B
3. Hillcrest Avenue/ Sunset Drive/ Slatten Ranch Road	Signal	AM PM	15 15	B B	15 15	B B	15 15	B B
4. Hillcrest Avenue/ State Route 4 Eastbound Ramps	Signal	AM PM	**86** **121**	**F** **F**	**91** **> 140**	**F** **F**	**91** **> 140**	**F** **F**
5. Lone Tree Way/ Davison Drive	Signal	AM PM	17 15	B B	18 16	B B	19 16	B B
6. Deer Valley Road/ Hillcrest Avenue/ Davison Drive	Signal	AM PM	26 26	C C	27 26	C C	27 26	C C
7. Lone Tree Way/ James Donlon Boulevard	Signal	AM PM	21 17	C B	22 17	C B	22 18	C B
8. Lone Tree Way/ Dallas Ranch Road	Signal	AM PM	31 16	C B	38 17	D B	39 19	D B
9. Lone Tree Way/ Deer Valley Road	Signal	AM PM	34 25	C C	44 34	D C	46 40	D D
10. Lone Tree Way/ Hillcrest Avenue	Signal	AM PM	19 21	B C	19 21	B C	19 21	B C
11. Lone Tree Way/ State Route 4 EB Ramps	Signal	AM PM	16 39	B D	16 39	B D	16 40	B D
12. Lone Tree Way/ State Route 4 WB Ramps/Jeffery Way	Signal	AM PM	8 12	A B	8 12	A B	8 12	A B
13. Prewett Ranch Drive/ Dallas Ranch Road	Signal	AM PM	18 14	B B	21 14	C B	21 14	C B
14. Prewett Ranch Drive/ Deer Valley Road	Signal	AM PM	29 14	C B	33 14	C B	33 15	C B

Table 5: Existing With Project Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Existing		Existing with Multi-generational Project		Existing with Traditional Project	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
15. Deer Valley Road/ Wellness Way/ Street A	Signal	AM PM	7 5	A A	15 12	B B	16 13	B B
16. Sand Creek Road/ Deer Valley Road	Signal	AM PM	11 7	B A	17 12	B B	18 14	B B
17. Sand Creek Road/ Hillcrest Avenue (future)	Signal	AM PM	-- --	-- --	-- --	-- --	-- --	-- --
18. Sand Creek Road/ Heidorn Ranch Road (future)	Signal	AM PM	-- --	-- --	-- --	-- --	-- --	-- --
19. Sand Creek Road/ State Route 4 EB Ramps	Signal	AM PM	6 5	A A	6 5	A A	6 5	A A
20. Sand Creek Road/ State Route 4 WB Ramps	Signal	AM PM	4 5	A A	4 5	A A	4 5	A A
21. Balfour Road/Deer Valley Road	SSSC	AM PM	30 **(58)** 8 (13)	D **(F)** A (B)	**90 (>120)** 10 (16)	**F (F)** A (C)	**108 (>120)** 11 (18)	**F (F)** B (C)
22. Balfour Road/State Route 4	Signal	AM PM	45 38	D D	49 38	D D	49 42	D D
24. Slatten Ranch/ State Route 4 WB Ramps	Signal	AM PM	9 8	A A	9 8	A A	9 8	A A

Notes:
1. Signal = signalized intersection
2. Average intersection delay is calculated for all signalized intersections using the 2010 HCM method for vehicles.
Source: Fehr & Peers, 2018

At the Deer Valley Road at Balfour Road intersection, the addition of project traffic would cause already deficient conditions to worsen, resulting in a potentially significant impact. Peak hour signal warrants are satisfied prior to the addition of project traffic.

Construction Assessment

The assessment of construction activity considers construction vehicles (including vehicles removing or delivering fill material, bulldozers, and other heavy machinery, as well as building materials delivery) and construction worker activity.

Given the topography of the site, import and/or export of fill is expected. Truck traffic would follow designated truck routes. Project construction would likely stage any large vehicles (i.e., earth-moving equipment, cranes, etc.) on the site prior to beginning site work and remove these vehicles at Project completion. As such, a daily influx of construction equipment is unlikely.

Detailed information relating to the construction schedule during site development or a construction management plan is not available. Based on information from other residential developments, approximately five workers per day are needed for each home under construction, with one to two deliveries per week of materials for each home. Not all homes are expected to be under construction at the same time and construction workers tend to arrive/depart work sites outside typical commute periods. Assuming ten percent of homes under construction at the peak of Project construction, there could be 570 workers on site at one time (up to 114 homes with five workers for each home), plus additional people such as building inspectors, foreman, and others. Maximum site activity could result in 2,000 to 3,000 daily trips to/from the site, which is less than would be generated by the Project at completion.

Existing Conditions Impacts and Mitigation

Two potential off-site intersection impacts were identified in the existing condition. Additionally, there could be temporary, although significant impacts during the construction phase of the Project.

Impact Statement 1: Intersection 4 – Hillcrest Avenue at State Route 4 Eastbound Ramps

The Hillcrest Avenue at State Route 4 Eastbound Ramps intersection operates at a deficient LOS F during both peak hours prior to the addition of project traffic in the existing condition. The addition of project traffic would worsen operations with either the multi-generational or traditional project. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 1:*** This interchange has been built to its ultimate right-of-way and no additional physical improvements are planned. Poor operations at this intersection are primarily

due to the close proximity of adjacent intersections that affect vehicle progression through the interchange area.

The Project Applicant shall fund installation of Adaptive Signal Control Technologies (ASCT) or other traffic signal interconnect system approved by the City at the following intersections:

- Slatten Ranch Road at State Route 4 Westbound Ramps
- Slatten Ranch Road/Sunset Drive at Hillcrest Avenue
- Hillcrest Avenue at State Route 4 Eastbound Ramps
- East Tregallas Road/Larkspur Drive at Hillcrest Avenue

Adaptive Signal Control Technologies are able to adjust traffic signal cycle lengths and phasing based on actual conditions with the ability to adjust signal timing parameters to best serve actual conditions every few minutes. Additional information about the technology can be found on the U.S. Department of Transportation Federal Highway Administration's website.[3] With signal timing adjustments to better serve projected traffic flows, intersection operations would improve to an acceptable level, reducing the impact to a ***less-than-significant*** level, as shown in **Table 6.** Additionally, the Project applicant shall pay regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA) that would fund construction of additional improvements along the State Route 4 corridor.

However, as Caltrans controls the operations of the traffic signals at the Slatten Ranch Road at State Route 4 Westbound Ramps and Hillcrest Avenue at State Route 4 Eastbound Ramps intersection, the City cannot assure full implementation of this improvement and the impact may remain ***significant and unavoidable***.

Impact Statement 2: Intersection 21 – Balfour Road at Deer Valley Road

The addition of project-generated vehicle trips during the AM peak hour would worsen conditions for side-street movements, and result in overall LOS F operations. This impact would occur with either project option. Peak hour signal warrants are also met prior to the addition of project traffic in the existing condition. Based on the significance criteria, this is considered a ***significant*** impact.

Mitigation Measure 2: The project applicant shall pay their fair share[4] towards the signalization of this intersection in conjunction with other planned improvements, which include the construction of a southbound left-turn lane, as well as separate westbound left and right-turn lanes. These

[3] https://www.fhwa.dot.gov/innovation/everydaycounts/edc-1/pdf/asct_brochure.pdf
[4] The responsibility for improvements to this intersection are shared equally by the City of Antioch and the City of Brentwood.

improvements would result in overall acceptable service levels, reducing the project's existing impact to a ***less-than-significant*** level, as shown in **Table 6.**

Table 6: Existing with Project with Mitigation Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Existing		Existing with Multi-generational Project with Mitigation		Existing with Traditional Project with Mitigation	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
4. Hillcrest Avenue/SR 4 Eastbound Ramps	Signal	AM PM	**86** **121**	**F** **F**	49 27	D C	50 34	D C
21. Balfour Road/Deer Valley Road	SSSC/ Signal	AM PM	30 **(58)** 8 (13)	D **(F)** A (B)	12 12	B B	13 13	B B

Notes: 1. Signal = signalized intersection
2. Average intersection delay is calculated for all signalized intersections using the 2010 HCM method for vehicles.
Source: Fehr & Peers, 2018

Impact Statement 3: Construction related activities could create potential conflicts with other roadway users, such as construction related activities resulting in lane closures along the project frontage, construction vehicles queuing within the public right-of-way waiting entry to the site, construction worker parking in non-designated parking areas, or construction debris on public streets. Construction impacts would be temporary in nature; however, this impact is considered ***potentially significant***.

Mitigation Measure 3: Although construction impacts would be temporary, development of a construction management plan would reduce the potential for construction vehicle conflicts with other roadway users. The plan should include:

- Project staging plan to maximize on-site storage of materials and equipment
- A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak hours; lane closure proceedings; signs, cones, and other warning devices for drivers; and designation of construction access routes
- Permitted construction hours
- Location of construction staging
- Identification of parking areas for construction employees, site visitors, and inspectors, including on-site locations
- Provisions for street sweeping to remove construction related debris on public streets

Implementation of the construction management plan would reduce the temporary construction impact to a ***less-than-significant*** level.

5. Near-Term Traffic Conditions

The near-term scenario reflects existing traffic counts plus traffic from approved and pending developments that are expected to be completed and occupied upon project completion. Near-term conditions without and with the project are evaluated. It also includes transportation projects programmed for implementation around the time that the project is completed, and construction of required transportation mitigation measures for approved projects. The analysis of cumulative conditions (see Chapter 6 for details) considers development within the City of Antioch as described in the General Plan and approved General Plan Amendment.

Near-Term Forecasts

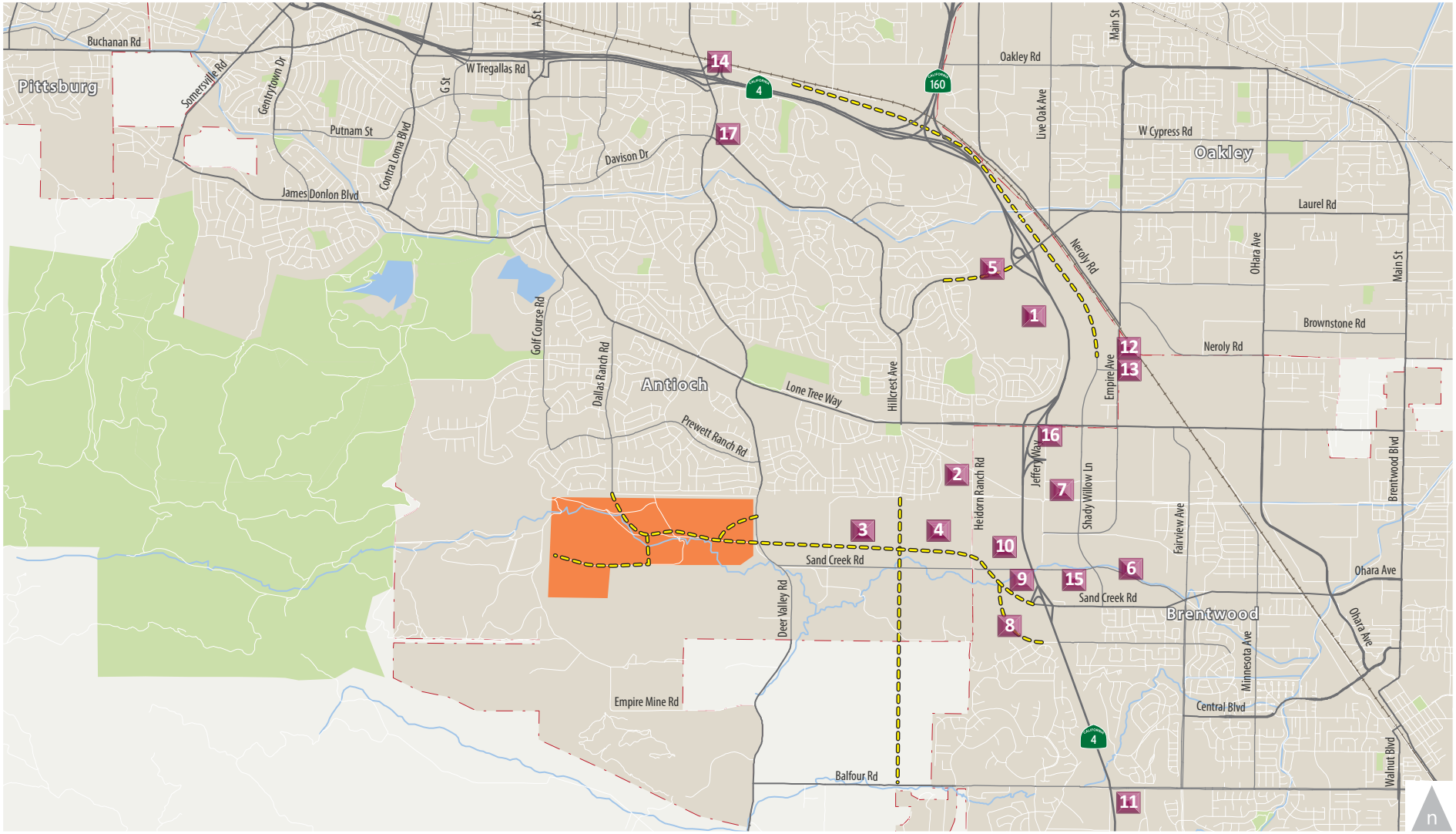
The available *City of Brentwood Project Status Report* (April 1, 2017 for commercial projects and July 1, 2017 for residential projects) and *City of Antioch Project Pipeline* (as of September 6, 2017) at the time the project's Notice of Preparation (NOP) was issued were reviewed to identify developments to include in this scenario. Copies of these reports are provided in **Appendix D**. In addition to these development projects, the opening of the eBART station at Hillcrest Avenue was considered. Developments that could generate additional traffic through the study area are summarized in **Table 7** and their locations shown on **Figure 10.**

Near-Term project vehicle trip generation was estimated using trip generation rates and equations for the proposed land uses from ITE's *Trip Generation Manual* (9th Edition). The results are provided in **Appendix E**. Traffic generated by approved and pending developments was added to the existing traffic volumes to provide the basis for the Near-Term without Project analysis, as presented on **Figure 11.** The existing traffic counts were also increased by 5 percent to account for traffic growth from projects outside the immediate study area that could add through traffic to the area. Project traffic volumes from **Figure 7A** and **7B** were added to the Near-Term without Project forecasts to estimate Near-Term with Multi-Generational Project and Near-Term with Traditional Project volumes at the study intersections, as presented on **Figure 12A** and **12B.**

Table 7: Approved Projects Summary

Map Location	Project Name	Size	Land Use	Status
1	Park Ridge	525 dwelling units	Single Family Homes	Approved, under construction
2	Heidorn Village	117 dwelling units	Single Family Homes	Approved
3	Aviano	533 dwelling units	Single Family Homes	Approved
4	Vineyard at Sand Creek	641 dwelling units	Single Family Homes	Approved
5	Laurel Ranch	178 dwelling units	Single Family Homes	Approved
6	Parkside Villas	37 dwelling units	Single Family Homes	Approved
7	Amber Meadows	69 dwelling units 126 dwelling units	Single Family Homes Apartments	Pending
8	Bridle Gate Residential Elementary School	265 dwelling units 700 students	Single Family Homes Elementary School	Pending Pending
9	Bridle Gate Commercial	150,000 square feet	Shopping Center	Pending
10	The Enclave	258 dwelling units	Apartments	Pending
11	Brentwood County Club	63 dwelling units	Detached Active Adult	Approved
12	Orfanos	160 dwelling units	Single Family Homes	Approved
13	Alvarez Partners	48 dwelling units	Single Family Homes	Approved
14	eBART Station		Train Station	Under Construction
15	Streets of Brentwood	320 dwelling units 32,000 square feet	Apartments Shopping Center	Pending
16	Jeffery Way Retail	54,000 square feet	Shopping Center	Pending
17	Wildflower	22 single-family 98 Condos 10-acres commercial	Mixed-Use	Pending

Source: *City of Brentwood Project Status Report* (April 1, 2017 for commercial projects and July 1, 2017 2014 for residential projects) and *City of Antioch Project Pipeline* (accessed September 6, 2017)

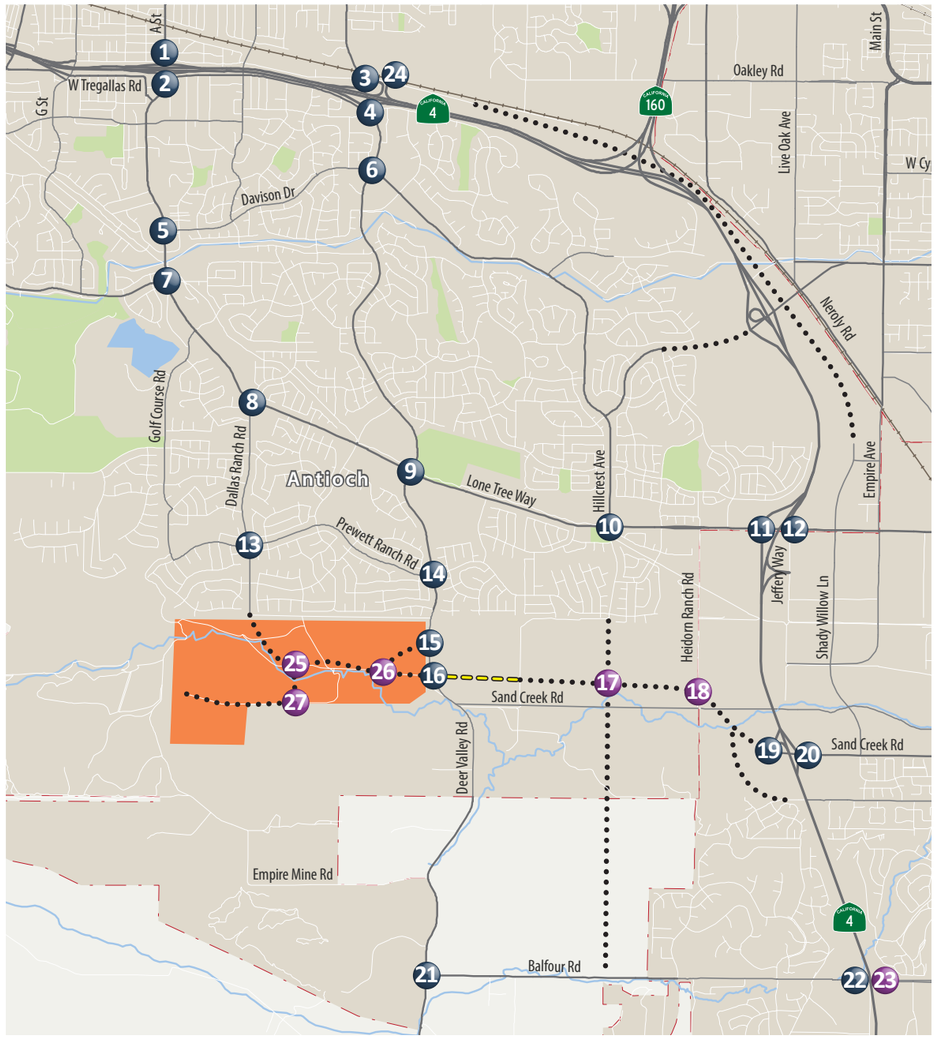


LEGEND

Project Site — Planned Future Roadway — # Approved/Pending Development Project

Figure 10

Near-Term Project Locations



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Planned Future Roadway

Study Intersection

Future Intersection

Roadway Improvements Expected to Be Complete

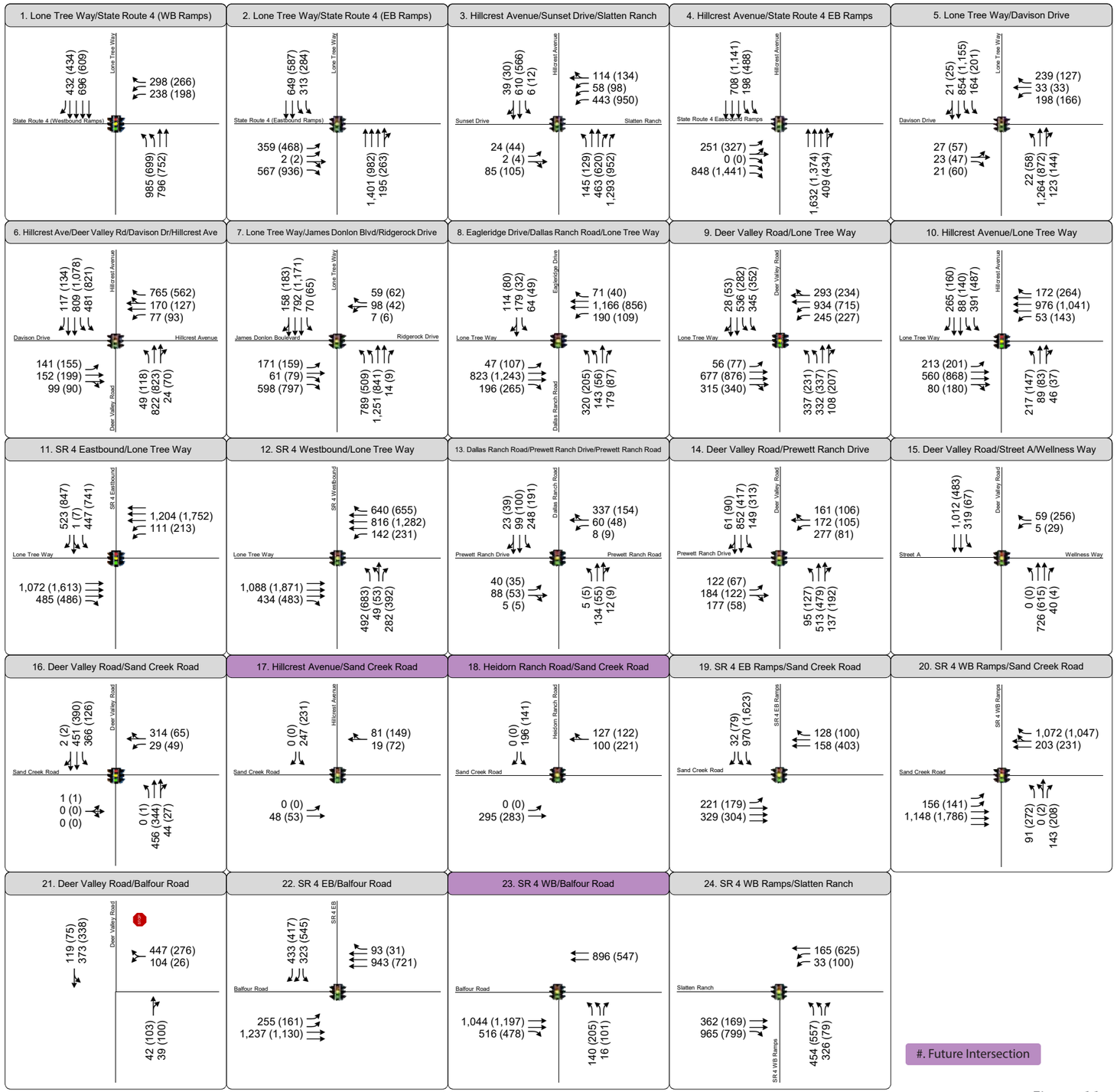
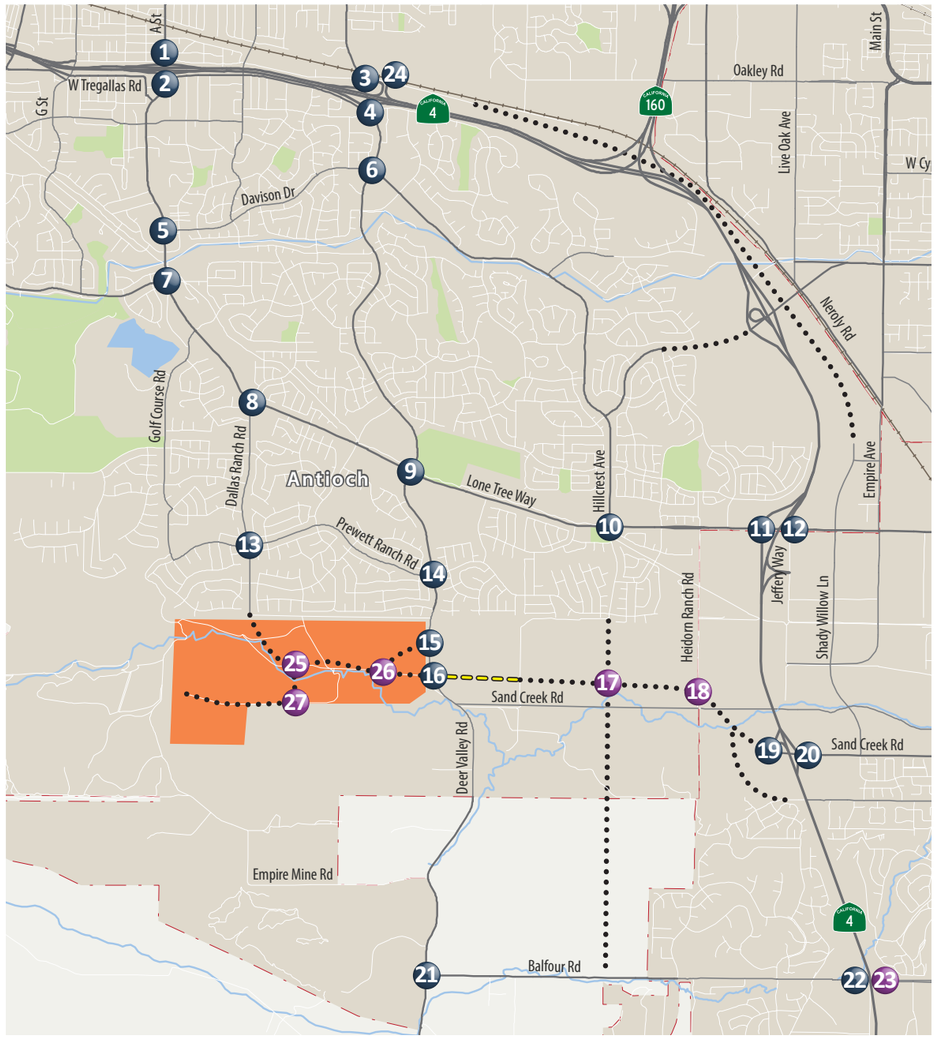


Figure 11

Near-term without Project
Peak Hour Traffic Volumes, Intersection Lane Configurations and Traffic Controls



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Planned Future Roadway

Study Intersection

Future Intersection

Roadway Improvements Expected to Be Complete

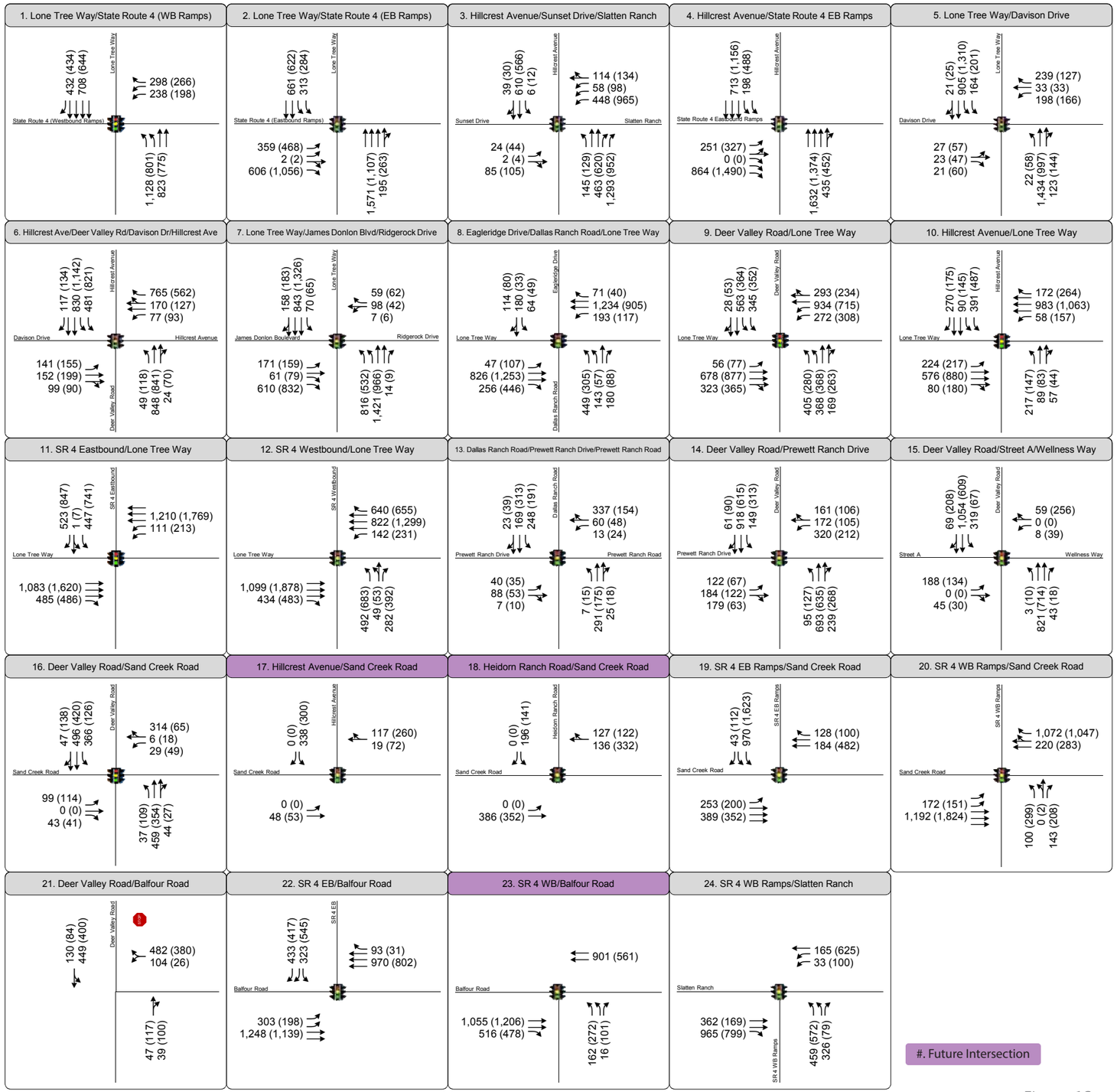
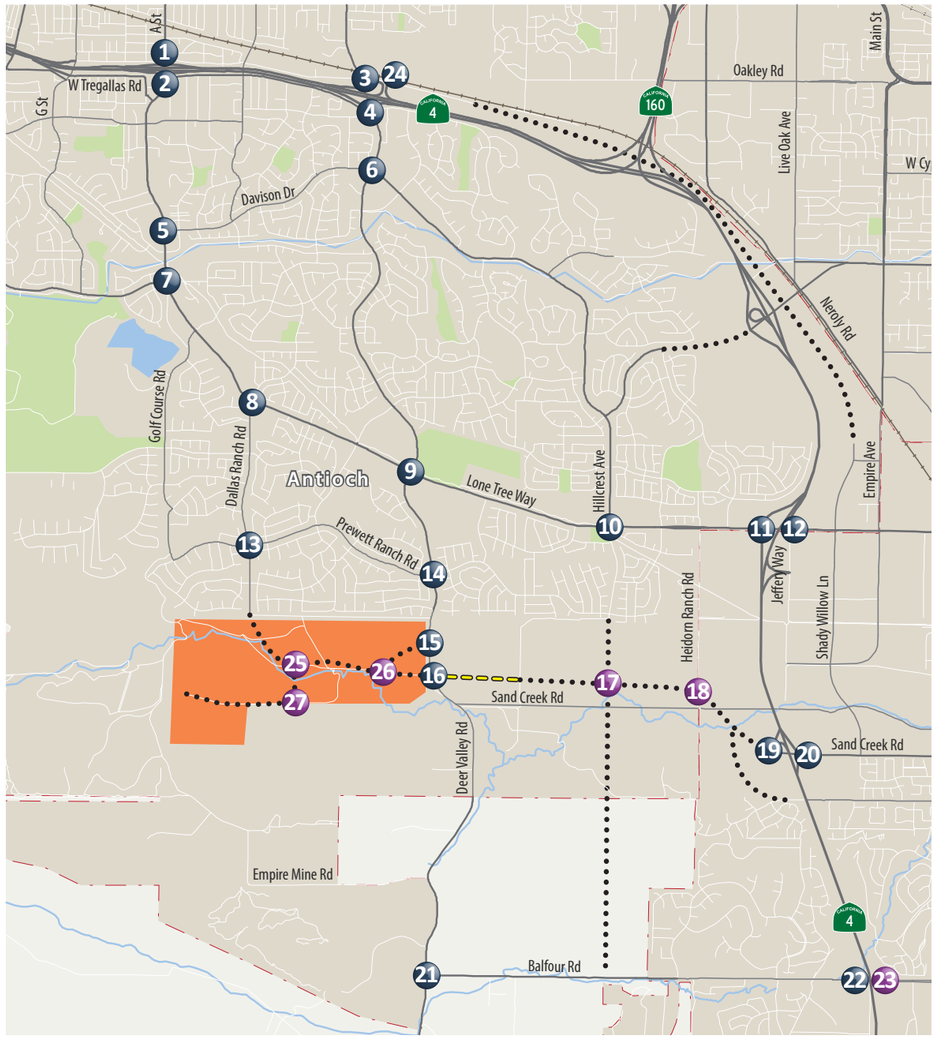


Figure 12a

Near-term with Multi-Generational Project
Peak Hour Traffic Volumes, Intersection Lane Configurations and Traffic Controls



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Planned Future Roadway

Study Intersection

Future Intersection

Roadway Improvements Expected to Be Complete

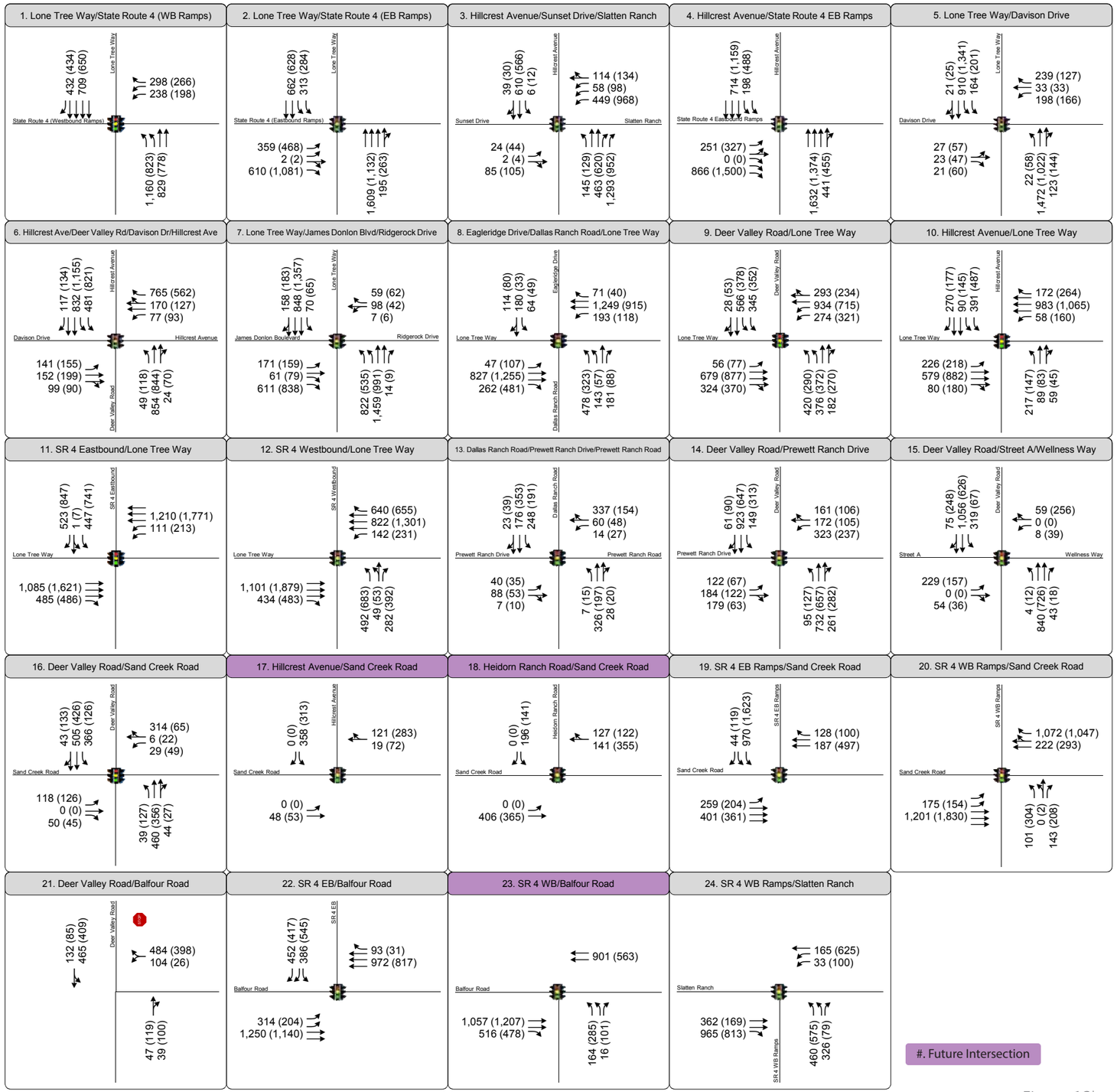


Figure 12b

Near-term with Traditional Project
Peak Hour Traffic Volumes, Intersection Lane Configurations and Traffic Controls

Near-Term Roadway Assumptions

A number of roadway improvements are conditioned on near-term developments and considered in the near-term forecasts, including an extension of Hillcrest Avenue from its current terminus to an extension of Sand Creek Road, improvements to Heidorn Ranch Road, the extension of Sand Creek Road from State Route 4 in the east to a new terminus by the Dozier-Libbey Medical High School, the Laurel Road extension from State Route 4 to its current terminus east of Canada Valley Road, and completion of the State Route 4 at Balfour Road interchange improvements, which are currently under construction.

For the extension of Sand Creek Road, no direct through travel would be permitted between Deer Valley Road and Hillcrest Avenue; however, vehicles would be able to travel through Prewett Ranch Drive to Hillcrest Avenue to Sand Creek Road to access destinations to the east. Additionally, the analysis of the intersections of Sand Creek Road at Hillcrest Avenue and Heidorn Ranch Road was conducted assuming one travel lane in each direction plus turn pockets at intersections as planned development in the area may phase construction of these improvements.

Lone Tree Way is also planned to be restriped to provide three through lanes in both the eastbound and westbound directions from west of Deer Valley Road to Hillcrest Avenue; at the Lone Tree Way/Deer Valley Road intersection, the third westbound through lane would become a second westbound left-turn lane.

As part of the project, roadway improvements would be constructed to extend Sand Creek Road from Deer Valley Road to Dallas Ranch Road, and Deer Valley Road would be improved along the project frontage to provide two travel lanes in each direction through the Sand Creek Road intersection, where it would taper to a two-lane cross-section. An assessment of on-site intersections is provided Chapter 9.

Analysis of Near-Term Conditions

Near-Term without and with Project conditions were evaluated using the same methods described in Chapter 1. The analysis results are presented in **Table 8**, based on the traffic volumes and lane configurations presented on Figure 11 and Figure 12. In the near-term condition, the Hillcrest Avenue at State Route 4 Eastbound Ramp, Lone Tree Way at SR 4 Eastbound Ramp, and Balfour Road at Deer Valley Road intersections would operate at deficient levels. All other study intersection would operate at acceptable service levels prior to the addition of project traffic.

Table 8: Near-Term Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Near-Term without Project		Near-Term with Multi-generational Project		Near-Term with Traditional Project	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
1. Lone Tree Way/A Street/SR 4 WB Ramps	Signal	AM PM	17 13	B B	21 14	C B	22 14	C B
2. Lone Tree Way/A Street/SR 4 EB Ramps	Signal	AM PM	19 24	B C	23 30	C C	23 31	C C
3. Hillcrest Avenue/ Sunset Drive/ Slatten Ranch Road	Signal	AM PM	17 23	B C	17 24	B C	17 24	B C
4. Hillcrest Avenue/ SR 4 EB Ramps	Signal	AM PM	**87** **121**	**F** **F**	**91** **126**	**F** **F**	**92** **128**	**F** **F**
5. Lone Tree Way/ Davison Drive	Signal	AM PM	22 22	C C	26 24	C C	27 25	C C
6. Deer Valley Road/ Hillcrest Avenue/ Davison Drive	Signal	AM PM	36 50	D D	37 51	D D	38 51	D D
7. Lone Tree Way/ James Donlon Boulevard	Signal	AM PM	24 22	C C	26 25	C C	26 26	C C
8. Lone Tree Way/ Dallas Ranch Road	Signal	AM PM	39 30	D C	48 36	D D	50 37	D D
9. Lone Tree Way/ Deer Valley Road	Signal	AM PM	41 35	D C	46 41	D D	47 42	D D
10. Lone Tree Way/ Hillcrest Avenue	Signal	AM PM	26 28	C C	27 29	C C	27 30	C C
11. Lone Tree Way/SR 4 EB Ramps	Signal	AM PM	19 **62**	B **E**	20 **64**	B **E**	20 **64**	B **E**
12. Lone Tree Way/ SR 4 WB Ramps/ Jeffery Way	Signal	AM PM	12 27	B C	13 24	B C	13 24	B C
13. Prewett Ranch Drive/ Dallas Ranch Road	Signal	AM PM	19 14	B B	21 14	C B	21 14	C B
14. Prewett Ranch Drive/ Deer Valley Road	Signal	AM PM	40 23	D C	**62** 43	**E** D	**67** 51	**E** D

Table 8: Near-Term Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Near-Term without Project		Near-Term with Multi-generational Project		Near-Term with Traditional Project	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
15. Deer Valley Road/ Wellness Way/ Street A[3]	Signal	AM PM	6 8	A A	28 21	C C	39 23	D C
16. Sand Creek Road/ Deer Valley Road[3]	Signal	AM PM	13 14	B B	18 19	B B	19 19	B B
17. Sand Creek Road/ Hillcrest Avenue	Signal	AM PM	28 22	C C	28 22	C C	29 23	C C
18. Sand Creek Road/ Heidorn Ranch Road	Signal	AM PM	16 14	B B	17 15	B B	17 15	B B
19. Sand Creek Road/ SR 4 EB Ramps	Signal	AM PM	16 37	B D	20 45	B D	20 46	B D
20. Sand Creek Road/ SR 4 WB Ramps	Signal	AM PM	6 7	A A	6 8	A A	6 8	A A
21. Balfour Road/Deer Valley Road	Signal	AM PM	**38 (72)** 8 (15)	**E (F)** A (B)	**83 (>120)** 11 (20)	**F (F)** B (C)	**93 (>120)** 11 (21)	**F (F)** B (C)
22. Balfour Road/State Route 4 EB Ramps	Signal	AM PM	13 17	B B	14 18	B B	16 19	B B
23. Balfour Road/State Route 4 WB Ramps	Signal	AM PM	11 12	B B	11 12	B B	11 13	B B
24. Slatten Ranch/ SR 4 WB Ramps	Signal	AM PM	12 13	B B	12 14	B B	12 14	B B

Notes:
1. Signal = signalized intersection
2. Average intersection delay is calculated for all signalized intersections using the 2010 HCM method for vehicles.
3. Traffic signal timings optimized in "with project" conditions to better accommodate changed geometry.
Source: Fehr & Peers, 2017

With the addition of project traffic, operations of the three deficient intersections would further degrade, and operations of the Deer Valley Road at Prewett Ranch Drive would degrade from LOS D to LOS E operations in the AM peak hour with either project option. All other study intersection would operate at acceptable service levels with the addition of project traffic (either variant).

Vehicle queues are expected to increase at study intersections as traffic volumes increase, which would further increase with the addition of project traffic. Monitoring and adjusting traffic signal timings in response to actual traffic volumes to minimize the potential for vehicle queue spillback is recommended.

Near-Term Conditions Impacts and Mitigation

Four potential off-site intersection impacts were identified in the near-term condition.

Impact Statement 4: Intersection 4 – Hillcrest Avenue at State Route 4 Eastbound Ramps

The Hillcrest Avenue at State Route 4 Eastbound Ramps intersection operates at a deficient LOS F during both peak hours prior to the addition of project traffic in the near-term condition. The addition of project traffic would worsen operations with either the multi-generational or traditional project. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 4:*** This interchange has been built to its ultimate right-of-way and no additional physical improvements are planned. Poor operations at this intersection are primarily due to the close proximity of adjacent intersections that affect vehicle progression through the interchange area.
>
> The Project Applicant shall fund installation of Adaptive Signal Control Technologies (ASCT) or other traffic signal interconnect system approved by the City at the following intersections (same as Mitigation Measure 1):
>
> - Slatten Ranch Road at State Route 4 Westbound Ramps
> - Slatten Ranch Road/Sunset Drive at Hillcrest Avenue
> - Hillcrest Avenue at State Route 4 Eastbound Ramps
> - East Tregallas Road/Larkspur Drive at Hillcrest Avenue
>
> With signal timing adjustments to better serve projected traffic flows, intersection operations would improve to better than the without project condition, reducing the impact to a ***less-than-significant*** level, as shown in **Table 9.** Additionally, the Project applicant shall pay regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA) that would fund construction of additional improvements along the State Route 4 corridor.
>
> However, as Caltrans controls the operations of the traffic signals at the Slatten Ranch Road at State Route 4 Westbound Ramps and Hillcrest Avenue at State Route 4 Eastbound Ramps intersection,

the City cannot assure full implementation of this improvement and the impact may remain ***significant and unavoidable***.

Impact Statement 5: Intersection 11 – Lone Tree Way at State Route 4 Eastbound Ramps

The Lone Tree Way at State Route 4 Eastbound Ramps intersection is projected to operate at a deficient LOS E in the PM peak hour prior to the addition of project traffic in the near-term condition. The addition of project traffic would worsen operations with either the multi-generational or traditional project. Based on the significance criteria, this is considered a ***significant*** impact.

Mitigation Measure 5: The project applicant should contribute their fair share to intersection improvements that would result in acceptable operations, which could include widening the southbound off-ramp to provide a second right-turn only lane. Construction of this improvement in combination with retiming of the traffic signals along the corridor would result in overall acceptable service levels, reducing the project's near-term impact to a ***less-than-significant*** level. Widening of the southbound off-ramp could result in secondary impacts to pedestrians by increasing the pedestrian crossing distance. The potential secondary impact to pedestrians for all hours of the day should be balanced against an intersection modification to improve vehicle travel during peak time periods. as shown in **Table 9.**

Although the intersection is located in the City of Antioch, coordination with Caltrans is required and City of Antioch cannot assure implementation of this measure. Therefore, the impact could remain ***significant and unavoidable.***

Impact Statement 6: Intersection 14 – Prewett Ranch Drive/ Deer Valley Road

This intersection is projected to operate at LOS D prior to the addition of project traffic. The addition of project traffic would result in LOS E operations in the AM peak hour with either project option. Based on the significance criteria, this is considered a ***significant*** impact.

Mitigation Measure 6: This intersection has been built to its ultimate configurations and no reconfigurations within the existing intersection cross-section that would result in acceptable operations were identified.

Construction of the Sand Creek Road extension between Deer Valley Road and its current planned terminus at Dozier-Libbey Medical High School would shift traffic from the Prewett Ranch Drive/ Deer Valley Road intersection, and result in acceptable operations. However, the construction of this extension could increase the amount of traffic on the Sand Creek Road corridor and result in a secondary impact to the State Route Four/Sand Creek Road Eastbound Ramp intersection (see Impact 7).

Impact Statement 7: Intersection 19 – Sand Creek Road at SR 4 EB Ramps (secondary impact due to implementation of Mitigation Measure 6)

Implementation of Mitigation Measure 6 would result in a secondary impact to the Sand Creek Road at SR 4 EB Ramps, as the provision of the full Sand Creek Road extension between Dallas Ranch Road and State Route 4 is projected to increase traffic at this intersection, including project traffic. The addition of project-generated vehicle trips during the PM peak hour would degrade acceptable operations to LOS E with the multi-generational and LOS F with the traditional project. Based on the significance criteria, this is considered a ***significant secondary*** impact, as it would only occur if Mitigation Measure 6 is implemented.

> ***Mitigation Measure 7:*** The Project applicant shall pay regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA) that would fund construction of additional improvements at the Sand Creek Road interchange, which includes a slip-ramp for the eastbound Sand Creek Road to southbound State Route 4 movement, eliminating the conflicting left-turn movement at the intersection. Construction of this improvement would result in acceptable operations, as shown in **Table 9,** reducing the near-term secondary impact to a ***less-than-significant*** level. As this improvement is in a programmed fee program, payment of the fee would reduce the impact to a less-than-significant level.

Impact Statement 8: Intersection 21 – Balfour Road at Deer Valley Road

The addition of project-generated vehicle trips during the AM peak hour would worsen LOS F conditions for side-street movements, and result in overall LOS F operations. This impact would occur with either the multi-generational or traditional project. Peak hour signal warrants are also met prior to the addition of project traffic in the near-term condition. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 8:*** Implement Mitigation Measure 2. The project applicant shall pay their fair share towards the signalization of this intersection in conjunction with other planned improvements, which include the construction of a southbound left-turn lane, as well as separate westbound left and right-turn lanes. These improvements would result in overall acceptable service levels, reducing the project's near-term impact to a ***less-than-significant*** level, as shown in Table 9.

Table 9: Near-Term With Project With Mitigation Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Near-term Without Project		Near-Term with Multi-generational Project with Mitigation		Near-Term with Traditional Project with Mitigation	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
4. Hillcrest Avenue/SR 4 Eastbound Ramps	Signal	AM PM	**87** **121**	**F** **F**	**73** **95**	**E** **F**	**73** **97**	**E** **F**
11. Lone Tree Way/SR 4 EB Ramps	Signal	AM PM	19 **62**	B **E**	13 27	B C	13 27	B C
14. Prewett Ranch Drive/ Deer Valley Road	Signal	AM PM	40 23	D C	40 21	D C	41 32	D C
19. Sand Creek Road/ SR 4 EB Ramps (With implementation of MM-6)	Signal	AM PM	17 36	B D	22 **74**	C **E**	23 **81**	C **F**
19. Sand Creek Road/ SR 4 EB Ramps (With implementation of MM-6 + MM-7)	Signal	AM PM	17 36	B D	11 17	B B	11 19	B B
21. Balfour Road/Deer Valley Road	SSSC/ Signal	AM PM	**38 (72)** 8 (15)	**E (F)** A (B)	28 30	C C	28 30	C C

Notes:
1. Signal = signalized intersection
2. Average intersection delay is calculated for all signalized intersections using the 2010 HCM method for vehicles.
Source: Fehr & Peers, 2018

6. Cumulative Traffic Conditions

This chapter discusses Cumulative traffic conditions both without and with the project. The future conditions analysis considers development within the City of Antioch as described in the General Plan, as well as development in Brentwood given that some study intersections are close proximity to the Brentwood/ Antioch border.

Cumulative Traffic Forecasts

To assess future growth with planned development in both the Cities of Antioch and Brentwood, several sources of data were reviewed, including the Contra Costa County Travel Demand Model (CCTA Model), future traffic projections as documented in the administrative draft Antioch Transportation Impact Fee, future projections from the City of Brentwood General Plan Environmental Impact Report, April 2014, and projections developed as part of the Aviano and Vineyards and Sand Creek transportation impact studies. Traffic forecasts within the immediate study area were reviewed to ensure that known developments were adequately reflected in the forecasts, such as the Bridle Gate project located on the south side of the proposed Sand Creek extensions, west of State Route 4. Minor adjustments were made to the forecasts to balance traffic volumes between closely spaced intersections in the study area. The resulting Cumulative without Project forecasts are presented on **Figure 13**, which are representative of conditions over the next 20 to 25 years. The Project volumes from Figure 8A and 8B were added to the Cumulative without Project traffic volumes to represent Cumulative with Multi-Generational and Cumulative with Traditional Project conditions, as presented on **Figure 14A** and **14B.**

The volumes presented on **Figure 14A** and **14B** reflect that with the project, the combination of the Sand Creek Road connection to Dallas Ranch Road and the Sand Creek Road extension between Dozier-Libbey Medical High School and Deer Valley Road is expected to result in some existing travel from the Dallas Ranch neighborhood to the Sand Creek Road corridor to shift from the Prewett Ranch Road at Deer Valley intersection to the Sand Creek Road at Deer Valley intersection.

The City of Brentwood is currently developing a Specific Plan for Priority Area 1 (PA-1) located east of Heidorn Ranch Road, south of Lone Tree Way, west of Shady Willow Lane, and north of Sand Creek. Intensified development, as compared to the General Plan assumptions, is proposed. However, no zoning or land use changes have been formally approved, and as of the preparation of this analysis, there was

insufficient information available to account for changed land use plans in this area. Future transportation studies for changed zoning in PA-1 would consider traffic generated by The Ranch.

Cumulative Roadway Assumptions

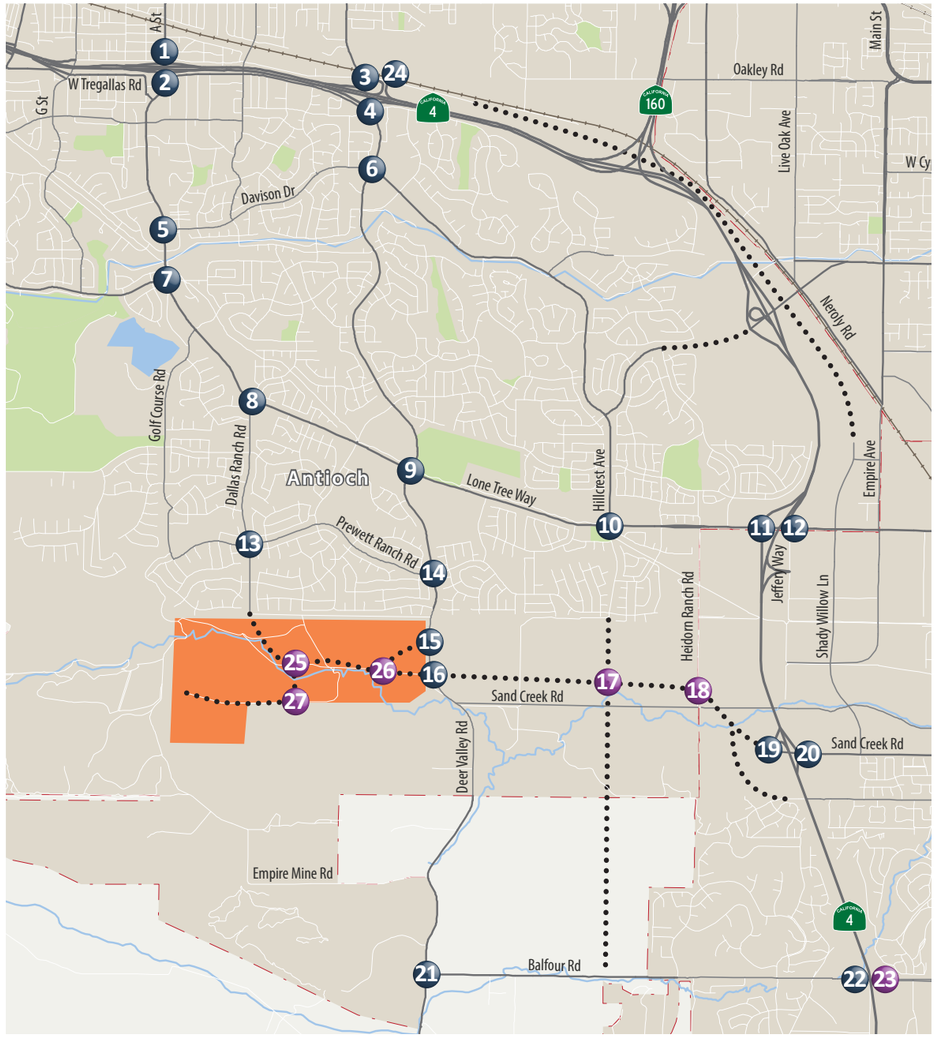
In addition to the roadway improvements considered in the analysis of near-term conditions, which includes an extension of Hillcrest Avenue from its current terminus to an extension of Sand Creek Road, improvements to Heidorn Ranch Road, the extension of Sand Creek Road from State Route 4 in the east to its current terminus by the Kaiser Medical Center, the Laurel Road extension from State Route 4 to its current terminus east of Canada Valley Road, and completion of the State Route 4/Balfour Road interchange improvements, which is currently under construction, the extension of Hillcrest Avenue to Balfour Road was considered in the Cumulative condition in conjunction with the construction of Sand Creek Road between the Kaiser Medical Center and Deer Valley Road.

Further upgrades to the Sand Creek Road/State Route 4 interchange, as well as SR 4 mainline are planned but not fully funded; therefore additional improvements are not assumed in the analysis of cumulative conditions as the timing of those improvements is uncertain.

As part of the project, roadway improvements would be constructed to extend Sand Creek Road from Deer Valley Road to Dallas Ranch Road, and Deer Valley Road would be improved along the project frontage to provide two travel lanes in each direction through the Sand Creek Road intersection, where it would taper to a two-lane cross-section. An assessment of on-site intersections is provided in the site plan review chapter.

The assumed lane configurations in each scenario are shown on Figure 13 and Figure 14.

Vehicle traffic generated by the proposed project would contribute to the need for local and regional roadway improvements. The project would contribute to the construction of regional roadway improvements through the payment of regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA).



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Roadway Improvements Expected to Be Complete

\# Study Intersection

\# Future Intersection

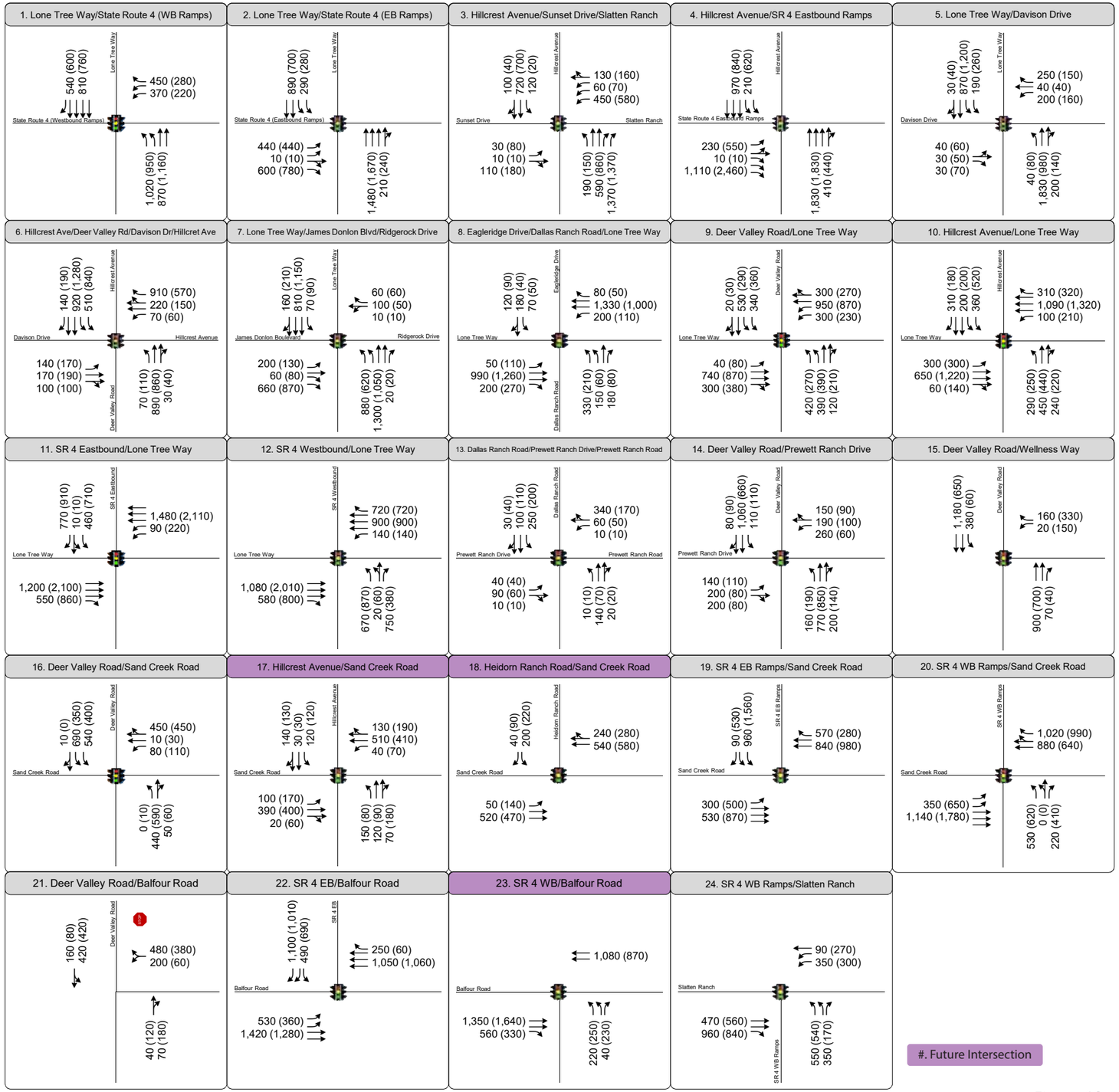
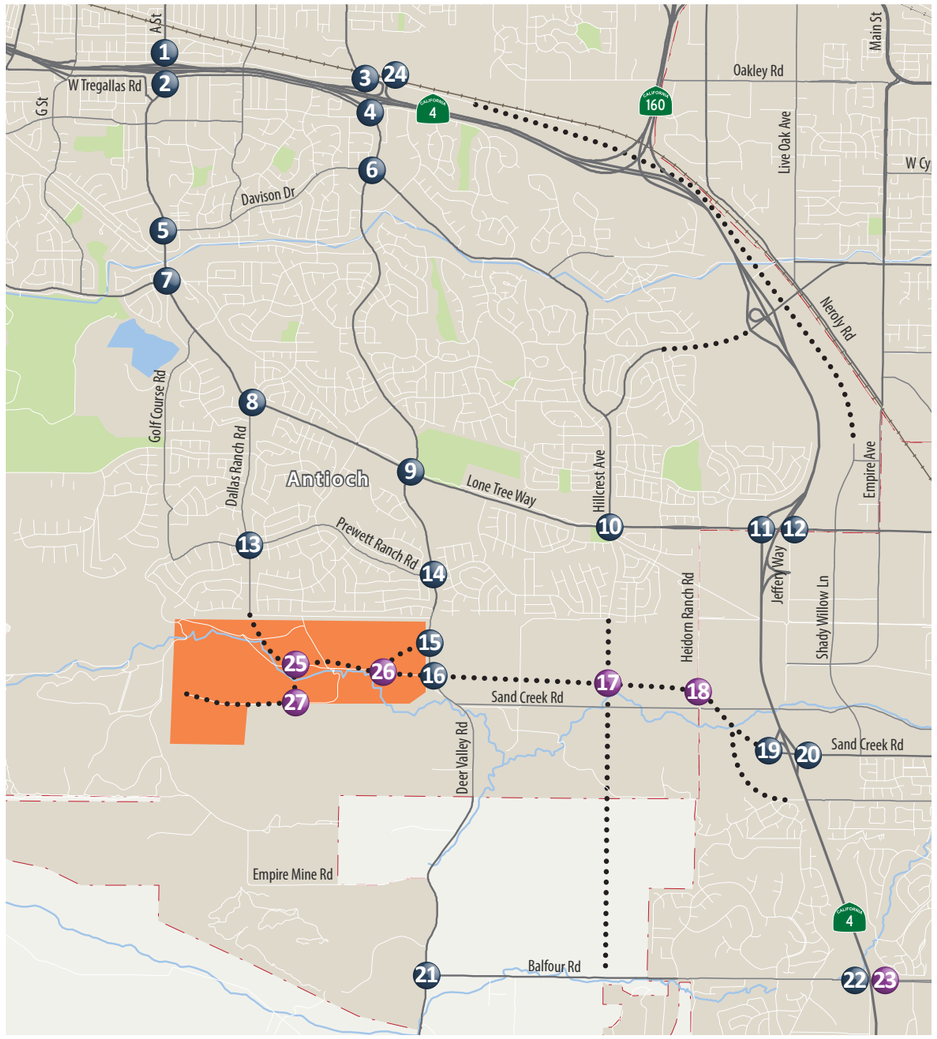


Figure 13

Cumulative without Project
Peak Hour Traffic Volumes, Lane Configurations and Traffic Controls



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Roadway Improvements Expected to Be Complete

Study Intersection

Future Intersection

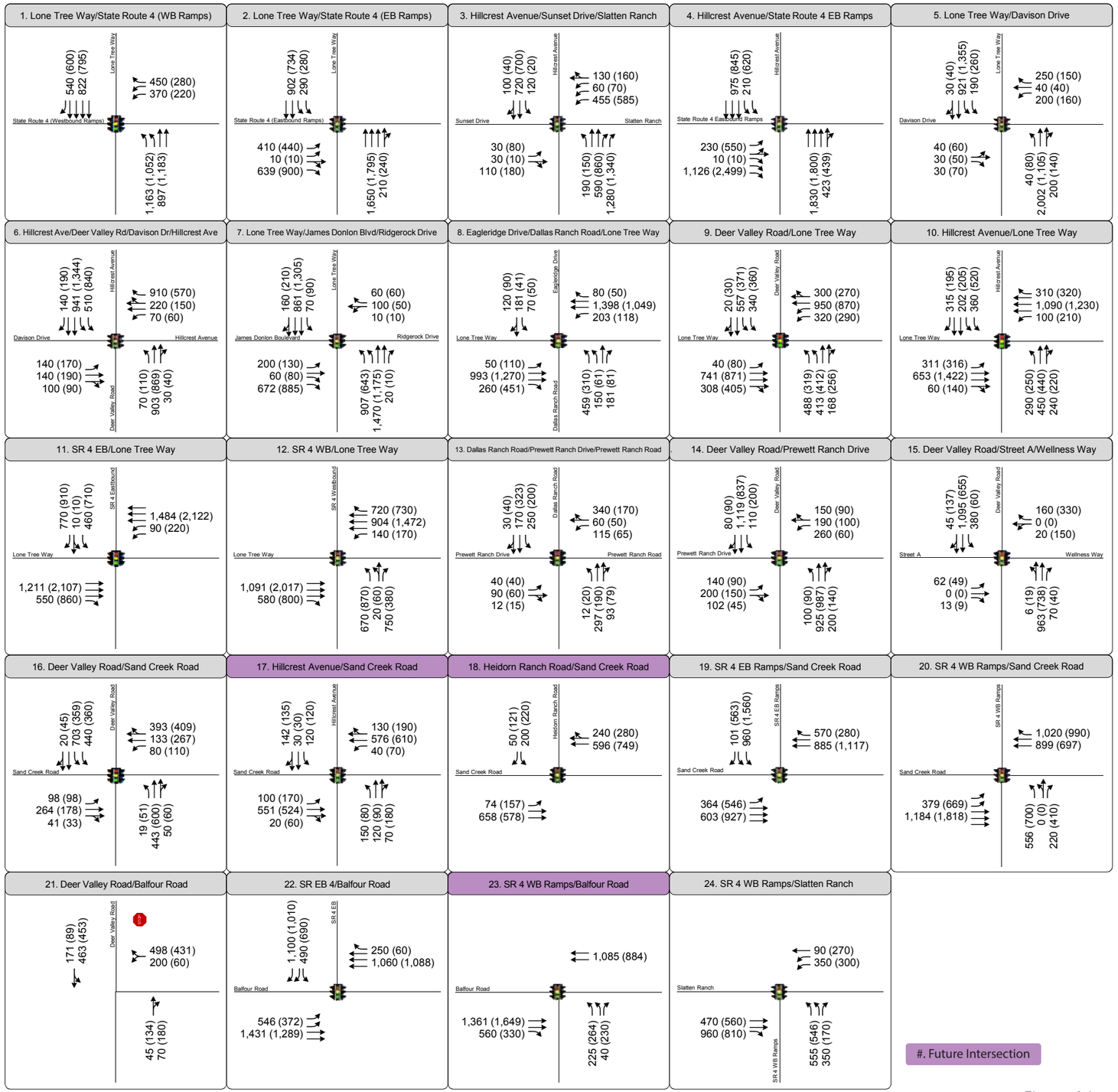
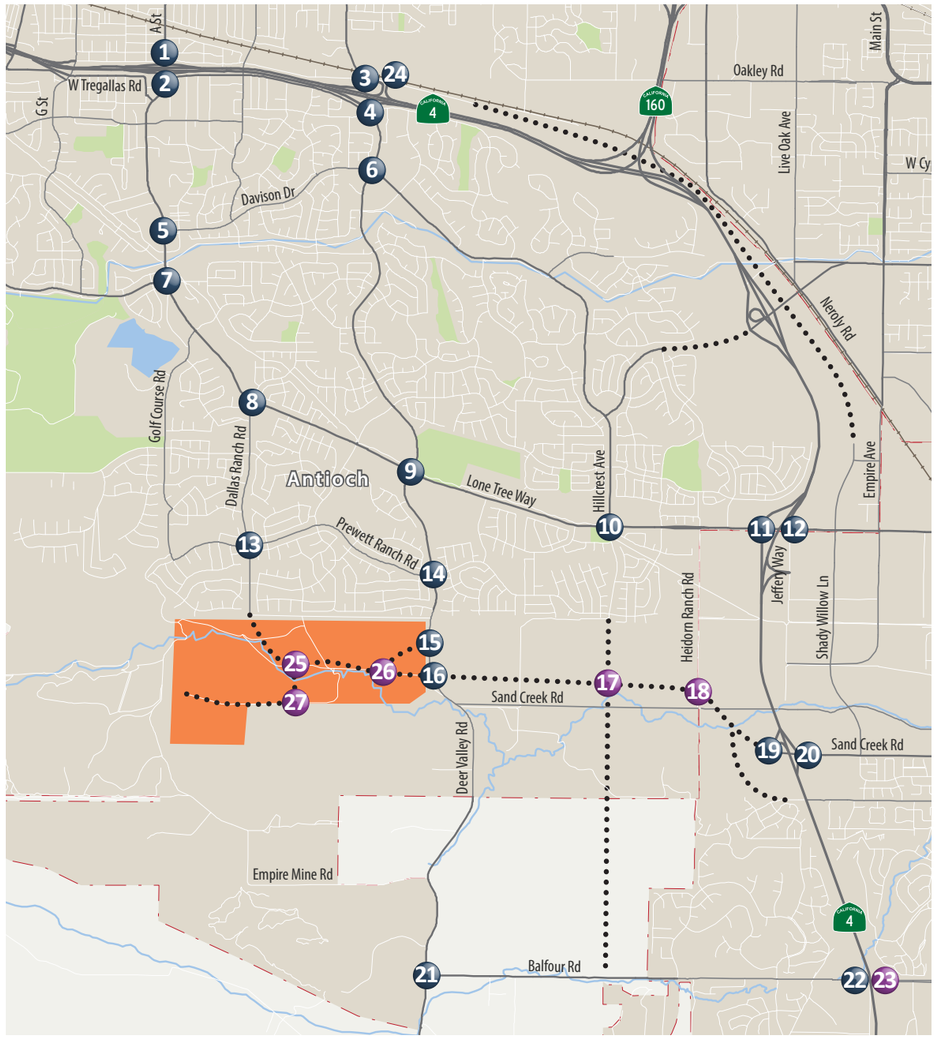


Figure 14a

Cumulative with Multi-Generational Project
Peak Hour Traffic Volumes, Intersection Lane Configurations and Traffic Controls



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Roadway Improvements Expected to Be Complete

Study Intersection

Future Intersection

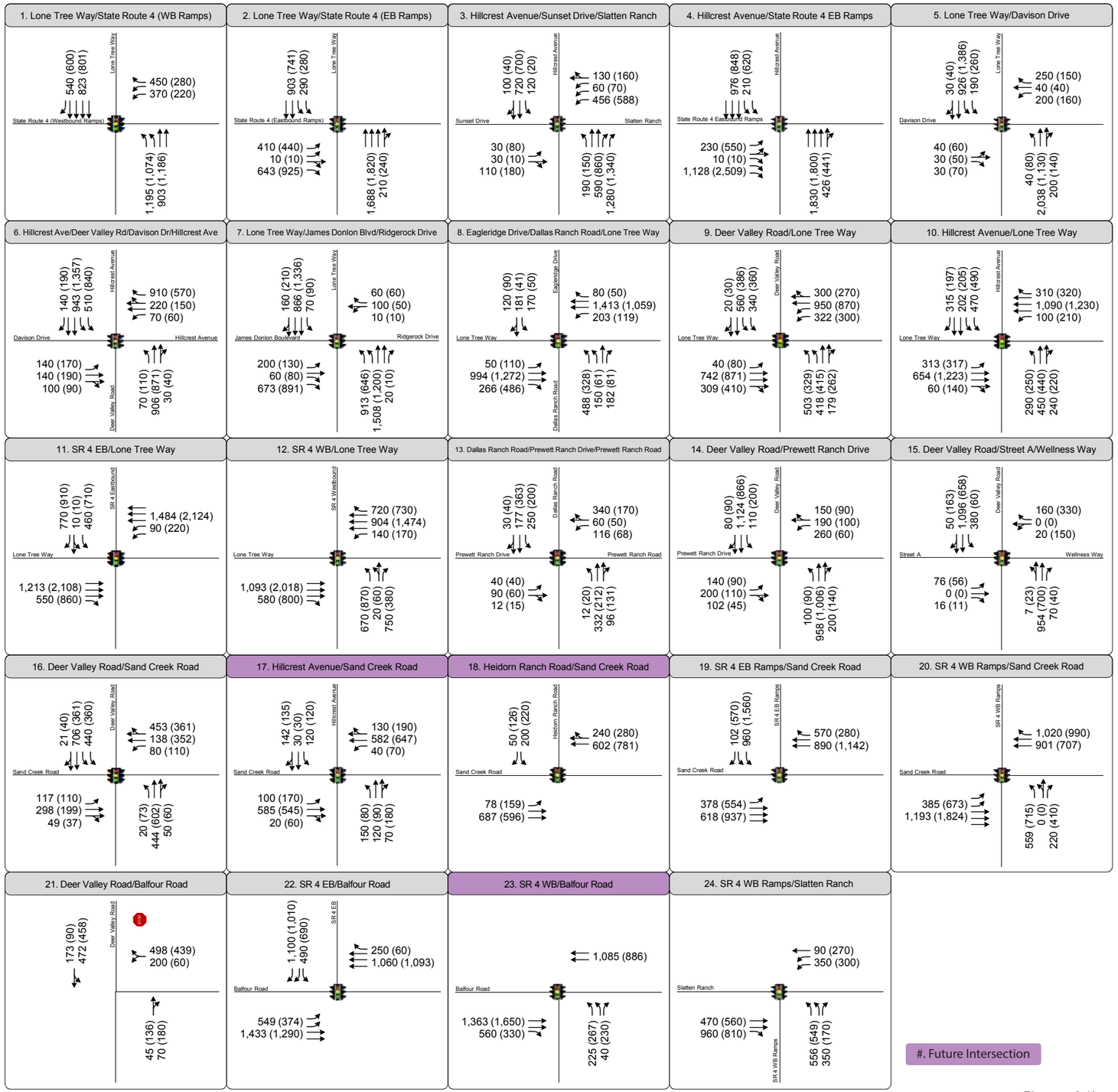


Figure 14b

Cumulative with Traditional Project
Peak Hour Traffic Volumes, Intersection Lane Configurations and Traffic Controls

Analysis of Cumulative Conditions

Cumulative without and with Project conditions were evaluated using the same methods described in Chapter 1. The analysis results are presented in **Table 10,** based on the traffic volumes presented on Figure 13 and Figure 14. Six intersections is projected to operate at deficient levels in the cumulative condition prior to the addition of project traffic:

- Hillcrest Avenue at State Route 4 Eastbound Ramps – LOS F AM and PM Peak Hour
- Lone Tree Way at Hillcrest Avenue – LOS E PM Peak Hour
- Lone Tree Way at SR 4 Eastbound Ramps – LOS F PM Peak Hour
- Prewett Ranch Drive at Deer Valley Road – LOS E AM Peak Hour
- Sand Creek Road at State Route 4 Eastbound Ramps – LOS F PM Peak Hour
- Balfour Road at Deer Valley Road – LOS F AM Peak hour

Table 10: Cumulative Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Cumulative without Project		Cumulative with Multi-generational Project		Cumulative with Traditional Project	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
1. Lone Tree Way/A Street/SR 4 WB Ramps	Signal	AM PM	26 16	C B	33 19	C B	34 19	C B
2. Lone Tree Way/A Street/SR 4 EB Ramps	Signal	AM PM	19 24	B C	21 30	C C	21 31	C C
3. Hillcrest Avenue/ Sunset Drive/ Slatten Ranch Road	Signal	AM PM	21 22	C C	21 22	C C	21 22	C C
4. Hillcrest Avenue/ SR 4 EB Ramps	Signal	AM PM	**108** **> 150**	**F** **F**	**111** **> 150**	**F** **F**	**112** **> 150**	**F** **F**
5. Lone Tree Way/ Davison Drive	Signal	AM PM	51 24	D C	**66** 26	**E** C	**70** 27	**E** C
6. Deer Valley Road/ Hillcrest Avenue/ Davison Drive	Signal	AM PM	43 44	D D	44 44	D D	44 44	D D

Table 10: Cumulative Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Cumulative without Project		Cumulative with Multi-generational Project		Cumulative with Traditional Project	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
7. Lone Tree Way/ James Donlon Boulevard	Signal	AM PM	33 34	C C	36 38	D D	36 39	D D
8. Lone Tree Way/ Dallas Ranch Road	Signal	AM PM	42 29	D C	52 34	D C	53 36	D D
9. Lone Tree Way/ Deer Valley Road	Signal	AM PM	39 36	D D	43 40	D D	44 40	D D
10. Lone Tree Way/ Hillcrest Avenue	Signal	AM PM	50 **69**	D **E**	52 **70**	D **E**	52 **70**	D **E**
11. Lone Tree Way/SR 4 EB Ramps	Signal	AM PM	39 **85**	D **F**	40 **85**	D **F**	40 **85**	D **F**
12. Lone Tree Way/ SR 4 WB Ramps/ Jeffery Way	Signal	AM PM	38 29	D C	36 26	D C	36 30	D C
13. Prewett Ranch Drive/ Dallas Ranch Road	Signal	AM PM	19 14	B B	21 15	C B	27 15	C B
14. Prewett Ranch Drive/ Deer Valley Road[3]	Signal	AM PM	**65** 21	**E** C	47 24	D C	48 25	D C
15. Deer Valley Road/ Wellness Way/ Street A	Signal	AM PM	13 9	B A	25 21	C C	31 21	C C
16. Sand Creek Road/ Deer Valley Road	Signal	AM PM	16 15	B B	22 23	C C	24 24	C C
17. Sand Creek Road/ Hillcrest Avenue	Signal	AM PM	44 39	D D	44 39	D D	44 39	D D
18. Sand Creek Road/ Heidorn Ranch Road	Signal	AM PM	24 24	C C	25 27	C C	25 28	C C
19. Sand Creek Road/ SR 4 EB Ramps	Signal	AM PM	48 **>120**	D **F**	**63** **>120**	**E** **F**	**65** **>120**	**E** **F**
20. Sand Creek Road/ SR 4 WB Ramps	Signal	AM PM	16 26	B C	16 29	B C	16 29	B C
21. Balfour Road/Deer Valley Road	Signal	AM PM	**>120 (>120)** 33 **(83)**	**F (F)** D **(F)**	**>120 (>120)** **59 (>120)**	**F (F)** **F (F)**	**>120 (>120)** **64 (>120)**	**F (F)** **F (F)**

Table 10: Cumulative Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Cumulative without Project		Cumulative with Multi-generational Project		Cumulative with Traditional Project	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
22. Balfour Road/State Route 4 EB Ramps	Signal	AM PM	29 38	C D	30 39	C D	30 39	C D
23. Balfour Road/State Route 4 WB Ramps	Signal	AM PM	17 16	B B	17 16	B B	17 16	B B
24. Slatten Ranch Road/SR 4 WB Ramps	Signal	AM PM	21 14	C B	21 15	C B	21 15	C B

Notes:
1. Signal = signalized intersection
2. Average intersection delay is calculated for all signalized intersections using the 2010 HCM method for vehicles.
3. Intersection operations improve with the project as the combination of the Sand Creek Road connection to Dallas Ranch Road and the Sand Creek Road extension between Dozier-Libbey Medical High School and Deer Valley Road is expected to result in some existing travel from the Dallas Ranch neighborhood to the Sand Creek Road corridor, shifting traffic from the Prewett Ranch Road intersection.
Source: Fehr & Peers, 2018

The addition of project traffic and associated roadway improvements would improve operations of the Prewett Ranch Drive at Deer Valley Road intersection. Delay at all other intersections would increase, resulting in potentially significant impacts. The addition of project traffic from either variant would also result in LOS E operations at the Lone Tree Way at Davison Drive intersection in the AM peak hour.

Vehicle queues are expected to increase at study intersections as traffic volumes increase, which would further increase with the addition of Project traffic. Monitoring and adjusting traffic signal timings in response to actual traffic volumes to minimize the potential for vehicle queue spillback is recommended.

Cumulative Conditions Impacts and Mitigation

Potential off-site intersection impacts were identified in the Cumulative condition.

Impact Statement 9: Intersection 4 – Hillcrest Avenue at State Route 4 Eastbound Ramps

The Hillcrest Avenue at State Route 4 Eastbound Ramps intersection operates at a deficient LOS F during both peak hours prior to the addition of project traffic in the cumulative condition. The addition of project traffic would worsen operations with either the multi-generational or traditional project. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 9:*** This interchange has been built to its ultimate right-of-way and no additional physical improvements are planned. Poor operations at this intersection are primarily due to the close proximity of adjacent intersections that affect vehicle progression through the interchange area.
>
> The Project Applicant shall fund installation of Adaptive Signal Control Technologies (ASCT) or other traffic signal interconnect system approved by the City at the following intersections (same as Mitigation Measure 1):
>
> - Slatten Ranch Road at State Route 4 Westbound Ramps
> - Slatten Ranch Road/Sunset Drive at Hillcrest Avenue
> - Hillcrest Avenue at State Route 4 Eastbound Ramps
> - East Tregallas Road/Larkspur Drive at Hillcrest Avenue
>
> With signal timing adjustments to better serve projected traffic flows, intersection operations would improve to better than the without project condition, reducing the impact to a ***less-than-significant*** level, as shown in **Table 11.** Additionally, the Project applicant shall pay regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA) that would fund construction of additional improvements along the State Route 4 corridor.

However, as Caltrans controls the operations of the traffic signals at the Slatten Ranch Road at State Route 4 Westbound Ramps and Hillcrest Avenue at State Route 4 Eastbound Ramps intersection, the City cannot assure full implementation of this improvement and the impact may remain ***significant and unavoidable***.

Impact Statement 10: Intersection 5 – Lone Tree Way at Davison Drive

The Lone Tree Way at Davison Drive intersection is projected to operate at an acceptable LOS D in the AM peak hour prior to the addition of project traffic in the cumulative condition. The addition of project traffic would result in LOS E operations with either the multi-generational or traditional project during the morning peak hour. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 10:*** The project applicant shall restripe the westbound approach to convert the westbound through lane to a left-thru shared lane. As the intersection already operates with east-west split phasing, the traffic signal would not need to be modified. Implementation of this improvement in combination with retiming of the traffic signals along the corridor would result in overall acceptable service levels, reducing the project's cumulative impact to a ***less-than-significant*** level, as shown in **Table 11**.

Impact Statement 11: Intersection 10 – Lone Tree Way at Hillcrest Avenue

The Lone Tree Way at Hillcrest Avenue intersection is projected to operate at a deficient LOS E in the PM peak hour prior to the addition of project traffic in the cumulative condition. The addition of project traffic would worsen operations with either the multi-generational or traditional project. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 11:*** The project applicant shall modify the traffic signal to provide a westbound right-turn overlap phase and a southbound right-turn overlap phase. With this improvement, the operations would improve as compared to the without project condition with either project option, reducing the project impact to a ***less-than-significant***, as presented in Table 11.

Impact Statement 12: Intersection 11 – Lone Tree Way at State Route 4 Eastbound Ramps

The Lone Tree Way at State Route 4 Eastbound Ramps intersection is projected to operate at a deficient LOS E in the PM peak hour prior to the addition of project traffic in the cumulative condition. The addition of project traffic would worsen operations with either the multi-generational or traditional project. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 12:*** Implement Mitigation Measure 5. The project applicant shall contribute their fair share to intersection improvements that would result in acceptable operations, which could include widening the southbound off-ramp to provide a second right-turn only lane. Construction of this improvement in combination with retiming of the traffic signals along the corridor would result in overall acceptable service levels, reducing the project's near-term impact to a ***less-than-significant*** level, as shown in Table 11. Widening of the southbound off-ramp could

result in secondary impacts to pedestrians by increasing the pedestrian crossing distance. The potential secondary impact to pedestrians for all hours of the day should be balanced against an intersection modification to improve vehicle travel during peak time periods.

Improvements to this intersection would require approval from Caltrans and the City cannot assure implementation of this measure. Therefore, the impact would remain ***significant and unavoidable.***

Impact Statement 13: Intersection 19 – Sand Creek Road at SR 4 EB Ramps

The Sand Creek Road at State Route 4 Eastbound Ramps intersection is projected to operate at a deficient LOS F in the PM peak hour prior to the addition of project traffic in the cumulative condition. The addition of project-generated vehicle trips during the PM peak hour would worsen operations in the PM peak hour and result in LOS E operations with either project variant during the morning peak hour. Based on the significance criteria, this is considered a ***significant*** impact.

Mitigation Measure 13: Implement Mitigation Measure 7. The Project applicant shall pay regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA) that would fund construction of additional improvements at the Sand Creek Road interchange, which includes a slip-ramp for the eastbound Sand Creek to southbound State Route 4 movement, eliminating the conflicting left-turn movement at the intersection. Construction of this improvement would result in acceptable operations, as shown in Table 11, reducing the cumulative impact to a ***less-than-significant*** level. As this improvement is in a programmed fee program, payment of the fee would reduce the impact to a less-than-significant level.

Impact Statement 14: Intersection 21 – Balfour Road at Deer Valley Road

The addition of project-generated vehicle trips during both the AM and PM peak hours would worsen deficient conditions. This impact would occur with either the multi-generational or traditional project. Peak hour signal warrants are also met prior to the addition of project traffic in the cumulative condition. Based on the significance criteria, this is considered a ***significant*** impact.

Mitigation Measure 14: Implement Mitigation Measure 2. The project applicant shall pay their fair share towards the signalization of this intersection in conjunction with other planned improvements, which include the construction of a southbound left-turn lane, as well as separate westbound left and right-turn lanes. These improvements would result in overall acceptable service levels, reducing the project's cumulative impact to a ***less-than-significant*** level, as shown in Table 11.

Table 11: Cumulative With Project With Mitigation Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Cumulative		Cumulative with Multi-generational Project with Mitigation		Cumulative with Traditional Project with Mitigation	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
4. Hillcrest Avenue/4 EB	Signal	AM PM	**108** **287**	**F** **F**	**90** **182**	F **E**	**103** **184**	**F** **F**
5. Lone Tree Way/ Davison Drive	Signal	AM PM	51 24	D C	48 24	D C	51 25	D C
10. Lone Tree Way/ Hillcrest Avenue	Signal	AM PM	50 **69**	D **E**	49 **58**	D **E**	48 **59**	D **E**
11. Lone Tree Way/SR 4 EB Ramps	Signal	AM PM	39 **85**	D **F**	18 28	B D	13 28	B C
19. Sand Creek Road/ SR 4 EB Ramps	Signal	AM PM	48 **>120**	D F	15 36	B D	15 37	B D
21. Balfour Road/Deer Valley Road	SSSC/ Signal	AM PM	**>120 (>120)** 33 **(83)**	**F (F)** D **(F)**	14 18	B B	14 21	B C

Notes:
1. Signal = signalized intersection
2. Average intersection delay is calculated for all signalized intersections using the 2010 HCM method for vehicles.
Source: Fehr & Peers, 2018

7. Phasing Analysis

The project is proposed to be constructed in three major phases, with a conceptual phasing plan shown on **Figure 15**. As the project would likely be built-out over many years, the transportation impacts of the project may not materialize until substantial portions of the project are built and occupied.

Phasing Plan

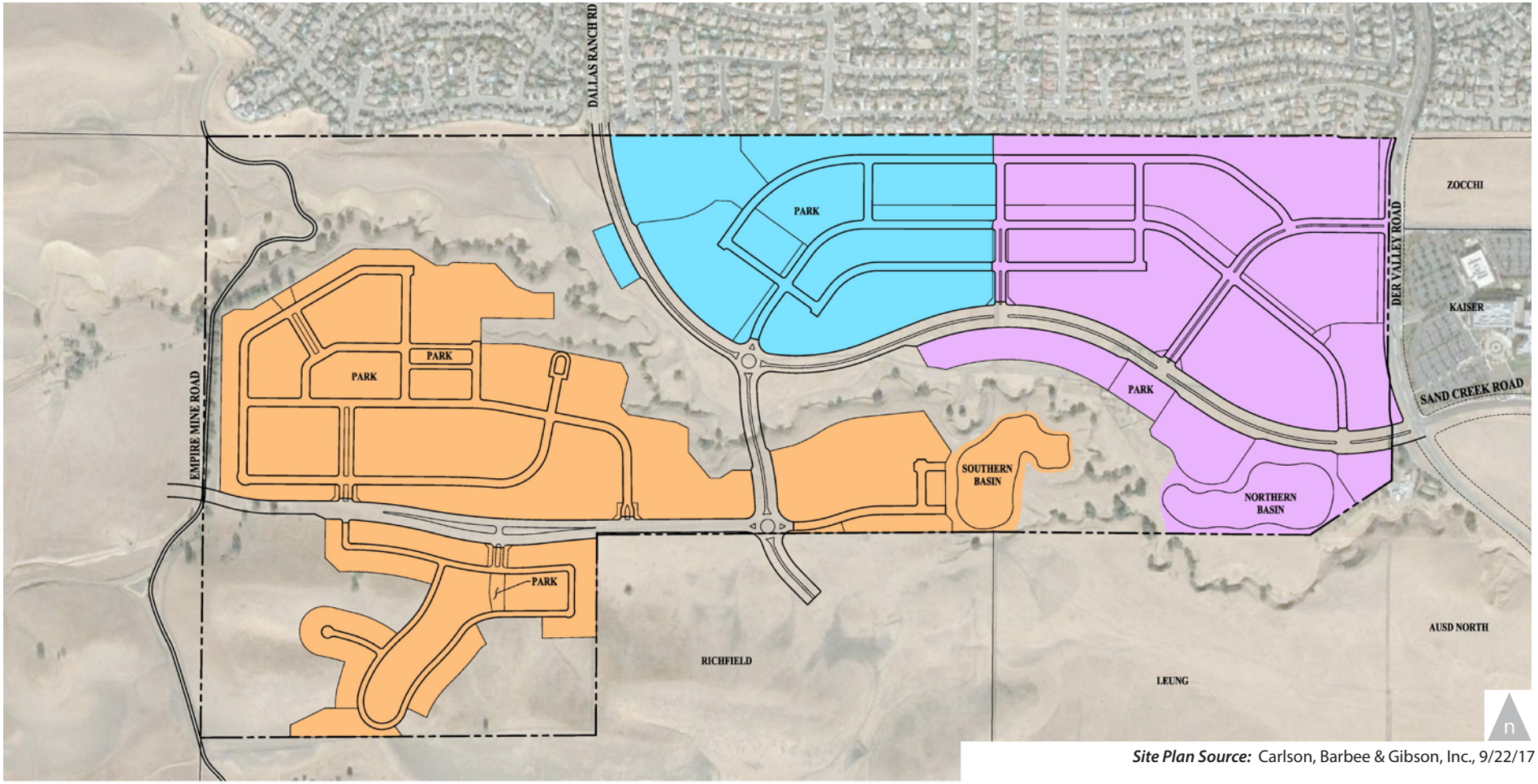
As shown on Figure 15, the project is proposed to be developed in three major phases. In the Phase 1, two roadway connections from Deer Valley Road would be constructed, and all frontage improvements on Deer Valley Road would be constructed. Sand Creek Road would be extended into the site to provide access to individual neighborhoods. Land uses that would be developed include the commercial site, and 412 single-family homes. This level of development is the same for either the traditional community or the multi-generational community.

In Phase 2, Sand Creek Road would be extended further into the site to provide an additional neighborhood access point. For the purposes of preparing a conservative analysis, the extension of Sand Creek Road to Dallas Ranch Road was not assumed and this analysis is intended to identify when that connection is needed. Additional land uses that would be developed in Phase 2 include 210 single-family homes. This level of development is the same for either the traditional community or the multi-generational community.

Project buildout would occur during Phase 3 and the analysis in the previous chapters identifies project impacts with full buildout.

Project Travel Characteristics by Phase

Project trip generation by phase was estimated based on the approach outlined in Chapter 3, and presented in **Table 12**. Phase 1 of the project is expected to generate approximately 6,230 daily trips, including 360 morning peak hour and 610 evening peak hour trips. Should the commercial parcel not be developed or fully occupied in Phase 1, trip generation would be less. Phase 2 would generate an additional 2,000 daily trips, including 160 morning peak hour and 210 evening peak hour trips. Trip generation through Phase 3 remains unchanged from the discussion in Chapter 3.



Site Plan Source: Carlson, Barbee & Gibson, Inc., 9/22/17

UNITS BY PHASE TABLE							
PHASE #	COLOR	LD-1 UNITS	LD-2 UNITS	LD-3 UNITS	MD UNITS	AA UNITS	TOTAL
PHASE 1				200	212		412
PHASE 2				210			210
PHASE 3		120	65			500	685
TOTAL		120	65	410	212	500	1307

Figure 15

Conceptual Project Phasing Plan

Table 12: Vehicle Trip Generation Estimates by Project Phase

Use	Size	Weekday						
		Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Phase 1 – Same for Multi-Generational and Traditional Communities								
Market-rate Single Family Homes	412 dwelling units	3,920	77	232	309	260	152	412
General Commercial	54,000 square feet	2,310	32	20	52	96	104	200
Total Project Trips Through Phase 1		6,230	109	252	361	356	256	612
Phase 2 – Same for Multi-Generational and Traditional Communities								
Market-rate Single Family Homes	210 dwelling units	2,000	39	119	158	132	78	210
Total Project Trips through Phase 2		8,230	149	370	519	488	334	822
Phase 3 – Multi-Generational								
Age Restricted Single Family Homes	500 dwelling units	1,840	40	70	110	80	55	135
Market-rate Single Family Homes	185 dwelling units	1,760	35	104	139	117	68	185
Phase 3 Multi-Generational Trips		3,600	75	174	249	197	123	320
Total Trips through Phase 3 Multi-Generational		*11,830*	*223*	*544*	*767*	*684*	*458*	*1,142*
Phase 3 – Traditional								
Market-rate Single Family Homes	515 dwelling units	4,900	96	290	386	324	191	515
Total Trips through Phase 3 Traditional		*13,130*	*245*	*660*	*905*	*812*	*525*	*1,337*

Source: *Trip Generation Manual* (9th Edition), ITE, 2012; Fehr & Peers, 2018.

Project trips for each phase were assigned to the roadway network based on the general directions of approach and departure for project traffic, as presented previously on Figure 5. The project trip assignment by phase considers the roadway network that would be constructed as part of each phase. Project trip assignment for Phase 1 is shown on Figure 16, Figure 18, and Figure 20 for the existing, near-term and cumulative roadway networks, and for Phase 2 on Figure 17, Figure 19, and Figure 21 existing, near-term and cumulative roadway networks, respectively.

Analysis Results

To estimate traffic volumes for each phase, project trips were added to the without project traffic volumes under existing, near-term and cumulative conditions. Intersection level of service analysis was conducted based on the methods outlined in Chapter 1. Analysis results are presented for study intersections that are impacted during at least one time period by the project and intersections in close proximity to the project where changed travel patterns with the first two phases of development could concentrate project traffic resulting in new-impacts. The results are presented in **Table 13** for the existing condition, **Table 14** for the near-term condition, and **Table 15** for the cumulative condition.

Existing Condition

In the existing condition, all study intersections except the Hillcrest Avenue/State Route 4 Eastbound Ramps and Balfour Road/Deer Valley Road intersections operate at an overall acceptable level. Results of the phasing analysis indicate that the addition of traffic from Phase 1 would worsen the operations of those two intersections, but would not result in any new deficiencies, even considering all project access from Deer Valley Road.

The addition of project traffic through Phase 2 also would not result in new deficiencies, but would continue to worsen the operations of the Hillcrest Avenue/State Route 4 Eastbound Ramps and Balfour Road/Deer Valley Road intersections.

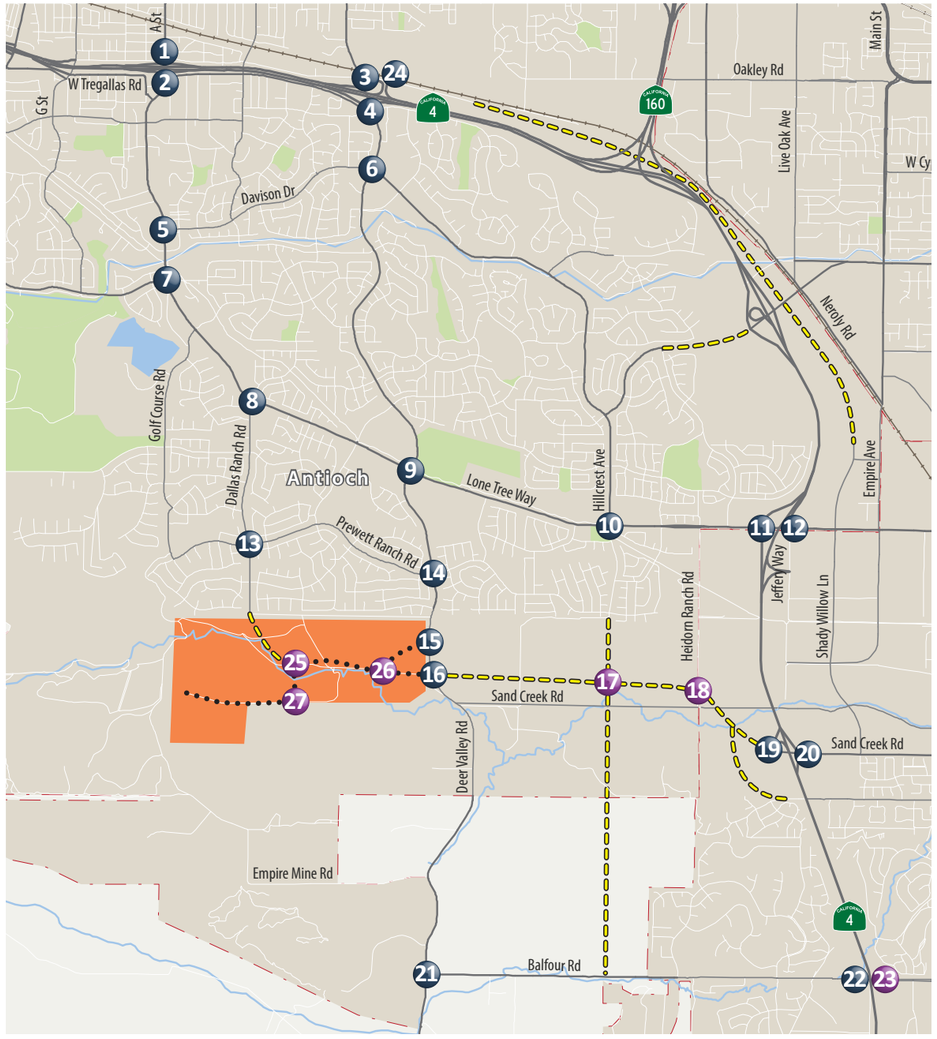
Near-term Condition

In the near-term without project condition, three intersection are projected to operate at unacceptable levels:

4. Hillcrest Avenue/State Route 4 Eastbound Ramps

11. Lone Tree Way/SR 4 EB Ramps

21. Balfour Road/Deer Valley Road



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Planned Future Roadway

Roadway Improvements Expected to Be Complete

Study Intersection

Future Intersection

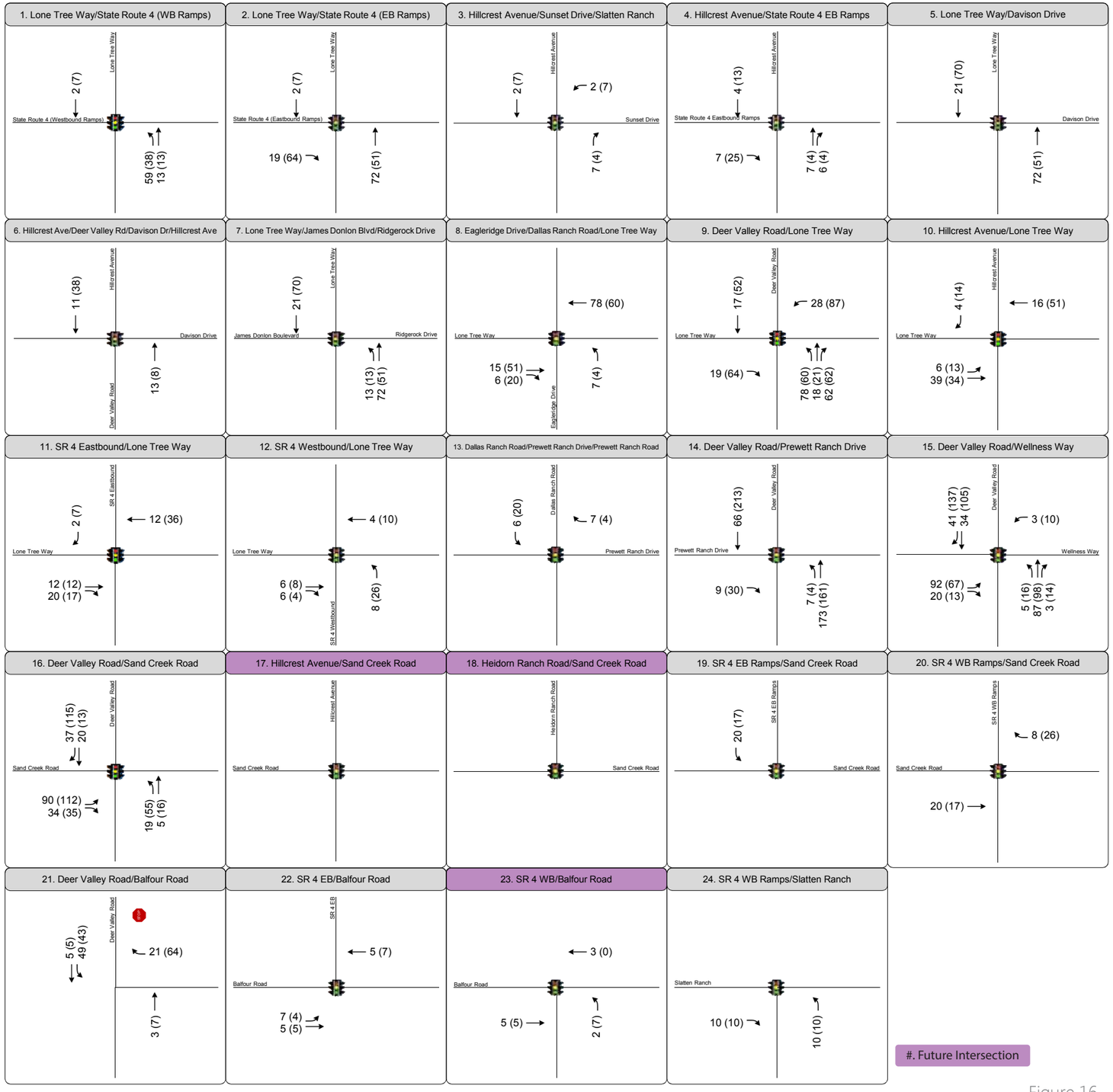
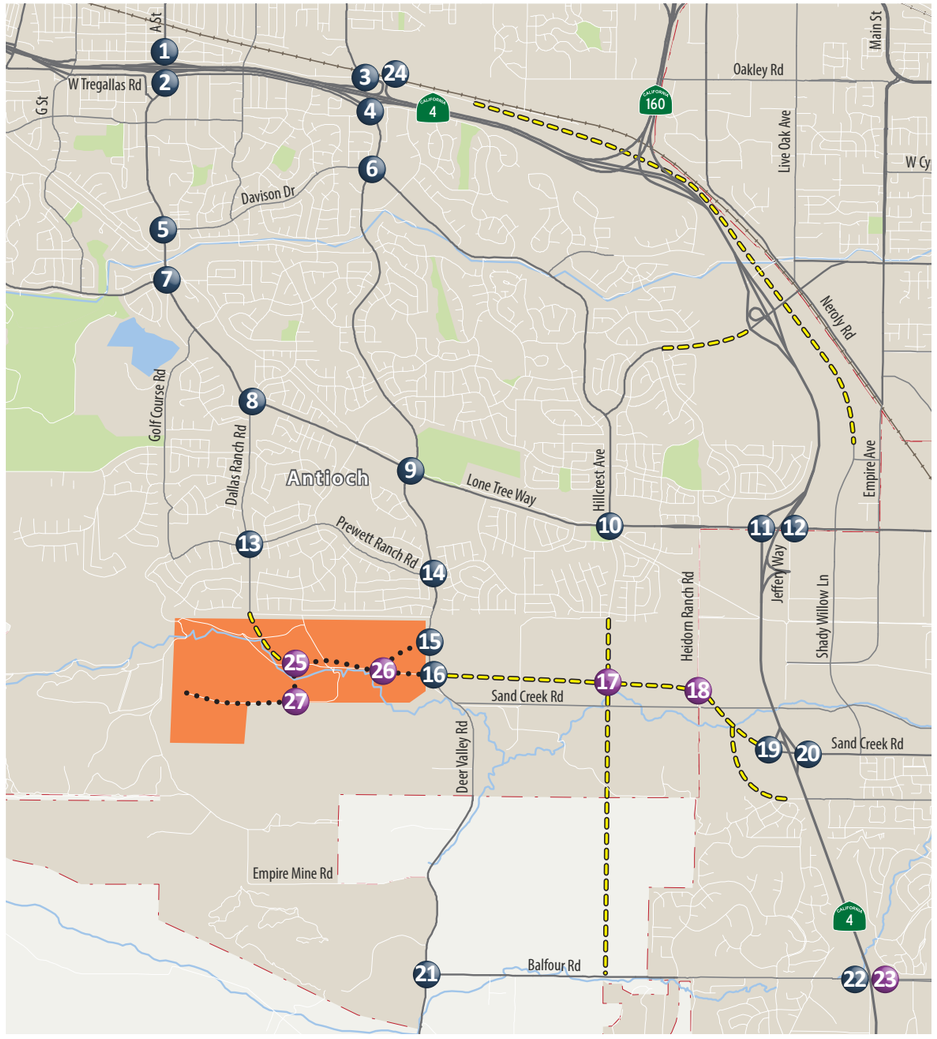


Figure 16

Project Trip Assignment
Existing Roadway Network Phase 1



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Planned Future Roadway

Roadway Improvements Expected to Be Complete

Study Intersection

Future Intersection

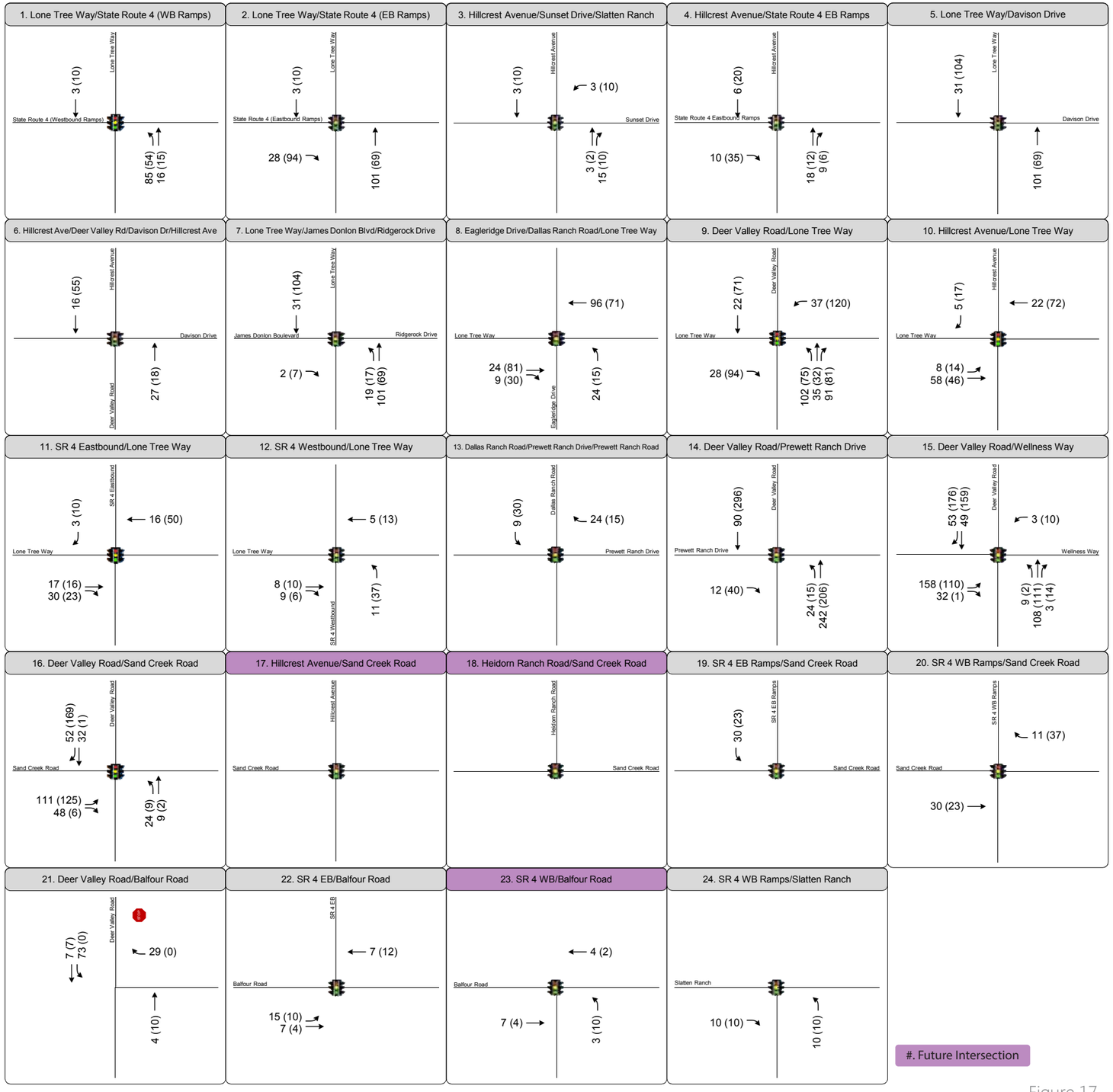
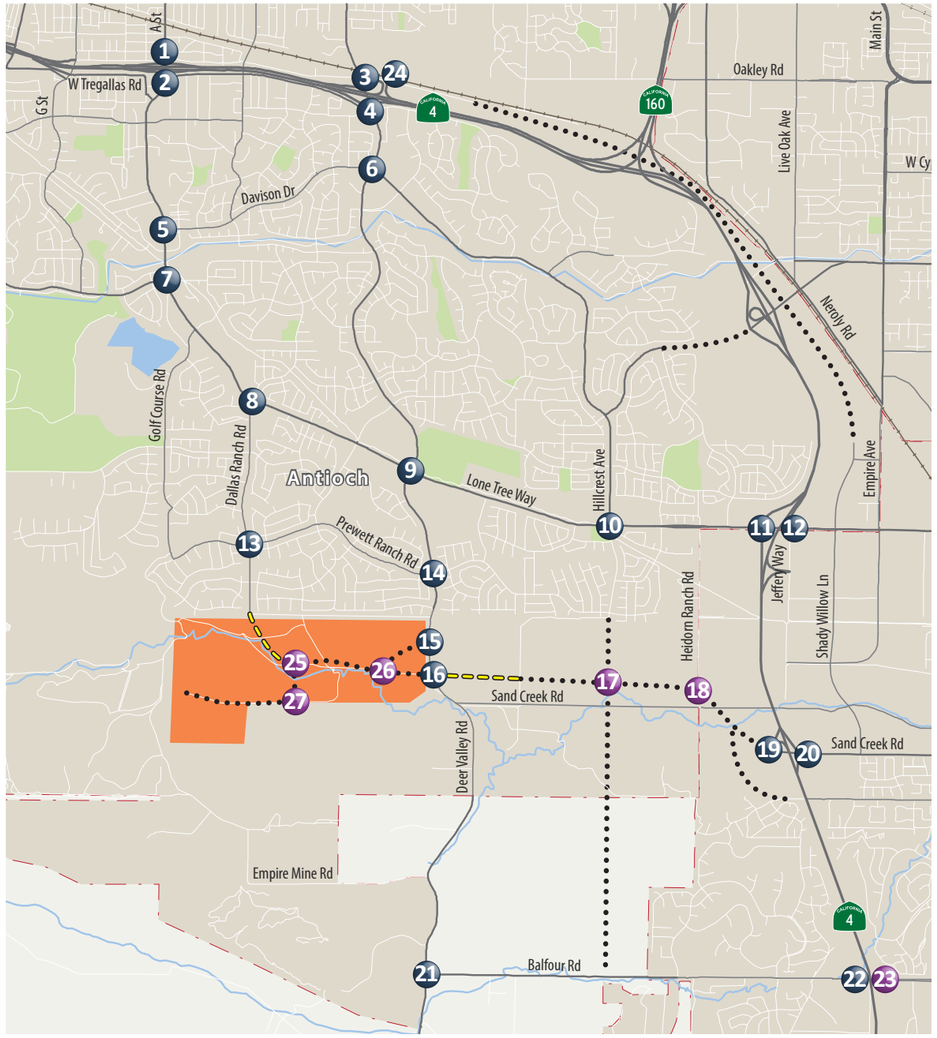


Figure 17

Project Trip Assignment
Existing Roadway Network Phase 2



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes | Signalized Intersection | Stop Sign

Project Site | Planned Future Roadway | Roadway Improvements Expected to Be Complete

Study Intersection | Future Intersection

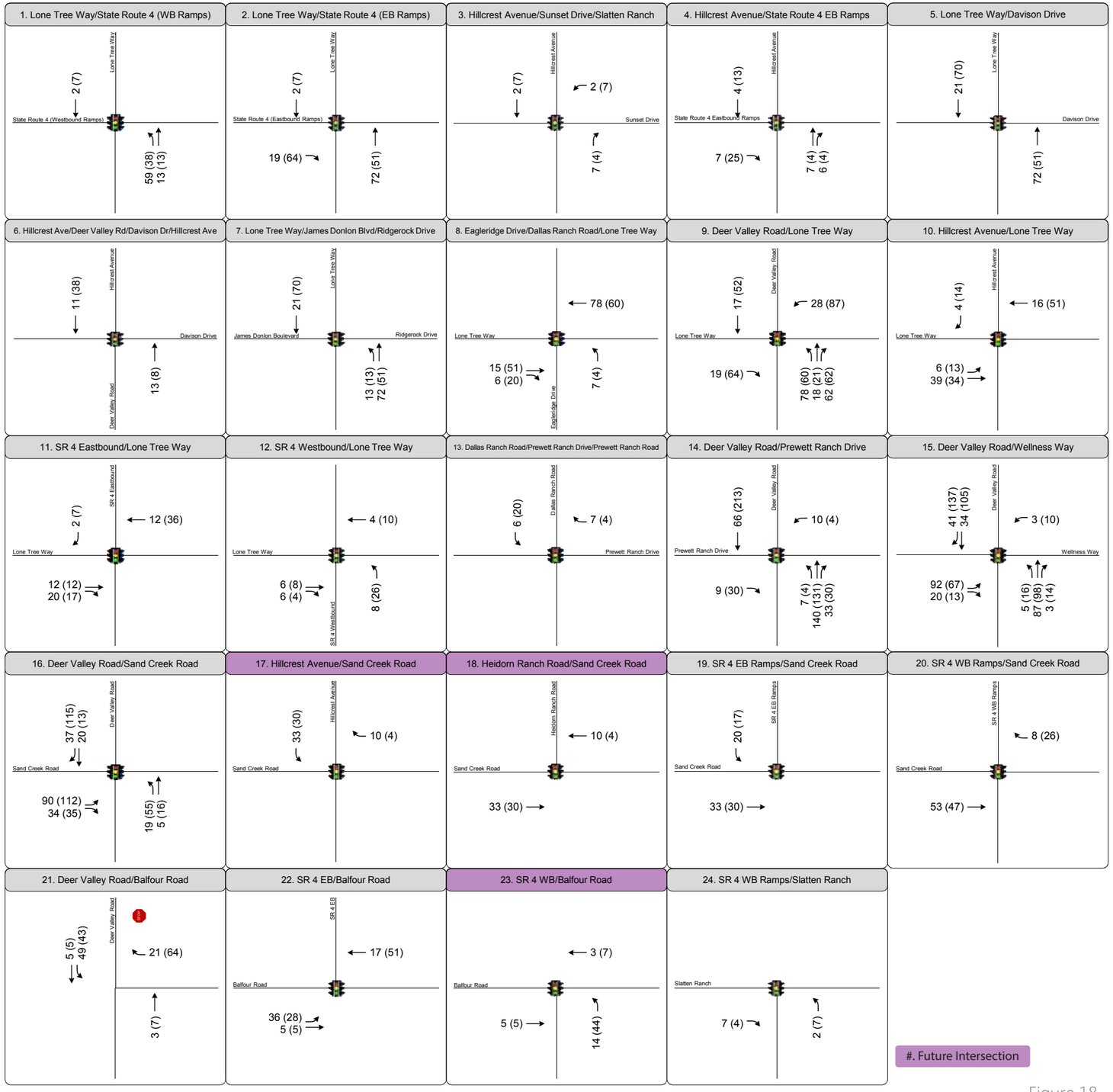
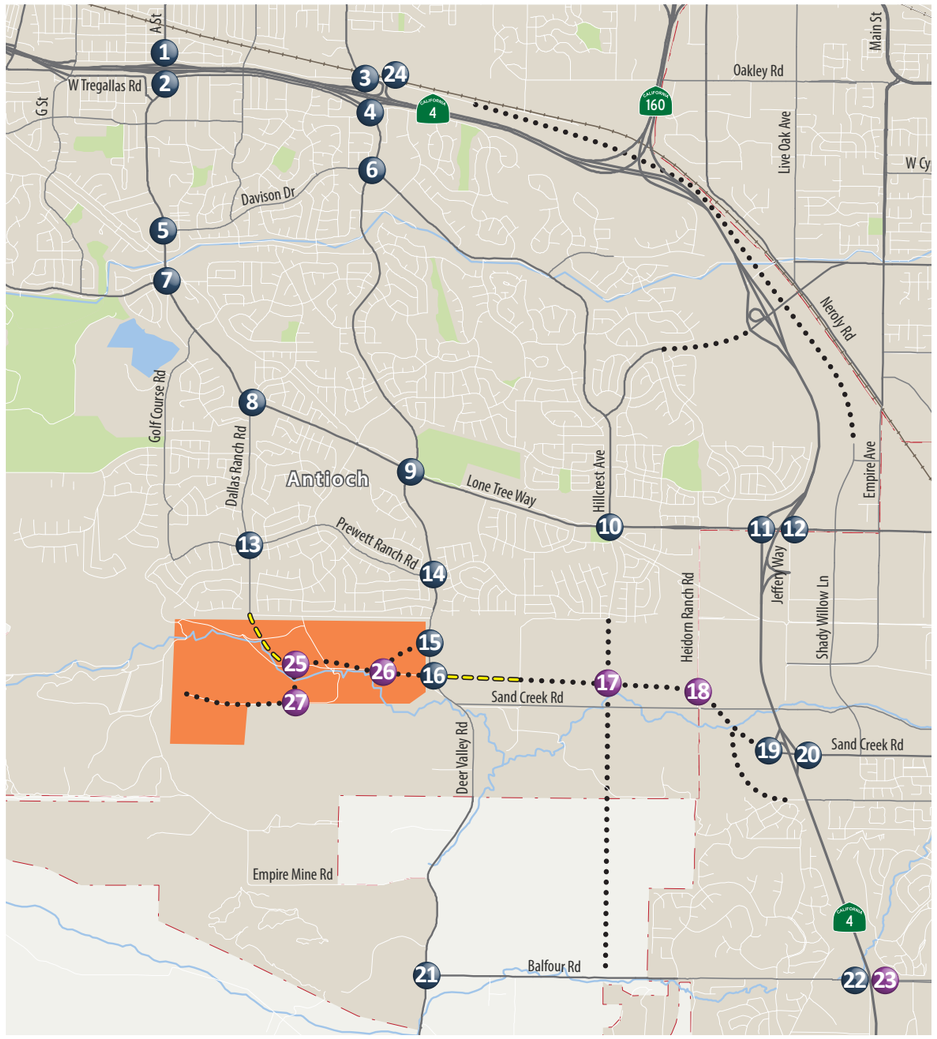


Figure 18

Project Trip Assignment
Near-Term Roadway Network Phase 1



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Planned Future Roadway

Roadway Improvements Expected to Be Complete

Study Intersection

Future Intersection

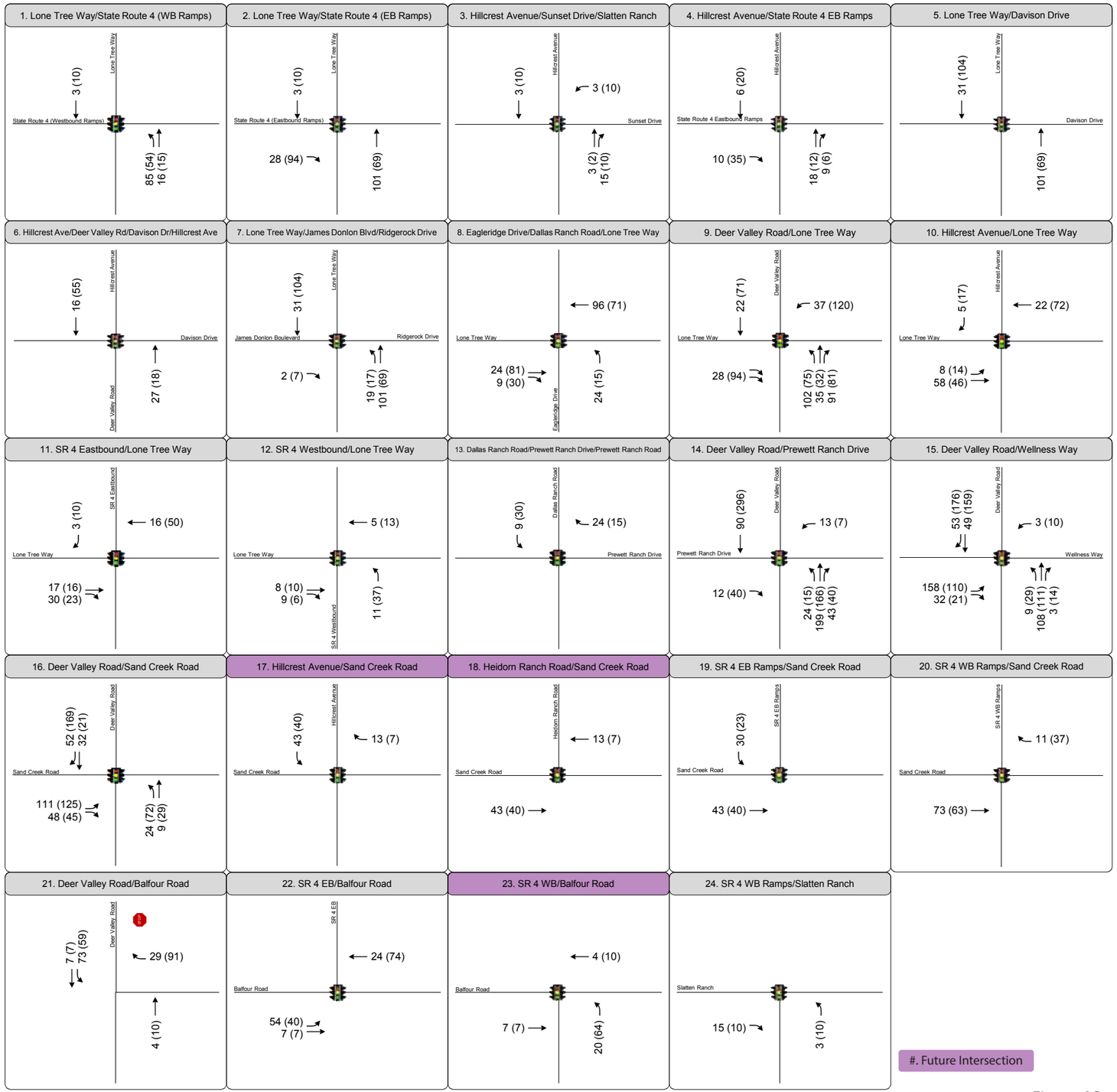
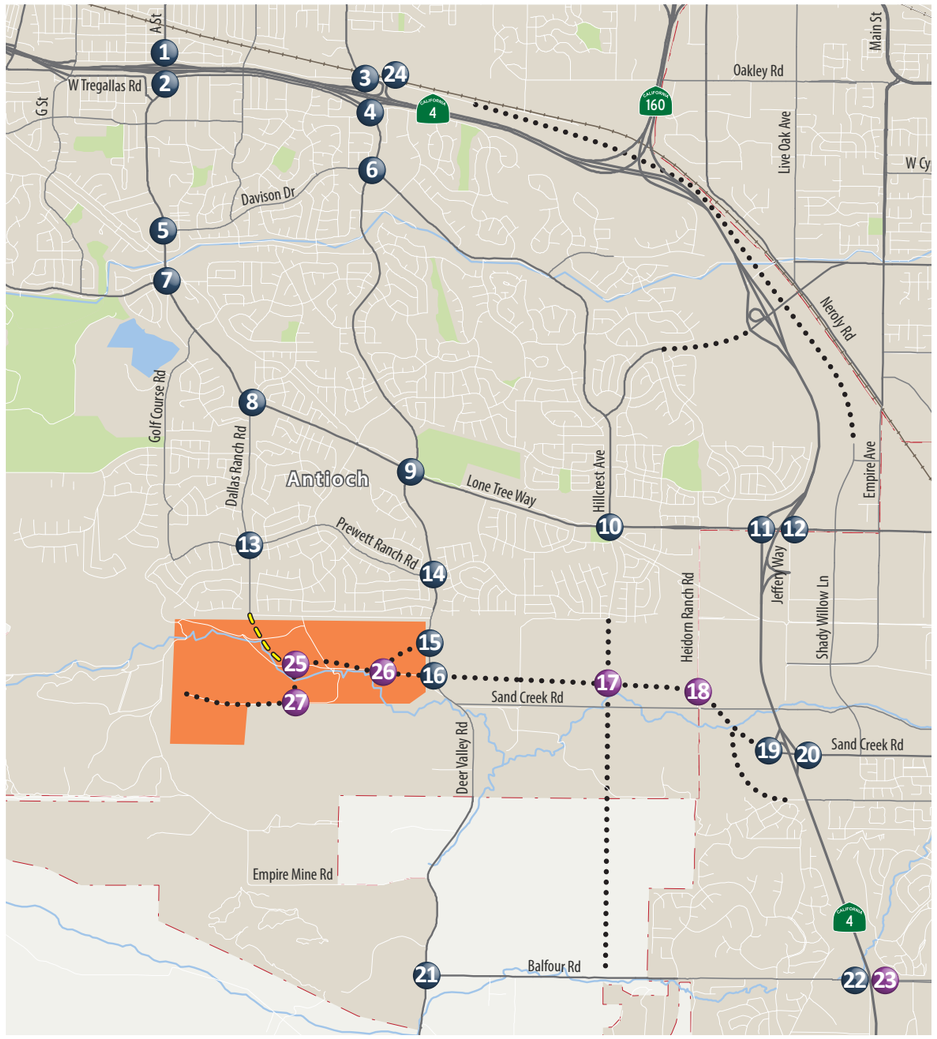


Figure 19

Project Trip Assignment
Near-Term Roadway Network Phase 2



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Planned Future Roadway

Roadway Improvements Expected to Be Complete

Study Intersection

Future Intersection

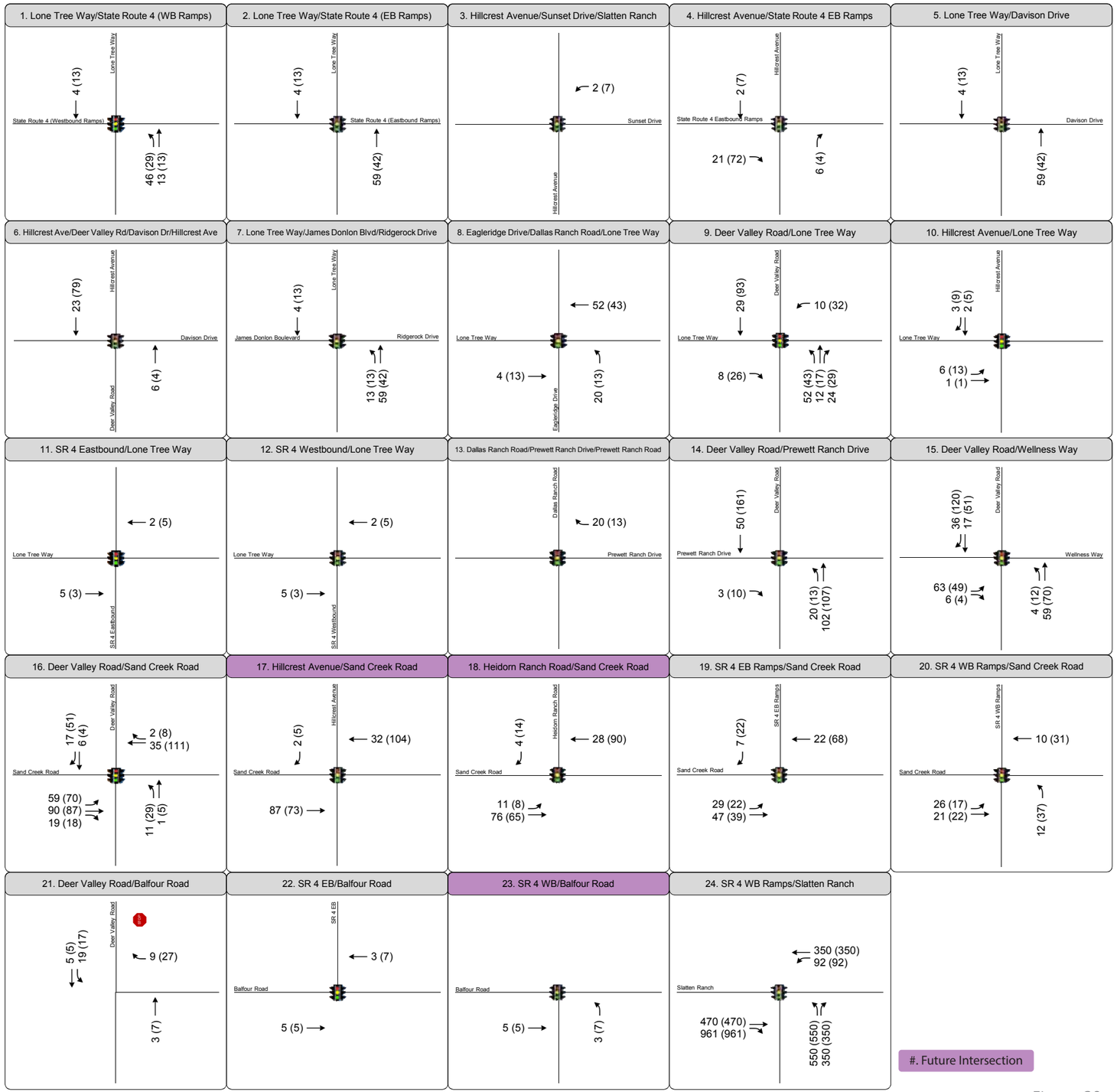
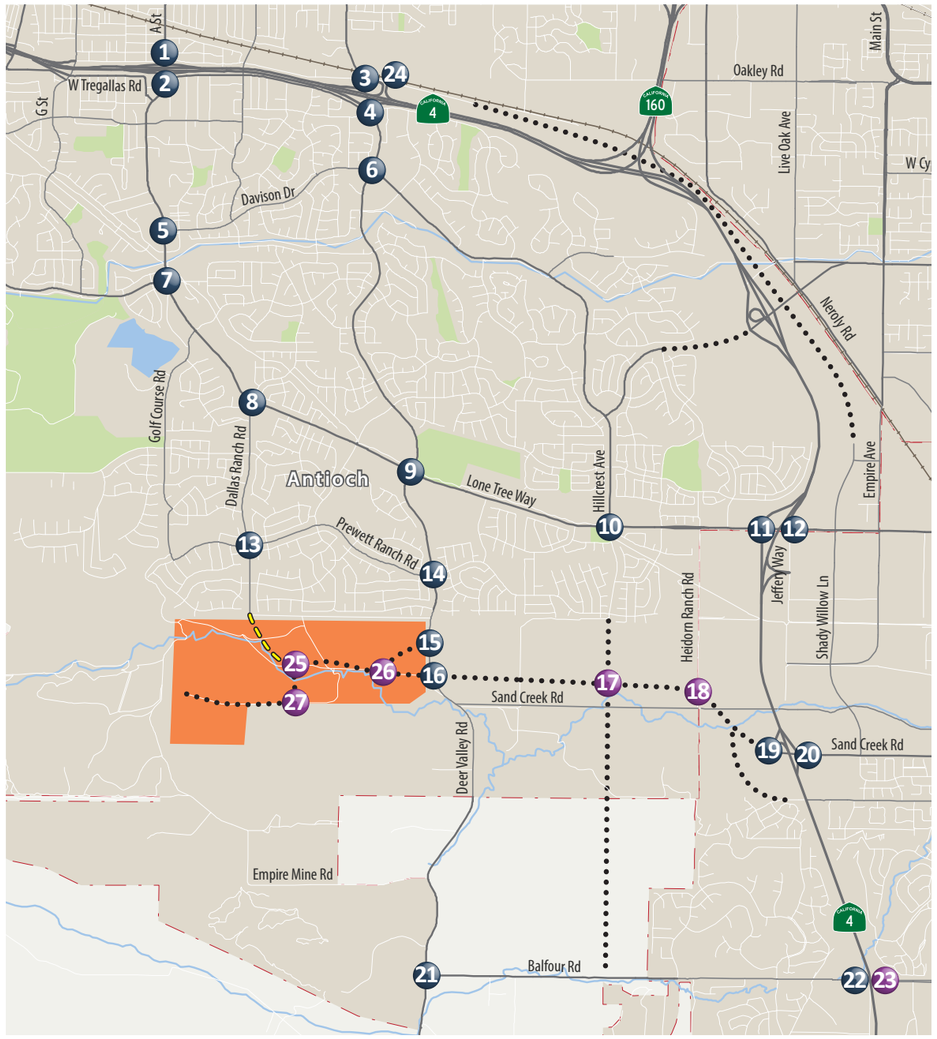


Figure 20

Project Trip Assignment
Cumulative Roadway Network Phase 1



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop Sign

Project Site

Planned Future Roadway

Roadway Improvements Expected to Be Complete

Study Intersection

Future Intersection

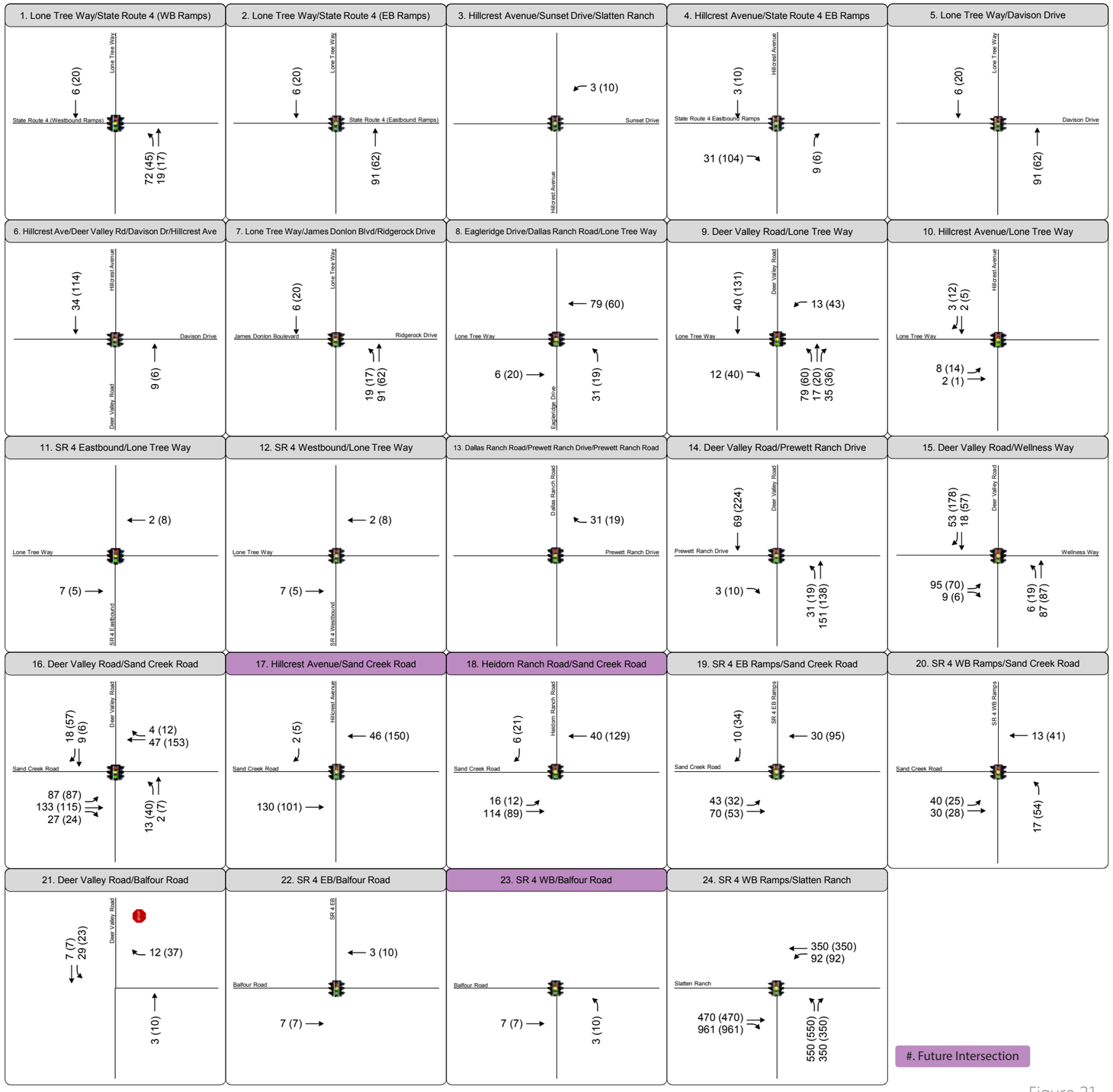


Figure 21

Project Trip Assignment
Cumulative Roadway Network Phase 2

The addition of project traffic through Phase 1 would worsen average delay at the already deficient intersections. All other intersections would continue to operate at acceptable service levels.

With the addition of traffic through Phase 2, operations of the already deficient intersections would continue to worsen, and the intersection of Prewett Ranch Drive/Deer Valley Road would degrade to LOS E.

Cumulative Condition

In the cumulative condition, the following intersections are projected to operate at unacceptable levels:

4. Hillcrest Avenue/SR 4 EB Ramps

10. Lone Tree Way/Hillcrest Avenue

11. Lone Tree Way/SR 4 EB Ramps

14. Prewett Ranch Drive/Deer Valley Road

19. Sand Creek Road/SR 4 EB Ramps

21. Balfour Road/Deer Valley Road

The addition of project traffic through Phase 1 would increase delay at the above intersections, but would not result in new deficiencies.

With the addition of traffic through Phase 2, operations of the above intersections would worsen, and the intersection of Lone Tree Way/Davison Drive would degrade to LOS E.

Table 13: Existing Conditions Phasing Analysis Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Existing		Existing with Phase 1		Existing with Phase 2	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
4. Hillcrest Avenue/ SR 4 EB Ramps	Signal	AM PM	**86** **121**	**F** **F**	**89** **142**	**F** **F**	**90** **> 150**	**F** **F**
5. Lone Tree Way/ Davison Drive	Signal	AM PM	17 15	B B	17 16	B B	18 16	B B
8. Lone Tree Way/Dallas Ranch Road	Signal	AM PM	31 16	C B	32 16	C B	33 16	C B
9. Lone Tree Way/Deer Valley Road	Signal	AM PM	34 25	C C	40 31	D C	43 31	D C
10. Lone Tree Way/ Hillcrest Avenue	Signal	AM PM	19 21	B C	19 21	B C	19 21	B C
11. Lone Tree Way/SR 4 EB Ramps	Signal	AM PM	16 39	B D	16 39	B D	16 39	B D
14. Prewett Ranch Drive/Deer Valley Road	Signal	AM PM	29 14	C B	33 15	C B	36 15	D B
15. Deer Valley Road/ Wellness Way/ Street A	Signal	AM PM	7 5	A A	13 11	B B	15 12	B B
16. Sand Creek Road/ Deer Valley Road	Signal	AM PM	11 7	B A	15 12	B B	17 12	B B
19. Sand Creek Road/ SR 4 EB Ramps	Signal	AM PM	6 5	A A	6 5	A A	6 5	A A
21. Balfour Road/Deer Valley Road	SSSC	AM PM	30 **(58)** 8 (13)	D **(F)** A (B)	**51 (110)** 9 (14)	**E (F)** A (B)	**65 (>120)** 9 (14)	**F (F)** A (B)

Notes:
1. Signal = signalized intersection; SSSC = side-street stop-controlled intersection
2. Average intersection delay is calculated for all signalized intersections using the 2010 HCM method for vehicles.
Source: Fehr & Peers, 2018

Table 14: Near-Term Conditions Phasing Analysis Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Near-term without Project		Near-term with Phase 1		Near-term with Phase 2	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
4. Hillcrest Avenue/ SR 4 EB Ramps	Signal	AM PM	**87** **121**	**F** **F**	**87** **123**	**F** **F**	**90** **125**	**F** **F**
5. Lone Tree Way/ Davison Drive	Signal	AM PM	22 22	C C	23 23	C C	24 23	C C
8. Lone Tree Way/Dallas Ranch Road	Signal	AM PM	39 30	D C	42 31	D C	42 32	D C
9. Lone Tree Way/Deer Valley Road	Signal	AM PM	41 35	D C	46 42	D D	48 46	D D
10. Lone Tree Way/ Hillcrest Avenue	Signal	AM PM	26 28	C C	27 29	C C	27 29	C C
11. Lone Tree Way/SR 4 EB Ramps	Signal	AM PM	19 **62**	B **E**	19 **65**	B **E**	20 **66**	B **E**
14. Prewett Ranch Drive/Deer Valley Road	Signal	AM PM	40 23	D C	52 25	D C	**60** 27	**E** C
15. Deer Valley Road/ Wellness Way/ Street A	Signal	AM PM	6 8	A A	16 19	B B	23 21	C C
16. Sand Creek Road/ Deer Valley Road	Signal	AM PM	13 14	B B	17 18	B B	19 19	B B
19. Sand Creek Road/ SR 4 EB Ramps	Signal	AM PM	16 37	B D	17 38	B D	18 38	B D
21. Balfour Road/Deer Valley Road	SSSC	AM PM	**38 (72)** 8 (15)	**E (F)** A (B)	**64 (>120)** 9 (17)	**F (F)** A (B)	**78 (>120)** 10 (16)	**F (F)** A (B)

Notes:
1. Signal = signalized intersection; SSSC = side-street stop-controlled intersection
2. Average intersection delay is calculated for all signalized intersections using the 2010 HCM method for vehicles.
Source: Fehr & Peers, 2018

Table 15: Cumulative Conditions Phasing Analysis Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	Cumulative without Project		Cumulative with Phase 1		Cumulative with Phase 2	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
4. Hillcrest Avenue/ SR 4 EB Ramps	Signal	AM PM	**108** **> 150**	**F** **F**	**112** **> 150**	**F** **F**	**113** **> 150**	**F** **F**
5. Lone Tree Way/ Davison Drive	Signal	AM PM	51 24	C C	55 24	D C	**58** 24	**E** C
8. Lone Tree Way/ Dallas Ranch Road	Signal	AM PM	42 29	D C	42 29	D C	45 30	D C
9. Lone Tree Way/Deer Valley Road	Signal	AM PM	39 36	D D	42 39	D D	44 39	D D
10. Lone Tree Way/ Hillcrest Avenue	Signal	AM PM	50 **69**	D **E**	51 **71**	D **E**	51 **71**	D **E**
11. Lone Tree Way/SR 4 EB Ramps	Signal	AM PM	39 **85**	D **F**	40 **85**	D **F**	40 **85**	D **F**
14. Prewett Ranch Drive/Deer Valley Road	Signal	AM PM	**65** 21	**E** C	**72** 24	**E** C	**77** 25	**E** C
15. Deer Valley Road/ Wellness Way/ Street A	Signal	AM PM	13 9	B A	28 21	C C	29 22	C C
16. Sand Creek Road/ Deer Valley Road	Signal	AM PM	16 15	B B	21 21	C C	23 22	C C
19. Sand Creek Road/ SR 4 EB Ramps	Signal	AM PM	48 **>120**	D **F**	**57** **>120**	**E** **F**	**59** **>120**	**E** **F**
21. Balfour Road/Deer Valley Road	SSSC	AM PM	**>120** **(>120)** 33 **(83)**	**F (F)** D **(F)**	**>120** **(>120)** **45 (117)**	**F (F)** **E (F)**	**>120** **(>120)** **51 (>120)**	**F (F)** **E (F)**

Notes:
1. Signal = signalized intersection; SSSC = side-street stop-controlled intersection
2. Average intersection delay is calculated for all signalized intersections using the 2010 HCM method for vehicles.
Source: Fehr & Peers, 2018

Mitigation By Phase

Existing

Two off-site intersection impacts were identified in the existing condition with Phase 1 and Phase 2.

Impact Statement 15: Intersection 4 – Hillcrest Avenue at State Route 4 Eastbound Ramps

The Hillcrest Avenue at State Route 4 Eastbound Ramps intersection operates at a deficient LOS F during both peak hours prior to the addition of project traffic in the existing condition. This impact would occur with Phase 1 and would worsen with Phase 2. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 15:*** Implement Mitigation Measure 1, install Adaptive Signal Control Technologies (ASCT) or other traffic signal interconnect system approved by the City at the following intersections:
>
> - Slatten Ranch Road at State Route 4 Westbound Ramps
> - Slatten Ranch Road/Sunset Drive at Hillcrest Avenue
> - Hillcrest Avenue at State Route 4 Eastbound Ramps
> - East Tregallas Road/Larkspur Drive at Hillcrest Avenue
>
> With signal timing adjustments to better serve projected traffic flows, intersection operations would improve to better than the without project condition, reducing the impact to a ***less-than-significant*** level, as shown in **Table 6.** Additionally, the Project applicant shall pay regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA) that would fund construction of additional improvements along the State Route 4 corridor.
>
> However, as Caltrans controls the operations of the traffic signals at the Slatten Ranch Road at State Route 4 Westbound Ramps and Hillcrest Avenue at State Route 4 Eastbound Ramps intersection, the City cannot assure full implementation of this improvement and the impact may remain ***significant and unavoidable***. Hillcrest Avenue at State Route 4 Eastbound Ramps

Impact Statement 16: Intersection 21 – Balfour Road at Deer Valley Road

The addition of project-generated vehicle trips during the AM peak hour would worsen LOS F conditions for side-street movements, and result in overall LOS F operations. This impact would occur with Phase 1

and would worsen with Phase 2. Peak hour signal warrants are also met prior to the addition of project traffic in the existing condition. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 16:*** Implement ***Mitigation Measure 1.*** The project applicant shall pay their fair share towards the signalization of this intersection in conjunction with other planned improvements, which include the construction of a southbound left-turn lane, as well as separate westbound left and right-turn lanes. These improvements would result in overall acceptable service levels, reducing the project's existing impact to a ***less-than-significant*** level, as shown in **Table 6,** in the existing condition.

Near-Term

Three potential off-site intersection impacts were identified in the near-term condition with Phase 1; these are the same impacts that were identified with the full project buildout. One additional impact was identified with Phase 2.

Phase 1

Impact Statement 17: Intersection 4 – Hillcrest Avenue at State Route 4 Eastbound Ramps

The Hillcrest Avenue at State Route 4 Eastbound Ramps intersection operates at a deficient LOS F during both peak hours prior to the addition of project traffic in the near-term condition. This impact would occur with Phase 1. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 17:*** Implement Mitigation Measure 1, install Adaptive Signal Control Technologies (ASCT) or other traffic signal interconnect system approved by the City at the following intersections:
>
> - Slatten Ranch Road at State Route 4 Westbound Ramps
> - Slatten Ranch Road/Sunset Drive at Hillcrest Avenue
> - Hillcrest Avenue at State Route 4 Eastbound Ramps
> - East Tregallas Road/Larkspur Drive at Hillcrest Avenue
>
> With signal timing adjustments to better serve projected traffic flows, intersection operations would improve to better than the without project condition, reducing the impact to a ***less-than-significant*** level, as shown in **Table 9.** Additionally, the Project applicant shall pay regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA) that would fund construction of additional improvements along the State Route 4 corridor.

However, as Caltrans controls the operations of the traffic signals at the Slatten Ranch Road at State Route 4 Westbound Ramps and Hillcrest Avenue at State Route 4 Eastbound Ramps intersection, the City cannot assure full implementation of this improvement and the impact may remain ***significant and unavoidable***.

Impact Statement 18: Intersection 11 – Lone Tree Way at State Route 4 Eastbound Ramps

The Lone Tree Way at State Route 4 Eastbound Ramps intersection is projected to operate at a deficient LOS E in the PM peak hour prior to the addition of project traffic in the near-term condition. The addition of project traffic through Phase 1 would worsen operations. Based on the significance criteria, this is considered a ***significant*** impact.

Mitigation Measure 18: Implement Mitigation Measure 5. The project applicant shall contribute their fair share to intersection improvements that would result in acceptable operations, which could include widening the southbound off-ramp to provide a second right-turn only lane. Construction of this improvement in combination with retiming of the traffic signals along the corridor would result in overall acceptable service levels, reducing the project's near-term impact to a ***less-than-significant*** level. Widening of the southbound off-ramp could result in secondary impacts to pedestrians by increasing the pedestrian crossing distance. The potential secondary impact to pedestrians for all hours of the day should be balanced against an intersection modification to improve vehicle travel during peak time periods. as shown in **Table 9.**

As this improvement requires Caltrans approval, the City of Antioch cannot ensure implementation of this measure. Therefore, the impact would remain ***significant and unavoidable.***

Impact Statement 19: Intersection 21 – Balfour Road at Deer Valley Road

The addition of project-generated vehicle trips from Phase 1 during the AM and PM peak hours would deficient conditions during the AM peak hour. Peak hour signal warrants are also met prior to the addition of project traffic in the near-term condition. Based on the significance criteria, this is considered a ***significant*** impact.

Mitigation Measure 19: Implement Mitigation Measure 2. The project applicant shall pay their fair share towards the signalization of this intersection in conjunction with other planned improvements, which include the construction of a southbound left-turn lane, as well as separate westbound left and right-turn lanes. These improvements would result in overall acceptable service levels, reducing the project's near-term impact to a ***less-than-significant*** level, as shown in **Table 9.**

Phase 2

Development through Phase 2 would continue to impact the intersections above; no additional mitigation measures are required. One new impact was projected to occur with Phase 2:

Impact Statement 20: Intersection 14 – Prewett Ranch Drive/ Deer Valley Road

This intersection is projected to operate at LOS D prior to the addition of project traffic. The addition of project traffic through Phase 2 would result in LOS E operations in the AM peak hour with either project option. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 20:*** This intersection has been built to its ultimate configurations and no reconfigurations within the existing intersection cross-section that would result in acceptable operations was identified.
>
> Construction of the Sand Creek Road extension between Deer Valley Road and its current planned terminus at Dozier-Libbey Medical High School would shift traffic from the Prewett Ranch Drive/ Deer Valley Road intersection, and result in acceptable operations. However, the construction of this extension could increase the amount of traffic on the Sand Creek Road corridor and result in a secondary impact to the State Route Four/Sand Creek Road Eastbound Ramp intersection (See Chapter 5 for mitigation measure).

Cumulative Condition

Six potential off-site intersection impacts were identified in the Cumulative condition with Phase 1; one additional impact was identified with Phase 2.

Phase 1

Impact Statement 21: Intersection 4 – Hillcrest Avenue at State Route 4 Eastbound Ramps

The Hillcrest Avenue at State Route 4 Eastbound Ramps intersection is projected to operate at a deficient LOS F in both peak hours prior to the addition of project traffic in the cumulative condition. The addition of project traffic through Phase 1 would worsen operations. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 21:*** Implement Mitigation Measure 1, install Adaptive Signal Control Technologies (ASCT) or other traffic signal interconnect system approved by the City at the following intersections:

- Slatten Ranch Road at State Route 4 Westbound Ramps
- Slatten Ranch Road/Sunset Drive at Hillcrest Avenue
- Hillcrest Avenue at State Route 4 Eastbound Ramps
- East Tregallas Road/Larkspur Drive at Hillcrest Avenue

With signal timing adjustments to better serve projected traffic flows, intersection operations would improve to better than the without project condition, reducing the impact to a ***less-than-significant*** level, as shown in **Table 11.** Additionally, the Project applicant shall pay regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA) that would fund construction of additional improvements along the State Route 4 corridor.

However, as Caltrans controls the operations of the traffic signals at the Slatten Ranch Road at State Route 4 Westbound Ramps and Hillcrest Avenue at State Route 4 Eastbound Ramps intersection, the City cannot assure full implementation of this improvement and the impact may remain ***significant and unavoidable***. Hillcrest Avenue at State Route 4 Eastbound Ramps

Impact Statement 22: Intersection 10 – Lone Tree Way at Hillcrest Avenue

The Lone Tree Way at Hillcrest Avenue intersection is projected to operate at a deficient LOS E in the PM peak hour prior to the addition of project traffic in the cumulative condition. The addition of Phase 1 project traffic would worsen operations. Based on the significance criteria, this is considered a ***significant*** impact.

Mitigation Measure 22: Implement Mitigation Measure 11. The project applicant shall modify the traffic signal to provide a westbound right-turn overlap phase and a southbound right-turn overlap phase. With this improvement, the operations would improve as compared to the without project condition with either project option, reducing the project impact to a ***less-than-significant***, as presented in Table 11.

Impact Statement 23: Intersection 11 – Lone Tree Way at State Route 4 Eastbound Ramps

The Lone Tree Way at State Route 4 Eastbound Ramps intersection is projected to operate at a deficient LOS E in the PM peak hour prior to the addition of project traffic in the cumulative condition. The addition of project traffic with Phase 1 would worsen operations. Based on the significance criteria, this is considered a ***significant*** impact.

Mitigation Measure 23: Implement Mitigation Measure 5. The project applicant shall contribute their fair share to intersection improvements that would result in acceptable operations, which could include widening the southbound off-ramp to provide a second right-turn only lane.

Construction of this improvement in combination with retiming of the traffic signals along the corridor would result in overall acceptable service levels, reducing the project's near-term impact to a ***less-than-significant*** level. Widening of the southbound off-ramp could result in secondary impacts to pedestrians by increasing the pedestrian crossing distance. The potential secondary impact to pedestrians for all hours of the day should be balanced against an intersection modification to improve vehicle travel during peak time periods. as shown in Table 11**.**

As this intersection is not under the jurisdiction of the City of Antioch, the City cannot assure implementation of this measure. Therefore, the impact would remain ***significant and unavoidable.***

Impact Statement 24: Intersection 14 – Prewett Ranch Drive/ Deer Valley Road

This intersection is projected to operate at LOS E prior to the addition of project traffic during the morning peak hour. The addition of project traffic through Phase 1 would worsen LOS E operations. Based on the significance criteria, this is considered a ***significant*** impact.

Mitigation Measure 24: This intersection has been built to its ultimate configurations and no reconfigurations within the existing intersection cross-section that would result in acceptable operations was identified.

Construction of the Sand Creek Road extension to Dallas Ranch Road would shift existing traffic and provide other travel routes for project traffic, improving the operations of this intersection to an acceptable level through project buildout as shown in **Table 10**.

Impact Statement 25: Intersection 19 – Sand Creek Road at SR 4 EB Ramps

This intersection is projected to operate at an unacceptable LOS F in the PM peak hour in the cumulative condition. The addition of project-generated vehicle trips with Phase 1 during the PM peak hour would worsen LOS F conditions and result in LOS E operations during the morning peak hour. Based on the significance criteria, this is considered a ***significant*** impact.

Mitigation Measure 25: Implement Mitigation Measure 7. The Project applicant shall pay regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA) that would fund construction of additional improvements at the Sand Creek Road interchange, which includes a slip-ramp for the eastbound Sand Creek to southbound State Route 4 movement, eliminating the conflicting left-turn movement at the intersection. Construction of this improvement would result in acceptable operations, as shown in Table 11, reducing the

cumulative impact to a ***less-than-significant*** level. As this improvement is in a programmed fee program, payment of the fee would reduce the impact to a less-than-significant level.

Impact Statement 26: Intersection 21 – Balfour Road at Deer Valley Road

The addition of project-generated vehicle trips from Phase 1 would worsen already deficient conditions in both peak hours. Peak hour signal warrants are also met prior to the addition of project traffic in the cumulative condition. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 26:*** Implement Mitigation Measure 1. The project applicant shall pay their fair share towards the signalization of this intersection in conjunction with other planned improvements, which include the construction of a southbound left-turn lane, as well as separate westbound left and right-turn lanes. These improvements would result in overall acceptable service levels, reducing the project's cumulative impact to a ***less-than-significant*** level, as shown in Table 11**.** This improvement is also identified in the City of Brentwood General Plan.

Phase 2

Development through Phase 2 would continue to impact the intersections above; no additional mitigation measures are required. One new impact was projected to occur with Phase 2:

Impact Statement 27: Intersection 5 – Lone Tree Way at Davison Drive

The Lone Tree Way at Davison Drive intersection is projected to operate at an acceptable LOS D in the AM peak hour prior to the addition of project traffic in the cumulative condition. The addition of project traffic would result in LOS E operations with either the multi-generational or traditional project during the morning peak hour. Based on the significance criteria, this is considered a ***significant*** impact.

> ***Mitigation Measure 27:*** Implement Mitigation Measure 10. The project applicant restripe the westbound approach to convert the westbound through lane to a left-thru shared lane. As the intersection already operates with east-west split phasing, the traffic signal would not need to be modified. Implementation of this improvement in combination with retiming of the traffic signals along the corridor would result in overall acceptable service levels, reducing the project's cumulative impact to a ***less-than-significant*** level, as shown in **Table 11**.

8. Freeway Analysis

The freeway analysis was conducted under existing, near-term and cumulative conditions based on the methodology outlined in Chapter 1 to determine travel speeds along the State Route 4 corridor from Lone Tree Way/A Street to Balfour Road and State Route 160, north of State Route 4.

Existing Conditions

Mainline traffic counts were conducted on State Route 4 south of Balfour Road in August 2017. Traffic volumes at the interchanges along the corridor were used to estimate traffic volumes on the mainline segments from south of Balfour Road to west of Lone Tree Way/A Street. Project traffic volumes were then considered. The traffic volumes and number of travel lanes were used to calculate vehicle speeds using the HCM 2010 method, which were then used to calculate the delay index. The results were verified through travel of the corridor during peak hours.

The results are presented in **Table 16** for the AM Peak Hour and **Table 17** for the PM peak hour. State Route 4 north of Sand Creek Road operates at free-flow speeds during both the morning and evening peak hours. State Route 4 between Balfour Road and Sand Creek Road experiences congestion during peak hours with a delay index between 1.5 and 4.3 during the morning and evening peak hours depending on the direction of travel, indicating that peak period travel takes approximately two to four times as long as off-peak period travel. This segment exceeds the service objective established by the Contra Costa County Transportation Authority (CCTA) in the East County Action Plan and is currently being widened which would improve operations. The project is not projected to add traffic to this segment of State Route 4 in the existing condition as the travel route to/from the project site to Highway 4 south is shorter (in both total travel distance and absolute travel time) via Deer Valley Road to Balfour Road than Deer Valley Road to Lone Tree Way prior to the construction of the Sand Creek Road extension. The project would contribute its fair share to the improvements under construction through the payment of the regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA).

All other mainline study freeway segments would continue to operate within the established service objective and the project's impact to freeway operations in the immediate project vicinity in the existing condition is considered less-than-significant. However, there are greater levels of congestion on State Route 4 further west of the project site and the project would add vehicle traffic to these roadway segments. The project's percentage of overall traffic would be minimal, but it would contribute to worsening levels of congestion along the State Route 4 corridor.

Table 16: Existing Conditions Freeway Operations Summary – AM Peak Hour

Segment	Direction	Existing		Existing with Multi-Generational		Existing with Traditional	
		Volume	Delay Index	Volume	Delay Index	Volume	Delay Index
1. State Route 4, west of Lone Tree Way/A Street	EB	2,966	1.00	3,026	1.00	3,034	1.00
	WB[1]	3,837	1.00	3,998	1.00	4,031	1.00
2. State Route 4, west of Hillcrest Avenue	EB	2,580	1.00	2,596	1.00	2,598	1.00
	WB[1]	3,166	1.00	3,166	1.00	3,166	1.00
3. State Route 4, west of State Route 160	EB	2,128	1.00	2,141	1.00	2,144	1.00
	WB	2,500	1.00	2,505	1.00	2,506	1.00
4. State Route 4, west of Laurel Road	EB	2,412	1.00	2,417	1.00	2,418	1.00
	WB	3,108	1.00	3,121	1.00	3,124	1.00
5. State Route 4, north of Lone Tree Way	SB	2,456	1.00	2,461	1.00	2,462	1.00
	NB	2,699	1.01	2,712	1.01	2,715	1.01
6. State Route 4, north of Sand Creek Road	SB	2,151	1.00	2,194	1.00	2,203	1.00
	NB	2,382	1.00	2,399	1.00	2,401	1.00
7. State Route 4, north of Balfour Road[3]	SB	1,342	1.49	1,342	1.49	1,342	1.49
	NB	**1,580**	**2.81**	**1,580**	**2.81**	**1,580**	**2.81**
8. State Route 4, south of Balfour Road	SB	992	1.04	1,072	1.04	1,089	1.08
	NB	730	1.00	761	1.00	764	1.01
9. State Route 160, north of State Route 4	NB	1,284	1.00	1,310	1.00	1,316	1.00
	SB	960	1.00	970	1.00	972	1.00

Notes:

1. AM peak hour analysis reflects operation of the HOV lane which carries approximately 13 percent of traffic volumes, reducing the number of mixed-flow lanes available during the AM peak hour.
2. The project is not projected to add traffic to this segment of State Route 4 in the existing condition as the travel route to/from the project site to Highway 4 south is shorter (in both total travel distance and absolute travel time) via Deer Valley Road to Balfour Road than Deer Valley Road to Lone Tree Way prior to the construction of the Sand Creek Road extension. However, the project would contribute its fair share to the improvements under construction through the payment of the regional transportation impact fees to ECCRFFA.

Source: Fehr & Peers, 2018.

Table 17: Existing Conditions Freeway Operations Summary – PM Peak Hour

Segment	Direction	Existing		Existing with Multi-Generational		Existing with Traditional	
		Volume	Delay Index	Volume	Delay Index	Volume	Delay Index
1. State Route 4, west of Lone Tree Way/A Street	EB[1]	5,892	1.06	6,079	1.07	6,117	1.08
	WB	4,122	1.00	4,254	1.00	4,279	1.00
2. State Route 4, west of Hillcrest Avenue	EB[1]	5,187	1.02	5,236	1.02	5,246	1.02
	WB	3,583	1.00	3,603	1.00	3,603	1.00
3. State Route 4, west of State Route 160	EB	4,132	1.00	4,141	1.00	4,143	1.00
	WB	3,186	1.00	3,201	1.00	3,204	1.00
4. State Route 4, west of Laurel Road	EB	4,110	1.01	4,125	1.01	4,128	1.01
	WB	2,637	1.00	2,646	1.00	2,648	1.00
5. State Route 4, north of Lone Tree Way	SB	3,480	1.07	3,495	1.07	3,498	1.07
	NB	2,670	1.01	2,679	1.01	2,681	1.01
6. State Route 4, north of Sand Creek Road	SB	2,748	1.01	2,781	1.01	2,787	1.01
	NB	2,476	1.00	2,528	1.01	2,538	1.01
7. State Route 4, north of Balfour Road[3]	SB	1,399	1.68	1,399	1.68	1,399	1.68
	NB	**1,704**	**4.31**	**1,704**	**4.31**	**1,704**	**4.31**
8. State Route 4, south of Balfour Road	SB	782	1.01	840	1.01	850	1.01
	NB	1,115	1.11	1,209	1.21	1,227	1.24
9. State Route 160, north of State Route 4	NB	1,143	1.00	1,161	1.00	1,165	1.00
	SB	1,670	1.00	1,700	1.00	1,706	1.00

Notes:

1. PM peak hour analysis reflects operation of the HOV lane which carries approximately 13 percent of traffic volumes, reducing the number of mixed-flow lanes available during the PM peak hour.
2. The project is not projected to add traffic to this segment of State Route 4 in the existing condition as the travel route to/from the project site to Highway 4 south is shorter (in both total travel distance and absolute travel time) via Deer Valley Road to Balfour Road than Deer Valley Road to Lone Tree Way prior to the construction of the Sand Creek Road extension. However, the project would contribute its fair share to the improvements under construction through the payment of the regional transportation impact fees to ECCRFFA.

Source: Fehr & Peers, 2018.

The amount of vehicle traffic in high-occupancy vehicle lanes was also assessed, as presented in **Table 18**, which shows that in the PM peak hour, the volume of traffic in the HOV lane exceeds the desired MTSO standard for eastbound State Route 4 to from west of Lone Tree Way/A Street to the HOV lane terminus near Hillcrest Avenue (600 vehicles per hour). The project is expected to add traffic to this HOV lane segment, worsening an existing deficiency.

Table 18: Existing Conditions Freeway Operations Summary – HOV Lane Volumes

Segment	Direction	Existing		Existing with Multi-Generational		Existing with Traditional	
		AM	PM	AM	PM	AM	PM
1. State Route 4, west of Lone Tree Way/A Street	EB	--	**766**	--	**790**	--	**795**
	WB	499	--	520	--	524	--
2. State Route 4, west of Hillcrest Avenue	EB	--	**674**	--	**681**	--	**682**
	WB	412	--	412	--	412	--

Bold indicates volume exceeds desired volume of 600 vehicles per hour.
Source: Fehr & Peers, 2018.

Impact Statement 28: Regional Freeway Facilities

The project is expected to add traffic to an HOV lane that already exceeds the desired volume during the PM peak hour (SR 4 eastbound between Lone Tree Way and Hillcrest Avenue). This is considered a ***significant*** impact and would occur under wither project alternative. Additionally, the project would contribute to worsening congestion on State Route 4 west of the study area.

> ***Mitigation Measure 28:*** No additional capacity enhancing projects are planned on State Route 4 from in the vicinity of the Lone Tree Way/A Street and Hillcrest Avenue interchanges. CCTA has developed State Route 4 Integrated Corridor Management (ICM) plan that includes strategies such as adaptive ramp metering, incident management, traffic and transit information systems, traffic arterial and transit information systems, connected vehicle technologies, and integration with the Interstate 80 corridor ICM to better manage traffic flows along the corridor.
>
> The project applicant shall pay their fair share towards this project through the payment of the regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA). However, as full funding for this improvement has not been identified and the effectiveness of the ICM project is uncertain, the impact would remain ***significant and unavoidable.***

Near-Term

Near-term freeway forecasts were developed based on the same method used to develop the near-term intersection forecasts, both without and with the project. Operations were evaluated using the same methods described in Chapter 1. The near-term freeway analysis considers the completion of the Balfour Road interchange, and the widening of State Route 4 to provide two travel lanes in each direction from south of Sand Creek Road to south of Balfour Road. The Near-term without and with Project analysis results are presented in **Table 19** and **Table 20** for the AM and PM peak hours, respectively, based on the estimates of near-term traffic volumes, plus estimates of project traffic. Although the project would increase traffic on freeways in the study area, it would not result in study-segment operations to degrade beyond the established standard and the near-term impact to freeway segments in the immediate study area are ***less-than-significant***. Although the project impacts to freeway segments within the immediate study area are considered less-than-significant, the project would contribute to worsening levels of congestion on State Route 4 further west of the study area.

Table 19: Near-term Conditions Freeway Operations Summary – AM Peak Hour

Segment	Direction	Near-Term		Near-Term with Multi-Generational		Near-Term with Traditional	
		Volume	Delay Index	Volume	Delay Index	Volume	Delay Index
1. State Route 4, west of Lone Tree Way/A Street	EB	3,469	1.00	3,534	1.00	3,536	1.00
	WB[1]	4,499	1.01	4,684	1.01	4,693	1.01
2. State Route 4, west of Hillcrest Avenue	EB	3,051	1.00	3,077	1.00	3,077	1.00
	WB[1]	3,618	1.00	3,660	1.00	3,662	1.00
3. State Route 4, west of State Route 160	EB	2,559	1.00	2,595	1.00	2,597	1.00
	WB	3,168	1.00	3,215	1.00	3,217	1.00
4. State Route 4, west of Laurel Road	EB	2,754	1.00	2,765	1.00	2,766	1.00
	WB	3,875	1.01	3,891	1.01	3,894	1.01
5. State Route 4, north of Lone Tree Way	SB	2,832	1.01	2,843	1.01	2,844	1.01
	NB	3,360	1.05	3,376	1.05	3,379	1.05
6. State Route 4, north of Sand Creek Road	SB	2,458	1.00	2,469	1.00	2,470	1.00
	NB	2,928	1.02	2,944	1.02	2,947	1.02
7. State Route 4, north of Balfour Road	SB	1,805	1.00	1,837	1.00	1,843	1.00
	NB	1,934	1.00	1,943	1.00	1,944	1.00

Table 19: Near-term Conditions Freeway Operations Summary – AM Peak Hour

Segment	Direction	Near-Term		Near-Term with Multi-Generational		Near-Term with Traditional	
		Volume	Delay Index	Volume	Delay Index	Volume	Delay Index
8. State Route 4, south of Balfour Road	SB	1,397	1.67	1,477	2.05	1,494	2.15
	NB	968	1.04	999	1.00	1,002	1.00
9. State Route 160, north of State Route 4	NB	1,550	1.00	1,580	1.00	1,582	1.00
	SB	1,038	1.00	1,095	1.00	1,095	1.00

Notes:
1. AM peak hour analysis reflects operation of the HOV lane which carries approximately 13 percent of traffic volumes, reducing the number of mixed-flow lanes available during the AM peak hour.

Source: Fehr & Peers, 2018.

Table 20: Near-Term Conditions Freeway Operations Summary – PM Peak Hour

Segment	Direction	Near-Term		Near-Term with Multi-Generational		Near-Term with Traditional	
		Volume	Delay Index	Volume	Delay Index	Volume	Delay Index
1. State Route 4, west of Lone Tree Way/A Street	EB[1]	6,635	1.15	6,813	1.18	6,851	1.19
	WB	4,720	1.00	4,823	1.00	4,846	1.00
2. State Route 4, west of Hillcrest Avenue	EB[1]	5,767	1.05	5,825	1.05	5,838	1.05
	WB	4,067	1.00	4,068	1.00	4,069	1.00
3. State Route 4, west of State Route 160	EB	4,921	1.00	4,948	1.00	4,954	1.00
	WB	3,643	1.00	3,659	1.00	3,663	1.00
4. State Route 4, west of Laurel Road	EB	5,003	1.05	5,036	1.05	5,043	1.05
	WB	3,133	1.00	3,143	1.00	3,146	1.00
5. State Route 4, north of Lone Tree Way	SB	4,207	1.30	4,220	1.31	4,247	1.32
	NB	3,233	1.04	3,243	1.04	3,246	1.04
6. State Route 4, north of Sand Creek Road	SB	3,318	1.04	3,351	1.05	3,358	1.05
	NB	2,954	1.02	2,964	1.02	2,967	1.02
7. State Route 4, north of Balfour Road	SB	1,916	1.00	1,937	1.00	1,941	1.00
	NB	2,279	1.00	2,306	1.00	2,311	1.00
8. State Route 4, south of Balfour Road	SB	1,146	1.14	1,204	1.21	1,214	1.22
	NB	1,594	1.03	1,688	1.05	1,706	1.06

Table 20: Near-Term Conditions Freeway Operations Summary – PM Peak Hour

Segment	Direction	Near-Term		Near-Term with Multi-Generational		Near-Term with Traditional	
		Volume	Delay Index	Volume	Delay Index	Volume	Delay Index
9. State Route 160, north of State Route 4	NB	1,267	1.00	1,285	1.00	1,289	1.00
	SB	1,859	1.00	1,889	1.00	1,895	1.00

Notes:
1. PM peak hour analysis reflects operation of the HOV lane which carries approximately 13 percent of traffic volumes, reducing the number of mixed-flow lanes available during the PM peak hour.

Source: Fehr & Peers, 2018.

The amount of vehicle traffic in high-occupancy vehicle lanes was also assessed, as presented in **Table 21**, which shows that in the PM peak hour, the volume of traffic in the HOV lane exceeds the desired MTSO standard for eastbound State Route 4 to from west of Lone Tree Way/A Street to the HOV lane terminus near Hillcrest Avenue (600 vehicles per hour). The project is expected to add traffic to this HOV lane segment, worsening a near-term deficiency. Additionally, the project would result in the MTSO for HOV lanes in the westbound direction during the morning peak hour to exceed the 600 vehicle threshold.

Table 21: Near-Term Conditions Freeway Operations Summary – HOV Lane Volumes

Segment	Direction	Existing		Existing with Multi-Generational		Existing with Traditional	
		AM	PM	AM	PM	AM	PM
1. State Route 4, west of Lone Tree Way/A Street	EB	--	**863**	--	**886**	--	**891**
	WB	585	--	**609**	--	**610**	--
2. State Route 4, west of Hillcrest Avenue	EB	--	**750**	--	**757**	--	**759**
	WB	470	--	476	--	476	--

Bold indicates volume exceeds desired volume of 600 vehicles per hour.

Source: Fehr & Peers, 2018.

Impact Statement 29: Regional Freeway Facilities

The project is expected to add traffic to an HOV lane that already exceeds the desired volume during the PM peak hour (SR 4 eastbound between Lone Tree Way/A Street and Hillcrest Avenue) and would result in volumes exceeding the desired threshold during the morning peak hour for State Route 4, west of Lone Tree Way/A Street. This is considered a ***significant*** impact and would occur under wither project alternative. Additionally, the project would contribute to worsening congestion of State Route 4 west of the study area.

> ***Mitigation Measure 29:*** No additional capacity enhancing projects are planned on State Route 4 from in the vicinity of the Lone Tree Way/A Street and Hillcrest Avenue interchanges. CCTA has developed State Route 4 Integrated Corridor Management (ICM) plan that includes strategies such as adaptive ramp metering, incident management, traffic and transit information systems, traffic arterial and transit information systems, connected vehicle technologies, and integration with the Interstate 80 corridor ICM to better manage traffic flows along the corridor.
>
> The project applicant shall pay their fair share towards this project through the payment of the regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA). However, as full funding for this improvement has not been identified and the effectiveness of the ICM project is uncertain, the impact would remain ***significant and unavoidable.***

Cumulative

Cumulative freeway forecasts were developed based on the same method used to develop the cumulative intersection forecasts, both without and with the project. Operations were evaluated using the same methods described in Chapter 1. The Cumulative without and with Project analysis results are presented in **Table 22** and **Table 23** for the AM and PM peak hours, respectively, based on the estimates of cumulative traffic volumes, plus estimates of project traffic. In the cumulative condition, operations of eastbound State Route 4 west of Lone Tree Way/A Street are projected to degrade beyond the MTSO with a projected delay index greater than 2.5 during the PM peak hour. The addition of project traffic would worsen the delay index, resulting in a ***significant*** impact.

Table 22: Cumulative Conditions Freeway Operations Summary – AM Peak Hour

Segment	Direction	Cumulative		Cumulative with Multi-Generational		Cumulative with Traditional	
		Volume	Delay Index	Volume	Delay Index	Volume	Delay Index
1. State Route 4, west of Lone Tree Way/A Street	EB	4,820	1.00	4,881	1.00	4,887	1.00
	WB[1]	5,470	1.03	5,631	1.04	5,664	1.04
2. State Route 4, west of Hillcrest Avenue	EB	4,310	1.00	4,332	1.00	4,334	1.00
	WB[1]	4,730	1.01	4,746	1.01	4,749	1.01
3. State Route 4, west of State Route 160	EB	3,590	1.00	3,609	1.00	3,612	1.00
	WB	4,220	1.00	4,241	1.00	4,245	1.00
4. State Route 4, west of Laurel Road	EB	3,880	1.01	3,891	1.01	3,166	1.00
	WB	5,080	1.05	5,109	1.06	5,115	1.06
5. State Route 4, north of Lone Tree Way	SB	4,060	1.23	4,071	1.23	4,072	1.23
	NB	4,660	1.68	4,689	1.71	4,695	1.72
6. State Route 4, north of Sand Creek Road	SB	3,470	1.06	3,481	1.07	3,482	1.07
	NB	4,120	1.25	4,149	1.27	4,155	1.27
7. State Route 4, north of Balfour Road	SB	3,290	1.04	3,354	1.05	3,368	1.05
	NB	3,500	1.07	3,526	1.07	3,529	1.07
8. State Route 4, south of Balfour Road	SB	2,510	1.00	2,590	1.01	2,607	1.01
	NB	2,520	1.00	2,551	1.01	2,554	1.01
9. State Route 160, north of State Route 4	NB	1,710	1.00	1,736	1.00	1,742	1.00
	SB	1,140	1.00	1,150	1.00	1,152	1.00

Notes:
1. AM peak hour analysis reflects operation of the HOV lane which carries approximately 13 percent of traffic volumes, reducing the number of mixed-flow lanes available during the AM peak hour.

Source: Fehr & Peers, 2018.

Table 23: Cumulative Conditions Freeway Operations Summary – PM Peak Hour

Segment	Direction	Cumulative		Cumulative with Multi-Generational		Cumulative with Traditional	
		Volume	Delay Index	Volume	Delay Index	Volume	Delay Index
1. State Route 4, west of Lone Tree Way/A Street	EB[1]	**8,880**	**2.51**	**9,084**	**2.81**	**9,116**	**2.86**
	WB	6,240	1.03	6,501	1.04	6,526	1.04
2. State Route 4, west of Hillcrest Avenue	EB[1]	8,180	1.78	8,264	1.85	8,271	1.86
	WB	5,190	1.01	5,349	1.01	5,352	1.01
3. State Route 4, west of State Route 160	EB	6,240	1.03	6,274	1.03	6,273	1.03
	WB	4,760	1.00	4,784	1.00	4,790	1.00
4. State Route 4, west of Laurel Road	EB	6,220	1.27	6,260	1.28	6,260	1.28
	WB	4,090	1.01	4,108	1.01	4,113	1.01
5. State Route 4, north of Lone Tree Way	SB	5,350	3.05	5,390	3.17	5,390	3.17
	NB	4,340	1.38	4,358	1.40	4,363	1.40
6. State Route 4, north of Sand Creek Road	SB	4,810	1.87	4,850	1.93	4,850	1.93
	NB	3,740	1.12	3,758	1.12	3,763	1.12
7. State Route 4, north of Balfour Road	SB	3,500	1.07	3,553	1.08	3,554	1.08
	NB	3,130	1.03	3,209	1.03	3,225	1.04
8. State Route 4, south of Balfour Road	SB	2,220	1.00	2,278	1.00	2,288	1.00
	NB	2,630	1.01	2,723	1.01	2,742	1.01
9. State Route 160, north of State Route 4	NB	1,390	1.00	1,408	1.00	1,412	1.00
	SB	2,040	1.00	2,070	1.00	2,076	1.00

Notes:
1. PM peak hour analysis reflects operation of the HOV lane which carries approximately 13 percent of traffic volumes, reducing the number of mixed-flow lanes available during the PM peak hour.

Source: Fehr & Peers, 2018.

The amount of vehicle traffic in high-occupancy vehicle lanes was also assessed, as presented in **Table 24**, which shows that in the cumulative condition, the volume of traffic in the HOV lane would exceeds the desired MTSO standard for westbound and eastbound State Route 4 in the project vicinity (600 vehicles per hour). The project is expected to add traffic to these HOV lane segments, worsening a cumulative deficiency.

Table 24: Cumulative Conditions Freeway Operations Summary – HOV Lane Volumes

Segment	Direction	Existing		Existing with Multi-Generational		Existing with Traditional	
		AM	PM	AM	PM	AM	PM
1. State Route 4, west of Lone Tree Way/A Street	EB	--	**1,154**	--	**1,181**	--	**1,185**
	WB	**711**	--	**732**	--	**736**	--
2. State Route 4, west of Hillcrest Avenue	EB	--	**1,063**	--	**1,074**	--	**1,075**
	WB	**615**	--	**617**	--	**617**	--

Bold indicates volume exceeds desired volume of 600 vehicles per hour.
Source: Fehr & Peers, 2018.

Impact Statement 30: Regional Freeway Facilities

The project is expected to add traffic to HOV lanes that are projected to exceed the desired volume during both the morning and evening peak hours (westbound during the AM peak hour from the start of the HOV lane, and eastbound during the PM peak hour from west of Lone Tree Way to the HOV lane terminus. This is considered **significant** and would occur under wither project alternative. Operations of Eastbound State Route 4 west of Lone Tree Way/A Street are projected to degrade beyond the MTSO with a projected delay index greater than 2.5 during the PM peak hour. The addition of project traffic would worsen the delay index, resulting in a potentially ***significant*** impact.

> ***Mitigation Measure 30:*** No additional capacity enhancing projects are planned on State Route 4 from in the vicinity of the Lone Tree Way/A Street and Hillcrest Avenue interchanges. CCTA has developed State Route 4 Integrated Corridor Management (ICM) plan that includes strategies such as adaptive ramp metering, incident management, traffic and transit information systems, traffic arterial and transit information systems, connected vehicle technologies, and integration with the Interstate 80 corridor ICM to better manage traffic flows along the corridor.
>
> The project applicant shall pay their fair share towards this project through the payment of the regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA). However, as full funding for this improvement has not been identified and the effectiveness of the ICM project is uncertain, the impact would remain ***significant and unavoidable.***

9. Site Plan Review

This chapter analyzes site access and internal circulation for vehicles, pedestrians, bicycles, and emergency vehicles based on the site plan presented previously on Figure 2 as well as The Ranch at Antioch, Development Standards & Design Guidelines, July 2017.

Vehicular Site Access and Circulation

Access to the project site would be provided by new roadway connections to the Sand Creek Road extension that would be constructed as part of the project connecting the terminus of Dallas Ranch Road to the existing Sand Creek Road connection at Deer Valley Road. As proposed, Sand Creek Road and Street B would be four lane roadways with the remaining roadways within the project site developed as two-lane roadways.

Sand Creek Road and Street B are proposed to provide a 110-foot right-of-way, which would include 6-foot sidewalk, 10-foot landscape buffer, 7-foot bicycle lane, and two 12-foot travel lanes in each direction plus a 16-foot median that would allow for turn pockets to be provided at intersections. Along some portions of the street section, an additional 18-feet of landscaping outside the public right-of-way is also proposed on each side of the street.

Deer Valley Road along the project frontage would be improved to provide 6-foot sidewalks, 8-foot landscape buffer, 7-foot bicycle lane, and two 12-foot travel lane to match the cross-section on the opposite of the roadway. An additional 42-feet of landscaping outside the public right-of-way is also proposed on the west side of the street, except in the vicinity of the Village Center where the landscape set-back would be reduced to encourage building to the sidewalk area.

Street C would have a variable right-of-way, with 5-foot sidewalks, 10-foot landscape buffer, 7-foot bicycle lane, and one 13-foot travel lane in each direction plus a variable width median. For portions of Street C without a median, the right-of-way is 68-feet with 5-foot sidewalks, 10-foot landscape buffer, 7-foot bicycle lane, and one 12-foot travel lane in each direction.

Street A is proposed with a right-of-way of 72-feet, with 5-foot sidewalks, 5-foot landscape buffer, 7-foot bicycle lane, and one 13-foot travel lane in each direction plus a 12-foot median.

Neighborhood Streets are proposed with a typical right-of-way of 54-feet with 5-foot sidewalks, 5-foot landscape buffer, 7-foot parking lane, and one 10-foot travel lane in each direction.

Projected peak hour turning movement forecasts the major roadway connections are presented on **Figure 22**. As shown, most intersections are projected to carry low volumes of traffic and would operate acceptably with side-street or all-way traffic control. Analysis was conducted for the three primary internal intersections under a variety of traffic control options, including stop-control (either side-street or all-way), traffic signal or roundabout as well as considering a two-lane Sand Creek Road **(Table 25**) and a four-lane (**Table 26)**, Sand Creek Road. As shown, internal intersections are projected to operate at acceptable levels under either a two-lane or four-lane Sand Creek Road.

Table 25: Cumulative With Project Conditions Internal Intersection LOS Summary – Two-Lane Sand Creek Road

Intersection	Peak Hour	Stop-Control		Roundabout		Traffic Signal	
		Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
25. Sand Creek Road/B Street	AM PM	7 (20) 9 (56)	A (C) A (F)	7 10	A A	21 24	C C
26. Sand Creek Road/A Street	AM PM	1 (16) 1 (21)	A (C) A (C)	Not Proposed		9 11	A B
27. B Street/C Street	AM PM	11 11	B B	5 6	A A	Not Recommended as a three leg-intersection	

Notes:
1. Signal = signalized intersection
2. Delay is based on 2010 HCM method for vehicles.
Source: Fehr & Peers, 2018.

Table 26: Cumulative With Project Conditions Internal Intersection LOS Summary – Four-Lane Sand Creek Road

Intersection	Peak Hour	Stop-Control		Roundabout		Traffic Signal	
		Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
25. Sand Creek Road/B Street	AM PM	6 (16) 8 (47)	A (C) A (E)	7 8	A A	20 22	B C
26. Sand Creek Road/A Street	AM PM	1 (11) 1 (18)	A (B) A (C)	Not Proposed		8 9	A A
27. B Street/C Street	AM PM	11 11	B B	5 6	A A	Not Recommended as a three leg-intersection	

Notes:
1. Signal = signalized intersection
2. Delay is based on 2010 HCM method for vehicles.
Source: Fehr & Peers, 2018.

LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Figure 22

Cumulative AM and PM Peak Hour Volumes with Traditional Development

Recommendation: Construct Street B as a two-lane roadway. Right-of-way can be reserved for a four-lane cross-section, but four lanes would not be needed until parcels to the south are developed with high-intensity land uses. The intersection of Street B and Street C can be all-way stop-controlled until a fourth leg is constructed.

Sand Creek Road would operate at acceptable service levels as either a two lane or four lane roadway, with major intersections roundabout control or signal control, based on the forecasts presented on Figure 22. Should parcels located to the south of the project site remain undeveloped, the traffic volumes on Sand Creek Road are not likely to warrant a four-lane cross-section.

Emergency Vehicle Access

Several factors determine whether a project has sufficient access for emergency vehicles, including:

1. Number of access points (both public and emergency access only)
2. Width of access points
3. Width of internal roadways

Based on the *2016 California Fire Code* as amended by Contra Costa County Ordinance 2016-23, the minimum number of access roads serving residential development(s) shall be based upon the number of dwelling units served as follows:

- Multiple Family Residential Projects having more than 100 dwelling units should be provided with two separated and approved fire apparatus access roads (D106.1)
- Development of one or two-family dwellings where the number of dwelling units exceed 30 shall be provided with two separate and approved fire apparatus access roads; where there are more than 30-dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 of the *California Fire Code*, access from two directions shall not be required (D107.1)

Access to the project would be provided from new roadway connections from Deer Valley Road via Street A and an extension of Sand Creek Road connecting to Dallas Ranch Road. Access to the traditional neighborhood would be provided from multiple locations, meeting or exceeding the fire code requirements.

Access to the LD-1, LD-2 and Active Adult neighborhoods south of Sand Creek Road would be restricted to a single public access roadway. A secondary emergency access connection from Empire Mine Road is proposed. This configuration may not meet the California Fire Code and the Contra Costa County Fire Protection District Ordinance (D107.1).

Recommendation: The LD-2 neighborhood would be developed with up to 65 homes with a single access location from Street B. Based on Fire Code requirements, two fire access roads may be required unless all homes are equipped with an approved automatic sprinkler system.

The LD-1 neighborhood would be developed with up to 120 homes with two access locations from Street C. Based on Fire Code requirements, two fire access roads may be required unless all homes are equipped with an approved automatic sprinkler system.

The Active Adult neighborhood would be developed with up to 500 age restricted home homes or 330 traditional homes with two access locations from Street C. Based on Fire Code requirements, two fire access roads may be required unless all homes are equipped with an approved automatic sprinkler system.

The Contra Costa County Fire Protection District should review the proposed circulation plan and automatic sprinkler plans to ensure Fire Code requirements are met.

Cross-sections for the proposed streets within the project site were reviewed. All street sections provide a minimum of 20-feet of clearway (meaning no obstructions in terms of parked vehicles, landscaping, etc), such that sufficient width is provided for emergency vehicle access and circulation.

Pedestrian Access and Circulation

Several roadway types are proposed within the development, including arterial, collector, local and hillside roadways. Arterial roadways would provide a six-foot sidewalk on both sides of the street, except where a parallel Class I trail is provided. Collector and local roadways would provide a five-foot sidewalk on both sides of the street where development is proposed; if development would only occur on one side of the street, the sidewalk would be placed adjacent to development, with a Class I trail provided on the opposite side of the street. Sidewalks on the hillside roadways are proposed to be four-feet. The proposed sidewalk network would connect to the site to adjacent developments, providing continuous pedestrian connections in the area.

The project would also construct a number of off-street trails, ranging from a four-foot natural tail to a ten-foot asphalt trail with stabilized shoulders to accommodate emergency vehicle access.

Recommendation: As site plans for individual neighborhoods are developed pedestrian desire lines should be assessed and marked-crosswalks installed at key uncontrolled pedestrian crossing locations, such as at trail crossings and park connections.

Signalized intersections constructed as part of the project should be designed to provide crosswalks, pedestrian actuation, and bicycle detection.

Bicycle Access and Circulation

Class II bicycle lanes would be constructed on Sand Creek Road, Deer Valley Road, and Streets A, B and C. A number of off-street trails would also be constructed.

The on-street Class II bicycle facilities are proposed to provide a 7-foot bicycle lanes adjacent to 12-foot or 13-foot travel lanes.

Recommendation: As vehicle speeds could exceed 25-miles per hour on four lane roadways, consider reallocating the pavement cross-section to provide a painted buffer between the bicycle lanes and the vehicular travel way. Reducing the travel lane width to 10.5-feet each would allow for a 3-foot buffer between the bicycle lanes and the vehicular travel-way on the proposed arterial streets.

As noted above, bicycle detection should be incorporated into new traffic signals in the area.

Transit Access Adjacent to Site

No transit service is provided in the area. An eBART station is under construction in the median of State Route 4 at Hillcrest Avenue, and an additional station may be constructed within the median of State Route 4 between Lone Tree Way and Sand Creek Road, approximately 2.5 to 4 -miles east of the project site. Bus pullouts are shown along Sand Creek Road at Street B and west of Deer Valley Road to accommodate the potential for TriDelta Transit to serve the site. Bus turnouts and shelters meeting TriDelta Transit requirements would be provided.

Although transit facilities would be provided on Sand Creek Road, numerous neighborhoods, specifically in the southwestern portion of the site would be located more than a quarter-mile walk to a bus stop, reducing the potential for transit trips for residents of those neighborhoods.

Recommendation: As the final site plan is developed, consult with TriDelta Transit to determine if additional transit facilities should be provided throughout the site. Consider providing pedestrian passages through cul-de-sacs and other potential barriers to minimize pedestrian walking distances to future transit stops.

Parking

Two enclosed parking spaces for each residential unit would be provided. Some homes would also have driveways where vehicles could be parked. For neighborhoods where on-street parking is not provided, guest parking would be provided at a rate of 1 space per each 5 units. For the Village Center, parking requirements are consistent with the City of Antioch municipal code.

CEQA Checklist Review

This section provides a summary of the potential project impacts related to bicycles, pedestrians, and transit based on the discussions in previous chapters as compared to the significance criteria outlined in Chapter 1, and summarized for each topic area, as presented in **Table 27**.

Table 27: CEQA Checklist Review

Significance Criteria	Discussion	Mitigation
A pedestrian impact is considered significant if the project would:		
Disrupt existing pedestrian facilities	Pedestrian access is not currently provided along the west side of Deer Valley Road, such that pedestrian access in the area is not expected to be disrupted during the project construction phase. Mitigation measures proposed as mitigation for project impacts were reviewed for their potential impact to pedestrians. Widening of one intersection beyond the already planned cross-sections is proposed as project mitigation (intersection 11), which would increase the pedestrian crossing distance. No pedestrian facilities are proposed to be removed as part of project mitigation.	None required. None required.
Interfere with planned pedestrian facilities	The project would construct pedestrian facilities along all roadways within the project site, completing the sidewalk network in	Mitigation Measure 31: As the final site plan is developed, provide sidewalk and intersection crossing designs consistent with City

Table 27: CEQA Checklist Review

Significance Criteria	Discussion	Mitigation
	this area. Insufficient details are provided to review potential pedestrian crossing locations (Impact 31).	requirements. Implementation of this measure would reduce the impact to a ***less-than-significant*** level.
Create inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards	Sidewalks along the project boundary and through the project site would be constructed to current City standards.	None required.
A bicycle impact is considered significant if the project would:		
Disrupt existing bicycle facilities	Existing Class II bicycle facilities are provided in the immediate vicinity of the project site on Deer Valley Road. The project does not propose to eliminate existing bicycle facilities in the vicinity of project. Mitigation measures proposed as mitigation for project impacts were reviewed for their potential impact to bicyclists. No intersection widening beyond the already planned cross-sections are proposed as project mitigation where bicycle facilities are provided and no bicycle facilities would be removed as part of project mitigation.	None required. None required.
Interfere with planned bicycle facilities	Class II bicycle facilities would be provided along all arterial roadways within the project site. Class I facilities will also be provided throughout the project site. Insufficient details are provided to review potential bicycle crossing locations (Impact 32).	Mitigation Measure 32: As the final site plan is developed, provide bicycle facility and intersection crossing designs consistent with City requirements. Implementation of this measure would reduce the impact to a ***less-than-significant*** level.
Create inconsistencies with adopted bicycle system plans, guidelines, policies, or standards	Bicycle detection at the signalized intersections along the project frontage and within the project site, is required. (Impact 33)	Mitigation Measure 33: Install bicycle detection as part of the signal modifications to the intersections of Deer Valley Road with Wellness Way and Sand Creek Road, as well as at any new signals constructed as part of the project. Implementation of this measure would reduce the impact to a ***less-than-significant*** level.

Table 27: CEQA Checklist Review

Significance Criteria	Discussion	Mitigation
A transit impact is considered significant if the project would:		
Result in development that is inaccessible to transit riders	Bus stops are proposed along Sand Creek Road with the provision of transit amenities. Pedestrian connections would be provided from the various neighborhoods to the bus stops. However, many residences would be located more than a quarter mile from a potential transit stop. (Impact 34)	Mitigation Measure 34: Consult with TriDelta Transit to determine if additional transit amenities should be provided throughout the project site. Implementation of this measure would reduce the impact to a ***less-than-significant*** level.
Generate transit demand that cannot be met by existing or planned transit in the area.	Based on the existing travel patterns in the area, it is not expected that the project would generate significant levels of transit ridership.	None required.
Other Transportation Effects not addressed in other Chapters		
An impact could occur if the project substantially increases traffic hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses.	An increase in hazardous road conditions could occur if the site circulation design does not meet City of Antioch standards or the project adds traffic to a roadway that does not meet current design standards. Roadways within the project site would be designed to meet City of Antioch standards. The project would add traffic to Deer Valley Road south of the project site which is currently an unimproved rural roadway. (Impact 35)	Mitigation Measure 35. The project applicant shall pay their fair share towards improvements on Deer Valley Road between the project site and Balfour Road to meet current City standards. Implementation of this measure would reduce the impact to a ***less-than-significant*** level.
An impact could occur if the project results in inadequate emergency access	Access to the northern portion of the site is proposed from numerous roadways. Access to the southern neighborhoods is provided from a single roadway connection. If this roadway is blocked, emergency response times may be impaired. (Impact 36)	Mitigation Measure 36: The final site plan shall be reviewed and approved by the Fire Marshal shall to ensure adequate emergency access. Implementation of this measure would reduce the impact to a ***less-than-significant*** level.

Source: Fehr & Peers, 2018.

10. Vehicle Miles of Travel

In response to Senate Bill 743 (SB 743), the Office of Planning and Research (OPR) is updating California Environmental Quality Act (CEQA) guidelines to include new transportation-related evaluation metrics. Draft guidelines were developed in August 2014, with updated draft guidelines prepared January 2016 which incorporated public comments from the August 2014 guidelines, and final guidelines published in November 2017. New guidelines are undergoing the formal rule making process. In response to the draft guidelines, this preliminary assessment of the vehicle miles of travel (VMT) generated by the proposed project was prepared.

The following provides a brief project description, language of the draft CEQA guidelines related to VMT, and preliminary results of the VMT assessment for the project. Potential thresholds of significance are also presented.

CEQA Guidelines

Proposed changes to Appendix G of the CEQA guidelines, as presented in *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA (November 2017)*[5] provides the potential basis for the evaluation of vehicle miles of travel generated by a project.

Text of Proposed Amendments to Appendix G

b) For a land use project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?

(b) Criteria for Analyzing Transportation Impacts.

(1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact.

[5] Full document can be found here:
http://www.fehrandpeers.com/wp-content/uploads/2016/01/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf

OPR has established a draft threshold for the evaluation of different land use types. For residential uses, new developments that have an estimated vehicle miles of travel 15 percent below **existing** regional **and** city VMT/capita (household or home-based) would be considered less than significant.

For office uses, developments that would result in VMT 15 percent below **existing** regional VMT per employee (work tour or home-based work) would be considered less than significant.

Local-serving retail may be less than significant (projects less than 50,000 square feet). Retail which increases VMT compared to previous shopping patterns may be considered significant.

As neither the City of Antioch nor the Contra Costa Transportation Authority (CCTA) have established thresholds, and the new guidelines have not yet been adopted, this assessment is prepared for informational purposes only. This assessment focuses on the residential component of the project only as the proposed commercial uses are unknown.

Analysis Methods

To conduct the VMT assessment, Fehr & Peers used the CCTA travel demand model as well as information from the Metropolitan Transportation Commission (MTC). The CCTA model was used to estimate average trip lengths for the proposed project, while MTC data[6] was used to establish average trip lengths for existing residential uses in Antioch. The existing average trip lengths for the City of Antioch, Contra Costa County and the Bay Area based on the MTC data are presented in **Table 28.** Home based trips in Antioch and Contra Costa County are slightly higher than the Bay Area average, while work based trips to jobs in Antioch are much lower than regional averages, indicating a jobs-housing imbalance where more people commute from Antioch to other employment centers, while jobs in Antioch tend to be filled by more local residents.

Table 28: Existing Average Trip Lengths

Land Use Type	Antioch	Contra Costa County	Bay Area
Home Based VMT	17.9	18.0	15.3
Work VMT	18.2	27.2	22.7

Source: MTC, Fehr & Peers, 2017.

[6] http://analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerCapita

Analysis Results

A select zone analysis was conducted using the CCTA model whereby all the trips generated by the residential portion of the project were tracked through the transportation system. Based on this analysis, the proposed project is estimated to generate approximately **27 vehicle miles of travel** per day per household. This includes all trips generated by each household that either start or end at home. This level of vehicle travel is higher than the City of Antioch average as well as the Bay Area Average.

A VMT assessment was not prepared for the proposed commercial uses as the actual uses are unknown. Up to 50,000 square feet of retail uses may be considered to have a less-than-significant VMT impact as it is expected to be locally serving. Office or other employment uses are also expected to have a lower than average trip length.

VMT Conclusions

Results of the VMT analysis indicate that the project would contribute to an increase in vehicle miles of travel on a per-capita basis as the project adds a housing development that would require residents to travel longer-than-average distances to meet their daily needs. As there are no thresholds of significance, this analysis is being prepared for informational purposes only.

Appendix

Appendix A: Traffic Counts

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-001
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Lone Tree Way Southbound					SR 4 WB Ramps Westbound					Lone Tree Way Northbound					SR 4 WB Ramps Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	0	54	117	0	171	11	0	20	0	31	200	67	0	0	267	0	0	0	0	0	469	0
7:15	0	69	84	0	153	38	0	29	0	67	190	120	0	0	310	0	0	0	0	0	530	0
7:30	0	135	104	0	239	45	0	45	0	90	181	175	0	0	356	0	0	0	0	0	685	0
7:45	0	216	104	0	320	71	1	87	0	159	199	212	0	0	411	0	0	0	0	0	890	0
Total	0	474	409	0	883	165	1	181	0	347	770	574	0	0	1344	0	0	0	0	0	2574	0
8:00	0	185	111	0	296	60	0	99	0	159	162	172	0	0	334	0	0	0	0	0	789	0
8:15	0	89	92	0	181	51	0	46	0	97	222	165	0	0	387	0	0	0	0	0	665	0
8:30	0	89	87	0	176	42	0	57	0	99	184	140	0	0	324	0	0	0	0	0	599	0
8:45	0	83	86	0	169	34	0	47	0	81	160	123	0	0	283	0	0	0	0	0	533	0
Total	0	446	376	0	822	187	0	249	0	436	728	600	0	0	1328	0	0	0	0	0	2586	0
16:00	0	136	86	0	222	33	0	63	0	96	137	169	0	0	306	0	0	0	0	0	624	0
16:15	0	133	104	0	237	36	0	48	0	84	151	168	0	0	319	0	0	0	0	0	640	0
16:30	0	158	91	0	249	30	1	41	0	72	127	170	0	0	297	0	0	0	0	0	618	0
16:45	0	143	81	0	224	41	0	52	0	93	136	200	0	0	336	0	0	0	0	0	653	0
Total	0	570	362	0	932	140	1	204	0	345	551	707	0	0	1258	0	0	0	0	0	2535	0
17:00	0	130	131	0	261	49	0	54	0	103	129	161	0	0	290	0	0	0	0	0	654	0
17:15	0	146	103	0	249	54	1	66	0	121	146	159	0	0	305	0	0	0	0	0	675	0
17:30	0	145	98	0	243	45	0	55	0	100	145	172	0	0	317	0	0	0	0	0	660	0
17:45	0	122	93	0	215	37	0	60	0	97	114	159	0	0	273	0	0	0	0	0	585	0
Total	0	543	425	0	968	185	1	235	0	421	534	651	0	0	1185	0	0	0	0	0	2574	0
Grand Total	0	2033	1572	0	3605	677	3	869	0	1549	2583	2532	0	0	5115	0	0	0	0	0	10269	0
Apprch %	0.0%	56.4%	43.6%	0.0%		43.7%	0.2%	56.1%	0.0%		50.5%	49.5%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%			
Total %	0.0%	19.8%	15.3%	0.0%	35.1%	6.6%	0.0%	8.5%	0.0%	15.1%	25.2%	24.7%	0.0%	0.0%	49.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	

AM PEAK HOUR	Lone Tree Way Southbound					SR 4 WB Ramps Westbound					Lone Tree Way Northbound					SR 4 WB Ramps Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	135	104	0	239	45	0	45	0	90	181	175	0	0	356	0	0	0	0	0	685
7:45	0	216	104	0	320	71	1	87	0	159	199	212	0	0	411	0	0	0	0	0	890
8:00	0	185	111	0	296	60	0	99	0	159	162	172	0	0	334	0	0	0	0	0	789
8:15	0	89	92	0	181	51	0	46	0	97	222	165	0	0	387	0	0	0	0	0	665
Total Volume	0	625	411	0	1036	227	1	277	0	505	764	724	0	0	1488	0	0	0	0	0	3029
% App Total	0.0%	60.3%	39.7%	0.0%		45.0%	0.2%	54.9%	0.0%		51.3%	48.7%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.000	.723	.926	.000	.809	.799	.250	.699	.000	.794	.860	.854	.000	.000	.905	.000	.000	.000	.000	.000	.851

PM PEAK HOUR	Lone Tree Way Southbound					SR 4 WB Ramps Westbound					Lone Tree Way Northbound					SR 4 WB Ramps Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	143	81	0	224	41	0	52	0	93	136	200	0	0	336	0	0	0	0	0	653
17:00	0	130	131	0	261	49	0	54	0	103	129	161	0	0	290	0	0	0	0	0	654
17:15	0	146	103	0	249	54	1	66	0	121	146	159	0	0	305	0	0	0	0	0	675
17:30	0	145	98	0	243	45	0	55	0	100	145	172	0	0	317	0	0	0	0	0	660
Total Volume	0	564	413	0	977	189	1	227	0	417	556	692	0	0	1248	0	0	0	0	0	2642
% App Total	0.0%	57.7%	42.3%	0.0%		45.3%	0.2%	54.4%	0.0%		44.6%	55.4%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.000	.966	.788	.000	.936	.875	.250	.860	.000	.862	.952	.865	.000	.000	.929	.000	.000	.000	.000	.000	.979

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-002
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Lone Tree Way Southbound					SR 4 EB Ramps Westbound					Lone Tree Way Northbound					SR 4 EB Ramps Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	33	30	0	0	63	0	0	0	0	0	0	218	24	0	242	47	0	63	0	110	415	0
7:15	25	66	0	0	91	0	0	0	0	0	0	248	35	0	283	61	0	77	0	138	512	0
7:30	62	128	0	0	190	0	0	0	0	0	0	271	42	0	313	78	0	124	0	202	705	0
7:45	94	178	0	2	274	0	0	0	0	0	0	307	47	0	354	101	0	149	0	250	878	2
Total	214	402	0	2	618	0	0	0	0	0	0	1044	148	0	1192	287	0	413	0	700	2510	2
8:00	80	172	0	0	252	0	0	0	0	0	0	252	45	0	297	86	0	108	0	194	743	0
8:15	33	110	0	0	143	0	0	0	0	0	0	296	52	0	348	77	2	120	0	199	690	0
8:30	41	90	0	0	131	0	0	0	0	0	0	242	38	0	280	76	0	137	0	213	624	0
8:45	43	72	0	0	115	0	0	0	0	0	0	238	35	0	273	54	0	105	0	159	547	0
Total	197	444	0	0	641	0	0	0	0	0	0	1028	170	0	1198	293	2	470	0	765	2604	0
16:00	64	98	0	0	162	0	0	0	0	0	0	202	56	0	258	106	0	191	0	297	717	0
16:15	64	103	0	0	167	0	0	0	0	0	0	218	55	0	273	107	0	197	0	304	744	0
16:30	79	113	0	0	192	0	0	0	0	0	0	189	61	0	250	110	0	171	0	281	723	0
16:45	63	117	0	0	180	0	0	0	0	0	0	205	68	0	273	125	0	202	0	327	780	0
Total	270	431	0	0	701	0	0	0	0	0	0	814	240	0	1054	448	0	761	0	1209	2964	0
17:00	58	126	0	0	184	0	0	0	0	0	0	191	66	0	257	104	1	194	0	299	740	0
17:15	66	123	0	0	189	0	0	0	0	0	0	201	60	0	261	104	0	172	0	276	726	0
17:30	80	110	0	0	190	0	0	0	0	0	0	189	47	0	236	112	0	190	0	302	728	0
17:45	55	112	0	1	168	0	0	0	0	0	0	153	54	0	207	110	0	206	0	316	691	1
Total	259	471	0	1	731	0	0	0	0	0	0	734	227	0	961	430	1	762	0	1193	2885	1
Grand Total	940	1748	0	3	2691	0	0	0	0	0	0	3620	785	0	4405	1458	3	2406	0	3867	10963	3
Apprch %	34.9%	65.0%	0.0%	0.1%		0.0%	0.0%	0.0%	0.0%		0.0%	82.2%	17.8%	0.0%		37.7%	0.1%	62.2%	0.0%			
Total %	8.6%	15.9%	0.0%	0.0%	24.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.0%	7.2%	0.0%	40.2%	13.3%	0.0%	21.9%	0.0%	35.3%	100.0%	

AM PEAK HOUR	Lone Tree Way Southbound					SR 4 EB Ramps Westbound					Lone Tree Way Northbound					SR 4 EB Ramps Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	62	128	0	0	190	0	0	0	0	0	0	271	42	0	313	78	0	124	0	202	705
7:45	94	178	0	2	274	0	0	0	0	0	0	307	47	0	354	101	0	149	0	250	878
8:00	80	172	0	0	252	0	0	0	0	0	0	252	45	0	297	86	0	108	0	194	743
8:15	33	110	0	0	143	0	0	0	0	0	0	296	52	0	348	77	2	120	0	199	690
Total Volume	269	588	0	2	859	0	0	0	0	0	0	1126	186	0	1312	342	2	501	0	845	3016
% App Total	31.3%	68.5%	0.0%	0.2%		0.0%	0.0%	0.0%	0.0%		0.0%	85.8%	14.2%	0.0%		40.5%	0.2%	59.3%	0.0%		
PHF	.715	.826	.000	.250	.784	.000	.000	.000	.000	.000	.000	.917	.894	.000	.927	.847	.250	.841	.000	.845	.859

PM PEAK HOUR	Lone Tree Way Southbound					SR 4 EB Ramps Westbound					Lone Tree Way Northbound					SR 4 EB Ramps Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:15 to 17:15																					
Peak Hour For Entire Intersection Begins at 16:15																					
16:15	64	103	0	0	167	0	0	0	0	0	0	218	55	0	273	107	0	197	0	304	744
16:30	79	113	0	0	192	0	0	0	0	0	0	189	61	0	250	110	0	171	0	281	723
16:45	63	117	0	0	180	0	0	0	0	0	0	205	68	0	273	125	0	202	0	327	780
17:00	58	126	0	0	184	0	0	0	0	0	0	191	66	0	257	104	1	194	0	299	740
Total Volume	264	459	0	0	723	0	0	0	0	0	0	803	250	0	1053	446	1	764	0	1211	2987
% App Total	36.5%	63.5%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	76.3%	23.7%	0.0%		36.8%	0.1%	63.1%	0.0%		
PHF	.835	.911	.000	.000	.941	.000	.000	.000	.000	.000	.000	.921	.919	.000	.964	.892	.250	.946	.000	.926	.957

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-003
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Hillcrest Ave Southbound					Sunset Dr Westbound					Hillcrest Ave Northbound					Sunset Dr Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	2	108	9	0	119	61	8	17	0	86	12	57	267	25	361	4	3	9	0	16	582	25
7:15	3	111	7	0	121	41	15	27	0	83	12	62	242	13	329	3	1	13	0	17	550	13
7:30	2	137	13	0	152	67	16	24	0	107	14	108	229	19	370	5	1	15	0	21	650	19
7:45	1	193	10	0	204	68	15	32	0	115	16	154	235	29	434	6	0	34	0	40	793	29
Total	8	549	39	0	596	237	54	100	0	391	54	381	973	86	1494	18	5	71	0	94	2575	86
8:00	2	139	9	0	150	70	15	31	0	116	19	89	200	11	319	6	0	18	0	24	609	11
8:15	1	112	5	0	118	86	9	22	0	117	17	90	257	13	377	6	1	14	0	21	633	13
8:30	1	108	10	0	119	79	13	24	0	116	9	74	210	26	319	4	0	14	0	18	572	26
8:45	1	80	8	0	89	75	12	21	0	108	24	97	201	21	343	10	0	13	0	23	563	21
Total	5	439	32	0	476	310	49	98	0	457	69	350	868	71	1358	26	1	59	0	86	2377	71
16:00	3	128	8	0	139	98	19	34	0	151	18	121	164	20	323	11	2	21	0	34	647	20
16:15	2	122	8	0	132	75	21	34	0	130	22	132	175	15	344	13	2	24	0	39	645	15
16:30	6	101	7	0	114	98	12	33	0	143	20	101	202	16	339	9	1	27	0	37	633	16
16:45	2	114	9	0	125	106	17	27	0	150	12	144	177	20	353	9	1	27	0	37	665	20
Total	13	465	32	0	510	377	69	128	0	574	72	498	718	71	1359	42	6	99	0	147	2590	71
17:00	0	146	4	0	150	81	19	34	0	134	21	132	192	20	365	13	3	30	0	46	695	20
17:15	7	125	9	0	141	125	15	33	0	173	14	121	178	13	326	10	1	22	0	33	673	13
17:30	1	136	9	0	146	87	16	28	0	131	16	161	205	18	400	10	0	21	0	31	708	18
17:45	3	132	7	0	142	83	9	33	0	125	10	176	169	11	366	9	0	27	0	36	669	11
Total	11	539	29	0	579	376	59	128	0	563	61	590	744	62	1457	42	4	100	0	146	2745	62
Grand Total	37	1992	132	0	2161	1300	231	454	0	1985	256	1819	3303	290	5668	128	16	329	0	473	10287	290
Apprch %	1.7%	92.2%	6.1%	0.0%		65.5%	11.6%	22.9%	0.0%		4.5%	32.1%	58.3%	5.1%		27.1%	3.4%	69.6%	0.0%			
Total %	0.4%	19.4%	1.3%	0.0%	21.0%	12.6%	2.2%	4.4%	0.0%	19.3%	2.5%	17.7%	32.1%	2.8%	55.1%	1.2%	0.2%	3.2%	0.0%	4.6%	100.0%	

AM PEAK HOUR	Hillcrest Ave Southbound					Sunset Dr Westbound					Hillcrest Ave Northbound					Sunset Dr Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	2	137	13	0	152	67	16	24	0	107	14	108	229	19	370	5	1	15	0	21	650
7:45	1	193	10	0	204	68	15	32	0	115	16	154	235	29	434	6	0	34	0	40	793
8:00	2	139	9	0	150	70	15	31	0	116	19	89	200	11	319	6	0	18	0	24	609
8:15	1	112	5	0	118	86	9	22	0	117	17	90	257	13	377	6	1	14	0	21	633
Total Volume	6	581	37	0	624	291	55	109	0	455	66	441	921	72	1500	23	2	81	0	106	2685
% App Total	1.0%	93.1%	5.9%	0.0%		64.0%	12.1%	24.0%	0.0%		4.4%	29.4%	61.4%	4.8%		21.7%	1.9%	76.4%	0.0%		
PHF	.750	.753	.712	.000	.765	.846	.859	.852	.000	.972	.868	.716	.896	.621	.864	.958	.500	.596	.000	.663	.846

PM PEAK HOUR	Hillcrest Ave Southbound					Sunset Dr Westbound					Hillcrest Ave Northbound					Sunset Dr Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	146	4	0	150	81	19	34	0	134	21	132	192	20	365	13	3	30	0	46	695
17:15	7	125	9	0	141	125	15	33	0	173	14	121	178	13	326	10	1	22	0	33	673
17:30	1	136	9	0	146	87	16	28	0	131	16	161	205	18	400	10	0	21	0	31	708
17:45	3	132	7	0	142	83	9	33	0	125	10	176	169	11	366	9	0	27	0	36	669
Total Volume	11	539	29	0	579	376	59	128	0	563	61	590	744	62	1457	42	4	100	0	146	2745
% App Total	1.9%	93.1%	5.0%	0.0%		66.8%	10.5%	22.7%	0.0%		4.2%	40.5%	51.1%	4.3%		28.8%	2.7%	68.5%	0.0%		
PHF	.393	.923	.806	.000	.965	.752	.776	.941	.000	.814	.726	.838	.907	.775	.911	.808	.333	.833	.000	.793	.969

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-004
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Hillcrest Ave Southbound					SR 4 EB Ramps Westbound					Hillcrest Ave Northbound					SR 4 EB Ramps Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	36	73	0	0	109	0	0	0	0	0	0	322	65	0	387	29	0	98	0	127	623	0
7:15	28	90	0	0	118	0	0	0	0	0	0	321	68	0	389	28	0	149	0	177	684	0
7:30	30	124	0	0	154	0	0	0	0	0	0	343	104	0	447	40	0	187	0	227	828	0
7:45	36	175	0	0	211	0	0	0	0	0	0	361	125	0	486	44	0	218	0	262	959	0
Total	130	462	0	0	592	0	0	0	0	0	0	1347	362	0	1709	141	0	652	0	793	3094	0
8:00	18	189	0	0	207	0	0	0	0	0	0	299	75	0	374	43	0	194	0	237	818	0
8:15	34	124	0	0	158	0	0	0	0	0	0	322	73	0	395	31	1	190	0	222	775	0
8:30	27	127	0	0	154	0	0	0	0	0	0	289	81	0	370	42	0	170	0	212	736	0
8:45	23	97	0	0	120	0	0	0	0	0	0	291	77	0	368	28	0	136	0	164	652	0
Total	102	537	0	0	639	0	0	0	0	0	0	1201	306	0	1507	144	1	690	0	835	2981	0
16:00	44	135	0	0	179	0	0	0	0	0	0	263	103	0	366	57	1	296	0	354	899	0
16:15	30	171	0	0	201	0	0	0	0	0	0	273	86	0	359	78	0	302	0	380	940	0
16:30	38	137	0	0	175	0	0	0	0	0	0	278	81	0	359	54	0	289	0	343	877	0
16:45	31	176	0	0	207	0	0	0	0	0	0	294	99	0	393	67	2	324	0	393	993	0
Total	143	619	0	0	762	0	0	0	0	0	0	1108	369	0	1477	256	3	1211	0	1470	3709	0
17:00	46	164	0	0	210	0	0	0	0	0	0	278	92	0	370	74	1	301	0	376	956	0
17:15	46	208	0	1	255	0	0	0	0	0	0	280	111	0	391	61	1	315	0	377	1023	1
17:30	25	148	0	0	173	0	0	0	0	0	0	320	94	0	414	64	1	352	0	417	1004	0
17:45	44	183	0	0	227	0	0	0	0	0	0	261	88	0	349	92	0	343	0	435	1011	0
Total	161	703	0	1	865	0	0	0	0	0	0	1139	385	0	1524	291	3	1311	0	1605	3994	1
Grand Total	536	2321	0	1	2858	0	0	0	0	0	0	4795	1422	0	6217	832	7	3864	0	4703	13778	1
Apprch %	18.8%	81.2%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	77.1%	22.9%	0.0%		17.7%	0.1%	82.2%	0.0%			
Total %	3.9%	16.8%	0.0%	0.0%	20.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	34.8%	10.3%	0.0%	45.1%	6.0%	0.1%	28.0%	0.0%	34.1%	100.0%	

AM PEAK HOUR	Hillcrest Ave Southbound					SR 4 EB Ramps Westbound					Hillcrest Ave Northbound					SR 4 EB Ramps Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	30	124	0	0	154	0	0	0	0	0	0	343	104	0	447	40	0	187	0	227	828
7:45	36	175	0	0	211	0	0	0	0	0	0	361	125	0	486	44	0	218	0	262	959
8:00	18	189	0	0	207	0	0	0	0	0	0	299	75	0	374	43	0	194	0	237	818
8:15	34	124	0	0	158	0	0	0	0	0	0	322	73	0	395	31	1	190	0	222	775
Total Volume	118	612	0	0	730	0	0	0	0	0	0	1325	377	0	1702	158	1	789	0	948	3380
% App Total	16.2%	83.8%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	77.8%	22.2%	0.0%		16.7%	0.1%	83.2%	0.0%		
PHF	.819	.810	.000	.000	.865	.000	.000	.000	.000	.000	.000	.918	.754	.000	.876	.898	.250	.905	.000	.905	.881

PM PEAK HOUR	Hillcrest Ave Southbound					SR 4 EB Ramps Westbound					Hillcrest Ave Northbound					SR 4 EB Ramps Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	46	164	0	0	210	0	0	0	0	0	0	278	92	0	370	74	1	301	0	376	956
17:15	46	208	0	1	255	0	0	0	0	0	0	280	111	0	391	61	1	315	0	377	1023
17:30	25	148	0	0	173	0	0	0	0	0	0	320	94	0	414	64	1	352	0	417	1004
17:45	44	183	0	0	227	0	0	0	0	0	0	261	88	0	349	92	0	343	0	435	1011
Total Volume	161	703	0	1	865	0	0	0	0	0	0	1139	385	0	1524	291	3	1311	0	1605	3994
% App Total	18.6%	81.3%	0.0%	0.1%		0.0%	0.0%	0.0%	0.0%		0.0%	74.7%	25.3%	0.0%		18.1%	0.2%	81.7%	0.0%		
PHF	.875	.845	.000	.250	.848	.000	.000	.000	.000	.000	.000	.890	.867	.000	.920	.791	.750	.931	.000	.922	.976

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-005
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Lone Tree Way Southbound					Davison Dr Westbound					Lone Tree Way Northbound					Davison Dr Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	17	75	1	1	94	26	3	40	0	69	1	182	12	0	195	5	1	1	0	7	365	1
7:15	15	112	4	0	131	27	4	50	0	81	8	193	15	0	216	3	3	6	0	12	440	0
7:30	24	139	4	1	168	45	6	53	0	104	5	234	28	0	267	10	4	3	0	17	556	1
7:45	40	203	4	1	248	42	8	47	0	97	3	279	26	0	308	5	2	4	0	11	664	1
Total	96	529	13	3	641	140	21	190	0	351	17	888	81	0	986	23	10	14	0	47	2025	3
8:00	35	197	8	1	241	48	9	74	0	131	5	194	24	0	223	1	9	3	0	13	608	1
8:15	52	205	4	2	263	43	8	54	0	105	8	288	31	0	327	10	7	10	0	27	722	2
8:30	25	151	4	0	180	30	8	37	0	75	3	188	14	0	205	4	6	5	0	15	475	0
8:45	38	152	2	3	195	32	9	37	0	78	5	205	17	0	227	6	5	2	0	13	513	3
Total	150	705	18	6	879	153	34	202	0	389	21	875	86	0	982	21	27	20	0	68	2318	6
16:00	45	209	4	0	258	24	10	28	0	62	11	206	24	1	242	15	10	8	0	33	595	1
16:15	46	235	7	4	292	20	9	36	0	65	11	184	25	0	220	9	7	16	0	32	609	4
16:30	38	181	5	3	227	30	7	30	0	67	11	188	24	0	223	9	18	14	0	41	558	3
16:45	35	227	5	2	269	37	9	26	0	72	10	176	31	0	217	13	11	13	0	37	595	2
Total	164	852	21	9	1046	111	35	120	0	266	43	754	104	1	902	46	46	51	0	143	2357	10
17:00	44	221	3	4	272	24	4	35	0	63	13	184	27	0	224	15	14	11	0	40	599	4
17:15	44	221	7	2	274	35	12	19	0	66	20	188	29	0	237	15	6	15	0	36	613	2
17:30	52	203	9	8	272	38	6	41	0	85	11	150	24	1	186	11	14	18	0	43	586	9
17:45	43	220	5	1	269	37	14	35	0	86	11	147	26	0	184	9	5	10	0	24	563	1
Total	183	865	24	15	1087	134	36	130	0	300	55	669	106	1	831	50	39	54	0	143	2361	16
Grand Total	593	2951	76	33	3653	538	126	642	0	1306	136	3186	377	2	3701	140	122	139	0	401	9061	35
Apprch %	16.2%	80.8%	2.1%	0.9%		41.2%	9.6%	49.2%	0.0%		3.7%	86.1%	10.2%	0.1%		34.9%	30.4%	34.7%	0.0%			
Total %	6.5%	32.6%	0.8%	0.4%	40.3%	5.9%	1.4%	7.1%	0.0%	14.4%	1.5%	35.2%	4.2%	0.0%	40.8%	1.5%	1.3%	1.5%	0.0%	4.4%	100.0%	

AM PEAK HOUR	Lone Tree Way Southbound					Davison Dr Westbound					Lone Tree Way Northbound					Davison Dr Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	24	139	4	1	168	45	6	53	0	104	5	234	28	0	267	10	4	3	0	17	556
7:45	40	203	4	1	248	42	8	47	0	97	3	279	26	0	308	5	2	4	0	11	664
8:00	35	197	8	1	241	48	9	74	0	131	5	194	24	0	223	1	9	3	0	13	608
8:15	52	205	4	2	263	43	8	54	0	105	8	288	31	0	327	10	7	10	0	27	722
Total Volume	151	744	20	5	920	178	31	228	0	437	21	995	109	0	1125	26	22	20	0	68	2550
% App Total	16.4%	80.9%	2.2%	0.5%		40.7%	7.1%	52.2%	0.0%		1.9%	88.4%	9.7%	0.0%		38.2%	32.4%	29.4%	0.0%		
PHF	.726	.907	.625	.625	.875	.927	.861	.770	.000	.834	.656	.864	.879	.000	.860	.650	.611	.500	.000	.630	.883

PM PEAK HOUR	Lone Tree Way Southbound					Davison Dr Westbound					Lone Tree Way Northbound					Davison Dr Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	35	227	5	2	269	37	9	26	0	72	10	176	31	0	217	13	11	13	0	37	595
17:00	44	221	3	4	272	24	4	35	0	63	13	184	27	0	224	15	14	11	0	40	599
17:15	44	221	7	2	274	35	12	19	0	66	20	188	29	0	237	15	6	15	0	36	613
17:30	52	203	9	8	272	38	6	41	0	85	11	150	24	1	186	11	14	18	0	43	586
Total Volume	175	872	24	16	1087	134	31	121	0	286	54	698	111	1	864	54	45	57	0	156	2393
% App Total	16.1%	80.2%	2.2%	1.5%		46.9%	10.8%	42.3%	0.0%		6.3%	80.8%	12.8%	0.1%		34.6%	28.8%	36.5%	0.0%		
PHF	.841	.960	.667	.500	.992	.882	.646	.738	.000	.841	.675	.928	.895	.250	.911	.900	.804	.792	.000	.907	.976

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-006
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Davison Dr Southbound					Deer Valley Rd /Hillcrest Ave Westbound					Davison Dr Northbound					Deer Valley Rd /Hillcrest Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	50	88	14	0	152	7	18	187	0	212	8	110	3	1	122	22	12	12	1	47	533	2
7:15	69	143	17	0	229	5	30	169	0	204	6	124	3	0	133	16	21	11	1	49	615	1
7:30	82	173	18	0	273	7	34	188	0	229	11	188	0	0	199	35	24	22	1	82	783	1
7:45	120	209	36	0	365	12	45	179	0	236	13	178	2	0	193	39	36	32	6	113	907	6
Total	321	613	85	0	1019	31	127	723	0	881	38	600	8	1	647	112	93	77	9	291	2838	10
8:00	138	205	27	0	370	12	43	157	0	212	13	142	5	0	160	31	39	20	1	91	833	1
8:15	102	157	30	0	289	12	29	145	1	187	10	141	8	0	159	27	37	20	4	88	723	5
8:30	94	190	24	0	308	11	23	119	1	154	18	157	6	0	181	22	29	20	0	71	714	1
8:45	85	133	23	0	241	7	20	146	0	173	14	169	3	1	187	24	23	22	7	76	677	8
Total	419	685	104	0	1208	42	115	567	2	726	55	609	22	1	687	104	128	82	12	326	2947	15
16:00	149	190	40	0	379	11	18	104	1	134	18	158	11	0	187	45	28	22	3	98	798	4
16:15	153	221	42	0	416	11	23	135	0	169	26	147	9	1	183	36	38	23	2	99	867	3
16:30	149	197	31	0	377	8	18	128	0	154	22	172	12	0	206	33	49	14	3	99	836	3
16:45	210	228	27	1	466	16	19	135	0	170	30	177	8	0	215	26	36	20	0	82	933	1
Total	661	836	140	1	1638	46	78	502	1	627	96	654	40	1	791	140	151	79	8	378	3434	11
17:00	163	208	33	0	404	12	22	111	0	145	24	200	14	0	238	29	37	21	3	90	877	3
17:15	161	252	34	0	447	8	19	111	0	138	28	192	5	0	225	39	46	23	3	111	921	3
17:30	155	231	34	0	420	14	37	135	2	188	29	181	13	1	224	44	45	22	4	115	947	7
17:45	190	239	36	0	465	8	33	121	1	163	23	161	7	0	191	30	49	20	4	103	922	5
Total	669	930	137	0	1736	42	111	478	3	634	104	734	39	1	878	142	177	86	14	419	3667	18
Grand Total	2070	3064	466	1	5601	161	431	2270	6	2868	293	2597	109	4	3003	498	549	324	43	1414	12886	54
Apprch %	37.0%	54.7%	8.3%	0.0%		5.6%	15.0%	79.1%	0.2%		9.8%	86.5%	3.6%	0.1%		35.2%	38.8%	22.9%	3.0%			
Total %	16.1%	23.8%	3.6%	0.0%	43.5%	1.2%	3.3%	17.6%	0.0%	22.3%	2.3%	20.2%	0.8%	0.0%	23.3%	3.9%	4.3%	2.5%	0.3%	11.0%	100.0%	

AM PEAK HOUR	Davison Dr Southbound					Deer Valley Rd /Hillcrest Ave Westbound					Davison Dr Northbound					Deer Valley Rd /Hillcrest Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	82	173	18	0	273	7	34	188	0	229	11	188	0	0	199	35	24	22	1	82	783
7:45	120	209	36	0	365	12	45	179	0	236	13	178	2	0	193	39	36	32	6	113	907
8:00	138	205	27	0	370	12	43	157	0	212	13	142	5	0	160	31	39	20	1	91	833
8:15	102	157	30	0	289	12	29	145	1	187	10	141	8	0	159	27	37	20	4	88	723
Total Volume	442	744	111	0	1297	43	151	669	1	864	47	649	15	0	711	132	136	94	12	374	3246
% App Total	34.1%	57.4%	8.6%	0.0%		5.0%	17.5%	77.4%	0.1%		6.6%	91.3%	2.1%	0.0%		35.3%	36.4%	25.1%	3.2%		
PHF	.801	.890	.771	.000	.876	.896	.839	.890	.250	.915	.904	.863	.469	.000	.893	.846	.872	.734	.500	.827	.895

PM PEAK HOUR	Davison Dr Southbound					Deer Valley Rd /Hillcrest Ave Westbound					Davison Dr Northbound					Deer Valley Rd /Hillcrest Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	210	228	27	1	466	16	19	135	0	170	30	177	8	0	215	26	36	20	0	82	933
17:00	163	208	33	0	404	12	22	111	0	145	24	200	14	0	238	29	37	21	3	90	877
17:15	161	252	34	0	447	8	19	111	0	138	28	192	5	0	225	39	46	23	3	111	921
17:30	155	231	34	0	420	14	37	135	2	188	29	181	13	1	224	44	45	22	4	115	947
Total Volume	689	919	128	1	1737	50	97	492	2	641	111	750	40	1	902	138	164	86	10	398	3678
% App Total	39.7%	52.9%	7.4%	0.1%		7.8%	15.1%	76.8%	0.3%		12.3%	83.1%	4.4%	0.1%		34.7%	41.2%	21.6%	2.5%		
PHF	.820	.912	.941	.250	.932	.781	.655	.911	.250	.852	.925	.938	.714	.250	.947	.784	.891	.935	.625	.865	.971

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-007
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Lone Tree Way Southbound					James Donlon Blvd Westbound					Lone Tree Way Northbound					James Donlon Blvd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	1	71	23	0	95	0	11	18	1	30	98	184	2	0	284	13	2	55	0	70	479	1
7:15	4	117	27	1	149	0	15	10	0	25	114	187	1	0	302	24	4	116	0	144	620	1
7:30	13	128	24	0	165	3	29	14	0	46	179	254	1	0	434	43	7	174	0	224	869	0
7:45	20	174	32	0	226	2	22	16	0	40	168	235	3	0	406	45	24	152	0	221	893	0
Total	38	490	106	1	635	5	77	58	1	141	559	860	7	0	1426	125	37	497	0	659	2861	2
8:00	16	192	43	2	253	1	20	14	0	35	188	207	7	0	402	38	19	132	0	189	879	2
8:15	13	191	43	1	248	1	22	10	0	33	182	287	2	0	471	30	8	100	0	138	890	1
8:30	4	134	36	0	174	1	13	10	0	24	129	174	2	0	305	23	4	137	0	164	667	0
8:45	6	142	19	2	169	0	11	5	0	16	149	242	1	0	392	29	1	108	0	138	715	2
Total	39	659	141	5	844	3	66	39	0	108	648	910	12	0	1570	120	32	477	0	629	3151	5
16:00	17	197	33	0	247	4	16	16	1	37	108	210	5	0	323	23	18	129	0	170	777	1
16:15	19	218	34	1	272	4	7	19	0	30	122	156	2	0	280	40	26	154	0	220	802	1
16:30	16	185	32	1	234	3	11	6	1	21	111	175	1	0	287	28	16	152	0	196	738	2
16:45	9	222	37	1	269	1	11	18	0	30	133	149	2	0	284	34	19	183	0	236	819	1
Total	61	822	136	3	1022	12	45	59	2	118	474	690	10	0	1174	125	79	618	0	822	3136	5
17:00	14	219	44	0	277	3	6	13	0	22	101	176	4	0	281	37	13	163	0	213	793	0
17:15	16	229	39	1	285	1	8	12	0	21	105	181	1	0	287	36	22	205	0	263	856	1
17:30	16	218	35	0	269	1	15	10	0	26	123	163	2	0	288	24	21	169	0	214	797	0
17:45	14	196	37	0	247	3	11	9	0	23	110	158	3	0	271	25	24	215	0	264	805	0
Total	60	862	155	1	1078	8	40	44	0	92	439	678	10	0	1127	122	80	752	0	954	3251	1
Grand Total	198	2833	538	10	3579	28	228	200	3	459	2120	3138	39	0	5297	492	228	2344	0	3064	12399	13
Apprch %	5.5%	79.2%	15.0%	0.3%		6.1%	49.7%	43.6%	0.7%		40.0%	59.2%	0.7%	0.0%		16.1%	7.4%	76.5%	0.0%			
Total %	1.6%	22.8%	4.3%	0.1%	28.9%	0.2%	1.8%	1.6%	0.0%	3.7%	17.1%	25.3%	0.3%	0.0%	42.7%	4.0%	1.8%	18.9%	0.0%	24.7%	100.0%	

AM PEAK HOUR	Lone Tree Way Southbound					James Donlon Blvd Westbound					Lone Tree Way Northbound					James Donlon Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	13	128	24	0	165	3	29	14	0	46	179	254	1	0	434	43	7	174	0	224	869
7:45	20	174	32	0	226	2	22	16	0	40	168	235	3	0	406	45	24	152	0	221	893
8:00	16	192	43	2	253	1	20	14	0	35	188	207	7	0	402	38	19	132	0	189	879
8:15	13	191	43	1	248	1	22	10	0	33	182	287	2	0	471	30	8	100	0	138	890
Total Volume	62	685	142	3	892	7	93	54	0	154	717	983	13	0	1713	156	58	558	0	772	3531
% App Total	7.0%	76.8%	15.9%	0.3%		4.5%	60.4%	35.1%	0.0%		41.9%	57.4%	0.8%	0.0%		20.2%	7.5%	72.3%	0.0%		
PHF	.775	.892	.826	.375	.881	.583	.802	.844	.000	.837	.953	.856	.464	.000	.909	.867	.604	.802	.000	.862	.989

PM PEAK HOUR	Lone Tree Way Southbound					James Donlon Blvd Westbound					Lone Tree Way Northbound					James Donlon Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	9	222	37	1	269	1	11	18	0	30	133	149	2	0	284	34	19	183	0	236	819
17:00	14	219	44	0	277	3	6	13	0	22	101	176	4	0	281	37	13	163	0	213	793
17:15	16	229	39	1	285	1	8	12	0	21	105	181	1	0	287	36	22	205	0	263	856
17:30	16	218	35	0	269	1	15	10	0	26	123	163	2	0	288	24	21	169	0	214	797
Total Volume	55	888	155	2	1100	6	40	53	0	99	462	669	9	0	1140	131	75	720	0	926	3265
% App Total	5.0%	80.7%	14.1%	0.2%		6.1%	40.4%	53.5%	0.0%		40.5%	58.7%	0.8%	0.0%		14.1%	8.1%	77.8%	0.0%		
PHF	.859	.969	.881	.500	.965	.500	.667	.736	.000	.825	.868	.924	.563	.000	.990	.885	.852	.878	.000	.880	.954

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-008
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Dallas Ranch Rd Southbound					Lone Tree Way Westbound					Dallas Ranch Rd Northbound					Lone Tree Way Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	6	5	24	0	35	6	135	2	0	143	59	6	7	0	72	2	72	17	0	91	341	0
7:15	10	7	23	0	40	12	139	9	0	160	77	7	20	0	104	4	163	34	1	202	506	1
7:30	14	20	24	0	58	31	215	15	0	261	87	16	35	0	138	2	203	35	0	240	697	0
7:45	12	35	26	0	73	56	221	21	0	298	66	43	42	0	151	12	175	44	0	231	753	0
Total	42	67	97	0	206	105	710	47	0	862	289	72	104	0	465	20	613	130	1	764	2297	1
8:00	13	65	24	0	102	64	244	15	1	324	70	46	50	1	167	17	183	69	0	269	862	2
8:15	22	50	35	0	107	28	188	17	1	234	79	31	43	2	155	14	142	39	0	195	691	3
8:30	8	4	16	0	28	21	174	3	1	199	50	7	19	1	77	9	169	46	0	224	528	2
8:45	11	4	22	1	38	17	269	11	0	297	64	3	24	2	93	4	169	31	0	204	632	3
Total	54	123	97	1	275	130	875	46	3	1054	263	87	136	6	492	44	663	185	0	892	2713	10
16:00	6	13	16	0	35	14	186	11	0	211	60	11	16	2	89	13	162	69	0	244	579	2
16:15	15	8	12	0	35	32	155	10	0	197	54	6	16	2	78	23	191	64	1	279	589	3
16:30	5	7	15	0	27	20	176	10	0	206	39	13	20	1	73	18	188	52	0	258	564	1
16:45	4	9	16	0	29	23	164	3	0	190	38	5	15	1	59	23	176	67	0	266	544	1
Total	30	37	59	0	126	89	681	34	0	804	191	35	67	6	299	77	717	252	1	1047	2276	7
17:00	13	7	21	0	41	19	162	5	3	189	52	12	24	4	92	23	205	55	0	283	605	7
17:15	11	10	15	0	36	32	168	12	0	212	43	10	17	6	76	21	251	73	0	345	669	6
17:30	13	8	21	0	42	17	158	11	0	186	45	16	16	0	77	33	232	61	0	326	631	0
17:45	10	5	19	0	34	30	172	10	3	215	45	15	26	0	86	25	229	63	0	317	652	3
Total	47	30	76	0	153	98	660	38	6	802	185	53	83	10	331	102	917	252	0	1271	2557	16
Grand Total	173	257	329	1	760	422	2926	165	9	3522	928	247	390	22	1587	243	2910	819	2	3974	9843	34
Apprch %	22.8%	33.8%	43.3%	0.1%		12.0%	83.1%	4.7%	0.3%		58.5%	15.6%	24.6%	1.4%		6.1%	73.2%	20.6%	0.1%			
Total %	1.8%	2.6%	3.3%	0.0%	7.7%	4.3%	29.7%	1.7%	0.1%	35.8%	9.4%	2.5%	4.0%	0.2%	16.1%	2.5%	29.6%	8.3%	0.0%	40.4%	100.0%	

AM PEAK HOUR	Dallas Ranch Rd Southbound					Lone Tree Way Westbound					Dallas Ranch Rd Northbound					Lone Tree Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	14	20	24	0	58	31	215	15	0	261	87	16	35	0	138	2	203	35	0	240	697
7:45	12	35	26	0	73	56	221	21	0	298	66	43	42	0	151	12	175	44	0	231	753
8:00	13	65	24	0	102	64	244	15	1	324	70	46	50	1	167	17	183	69	0	269	862
8:15	22	50	35	0	107	28	188	17	1	234	79	31	43	2	155	14	142	39	0	195	691
Total Volume	61	170	109	0	340	179	868	68	2	1117	302	136	170	3	611	45	703	187	0	935	3003
% App Total	17.9%	50.0%	32.1%	0.0%		16.0%	77.7%	6.1%	0.2%		49.4%	22.3%	27.8%	0.5%		4.8%	75.2%	20.0%	0.0%		
PHF	.693	.654	.779	.000	.794	.699	.889	.810	.500	.862	.868	.739	.850	.375	.915	.662	.866	.678	.000	.869	.871

PM PEAK HOUR	Dallas Ranch Rd Southbound					Lone Tree Way Westbound					Dallas Ranch Rd Northbound					Lone Tree Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	13	7	21	0	41	19	162	5	3	189	52	12	24	4	92	23	205	55	0	283	605
17:15	11	10	15	0	36	32	168	12	0	212	43	10	17	6	76	21	251	73	0	345	669
17:30	13	8	21	0	42	17	158	11	0	186	45	16	16	0	77	33	232	61	0	326	631
17:45	10	5	19	0	34	30	172	10	3	215	45	15	26	0	86	25	229	63	0	317	652
Total Volume	47	30	76	0	153	98	660	38	6	802	185	53	83	10	331	102	917	252	0	1271	2557
% App Total	30.7%	19.6%	49.7%	0.0%		12.2%	82.3%	4.7%	0.7%		55.9%	16.0%	25.1%	3.0%		8.0%	72.1%	19.8%	0.0%		
PHF	.904	.750	.905	.000	.911	.766	.959	.792	.500	.933	.889	.828	.798	.417	.899	.773	.913	.863	.000	.921	.956

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-009
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Deer Valley Rd Southbound					Lone Tree Way Westbound					Deer Valley Rd Northbound					Lone Tree Way Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	19	56	1	2	78	26	73	20	4	123	30	18	6	0	54	4	52	30	0	86	341	6
7:15	34	100	2	0	136	38	96	26	3	163	30	32	16	0	78	2	87	61	0	150	527	3
7:30	107	128	6	0	241	45	142	54	6	247	77	67	26	2	172	1	158	64	0	223	883	8
7:45	76	137	2	0	215	46	208	79	5	338	86	84	22	1	193	7	184	65	0	256	1002	6
Total	236	421	11	2	670	155	519	179	18	871	223	201	70	3	497	14	481	220	0	715	2753	23
8:00	65	129	8	0	202	44	152	39	7	242	89	80	22	2	193	7	132	52	0	191	828	9
8:15	49	113	4	0	166	52	142	43	6	243	47	56	16	3	122	12	141	68	0	221	752	9
8:30	95	123	8	0	226	47	130	54	17	248	57	48	26	2	133	15	151	59	0	225	832	19
8:45	113	103	4	2	222	46	166	80	22	314	59	68	29	4	160	6	176	35	1	218	914	29
Total	322	468	24	2	816	189	590	216	52	1047	252	252	93	11	608	40	600	214	1	855	3326	66
16:00	40	83	3	0	126	49	116	50	10	225	56	61	51	1	169	21	151	40	0	212	732	11
16:15	47	47	5	1	100	36	128	37	3	204	41	58	33	4	136	8	154	30	0	192	632	8
16:30	46	65	10	1	122	33	136	42	5	216	45	73	28	7	153	15	162	22	0	199	690	13
16:45	48	74	11	0	133	33	121	42	6	202	53	75	48	1	177	17	140	32	1	190	702	8
Total	181	269	29	2	481	151	501	171	24	847	195	267	160	13	635	61	607	124	1	793	2756	40
17:00	53	61	6	0	120	31	126	47	12	216	58	94	45	4	201	16	179	40	0	235	772	16
17:15	75	81	5	1	162	40	131	43	7	221	54	81	44	5	184	19	186	26	0	231	798	13
17:30	50	46	6	0	102	45	130	46	8	229	42	64	39	3	148	17	185	47	0	249	728	11
17:45	73	71	7	0	151	46	137	40	2	225	41	65	34	3	143	15	185	43	1	244	763	6
Total	251	259	24	1	535	162	524	176	29	891	195	304	162	15	676	67	735	156	1	959	3061	46
Grand Total	990	1417	88	7	2502	657	2134	742	123	3656	865	1024	485	42	2416	182	2423	714	3	3322	11896	175
Apprch %	39.6%	56.6%	3.5%	0.3%		18.0%	58.4%	20.3%	3.4%		35.8%	42.4%	20.1%	1.7%		5.5%	72.9%	21.5%	0.1%			
Total %	8.3%	11.9%	0.7%	0.1%	21.0%	5.5%	17.9%	6.2%	1.0%	30.7%	7.3%	8.6%	4.1%	0.4%	20.3%	1.5%	20.4%	6.0%	0.0%	27.9%	100.0%	

AM PEAK HOUR	Deer Valley Rd Southbound					Lone Tree Way Westbound					Deer Valley Rd Northbound					Lone Tree Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	107	128	6	0	241	45	142	54	6	247	77	67	26	2	172	1	158	64	0	223	883
7:45	76	137	2	0	215	46	208	79	5	338	86	84	22	1	193	7	184	65	0	256	1002
8:00	65	129	8	0	202	44	152	39	7	242	89	80	22	2	193	7	132	52	0	191	828
8:15	49	113	4	0	166	52	142	43	6	243	47	56	16	3	122	12	141	68	0	221	752
Total Volume	297	507	20	0	824	187	644	215	24	1070	299	287	86	8	680	27	615	249	0	891	3465
% App Total	36.0%	61.5%	2.4%	0.0%		17.5%	60.2%	20.1%	2.2%		44.0%	42.2%	12.6%	1.2%		3.0%	69.0%	27.9%	0.0%		
PHF	.694	.925	.625	.000	.855	.899	.774	.680	.857	.791	.840	.854	.827	.667	.881	.563	.836	.915	.000	.870	.865

PM PEAK HOUR	Deer Valley Rd Southbound					Lone Tree Way Westbound					Deer Valley Rd Northbound					Lone Tree Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	53	61	6	0	120	31	126	47	12	216	58	94	45	4	201	16	179	40	0	235	772
17:15	75	81	5	1	162	40	131	43	7	221	54	81	44	5	184	19	186	26	0	231	798
17:30	50	46	6	0	102	45	130	46	8	229	42	64	39	3	148	17	185	47	0	249	728
17:45	73	71	7	0	151	46	137	40	2	225	41	65	34	3	143	15	185	43	1	244	763
Total Volume	251	259	24	1	535	162	524	176	29	891	195	304	162	15	676	67	735	156	1	959	3061
% App Total	46.9%	48.4%	4.5%	0.2%		18.2%	58.8%	19.8%	3.3%		28.8%	45.0%	24.0%	2.2%		7.0%	76.6%	16.3%	0.1%		
PHF	.837	.799	.857	.250	.826	.880	.956	.936	.604	.973	.841	.809	.900	.750	.841	.882	.988	.830	.250	.963	.959

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-010
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Hillcrest Ave Southbound					Lone Tree Way Westbound					Hillcrest Ave Northbound					Lone Tree Way Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	41	6	13	9	69	4	82	15	0	101	5	8	0	0	13	12	52	1	3	68	251	12
7:15	54	16	35	9	114	7	150	23	0	180	7	10	6	0	23	14	89	0	2	105	422	11
7:30	64	19	81	7	171	11	159	36	0	206	6	19	10	0	35	29	138	2	1	170	582	8
7:45	81	17	57	16	171	2	193	34	1	230	11	12	5	0	28	77	155	1	4	237	666	21
Total	240	58	186	41	525	24	584	108	1	717	29	49	21	0	99	132	434	4	10	580	1921	52
8:00	80	12	36	12	140	6	186	35	0	227	11	6	5	0	22	45	129	7	2	183	572	14
8:15	69	20	54	21	164	6	213	43	0	262	4	14	7	0	25	30	74	3	3	110	561	24
8:30	63	12	70	13	158	11	216	35	0	262	7	8	5	0	20	33	103	6	2	144	584	15
8:45	74	14	64	17	169	4	162	44	0	210	5	9	4	0	18	54	133	3	4	194	591	21
Total	286	58	224	63	631	27	777	157	0	961	27	37	21	0	85	162	439	19	11	631	2308	74
16:00	81	8	25	28	142	12	178	50	0	240	6	16	9	0	31	37	195	10	1	243	656	29
16:15	84	14	23	27	148	16	187	44	0	247	8	6	4	0	18	23	167	6	5	201	614	32
16:30	83	12	19	29	143	21	194	40	0	255	6	11	8	0	25	29	213	7	5	254	677	34
16:45	96	12	29	25	162	8	177	58	0	243	6	13	3	1	23	39	206	3	0	248	676	26
Total	344	46	96	109	595	57	736	192	0	985	26	46	24	1	97	128	781	26	11	946	2623	121
17:00	80	21	21	20	142	14	189	46	1	250	6	10	8	0	24	32	190	9	4	235	651	25
17:15	83	18	40	33	174	22	223	77	1	323	7	10	10	0	27	31	179	8	5	223	747	39
17:30	99	25	26	29	179	15	230	57	0	302	4	13	1	0	18	36	199	10	3	248	747	32
17:45	74	18	50	24	166	19	226	43	1	289	10	15	5	0	30	38	180	7	5	230	715	30
Total	336	82	137	106	661	70	868	223	3	1164	27	48	24	0	99	137	748	34	17	936	2860	126
Grand Total	1206	244	643	319	2412	178	2965	680	4	3827	109	180	90	1	380	559	2402	83	49	3093	9712	373
Apprch %	50.0%	10.1%	26.7%	13.2%		4.7%	77.5%	17.8%	0.1%		28.7%	47.4%	23.7%	0.3%		18.1%	77.7%	2.7%	1.6%			
Total %	12.4%	2.5%	6.6%	3.3%	24.8%	1.8%	30.5%	7.0%	0.0%	39.4%	1.1%	1.9%	0.9%	0.0%	3.9%	5.8%	24.7%	0.9%	0.5%	31.8%	100.0%	

AM PEAK HOUR	Hillcrest Ave Southbound					Lone Tree Way Westbound					Hillcrest Ave Northbound					Lone Tree Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	81	17	57	16	171	2	193	34	1	230	11	12	5	0	28	77	155	1	4	237	666
8:00	80	12	36	12	140	6	186	35	0	227	11	6	5	0	22	45	129	7	2	183	572
8:15	69	20	54	21	164	6	213	43	0	262	4	14	7	0	25	30	74	3	3	110	561
8:30	63	12	70	13	158	11	216	35	0	262	7	8	5	0	20	33	103	6	2	144	584
Total Volume	293	61	217	62	633	25	808	147	1	981	33	40	22	0	95	185	461	17	11	674	2383
% App Total	46.3%	9.6%	34.3%	9.8%		2.5%	82.4%	15.0%	0.1%		34.7%	42.1%	23.2%	0.0%		27.4%	68.4%	2.5%	1.6%		
PHF	.904	.763	.775	.738	.925	.568	.935	.855	.250	.936	.750	.714	.786	.000	.848	.601	.744	.607	.688	.711	.895

PM PEAK HOUR	Hillcrest Ave Southbound					Lone Tree Way Westbound					Hillcrest Ave Northbound					Lone Tree Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	80	21	21	20	142	14	189	46	1	250	6	10	8	0	24	32	190	9	4	235	651
17:15	83	18	40	33	174	22	223	77	1	323	7	10	10	0	27	31	179	8	5	223	747
17:30	99	25	26	29	179	15	230	57	0	302	4	13	1	0	18	36	199	10	3	248	747
17:45	74	18	50	24	166	19	226	43	1	289	10	15	5	0	30	38	180	7	5	230	715
Total Volume	336	82	137	106	661	70	868	223	3	1164	27	48	24	0	99	137	748	34	17	936	2860
% App Total	50.8%	12.4%	20.7%	16.0%		6.0%	74.6%	19.2%	0.3%		27.3%	48.5%	24.2%	0.0%		14.6%	79.9%	3.6%	1.8%		
PHF	.848	.820	.685	.803	.923	.795	.943	.724	.750	.901	.675	.800	.600	.000	.825	.901	.940	.850	.850	.944	.957

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-011
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	SR 4 EB Ramps Southbound					Lone Tree Way Westbound					SR 4 EB Ramps Northbound					Lone Tree Way Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	47	1	68	0	116	21	109	0	0	130	0	0	0	0	0	0	125	80	0	205	451	0
7:15	52	0	86	0	138	14	160	0	0	174	0	0	0	0	0	0	199	111	0	310	622	0
7:30	74	0	87	0	161	23	192	0	0	215	0	0	0	0	0	0	261	128	0	389	765	0
7:45	118	0	138	0	256	21	211	0	0	232	0	0	0	0	0	0	304	131	0	435	923	0
Total	291	1	379	0	671	79	672	0	0	751	0	0	0	0	0	0	889	450	0	1339	2761	0
8:00	97	1	129	0	227	16	328	0	0	344	0	0	0	0	0	0	218	105	0	323	894	0
8:15	83	0	117	0	200	16	319	0	0	335	0	0	0	0	0	0	166	98	0	264	799	0
8:30	81	0	136	0	217	20	220	0	0	240	0	0	0	0	0	0	228	83	0	311	768	0
8:45	86	0	121	0	207	27	203	0	0	230	0	0	0	0	0	0	237	96	0	333	770	0
Total	347	1	503	0	851	79	1070	0	0	1149	0	0	0	0	0	0	849	382	0	1231	3231	0
16:00	141	2	147	0	290	22	344	0	0	366	0	0	0	0	0	0	331	110	0	441	1097	0
16:15	148	3	121	0	272	28	335	0	0	363	0	0	0	0	0	0	354	118	0	472	1107	0
16:30	156	0	161	0	317	29	323	0	1	353	0	0	0	0	0	0	413	130	0	543	1213	1
16:45	162	0	157	0	319	34	314	0	0	348	0	0	0	0	0	0	333	134	0	467	1134	0
Total	607	5	586	0	1198	113	1316	0	1	1430	0	0	0	0	0	0	1431	492	0	1923	4551	1
17:00	169	1	174	0	344	37	336	0	0	373	0	0	0	0	0	0	385	112	0	497	1214	0
17:15	167	5	171	0	343	59	356	0	0	415	0	0	0	0	0	0	351	130	0	481	1239	0
17:30	141	1	166	0	308	20	365	0	1	386	0	0	0	0	0	0	345	100	0	445	1139	1
17:45	153	0	205	0	358	34	403	0	0	437	0	0	0	0	0	0	367	121	0	488	1283	0
Total	630	7	716	0	1353	150	1460	0	1	1611	0	0	0	0	0	0	1448	463	0	1911	4875	1
Grand Total	1875	14	2184	0	4073	421	4518	0	2	4941	0	0	0	0	0	0	4617	1787	0	6404	15418	2
Apprch %	46.0%	0.3%	53.6%	0.0%		8.5%	91.4%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	72.1%	27.9%	0.0%			
Total %	12.2%	0.1%	14.2%	0.0%	26.4%	2.7%	29.3%	0.0%	0.0%	32.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29.9%	11.6%	0.0%	41.5%	100.0%	

AM PEAK HOUR	SR 4 EB Ramps Southbound					Lone Tree Way Westbound					SR 4 EB Ramps Northbound					Lone Tree Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	118	0	138	0	256	21	211	0	0	232	0	0	0	0	0	0	304	131	0	435	923
8:00	97	1	129	0	227	16	328	0	0	344	0	0	0	0	0	0	218	105	0	323	894
8:15	83	0	117	0	200	16	319	0	0	335	0	0	0	0	0	0	166	98	0	264	799
8:30	81	0	136	0	217	20	220	0	0	240	0	0	0	0	0	0	228	83	0	311	768
Total Volume	379	1	520	0	900	73	1078	0	0	1151	0	0	0	0	0	0	916	417	0	1333	3384
% App Total	42.1%	0.1%	57.8%	0.0%		6.3%	93.7%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	68.7%	31.3%	0.0%		
PHF	.803	.250	.942	.000	.879	.869	.822	.000	.000	.836	.000	.000	.000	.000	.000	.000	.753	.796	.000	.766	.917

PM PEAK HOUR	SR 4 EB Ramps Southbound					Lone Tree Way Westbound					SR 4 EB Ramps Northbound					Lone Tree Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	169	1	174	0	344	37	336	0	0	373	0	0	0	0	0	0	385	112	0	497	1214
17:15	167	5	171	0	343	59	356	0	0	415	0	0	0	0	0	0	351	130	0	481	1239
17:30	141	1	166	0	308	20	365	0	1	386	0	0	0	0	0	0	345	100	0	445	1139
17:45	153	0	205	0	358	34	403	0	0	437	0	0	0	0	0	0	367	121	0	488	1283
Total Volume	630	7	716	0	1353	150	1460	0	1	1611	0	0	0	0	0	0	1448	463	0	1911	4875
% App Total	46.6%	0.5%	52.9%	0.0%		9.3%	90.6%	0.0%	0.1%		0.0%	0.0%	0.0%	0.0%		0.0%	75.8%	24.2%	0.0%		
PHF	.932	.350	.873	.000	.945	.636	.906	.000	.250	.922	.000	.000	.000	.000	.000	.000	.940	.890	.000	.961	.950

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-012
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	SR 4 WB Ramps Southbound					Lone Tree Way Westbound					SR 4 WB Ramps Northbound					Lone Tree Way Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	0	0	0	0	0	4	75	102	1	182	55	9	12	0	76	0	101	75	0	176	434	1
7:15	0	0	0	0	0	3	81	131	0	215	83	7	25	0	115	0	136	88	0	224	554	0
7:30	0	0	0	0	0	1	136	122	0	259	91	5	26	0	122	0	237	107	0	344	725	0
7:45	0	0	0	0	0	5	155	130	0	290	92	4	43	0	139	0	293	100	0	393	822	0
Total	0	0	0	0	0	13	447	485	1	946	321	25	106	0	452	0	767	370	0	1137	2535	1
8:00	0	0	0	0	0	6	233	149	3	391	96	3	49	0	148	0	253	78	0	331	870	3
8:15	0	0	0	0	0	4	207	123	0	334	110	4	60	0	174	0	187	68	0	255	763	0
8:30	0	0	0	0	0	5	177	138	2	322	89	6	32	0	127	0	225	82	0	307	756	2
8:45	0	0	0	0	0	6	156	112	5	279	89	3	36	0	128	0	257	68	0	325	732	5
Total	0	0	0	0	0	21	773	522	10	1326	384	16	177	0	577	0	922	296	0	1218	3121	10
16:00	0	0	0	0	0	5	239	118	10	372	141	9	61	0	211	0	393	95	0	488	1071	10
16:15	0	0	0	0	0	3	239	109	9	360	111	9	62	0	182	0	420	92	0	512	1054	9
16:30	0	0	0	0	0	1	230	111	8	350	130	7	47	0	184	0	421	123	0	544	1078	8
16:45	0	0	0	0	0	2	216	119	7	344	124	10	75	0	209	0	418	70	0	488	1041	7
Total	0	0	0	0	0	11	924	457	34	1426	506	35	245	0	786	0	1652	380	0	2032	4244	34
17:00	0	0	0	0	0	2	254	139	16	411	127	8	75	0	210	0	432	97	0	529	1150	16
17:15	0	0	0	0	0	3	284	140	12	439	148	10	68	2	228	0	441	99	0	540	1207	14
17:30	0	0	0	0	0	2	267	133	10	412	143	9	54	0	206	0	411	93	0	504	1122	10
17:45	0	0	0	0	0	1	276	114	9	400	135	5	55	0	195	0	427	93	0	520	1115	9
Total	0	0	0	0	0	8	1081	526	47	1662	553	32	252	2	839	0	1711	382	0	2093	4594	49
Grand Total	0	0	0	0	0	53	3225	1990	92	5360	1764	108	780	2	2654	0	5052	1428	0	6480	14494	94
Apprch %	0.0%	0.0%	0.0%	0.0%		1.0%	60.2%	37.1%	1.7%		66.5%	4.1%	29.4%	0.1%		0.0%	78.0%	22.0%	0.0%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	22.3%	13.7%	0.6%	37.0%	12.2%	0.7%	5.4%	0.0%	18.3%	0.0%	34.9%	9.9%	0.0%	44.7%	100.0%	

AM PEAK HOUR	SR 4 WB Ramps Southbound					Lone Tree Way Westbound					SR 4 WB Ramps Northbound					Lone Tree Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	0	0	0	0	5	155	130	0	290	92	4	43	0	139	0	293	100	0	393	822
8:00	0	0	0	0	0	6	233	149	3	391	96	3	49	0	148	0	253	78	0	331	870
8:15	0	0	0	0	0	4	207	123	0	334	110	4	60	0	174	0	187	68	0	255	763
8:30	0	0	0	0	0	5	177	138	2	322	89	6	32	0	127	0	225	82	0	307	756
Total Volume	0	0	0	0	0	20	772	540	5	1337	387	17	184	0	588	0	958	328	0	1286	3211
% App Total	0.0%	0.0%	0.0%	0.0%		1.5%	57.7%	40.4%	0.4%		65.8%	2.9%	31.3%	0.0%		0.0%	74.5%	25.5%	0.0%		
PHF	.000	.000	.000	.000	.000	.833	.828	.906	.417	.855	.880	.708	.767	.000	.845	.000	.817	.820	.000	.818	.923

PM PEAK HOUR	SR 4 WB Ramps Southbound					Lone Tree Way Westbound					SR 4 WB Ramps Northbound					Lone Tree Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	0	0	2	254	139	16	411	127	8	75	0	210	0	432	97	0	529	1150
17:15	0	0	0	0	0	3	284	140	12	439	148	10	68	2	228	0	441	99	0	540	1207
17:30	0	0	0	0	0	2	267	133	10	412	143	9	54	0	206	0	411	93	0	504	1122
17:45	0	0	0	0	0	1	276	114	9	400	135	5	55	0	195	0	427	93	0	520	1115
Total Volume	0	0	0	0	0	8	1081	526	47	1662	553	32	252	2	839	0	1711	382	0	2093	4594
% App Total	0.0%	0.0%	0.0%	0.0%		0.5%	65.0%	31.6%	2.8%		65.9%	3.8%	30.0%	0.2%		0.0%	81.7%	18.3%	0.0%		
PHF	.000	.000	.000	.000	.000	.667	.952	.939	.734	.946	.934	.800	.840	.250	.920	.000	.970	.965	.000	.969	.952

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-013
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Dallas Ranch Rd Southbound					Prewett Ranch Dr Westbound					Dallas Ranch Rd Northbound					Prewett Ranch Dr Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	22	7	1	0	30	0	3	36	0	39	0	21	2	0	23	2	5	0	0	7	99	0
7:15	31	16	2	0	49	0	4	53	0	57	0	18	2	0	20	6	9	0	0	15	141	0
7:30	51	23	0	0	74	2	6	72	0	80	1	31	4	0	36	9	23	4	0	36	226	0
7:45	68	27	7	0	102	0	21	85	1	107	2	32	4	0	38	10	40	1	0	51	298	1
Total	172	73	10	0	255	2	34	246	1	283	3	102	12	0	117	27	77	5	0	109	764	1
8:00	73	21	10	0	104	5	17	115	0	137	1	38	1	0	40	11	9	0	0	20	301	0
8:15	44	23	5	0	72	0	13	49	0	62	1	27	2	0	30	8	12	0	0	20	184	0
8:30	43	12	4	0	59	1	10	37	0	48	0	18	2	2	22	9	16	2	0	27	156	2
8:45	34	15	6	0	55	3	8	48	0	59	2	19	1	0	22	5	8	1	0	14	150	0
Total	194	71	25	0	290	9	48	249	0	306	4	102	6	2	114	33	45	3	0	81	791	2
16:00	46	18	12	0	76	2	20	28	0	50	0	21	1	0	22	12	6	2	0	20	168	0
16:15	36	20	11	0	67	5	11	31	0	47	2	16	1	0	19	5	12	1	0	18	151	0
16:30	37	25	4	0	66	1	10	31	0	42	0	9	7	0	16	2	11	1	0	14	138	0
16:45	42	28	6	0	76	1	8	40	0	49	1	7	0	1	9	4	8	0	0	12	146	1
Total	161	91	33	0	285	9	49	130	0	188	3	53	9	1	66	23	37	4	0	64	603	1
17:00	45	23	4	0	72	3	7	32	0	42	2	7	3	0	12	6	10	0	0	16	142	0
17:15	48	28	14	0	90	3	14	35	0	52	0	12	1	1	14	4	13	0	0	17	173	1
17:30	43	23	10	0	76	2	13	41	0	56	0	18	2	0	20	13	14	0	0	27	179	0
17:45	46	21	9	0	76	1	12	39	0	52	2	15	3	0	20	10	13	0	0	23	171	0
Total	182	95	37	0	314	9	46	147	0	202	4	52	9	1	66	33	50	0	0	83	665	1
Grand Total	709	330	105	0	1144	29	177	772	1	979	14	309	36	4	363	116	209	12	0	337	2823	5
Apprch %	62.0%	28.8%	9.2%	0.0%		3.0%	18.1%	78.9%	0.1%		3.9%	85.1%	9.9%	1.1%		34.4%	62.0%	3.6%	0.0%			
Total %	25.1%	11.7%	3.7%	0.0%	40.5%	1.0%	6.3%	27.3%	0.0%	34.7%	0.5%	10.9%	1.3%	0.1%	12.9%	4.1%	7.4%	0.4%	0.0%	11.9%	100.0%	

AM PEAK HOUR	Dallas Ranch Rd Southbound					Prewett Ranch Dr Westbound					Dallas Ranch Rd Northbound					Prewett Ranch Dr Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	51	23	0	0	74	2	6	72	0	80	1	31	4	0	36	9	23	4	0	36	226
7:45	68	27	7	0	102	0	21	85	1	107	2	32	4	0	38	10	40	1	0	51	298
8:00	73	21	10	0	104	5	17	115	0	137	1	38	1	0	40	11	9	0	0	20	301
8:15	44	23	5	0	72	0	13	49	0	62	1	27	2	0	30	8	12	0	0	20	184
Total Volume	236	94	22	0	352	7	57	321	1	386	5	128	11	0	144	38	84	5	0	127	1009
% App Total	67.0%	26.7%	6.3%	0.0%		1.8%	14.8%	83.2%	0.3%		3.5%	88.9%	7.6%	0.0%		29.9%	66.1%	3.9%	0.0%		
PHF	.808	.870	.550	.000	.846	.350	.679	.698	.250	.704	.625	.842	.688	.000	.900	.864	.525	.313	.000	.623	.838

PM PEAK HOUR	Dallas Ranch Rd Southbound					Prewett Ranch Dr Westbound					Dallas Ranch Rd Northbound					Prewett Ranch Dr Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	45	23	4	0	72	3	7	32	0	42	2	7	3	0	12	6	10	0	0	16	142
17:15	48	28	14	0	90	3	14	35	0	52	0	12	1	1	14	4	13	0	0	17	173
17:30	43	23	10	0	76	2	13	41	0	56	0	18	2	0	20	13	14	0	0	27	179
17:45	46	21	9	0	76	1	12	39	0	52	2	15	3	0	20	10	13	0	0	23	171
Total Volume	182	95	37	0	314	9	46	147	0	202	4	52	9	1	66	33	50	0	0	83	665
% App Total	58.0%	30.3%	11.8%	0.0%		4.5%	22.8%	72.8%	0.0%		6.1%	78.8%	13.6%	1.5%		39.8%	60.2%	0.0%	0.0%		
PHF	.948	.848	.661	.000	.872	.750	.821	.896	.000	.902	.500	.722	.750	.250	.825	.635	.893	.000	.000	.769	.929

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-014
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Deer Valley Rd Southbound					Prewett Ranch Dr Westbound					Deer Valley Rd Northbound					Prewett Ranch Dr Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	4	120	6	1	131	17	12	23	0	52	11	35	3	0	49	12	9	18	0	39	271	1
7:15	13	154	14	1	182	46	12	18	0	76	21	64	14	0	99	13	14	30	0	57	414	1
7:30	9	197	8	8	222	60	26	33	0	119	21	102	36	1	160	45	56	61	0	162	663	9
7:45	18	213	22	5	258	64	58	33	0	155	17	131	37	0	185	29	30	43	0	102	700	5
Total	44	684	50	15	793	187	108	107	0	402	70	332	90	1	493	99	109	152	0	360	2048	16
8:00	23	193	12	4	232	40	60	34	0	134	30	136	31	0	197	27	45	26	0	98	661	4
8:15	13	195	16	2	226	50	15	23	0	88	21	90	12	0	123	15	39	39	0	93	530	2
8:30	19	165	15	5	204	33	14	25	0	72	16	76	21	0	113	36	16	32	0	84	473	5
8:45	8	141	22	15	186	20	19	19	0	58	12	90	24	0	126	54	33	21	0	108	478	15
Total	63	694	65	26	848	143	108	101	0	352	79	392	88	0	559	132	133	118	0	383	2142	26
16:00	10	95	16	2	123	13	15	11	0	39	8	108	16	0	132	6	23	13	0	42	336	2
16:15	18	102	20	2	142	17	20	16	0	53	18	119	33	0	170	14	23	22	0	59	424	2
16:30	16	67	14	0	97	19	26	16	0	61	22	140	28	0	190	7	29	12	0	48	396	0
16:45	23	77	14	3	117	9	19	17	0	45	28	114	28	0	170	15	16	12	0	43	375	3
Total	67	341	64	7	479	58	80	60	0	198	76	481	105	0	662	42	91	59	0	192	1531	7
17:00	24	105	16	1	146	12	22	19	0	53	28	135	43	0	206	13	21	12	0	46	451	1
17:15	15	68	17	1	101	11	27	14	0	52	36	115	47	0	198	18	22	20	0	60	411	1
17:30	35	92	30	0	157	9	16	23	0	48	36	97	28	1	162	15	30	7	0	52	419	1
17:45	27	111	23	2	163	11	23	15	0	49	20	92	17	0	129	18	30	16	0	64	405	2
Total	101	376	86	4	567	43	88	71	0	202	120	439	135	1	695	64	103	55	0	222	1686	5
Grand Total	275	2095	265	52	2687	431	384	339	0	1154	345	1644	418	2	2409	337	436	384	0	1157	7407	54
Apprch %	10.2%	78.0%	9.9%	1.9%		37.3%	33.3%	29.4%	0.0%		14.3%	68.2%	17.4%	0.1%		29.1%	37.7%	33.2%	0.0%			
Total %	3.7%	28.3%	3.6%	0.7%	36.3%	5.8%	5.2%	4.6%	0.0%	15.6%	4.7%	22.2%	5.6%	0.0%	32.5%	4.5%	5.9%	5.2%	0.0%	15.6%	100.0%	

AM PEAK HOUR	Deer Valley Rd Southbound					Prewett Ranch Dr Westbound					Deer Valley Rd Northbound					Prewett Ranch Dr Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	9	197	8	8	222	60	26	33	0	119	21	102	36	1	160	45	56	61	0	162	663
7:45	18	213	22	5	258	64	58	33	0	155	17	131	37	0	185	29	30	43	0	102	700
8:00	23	193	12	4	232	40	60	34	0	134	30	136	31	0	197	27	45	26	0	98	661
8:15	13	195	16	2	226	50	15	23	0	88	21	90	12	0	123	15	39	39	0	93	530
Total Volume	63	798	58	19	938	214	159	123	0	496	89	459	116	1	665	116	170	169	0	455	2554
% App Total	6.7%	85.1%	6.2%	2.0%		43.1%	32.1%	24.8%	0.0%		13.4%	69.0%	17.4%	0.2%		25.5%	37.4%	37.1%	0.0%		
PHF	.685	.937	.659	.594	.909	.836	.663	.904	.000	.800	.742	.844	.784	.250	.844	.644	.759	.693	.000	.702	.912

PM PEAK HOUR	Deer Valley Rd Southbound					Prewett Ranch Dr Westbound					Deer Valley Rd Northbound					Prewett Ranch Dr Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	24	105	16	1	146	12	22	19	0	53	28	135	43	0	206	13	21	12	0	46	451
17:15	15	68	17	1	101	11	27	14	0	52	36	115	47	0	198	18	22	20	0	60	411
17:30	35	92	30	0	157	9	16	23	0	48	36	97	28	1	162	15	30	7	0	52	419
17:45	27	111	23	2	163	11	23	15	0	49	20	92	17	0	129	18	30	16	0	64	405
Total Volume	101	376	86	4	567	43	88	71	0	202	120	439	135	1	695	64	103	55	0	222	1686
% App Total	17.8%	66.3%	15.2%	0.7%		21.3%	43.6%	35.1%	0.0%		17.3%	63.2%	19.4%	0.1%		28.8%	46.4%	24.8%	0.0%		
PHF	.721	.847	.717	.500	.870	.896	.815	.772	.000	.953	.833	.813	.718	.250	.843	.889	.858	.688	.000	.867	.935

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-015
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Deer Valley Rd Southbound					Wellness Way Westbound					Deer Valley Rd Northbound					Wellness Way Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	35	110	0	0	145	0	0	4	0	4	0	40	4	0	44	0	0	0	0	0	193	0
7:15	31	216	0	0	247	0	0	10	0	10	0	77	3	0	80	0	0	0	0	0	337	0
7:30	33	335	0	0	368	0	0	21	0	21	0	170	4	0	174	0	0	0	0	0	563	0
7:45	73	259	0	0	332	1	0	8	0	9	0	196	9	1	206	0	0	0	0	0	547	1
Total	172	920	0	0	1092	1	0	43	0	44	0	483	20	1	504	0	0	0	0	0	1640	1
8:00	89	146	0	1	236	0	0	10	0	10	0	165	6	0	171	0	0	0	0	0	417	1
8:15	98	170	0	0	268	4	0	17	0	21	0	117	19	0	136	0	0	0	0	0	425	0
8:30	89	191	0	0	280	2	0	25	0	27	0	114	11	0	125	0	0	0	0	0	432	0
8:45	77	124	0	0	201	4	0	27	0	31	0	87	4	0	91	0	0	0	0	0	323	0
Total	353	631	0	1	985	10	0	79	0	89	0	483	40	0	523	0	0	0	0	0	1597	1
16:00	29	99	0	0	128	8	0	53	0	61	0	122	1	0	123	0	0	0	0	0	312	0
16:15	30	88	0	0	118	5	0	42	0	47	0	109	5	0	114	0	0	0	0	0	279	0
16:30	11	82	0	0	93	9	0	54	0	63	0	123	1	0	124	0	0	0	0	0	280	0
16:45	17	94	0	0	111	3	0	58	0	61	0	136	1	0	137	0	0	0	0	0	309	0
Total	87	363	0	0	450	25	0	207	0	232	0	490	8	0	498	0	0	0	0	0	1180	0
17:00	11	107	0	0	118	13	0	75	0	88	0	159	1	0	160	0	0	0	0	0	366	0
17:15	12	106	0	0	118	4	0	64	0	68	0	110	1	0	111	0	0	0	0	0	297	0
17:30	12	109	0	0	121	8	0	47	0	55	0	116	1	1	118	0	0	0	0	0	294	1
17:45	12	114	0	0	126	3	0	31	0	34	0	93	1	0	94	0	0	0	0	0	254	0
Total	47	436	0	0	483	28	0	217	0	245	0	478	4	1	483	0	0	0	0	0	1211	1
Grand Total	659	2350	0	1	3010	64	0	546	0	610	0	1934	72	2	2008	0	0	0	0	0	5628	3
Apprch %	21.9%	78.1%	0.0%	0.0%		10.5%	0.0%	89.5%	0.0%		0.0%	96.3%	3.6%	0.1%		0.0%	0.0%	0.0%	0.0%			
Total %	11.7%	41.8%	0.0%	0.0%	53.5%	1.1%	0.0%	9.7%	0.0%	10.8%	0.0%	34.4%	1.3%	0.0%	35.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	

AM PEAK HOUR	Deer Valley Rd Southbound					Wellness Way Westbound					Deer Valley Rd Northbound					Wellness Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	33	335	0	0	368	0	0	21	0	21	0	170	4	0	174	0	0	0	0	0	563
7:45	73	259	0	0	332	1	0	8	0	9	0	196	9	1	206	0	0	0	0	0	547
8:00	89	146	0	1	236	0	0	10	0	10	0	165	6	0	171	0	0	0	0	0	417
8:15	98	170	0	0	268	4	0	17	0	21	0	117	19	0	136	0	0	0	0	0	425
Total Volume	293	910	0	1	1204	5	0	56	0	61	0	648	38	1	687	0	0	0	0	0	1952
% App Total	24.3%	75.6%	0.0%	0.1%		8.2%	0.0%	91.8%	0.0%		0.0%	94.3%	5.5%	0.1%		0.0%	0.0%	0.0%	0.0%		
PHF	.747	.679	.000	.250	.818	.313	.000	.667	.000	.726	.000	.827	.500	.250	.834	.000	.000	.000	.000	.000	.867

PM PEAK HOUR	Deer Valley Rd Southbound					Wellness Way Westbound					Deer Valley Rd Northbound					Wellness Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	17	94	0	0	111	3	0	58	0	61	0	136	1	0	137	0	0	0	0	0	309
17:00	11	107	0	0	118	13	0	75	0	88	0	159	1	0	160	0	0	0	0	0	366
17:15	12	106	0	0	118	4	0	64	0	68	0	110	1	0	111	0	0	0	0	0	297
17:30	12	109	0	0	121	8	0	47	0	55	0	116	1	1	118	0	0	0	0	0	294
Total Volume	52	416	0	0	468	28	0	244	0	272	0	521	4	1	526	0	0	0	0	0	1266
% App Total	11.1%	88.9%	0.0%	0.0%		10.3%	0.0%	89.7%	0.0%		0.0%	99.0%	0.8%	0.2%		0.0%	0.0%	0.0%	0.0%		
PHF	.765	.954	.000	.000	.967	.538	.000	.813	.000	.773	.000	.819	1.000	.250	.822	.000	.000	.000	.000	.000	.865

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-016
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Deer Valley Rd Southbound					Sand Creek Rd Westbound					Deer Valley Rd Northbound					Sand Creek Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	16	80	0	0	96	4	0	5	0	9	0	37	3	0	40	1	0	0	0	1	146	0
7:15	71	126	0	0	197	11	0	41	0	52	0	53	8	0	61	0	0	0	0	0	310	0
7:30	145	132	1	0	278	9	0	90	0	99	0	79	10	0	89	1	0	0	0	1	467	0
7:45	115	121	0	0	236	7	0	112	0	119	0	108	6	0	114	0	0	0	0	0	469	0
Total	347	459	1	0	807	31	0	248	0	279	0	277	27	0	304	2	0	0	0	2	1392	0
8:00	32	67	0	0	99	4	0	60	0	64	0	93	12	0	105	0	0	0	0	0	268	0
8:15	56	56	1	1	114	8	0	37	0	45	0	110	14	0	124	0	0	0	0	0	283	1
8:30	94	43	0	1	138	5	0	65	0	70	0	76	8	0	84	0	0	0	0	0	292	1
8:45	23	43	0	0	66	5	0	29	0	34	0	55	13	0	68	0	0	0	0	0	168	0
Total	205	209	1	2	417	22	0	191	0	213	0	334	47	0	381	0	0	0	0	0	1011	2
16:00	9	80	0	1	90	23	0	14	0	37	0	79	5	0	84	0	0	0	0	0	211	1
16:15	7	70	0	1	78	10	0	8	0	18	1	67	5	0	73	0	0	0	0	0	169	1
16:30	17	69	0	1	87	22	0	9	0	31	0	66	3	0	69	1	0	0	0	1	188	1
16:45	20	76	0	0	96	15	0	16	0	31	0	66	9	0	75	0	0	0	0	0	202	0
Total	53	295	0	3	351	70	0	47	0	117	1	278	22	0	301	1	0	0	0	1	770	3
17:00	26	103	0	1	130	13	0	23	0	36	1	68	7	0	76	0	0	0	0	0	242	1
17:15	26	81	0	0	107	9	0	11	0	20	0	60	8	0	68	1	0	0	0	1	196	0
17:30	47	68	0	0	115	9	0	12	1	22	0	69	2	0	71	0	0	0	0	0	208	1
17:45	60	41	0	0	101	6	0	9	0	15	0	61	7	0	68	0	0	0	0	0	184	0
Total	159	293	0	1	453	37	0	55	1	93	1	258	24	0	283	1	0	0	0	1	830	2
Grand Total	764	1256	2	6	2028	160	0	541	1	702	2	1147	120	0	1269	4	0	0	0	4	4003	7
Apprch %	37.7%	61.9%	0.1%	0.3%		22.8%	0.0%	77.1%	0.1%		0.2%	90.4%	9.5%	0.0%		100.0%	0.0%	0.0%	0.0%			
Total %	19.1%	31.4%	0.0%	0.1%	50.7%	4.0%	0.0%	13.5%	0.0%	17.5%	0.0%	28.7%	3.0%	0.0%	31.7%	0.1%	0.0%	0.0%	0.0%	0.1%	100.0%	

AM PEAK HOUR	Deer Valley Rd Southbound					Sand Creek Rd Westbound					Deer Valley Rd Northbound					Sand Creek Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:15 to 08:15																					
Peak Hour For Entire Intersection Begins at 07:15																					
7:15	71	126	0	0	197	11	0	41	0	52	0	53	8	0	61	0	0	0	0	0	310
7:30	145	132	1	0	278	9	0	90	0	99	0	79	10	0	89	1	0	0	0	1	467
7:45	115	121	0	0	236	7	0	112	0	119	0	108	6	0	114	0	0	0	0	0	469
8:00	32	67	0	0	99	4	0	60	0	64	0	93	12	0	105	0	0	0	0	0	268
Total Volume	363	446	1	0	810	31	0	303	0	334	0	333	36	0	369	1	0	0	0	1	1514
% App Total	44.8%	55.1%	0.1%	0.0%		9.3%	0.0%	90.7%	0.0%		0.0%	90.2%	9.8%	0.0%		100.0%	0.0%	0.0%	0.0%		
PHF	.626	.845	.250	.000	.728	.705	.000	.676	.000	.702	.000	.771	.750	.000	.809	.250	.000	.000	.000	.250	.807

PM PEAK HOUR	Deer Valley Rd Southbound					Sand Creek Rd Westbound					Deer Valley Rd Northbound					Sand Creek Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	20	76	0	0	96	15	0	16	0	31	0	66	9	0	75	0	0	0	0	0	202
17:00	26	103	0	1	130	13	0	23	0	36	1	68	7	0	76	0	0	0	0	0	242
17:15	26	81	0	0	107	9	0	11	0	20	0	60	8	0	68	1	0	0	0	1	196
17:30	47	68	0	0	115	9	0	12	1	22	0	69	2	0	71	0	0	0	0	0	208
Total Volume	119	328	0	1	448	46	0	62	1	109	1	263	26	0	290	1	0	0	0	1	848
% App Total	26.6%	73.2%	0.0%	0.2%		42.2%	0.0%	56.9%	0.9%		0.3%	90.7%	9.0%	0.0%		100.0%	0.0%	0.0%	0.0%		
PHF	.633	.796	.000	.250	.862	.767	.000	.674	.250	.757	.250	.953	.722	.000	.954	.250	.000	.000	.000	.250	.876

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-019
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	SR 4 EB Ramps Southbound					Sand Creek Rd Westbound					SR 4 EB Ramps Northbound					Sand Creek Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	100	0	0	0	100	0	0	32	0	32	0	0	0	0	0	0	0	0	0	0	132	0
7:15	148	0	0	0	148	0	0	37	0	37	0	0	0	0	0	0	0	0	0	0	185	0
7:30	223	0	0	0	223	0	0	22	0	22	0	0	0	0	0	0	0	0	0	0	245	0
7:45	269	0	0	0	269	0	0	19	0	19	0	0	0	0	0	0	0	0	0	0	288	0
Total	740	0	0	0	740	0	0	110	0	110	0	0	0	0	0	0	0	0	0	0	850	0
8:00	220	0	0	0	220	0	0	20	0	20	0	0	0	0	0	0	0	0	0	0	240	0
8:15	183	0	0	0	183	0	0	25	0	25	0	0	0	0	0	0	0	0	0	0	208	0
8:30	157	0	0	0	157	0	0	19	0	19	0	0	0	0	0	0	0	0	0	0	176	0
8:45	147	0	0	0	147	0	0	13	0	13	0	0	0	0	0	0	0	0	0	0	160	0
Total	707	0	0	0	707	0	0	77	0	77	0	0	0	0	0	0	0	0	0	0	784	0
16:00	329	0	0	0	329	0	0	18	0	18	0	0	0	0	0	0	0	0	0	0	347	0
16:15	342	0	0	1	343	0	0	18	0	18	0	0	0	0	0	0	0	0	0	0	361	1
16:30	334	0	0	0	334	0	0	23	2	25	0	0	0	0	0	0	0	0	0	0	359	2
16:45	362	0	0	0	362	0	0	13	0	13	0	0	0	0	0	0	0	0	0	0	375	0
Total	1367	0	0	1	1368	0	0	72	2	74	0	0	0	0	0	0	0	0	0	0	1442	3
17:00	343	0	0	1	344	0	0	16	1	17	0	0	0	0	0	0	0	0	0	0	361	2
17:15	394	0	0	0	394	0	0	14	1	15	0	0	0	0	0	0	0	0	0	0	409	1
17:30	342	0	0	0	342	0	0	10	0	10	0	0	0	0	0	0	0	0	0	0	352	0
17:45	329	0	0	0	329	0	0	20	0	20	0	0	0	0	0	0	0	0	0	0	349	0
Total	1408	0	0	1	1409	0	0	60	2	62	0	0	0	0	0	0	0	0	0	0	1471	3
Grand Total	4222	0	0	2	4224	0	0	319	4	323	0	0	0	0	0	0	0	0	0	0	4547	6
Apprch %	100.0%	0.0%	0.0%	0.0%		0.0%	0.0%	98.8%	1.2%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%			
Total %	92.9%	0.0%	0.0%	0.0%	92.9%	0.0%	0.0%	7.0%	0.1%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	

AM PEAK HOUR	SR 4 EB Ramps Southbound					Sand Creek Rd Westbound					SR 4 EB Ramps Northbound					Sand Creek Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	223	0	0	0	223	0	0	22	0	22	0	0	0	0	0	0	0	0	0	0	245
7:45	269	0	0	0	269	0	0	19	0	19	0	0	0	0	0	0	0	0	0	0	288
8:00	220	0	0	0	220	0	0	20	0	20	0	0	0	0	0	0	0	0	0	0	240
8:15	183	0	0	0	183	0	0	25	0	25	0	0	0	0	0	0	0	0	0	0	208
Total Volume	895	0	0	0	895	0	0	86	0	86	0	0	0	0	0	0	0	0	0	0	981
% App Total	100.0%	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.832	.000	.000	.000	.832	.000	.000	.860	.000	.860	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.852

PM PEAK HOUR	SR 4 EB Ramps Southbound					Sand Creek Rd Westbound					SR 4 EB Ramps Northbound					Sand Creek Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	334	0	0	0	334	0	0	23	2	25	0	0	0	0	0	0	0	0	0	0	359
16:45	362	0	0	0	362	0	0	13	0	13	0	0	0	0	0	0	0	0	0	0	375
17:00	343	0	0	1	344	0	0	16	1	17	0	0	0	0	0	0	0	0	0	0	361
17:15	394	0	0	0	394	0	0	14	1	15	0	0	0	0	0	0	0	0	0	0	409
Total Volume	1433	0	0	1	1434	0	0	66	4	70	0	0	0	0	0	0	0	0	0	0	1504
% App Total	99.9%	0.0%	0.0%	0.1%		0.0%	0.0%	94.3%	5.7%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.909	.000	.000	.250	.910	.000	.000	.717	.500	.700	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.919

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-020
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	SR 4 WB Ramps Southbound					Sand Creek Rd Westbound					SR 4 WB Ramps Northbound					Sand Creek Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	0	0	0	0	0	0	31	160	0	191	0	2	16	0	18	1	100	0	0	101	310	0
7:15	0	0	0	0	0	0	36	195	0	231	0	0	20	0	20	0	148	0	0	148	399	0
7:30	0	0	0	0	0	0	25	219	0	244	1	0	32	0	33	0	225	0	0	225	502	0
7:45	0	0	0	0	0	0	19	189	0	208	0	0	29	0	29	2	273	0	0	275	512	0
Total	0	0	0	0	0	0	111	763	0	874	1	2	97	0	100	3	746	0	0	749	1723	0
8:00	0	0	0	0	0	0	21	247	1	269	0	0	34	0	34	0	223	0	0	223	526	1
8:15	0	0	0	0	0	0	27	266	0	293	0	0	27	0	27	2	174	0	0	176	496	0
8:30	0	0	0	0	0	0	16	183	0	199	0	0	16	0	16	2	152	0	0	154	369	0
8:45	0	0	0	0	0	0	15	185	0	200	0	0	29	0	29	0	144	0	0	144	373	0
Total	0	0	0	0	0	0	79	881	1	961	0	0	106	0	106	4	693	0	0	697	1764	1
16:00	0	0	0	0	0	0	22	221	0	243	0	1	36	0	37	4	331	0	0	335	615	0
16:15	0	0	0	0	0	0	19	214	0	233	0	1	27	0	28	1	339	0	0	340	601	0
16:30	0	0	0	0	0	0	26	233	0	259	1	0	26	0	27	3	335	0	0	338	624	0
16:45	0	0	0	0	0	0	16	232	0	248	0	0	35	0	35	3	362	0	0	365	648	0
Total	0	0	0	0	0	0	83	900	0	983	1	2	124	0	127	11	1367	0	0	1378	2488	0
17:00	0	0	0	0	0	0	16	239	0	255	0	0	36	0	36	1	344	0	0	345	636	0
17:15	0	0	0	0	0	0	13	243	0	256	1	1	35	0	37	1	392	0	0	393	686	0
17:30	0	0	0	0	0	0	13	232	1	246	0	1	40	0	41	0	346	0	0	346	633	1
17:45	0	0	0	0	0	0	22	205	0	227	0	0	38	0	38	1	330	0	0	331	596	0
Total	0	0	0	0	0	0	64	919	1	984	1	2	149	0	152	3	1412	0	0	1415	2551	1
Grand Total	0	0	0	0	0	0	337	3463	2	3802	3	6	476	0	485	21	4218	0	0	4239	8526	2
Apprch %	0.0%	0.0%	0.0%	0.0%		0.0%	8.9%	91.1%	0.1%		0.6%	1.2%	98.1%	0.0%		0.5%	99.5%	0.0%	0.0%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	40.6%	0.0%	44.6%	0.0%	0.1%	5.6%	0.0%	5.7%	0.2%	49.5%	0.0%	0.0%	49.7%	100.0%	

AM PEAK HOUR	SR 4 WB Ramps Southbound					Sand Creek Rd Westbound					SR 4 WB Ramps Northbound					Sand Creek Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	0	0	0	0	25	219	0	244	1	0	32	0	33	0	225	0	0	225	502
7:45	0	0	0	0	0	0	19	189	0	208	0	0	29	0	29	2	273	0	0	275	512
8:00	0	0	0	0	0	0	21	247	1	269	0	0	34	0	34	0	223	0	0	223	526
8:15	0	0	0	0	0	0	27	266	0	293	0	0	27	0	27	2	174	0	0	176	496
Total Volume	0	0	0	0	0	0	92	921	1	1014	1	0	122	0	123	4	895	0	0	899	2036
% App Total	0.0%	0.0%	0.0%	0.0%		0.0%	9.1%	90.8%	0.1%		0.8%	0.0%	99.2%	0.0%		0.4%	99.6%	0.0%	0.0%		
PHF	.000	.000	.000	.000	.000	.000	.852	.866	.250	.865	.250	.000	.897	.000	.904	.500	.820	.000	.000	.817	.968

PM PEAK HOUR	SR 4 WB Ramps Southbound					Sand Creek Rd Westbound					SR 4 WB Ramps Northbound					Sand Creek Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0	0	0	0	16	232	0	248	0	0	35	0	35	3	362	0	0	365	648
17:00	0	0	0	0	0	0	16	239	0	255	0	0	36	0	36	1	344	0	0	345	636
17:15	0	0	0	0	0	0	13	243	0	256	1	1	35	0	37	1	392	0	0	393	686
17:30	0	0	0	0	0	0	13	232	1	246	0	1	40	0	41	0	346	0	0	346	633
Total Volume	0	0	0	0	0	0	58	946	1	1005	1	2	146	0	149	5	1444	0	0	1449	2603
% App Total	0.0%	0.0%	0.0%	0.0%		0.0%	5.8%	94.1%	0.1%		0.7%	1.3%	98.0%	0.0%		0.3%	99.7%	0.0%	0.0%		
PHF	.000	.000	.000	.000	.000	.000	.906	.973	.250	.981	.250	.500	.913	.000	.909	.417	.921	.000	.000	.922	.949

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-021
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Deer Valley Rd Southbound					Balfour Rd Westbound					Deer Valley Rd Northbound					Balfour Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	55	29	0	0	84	33	0	34	0	67	0	6	13	0	19	0	0	0	0	0	170	0
7:15	113	27	0	0	140	27	0	60	0	87	0	6	10	0	16	0	0	0	0	0	243	0
7:30	117	22	0	0	139	20	0	82	0	102	0	6	13	0	19	0	0	0	0	0	260	0
7:45	104	20	0	0	124	29	0	101	0	130	0	8	7	0	15	0	0	0	0	0	269	0
Total	389	98	0	0	487	109	0	277	0	386	0	26	43	0	69	0	0	0	0	0	942	0
8:00	80	8	0	0	88	29	0	110	0	139	0	4	9	0	13	0	0	0	0	0	240	0
8:15	54	10	0	0	64	21	0	106	0	127	0	5	6	0	11	0	0	0	0	0	202	0
8:30	43	8	0	0	51	15	0	65	0	80	0	6	5	0	11	0	0	0	0	0	142	0
8:45	53	3	0	0	56	10	0	59	0	69	0	2	6	0	8	0	0	0	0	0	133	0
Total	230	29	0	0	259	75	0	340	0	415	0	17	26	0	43	0	0	0	0	0	717	0
16:00	79	5	0	0	84	7	0	60	0	67	0	16	17	0	33	0	0	0	0	0	184	0
16:15	70	4	0	0	74	10	0	76	0	86	0	10	13	0	23	0	0	0	0	0	183	0
16:30	60	5	0	0	65	3	0	60	0	63	0	8	20	0	28	0	0	0	0	0	156	0
16:45	93	5	0	0	98	6	0	68	0	74	0	10	26	0	36	0	0	0	0	0	208	0
Total	302	19	0	0	321	26	0	264	0	290	0	44	76	0	120	0	0	0	0	0	731	0
17:00	90	11	0	0	101	6	0	58	0	64	0	16	19	0	35	0	0	0	0	0	200	0
17:15	60	6	0	0	66	9	0	66	0	75	0	7	18	0	25	0	0	0	0	0	166	0
17:30	79	6	0	0	85	4	0	64	0	68	0	7	24	0	31	0	0	0	0	0	184	0
17:45	53	7	0	0	60	2	0	52	0	54	0	11	30	0	41	0	0	0	0	0	155	0
Total	282	30	0	0	312	21	0	240	0	261	0	41	91	0	132	0	0	0	0	0	705	0
Grand Total	1203	176	0	0	1379	231	0	1121	0	1352	0	128	236	0	364	0	0	0	0	0	3095	0
Apprch %	87.2%	12.8%	0.0%	0.0%		17.1%	0.0%	82.9%	0.0%		0.0%	35.2%	64.8%	0.0%		0.0%	0.0%	0.0%	0.0%			
Total %	38.9%	5.7%	0.0%	0.0%	44.6%	7.5%	0.0%	36.2%	0.0%	43.7%	0.0%	4.1%	7.6%	0.0%	11.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	

AM PEAK HOUR	Deer Valley Rd Southbound					Balfour Rd Westbound					Deer Valley Rd Northbound					Balfour Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:15 to 08:15																					
Peak Hour For Entire Intersection Begins at 07:15																					
7:15	113	27	0	0	140	27	0	60	0	87	0	6	10	0	16	0	0	0	0	0	243
7:30	117	22	0	0	139	20	0	82	0	102	0	6	13	0	19	0	0	0	0	0	260
7:45	104	20	0	0	124	29	0	101	0	130	0	8	7	0	15	0	0	0	0	0	269
8:00	80	8	0	0	88	29	0	110	0	139	0	4	9	0	13	0	0	0	0	0	240
Total Volume	414	77	0	0	491	105	0	353	0	458	0	24	39	0	63	0	0	0	0	0	1012
% App Total	84.3%	15.7%	0.0%	0.0%		22.9%	0.0%	77.1%	0.0%		0.0%	38.1%	61.9%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.885	.713	.000	.000	.877	.905	.000	.802	.000	.824	.000	.750	.750	.000	.829	.000	.000	.000	.000	.000	.941

PM PEAK HOUR	Deer Valley Rd Southbound					Balfour Rd Westbound					Deer Valley Rd Northbound					Balfour Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	93	5	0	0	98	6	0	68	0	74	0	10	26	0	36	0	0	0	0	0	208
17:00	90	11	0	0	101	6	0	58	0	64	0	16	19	0	35	0	0	0	0	0	200
17:15	60	6	0	0	66	9	0	66	0	75	0	7	18	0	25	0	0	0	0	0	166
17:30	79	6	0	0	85	4	0	64	0	68	0	7	24	0	31	0	0	0	0	0	184
Total Volume	322	28	0	0	350	25	0	256	0	281	0	40	87	0	127	0	0	0	0	0	758
% App Total	92.0%	8.0%	0.0%	0.0%		8.9%	0.0%	91.1%	0.0%		0.0%	31.5%	68.5%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.866	.636	.000	.000	.866	.694	.000	.941	.000	.937	.000	.625	.837	.000	.882	.000	.000	.000	.000	.000	.911

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-022
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	SR 4 Southbound					Balfour Rd Westbound					SR 4 Northbound					Balfour Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	35	188	94	0	317	20	164	108	0	292	9	138	5	0	152	87	66	61	0	214	975	0
7:15	44	160	81	0	285	11	276	116	0	403	24	127	4	0	155	98	108	50	0	256	1099	0
7:30	79	157	100	1	337	13	226	118	0	357	45	177	1	0	223	85	158	67	0	310	1227	1
7:45	64	156	115	0	335	27	240	125	0	392	34	134	6	0	174	152	205	58	0	415	1316	0
Total	222	661	390	1	1274	71	906	467	0	1444	112	576	16	0	704	422	537	236	0	1195	4617	1
8:00	74	179	114	0	367	27	155	127	0	309	35	138	5	0	178	135	172	59	0	366	1220	0
8:15	67	169	67	0	303	21	143	140	0	304	19	134	2	0	155	115	151	59	0	325	1087	0
8:30	66	175	77	1	319	20	103	115	0	238	35	160	7	0	202	76	93	37	0	206	965	1
8:45	79	136	86	0	301	20	142	124	0	286	31	171	9	0	211	70	95	42	0	207	1005	0
Total	286	659	344	1	1290	88	543	506	0	1137	120	603	23	0	746	396	511	197	0	1104	4277	1
16:00	96	150	72	0	318	10	112	97	0	219	34	214	13	0	261	90	152	35	0	277	1075	0
16:15	75	156	59	0	290	7	121	108	0	236	44	206	14	0	264	83	168	32	0	283	1073	0
16:30	85	176	72	0	333	8	106	110	0	224	34	197	24	0	255	99	149	34	0	282	1094	0
16:45	95	174	68	0	337	4	119	84	0	207	47	198	21	0	266	117	156	38	0	311	1121	0
Total	351	656	271	0	1278	29	458	399	0	886	159	815	72	0	1046	389	625	139	0	1153	4363	0
17:00	96	161	81	0	338	5	122	111	0	238	44	201	24	0	269	114	150	37	0	301	1146	0
17:15	129	153	92	0	374	6	126	114	0	246	54	200	21	0	275	127	179	49	0	355	1250	0
17:30	95	132	83	0	310	13	125	120	0	258	45	205	24	0	274	109	171	36	0	316	1158	0
17:45	116	154	107	0	377	5	117	99	0	221	52	220	25	0	297	84	120	31	0	235	1130	0
Total	436	600	363	0	1399	29	490	444	0	963	195	826	94	0	1115	434	620	153	0	1207	4684	0
Grand Total	1295	2576	1368	2	5241	217	2397	1816	0	4430	586	2820	205	0	3611	1641	2293	725	0	4659	17941	2
Apprch %	24.7%	49.2%	26.1%	0.0%		4.9%	54.1%	41.0%	0.0%		16.2%	78.1%	5.7%	0.0%		35.2%	49.2%	15.6%	0.0%			
Total %	7.2%	14.4%	7.6%	0.0%	29.2%	1.2%	13.4%	10.1%	0.0%	24.7%	3.3%	15.7%	1.1%	0.0%	20.1%	9.1%	12.8%	4.0%	0.0%	26.0%	100.0%	

AM PEAK HOUR	SR 4 Southbound					Balfour Rd Westbound					SR 4 Northbound					Balfour Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:15 to 08:15																					
Peak Hour For Entire Intersection Begins at 07:15																					
7:15	44	160	81	0	285	11	276	116	0	403	24	127	4	0	155	98	108	50	0	256	1099
7:30	79	157	100	1	337	13	226	118	0	357	45	177	1	0	223	85	158	67	0	310	1227
7:45	64	156	115	0	335	27	240	125	0	392	34	134	6	0	174	152	205	58	0	415	1316
8:00	74	179	114	0	367	27	155	127	0	309	35	138	5	0	178	135	172	59	0	366	1220
Total Volume	261	652	410	1	1324	78	897	486	0	1461	138	576	16	0	730	470	643	234	0	1347	4862
% App Total	19.7%	49.2%	31.0%	0.1%		5.3%	61.4%	33.3%	0.0%		18.9%	78.9%	2.2%	0.0%		34.9%	47.7%	17.4%	0.0%		
PHF	.826	.911	.891	.250	.902	.722	.813	.957	.000	.906	.767	.814	.667	.000	.818	.773	.784	.873	.000	.811	.924

PM PEAK HOUR	SR 4 Southbound					Balfour Rd Westbound					SR 4 Northbound					Balfour Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	96	161	81	0	338	5	122	111	0	238	44	201	24	0	269	114	150	37	0	301	1146
17:15	129	153	92	0	374	6	126	114	0	246	54	200	21	0	275	127	179	49	0	355	1250
17:30	95	132	83	0	310	13	125	120	0	258	45	205	24	0	274	109	171	36	0	316	1158
17:45	116	154	107	0	377	5	117	99	0	221	52	220	25	0	297	84	120	31	0	235	1130
Total Volume	436	600	363	0	1399	29	490	444	0	963	195	826	94	0	1115	434	620	153	0	1207	4684
% App Total	31.2%	42.9%	25.9%	0.0%		3.0%	50.9%	46.1%	0.0%		17.5%	74.1%	8.4%	0.0%		36.0%	51.4%	12.7%	0.0%		
PHF	.845	.932	.848	.000	.928	.558	.972	.925	.000	.933	.903	.939	.940	.000	.939	.854	.866	.781	.000	.850	.937

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-023
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	Heidorn Ranch Rd Southbound					Lone Tree Way Westbound					Heidorn Ranch Rd Northbound					Lone Tree Way Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	3	0	1	0	4	6	114	2	1	123	3	0	5	0	8	1	121	3	0	125	260	1
7:15	9	1	3	0	13	0	185	4	0	189	5	0	7	0	12	1	185	4	0	190	404	0
7:30	5	0	0	0	5	3	194	2	0	199	3	0	6	0	9	2	246	4	0	252	465	0
7:45	11	1	2	0	14	2	229	6	0	237	3	2	3	0	8	1	281	4	0	286	545	0
Total	28	2	6	0	36	11	722	14	1	748	14	2	21	0	37	5	833	15	0	853	1674	1
8:00	4	0	1	0	5	3	272	9	0	284	5	0	5	0	10	2	221	7	0	230	529	0
8:15	5	1	2	0	8	3	299	7	0	309	12	0	6	0	18	2	169	15	0	186	521	0
8:30	4	0	2	0	6	3	242	8	2	255	13	2	6	0	21	1	199	11	1	212	494	3
8:45	7	0	1	0	8	9	212	4	1	226	14	1	3	0	18	2	196	19	1	218	470	2
Total	20	1	6	0	27	18	1025	28	3	1074	44	3	20	0	67	7	785	52	2	846	2014	5
16:00	5	2	0	0	7	7	286	14	2	309	20	0	20	0	40	3	281	20	1	305	661	3
16:15	8	0	2	0	10	13	240	9	1	263	25	0	20	0	45	2	265	17	0	284	602	1
16:30	6	1	2	0	9	6	261	8	1	276	31	6	11	0	48	2	343	25	0	370	703	1
16:45	8	0	0	0	8	5	252	6	0	263	32	1	14	0	47	2	309	26	0	337	655	0
Total	27	3	4	0	34	31	1039	37	4	1111	108	7	65	0	180	9	1198	88	1	1296	2621	5
17:00	4	1	1	0	6	5	296	7	0	308	41	1	18	0	60	2	321	11	1	335	709	1
17:15	6	1	0	0	7	4	286	7	5	302	38	1	11	0	50	0	279	24	1	304	663	6
17:30	5	0	3	0	8	10	305	3	4	322	46	0	19	0	65	3	319	32	1	355	750	5
17:45	7	0	0	0	7	9	296	8	0	313	28	2	24	0	54	3	284	21	0	308	682	0
Total	22	2	4	0	28	28	1183	25	9	1245	153	4	72	0	229	8	1203	88	3	1302	2804	12
Grand Total	97	8	20	0	125	88	3969	104	17	4178	319	16	178	0	513	29	4019	243	6	4297	9113	23
Apprch %	77.6%	6.4%	16.0%	0.0%		2.1%	95.0%	2.5%	0.4%		62.2%	3.1%	34.7%	0.0%		0.7%	93.5%	5.7%	0.1%			
Total %	1.1%	0.1%	0.2%	0.0%	1.4%	1.0%	43.6%	1.1%	0.2%	45.8%	3.5%	0.2%	2.0%	0.0%	5.6%	0.3%	44.1%	2.7%	0.1%	47.2%	100.0%	

AM PEAK HOUR	Heidorn Ranch Rd Southbound					Lone Tree Way Westbound					Heidorn Ranch Rd Northbound					Lone Tree Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	11	1	2	0	14	2	229	6	0	237	3	2	3	0	8	1	281	4	0	286	545
8:00	4	0	1	0	5	3	272	9	0	284	5	0	5	0	10	2	221	7	0	230	529
8:15	5	1	2	0	8	3	299	7	0	309	12	0	6	0	18	2	169	15	0	186	521
8:30	4	0	2	0	6	3	242	8	2	255	13	2	6	0	21	1	199	11	1	212	494
Total Volume	24	2	7	0	33	11	1042	30	2	1085	33	4	20	0	57	6	870	37	1	914	2089
% App Total	72.7%	6.1%	21.2%	0.0%		1.0%	96.0%	2.8%	0.2%		57.9%	7.0%	35.1%	0.0%		0.7%	95.2%	4.0%	0.1%		
PHF	.545	.500	.875	.000	.589	.917	.871	.833	.250	.878	.635	.500	.833	.000	.679	.750	.774	.617	.250	.799	.958

PM PEAK HOUR	Heidorn Ranch Rd Southbound					Lone Tree Way Westbound					Heidorn Ranch Rd Northbound					Lone Tree Way Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	4	1	1	0	6	5	296	7	0	308	41	1	18	0	60	2	321	11	1	335	709
17:15	6	1	0	0	7	4	286	7	5	302	38	1	11	0	50	0	279	24	1	304	663
17:30	5	0	3	0	8	10	305	3	4	322	46	0	19	0	65	3	319	32	1	355	750
17:45	7	0	0	0	7	9	296	8	0	313	28	2	24	0	54	3	284	21	0	308	682
Total Volume	22	2	4	0	28	28	1183	25	9	1245	153	4	72	0	229	8	1203	88	3	1302	2804
% App Total	78.6%	7.1%	14.3%	0.0%		2.2%	95.0%	2.0%	0.7%		66.8%	1.7%	31.4%	0.0%		0.6%	92.4%	6.8%	0.2%		
PHF	.786	.500	.333	.000	.875	.700	.970	.781	.450	.967	.832	.500	.750	.000	.881	.667	.937	.688	.750	.917	.935

ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

File Name : 17-07654-103
Date : 08/24/2017

Unshifted Count = All Vehicles & Uturns

	SR 4 EB Southbound					Slatten Ranch Rd Westbound					SR 4 EB Northbound					Slatten Ranch Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	0	0	0	0	0	7	14	0	0	21	59	0	7	0	66	0	22	230	1	253	340	1
7:15	0	0	0	0	0	1	7	0	0	8	69	0	9	0	78	0	16	216	0	232	318	0
7:30	0	0	0	0	0	3	8	0	0	11	86	0	16	0	102	0	20	218	0	238	351	0
7:45	0	0	0	0	0	3	10	0	0	13	112	0	8	0	120	0	14	245	0	259	392	0
Total	0	0	0	0	0	14	39	0	0	53	326	0	40	0	366	0	72	909	1	982	1401	1
8:00	0	0	0	0	0	3	11	0	0	14	103	0	7	0	110	0	13	208	0	221	345	0
8:15	0	0	0	0	0	2	7	0	0	9	122	0	8	0	130	0	12	223	1	236	375	1
8:30	0	0	0	0	0	3	15	0	0	18	110	0	1	0	111	0	12	196	0	208	337	0
8:45	0	0	0	0	0	4	6	0	0	10	94	0	5	0	99	0	14	192	1	207	316	1
Total	0	0	0	0	0	12	39	0	0	51	429	0	21	0	450	0	51	819	2	872	1373	2
16:00	0	0	0	0	0	5	27	0	0	32	138	0	3	0	141	0	13	166	0	179	352	0
16:15	0	0	0	0	0	2	38	0	0	40	112	0	5	0	117	0	11	188	0	199	356	0
16:30	0	0	0	0	0	6	19	0	0	25	104	0	1	0	105	0	14	181	0	195	325	0
16:45	0	0	0	0	0	1	13	0	0	14	146	0	0	0	146	0	11	168	0	179	339	0
Total	0	0	0	0	0	14	97	0	0	111	500	0	9	0	509	0	49	703	0	752	1372	0
17:00	0	0	0	0	0	4	22	0	0	26	116	0	0	0	116	0	6	184	0	190	332	0
17:15	0	0	0	0	0	5	30	0	0	35	122	0	4	0	126	0	16	166	0	182	343	0
17:30	0	0	0	0	0	6	36	0	0	42	105	0	5	0	110	0	14	171	0	185	337	0
17:45	0	0	0	0	0	5	17	0	0	22	102	0	4	0	106	0	12	164	0	176	304	0
Total	0	0	0	0	0	20	105	0	0	125	445	0	13	0	458	0	48	685	0	733	1316	0
Grand Total	0	0	0	0	0	60	280	0	0	340	1700	0	83	0	1783	0	220	3116	3	3339	5462	3
Apprch %	0.0%	0.0%	0.0%	0.0%		17.6%	82.4%	0.0%	0.0%		95.3%	0.0%	4.7%	0.0%		0.0%	6.6%	93.3%	0.1%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	5.1%	0.0%	0.0%	6.2%	31.1%	0.0%	1.5%	0.0%	32.6%	0.0%	4.0%	57.0%	0.1%	61.1%	100.0%	

AM PEAK HOUR	SR 4 EB Southbound					Slatten Ranch Rd Westbound					SR 4 EB Northbound					Slatten Ranch Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	0	0	0	3	8	0	0	11	86	0	16	0	102	0	20	218	0	238	351
7:45	0	0	0	0	0	3	10	0	0	13	112	0	8	0	120	0	14	245	0	259	392
8:00	0	0	0	0	0	3	11	0	0	14	103	0	7	0	110	0	13	208	0	221	345
8:15	0	0	0	0	0	2	7	0	0	9	122	0	8	0	130	0	12	223	1	236	375
Total Volume	0	0	0	0	0	11	36	0	0	47	423	0	39	0	462	0	59	894	1	954	1463
% App Total	0.0%	0.0%	0.0%	0.0%		23.4%	76.6%	0.0%	0.0%		91.6%	0.0%	8.4%	0.0%		0.0%	6.2%	93.7%	0.1%		
PHF	.000	.000	.000	.000	.000	.917	.818	.000	.000	.839	.867	.000	.609	.000	.888	.000	.738	.912	.250	.921	.933

PM PEAK HOUR	SR 4 EB Southbound					Slatten Ranch Rd Westbound					SR 4 EB Northbound					Slatten Ranch Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:00 to 17:00																					
Peak Hour For Entire Intersection Begins at 16:00																					
16:00	0	0	0	0	0	5	27	0	0	32	138	0	3	0	141	0	13	166	0	179	352
16:15	0	0	0	0	0	2	38	0	0	40	112	0	5	0	117	0	11	188	0	199	356
16:30	0	0	0	0	0	6	19	0	0	25	104	0	1	0	105	0	14	181	0	195	325
16:45	0	0	0	0	0	1	13	0	0	14	146	0	0	0	146	0	11	168	0	179	339
Total Volume	0	0	0	0	0	14	97	0	0	111	500	0	9	0	509	0	49	703	0	752	1372
% App Total	0.0%	0.0%	0.0%	0.0%		12.6%	87.4%	0.0%	0.0%		98.2%	0.0%	1.8%	0.0%		0.0%	6.5%	93.5%	0.0%		
PHF	.000	.000	.000	.000	.000	.583	.638	.000	.000	.694	.856	.000	.450	.000	.872	.000	.875	.935	.000	.945	.963

Appendix B: HCM 2010 LOS Worksheets

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	227	0	277	764	724	0	0	632	411
Future Volume (veh/h)	0	0	0	227	0	277	764	724	0	0	632	411
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		0.99
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				1881	0	1881	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				267	0	153	899	852	0	0	744	136
Adj No. of Lanes				2	0	1	2	2	0	0	4	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, %				1	0	1	2	2	0	0	2	2
Cap, veh/h				515	0	237	1096	2396	0	0	1889	464
Arrive On Green				0.15	0.00	0.15	0.32	0.68	0.00	0.00	0.29	0.29
Sat Flow, veh/h				3476	0	1599	3442	3632	0	0	6669	1573
Grp Volume(v), veh/h				267	0	153	899	852	0	0	744	136
Grp Sat Flow(s),veh/h/ln				1738	0	1599	1721	1770	0	0	1602	1573
Q Serve(g_s), s				3.9	0.0	5.0	13.2	5.6	0.0	0.0	5.1	3.7
Cycle Q Clear(g_c), s				3.9	0.0	5.0	13.2	5.6	0.0	0.0	5.1	3.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				515	0	237	1096	2396	0	0	1889	464
V/C Ratio(X)				0.52	0.00	0.65	0.82	0.36	0.00	0.00	0.39	0.29
Avail Cap(c_a), veh/h				2670	0	1228	2851	5682	0	0	4573	1122
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				21.6	0.0	22.0	17.3	3.8	0.0	0.0	15.5	15.0
Incr Delay (d2), s/veh				0.3	0.0	1.1	0.6	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.9	0.0	2.2	6.3	2.7	0.0	0.0	2.2	1.6
LnGrp Delay(d),s/veh				21.9	0.0	23.1	17.9	3.8	0.0	0.0	15.5	15.1
LnGrp LOS				C		C	B	A			B	B
Approach Vol, veh/h					420			1751			880	
Approach Delay, s/veh					22.3			11.0			15.4	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		42.0			21.0	21.0		12.9
Change Period (Y+Rc), s		5.3			4.0	5.3		5.3
Max Green Setting (Gmax), s		87.7			45.0	38.7		41.7
Max Q Clear Time (g_c+I1), s		7.6			15.2	7.1		7.0
Green Ext Time (p_c), s		8.9			1.8	8.3		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	13.9
HCM 2010 LOS	B

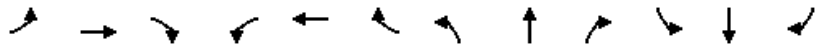
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	342	0	501	0	0	0	0	1146	186	271	588	0
Future Volume (veh/h)	342	0	501	0	0	0	0	1146	186	271	588	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845				0	1881	1900	1863	1863	0
Adj Flow Rate, veh/h	398	0	583				0	1333	200	315	684	0
Adj No. of Lanes	2	0	2				0	4	0	2	2	0
Peak Hour Factor	0.86	0.86	0.86				0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3				0	1	1	2	2	0
Cap, veh/h	950	0	848				0	2313	346	456	2093	0
Arrive On Green	0.27	0.00	0.27				0.00	0.40	0.40	0.13	0.59	0.00
Sat Flow, veh/h	3514	0	3136				0	5989	856	3442	3632	0
Grp Volume(v), veh/h	398	0	583				0	1129	404	315	684	0
Grp Sat Flow(s),veh/h/ln	1757	0	1568				0	1618	1729	1721	1770	0
Q Serve(g_s), s	5.9	0.0	10.6				0.0	11.5	11.6	5.6	6.2	0.0
Cycle Q Clear(g_c), s	5.9	0.0	10.6				0.0	11.5	11.6	5.6	6.2	0.0
Prop In Lane	1.00		1.00				0.00		0.50	1.00		0.00
Lane Grp Cap(c), veh/h	950	0	848				0	1960	698	456	2093	0
V/C Ratio(X)	0.42	0.00	0.69				0.00	0.58	0.58	0.69	0.33	0.00
Avail Cap(c_a), veh/h	3806	0	3396				0	3139	1118	945	3528	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	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.1	0.0	20.8				0.0	14.8	14.9	26.4	6.6	0.0
Incr Delay (d2), s/veh	0.3	0.0	1.0				0.0	0.1	0.3	0.7	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	0.0	4.7				0.0	5.1	5.6	2.7	3.0	0.0
LnGrp Delay(d),s/veh	19.4	0.0	21.8				0.0	14.9	15.2	27.1	6.6	0.0
LnGrp LOS	B		C					B	B	C	A	
Approach Vol, veh/h		981						1533			999	
Approach Delay, s/veh		20.8						14.9			13.1	
Approach LOS		C						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	11.9	30.5		21.2		42.5		
Change Period (Y+Rc), s	4.0	5.3		4.5		* 5.3		
Max Green Setting (Gmax), s	17.9	40.7		68.5		* 63		
Max Q Clear Time (g_c+I1), s	7.6	13.6		12.6		8.2		
Green Ext Time (p_c), s	0.4	11.6		4.1		14.0		

Intersection Summary	
HCM 2010 Ctrl Delay	16.1
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	2	81	291	55	109	138	441	921	6	581	37
Future Volume (veh/h)	23	2	81	291	55	109	138	441	921	6	581	37
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1827	1827	1900	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	27	2	1	342	65	82	162	519	338	7	684	40
Adj No. of Lanes	1	1	0	3	1	0	1	2	2	1	2	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	8	8	8	4	4	4	2	2	2	5	5	5
Cap, veh/h	58	110	55	601	138	174	225	1345	1042	154	1131	66
Arrive On Green	0.03	0.10	0.09	0.12	0.19	0.18	0.13	0.38	0.38	0.09	0.34	0.33
Sat Flow, veh/h	1675	1101	550	4907	735	928	1774	3539	2741	1723	3301	193
Grp Volume(v), veh/h	27	0	3	342	0	147	162	519	338	7	356	368
Grp Sat Flow(s),veh/h/ln	1675	0	1651	1636	0	1663	1774	1770	1371	1723	1719	1775
Q Serve(g_s), s	0.8	0.0	0.1	3.3	0.0	4.0	4.4	5.4	4.4	0.2	8.6	8.7
Cycle Q Clear(g_c), s	0.8	0.0	0.1	3.3	0.0	4.0	4.4	5.4	4.4	0.2	8.6	8.7
Prop In Lane	1.00		0.33	1.00		0.56	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	58	0	166	601	0	313	225	1345	1042	154	589	608
V/C Ratio(X)	0.46	0.00	0.02	0.57	0.00	0.47	0.72	0.39	0.32	0.05	0.60	0.61
Avail Cap(c_a), veh/h	183	0	971	1218	0	1209	616	3366	2608	154	1191	1230
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	0.0	20.5	20.8	0.0	18.3	21.1	11.3	11.0	21.0	13.7	13.7
Incr Delay (d2), s/veh	2.1	0.0	0.0	0.3	0.0	0.4	1.6	0.1	0.1	0.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	1.5	0.0	1.8	2.3	2.6	1.7	0.1	4.1	4.3
LnGrp Delay(d),s/veh	25.9	0.0	20.5	21.2	0.0	18.8	22.8	11.4	11.1	21.0	14.1	14.1
LnGrp LOS	C		C	C		B	C	B	B	C	B	B
Approach Vol, veh/h		30			489			1019			731	
Approach Delay, s/veh		25.4			20.4			13.1			14.2	
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	8.0	23.5	9.7	9.2	9.9	21.7	5.3	13.6
Change Period (Y+Rc), s	4.0	4.9	4.0	4.6	4.0	4.9	4.0	4.6
Max Green Setting (Gmax), s	4.0	47.4	12.0	29.1	17.0	34.4	5.0	36.1
Max Q Clear Time (g_c+I1), s	2.8	7.4	5.3	2.1	6.4	10.7	2.8	6.0
Green Ext Time (p_c), s	0.0	6.2	0.4	0.5	0.1	5.8	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Notes

User approved changes to right turn type.

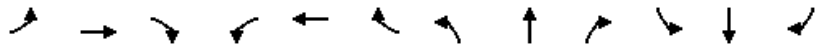
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	0	789	0	0	0	0	1342	377	118	835	0
Future Volume (veh/h)	158	0	789	0	0	0	0	1342	377	118	835	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	60				0	60	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	180	0	613				0	1525	428	134	949	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	643	0	590				0	2350	551	227	3499	0
Arrive On Green	0.07	0.00	0.07				0.00	0.18	0.18	0.02	0.22	0.00
Sat Flow, veh/h	3442	0	3610				0	4637	1092	3343	5103	0
Grp Volume(v), veh/h	180	0	613				0	1314	639	134	949	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1632	1672	1647	0
Q Serve(g_s), s	3.9	0.0	13.0				0.0	28.6	28.6	3.1	12.4	0.0
Cycle Q Clear(g_c), s	3.9	0.0	13.0				0.0	28.6	28.6	3.1	12.4	0.0
Prop In Lane	1.00		1.00				0.00		0.67	1.00		0.00
Lane Grp Cap(c), veh/h	643	0	590				0	1908	926	227	3499	0
V/C Ratio(X)	0.28	0.00	1.04				0.00	0.69	0.69	0.59	0.27	0.00
Avail Cap(c_a), veh/h	762	0	799				0	2917	1420	538	3340	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.6	0.0	49.8				0.0	29.4	27.9	42.7	15.2	0.0
Incr Delay (d2), s/veh	0.1	0.0	38.5				0.0	0.2	0.3	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	280.7				0.0	12.9	6.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	27.8				0.0	13.7	17.0	1.7	6.4	0.0
LnGrp Delay(d),s/veh	36.7	0.0	369.0				0.0	42.4	34.3	43.6	15.3	0.0
LnGrp LOS	D		F					D	C	D	B	
Approach Vol, veh/h		793						1953			1083	
Approach Delay, s/veh		293.5						39.8			18.8	
Approach LOS		F						D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	9.9	47.1		20.8		56.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	12.0	* 67		16.7		46.1		
Max Q Clear Time (g_c+I1), s	5.1	30.6		15.0		14.4		
Green Ext Time (p_c), s	0.3	11.5		0.4		4.6		

Intersection Summary	
HCM 2010 Ctrl Delay	86.4
HCM 2010 LOS	F

Notes

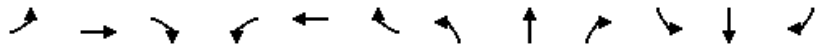
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	22	20	178	31	228	21	995	109	156	744	20
Future Volume (veh/h)	26	22	20	178	31	228	21	995	109	156	744	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	30	25	3	202	35	22	24	1131	119	177	845	22
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	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	1	1	1	2	2	2	2	2	2
Cap, veh/h	68	57	96	270	284	241	50	1563	164	293	1904	50
Arrive On Green	0.07	0.07	0.06	0.15	0.15	0.15	0.03	0.48	0.48	0.09	0.54	0.53
Sat Flow, veh/h	979	816	1530	1792	1881	1596	1774	3232	340	3442	3522	92
Grp Volume(v), veh/h	55	0	3	202	35	22	24	619	631	177	425	442
Grp Sat Flow(s),veh/h/ln	1796	0	1530	1792	1881	1596	1774	1770	1802	1721	1770	1844
Q Serve(g_s), s	2.1	0.0	0.1	7.8	1.2	0.9	1.0	20.0	20.1	3.6	10.4	10.5
Cycle Q Clear(g_c), s	2.1	0.0	0.1	7.8	1.2	0.9	1.0	20.0	20.1	3.6	10.4	10.5
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.19	1.00		0.05
Lane Grp Cap(c), veh/h	125	0	96	270	284	241	50	856	871	293	957	997
V/C Ratio(X)	0.44	0.00	0.03	0.75	0.12	0.09	0.48	0.72	0.72	0.60	0.44	0.44
Avail Cap(c_a), veh/h	885	0	743	942	990	839	406	1840	1873	788	1840	1917
HCM Platoon Ratio	1.00	1.00	1.00	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	32.2	0.0	31.7	29.3	26.5	26.3	34.5	14.8	14.8	31.8	10.0	10.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.6	0.1	0.1	2.7	0.4	0.4	0.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.1	3.9	0.6	0.4	0.5	9.7	9.9	1.7	5.1	5.3
LnGrp Delay(d),s/veh	33.1	0.0	31.8	30.9	26.5	26.4	37.2	15.2	15.3	32.5	10.1	10.1
LnGrp LOS	C		C	C	C	C	D	B	B	C	B	B
Approach Vol, veh/h		58			259			1274			1044	
Approach Delay, s/veh		33.0			29.9			15.6			13.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.6	38.9		8.5	5.5	43.0		15.0
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.0	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	5.6	22.1		4.1	3.0	12.5		9.8
Green Ext Time (p_c), s	0.2	12.2		0.1	0.0	12.4		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	16.8
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	136	94	44	151	669	47	649	15	442	744	111
Future Volume (veh/h)	144	136	94	44	151	669	47	649	15	442	744	111
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1881	1881	1881	1881	1881	1900	1863	1863	1863
Adj Flow Rate, veh/h	162	153	33	49	170	752	53	729	16	497	836	50
Adj No. of Lanes	1	2	0	1	1	2	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	210	947	199	73	468	1373	209	919	20	621	1079	669
Arrive On Green	0.12	0.33	0.32	0.04	0.25	0.25	0.12	0.26	0.25	0.18	0.30	0.30
Sat Flow, veh/h	1774	2902	610	1792	1881	3198	1792	3575	78	3442	3539	1580
Grp Volume(v), veh/h	162	92	94	49	170	752	53	364	381	497	836	50
Grp Sat Flow(s),veh/h/ln	1774	1770	1743	1792	1881	1599	1792	1787	1866	1721	1770	1580
Q Serve(g_s), s	7.2	3.0	3.1	2.2	6.1	14.3	2.2	15.5	15.5	11.3	17.5	0.8
Cycle Q Clear(g_c), s	7.2	3.0	3.1	2.2	6.1	14.3	2.2	15.5	15.5	11.3	17.5	0.8
Prop In Lane	1.00		0.35	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	210	577	569	73	468	1373	209	459	480	621	1079	669
V/C Ratio(X)	0.77	0.16	0.17	0.67	0.36	0.55	0.25	0.79	0.79	0.80	0.77	0.07
Avail Cap(c_a), veh/h	512	1607	1583	231	1408	2971	253	1037	1082	1375	2966	1512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	19.5	19.6	38.5	25.2	17.3	32.7	28.2	28.2	31.9	25.7	4.8
Incr Delay (d2), s/veh	2.3	0.0	0.1	3.9	0.2	0.1	0.2	1.2	1.1	0.9	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	1.5	1.5	1.2	3.2	6.2	1.1	7.7	8.1	5.4	8.5	0.4
LnGrp Delay(d),s/veh	37.1	19.5	19.6	42.4	25.4	17.5	32.9	29.4	29.4	32.9	26.2	4.8
LnGrp LOS	D	B	B	D	C	B	C	C	C	C	C	A
Approach Vol, veh/h		348			971			798			1383	
Approach Delay, s/veh		27.7			20.1			29.6			27.8	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.2	25.7	6.8	30.7	14.3	29.6	13.1	24.3
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	5.3	* 5.3	4.0	4.6
Max Green Setting (Gmax), s	32.0	46.7	10.0	73.4	11.0	* 68	23.0	60.4
Max Q Clear Time (g_c+I1), s	13.3	17.5	4.2	5.1	4.2	19.5	9.2	16.3
Green Ext Time (p_c), s	0.9	2.6	0.0	3.0	1.7	4.6	0.2	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	26.1
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

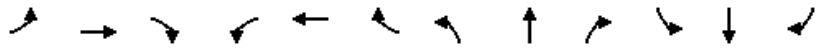
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	58	558	7	93	54	717	983	13	65	685	142
Future Volume (veh/h)	156	58	558	7	93	54	717	983	13	65	685	142
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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	1881	1881	1881	1900	1863	1863	1881	1881	1881	1863	1863	1900
Adj Flow Rate, veh/h	158	59	85	7	94	8	724	993	6	66	692	126
Adj No. of Lanes	1	1	2	0	1	1	2	2	1	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	2	2	2
Cap, veh/h	224	235	351	12	158	141	871	1796	785	97	1324	238
Arrive On Green	0.12	0.12	0.12	0.09	0.09	0.09	0.25	0.50	0.50	0.05	0.31	0.30
Sat Flow, veh/h	1792	1881	2814	129	1728	1550	3476	3574	1563	1774	4321	777
Grp Volume(v), veh/h	158	59	85	101	0	8	724	993	6	66	541	277
Grp Sat Flow(s),veh/h/ln	1792	1881	1407	1856	0	1550	1738	1787	1563	1774	1695	1708
Q Serve(g_s), s	6.0	2.0	1.9	3.7	0.0	0.3	14.1	13.7	0.1	2.6	9.4	9.6
Cycle Q Clear(g_c), s	6.0	2.0	1.9	3.7	0.0	0.3	14.1	13.7	0.1	2.6	9.4	9.6
Prop In Lane	1.00		1.00	0.07		1.00	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	224	235	351	169	0	141	871	1796	785	97	1039	523
V/C Ratio(X)	0.71	0.25	0.24	0.60	0.00	0.06	0.83	0.55	0.01	0.68	0.52	0.53
Avail Cap(c_a), veh/h	442	464	694	1028	0	858	1632	2766	1209	286	1611	811
HCM Platoon Ratio	1.00	1.00	1.00	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	30.0	28.2	28.2	31.2	0.0	29.6	25.3	12.2	8.9	33.1	20.4	20.6
Incr Delay (d2), s/veh	1.5	0.2	0.1	1.3	0.0	0.1	0.8	0.1	0.0	3.2	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	1.1	0.8	2.0	0.0	0.1	6.8	6.6	0.1	1.4	4.4	4.5
LnGrp Delay(d),s/veh	31.5	28.4	28.3	32.4	0.0	29.7	26.1	12.3	8.9	36.3	20.6	20.9
LnGrp LOS	C	C	C	C		C	C	B	A	D	C	C
Approach Vol, veh/h		302			109			1723			884	
Approach Delay, s/veh		30.0			32.2			18.1			21.8	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.4	40.6		13.3	21.4	26.7		10.0
Change Period (Y+Rc), s	4.0	5.3		4.9	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	11.0	54.7		17.1	33.0	* 33		39.0
Max Q Clear Time (g_c+I1), s	4.6	15.7		8.0	16.1	11.6		5.7
Green Ext Time (p_c), s	0.0	10.5		0.4	1.3	8.9		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

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)	45	703	187	181	868	68	305	136	170	61	170	109
Future Volume (veh/h)	45	703	187	181	868	68	305	136	170	61	170	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	52	808	126	208	998	25	351	156	50	70	195	110
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	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, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	76	1119	493	251	1468	642	443	630	514	100	295	166
Arrive On Green	0.04	0.31	0.31	0.14	0.41	0.41	0.13	0.33	0.33	0.06	0.26	0.26
Sat Flow, veh/h	1792	3574	1573	1792	3574	1562	3476	1881	1559	1810	1125	634
Grp Volume(v), veh/h	52	808	126	208	998	25	351	156	50	70	0	305
Grp Sat Flow(s),veh/h/ln	1792	1787	1573	1792	1787	1562	1738	1881	1559	1810	0	1759
Q Serve(g_s), s	2.8	19.8	5.9	11.1	22.5	0.9	9.7	5.9	2.2	3.7	0.0	15.3
Cycle Q Clear(g_c), s	2.8	19.8	5.9	11.1	22.5	0.9	9.7	5.9	2.2	3.7	0.0	15.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	76	1119	493	251	1468	642	443	630	514	100	0	461
V/C Ratio(X)	0.69	0.72	0.26	0.83	0.68	0.04	0.79	0.25	0.10	0.70	0.00	0.66
Avail Cap(c_a), veh/h	173	1513	666	445	2057	899	688	893	732	211	0	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.5	30.0	25.3	41.2	23.7	17.4	41.7	23.8	22.9	45.8	0.0	32.5
Incr Delay (d2), s/veh	4.0	0.6	0.1	2.7	0.2	0.0	1.5	0.1	0.0	3.4	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	9.9	2.6	5.7	11.1	0.4	4.7	3.1	0.9	2.0	0.0	7.5
LnGrp Delay(d),s/veh	50.6	30.6	25.4	44.0	23.9	17.4	43.2	23.9	22.9	49.1	0.0	33.1
LnGrp LOS	D	C	C	D	C	B	D	C	C	D		C
Approach Vol, veh/h		986			1231			557			375	
Approach Delay, s/veh		31.0			27.2			36.0			36.1	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	37.8	17.3	34.6	16.1	30.6	7.7	44.2
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	4.9	46.3	24.0	* 41	19.0	38.3	9.0	* 56
Max Q Clear Time (g_c+I1), s	5.7	7.9	13.1	21.8	11.7	17.3	4.8	24.5
Green Ext Time (p_c), s	0.0	1.7	0.2	8.4	0.4	1.6	0.0	9.9

Intersection Summary	
HCM 2010 Ctrl Delay	31.0
HCM 2010 LOS	C

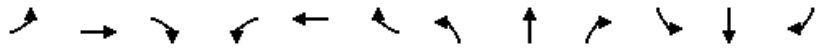
Notes

* 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)	27	615	249	211	644	215	307	287	86	297	507	20
Future Volume (veh/h)	27	615	249	211	644	215	307	287	86	297	507	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1881	1863	1863	1863	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	31	715	59	245	749	86	357	334	81	345	590	21
Adj No. of Lanes	1	2	1	1	2	1	2	2	0	2	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	49	1064	452	285	1525	673	444	732	175	433	893	32
Arrive On Green	0.03	0.30	0.30	0.16	0.43	0.43	0.13	0.26	0.25	0.12	0.25	0.25
Sat Flow, veh/h	1792	3574	1519	1774	3539	1562	3476	2848	680	3476	3516	125
Grp Volume(v), veh/h	31	715	59	245	749	86	357	208	207	345	300	311
Grp Sat Flow(s),veh/h/ln	1792	1787	1519	1774	1770	1562	1738	1787	1741	1738	1787	1854
Q Serve(g_s), s	1.8	18.2	2.9	14.0	15.9	3.4	10.4	10.1	10.4	10.0	15.6	15.6
Cycle Q Clear(g_c), s	1.8	18.2	2.9	14.0	15.9	3.4	10.4	10.1	10.4	10.0	15.6	15.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		0.07
Lane Grp Cap(c), veh/h	49	1064	452	285	1525	673	444	459	447	433	454	471
V/C Ratio(X)	0.63	0.67	0.13	0.86	0.49	0.13	0.80	0.45	0.46	0.80	0.66	0.66
Avail Cap(c_a), veh/h	112	1281	545	470	1985	876	653	658	641	687	675	701
HCM Platoon Ratio	1.00	1.00	1.00	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	49.9	32.0	26.6	42.4	21.3	17.8	44.0	32.4	32.6	44.1	34.7	34.7
Incr Delay (d2), s/veh	4.8	0.6	0.0	4.3	0.1	0.0	2.7	0.3	0.3	1.4	0.6	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	0.9	9.0	1.2	7.1	7.7	1.5	5.1	5.1	5.1	4.9	7.7	8.0
LnGrp Delay(d),s/veh	54.7	32.6	26.7	46.7	21.4	17.8	46.7	32.7	32.9	45.5	35.3	35.3
LnGrp LOS	D	C	C	D	C	B	D	C	C	D	D	D
Approach Vol, veh/h		805			1080			772			956	
Approach Delay, s/veh		33.1			26.9			39.2			39.0	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.4	31.5	20.2	35.7	16.8	31.1	6.4	49.5
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	20.0	37.7	27.0	36.7	19.0	38.7	6.0	57.7
Max Q Clear Time (g_c+I1), s	12.0	12.4	16.0	20.2	12.4	17.6	3.8	17.9
Green Ext Time (p_c), s	0.4	3.6	0.2	6.1	0.4	3.5	0.0	7.6

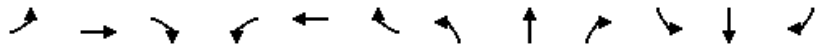
Intersection Summary	
HCM 2010 Ctrl Delay	34.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	461	17	26	808	147	33	40	22	355	61	217
Future Volume (veh/h)	196	461	17	26	808	147	33	40	22	355	61	217
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	220	518	8	29	908	47	37	45	0	399	69	45
Adj No. of Lanes	1	2	1	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	282	1579	696	59	1631	506	69	336	0	547	761	334
Arrive On Green	0.16	0.45	0.45	0.03	0.32	0.32	0.04	0.09	0.00	0.16	0.21	0.21
Sat Flow, veh/h	1774	3539	1560	1774	5085	1576	1792	3668	0	3476	3574	1568
Grp Volume(v), veh/h	220	518	8	29	908	47	37	45	0	399	69	45
Grp Sat Flow(s),veh/h/ln	1774	1770	1560	1774	1695	1576	1792	1787	0	1738	1787	1568
Q Serve(g_s), s	7.4	5.9	0.2	1.0	9.1	1.3	1.3	0.7	0.0	6.7	1.0	1.4
Cycle Q Clear(g_c), s	7.4	5.9	0.2	1.0	9.1	1.3	1.3	0.7	0.0	6.7	1.0	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	282	1579	696	59	1631	506	69	336	0	547	761	334
V/C Ratio(X)	0.78	0.33	0.01	0.49	0.56	0.09	0.54	0.13	0.00	0.73	0.09	0.13
Avail Cap(c_a), veh/h	503	3239	1428	187	3748	1162	189	2542	0	929	3121	1369
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.9	11.1	9.5	29.3	17.3	14.7	29.1	25.7	0.0	24.8	19.5	19.7
Incr Delay (d2), s/veh	1.8	0.0	0.0	2.3	0.1	0.0	2.4	0.1	0.0	0.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	2.8	0.1	0.5	4.2	0.6	0.7	0.4	0.0	3.3	0.5	0.6
LnGrp Delay(d),s/veh	26.7	11.1	9.5	31.6	17.4	14.7	31.5	25.7	0.0	25.5	19.5	19.8
LnGrp LOS	C	B	A	C	B	B	C	C		C	B	B
Approach Vol, veh/h		746			984			82			513	
Approach Delay, s/veh		15.7			17.7			28.3			24.2	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	10.6	5.6	32.3	5.9	17.9	13.3	24.6
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.0	43.4	6.0	56.0	6.0	53.4	17.0	45.0
Max Q Clear Time (g_c+I1), s	11.4	2.7	3.0	7.9	3.3	3.4	9.4	11.1
Green Ext Time (p_c), s	0.5	0.5	0.0	7.3	0.0	0.5	0.2	7.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B



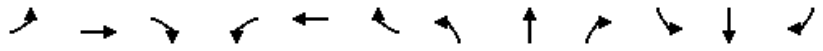
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	916	417	73	1086	0	0	0	0	379	1	520
Future Volume (veh/h)	0	916	417	73	1086	0	0	0	0	379	1	520
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	996	118	79	1180	0				413	0	536
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1916	596	120	2486	0				1343	0	599
Arrive On Green	0.00	0.37	0.37	0.06	0.48	0.00				0.38	0.00	0.38
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	996	118	79	1180	0				413	0	536
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	10.6	3.5	2.7	10.8	0.0				5.7	0.0	22.2
Cycle Q Clear(g_c), s	0.0	10.6	3.5	2.7	10.8	0.0				5.7	0.0	22.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1916	596	120	2486	0				1343	0	599
V/C Ratio(X)	0.00	0.52	0.20	0.66	0.47	0.00				0.31	0.00	0.89
Avail Cap(c_a), veh/h	0	3319	1032	465	4787	0				3307	0	1476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.1	14.8	32.1	12.1	0.0				15.3	0.0	20.4
Incr Delay (d2), s/veh	0.0	0.1	0.1	2.3	0.1	0.0				0.0	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	5.0	1.6	0.8	5.0	0.0				2.8	0.0	10.0
LnGrp Delay(d),s/veh	0.0	17.1	14.9	34.4	12.1	0.0				15.3	0.0	22.4
LnGrp LOS		B	B	C	B					B		C
Approach Vol, veh/h		1114			1259						949	
Approach Delay, s/veh		16.9			13.5						19.3	
Approach LOS		B			B						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	7.8	30.9		31.3		38.7		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	16.0	44.7		64.7		64.7		
Max Q Clear Time (g_c+I1), s	4.7	12.6		24.2		12.8		
Green Ext Time (p_c), s	0.1	13.0		1.7		14.6		

Intersection Summary	
HCM 2010 Ctrl Delay	16.3
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



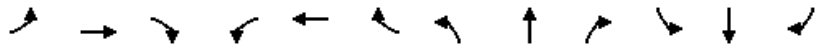
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰	↑↑↑	↱	↰	↲	↱			
Traffic Volume (veh/h)	0	967	328	25	772	540	387	17	184	0	0	0
Future Volume (veh/h)	0	967	328	25	772	540	387	17	184	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	0	1051	122	27	839	273	434	0	50			
Adj No. of Lanes	0	3	1	1	3	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	2435	757	65	3019	914	682	0	304			
Arrive On Green	0.00	0.48	0.48	0.04	0.59	0.59	0.19	0.00	0.19			
Sat Flow, veh/h	0	5253	1581	1774	5085	1540	3548	0	1581			
Grp Volume(v), veh/h	0	1051	122	27	839	273	434	0	50			
Grp Sat Flow(s),veh/h/ln	0	1695	1581	1774	1695	1540	1774	0	1581			
Q Serve(g_s), s	0.0	6.1	2.0	0.7	3.6	3.9	5.0	0.0	1.2			
Cycle Q Clear(g_c), s	0.0	6.1	2.0	0.7	3.6	3.9	5.0	0.0	1.2			
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2435	757	65	3019	914	682	0	304			
V/C Ratio(X)	0.00	0.43	0.16	0.42	0.28	0.30	0.64	0.00	0.16			
Avail Cap(c_a), veh/h	0	5359	1666	456	7062	2139	3818	0	1701			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	7.7	6.6	21.1	4.4	4.5	16.7	0.0	15.1			
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.6	0.0	0.1	0.4	0.0	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	2.8	0.9	0.4	1.6	1.7	2.5	0.0	0.5			
LnGrp Delay(d),s/veh	0.0	7.7	6.6	22.7	4.4	4.6	17.0	0.0	15.2			
LnGrp LOS		A	A	C	A	A	B		B			
Approach Vol, veh/h		1173			1139			484				
Approach Delay, s/veh		7.6			4.9			16.8				
Approach LOS		A			A			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	5.1	26.2		13.4		31.4		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	1.0	46.7		47.7		61.7		
Max Q Clear Time (g_c+I1), s	12.7	8.1		7.0		5.9		
Green Ext Time (p_c), s	0.0	12.1		0.9		12.9		

Intersection Summary	
HCM 2010 Ctrl Delay	8.1
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	84	5	8	57	321	5	128	11	236	94	22
Future Volume (veh/h)	38	84	5	8	57	321	5	128	11	236	94	22
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.97	1.00		0.95	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	1900	1845	1845	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	45	100	4	10	68	205	6	152	6	281	112	9
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	156	465	19	154	104	312	157	524	21	363	887	70
Arrive On Green	0.09	0.26	0.25	0.09	0.26	0.25	0.09	0.15	0.14	0.20	0.26	0.26
Sat Flow, veh/h	1774	1778	71	1757	396	1195	1792	3499	137	1792	3350	266
Grp Volume(v), veh/h	45	0	104	10	0	273	6	77	81	281	59	62
Grp Sat Flow(s),veh/h/ln	1774	0	1849	1757	0	1591	1792	1787	1849	1792	1787	1829
Q Serve(g_s), s	1.2	0.0	2.3	0.3	0.0	7.9	0.2	2.0	2.0	7.6	1.3	1.3
Cycle Q Clear(g_c), s	1.2	0.0	2.3	0.3	0.0	7.9	0.2	2.0	2.0	7.6	1.3	1.3
Prop In Lane	1.00		0.04	1.00		0.75	1.00		0.07	1.00		0.15
Lane Grp Cap(c), veh/h	156	0	484	154	0	416	157	268	277	363	473	484
V/C Ratio(X)	0.29	0.00	0.22	0.06	0.00	0.66	0.04	0.29	0.29	0.77	0.12	0.13
Avail Cap(c_a), veh/h	398	0	1315	394	0	1132	751	1748	1809	751	1748	1789
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	14.8	21.5	0.0	17.1	21.4	19.4	19.4	19.3	14.3	14.4
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.1	0.0	0.7	0.0	0.2	0.2	1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	1.2	0.1	0.0	3.5	0.1	1.0	1.0	3.9	0.6	0.7
LnGrp Delay(d),s/veh	22.3	0.0	14.9	21.5	0.0	17.7	21.5	19.6	19.6	20.7	14.4	14.4
LnGrp LOS	C		B	C		B	C	B	B	C	B	B
Approach Vol, veh/h		149			283			164			402	
Approach Delay, s/veh		17.1			17.9			19.7			18.8	
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	13.9	12.5	8.0	16.9	8.0	18.4	8.0	16.9
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.7	11.0	36.0	21.0	49.7	11.0	36.0
Max Q Clear Time (g_c+I1), s	9.9	4.0	2.3	4.3	2.2	3.3	3.2	9.9
Green Ext Time (p_c), s	0.3	0.9	0.0	1.4	0.0	0.9	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	18.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	170	169	214	159	123	90	459	116	82	798	58
Future Volume (veh/h)	116	170	169	214	159	123	90	459	116	82	798	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		0.98	1.00		0.98	1.00		1.00	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	127	187	164	235	175	117	99	504	114	90	877	61
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	170	229	201	283	325	217	137	977	220	126	1121	78
Arrive On Green	0.09	0.25	0.24	0.16	0.31	0.31	0.08	0.34	0.33	0.07	0.33	0.33
Sat Flow, veh/h	1792	919	806	1774	1033	691	1792	2898	652	1792	3384	235
Grp Volume(v), veh/h	127	0	351	235	0	292	99	310	308	90	463	475
Grp Sat Flow(s),veh/h/ln	1792	0	1725	1774	0	1724	1792	1787	1763	1792	1787	1832
Q Serve(g_s), s	5.8	0.0	16.0	10.7	0.0	11.7	4.5	11.6	11.8	4.1	19.5	19.6
Cycle Q Clear(g_c), s	5.8	0.0	16.0	10.7	0.0	11.7	4.5	11.6	11.8	4.1	19.5	19.6
Prop In Lane	1.00		0.47	1.00		0.40	1.00		0.37	1.00		0.13
Lane Grp Cap(c), veh/h	170	0	430	283	0	542	137	603	594	126	592	607
V/C Ratio(X)	0.75	0.00	0.82	0.83	0.00	0.54	0.72	0.51	0.52	0.71	0.78	0.78
Avail Cap(c_a), veh/h	332	0	712	435	0	815	204	795	785	268	860	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	0.0	29.7	34.0	0.0	23.7	37.7	22.2	22.3	38.0	25.2	25.3
Incr Delay (d2), s/veh	2.4	0.0	1.5	4.5	0.0	0.3	2.7	0.3	0.3	2.8	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	3.0	0.0	7.8	5.6	0.0	5.6	2.3	5.7	5.7	2.1	9.9	10.2
LnGrp Delay(d),s/veh	39.3	0.0	31.1	38.5	0.0	24.1	40.4	22.5	22.6	40.8	26.8	26.8
LnGrp LOS	D		C	D		C	D	C	C	D	C	C
Approach Vol, veh/h		478			527			717			1028	
Approach Delay, s/veh		33.3			30.5			25.0			28.1	
Approach LOS		C			C			C			C	

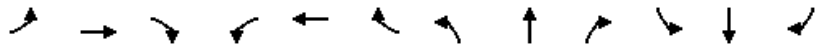
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	33.0	16.9	24.3	9.9	32.5	11.4	29.8
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	12.0	36.7	20.0	34.0	9.0	39.7	15.0	39.0
Max Q Clear Time (g_c+I1), s	6.1	13.8	12.7	18.0	6.5	21.6	7.8	13.7
Green Ext Time (p_c), s	0.0	6.0	0.2	2.1	0.0	5.6	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	28.6
HCM 2010 LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	56	649	38	294	910
Future Volume (veh/h)	5	56	649	38	294	910
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		0.97	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1881	1881	1881	1881
Adj Flow Rate, veh/h	6	4	746	15	338	1046
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	41	36	1615	704	434	1464
Arrive On Green	0.02	0.02	0.45	0.45	0.24	0.78
Sat Flow, veh/h	1810	1615	3668	1559	1792	1881
Grp Volume(v), veh/h	6	4	746	15	338	1046
Grp Sat Flow(s),veh/h/ln	1810	1615	1787	1559	1792	1881
Q Serve(g_s), s	0.1	0.1	6.0	0.2	7.3	11.6
Cycle Q Clear(g_c), s	0.1	0.1	6.0	0.2	7.3	11.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	41	36	1615	704	434	1464
V/C Ratio(X)	0.15	0.11	0.46	0.02	0.78	0.71
Avail Cap(c_a), veh/h	1500	1339	3452	1506	1442	3489
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	20.0	19.9	7.9	6.3	14.7	2.3
Incr Delay (d2), s/veh	0.6	0.5	0.1	0.0	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	2.9	0.1	3.7	5.6
LnGrp Delay(d),s/veh	20.6	20.4	8.0	6.3	15.9	2.6
LnGrp LOS	C	C	A	A	B	A
Approach Vol, veh/h	10		761			1384
Approach Delay, s/veh	20.5		7.9			5.8
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	13.6	23.6				37.2		4.4
Change Period (Y+Rc), s	4.0	5.3				5.3		4.0
Max Green Setting (Gmax), s	23.6	39.7				76.7		34.0
Max Q Clear Time (g_c+I1), s	9.3	8.0				13.6		2.1
Green Ext Time (p_c), s	0.4	10.1				11.2		0.0

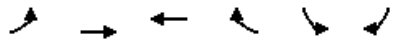
Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	31	0	303	0	333	36	363	446	1
Future Volume (veh/h)	1	0	0	31	0	303	0	333	36	363	446	1
Number	7	4	14	3	8	18	5	2	12	1	6	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	0.99		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	1	0	0	38	0	39	0	411	44	448	551	1
Adj No. of Lanes	0	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	228	0	0	272	0	113	4	610	65	538	1393	3
Arrive On Green	0.07	0.00	0.00	0.07	0.00	0.07	0.00	0.36	0.35	0.30	0.74	0.73
Sat Flow, veh/h	931	0	0	1417	0	1594	1810	1683	180	1792	1877	3
Grp Volume(v), veh/h	1	0	0	38	0	39	0	0	455	448	0	552
Grp Sat Flow(s),veh/h/ln	932	0	0	1417	0	1594	1810	0	1864	1792	0	1881
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	9.1	10.4	0.0	4.8
Cycle Q Clear(g_c), s	1.1	0.0	0.0	0.9	0.0	1.0	0.0	0.0	9.1	10.4	0.0	4.8
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.10	1.00		0.00
Lane Grp Cap(c), veh/h	228	0	0	272	0	113	4	0	676	538	0	1395
V/C Ratio(X)	0.00	0.00	0.00	0.14	0.00	0.34	0.00	0.00	0.67	0.83	0.00	0.40
Avail Cap(c_a), veh/h	1238	0	0	1305	0	1275	469	0	2990	868	0	3441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	0.0	19.6	0.0	19.6	0.0	0.0	11.9	14.5	0.0	2.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.7	0.0	0.0	0.4	1.8	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.4	0.0	0.5	0.0	0.0	4.8	5.4	0.0	2.3
LnGrp Delay(d),s/veh	20.1	0.0	0.0	19.6	0.0	20.3	0.0	0.0	12.4	16.3	0.0	2.2
LnGrp LOS	C			B		C			B	B		A
Approach Vol, veh/h		1			77			455			1000	
Approach Delay, s/veh		20.1			20.0			12.4			8.5	
Approach LOS		C			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.8	20.9		6.7	0.0	37.7		6.7
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	21.0	70.7		35.0	11.0	80.7		35.0
Max Q Clear Time (g_c+I1), s	12.4	11.1		3.1	0.0	6.8		3.0
Green Ext Time (p_c), s	0.5	4.5		0.2	0.0	4.5		0.2

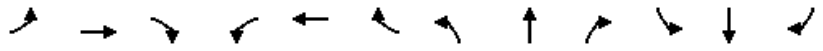
Intersection Summary	
HCM 2010 Ctrl Delay	10.2
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	94	899	0
Future Volume (veh/h)	0	0	0	94	899	0
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1881	1881
Adj Flow Rate, veh/h	0	0	0	111	1058	0
Adj No. of Lanes	0	1	1	0	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	0	167	0	142	1567	685
Arrive On Green	0.00	0.00	0.00	0.11	0.45	0.00
Sat Flow, veh/h	0	1863	0	1583	3476	1599
Grp Volume(v), veh/h	0	0	0	111	1058	0
Grp Sat Flow(s),veh/h/ln	0	1863	0	1583	1738	1599
Q Serve(g_s), s	0.0	0.0	0.0	1.5	5.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.5	5.3	0.0
Prop In Lane	0.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	167	0	142	1567	685
V/C Ratio(X)	0.00	0.00	0.00	0.78	0.68	0.00
Avail Cap(c_a), veh/h	0	4636	0	3940	5566	2524
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.5	4.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.8	2.4	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	13.1	5.0	0.0
LnGrp LOS				B	A	
Approach Vol, veh/h		0	111		1058	
Approach Delay, s/veh		0.0	13.1		5.0	
Approach LOS			B		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		7.3				7.3		14.7
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		54.7				54.7		34.7
Max Q Clear Time (g_c+I1), s		0.0				3.5		7.3
Green Ext Time (p_c), s		0.0				0.4		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.7
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	895	0	0	93	921	1	0	122	0	0	0
Future Volume (veh/h)	4	895	0	0	93	921	1	0	122	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1845	1845	1845			
Adj Flow Rate, veh/h	4	923	0	0	96	496	1	0	11			
Adj No. of Lanes	2	3	0	0	1	2	2	0	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, %	1	1	0	0	1	1	3	3	3			
Cap, veh/h	82	3066	0	0	824	1401	113	0	50			
Arrive On Green	0.02	0.60	0.00	0.00	0.44	0.44	0.03	0.00	0.03			
Sat Flow, veh/h	3476	5305	0	0	1881	3198	3514	0	1568			
Grp Volume(v), veh/h	4	923	0	0	96	496	1	0	11			
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1881	1599	1757	0	1568			
Q Serve(g_s), s	0.0	2.3	0.0	0.0	0.8	2.7	0.0	0.0	0.2			
Cycle Q Clear(g_c), s	0.0	2.3	0.0	0.0	0.8	2.7	0.0	0.0	0.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	82	3066	0	0	824	1401	113	0	50			
V/C Ratio(X)	0.05	0.30	0.00	0.00	0.12	0.35	0.01	0.00	0.22			
Avail Cap(c_a), veh/h	2216	14725	0	0	3940	6698	6273	0	2799			
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	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	12.3	2.6	0.0	0.0	4.3	4.8	12.1	0.0	12.2			
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	1.0	0.0	0.0	0.4	1.2	0.0	0.0	0.2			
LnGrp Delay(d),s/veh	12.4	2.6	0.0	0.0	4.3	4.9	12.1	0.0	13.0			
LnGrp LOS	B	A			A	A	B		B			
Approach Vol, veh/h		927			592			12				
Approach Delay, s/veh		2.6			4.8			12.9				
Approach LOS		A			A			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		20.2		5.6	4.1	16.1		
Change Period (Y+Rc), s		5.3		5.3	4.0	5.3		
Max Green Setting (Gmax), s		73.7		45.7	16.0	53.7		
Max Q Clear Time (g_c+I1), s		4.3		2.2	2.0	4.7		
Green Ext Time (p_c), s		6.2		0.0	0.0	6.2		

Intersection Summary	
HCM 2010 Ctrl Delay	3.5
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	29.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	105	353	24	39	414	77
Future Vol, veh/h	105	353	24	39	414	77
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	112	376	26	41	440	82

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1009	46	0	0	67	0
Stage 1	46	-	-	-	-	-
Stage 2	963	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	269	1029	-	-	1547	-
Stage 1	982	-	-	-	-	-
Stage 2	374	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	189	1029	-	-	1547	-
Mov Cap-2 Maneuver	189	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	263	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	58	0	7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	510	1547	-
HCM Lane V/C Ratio	-	-	0.955	0.285	-
HCM Control Delay (s)	-	-	58	8.3	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	12.2	1.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	470	643	234	78	897	486	138	576	16	262	652	410
Future Volume (veh/h)	470	643	234	78	897	486	138	576	16	262	652	410
Number	7	4	14	3	8	18	5	2	12	1	6	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	1881	1881	1881	1863	1863	1863	1712	1712	1712	1776	1776	1776
Adj Flow Rate, veh/h	511	699	92	85	975	0	150	626	4	285	709	176
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	2	2	2	11	11	11	7	7	7
Cap, veh/h	584	1549	683	113	1165	521	178	881	394	350	904	405
Arrive On Green	0.17	0.43	0.43	0.06	0.33	0.00	0.11	0.27	0.27	0.11	0.27	0.27
Sat Flow, veh/h	3476	3574	1575	1774	3539	1583	1630	3252	1455	3281	3374	1509
Grp Volume(v), veh/h	511	699	92	85	975	0	150	626	4	285	709	176
Grp Sat Flow(s),veh/h/ln	1738	1787	1575	1774	1770	1583	1630	1626	1455	1640	1687	1509
Q Serve(g_s), s	19.0	18.2	4.7	6.2	33.8	0.0	11.9	23.0	0.3	11.2	25.8	12.8
Cycle Q Clear(g_c), s	19.0	18.2	4.7	6.2	33.8	0.0	11.9	23.0	0.3	11.2	25.8	12.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	584	1549	683	113	1165	521	178	881	394	350	904	405
V/C Ratio(X)	0.88	0.45	0.13	0.75	0.84	0.00	0.84	0.71	0.01	0.81	0.78	0.44
Avail Cap(c_a), veh/h	827	1733	764	288	1449	648	265	1356	607	558	1432	641
HCM Platoon Ratio	1.00	1.00	1.00	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	53.7	26.4	22.6	60.9	41.1	0.0	57.8	43.6	35.3	57.8	44.9	40.1
Incr Delay (d2), s/veh	5.8	0.1	0.0	3.7	3.0	0.0	9.5	0.4	0.0	2.2	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	9.0	2.0	3.2	17.0	0.0	5.8	10.4	0.1	5.2	12.1	5.4
LnGrp Delay(d),s/veh	59.5	26.5	22.6	64.7	44.2	0.0	67.3	44.0	35.3	60.0	45.5	40.4
LnGrp LOS	E	C	C	E	D		E	D	D	E	D	D
Approach Vol, veh/h		1302			1060			780			1170	
Approach Delay, s/veh		39.2			45.8			48.4			48.3	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	40.6	11.9	62.2	18.0	40.3	25.7	48.4
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	22.0	54.7	21.0	63.7	21.0	55.7	31.0	53.7
Max Q Clear Time (g_c+I1), s	13.2	25.0	8.2	20.2	13.9	27.8	21.0	35.8
Green Ext Time (p_c), s	0.4	7.3	0.1	9.2	0.1	7.2	0.8	7.3

Intersection Summary	
HCM 2010 Ctrl Delay	44.9
HCM 2010 LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	60	894	11	36	423	39
Future Volume (veh/h)	60	894	11	36	423	39
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1397	1397	1845	1845
Adj Flow Rate, veh/h	65	302	12	39	455	16
Adj No. of Lanes	2	1	2	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	36	36	3	3
Cap, veh/h	1072	474	89	678	797	367
Arrive On Green	0.30	0.30	0.03	0.49	0.23	0.23
Sat Flow, veh/h	3632	1565	2581	1397	3408	1568
Grp Volume(v), veh/h	65	302	12	39	455	16
Grp Sat Flow(s),veh/h/ln	1770	1565	1291	1397	1704	1568
Q Serve(g_s), s	0.4	4.5	0.1	0.4	3.2	0.2
Cycle Q Clear(g_c), s	0.4	4.5	0.1	0.4	3.2	0.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1072	474	89	678	797	367
V/C Ratio(X)	0.06	0.64	0.14	0.06	0.57	0.04
Avail Cap(c_a), veh/h	7052	3118	534	3279	2381	1095
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	6.7	8.1	12.7	3.7	9.2	8.0
Incr Delay (d2), s/veh	0.0	0.5	0.7	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.0	0.1	0.2	1.5	0.1
LnGrp Delay(d),s/veh	6.7	8.7	13.4	3.7	9.4	8.0
LnGrp LOS	A	A	B	A	A	A
Approach Vol, veh/h	367			51	471	
Approach Delay, s/veh	8.3			6.0	9.4	
Approach LOS	A			A	A	

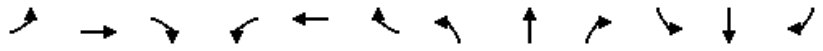
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		9.8	4.9	12.3				17.2
Change Period (Y+Rc), s		4.0	4.5	4.6				4.6
Max Green Setting (Gmax), s		18.4	5.1	53.4				63.0
Max Q Clear Time (g_c+I1), s		5.2	2.1	6.5				2.4
Green Ext Time (p_c), s		0.8	0.0	0.9				0.9

Intersection Summary	
HCM 2010 Ctrl Delay	8.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	238	1	298	985	796	0	0	696	432
Future Volume (veh/h)	0	0	0	238	1	298	985	796	0	0	696	432
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		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	1900	1881	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				280	1	178	1159	936	0	0	819	160
Adj No. of Lanes				2	0	1	2	2	0	0	4	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, %				1	1	1	2	2	0	0	2	2
Cap, veh/h				566	0	260	1301	2560	0	0	1848	455
Arrive On Green				0.16	0.16	0.16	0.38	0.72	0.00	0.00	0.29	0.29
Sat Flow, veh/h				3476	0	1599	3442	3632	0	0	6669	1577
Grp Volume(v), veh/h				280	0	178	1159	936	0	0	819	160
Grp Sat Flow(s),veh/h/ln				1738	0	1599	1721	1770	0	0	1602	1577
Q Serve(g_s), s				5.2	0.0	7.4	22.2	7.0	0.0	0.0	7.3	5.6
Cycle Q Clear(g_c), s				5.2	0.0	7.4	22.2	7.0	0.0	0.0	7.3	5.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				566	0	260	1301	2560	0	0	1848	455
V/C Ratio(X)				0.50	0.00	0.68	0.89	0.37	0.00	0.00	0.44	0.35
Avail Cap(c_a), veh/h				2127	0	978	2204	4482	0	0	3647	897
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				26.8	0.0	27.7	20.5	3.7	0.0	0.0	20.4	19.8
Incr Delay (d2), s/veh				0.3	0.0	1.2	1.4	0.0	0.0	0.0	0.1	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.5	0.0	3.3	10.7	3.4	0.0	0.0	3.2	2.5
LnGrp Delay(d),s/veh				27.0	0.0	28.9	21.9	3.7	0.0	0.0	20.5	20.0
LnGrp LOS				C		C	C	A			C	B
Approach Vol, veh/h					458			2095			979	
Approach Delay, s/veh					27.8			13.8			20.4	
Approach LOS					C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		54.8			30.6	24.3		15.4
Change Period (Y+Rc), s		5.3			4.0	5.3		5.3
Max Green Setting (Gmax), s		87.7			45.0	38.7		41.7
Max Q Clear Time (g_c+I1), s		9.0			24.2	9.3		9.4
Green Ext Time (p_c), s		10.5			2.4	9.4		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	17.4
HCM 2010 LOS	B



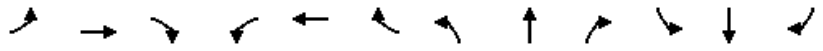
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	359	2	567	0	0	0	0	1401	195	313	649	0
Future Volume (veh/h)	359	2	567	0	0	0	0	1401	195	313	649	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845				0	1881	1900	1863	1863	0
Adj Flow Rate, veh/h	417	0	660				0	1629	211	364	755	0
Adj No. of Lanes	2	0	2				0	4	0	2	2	0
Peak Hour Factor	0.86	0.86	0.86				0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3				0	1	1	2	2	0
Cap, veh/h	996	0	889				0	2501	324	460	2111	0
Arrive On Green	0.28	0.00	0.28				0.00	0.43	0.41	0.13	0.60	0.00
Sat Flow, veh/h	3514	0	3136				0	6106	757	3442	3632	0
Grp Volume(v), veh/h	417	0	660				0	1353	487	364	755	0
Grp Sat Flow(s),veh/h/ln	1757	0	1568				0	1618	1746	1721	1770	0
Q Serve(g_s), s	7.5	0.0	14.8				0.0	17.1	17.2	7.9	8.5	0.0
Cycle Q Clear(g_c), s	7.5	0.0	14.8				0.0	17.1	17.2	7.9	8.5	0.0
Prop In Lane	1.00		1.00				0.00		0.43	1.00		0.00
Lane Grp Cap(c), veh/h	996	0	889				0	2077	747	460	2111	0
V/C Ratio(X)	0.42	0.00	0.74				0.00	0.65	0.65	0.79	0.36	0.00
Avail Cap(c_a), veh/h	3131	0	2794				0	2632	947	756	2879	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	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.6	0.0	25.2				0.0	17.6	17.8	32.5	8.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	1.2				0.0	0.2	0.5	1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	6.6				0.0	7.7	8.4	3.8	4.1	0.0
LnGrp Delay(d),s/veh	22.8	0.0	26.4				0.0	17.7	18.3	33.7	8.1	0.0
LnGrp LOS	C		C					B	B	C	A	
Approach Vol, veh/h		1077						1840			1119	
Approach Delay, s/veh		25.0						17.9			16.4	
Approach LOS		C						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.4	37.1		25.9		51.5		
Change Period (Y+Rc), s	4.0	5.3		4.5		* 5.3		
Max Green Setting (Gmax), s	17.0	40.7		68.5		* 63		
Max Q Clear Time (g_c+I1), s	9.9	19.2		16.8		10.5		
Green Ext Time (p_c), s	0.4	12.6		4.7		18.5		

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	2	85	443	58	114	145	463	1293	6	610	39
Future Volume (veh/h)	24	2	85	443	58	114	145	463	1293	6	610	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1827	1827	1900	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	28	2	6	521	68	88	171	545	775	7	718	42
Adj No. of Lanes	1	1	0	3	1	0	1	2	2	1	2	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	8	8	8	4	4	4	2	2	2	5	5	5
Cap, veh/h	42	36	107	719	155	201	216	1486	1151	117	1208	71
Arrive On Green	0.02	0.09	0.08	0.15	0.21	0.20	0.12	0.42	0.42	0.07	0.37	0.35
Sat Flow, veh/h	1675	383	1149	4907	724	937	1774	3539	2742	1723	3301	193
Grp Volume(v), veh/h	28	0	8	521	0	156	171	545	775	7	374	386
Grp Sat Flow(s),veh/h/ln	1675	0	1532	1636	0	1662	1774	1770	1371	1723	1719	1775
Q Serve(g_s), s	1.0	0.0	0.3	5.9	0.0	4.8	5.5	6.2	13.4	0.2	10.3	10.4
Cycle Q Clear(g_c), s	1.0	0.0	0.3	5.9	0.0	4.8	5.5	6.2	13.4	0.2	10.3	10.4
Prop In Lane	1.00		0.75	1.00		0.56	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	42	0	142	719	0	356	216	1486	1151	117	629	650
V/C Ratio(X)	0.67	0.00	0.06	0.72	0.00	0.44	0.79	0.37	0.67	0.06	0.59	0.59
Avail Cap(c_a), veh/h	171	0	773	1171	0	1065	484	2799	2169	117	1008	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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	0.0	24.5	23.9	0.0	20.1	25.0	11.7	13.8	25.6	15.1	15.1
Incr Delay (d2), s/veh	6.7	0.0	0.1	0.5	0.0	0.3	2.4	0.1	0.3	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.1	2.7	0.0	2.2	2.8	3.0	5.1	0.1	4.9	5.1
LnGrp Delay(d),s/veh	35.0	0.0	24.5	24.4	0.0	20.5	27.5	11.7	14.0	25.7	15.4	15.4
LnGrp LOS	D		C	C		C	C	B	B	C	B	B
Approach Vol, veh/h		36			677			1491			767	
Approach Delay, s/veh		32.7			23.5			14.7			15.5	
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	8.0	28.6	12.6	9.5	11.2	25.5	5.5	16.6
Change Period (Y+Rc), s	4.0	4.9	4.0	4.6	4.0	4.9	4.0	4.6
Max Green Setting (Gmax), s	4.0	45.5	14.0	29.0	16.0	33.5	6.0	37.0
Max Q Clear Time (g_c+I1), s	2.3	15.4	7.9	2.3	7.5	12.4	3.0	6.8
Green Ext Time (p_c), s	0.0	8.2	0.6	0.5	0.1	7.5	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.2
HCM 2010 LOS	B

Notes

User approved changes to right turn type.

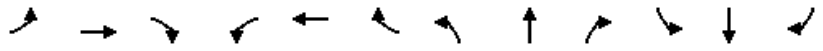
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	0	848	0	0	0	0	1632	409	198	708	0
Future Volume (veh/h)	251	0	848	0	0	0	0	1632	409	198	708	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	60				0	60	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	285	0	680				0	1855	465	225	805	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	968	0	973				0	2391	342	298	3170	0
Arrive On Green	0.08	0.00	0.08				0.00	0.18	0.17	0.03	0.22	0.00
Sat Flow, veh/h	3442	0	3610				0	4749	1000	3343	5103	0
Grp Volume(v), veh/h	285	0	680				0	1552	768	225	805	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1651	1672	1647	0
Q Serve(g_s), s	7.5	0.0	17.8				0.0	43.2	43.5	6.4	12.8	0.0
Cycle Q Clear(g_c), s	7.5	0.0	17.8				0.0	43.2	43.5	6.4	12.8	0.0
Prop In Lane	1.00		1.00				0.00		0.61	1.00		0.00
Lane Grp Cap(c), veh/h	968	0	973				0	1655	886	298	3170	0
V/C Ratio(X)	0.29	0.00	0.70				0.00	0.94	0.87	0.75	0.25	0.00
Avail Cap(c_a), veh/h	1147	0	1173				0	1850	911	452	3348	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	0.0	46.4				0.0	45.0	40.7	49.4	20.4	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.0				0.0	8.8	8.3	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	90.8				0.0	70.1	15.5	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	17.1				0.0	28.5	29.0	3.3	6.5	0.0
LnGrp Delay(d),s/veh	37.6	0.0	138.1				0.0	123.9	64.5	50.9	20.4	0.0
LnGrp LOS	D		F					F	E	D	C	
Approach Vol, veh/h		965						2320			1030	
Approach Delay, s/veh		108.4						104.2			27.0	
Approach LOS		F						F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	13.7	55.4		27.0		69.1		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	13.0	* 52		30.7		48.1		
Max Q Clear Time (g_c+I1), s	8.4	45.5		19.8		14.8		
Green Ext Time (p_c), s	0.4	5.1		1.8		4.0		

Intersection Summary	
HCM 2010 Ctrl Delay	86.7
HCM 2010 LOS	F

Notes

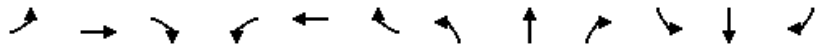
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	23	21	198	33	239	22	1264	123	164	854	21
Future Volume (veh/h)	27	23	21	198	33	239	22	1264	123	164	854	21
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	31	26	4	225	38	35	25	1436	135	186	970	23
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	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	1	1	1	2	2	2	2	2	2
Cap, veh/h	62	52	97	277	291	247	36	1789	167	257	2124	50
Arrive On Green	0.06	0.06	0.06	0.15	0.15	0.15	0.02	0.55	0.54	0.07	0.60	0.60
Sat Flow, veh/h	977	819	1531	1792	1881	1596	1774	3272	306	3442	3532	84
Grp Volume(v), veh/h	57	0	4	225	38	35	25	773	798	186	486	507
Grp Sat Flow(s),veh/h/ln	1796	0	1531	1792	1881	1596	1774	1770	1808	1721	1770	1846
Q Serve(g_s), s	3.1	0.0	0.2	12.1	1.7	1.9	1.4	35.1	35.8	5.3	15.1	15.1
Cycle Q Clear(g_c), s	3.1	0.0	0.2	12.1	1.7	1.9	1.4	35.1	35.8	5.3	15.1	15.1
Prop In Lane	0.54		1.00	1.00		1.00	1.00		0.17	1.00		0.05
Lane Grp Cap(c), veh/h	114	0	97	277	291	247	36	968	989	257	1064	1110
V/C Ratio(X)	0.50	0.00	0.04	0.81	0.13	0.14	0.70	0.80	0.81	0.72	0.46	0.46
Avail Cap(c_a), veh/h	630	0	537	682	716	607	284	1329	1358	552	1329	1387
HCM Platoon Ratio	1.00	1.00	1.00	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	45.2	0.0	43.9	40.8	36.4	36.5	48.6	18.2	18.4	45.2	10.9	10.9
Incr Delay (d2), s/veh	1.3	0.0	0.1	2.2	0.1	0.1	9.0	1.7	1.8	1.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.1	6.2	0.9	0.8	0.8	17.4	18.2	2.6	7.3	7.6
LnGrp Delay(d),s/veh	46.5	0.0	43.9	43.0	36.5	36.6	57.6	19.9	20.2	46.7	11.1	11.1
LnGrp LOS	D		D	D	D	D	E	B	C	D	B	B
Approach Vol, veh/h		61			298			1596			1179	
Approach Delay, s/veh		46.3			41.4			20.6			16.7	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.4	58.6		10.3	6.0	64.0		19.4
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.0	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	7.3	37.8		5.1	3.4	17.1		14.1
Green Ext Time (p_c), s	0.2	16.2		0.1	0.0	18.5		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	21.6
HCM 2010 LOS	C



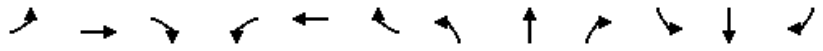
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	152	99	77	170	765	49	822	24	481	809	117
Future Volume (veh/h)	141	152	99	77	170	765	49	822	24	481	809	117
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1881	1881	1881	1881	1881	1900	1863	1863	1863
Adj Flow Rate, veh/h	158	171	38	87	191	860	55	924	26	540	909	56
Adj No. of Lanes	1	2	0	1	1	2	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	188	891	193	110	497	1402	283	1079	30	618	1111	645
Arrive On Green	0.11	0.31	0.30	0.06	0.26	0.26	0.16	0.30	0.29	0.18	0.31	0.30
Sat Flow, veh/h	1774	2884	625	1792	1881	3198	1792	3549	100	3442	3539	1580
Grp Volume(v), veh/h	158	103	106	87	191	860	55	465	485	540	909	56
Grp Sat Flow(s),veh/h/ln	1774	1770	1740	1792	1881	1599	1792	1787	1862	1721	1770	1580
Q Serve(g_s), s	9.6	4.7	4.9	5.3	9.1	22.6	2.9	26.9	26.9	16.7	26.0	1.2
Cycle Q Clear(g_c), s	9.6	4.7	4.9	5.3	9.1	22.6	2.9	26.9	26.9	16.7	26.0	1.2
Prop In Lane	1.00		0.36	1.00		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	188	546	537	110	497	1402	283	543	566	618	1111	645
V/C Ratio(X)	0.84	0.19	0.20	0.79	0.38	0.61	0.19	0.86	0.86	0.87	0.82	0.09
Avail Cap(c_a), veh/h	372	1195	1174	163	1047	2337	283	782	815	1005	2228	1144
HCM Platoon Ratio	1.00	1.00	1.00	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	48.1	27.8	28.0	50.7	33.0	23.6	40.1	35.9	35.9	43.8	34.7	7.6
Incr Delay (d2), s/veh	3.8	0.1	0.1	7.8	0.2	0.2	0.1	4.7	4.5	2.9	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	2.3	2.4	2.8	4.7	10.0	1.5	13.9	14.4	8.2	12.7	0.6
LnGrp Delay(d),s/veh	51.9	27.9	28.0	58.5	33.2	23.8	40.2	40.6	40.4	46.6	35.3	7.6
LnGrp LOS	D	C	C	E	C	C	D	D	D	D	D	A
Approach Vol, veh/h		367			1138			1005			1505	
Approach Delay, s/veh		38.3			28.0			40.5			38.3	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	37.3	10.8	37.8	22.6	38.4	15.6	33.0
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	5.3	* 5.3	4.0	4.6
Max Green Setting (Gmax), s	32.6	46.7	10.0	73.4	11.0	* 68	23.0	60.4
Max Q Clear Time (g_c+I1), s	11.7	28.9	7.3	6.9	4.9	28.0	11.6	24.6
Green Ext Time (p_c), s	1.0	3.2	0.0	3.5	2.0	5.1	0.1	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	35.9
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



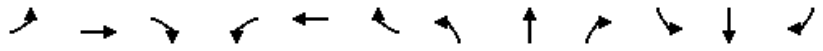
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	171	61	598	7	98	59	789	1251	14	70	792	158
Future Volume (veh/h)	171	61	598	7	98	59	789	1251	14	70	792	158
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
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	1881	1881	1881	1900	1863	1863	1881	1881	1881	1863	1863	1900
Adj Flow Rate, veh/h	173	62	125	7	99	13	797	1264	7	71	800	143
Adj No. of Lanes	1	1	2	0	1	1	2	2	1	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	2	2	2
Cap, veh/h	236	248	371	11	151	135	906	1925	842	91	1391	247
Arrive On Green	0.13	0.13	0.13	0.09	0.09	0.09	0.26	0.54	0.54	0.05	0.32	0.31
Sat Flow, veh/h	1792	1881	2814	123	1734	1550	3476	3574	1563	1774	4332	768
Grp Volume(v), veh/h	173	62	125	106	0	13	797	1264	7	71	625	318
Grp Sat Flow(s),veh/h/ln	1792	1881	1407	1857	0	1550	1738	1787	1563	1774	1695	1710
Q Serve(g_s), s	7.8	2.5	3.4	4.6	0.0	0.6	18.4	21.1	0.2	3.3	12.8	13.0
Cycle Q Clear(g_c), s	7.8	2.5	3.4	4.6	0.0	0.6	18.4	21.1	0.2	3.3	12.8	13.0
Prop In Lane	1.00		1.00	0.07		1.00	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	236	248	371	161	0	135	906	1925	842	91	1088	549
V/C Ratio(X)	0.73	0.25	0.34	0.66	0.00	0.10	0.88	0.66	0.01	0.78	0.57	0.58
Avail Cap(c_a), veh/h	343	360	539	866	0	723	1413	2608	1140	170	1419	716
HCM Platoon Ratio	1.00	1.00	1.00	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	34.9	32.6	33.0	37.0	0.0	35.2	29.7	13.8	8.9	39.2	23.6	23.8
Incr Delay (d2), s/veh	1.8	0.2	0.2	1.7	0.0	0.1	2.7	0.1	0.0	5.3	0.2	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	4.0	1.3	1.3	2.4	0.0	0.3	9.2	10.4	0.1	1.8	6.0	6.2
LnGrp Delay(d),s/veh	36.7	32.8	33.2	38.7	0.0	35.3	32.4	13.9	8.9	44.5	23.8	24.2
LnGrp LOS	D	C	C	D		D	C	B	A	D	C	C
Approach Vol, veh/h		360			119			2068			1014	
Approach Delay, s/veh		34.8			38.3			21.0			25.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	49.0		15.0	25.8	31.5		11.3
Change Period (Y+Rc), s	4.0	5.3		4.9	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	4.3	59.7		15.1	34.0	* 34		39.0
Max Q Clear Time (g_c+I1), s	5.3	23.1		9.8	20.4	15.0		6.6
Green Ext Time (p_c), s	0.0	14.2		0.4	1.4	10.7		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	24.2
HCM 2010 LOS	C

Notes

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



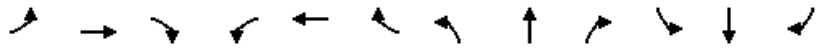
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	823	196	190	1166	71	320	143	179	64	179	114
Future Volume (veh/h)	47	823	196	190	1166	71	320	143	179	64	179	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	54	946	136	218	1340	29	368	164	61	74	206	116
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	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, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	70	1232	543	247	1585	693	429	617	511	95	289	163
Arrive On Green	0.04	0.34	0.34	0.14	0.44	0.44	0.12	0.33	0.33	0.05	0.26	0.25
Sat Flow, veh/h	1792	3574	1574	1792	3574	1563	3476	1881	1559	1810	1125	633
Grp Volume(v), veh/h	54	946	136	218	1340	29	368	164	61	74	0	322
Grp Sat Flow(s),veh/h/ln	1792	1787	1574	1792	1787	1563	1738	1881	1559	1810	0	1758
Q Serve(g_s), s	3.5	27.5	7.2	13.9	38.9	1.2	12.1	7.5	3.2	4.7	0.0	19.5
Cycle Q Clear(g_c), s	3.5	27.5	7.2	13.9	38.9	1.2	12.1	7.5	3.2	4.7	0.0	19.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	70	1232	543	247	1585	693	429	617	511	95	0	452
V/C Ratio(X)	0.78	0.77	0.25	0.88	0.85	0.04	0.86	0.27	0.12	0.78	0.00	0.71
Avail Cap(c_a), veh/h	108	1380	608	323	1809	791	537	742	615	186	0	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.5	34.0	27.4	49.3	28.9	18.4	50.1	28.8	27.4	54.5	0.0	39.6
Incr Delay (d2), s/veh	7.0	2.0	0.1	16.9	3.1	0.0	9.3	0.1	0.0	5.1	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	13.9	3.2	8.1	19.9	0.5	6.4	3.9	1.4	2.5	0.0	9.6
LnGrp Delay(d),s/veh	62.5	36.0	27.5	66.3	32.0	18.4	59.4	28.9	27.4	59.6	0.0	41.0
LnGrp LOS	E	D	C	E	C	B	E	C	C	E		D
Approach Vol, veh/h		1136			1587			593			396	
Approach Delay, s/veh		36.3			36.4			47.7			44.5	
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	10.1	42.2	20.0	44.2	18.4	33.9	8.5	55.7
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	12.0	44.7	21.0	* 45	18.0	38.7	7.0	* 59
Max Q Clear Time (g_c+I1), s	16.7	9.5	15.9	29.5	14.1	21.5	5.5	40.9
Green Ext Time (p_c), s	0.0	1.8	0.1	9.6	0.3	1.6	0.0	10.6

Intersection Summary	
HCM 2010 Ctrl Delay	39.0
HCM 2010 LOS	D

Notes

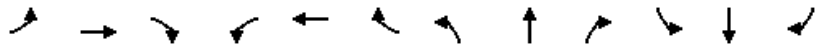
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	677	315	245	934	293	337	332	108	345	536	28
Future Volume (veh/h)	56	677	315	245	934	293	337	332	108	345	536	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	65	787	135	285	1086	177	392	386	107	401	623	31
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	83	1639	278	347	1301	212	450	706	193	460	895	45
Arrive On Green	0.05	0.37	0.36	0.10	0.43	0.42	0.13	0.26	0.24	0.13	0.26	0.25
Sat Flow, veh/h	1792	4388	746	3442	3042	495	3476	2758	755	3476	3459	172
Grp Volume(v), veh/h	65	612	310	285	630	633	392	248	245	401	322	332
Grp Sat Flow(s),veh/h/ln	1792	1712	1710	1721	1770	1767	1738	1787	1725	1738	1787	1844
Q Serve(g_s), s	4.2	15.9	16.2	9.5	36.9	37.2	12.9	14.0	14.4	13.2	18.9	19.0
Cycle Q Clear(g_c), s	4.2	15.9	16.2	9.5	36.9	37.2	12.9	14.0	14.4	13.2	18.9	19.0
Prop In Lane	1.00		0.44	1.00		0.28	1.00		0.44	1.00		0.09
Lane Grp Cap(c), veh/h	83	1279	639	347	757	756	450	457	441	460	463	477
V/C Ratio(X)	0.78	0.48	0.48	0.82	0.83	0.84	0.87	0.54	0.55	0.87	0.70	0.70
Avail Cap(c_a), veh/h	92	1410	704	532	911	910	507	614	592	537	629	649
HCM Platoon Ratio	1.00	1.00	1.00	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	55.0	27.8	28.2	51.4	29.6	29.9	49.8	37.5	37.9	49.6	39.0	39.1
Incr Delay (d2), s/veh	27.2	0.1	0.2	3.4	4.8	5.0	12.9	0.4	0.4	11.7	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	2.7	7.5	7.7	4.7	19.1	19.2	7.0	6.9	6.9	7.1	9.5	9.8
LnGrp Delay(d),s/veh	82.2	27.9	28.4	54.7	34.5	34.9	62.6	37.8	38.3	61.3	39.9	40.0
LnGrp LOS	F	C	C	D	C	C	E	D	D	E	D	D
Approach Vol, veh/h		987			1548			885			1055	
Approach Delay, s/veh		31.7			38.4			48.9			48.1	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.4	33.8	15.7	47.5	19.1	34.2	9.4	53.8
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	18.0	38.7	18.0	46.7	17.0	39.7	6.0	58.7
Max Q Clear Time (g_c+I1), s	15.2	16.4	11.5	18.2	14.9	21.0	6.2	39.2
Green Ext Time (p_c), s	0.3	4.0	0.3	10.9	0.2	3.9	0.0	9.3

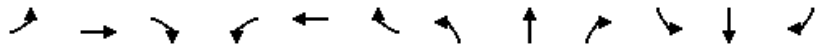
Intersection Summary	
HCM 2010 Ctrl Delay	41.3
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	560	80	53	976	172	217	89	46	391	88	265
Future Volume (veh/h)	213	560	80	53	976	172	217	89	46	391	88	265
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	239	629	79	60	1097	75	244	100	27	439	99	99
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	279	2128	264	77	1784	553	286	382	100	531	462	202
Arrive On Green	0.16	0.47	0.45	0.04	0.35	0.35	0.16	0.14	0.12	0.15	0.13	0.13
Sat Flow, veh/h	1774	4575	568	1774	5085	1577	1792	2805	732	3476	3574	1561
Grp Volume(v), veh/h	239	464	244	60	1097	75	244	62	65	439	99	99
Grp Sat Flow(s),veh/h/ln	1774	1695	1753	1774	1695	1577	1792	1787	1750	1738	1787	1561
Q Serve(g_s), s	10.3	6.7	6.9	2.6	14.1	2.6	10.4	2.5	2.6	9.7	2.0	4.7
Cycle Q Clear(g_c), s	10.3	6.7	6.9	2.6	14.1	2.6	10.4	2.5	2.6	9.7	2.0	4.7
Prop In Lane	1.00		0.32	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	279	1577	815	77	1784	553	286	243	238	531	462	202
V/C Ratio(X)	0.86	0.29	0.30	0.78	0.61	0.14	0.85	0.26	0.27	0.83	0.21	0.49
Avail Cap(c_a), veh/h	382	2291	1185	225	2985	926	454	1013	992	705	1845	805
HCM Platoon Ratio	1.00	1.00	1.00	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	32.3	13.1	13.3	37.4	21.2	17.5	32.2	30.5	30.8	32.4	30.8	31.9
Incr Delay (d2), s/veh	10.2	0.0	0.1	6.4	0.1	0.0	5.0	0.2	0.2	4.7	0.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	3.1	3.3	1.4	6.6	1.1	5.6	1.2	1.3	5.0	1.0	2.0
LnGrp Delay(d),s/veh	42.6	13.1	13.3	43.7	21.3	17.5	37.3	30.7	31.0	37.1	30.8	32.6
LnGrp LOS	D	B	B	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		947			1232			371			637	
Approach Delay, s/veh		20.6			22.2			35.1			35.4	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	14.7	7.4	40.7	16.6	14.2	16.4	31.7
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.0	43.4	10.0	52.0	20.0	39.4	17.0	45.0
Max Q Clear Time (g_c+I1), s	11.7	4.6	4.6	8.9	12.4	6.7	12.3	16.1
Green Ext Time (p_c), s	0.4	0.9	0.0	9.9	0.2	0.9	0.1	9.2

Intersection Summary	
HCM 2010 Ctrl Delay	25.9
HCM 2010 LOS	C



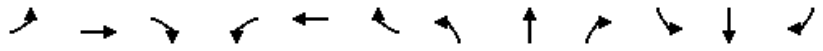
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↶	↱
Traffic Volume (veh/h)	0	1072	485	111	1204	0	0	0	0	447	1	523
Future Volume (veh/h)	0	1072	485	111	1204	0	0	0	0	447	1	523
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1165	192	121	1309	0				487	0	539
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2026	630	158	2684	0				1354	0	604
Arrive On Green	0.00	0.39	0.39	0.08	0.52	0.00				0.38	0.00	0.38
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1165	192	121	1309	0				487	0	539
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	14.8	6.9	5.0	13.6	0.0				8.2	0.0	26.6
Cycle Q Clear(g_c), s	0.0	14.8	6.9	5.0	13.6	0.0				8.2	0.0	26.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2026	630	158	2684	0				1354	0	604
V/C Ratio(X)	0.00	0.58	0.30	0.76	0.49	0.00				0.36	0.00	0.89
Avail Cap(c_a), veh/h	0	2830	881	378	4061	0				2806	0	1252
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	19.8	17.4	37.6	12.8	0.0				18.5	0.0	24.2
Incr Delay (d2), s/veh	0.0	0.1	0.1	2.9	0.1	0.0				0.1	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.0	3.1	1.4	6.4	0.0				4.0	0.0	11.8
LnGrp Delay(d),s/veh	0.0	19.9	17.5	40.5	12.8	0.0				18.6	0.0	26.1
LnGrp LOS		B	B	D	B					B		C
Approach Vol, veh/h		1357			1430						1026	
Approach Delay, s/veh		19.6			15.2						22.5	
Approach LOS		B			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	10.7	36.9		35.8		47.6		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	16.0	44.7		64.7		64.7		
Max Q Clear Time (g_c+I1), s	7.0	16.8		28.6		15.6		
Green Ext Time (p_c), s	0.1	14.8		1.9		18.5		

Intersection Summary	
HCM 2010 Ctrl Delay	18.7
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

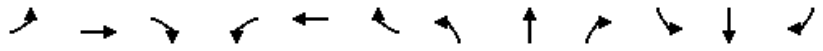


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1088	434	142	816	640	492	49	282	0	0	0
Future Volume (veh/h)	0	1088	434	142	816	640	492	49	282	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	0	1183	237	154	887	382	573	0	157			
Adj No. of Lanes	0	3	1	1	3	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	2356	733	195	3250	985	812	0	362			
Arrive On Green	0.00	0.46	0.46	0.11	0.64	0.64	0.23	0.00	0.23			
Sat Flow, veh/h	0	5253	1581	1774	5085	1541	3548	0	1581			
Grp Volume(v), veh/h	0	1183	237	154	887	382	573	0	157			
Grp Sat Flow(s),veh/h/ln	0	1695	1581	1774	1695	1541	1774	0	1581			
Q Serve(g_s), s	0.0	9.9	5.7	5.1	4.6	7.2	9.0	0.0	5.2			
Cycle Q Clear(g_c), s	0.0	9.9	5.7	5.1	4.6	7.2	9.0	0.0	5.2			
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2356	733	195	3250	985	812	0	362			
V/C Ratio(X)	0.00	0.50	0.32	0.79	0.27	0.39	0.71	0.00	0.43			
Avail Cap(c_a), veh/h	0	4027	1252	322	5285	1602	2868	0	1278			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	11.4	10.3	26.3	4.8	5.3	21.5	0.0	20.0			
Incr Delay (d2), s/veh	0.0	0.1	0.1	2.7	0.0	0.1	0.4	0.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	4.6	2.5	2.7	2.1	3.0	4.4	0.0	2.3			
LnGrp Delay(d),s/veh	0.0	11.4	10.4	29.0	4.8	5.3	21.9	0.0	20.3			
LnGrp LOS		B	B	C	A	A	C		C			
Approach Vol, veh/h		1420			1423			730				
Approach Delay, s/veh		11.3			7.6			21.6				
Approach LOS		B			A			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	10.7	32.1		17.9		42.7		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	11.6	46.7		47.7		61.7		
Max Q Clear Time (g_c+I1), s	7.1	11.9		11.0		9.2		
Green Ext Time (p_c), s	0.1	14.5		1.3		16.1		

Intersection Summary	
HCM 2010 Ctrl Delay	11.9
HCM 2010 LOS	B

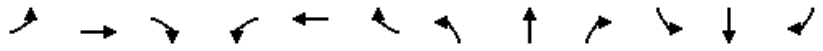
Notes
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	88	5	8	60	337	5	134	12	248	99	23
Future Volume (veh/h)	40	88	5	8	60	337	5	134	12	248	99	23
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.97	1.00		0.95	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	1900	1845	1845	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	48	105	4	10	71	224	6	160	7	295	118	10
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	132	471	18	131	101	319	133	570	25	359	966	81
Arrive On Green	0.07	0.26	0.26	0.07	0.26	0.26	0.07	0.16	0.14	0.20	0.29	0.27
Sat Flow, veh/h	1774	1782	68	1757	383	1207	1792	3482	151	1792	3334	279
Grp Volume(v), veh/h	48	0	109	10	0	295	6	82	85	295	63	65
Grp Sat Flow(s),veh/h/ln	1774	0	1849	1757	0	1590	1792	1787	1846	1792	1787	1826
Q Serve(g_s), s	1.4	0.0	2.5	0.3	0.0	9.0	0.2	2.2	2.2	8.5	1.4	1.4
Cycle Q Clear(g_c), s	1.4	0.0	2.5	0.3	0.0	9.0	0.2	2.2	2.2	8.5	1.4	1.4
Prop In Lane	1.00		0.04	1.00		0.76	1.00		0.08	1.00		0.15
Lane Grp Cap(c), veh/h	132	0	489	131	0	420	133	293	302	359	518	529
V/C Ratio(X)	0.36	0.00	0.22	0.08	0.00	0.70	0.05	0.28	0.28	0.82	0.12	0.12
Avail Cap(c_a), veh/h	363	0	1237	359	0	1064	699	1694	1749	699	1694	1731
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	15.5	23.2	0.0	17.9	23.1	19.7	19.8	20.6	14.1	14.2
Incr Delay (d2), s/veh	0.6	0.0	0.1	0.1	0.0	0.8	0.1	0.2	0.2	1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.3	0.1	0.0	4.0	0.1	1.1	1.1	4.4	0.7	0.7
LnGrp Delay(d),s/veh	24.3	0.0	15.6	23.3	0.0	18.7	23.2	19.9	20.0	22.4	14.1	14.2
LnGrp LOS	C		B	C		B	C	B	B	C	B	B
Approach Vol, veh/h		157			305			173			423	
Approach Delay, s/veh		18.2			18.8			20.1			19.9	
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	14.8	12.8	8.0	18.2	8.0	19.6	8.0	18.2
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.7	11.0	36.0	21.0	49.7	11.0	36.0
Max Q Clear Time (g_c+I1), s	10.5	4.2	2.3	4.5	2.2	3.4	3.4	11.0
Green Ext Time (p_c), s	0.3	0.9	0.0	1.5	0.0	0.9	0.0	1.5

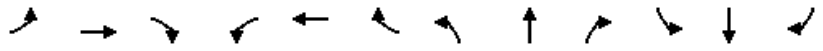
Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	184	177	277	172	161	95	513	137	149	852	61
Future Volume (veh/h)	122	184	177	277	172	161	95	513	137	149	852	61
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	134	202	173	304	189	159	104	564	138	164	936	64
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	348	227	194	338	222	187	132	703	171	269	1096	75
Arrive On Green	0.19	0.24	0.24	0.19	0.24	0.24	0.07	0.25	0.23	0.15	0.32	0.31
Sat Flow, veh/h	1792	930	796	1774	926	779	1792	2846	694	1792	3388	232
Grp Volume(v), veh/h	134	0	375	304	0	348	104	353	349	164	494	506
Grp Sat Flow(s),veh/h/ln	1792	0	1726	1774	0	1704	1792	1787	1753	1792	1787	1833
Q Serve(g_s), s	6.2	0.0	19.9	15.9	0.0	18.5	5.4	17.6	17.8	8.1	24.5	24.5
Cycle Q Clear(g_c), s	6.2	0.0	19.9	15.9	0.0	18.5	5.4	17.6	17.8	8.1	24.5	24.5
Prop In Lane	1.00		0.46	1.00		0.46	1.00		0.40	1.00		0.13
Lane Grp Cap(c), veh/h	348	0	422	338	0	409	132	441	433	269	578	593
V/C Ratio(X)	0.38	0.00	0.89	0.90	0.00	0.85	0.79	0.80	0.81	0.61	0.85	0.85
Avail Cap(c_a), veh/h	348	0	635	393	0	717	189	642	630	269	718	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	0.0	34.6	37.5	0.0	34.4	43.2	33.5	33.8	37.7	30.0	30.1
Incr Delay (d2), s/veh	0.3	0.0	7.4	19.6	0.0	1.9	8.2	2.7	3.0	2.9	7.0	6.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	10.3	9.6	0.0	8.9	3.0	9.0	9.0	4.2	13.2	13.5
LnGrp Delay(d),s/veh	33.5	0.0	42.0	57.1	0.0	36.4	51.4	36.3	36.8	40.6	37.0	36.9
LnGrp LOS	C		D	E		D	D	D	D	D	D	D
Approach Vol, veh/h		509			652			806			1164	
Approach Delay, s/veh		39.8			46.0			38.4			37.5	
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	32.0	27.2	11.0	34.7	22.4	26.8	18.2	27.4
Change Period (Y+Rc), s	4.0	4.0	4.0	5.3	4.0	4.0	4.0	5.3
Max Green Setting (Gmax), s	21.0	34.9	10.0	36.8	16.0	39.9	14.0	32.8
Max Q Clear Time (g_c+I1), s	17.9	21.9	7.4	26.5	8.2	20.5	10.1	19.8
Green Ext Time (p_c), s	0.2	1.1	0.0	2.9	0.4	1.2	0.1	2.1

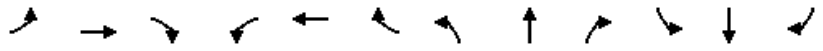
Intersection Summary	
HCM 2010 Ctrl Delay	39.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	5	0	59	0	726	40	319	1012	0
Future Volume (veh/h)	0	0	0	5	0	59	0	726	40	319	1012	0
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		0.98	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	0	1900	1863	1881	1881	1881	1881	0
Adj Flow Rate, veh/h				6	0	8	0	834	17	367	1163	0
Adj No. of Lanes				1	0	1	1	2	1	1	2	0
Peak Hour Factor				0.87	0.92	0.87	0.92	0.87	0.87	0.87	0.87	0.92
Percent Heavy Veh, %				0	0	0	2	1	1	1	1	0
Cap, veh/h				26	0	23	158	1702	743	441	2896	0
Arrive On Green				0.01	0.00	0.01	0.00	0.48	0.48	0.25	0.81	0.00
Sat Flow, veh/h				1810	0	1615	481	3574	1559	1792	3668	0
Grp Volume(v), veh/h				6	0	8	0	834	17	367	1163	0
Grp Sat Flow(s),veh/h/ln				1810	0	1615	481	1787	1559	1792	1787	0
Q Serve(g_s), s				0.1	0.0	0.2	0.0	7.3	0.3	8.8	4.2	0.0
Cycle Q Clear(g_c), s				0.1	0.0	0.2	0.0	7.3	0.3	8.8	4.2	0.0
Prop In Lane				1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				26	0	23	158	1702	743	441	2896	0
V/C Ratio(X)				0.23	0.00	0.35	0.00	0.49	0.02	0.83	0.40	0.00
Avail Cap(c_a), veh/h				1350	0	1205	362	3216	1403	1298	6118	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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				22.2	0.0	22.2	0.0	8.2	6.3	16.3	1.2	0.0
Incr Delay (d2), s/veh				1.7	0.0	3.3	0.0	0.1	0.0	1.6	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				0.1	0.0	0.1	0.0	3.5	0.1	4.6	2.0	0.0
LnGrp Delay(d),s/veh				23.9	0.0	25.6	0.0	8.2	6.3	17.9	1.3	0.0
LnGrp LOS				C		C		A	A	B	A	
Approach Vol, veh/h					14			851			1530	
Approach Delay, s/veh					24.8			8.2			5.2	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	15.2	25.7				40.9		4.6
Change Period (Y+Rc), s	4.0	5.3				5.3		4.0
Max Green Setting (Gmax), s	33.0	39.7				76.7		34.0
Max Q Clear Time (g_c+I1), s	10.8	9.3				6.2		2.2
Green Ext Time (p_c), s	0.5	11.0				12.6		0.0

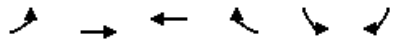
Intersection Summary	
HCM 2010 Ctrl Delay	6.4
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	29	0	314	0	456	44	366	451	2
Future Volume (veh/h)	1	0	0	29	0	314	0	456	44	366	451	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	1	0	0	36	0	53	0	563	54	452	557	2
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	75	30	0	143	83	74	4	993	95	524	2452	9
Arrive On Green	0.04	0.00	0.00	0.08	0.00	0.05	0.00	0.30	0.27	0.29	0.67	0.65
Sat Flow, veh/h	1810	3705	0	1792	1787	1593	1810	3326	318	1792	3653	13
Grp Volume(v), veh/h	1	0	0	36	0	53	0	305	312	452	272	287
Grp Sat Flow(s),veh/h/ln	1810	1805	0	1792	1787	1593	1810	1805	1839	1792	1787	1879
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	1.6	0.0	7.1	7.2	11.9	2.9	2.9
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.9	0.0	1.6	0.0	7.1	7.2	11.9	2.9	2.9
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.17	1.00		0.01
Lane Grp Cap(c), veh/h	75	30	0	143	83	74	4	539	549	524	1199	1261
V/C Ratio(X)	0.01	0.00	0.00	0.25	0.00	0.72	0.00	0.57	0.57	0.86	0.23	0.23
Avail Cap(c_a), veh/h	254	1812	0	612	1256	1120	145	1124	1145	2230	3194	3358
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	0.0	0.0	21.5	0.0	23.4	0.0	14.7	14.9	16.7	3.2	3.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.9	0.0	4.8	0.0	0.3	0.3	1.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.5	0.0	0.8	0.0	3.5	3.6	6.0	1.4	1.5
LnGrp Delay(d),s/veh	23.0	0.0	0.0	22.5	0.0	28.2	0.0	15.1	15.2	18.4	3.2	3.2
LnGrp LOS	C			C		C		B	B	B	A	A
Approach Vol, veh/h		1			89			617			1011	
Approach Delay, s/veh		23.0			25.9			15.1			10.0	
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	18.6	18.9	8.0	4.4	0.0	37.4	6.1	6.3
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	62.6	29.7	15.0	25.0	4.0	87.7	5.0	35.0
Max Q Clear Time (g_c+I1), s	13.9	9.2	2.9	0.0	0.0	4.9	2.0	3.6
Green Ext Time (p_c), s	0.7	4.4	0.0	0.0	0.0	4.8	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B



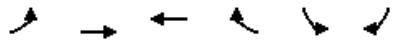
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	48	19	81	247	0
Future Volume (veh/h)	0	48	19	81	247	0
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	52	21	88	268	0
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2	2441	1220	1092	314	316
Arrive On Green	0.00	0.69	0.69	0.69	0.18	0.00
Sat Flow, veh/h	1774	3632	1863	1583	1774	1583
Grp Volume(v), veh/h	0	52	21	88	268	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1583	1774	1583
Q Serve(g_s), s	0.0	0.4	0.3	1.6	13.2	0.0
Cycle Q Clear(g_c), s	0.0	0.4	0.3	1.6	13.2	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	2	2441	1220	1092	314	316
V/C Ratio(X)	0.00	0.02	0.02	0.08	0.85	0.00
Avail Cap(c_a), veh/h	177	2441	1220	1092	788	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	4.4	4.4	4.6	35.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	6.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.8	7.0	0.0
LnGrp Delay(d),s/veh	0.0	4.4	4.4	4.7	42.4	0.0
LnGrp LOS		A	A	A	D	
Approach Vol, veh/h		52	109		268	
Approach Delay, s/veh		4.4	4.7		42.4	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				68.1		21.9	0.0	68.1
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				38.0		40.0	9.0	23.0
Max Q Clear Time (g_c+I1), s				2.4		15.2	0.0	3.6
Green Ext Time (p_c), s				1.0		0.8	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	28.2
HCM 2010 LOS	C

Notes

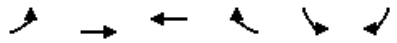
User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	295	100	127	196	0
Future Volume (veh/h)	0	295	100	127	196	0
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	321	109	138	213	0
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2	1573	786	704	749	669
Arrive On Green	0.00	0.44	0.44	0.44	0.42	0.00
Sat Flow, veh/h	1774	3632	1863	1583	1774	1583
Grp Volume(v), veh/h	0	321	109	138	213	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1583	1774	1583
Q Serve(g_s), s	0.0	5.0	3.3	4.8	7.1	0.0
Cycle Q Clear(g_c), s	0.0	5.0	3.3	4.8	7.1	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	2	1573	786	704	749	669
V/C Ratio(X)	0.00	0.20	0.14	0.20	0.28	0.00
Avail Cap(c_a), veh/h	177	1573	786	704	749	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	15.3	14.8	15.2	17.1	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.4	0.6	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.5	1.7	2.2	3.6	0.0
LnGrp Delay(d),s/veh	0.0	15.6	15.2	15.8	18.0	0.0
LnGrp LOS		B	B	B	B	
Approach Vol, veh/h		321	247		213	
Approach Delay, s/veh		15.6	15.5		18.0	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				46.0		44.0	0.0	46.0
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				40.0		38.0	9.0	25.0
Max Q Clear Time (g_c+I1), s				7.0		9.1	0.0	6.8
Green Ext Time (p_c), s				3.8		0.6	0.0	3.3

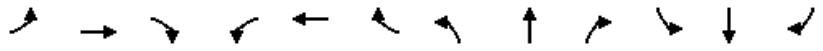
Intersection Summary	
HCM 2010 Ctrl Delay	16.2
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	221	329	158	128	970	32
Future Volume (veh/h)	221	329	158	128	970	32
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	260	387	186	151	1141	38
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	371	2369	662	296	1372	631
Arrive On Green	0.21	0.47	0.19	0.19	0.39	0.39
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	260	387	186	151	1141	38
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	7.8	2.5	2.6	4.9	17.0	0.8
Cycle Q Clear(g_c), s	7.8	2.5	2.6	4.9	17.0	0.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	371	2369	662	296	1372	631
V/C Ratio(X)	0.70	0.16	0.28	0.51	0.83	0.06
Avail Cap(c_a), veh/h	556	6341	3057	1368	2445	1125
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	21.0	8.9	20.0	21.0	15.7	10.8
Incr Delay (d2), s/veh	2.4	0.0	0.1	0.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	1.2	1.3	2.2	8.2	0.4
LnGrp Delay(d),s/veh	23.4	8.9	20.1	21.5	16.2	10.8
LnGrp LOS	C	A	C	C	B	B
Approach Vol, veh/h		647	337		1179	
Approach Delay, s/veh		14.7	20.7		16.0	
Approach LOS		B	C		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		30.8			16.0	14.7		26.7
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		70.3			16.0	48.3		39.1
Max Q Clear Time (g_c+I1), s		4.5			9.8	6.9		19.0
Green Ext Time (p_c), s		2.6			0.4	2.6		2.4

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)	156	1148	0	0	203	1072	91	0	143	0	0	0
Future Volume (veh/h)	156	1148	0	0	203	1072	91	0	143	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1845	1845	1845			
Adj Flow Rate, veh/h	161	1184	0	0	209	652	94	0	32			
Adj No. of Lanes	2	3	0	0	1	2	2	0	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, %	1	1	0	0	1	1	3	3	3			
Cap, veh/h	302	3458	0	0	902	1534	396	0	177			
Arrive On Green	0.09	0.67	0.00	0.00	0.48	0.48	0.11	0.00	0.11			
Sat Flow, veh/h	3476	5305	0	0	1881	3198	3514	0	1568			
Grp Volume(v), veh/h	161	1184	0	0	209	652	94	0	32			
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1881	1599	1757	0	1568			
Q Serve(g_s), s	1.7	3.7	0.0	0.0	2.4	5.0	0.9	0.0	0.7			
Cycle Q Clear(g_c), s	1.7	3.7	0.0	0.0	2.4	5.0	0.9	0.0	0.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	302	3458	0	0	902	1534	396	0	177			
V/C Ratio(X)	0.53	0.34	0.00	0.00	0.23	0.43	0.24	0.00	0.18			
Avail Cap(c_a), veh/h	557	9018	0	0	2801	4761	4348	0	1940			
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	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	16.4	2.6	0.0	0.0	5.7	6.4	15.1	0.0	15.0			
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.8	1.7	0.0	0.0	1.2	2.2	0.5	0.0	0.6			
LnGrp Delay(d),s/veh	16.9	2.6	0.0	0.0	5.7	6.4	15.2	0.0	15.2			
LnGrp LOS	B	A			A	A	B		B			
Approach Vol, veh/h		1345			861			126				
Approach Delay, s/veh		4.3			6.3			15.2				
Approach LOS		A			A			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		29.2		8.2	7.2	21.9		
Change Period (Y+Rc), s		5.3		5.3	4.0	5.3		
Max Green Setting (Gmax), s		64.4		45.0	6.0	54.4		
Max Q Clear Time (g_c+I1), s		5.7		2.9	3.7	7.0		
Green Ext Time (p_c), s		9.8		0.2	0.1	9.7		

Intersection Summary	
HCM 2010 Ctrl Delay	5.6
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	38.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	104	447	42	39	373	119
Future Vol, veh/h	104	447	42	39	373	119
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	111	476	45	41	397	127

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	985	65	0	0	86	0
Stage 1	65	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	277	1005	-	-	1523	-
Stage 1	963	-	-	-	-	-
Stage 2	392	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	199	1005	-	-	1523	-
Mov Cap-2 Maneuver	199	-	-	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	282	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	72.1	0	6.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	570	1523	-
HCM Lane V/C Ratio	-	-	1.028	0.261	-
HCM Control Delay (s)	-	-	72.1	8.2	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	15.9	1	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	255	1237	943	93	323	433
Future Volume (veh/h)	255	1237	943	93	323	433
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1863	1863	1776	1776
Adj Flow Rate, veh/h	277	1345	1025	-97	351	201
Adj No. of Lanes	2	2	3	1	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	7	7
Cap, veh/h	397	2235	2271	707	415	708
Arrive On Green	0.11	0.63	0.45	0.00	0.25	0.27
Sat Flow, veh/h	3476	3668	5253	1583	1691	2656
Grp Volume(v), veh/h	277	1345	1025	-97	351	201
Grp Sat Flow(s),veh/h/ln	1738	1787	1695	1583	1691	1328
Q Serve(g_s), s	4.8	14.0	8.7	0.0	12.2	3.7
Cycle Q Clear(g_c), s	4.8	14.0	8.7	0.0	12.2	3.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	397	2235	2271	707	415	708
V/C Ratio(X)	0.70	0.60	0.45	-0.14	0.84	0.28
Avail Cap(c_a), veh/h	1065	4324	4266	1328	1555	2498
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	26.4	7.0	11.9	0.0	22.3	18.0
Incr Delay (d2), s/veh	0.8	0.1	0.1	0.0	1.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.8	4.0	0.0	5.9	3.0
LnGrp Delay(d),s/veh	27.3	7.1	11.9	0.0	24.1	18.1
LnGrp LOS	C	A	B		C	B
Approach Vol, veh/h		1622	928		552	
Approach Delay, s/veh		10.5	13.2		21.9	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				42.8		19.2	11.1	31.7
Change Period (Y+Rc), s				5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s				73.7		57.0	19.0	50.7
Max Q Clear Time (g_c+I1), s				16.0		14.2	6.8	10.7
Green Ext Time (p_c), s				17.2		1.0	0.4	15.7

Intersection Summary	
HCM 2010 Ctrl Delay	13.3
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1044	516	0	896	140	16
Future Volume (veh/h)	1044	516	0	896	140	16
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	1135	561	0	974	152	17
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2218	992	0	2218	1007	463
Arrive On Green	0.63	0.63	0.00	0.63	0.29	0.29
Sat Flow, veh/h	3632	1583	0	3725	3442	1583
Grp Volume(v), veh/h	1135	561	0	974	152	17
Grp Sat Flow(s),veh/h/ln	1770	1583	0	1770	1721	1583
Q Serve(g_s), s	17.5	20.3	0.0	14.0	3.2	0.8
Cycle Q Clear(g_c), s	17.5	20.3	0.0	14.0	3.2	0.8
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2218	992	0	2218	1007	463
V/C Ratio(X)	0.51	0.57	0.00	0.44	0.15	0.04
Avail Cap(c_a), veh/h	3679	1646	0	3679	1007	463
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	10.2	10.7	0.0	9.5	25.9	25.1
Incr Delay (d2), s/veh	0.2	0.5	0.0	0.1	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	8.9	0.0	6.8	1.6	0.3
LnGrp Delay(d),s/veh	10.4	11.2	0.0	9.7	26.3	25.2
LnGrp LOS	B	B		A	C	C
Approach Vol, veh/h	1696			974	169	
Approach Delay, s/veh	10.6			9.7	26.1	
Approach LOS	B			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		66.1				66.1
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		28.5		102.5				102.5
Max Q Clear Time (g_c+I1), s		5.2		22.3				16.0
Green Ext Time (p_c), s		0.5		39.3				40.5

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	362	965	33	165	454	326
Future Volume (veh/h)	362	965	33	165	454	326
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1397	1397	1845	1845
Adj Flow Rate, veh/h	389	379	35	177	488	325
Adj No. of Lanes	2	1	2	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	36	36	3	3
Cap, veh/h	1240	549	227	747	931	428
Arrive On Green	0.35	0.35	0.09	0.53	0.27	0.27
Sat Flow, veh/h	3632	1568	2581	1397	3408	1568
Grp Volume(v), veh/h	389	379	35	177	488	325
Grp Sat Flow(s),veh/h/ln	1770	1568	1291	1397	1704	1568
Q Serve(g_s), s	3.3	8.6	0.5	2.8	5.1	7.9
Cycle Q Clear(g_c), s	3.3	8.6	0.5	2.8	5.1	7.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1240	549	227	747	931	428
V/C Ratio(X)	0.31	0.69	0.15	0.24	0.52	0.76
Avail Cap(c_a), veh/h	5699	2524	434	2619	1966	904
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	9.9	11.6	17.5	5.2	12.8	13.9
Incr Delay (d2), s/veh	0.1	0.6	0.3	0.1	0.2	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.8	0.2	1.1	2.4	3.5
LnGrp Delay(d),s/veh	9.9	12.2	17.9	5.2	13.0	14.9
LnGrp LOS	A	B	B	A	B	B
Approach Vol, veh/h	768			212	813	
Approach Delay, s/veh	11.0			7.3	13.8	
Approach LOS	B			A	B	

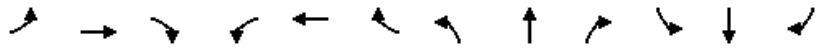
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		15.4	7.7	18.6				26.2
Change Period (Y+Rc), s		4.0	6.0	4.6				4.6
Max Green Setting (Gmax), s		24.0	5.0	66.4				77.4
Max Q Clear Time (g_c+I1), s		9.9	2.5	10.6				4.8
Green Ext Time (p_c), s		1.5	0.0	2.8				2.8

Intersection Summary	
HCM 2010 Ctrl Delay	11.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	198	1	266	699	752	0	0	609	434
Future Volume (veh/h)	0	0	0	198	1	266	699	752	0	0	609	434
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		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	1900	1881	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				233	1	140	822	885	0	0	716	163
Adj No. of Lanes				2	0	1	2	2	0	0	4	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, %				1	1	1	2	2	0	0	2	2
Cap, veh/h				543	0	250	1004	2437	0	0	2047	504
Arrive On Green				0.16	0.16	0.16	0.29	0.69	0.00	0.00	0.32	0.32
Sat Flow, veh/h				3476	0	1599	3442	3632	0	0	6669	1577
Grp Volume(v), veh/h				233	0	140	822	885	0	0	716	163
Grp Sat Flow(s),veh/h/ln				1738	0	1599	1721	1770	0	0	1602	1577
Q Serve(g_s), s				3.1	0.0	4.2	11.5	5.4	0.0	0.0	4.4	4.0
Cycle Q Clear(g_c), s				3.1	0.0	4.2	11.5	5.4	0.0	0.0	4.4	4.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				543	0	250	1004	2437	0	0	2047	504
V/C Ratio(X)				0.43	0.00	0.56	0.82	0.36	0.00	0.00	0.35	0.32
Avail Cap(c_a), veh/h				2897	0	1333	3002	6105	0	0	4968	1223
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				19.7	0.0	20.1	17.0	3.3	0.0	0.0	13.5	13.3
Incr Delay (d2), s/veh				0.2	0.0	0.7	0.6	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	0.0	1.9	5.5	2.6	0.0	0.0	1.9	1.8
LnGrp Delay(d),s/veh				19.9	0.0	20.9	17.7	3.4	0.0	0.0	13.5	13.5
LnGrp LOS				B		C	B	A			B	B
Approach Vol, veh/h					373			1707			879	
Approach Delay, s/veh					20.2			10.2			13.5	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		39.5			19.0	20.5		12.1
Change Period (Y+Rc), s		5.3			4.0	5.3		5.3
Max Green Setting (Gmax), s		87.7			45.0	38.7		41.7
Max Q Clear Time (g_c+I1), s		7.4			13.5	6.4		6.2
Green Ext Time (p_c), s		9.1			1.6	8.5		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B



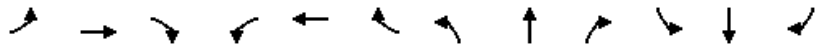
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	468	2	936	0	0	0	0	982	263	284	587	0
Future Volume (veh/h)	468	2	936	0	0	0	0	982	263	284	587	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845				0	1881	1900	1863	1863	0
Adj Flow Rate, veh/h	544	0	1089				0	1142	290	330	683	0
Adj No. of Lanes	2	0	2				0	4	0	2	2	0
Peak Hour Factor	0.86	0.86	0.86				0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3				0	1	1	2	2	0
Cap, veh/h	1520	0	1357				0	1605	404	406	1623	0
Arrive On Green	0.43	0.00	0.43				0.00	0.31	0.29	0.12	0.46	0.00
Sat Flow, veh/h	3514	0	3136				0	5456	1308	3442	3632	0
Grp Volume(v), veh/h	544	0	1089				0	1067	365	330	683	0
Grp Sat Flow(s),veh/h/ln	1757	0	1568				0	1618	1647	1721	1770	0
Q Serve(g_s), s	8.9	0.0	25.8				0.0	16.6	16.9	8.0	11.1	0.0
Cycle Q Clear(g_c), s	8.9	0.0	25.8				0.0	16.6	16.9	8.0	11.1	0.0
Prop In Lane	1.00		1.00				0.00		0.79	1.00		0.00
Lane Grp Cap(c), veh/h	1520	0	1357				0	1500	509	406	1623	0
V/C Ratio(X)	0.36	0.00	0.80				0.00	0.71	0.72	0.81	0.42	0.00
Avail Cap(c_a), veh/h	3577	0	3193				0	1704	578	443	1864	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	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.3	0.0	21.1				0.0	26.1	26.7	36.8	15.5	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.2				0.0	0.9	2.8	9.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	11.3				0.0	7.5	8.1	4.3	5.4	0.0
LnGrp Delay(d),s/veh	16.4	0.0	22.2				0.0	27.1	29.5	46.0	15.6	0.0
LnGrp LOS	B		C					C	C	D	B	
Approach Vol, veh/h		1633						1432			1013	
Approach Delay, s/veh		20.3						27.7			25.5	
Approach LOS		C						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.1	30.4		41.0		44.5		
Change Period (Y+Rc), s	4.0	5.3		4.5		* 5.3		
Max Green Setting (Gmax), s	10.0	28.7		86.5		* 45		
Max Q Clear Time (g_c+I1), s	10.9	18.9		27.8		13.1		
Green Ext Time (p_c), s	0.1	6.2		8.7		11.6		

Intersection Summary	
HCM 2010 Ctrl Delay	24.2
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



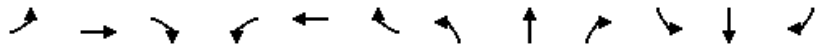
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	4	105	950	98	134	129	620	952	12	566	30
Future Volume (veh/h)	44	4	105	950	98	134	129	620	952	12	566	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1827	1827	1900	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	52	5	30	1118	115	112	152	729	374	14	666	31
Adj No. of Lanes	1	1	0	3	1	0	1	2	2	1	2	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	8	8	8	4	4	4	2	2	2	5	5	5
Cap, veh/h	64	18	111	1344	274	267	191	1305	1010	93	1054	49
Arrive On Green	0.04	0.09	0.08	0.27	0.32	0.31	0.11	0.37	0.37	0.05	0.31	0.30
Sat Flow, veh/h	1675	215	1288	4907	851	829	1774	3539	2741	1723	3345	156
Grp Volume(v), veh/h	52	0	35	1118	0	227	152	729	374	14	342	355
Grp Sat Flow(s),veh/h/ln	1675	0	1502	1636	0	1681	1774	1770	1370	1723	1719	1782
Q Serve(g_s), s	2.3	0.0	1.6	15.8	0.0	7.8	6.2	12.1	7.4	0.6	12.5	12.6
Cycle Q Clear(g_c), s	2.3	0.0	1.6	15.8	0.0	7.8	6.2	12.1	7.4	0.6	12.5	12.6
Prop In Lane	1.00		0.86	1.00		0.49	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	64	0	129	1344	0	541	191	1305	1010	93	541	561
V/C Ratio(X)	0.81	0.00	0.27	0.83	0.00	0.42	0.79	0.56	0.37	0.15	0.63	0.63
Avail Cap(c_a), veh/h	273	0	632	3394	0	1596	650	3696	2862	117	1282	1329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	0.0	31.8	25.2	0.0	19.7	32.1	18.5	17.0	33.2	21.6	21.6
Incr Delay (d2), s/veh	8.9	0.0	0.4	0.5	0.0	0.2	2.8	0.1	0.1	0.3	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.7	7.2	0.0	3.6	3.1	5.9	2.8	0.3	6.0	6.2
LnGrp Delay(d),s/veh	44.1	0.0	32.2	25.7	0.0	19.9	34.9	18.6	17.1	33.5	22.1	22.1
LnGrp LOS	D		C	C		B	C	B	B	C	C	C
Approach Vol, veh/h		87			1345			1255			711	
Approach Delay, s/veh		39.3			24.7			20.2			22.3	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	31.2	24.2	10.3	12.0	27.2	6.8	27.7
Change Period (Y+Rc), s	4.0	4.9	4.0	4.6	4.0	4.9	4.0	4.6
Max Green Setting (Gmax), s	5.0	76.1	51.0	30.4	27.0	54.1	12.0	69.4
Max Q Clear Time (g_c+I1), s	2.6	14.1	17.8	3.6	8.2	14.6	4.3	9.8
Green Ext Time (p_c), s	0.0	7.8	2.4	0.9	0.2	7.7	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	22.9
HCM 2010 LOS	C

Notes

User approved changes to right turn type.



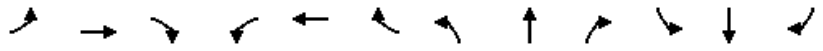
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	327	0	1441	0	0	0	0	1374	434	488	1141	0
Future Volume (veh/h)	327	0	1441	0	0	0	0	1374	434	488	1141	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	20				0	20	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	372	0	1354				0	1561	493	555	1297	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1155	0	1194				0	1954	366	618	3054	0
Arrive On Green	0.11	0.00	0.11				0.00	0.13	0.13	0.06	0.20	0.00
Sat Flow, veh/h	3442	0	3610				0	4515	1190	3343	5103	0
Grp Volume(v), veh/h	372	0	1354				0	1388	666	555	1297	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1607	1672	1647	0
Q Serve(g_s), s	17.2	0.0	57.2				0.0	70.0	70.0	28.5	39.6	0.0
Cycle Q Clear(g_c), s	17.2	0.0	57.2				0.0	70.0	70.0	28.5	39.6	0.0
Prop In Lane	1.00		1.00				0.00		0.74	1.00		0.00
Lane Grp Cap(c), veh/h	1155	0	1194				0	1358	675	618	3054	0
V/C Ratio(X)	0.32	0.00	1.13				0.00	1.02	0.99	0.90	0.42	0.00
Avail Cap(c_a), veh/h	1155	0	1194				0	1358	651	774	3054	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.7	0.0	77.0				0.0	74.9	75.0	79.5	42.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	70.9				0.0	30.3	31.2	10.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	51.4				0.0	38.0	20.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	0.0	33.6				0.0	30.5	41.9	14.1	18.1	0.0
LnGrp Delay(d),s/veh	58.8	0.0	199.3				0.0	143.2	126.2	89.6	42.0	0.0
LnGrp LOS	E		F					F	F	F	D	
Approach Vol, veh/h		1726						2054			1852	
Approach Delay, s/veh		169.0						137.7			56.3	
Approach LOS		F						F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	36.9	74.0		62.0		110.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	40.0	* 69		56.7		64.1		
Max Q Clear Time (g_c+I1), s	30.5	72.0		59.2		41.6		
Green Ext Time (p_c), s	1.5	0.0		0.0		7.5		

Intersection Summary	
HCM 2010 Ctrl Delay	120.5
HCM 2010 LOS	F

Notes

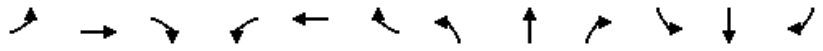
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	47	60	166	33	127	58	872	144	201	1155	25
Future Volume (veh/h)	57	47	60	166	33	127	58	872	144	201	1155	25
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	53	48	189	38	-93	66	991	159	228	1312	27
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	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	1	1	1	2	2	2	2	2	2
Cap, veh/h	107	87	167	241	253	215	85	1470	236	312	1857	38
Arrive On Green	0.11	0.11	0.11	0.13	0.13	0.00	0.05	0.48	0.47	0.09	0.52	0.52
Sat Flow, veh/h	989	806	1546	1792	1881	1599	1774	3054	490	3442	3545	73
Grp Volume(v), veh/h	118	0	48	189	38	-93	66	574	576	228	655	684
Grp Sat Flow(s),veh/h/ln	1795	0	1546	1792	1881	1599	1774	1770	1775	1721	1770	1848
Q Serve(g_s), s	5.4	0.0	2.5	8.8	1.5	0.0	3.2	21.4	21.5	5.6	24.1	24.1
Cycle Q Clear(g_c), s	5.4	0.0	2.5	8.8	1.5	0.0	3.2	21.4	21.5	5.6	24.1	24.1
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.28	1.00		0.04
Lane Grp Cap(c), veh/h	194	0	167	241	253	215	85	852	854	312	927	968
V/C Ratio(X)	0.61	0.00	0.29	0.78	0.15	-0.43	0.78	0.67	0.67	0.73	0.71	0.71
Avail Cap(c_a), veh/h	730	0	629	791	831	706	330	1542	1546	640	1542	1610
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	0.0	35.3	36.0	32.9	0.0	40.5	17.1	17.2	38.1	15.5	15.5
Incr Delay (d2), s/veh	1.2	0.0	0.3	2.1	0.1	0.0	5.5	0.3	0.4	1.3	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	1.1	4.5	0.8	0.0	1.7	10.4	10.5	2.7	11.7	12.3
LnGrp Delay(d),s/veh	37.8	0.0	35.7	38.2	33.0	0.0	46.1	17.5	17.6	39.4	15.9	15.9
LnGrp LOS	D		D	D	C		D	B	B	D	B	B
Approach Vol, veh/h		166			134			1216			1567	
Approach Delay, s/veh		37.2			63.2			19.1			19.3	
Approach LOS		D			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.8	45.4		13.3	8.1	49.1		15.6
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.8	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	7.6	23.5		7.4	5.2	26.1		10.8
Green Ext Time (p_c), s	0.3	17.3		0.4	0.0	17.1		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C



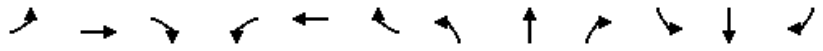
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	199	90	93	127	562	118	823	70	821	1078	134
Future Volume (veh/h)	155	199	90	93	127	562	118	823	70	821	1078	134
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1881	1881	1881	1881	1881	1900	1863	1863	1863
Adj Flow Rate, veh/h	174	224	28	104	143	631	133	925	78	922	1211	76
Adj No. of Lanes	1	2	0	1	1	2	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	201	721	89	128	350	1404	293	1045	88	888	1407	791
Arrive On Green	0.11	0.23	0.22	0.07	0.19	0.18	0.16	0.31	0.30	0.26	0.40	0.39
Sat Flow, veh/h	1774	3164	390	1792	1881	3198	1792	3333	281	3442	3539	1581
Grp Volume(v), veh/h	174	124	128	104	143	631	133	496	507	922	1211	76
Grp Sat Flow(s),veh/h/ln	1774	1770	1785	1792	1881	1599	1792	1787	1827	1721	1770	1581
Q Serve(g_s), s	12.0	7.2	7.4	7.1	8.3	17.1	8.3	32.7	32.7	32.0	38.9	1.4
Cycle Q Clear(g_c), s	12.0	7.2	7.4	7.1	8.3	17.1	8.3	32.7	32.7	32.0	38.9	1.4
Prop In Lane	1.00		0.22	1.00		1.00	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	201	403	407	128	350	1404	293	561	573	888	1407	791
V/C Ratio(X)	0.86	0.31	0.31	0.81	0.41	0.45	0.45	0.88	0.88	1.04	0.86	0.10
Avail Cap(c_a), veh/h	329	1056	1065	144	925	2383	293	692	707	888	1969	1043
HCM Platoon Ratio	1.00	1.00	1.00	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	54.0	39.7	39.9	56.8	44.5	24.3	46.8	40.4	40.5	46.0	34.2	5.9
Incr Delay (d2), s/veh	6.9	0.2	0.2	23.2	0.3	0.1	0.4	9.9	9.7	40.5	2.2	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	6.2	3.5	3.7	4.4	4.4	7.5	4.2	17.7	18.0	20.2	19.4	0.6
LnGrp Delay(d),s/veh	60.9	39.9	40.0	80.0	44.8	24.4	47.2	50.3	50.3	86.5	36.4	5.9
LnGrp LOS	E	D	D	F	D	C	D	D	D	F	D	A
Approach Vol, veh/h		426			878			1136			2209	
Approach Delay, s/veh		48.5			34.3			49.9			56.3	
Approach LOS		D			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.0	42.9	12.9	32.3	25.6	53.3	18.1	27.0
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	5.3	* 5.3	4.0	4.6
Max Green Setting (Gmax), s	32.0	46.7	10.0	73.4	11.0	* 68	23.0	60.4
Max Q Clear Time (g_c+I1), s	34.0	34.7	9.1	9.4	10.3	40.9	14.0	19.1
Green Ext Time (p_c), s	0.0	2.9	0.0	2.8	0.3	7.1	0.1	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	49.9
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



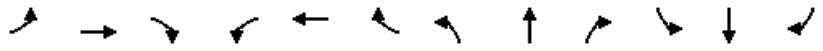
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	79	797	6	42	62	509	841	9	65	1171	183
Future Volume (veh/h)	159	79	797	6	42	62	509	841	9	65	1171	183
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	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	1881	1881	1881	1900	1863	1863	1881	1881	1881	1863	1863	1900
Adj Flow Rate, veh/h	161	80	326	6	42	16	514	849	2	66	1183	168
Adj No. of Lanes	1	1	2	0	1	1	2	2	1	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	2	2	2
Cap, veh/h	284	298	446	11	80	76	619	1924	841	85	1792	254
Arrive On Green	0.16	0.16	0.16	0.05	0.05	0.05	0.18	0.54	0.54	0.05	0.40	0.39
Sat Flow, veh/h	1792	1881	2814	231	1620	1540	3476	3574	1563	1774	4490	637
Grp Volume(v), veh/h	161	80	326	48	0	16	514	849	2	66	893	458
Grp Sat Flow(s),veh/h/ln	1792	1881	1407	1851	0	1540	1738	1787	1563	1774	1695	1737
Q Serve(g_s), s	6.5	2.9	8.6	2.0	0.0	0.8	11.1	11.2	0.0	2.9	16.7	16.8
Cycle Q Clear(g_c), s	6.5	2.9	8.6	2.0	0.0	0.8	11.1	11.2	0.0	2.9	16.7	16.8
Prop In Lane	1.00		1.00	0.12		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	284	298	446	92	0	76	619	1924	841	85	1353	693
V/C Ratio(X)	0.57	0.27	0.73	0.52	0.00	0.21	0.83	0.44	0.00	0.78	0.66	0.66
Avail Cap(c_a), veh/h	465	488	730	928	0	771	1027	2471	1080	251	1821	933
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	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	30.3	28.8	31.2	36.1	0.0	35.5	30.9	10.9	8.3	36.7	19.1	19.2
Incr Delay (d2), s/veh	0.7	0.2	0.9	1.7	0.0	0.5	1.1	0.1	0.0	5.7	0.2	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	3.2	1.5	3.4	1.0	0.0	0.3	5.4	5.4	0.0	1.5	7.9	8.1
LnGrp Delay(d),s/veh	30.9	28.9	32.0	37.8	0.0	36.0	32.0	10.9	8.3	42.3	19.3	19.6
LnGrp LOS	C	C	C	D		D	C	B	A	D	B	B
Approach Vol, veh/h		567			64			1365			1417	
Approach Delay, s/veh		31.3			37.3			18.9			20.5	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	45.9		16.3	17.9	35.8		7.9
Change Period (Y+Rc), s	4.0	5.3		4.9	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	4.0	52.5		19.3	23.0	* 41		39.0
Max Q Clear Time (g_c+I1), s	4.9	13.2		10.6	13.1	18.8		4.0
Green Ext Time (p_c), s	0.0	14.5		0.9	0.8	11.5		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	21.9
HCM 2010 LOS	C

Notes

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



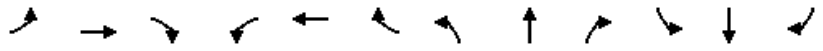
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	1243	265	109	856	40	205	56	87	49	32	80
Future Volume (veh/h)	107	1243	265	109	856	40	205	56	87	49	32	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	123	1429	216	125	984	-7	236	64	-45	56	37	77
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	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, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	151	1729	762	153	1732	775	299	457	389	73	105	218
Arrive On Green	0.08	0.48	0.48	0.09	0.48	0.00	0.09	0.24	0.00	0.04	0.20	0.19
Sat Flow, veh/h	1792	3574	1575	1792	3574	1599	3476	1881	1599	1810	532	1108
Grp Volume(v), veh/h	123	1429	216	125	984	-7	236	64	-45	56	0	114
Grp Sat Flow(s),veh/h/ln	1792	1787	1575	1792	1787	1599	1738	1881	1599	1810	0	1640
Q Serve(g_s), s	7.3	37.2	8.9	7.4	21.2	0.0	7.2	2.9	0.0	3.3	0.0	6.5
Cycle Q Clear(g_c), s	7.3	37.2	8.9	7.4	21.2	0.0	7.2	2.9	0.0	3.3	0.0	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.68
Lane Grp Cap(c), veh/h	151	1729	762	153	1732	775	299	457	389	73	0	323
V/C Ratio(X)	0.81	0.83	0.28	0.82	0.57	-0.01	0.79	0.14	-0.12	0.77	0.00	0.35
Avail Cap(c_a), veh/h	281	2030	895	215	1898	849	385	704	598	150	0	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	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.7	24.0	16.7	48.7	19.8	0.0	48.5	32.1	0.0	51.5	0.0	37.9
Incr Delay (d2), s/veh	3.9	2.2	0.1	10.6	0.2	0.0	6.1	0.1	0.0	6.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	18.8	3.9	4.1	10.4	0.0	3.7	1.5	0.0	1.8	0.0	3.0
LnGrp Delay(d),s/veh	52.7	26.2	16.8	59.3	20.0	0.0	54.6	32.2	0.0	57.8	0.0	38.1
LnGrp LOS	D	C	B	E	C		D	C		E		D
Approach Vol, veh/h		1768			1102			255			170	
Approach Delay, s/veh		26.9			24.6			58.6			44.6	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	30.3	13.2	56.4	13.3	25.3	13.2	56.5
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	4.3	39.2	13.0	* 61	12.0	36.2	17.0	* 57
Max Q Clear Time (g_c+I1), s	5.3	4.9	9.4	39.2	9.2	8.5	9.3	23.2
Green Ext Time (p_c), s	0.0	0.6	0.0	12.9	0.1	0.6	0.1	16.2

Intersection Summary	
HCM 2010 Ctrl Delay	29.5
HCM 2010 LOS	C

Notes

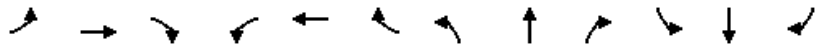
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	876	340	227	715	234	231	337	207	352	282	53
Future Volume (veh/h)	77	876	340	227	715	234	231	337	207	352	282	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	90	1019	164	264	831	108	269	392	222	409	328	60
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	115	1509	242	332	1173	152	340	589	329	483	932	168
Arrive On Green	0.06	0.34	0.33	0.10	0.37	0.36	0.10	0.27	0.26	0.14	0.31	0.30
Sat Flow, veh/h	1792	4428	711	3442	3145	409	3476	2193	1224	3476	3010	544
Grp Volume(v), veh/h	90	787	396	264	468	471	269	318	296	409	193	195
Grp Sat Flow(s),veh/h/ln	1792	1712	1715	1721	1770	1784	1738	1787	1629	1738	1787	1767
Q Serve(g_s), s	5.1	20.3	20.4	7.7	23.2	23.2	7.8	16.3	16.8	11.8	8.6	8.9
Cycle Q Clear(g_c), s	5.1	20.3	20.4	7.7	23.2	23.2	7.8	16.3	16.8	11.8	8.6	8.9
Prop In Lane	1.00		0.41	1.00		0.23	1.00		0.75	1.00		0.31
Lane Grp Cap(c), veh/h	115	1167	584	332	660	666	340	480	438	483	554	547
V/C Ratio(X)	0.79	0.67	0.68	0.80	0.71	0.71	0.79	0.66	0.68	0.85	0.35	0.36
Avail Cap(c_a), veh/h	191	1596	799	468	876	883	574	711	649	709	781	772
HCM Platoon Ratio	1.00	1.00	1.00	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	47.5	29.1	29.3	45.5	27.5	27.6	45.4	33.5	34.1	43.3	27.5	27.7
Incr Delay (d2), s/veh	4.4	0.3	0.5	4.0	0.9	0.9	1.6	0.6	0.7	4.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	9.6	9.8	3.9	11.5	11.6	3.8	8.1	7.6	6.0	4.3	4.3
LnGrp Delay(d),s/veh	51.9	29.3	29.9	49.6	28.4	28.6	47.0	34.1	34.8	47.6	27.6	27.9
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1273			1203			883			797	
Approach Delay, s/veh		31.1			33.1			38.3			37.9	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	31.7	13.9	39.1	14.1	35.9	10.6	42.4
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	21.0	39.7	14.0	46.7	17.0	43.7	11.0	49.7
Max Q Clear Time (g_c+I1), s	13.8	18.8	9.7	22.4	9.8	10.9	7.1	25.2
Green Ext Time (p_c), s	0.5	3.5	0.2	9.8	0.3	3.7	0.0	9.8

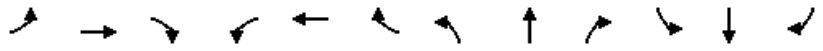
Intersection Summary	
HCM 2010 Ctrl Delay	34.5
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	868	180	143	1041	264	147	83	37	487	140	160
Future Volume (veh/h)	201	868	180	143	1041	264	147	83	37	487	140	160
Number	7	4	14	3	8	18	5	2	12	1	6	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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	226	975	191	161	1170	179	165	93	17	547	157	-19
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	263	1798	351	197	1958	607	201	300	54	629	599	268
Arrive On Green	0.15	0.42	0.41	0.11	0.39	0.39	0.11	0.10	0.08	0.18	0.17	0.00
Sat Flow, veh/h	1774	4259	832	1774	5085	1577	1792	3030	541	3476	3574	1599
Grp Volume(v), veh/h	226	775	391	161	1170	179	165	54	56	547	157	-19
Grp Sat Flow(s),veh/h/ln	1774	1695	1701	1774	1695	1577	1792	1787	1784	1738	1787	1599
Q Serve(g_s), s	10.6	14.7	14.8	7.6	15.7	6.7	7.7	2.4	2.5	13.1	3.3	0.0
Cycle Q Clear(g_c), s	10.6	14.7	14.8	7.6	15.7	6.7	7.7	2.4	2.5	13.1	3.3	0.0
Prop In Lane	1.00		0.49	1.00		1.00	1.00		0.30	1.00		1.00
Lane Grp Cap(c), veh/h	263	1431	718	197	1958	607	201	177	177	629	599	268
V/C Ratio(X)	0.86	0.54	0.54	0.82	0.60	0.29	0.82	0.30	0.32	0.87	0.26	-0.07
Avail Cap(c_a), veh/h	311	1795	901	332	2752	853	335	934	932	731	1951	873
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00
Uniform Delay (d), s/veh	35.6	18.5	18.8	37.2	21.0	18.2	37.1	35.8	36.0	34.1	31.0	0.0
Incr Delay (d2), s/veh	16.7	0.1	0.2	3.2	0.1	0.1	3.1	0.4	0.4	8.9	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	6.4	6.8	7.0	3.9	7.4	2.9	4.0	1.2	1.3	7.1	1.6	0.0
LnGrp Delay(d),s/veh	52.3	18.6	19.0	40.4	21.1	18.3	40.3	36.2	36.4	43.0	31.1	0.0
LnGrp LOS	D	B	B	D	C	B	D	D	D	D	C	
Approach Vol, veh/h		1392			1510			275			685	
Approach Delay, s/veh		24.2			22.8			38.7			41.4	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	12.5	13.5	40.1	13.6	18.3	16.7	37.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	18.0	43.4	16.0	44.0	16.0	45.4	15.0	45.0
Max Q Clear Time (g_c+I1), s	15.1	4.5	9.6	16.8	9.7	5.3	12.6	17.7
Green Ext Time (p_c), s	0.4	0.9	0.1	13.1	0.1	0.9	0.1	13.1

Intersection Summary	
HCM 2010 Ctrl Delay	27.8
HCM 2010 LOS	C



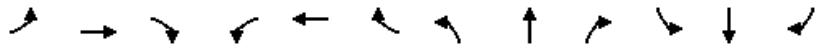
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↶	↱
Traffic Volume (veh/h)	0	1613	486	213	1752	0	0	0	0	741	7	847
Future Volume (veh/h)	0	1613	486	213	1752	0	0	0	0	741	7	847
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1753	193	232	1904	0				811	0	892
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1712	533	213	2439	0				1626	0	726
Arrive On Green	0.00	0.33	0.33	0.11	0.47	0.00				0.46	0.00	0.46
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1753	193	232	1904	0				811	0	892
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	40.0	11.0	13.0	37.1	0.0				19.3	0.0	55.0
Cycle Q Clear(g_c), s	0.0	40.0	11.0	13.0	37.1	0.0				19.3	0.0	55.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1712	533	213	2439	0				1626	0	726
V/C Ratio(X)	0.00	1.02	0.36	1.09	0.78	0.00				0.50	0.00	1.23
Avail Cap(c_a), veh/h	0	1712	533	213	2439	0				1626	0	726
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	40.0	30.3	53.5	26.3	0.0				22.8	0.0	32.5
Incr Delay (d2), s/veh	0.0	28.1	0.2	86.6	1.5	0.0				0.1	0.0	115.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	23.3	4.8	6.1	17.8	0.0				9.4	0.0	47.2
LnGrp Delay(d),s/veh	0.0	68.1	30.5	140.1	27.8	0.0				22.9	0.0	147.6
LnGrp LOS		F	C	F	C					C		F
Approach Vol, veh/h		1946			2136						1703	
Approach Delay, s/veh		64.3			40.0						88.2	
Approach LOS		E			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	17.0	44.0		59.0		61.0		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	13.0	38.7		53.7		55.7		
Max Q Clear Time (g_c+I1), s	15.0	42.0		57.0		39.1		
Green Ext Time (p_c), s	0.0	0.0		0.0		14.5		

Intersection Summary	
HCM 2010 Ctrl Delay	62.4
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.



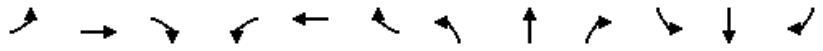
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1871	483	231	1282	655	683	53	392	0	0	0
Future Volume (veh/h)	0	1871	483	231	1282	655	683	53	392	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	0	2034	290	251	1393	398	783	0	276			
Adj No. of Lanes	0	3	1	1	3	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	2501	778	205	3303	1001	945	0	421			
Arrive On Green	0.00	0.49	0.49	0.12	0.65	0.65	0.27	0.00	0.27			
Sat Flow, veh/h	0	5253	1581	1774	5085	1541	3548	0	1582			
Grp Volume(v), veh/h	0	2034	290	251	1393	398	783	0	276			
Grp Sat Flow(s),veh/h/ln	0	1695	1581	1774	1695	1541	1774	0	1582			
Q Serve(g_s), s	0.0	32.2	10.8	11.0	12.6	11.6	19.7	0.0	14.7			
Cycle Q Clear(g_c), s	0.0	32.2	10.8	11.0	12.6	11.6	19.7	0.0	14.7			
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2501	778	205	3303	1001	945	0	421			
V/C Ratio(X)	0.00	0.81	0.37	1.22	0.42	0.40	0.83	0.00	0.66			
Avail Cap(c_a), veh/h	0	2568	799	205	3371	1022	1829	0	815			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	20.5	15.0	42.0	8.0	7.9	32.8	0.0	31.0			
Incr Delay (d2), s/veh	0.0	1.9	0.1	135.6	0.0	0.1	0.7	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			
%ile BackOfQ(50%),veh/ln	0.0	15.3	4.8	13.1	5.8	4.9	9.8	0.0	6.5			
LnGrp Delay(d),s/veh	0.0	22.3	15.1	177.7	8.1	8.0	33.6	0.0	31.6			
LnGrp LOS		C	B	F	A	A	C		C			
Approach Vol, veh/h		2324			2042			1059				
Approach Delay, s/veh		21.4			28.9			33.1				
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.0	50.7		29.3		65.7		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	11.0	46.7		47.7		61.7		
Max Q Clear Time (g_c+I1), s	13.6	34.2		21.7		14.6		
Green Ext Time (p_c), s	0.0	11.2		2.0		33.7		

Intersection Summary	
HCM 2010 Ctrl Delay	26.5
HCM 2010 LOS	C

Notes

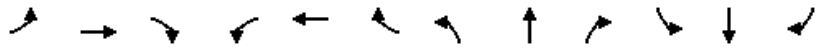
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	53	5	9	48	154	5	55	9	191	100	39
Future Volume (veh/h)	35	53	5	9	48	154	5	55	9	191	100	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	1.00		0.96	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	1900	1845	1845	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	42	63	4	11	57	6	6	65	4	227	119	29
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	188	180	11	186	170	18	190	642	39	320	746	176
Arrive On Green	0.11	0.10	0.10	0.11	0.10	0.10	0.11	0.19	0.15	0.18	0.26	0.23
Sat Flow, veh/h	1774	1731	110	1757	1631	172	1792	3413	208	1792	2859	674
Grp Volume(v), veh/h	42	0	67	11	0	63	6	34	35	227	73	75
Grp Sat Flow(s),veh/h/ln	1774	0	1840	1757	0	1803	1792	1787	1833	1792	1787	1746
Q Serve(g_s), s	0.8	0.0	1.3	0.2	0.0	1.2	0.1	0.6	0.6	4.5	1.2	1.3
Cycle Q Clear(g_c), s	0.8	0.0	1.3	0.2	0.0	1.2	0.1	0.6	0.6	4.5	1.2	1.3
Prop In Lane	1.00		0.06	1.00		0.10	1.00		0.11	1.00		0.39
Lane Grp Cap(c), veh/h	188	0	191	186	0	188	190	336	345	320	466	455
V/C Ratio(X)	0.22	0.00	0.35	0.06	0.00	0.34	0.03	0.10	0.10	0.71	0.16	0.16
Avail Cap(c_a), veh/h	516	0	1753	511	0	1718	996	2412	2474	996	2412	2357
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	15.7	15.2	0.0	15.7	15.2	12.7	12.8	14.6	10.8	11.0
Incr Delay (d2), s/veh	0.2	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.0	1.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.7	0.1	0.0	0.6	0.1	0.3	0.3	2.3	0.6	0.6
LnGrp Delay(d),s/veh	15.7	0.0	16.1	15.2	0.0	16.1	15.2	12.7	12.8	15.7	10.8	11.1
LnGrp LOS	B		B	B		B	B	B	B	B	B	B
Approach Vol, veh/h		109			74			75			375	
Approach Delay, s/veh		16.0			16.0			13.0			13.8	
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	10.8	11.1	8.0	7.9	8.0	13.9	8.0	7.9
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.7	11.0	36.0	21.0	49.7	11.0	36.0
Max Q Clear Time (g_c+I1), s	6.5	2.6	2.2	3.3	2.1	3.3	2.8	3.2
Green Ext Time (p_c), s	0.2	0.7	0.0	0.4	0.0	0.7	0.0	0.4

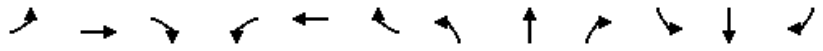
Intersection Summary	
HCM 2010 Ctrl Delay	14.3
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	122	58	81	105	106	127	479	192	313	417	90
Future Volume (veh/h)	67	122	58	81	105	106	127	479	192	313	417	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		0.98	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	134	42	89	115	98	140	526	198	344	458	96
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	95	237	74	114	170	145	179	770	289	396	1244	259
Arrive On Green	0.05	0.17	0.17	0.06	0.18	0.18	0.10	0.30	0.28	0.22	0.42	0.40
Sat Flow, veh/h	1792	1368	429	1774	918	782	1792	2542	953	1792	2933	610
Grp Volume(v), veh/h	74	0	176	89	0	213	140	369	355	344	278	276
Grp Sat Flow(s),veh/h/ln	1792	0	1797	1774	0	1701	1792	1787	1707	1792	1787	1755
Q Serve(g_s), s	2.7	0.0	6.0	3.3	0.0	7.8	5.1	12.2	12.4	12.4	7.1	7.3
Cycle Q Clear(g_c), s	2.7	0.0	6.0	3.3	0.0	7.8	5.1	12.2	12.4	12.4	7.1	7.3
Prop In Lane	1.00		0.24	1.00		0.46	1.00		0.56	1.00		0.35
Lane Grp Cap(c), veh/h	95	0	312	114	0	314	179	542	517	396	758	744
V/C Ratio(X)	0.78	0.00	0.56	0.78	0.00	0.68	0.78	0.68	0.69	0.87	0.37	0.37
Avail Cap(c_a), veh/h	213	0	910	211	0	861	480	851	813	800	1171	1150
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.4	0.0	25.4	31.0	0.0	25.5	29.5	20.6	20.9	25.2	13.2	13.4
Incr Delay (d2), s/veh	5.1	0.0	0.6	4.3	0.0	1.0	2.8	0.6	0.6	2.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	3.0	1.8	0.0	3.8	2.7	6.0	5.9	6.4	3.5	3.5
LnGrp Delay(d),s/veh	36.5	0.0	26.0	35.2	0.0	26.5	32.3	21.1	21.5	27.6	13.3	13.5
LnGrp LOS	D		C	D		C	C	C	C	C	B	B
Approach Vol, veh/h		250			302			864			898	
Approach Delay, s/veh		29.1			29.1			23.1			18.8	
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	18.8	24.4	8.3	15.7	10.7	32.5	7.6	16.4
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	30.0	30.7	8.0	34.0	18.0	42.7	8.0	34.0
Max Q Clear Time (g_c+I1), s	14.4	14.4	5.3	8.0	7.1	9.3	4.7	9.8
Green Ext Time (p_c), s	0.4	4.4	0.0	1.3	0.1	5.0	0.0	1.3

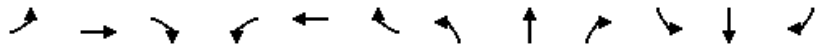
Intersection Summary	
HCM 2010 Ctrl Delay	22.9
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	29	0	256	0	615	4	67	483	0
Future Volume (veh/h)	0	0	0	29	0	256	0	615	4	67	483	0
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		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1900	1900	1863	1881	1881	1881	1881	0
Adj Flow Rate, veh/h				33	0	234	0	707	-24	77	555	0
Adj No. of Lanes				0	1	1	1	2	1	1	2	0
Peak Hour Factor				0.87	0.92	0.87	0.92	0.87	0.87	0.87	0.87	0.92
Percent Heavy Veh, %				0	2	0	2	1	1	1	1	0
Cap, veh/h				347	0	309	204	1460	653	108	2080	0
Arrive On Green				0.19	0.00	0.19	0.00	0.41	0.00	0.06	0.58	0.00
Sat Flow, veh/h				1810	0	1615	850	3574	1599	1792	3668	0
Grp Volume(v), veh/h				33	0	234	0	707	-24	77	555	0
Grp Sat Flow(s),veh/h/ln				1810	0	1615	850	1787	1599	1792	1787	0
Q Serve(g_s), s				0.5	0.0	4.8	0.0	5.2	0.0	1.5	2.7	0.0
Cycle Q Clear(g_c), s				0.5	0.0	4.8	0.0	5.2	0.0	1.5	2.7	0.0
Prop In Lane				1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				347	0	309	204	1460	653	108	2080	0
V/C Ratio(X)				0.10	0.00	0.76	0.00	0.48	-0.04	0.72	0.27	0.00
Avail Cap(c_a), veh/h				1742	0	1555	843	4150	1856	1674	7894	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	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				11.8	0.0	13.5	0.0	7.7	0.0	16.3	3.7	0.0
Incr Delay (d2), s/veh				0.0	0.0	1.4	0.0	0.1	0.0	3.3	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.3	0.0	2.2	0.0	2.5	0.0	0.8	1.3	0.0
LnGrp Delay(d),s/veh				11.8	0.0	14.9	0.0	7.8	0.0	19.6	3.7	0.0
LnGrp LOS				B		B		A		B	A	
Approach Vol, veh/h					267			683			632	
Approach Delay, s/veh					14.5			8.1			5.6	
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	6.1	18.4				24.5		10.8
Change Period (Y+Rc), s	4.0	5.3				5.3		4.0
Max Green Setting (Gmax), s	33.0	39.7				76.7		34.0
Max Q Clear Time (g_c+I1), s	3.5	7.2				4.7		6.8
Green Ext Time (p_c), s	0.1	5.7				5.9		0.5

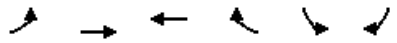
Intersection Summary	
HCM 2010 Ctrl Delay	8.2
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	49	0	65	1	344	27	126	390	2
Future Volume (veh/h)	1	0	0	49	0	65	1	344	27	126	390	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	1	0	0	60	0	-255	1	425	33	156	481	2
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	128	13	0	243	6	371	6	1129	87	206	1631	7
Arrive On Green	0.07	0.00	0.00	0.14	0.00	0.00	0.00	0.33	0.29	0.12	0.45	0.40
Sat Flow, veh/h	1810	3705	0	1792	3668	0	1810	3392	262	1792	3650	15
Grp Volume(v), veh/h	1	0	0	60	-255	-255	1	225	233	156	235	248
Grp Sat Flow(s),veh/h/ln	1810	1805	0	1792	1787	1599	1810	1805	1850	1792	1787	1879
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	0.0	0.0	2.7	2.8	2.4	2.4	2.4
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.9	0.0	0.0	0.0	2.7	2.8	2.4	2.4	2.4
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.14	1.00		0.01
Lane Grp Cap(c), veh/h	128	13	0	243	6	0	6	601	616	206	798	839
V/C Ratio(X)	0.01	0.00	0.00	0.25	-41.11	0.00	0.16	0.38	0.38	0.76	0.29	0.29
Avail Cap(c_a), veh/h	440	3133	0	1057	2171	0	251	1942	1990	3856	5521	5803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.4	0.0	0.0	11.1	0.0	0.0	14.3	7.3	7.4	12.4	5.1	5.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	4.3	0.1	0.1	2.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	1.3	1.4	1.3	1.2	1.3
LnGrp Delay(d),s/veh	12.5	0.0	0.0	11.7	0.0	0.0	18.7	7.5	7.6	14.5	5.2	5.2
LnGrp LOS	B			B			B	A	A	B	A	A
Approach Vol, veh/h		1			-450			459			639	
Approach Delay, s/veh		12.5			-1.6			7.5			7.4	
Approach LOS		B			A			A			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	7.3	13.6	7.9	0.0	4.0	16.9	6.0	1.9
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	62.6	29.7	15.0	25.0	4.0	87.7	5.0	35.0
Max Q Clear Time (g_c+I1), s	4.4	4.8	2.9	0.0	2.0	4.4	2.0	0.0
Green Ext Time (p_c), s	0.2	3.5	0.1	0.0	0.0	3.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.7
HCM 2010 LOS	B



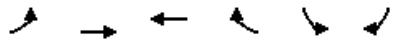
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	53	72	149	231	0
Future Volume (veh/h)	0	53	72	149	231	0
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	58	78	162	251	0
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2	2476	1238	1108	296	300
Arrive On Green	0.00	0.70	0.70	0.70	0.17	0.00
Sat Flow, veh/h	1774	3632	1863	1583	1774	1583
Grp Volume(v), veh/h	0	58	78	162	251	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1583	1774	1583
Q Serve(g_s), s	0.0	0.5	1.2	3.1	12.4	0.0
Cycle Q Clear(g_c), s	0.0	0.5	1.2	3.1	12.4	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	2	2476	1238	1108	296	300
V/C Ratio(X)	0.00	0.02	0.06	0.15	0.85	0.00
Avail Cap(c_a), veh/h	177	2476	1238	1108	710	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	4.1	4.2	4.5	36.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	6.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.6	1.4	6.6	0.0
LnGrp Delay(d),s/veh	0.0	4.1	4.3	4.8	43.0	0.0
LnGrp LOS		A	A	A	D	
Approach Vol, veh/h		58	240		251	
Approach Delay, s/veh		4.1	4.7		43.0	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				69.0		21.0	0.0	69.0
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				42.0		36.0	9.0	27.0
Max Q Clear Time (g_c+I1), s				2.5		14.4	0.0	5.1
Green Ext Time (p_c), s				2.0		0.7	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

Notes

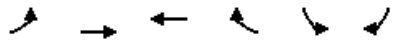
User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	283	221	122	141	0
Future Volume (veh/h)	0	283	221	122	141	0
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	308	240	133	153	0
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2	1770	1114	596	650	581
Arrive On Green	0.00	0.50	0.50	0.50	0.37	0.00
Sat Flow, veh/h	1774	3632	2322	1193	1774	1583
Grp Volume(v), veh/h	0	308	189	184	153	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1652	1774	1583
Q Serve(g_s), s	0.0	4.3	5.4	5.6	5.4	0.0
Cycle Q Clear(g_c), s	0.0	4.3	5.4	5.6	5.4	0.0
Prop In Lane	1.00			0.72	1.00	1.00
Lane Grp Cap(c), veh/h	2	1770	885	826	650	581
V/C Ratio(X)	0.00	0.17	0.21	0.22	0.24	0.00
Avail Cap(c_a), veh/h	197	1770	885	826	650	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	12.3	12.6	12.7	19.8	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.6	0.6	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.1	2.8	2.7	2.8	0.0
LnGrp Delay(d),s/veh	0.0	12.5	13.1	13.3	20.6	0.0
LnGrp LOS		B	B	B	C	
Approach Vol, veh/h		308	373		153	
Approach Delay, s/veh		12.5	13.2		20.6	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				51.0		39.0	0.0	51.0
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				45.0		33.0	10.0	29.0
Max Q Clear Time (g_c+I1), s				6.3		7.4	0.0	7.6
Green Ext Time (p_c), s				4.5		0.4	0.0	4.1

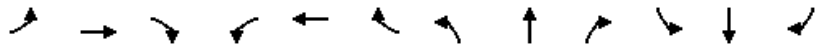
Intersection Summary	
HCM 2010 Ctrl Delay	14.3
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	179	304	403	100	1623	79
Future Volume (veh/h)	179	304	403	100	1623	79
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	211	358	474	118	1909	93
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	233	1796	662	296	2005	923
Arrive On Green	0.13	0.35	0.19	0.19	0.58	0.58
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	211	358	474	118	1909	93
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	13.4	5.6	14.4	7.5	58.9	3.0
Cycle Q Clear(g_c), s	13.4	5.6	14.4	7.5	58.9	3.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	233	1796	662	296	2005	923
V/C Ratio(X)	0.91	0.20	0.72	0.40	0.95	0.10
Avail Cap(c_a), veh/h	233	3158	1610	720	2158	993
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	49.0	25.7	43.6	40.8	22.7	10.9
Incr Delay (d2), s/veh	35.0	0.0	0.5	0.3	9.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	2.6	7.1	3.3	30.8	1.3
LnGrp Delay(d),s/veh	83.9	25.8	44.2	41.2	32.4	10.9
LnGrp LOS	F	C	D	D	C	B
Approach Vol, veh/h		569	592		2002	
Approach Delay, s/veh		47.3	43.6		31.4	
Approach LOS		D	D		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		44.4			19.0	25.4		70.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		69.7			13.0	50.7		69.7
Max Q Clear Time (g_c+I1), s		7.6			15.4	16.4		60.9
Green Ext Time (p_c), s		3.7			0.0	3.7		3.7

Intersection Summary	
HCM 2010 Ctrl Delay	36.5
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	1786	0	0	231	1047	272	2	208	0	0	0
Future Volume (veh/h)	141	1786	0	0	231	1047	272	2	208	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1845	1845	1845			
Adj Flow Rate, veh/h	145	1841	0	0	238	626	281	0	99			
Adj No. of Lanes	2	3	0	0	1	2	2	0	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, %	1	1	0	0	1	1	3	3	3			
Cap, veh/h	246	3567	0	0	1028	1747	527	0	235			
Arrive On Green	0.07	0.69	0.00	0.00	0.55	0.55	0.15	0.00	0.15			
Sat Flow, veh/h	3476	5305	0	0	1881	3198	3514	0	1568			
Grp Volume(v), veh/h	145	1841	0	0	238	626	281	0	99			
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1881	1599	1757	0	1568			
Q Serve(g_s), s	2.1	8.8	0.0	0.0	3.4	5.7	3.8	0.0	2.9			
Cycle Q Clear(g_c), s	2.1	8.8	0.0	0.0	3.4	5.7	3.8	0.0	2.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	246	3567	0	0	1028	1747	527	0	235			
V/C Ratio(X)	0.59	0.52	0.00	0.00	0.23	0.36	0.53	0.00	0.42			
Avail Cap(c_a), veh/h	540	9537	0	0	3055	5193	3167	0	1413			
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	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.2	3.7	0.0	0.0	6.1	6.6	20.2	0.0	19.9			
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.0	4.1	0.0	0.0	1.7	2.4	1.9	0.0	2.6			
LnGrp Delay(d),s/veh	24.0	3.8	0.0	0.0	6.1	6.6	20.5	0.0	20.3			
LnGrp LOS	C	A			A	A	C		C			
Approach Vol, veh/h		1986			864			380				
Approach Delay, s/veh		5.3			6.5			20.5				
Approach LOS		A			A			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		39.8		11.7	7.6	32.1		
Change Period (Y+Rc), s		5.3		5.3	4.0	5.3		
Max Green Setting (Gmax), s		94.3		45.1	8.0	82.3		
Max Q Clear Time (g_c+I1), s		10.8		5.8	4.1	7.7		
Green Ext Time (p_c), s		19.4		0.6	0.1	19.1		

Intersection Summary		
HCM 2010 Ctrl Delay		7.4
HCM 2010 LOS		A

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	276	103	100	338	75
Future Vol, veh/h	26	276	103	100	338	75
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	28	294	110	106	360	80

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	962	163	0	0	216	0
Stage 1	163	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	286	887	-	-	1366	-
Stage 1	871	-	-	-	-	-
Stage 2	446	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	207	887	-	-	1366	-
Mov Cap-2 Maneuver	207	-	-	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	323	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.7	0	7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	691	1366	-
HCM Lane V/C Ratio	-	-	0.465	0.263	-
HCM Control Delay (s)	-	-	14.7	8.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	2.5	1.1	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	161	1130	721	31	545	417
Future Volume (veh/h)	161	1130	721	31	545	417
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1863	1863	1776	1776
Adj Flow Rate, veh/h	175	1228	784	-164	592	183
Adj No. of Lanes	2	2	3	1	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	7	7
Cap, veh/h	268	1758	1793	558	650	1074
Arrive On Green	0.08	0.49	0.35	0.00	0.38	0.40
Sat Flow, veh/h	3476	3668	5253	1583	1691	2656
Grp Volume(v), veh/h	175	1228	784	-164	592	183
Grp Sat Flow(s),veh/h/ln	1738	1787	1695	1583	1691	1328
Q Serve(g_s), s	3.2	17.2	7.6	0.0	21.4	2.8
Cycle Q Clear(g_c), s	3.2	17.2	7.6	0.0	21.4	2.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	268	1758	1793	558	650	1074
V/C Ratio(X)	0.65	0.70	0.44	-0.29	0.91	0.17
Avail Cap(c_a), veh/h	377	2842	3176	989	1329	2141
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	28.9	12.7	16.0	0.0	18.8	12.3
Incr Delay (d2), s/veh	1.0	0.2	0.1	0.0	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	8.4	3.6	0.0	10.3	2.6
LnGrp Delay(d),s/veh	29.9	12.9	16.1	0.0	21.0	12.3
LnGrp LOS	C	B	B		C	B
Approach Vol, veh/h		1403	620		775	
Approach Delay, s/veh		15.0	20.3		18.9	
Approach LOS		B	C		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				35.7		28.8	9.0	26.7
Change Period (Y+Rc), s				5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s				50.0		50.7	7.0	39.0
Max Q Clear Time (g_c+I1), s				19.2		23.4	5.2	9.6
Green Ext Time (p_c), s				11.3		1.4	0.1	11.1

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1197	478	0	547	205	101
Future Volume (veh/h)	1197	478	0	547	205	101
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	1301	520	0	595	223	110
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2121	949	0	2121	1055	485
Arrive On Green	0.60	0.60	0.00	0.60	0.31	0.31
Sat Flow, veh/h	3632	1583	0	3725	3442	1583
Grp Volume(v), veh/h	1301	520	0	595	223	110
Grp Sat Flow(s),veh/h/ln	1770	1583	0	1770	1721	1583
Q Serve(g_s), s	19.8	16.6	0.0	6.9	4.1	4.4
Cycle Q Clear(g_c), s	19.8	16.6	0.0	6.9	4.1	4.4
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2121	949	0	2121	1055	485
V/C Ratio(X)	0.61	0.55	0.00	0.28	0.21	0.23
Avail Cap(c_a), veh/h	3171	1419	0	3171	1055	485
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	10.8	10.1	0.0	8.2	21.8	21.9
Incr Delay (d2), s/veh	0.3	0.5	0.0	0.1	0.5	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	7.4	0.0	3.3	2.0	2.1
LnGrp Delay(d),s/veh	11.1	10.6	0.0	8.3	22.3	23.0
LnGrp LOS	B	B		A	C	C
Approach Vol, veh/h	1821			595	333	
Approach Delay, s/veh	10.9			8.3	22.5	
Approach LOS	B			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		30.0		54.8				54.8
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		25.5		75.5				75.5
Max Q Clear Time (g_c+I1), s		6.4		21.8				8.9
Green Ext Time (p_c), s		1.1		28.6				31.4

Intersection Summary	
HCM 2010 Ctrl Delay	11.8
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	169	799	100	625	557	79
Future Volume (veh/h)	169	799	100	625	557	79
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1397	1397	1845	1845
Adj Flow Rate, veh/h	182	200	108	672	599	59
Adj No. of Lanes	2	1	2	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	36	36	3	3
Cap, veh/h	1142	505	370	800	728	335
Arrive On Green	0.32	0.32	0.14	0.57	0.21	0.21
Sat Flow, veh/h	3632	1566	2581	1397	3408	1568
Grp Volume(v), veh/h	182	200	108	672	599	59
Grp Sat Flow(s),veh/h/ln	1770	1566	1291	1397	1704	1568
Q Serve(g_s), s	1.4	3.7	1.4	14.8	6.3	1.2
Cycle Q Clear(g_c), s	1.4	3.7	1.4	14.8	6.3	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1142	505	370	800	728	335
V/C Ratio(X)	0.16	0.40	0.29	0.84	0.82	0.18
Avail Cap(c_a), veh/h	5668	2508	689	2759	728	335
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	9.1	9.9	14.3	6.6	14.1	12.0
Incr Delay (d2), s/veh	0.0	0.2	0.4	0.9	7.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.6	0.5	5.6	3.6	0.5
LnGrp Delay(d),s/veh	9.1	10.0	14.8	7.5	21.2	12.1
LnGrp LOS	A	B	B	A	C	B
Approach Vol, veh/h	382			780	658	
Approach Delay, s/veh	9.6			8.5	20.4	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		12.0	9.4	16.1				25.5
Change Period (Y+Rc), s		4.0	6.0	4.6				4.6
Max Green Setting (Gmax), s		8.0	8.0	59.4				73.4
Max Q Clear Time (g_c+I1), s		8.3	3.4	5.7				16.8
Green Ext Time (p_c), s		0.0	0.1	4.0				4.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	0	864	0	0	0	0	1632	435	198	713	0
Future Volume (veh/h)	251	0	864	0	0	0	0	1632	435	198	713	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	50				0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	285	0	698				0	1855	494	225	810	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	752	0	782				0	2455	516	299	3466	0
Arrive On Green	0.15	0.00	0.15				0.00	0.38	0.37	0.06	0.47	0.00
Sat Flow, veh/h	3442	0	3610				0	4693	1047	3343	5103	0
Grp Volume(v), veh/h	285	0	698				0	1574	775	225	810	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1642	1672	1647	0
Q Serve(g_s), s	8.2	0.0	20.7				0.0	46.6	47.0	7.2	10.8	0.0
Cycle Q Clear(g_c), s	8.2	0.0	20.7				0.0	46.6	47.0	7.2	10.8	0.0
Prop In Lane	1.00		1.00				0.00		0.64	1.00		0.00
Lane Grp Cap(c), veh/h	752	0	782				0	1915	947	299	3466	0
V/C Ratio(X)	0.38	0.00	0.89				0.00	0.82	0.82	0.75	0.23	0.00
Avail Cap(c_a), veh/h	825	0	866				0	2166	1061	321	3824	0
HCM Platoon Ratio	0.67	1.00	0.67				1.00	0.67	0.67	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.2	0.0	51.7				0.0	32.3	30.9	53.0	12.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	10.1				0.0	2.1	4.1	7.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	181.6				0.0	15.5	6.9	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	22.6				0.0	20.3	26.7	3.9	5.1	0.0
LnGrp Delay(d),s/veh	42.3	0.0	243.4				0.0	49.9	42.0	60.7	12.1	0.0
LnGrp LOS	D		F					D	D	E	B	
Approach Vol, veh/h		983						2349			1035	
Approach Delay, s/veh		185.1						47.3			22.7	
Approach LOS		F						D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.5	65.9		28.9		80.4		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	10.0	* 70		25.7		84.1		
Max Q Clear Time (g_c+I1), s	9.2	49.0		22.7		12.8		
Green Ext Time (p_c), s	0.4	12.0		0.9		4.1		

Intersection Summary	
HCM 2010 Ctrl Delay	72.5
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1083	485	111	1210	0	0	0	0	447	1	523
Future Volume (veh/h)	0	1083	485	111	1210	0	0	0	0	447	1	523
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1177	192	121	1315	0				487	0	539
Adj No. of Lanes	0	3	1	2	3	0				2	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2467	768	177	3203	0				813	0	725
Arrive On Green	0.00	0.48	0.48	0.09	0.62	0.00				0.23	0.00	0.23
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	3167
Grp Volume(v), veh/h	0	1177	192	121	1315	0				487	0	539
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	10.1	4.6	3.9	8.4	0.0				8.0	0.0	10.3
Cycle Q Clear(g_c), s	0.0	10.1	4.6	3.9	8.4	0.0				8.0	0.0	10.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2467	768	177	3203	0				813	0	725
V/C Ratio(X)	0.00	0.48	0.25	0.68	0.41	0.00				0.60	0.00	0.74
Avail Cap(c_a), veh/h	0	4822	1500	590	6634	0				2515	0	2244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.4	10.0	28.8	6.2	0.0				22.5	0.0	23.3
Incr Delay (d2), s/veh	0.0	0.1	0.1	1.8	0.0	0.0				0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.7	2.0	1.1	3.9	0.0				4.0	0.0	4.5
LnGrp Delay(d),s/veh	0.0	11.5	10.1	30.5	6.2	0.0				22.7	0.0	23.9
LnGrp LOS		B	B	C	A					C		C
Approach Vol, veh/h		1369			1436						1026	
Approach Delay, s/veh		11.3			8.3						23.3	
Approach LOS		B			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	9.3	36.1		19.7		45.5		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	19.0	60.7		45.7		83.7		
Max Q Clear Time (g_c+I1), s	5.9	12.1		12.3		10.4		
Green Ext Time (p_c), s	0.1	18.7		2.1		20.4		

Intersection Summary	
HCM 2010 Ctrl Delay	13.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	180	183	225	167	144	100	685	122	140	920	61
Future Volume (veh/h)	122	180	183	225	167	144	100	685	122	140	920	61
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98	1.00		1.00	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	134	198	179	247	184	140	110	753	121	154	1011	64
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	172	230	208	286	311	237	145	1007	162	193	1203	76
Arrive On Green	0.10	0.25	0.25	0.16	0.32	0.31	0.08	0.33	0.32	0.11	0.35	0.35
Sat Flow, veh/h	1792	905	818	1774	974	741	1792	3083	495	1792	3408	216
Grp Volume(v), veh/h	134	0	377	247	0	324	110	436	438	154	530	545
Grp Sat Flow(s),veh/h/ln	1792	0	1722	1774	0	1714	1792	1787	1791	1792	1787	1837
Q Serve(g_s), s	7.5	0.0	21.3	13.9	0.0	16.2	6.1	22.2	22.2	8.6	27.9	27.9
Cycle Q Clear(g_c), s	7.5	0.0	21.3	13.9	0.0	16.2	6.1	22.2	22.2	8.6	27.9	27.9
Prop In Lane	1.00		0.47	1.00		0.43	1.00		0.28	1.00		0.12
Lane Grp Cap(c), veh/h	172	0	439	286	0	548	145	584	585	193	631	648
V/C Ratio(X)	0.78	0.00	0.86	0.86	0.00	0.59	0.76	0.75	0.75	0.80	0.84	0.84
Avail Cap(c_a), veh/h	272	0	582	339	0	646	167	651	653	237	721	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	0.0	36.4	41.7	0.0	29.2	45.9	30.6	30.7	44.5	30.4	30.4
Incr Delay (d2), s/veh	2.9	0.0	7.8	15.9	0.0	0.4	12.9	3.5	3.5	11.7	7.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	11.1	8.1	0.0	7.7	3.5	11.5	11.5	4.9	14.9	15.3
LnGrp Delay(d),s/veh	47.9	0.0	44.3	57.7	0.0	29.6	58.8	34.1	34.2	56.2	37.4	37.2
LnGrp LOS	D		D	E		C	E	C	C	E	D	D
Approach Vol, veh/h		511			571			984			1229	
Approach Delay, s/veh		45.2			41.7			36.9			39.7	
Approach LOS		D			D			D			D	

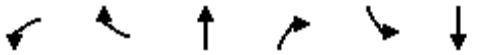
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	38.2	19.9	29.5	11.8	40.8	13.3	36.1
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	13.0	36.7	19.0	34.0	9.0	40.7	15.0	38.0
Max Q Clear Time (g_c+I1), s	10.6	24.2	15.9	23.3	8.1	29.9	9.5	18.2
Green Ext Time (p_c), s	0.0	6.2	0.1	2.0	0.0	5.7	0.1	2.5

Intersection Summary			
HCM 2010 Ctrl Delay		40.1	
HCM 2010 LOS		D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	295	412	0	0	208	128	0	0	0	970	0	43
Future Volume (veh/h)	295	412	0	0	208	128	0	0	0	970	0	43
Number	5	2	12	1	6	16				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863				1881	0	1881
Adj Flow Rate, veh/h	347	485	0	0	245	151				1141	0	51
Adj No. of Lanes	1	3	0	0	2	1				2	0	1
Peak Hour Factor	0.85	0.85	0.92	0.92	0.85	0.85				0.85	0.92	0.85
Percent Heavy Veh, %	2	2	0	0	2	2				1	0	1
Cap, veh/h	408	2423	0	0	585	273				1302	0	587
Arrive On Green	0.23	0.48	0.00	0.00	0.17	0.17				0.37	0.00	0.37
Sat Flow, veh/h	1774	5253	0	0	3632	1583				3476	0	1599
Grp Volume(v), veh/h	347	485	0	0	245	151				1141	0	51
Grp Sat Flow(s),veh/h/ln	1774	1695	0	0	1770	1583				1738	0	1599
Q Serve(g_s), s	12.7	3.7	0.0	0.0	4.2	5.9				20.7	0.0	1.4
Cycle Q Clear(g_c), s	12.7	3.7	0.0	0.0	4.2	5.9				20.7	0.0	1.4
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	408	2423	0	0	585	273				1302	0	587
V/C Ratio(X)	0.85	0.20	0.00	0.00	0.42	0.55				0.88	0.00	0.09
Avail Cap(c_a), veh/h	510	5601	0	0	2593	1172				1804	0	818
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	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	25.0	10.3	0.0	0.0	25.4	25.7				19.7	0.0	14.0
Incr Delay (d2), s/veh	10.7	0.0	0.0	0.0	0.2	0.7				3.0	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	7.4	1.8	0.0	0.0	2.1	2.6				10.4	0.0	0.6
LnGrp Delay(d),s/veh	35.7	10.3	0.0	0.0	25.6	26.3				22.8	0.0	14.0
LnGrp LOS	D	B			C	C				C		B
Approach Vol, veh/h		832			396						1192	
Approach Delay, s/veh		20.9			25.9						22.4	
Approach LOS		C			C						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		37.6			21.1	16.5		30.2
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		74.7			19.0	49.7		34.7
Max Q Clear Time (g_c+I1), s		5.7			14.7	7.9		22.7
Green Ext Time (p_c), s		3.3			0.4	3.3		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	22.4
HCM 2010 LOS	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	104	482	47	39	449	130
Future Volume (veh/h)	104	482	47	39	449	130
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	111	513	50	41	478	138
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	261	705	384	315	528	1414
Arrive On Green	0.14	0.14	0.40	0.40	0.29	0.74
Sat Flow, veh/h	1810	1615	967	793	1810	1900
Grp Volume(v), veh/h	111	513	0	91	478	138
Grp Sat Flow(s),veh/h/ln	1810	1615	0	1760	1810	1900
Q Serve(g_s), s	5.0	13.0	0.0	3.0	22.9	1.8
Cycle Q Clear(g_c), s	5.0	13.0	0.0	3.0	22.9	1.8
Prop In Lane	1.00	1.00		0.45	1.00	
Lane Grp Cap(c), veh/h	261	705	0	699	528	1414
V/C Ratio(X)	0.42	0.73	0.00	0.13	0.90	0.10
Avail Cap(c_a), veh/h	261	705	0	699	804	1414
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	35.1	21.0	0.0	17.3	30.7	3.2
Incr Delay (d2), s/veh	1.1	3.8	0.0	0.4	9.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	11.3	0.0	1.5	12.8	1.0
LnGrp Delay(d),s/veh	36.2	24.8	0.0	17.6	40.3	3.3
LnGrp LOS	D	C		B	D	A
Approach Vol, veh/h	624		91			616
Approach Delay, s/veh	26.8		17.6			32.0
Approach LOS	C		B			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	31.3	40.7				72.0		18.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	40.0	22.0				67.0		13.0
Max Q Clear Time (g_c+I1), s	24.9	5.0				3.8		15.0
Green Ext Time (p_c), s	1.4	1.1				1.5		0.0

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)	327	0	1490	0	0	0	0	1374	452	488	1156	0
Future Volume (veh/h)	327	0	1490	0	0	0	0	1374	452	488	1156	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	10				0	10	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	372	0	1409				0	1561	514	555	1314	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1232	0	1273				0	2040	478	443	2910	0
Arrive On Green	0.24	0.00	0.24				0.00	0.28	0.28	0.09	0.39	0.00
Sat Flow, veh/h	3442	0	3610				0	4471	1226	3343	5103	0
Grp Volume(v), veh/h	372	0	1409				0	1405	670	555	1314	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1600	1672	1647	0
Q Serve(g_s), s	13.4	0.0	53.2				0.0	62.9	63.0	20.0	29.6	0.0
Cycle Q Clear(g_c), s	13.4	0.0	53.2				0.0	62.9	63.0	20.0	29.6	0.0
Prop In Lane	1.00		1.00				0.00		0.77	1.00		0.00
Lane Grp Cap(c), veh/h	1232	0	1273				0	1422	688	443	2910	0
V/C Ratio(X)	0.30	0.00	1.11				0.00	0.99	0.98	1.25	0.45	0.00
Avail Cap(c_a), veh/h	1232	0	1273				0	1422	678	443	2910	0
HCM Platoon Ratio	0.67	1.00	0.67				1.00	0.67	0.67	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.9	0.0	57.6				0.0	54.0	53.9	68.8	27.7	0.0
Incr Delay (d2), s/veh	0.1	0.0	59.9				0.0	20.8	28.4	131.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	25.1				0.0	13.4	3.8	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	28.0				0.0	24.2	34.4	17.3	13.5	0.0
LnGrp Delay(d),s/veh	42.0	0.0	142.7				0.0	88.3	86.1	199.8	27.8	0.0
LnGrp LOS	D		F					F	F	F	C	
Approach Vol, veh/h		1781						2075			1869	
Approach Delay, s/veh		121.7						87.6			78.9	
Approach LOS		F						F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	24.9	68.0		58.0		92.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	20.0	* 63		52.7		87.1		
Max Q Clear Time (g_c+I1), s	22.0	65.0		55.2		31.6		
Green Ext Time (p_c), s	0.0	0.0		0.0		8.7		

Intersection Summary	
HCM 2010 Ctrl Delay	95.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1620	486	213	1769	0	0	0	0	741	7	847
Future Volume (veh/h)	0	1620	486	213	1769	0	0	0	0	741	7	847
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1761	193	232	1923	0				811	0	892
Adj No. of Lanes	0	3	1	2	3	0				2	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2190	682	267	3077	0				1158	0	1033
Arrive On Green	0.00	0.43	0.43	0.14	0.60	0.00				0.33	0.00	0.33
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	3167
Grp Volume(v), veh/h	0	1761	193	232	1923	0				811	0	892
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	32.1	8.4	12.4	25.7	0.0				21.4	0.0	28.3
Cycle Q Clear(g_c), s	0.0	32.1	8.4	12.4	25.7	0.0				21.4	0.0	28.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2190	682	267	3077	0				1158	0	1033
V/C Ratio(X)	0.00	0.80	0.28	0.87	0.63	0.00				0.70	0.00	0.86
Avail Cap(c_a), veh/h	0	2242	697	331	3295	0				1430	0	1276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.8	20.1	45.4	13.8	0.0				31.5	0.0	33.9
Incr Delay (d2), s/veh	0.0	2.0	0.1	16.0	0.2	0.0				0.7	0.0	4.6
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	0.0	15.6	3.7	4.0	12.2	0.0				10.6	0.0	13.0
LnGrp Delay(d),s/veh	0.0	28.8	20.1	61.5	14.0	0.0				32.3	0.0	38.4
LnGrp LOS		C	C	E	B					C		D
Approach Vol, veh/h		1954			2155						1703	
Approach Delay, s/veh		28.0			19.1						35.5	
Approach LOS		C			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	18.5	49.7		39.0		68.2		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	18.0	45.5		41.9		67.5		
Max Q Clear Time (g_c+I1), s	14.4	34.1		30.3		27.7		
Green Ext Time (p_c), s	0.1	10.3		3.4		29.9		

Intersection Summary	
HCM 2010 Ctrl Delay	26.9
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	112	73	45	92	85	140	626	142	286	611	90
Future Volume (veh/h)	67	112	73	45	92	85	140	626	142	286	611	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		0.98	1.00		0.97	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	123	58	49	101	75	154	688	143	314	671	96
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	95	216	102	63	159	118	195	1008	209	365	1368	195
Arrive On Green	0.05	0.18	0.18	0.04	0.16	0.16	0.11	0.34	0.32	0.20	0.44	0.42
Sat Flow, veh/h	1792	1203	567	1774	981	729	1792	2945	612	1792	3129	447
Grp Volume(v), veh/h	74	0	181	49	0	176	154	417	414	314	383	384
Grp Sat Flow(s),veh/h/ln	1792	0	1770	1774	0	1710	1792	1787	1770	1792	1787	1789
Q Serve(g_s), s	2.7	0.0	6.3	1.8	0.0	6.4	5.6	13.4	13.5	11.3	10.3	10.4
Cycle Q Clear(g_c), s	2.7	0.0	6.3	1.8	0.0	6.4	5.6	13.4	13.5	11.3	10.3	10.4
Prop In Lane	1.00		0.32	1.00		0.43	1.00		0.35	1.00		0.25
Lane Grp Cap(c), veh/h	95	0	317	63	0	277	195	612	606	365	781	782
V/C Ratio(X)	0.78	0.00	0.57	0.77	0.00	0.64	0.79	0.68	0.68	0.86	0.49	0.49
Avail Cap(c_a), veh/h	187	0	925	159	0	868	481	960	951	722	1200	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	0.0	25.1	32.0	0.0	26.2	29.1	18.9	19.1	25.8	13.5	13.6
Incr Delay (d2), s/veh	5.1	0.0	0.6	7.3	0.0	0.9	2.7	0.5	0.5	2.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	3.1	1.0	0.0	3.1	2.9	6.7	6.7	5.8	5.0	5.1
LnGrp Delay(d),s/veh	36.5	0.0	25.7	39.3	0.0	27.1	31.8	19.4	19.6	28.1	13.7	13.8
LnGrp LOS	D		C	D		C	C	B	B	C	B	B
Approach Vol, veh/h		255			225			985			1081	
Approach Delay, s/veh		28.9			29.8			21.4			17.9	
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	17.7	26.9	6.4	16.0	11.3	33.3	7.5	14.9
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	27.0	34.7	6.0	35.0	18.0	43.7	7.0	34.0
Max Q Clear Time (g_c+I1), s	13.3	15.5	3.8	8.3	7.6	12.4	4.7	8.4
Green Ext Time (p_c), s	0.4	5.9	0.0	1.2	0.1	6.6	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	21.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (veh/h)	232	368	0	0	553	100	1623	112	0	0
Future Volume (veh/h)	232	368	0	0	553	100	1623	112	0	0
Number	5	2	12	1	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1881		
Adj Flow Rate, veh/h	273	433	0	0	651	118	1764	132		
Adj No. of Lanes	1	3	0	0	2	1	2	1		
Peak Hour Factor	0.85	0.85	0.92	0.92	0.85	0.85	0.92	0.85		
Percent Heavy Veh, %	2	2	0	0	2	2	2	1		
Cap, veh/h	302	2311	0	0	849	380	1495	718		
Arrive On Green	0.17	0.45	0.00	0.00	0.24	0.24	0.43	0.45		
Sat Flow, veh/h	1774	5253	0	0	3632	1583	3442	1599		
Grp Volume(v), veh/h	273	433	0	0	651	118	1764	132		
Grp Sat Flow(s),veh/h/ln	1774	1695	0	0	1770	1583	1721	1599		
Q Serve(g_s), s	13.6	4.6	0.0	0.0	15.4	5.5	39.1	4.5		
Cycle Q Clear(g_c), s	13.6	4.6	0.0	0.0	15.4	5.5	39.1	4.5		
Prop In Lane	1.00		0.00	0.00		1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	302	2311	0	0	849	380	1495	718		
V/C Ratio(X)	0.91	0.19	0.00	0.00	0.77	0.31	1.18	0.18		
Avail Cap(c_a), veh/h	302	4046	0	0	2029	908	1495	718		
HCM Platoon Ratio	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	0.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	36.6	14.6	0.0	0.0	31.9	28.1	25.4	14.9		
Incr Delay (d2), s/veh	28.9	0.0	0.0	0.0	0.6	0.2	88.1	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.1	2.1	0.0	0.0	7.6	2.4	36.8	5.1		
LnGrp Delay(d),s/veh	65.5	14.7	0.0	0.0	32.4	28.3	113.5	14.9		
LnGrp LOS	E	B			C	C	F	B		
Approach Vol, veh/h		706			769		1896			
Approach Delay, s/veh		34.3			31.8		106.7			
Approach LOS		C			C		F			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		45.6		44.4	20.0	25.6		
Change Period (Y+Rc), s		* 6		5.3	6.0	5.3		
Max Green Setting (Gmax), s		* 70		39.1	14.0	50.3		
Max Q Clear Time (g_c+I1), s		6.6		41.1	15.6	17.4		
Green Ext Time (p_c), s		2.7		0.0	0.0	2.9		

Intersection Summary	
HCM 2010 Ctrl Delay	74.4
HCM 2010 LOS	E

Notes

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	26	380	117	100	400	84
Future Volume (veh/h)	26	380	117	100	400	84
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	28	404	124	106	426	89
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	121	532	446	381	475	1520
Arrive On Green	0.07	0.07	0.47	0.47	0.26	0.80
Sat Flow, veh/h	1810	1615	947	810	1810	1900
Grp Volume(v), veh/h	28	404	0	230	426	89
Grp Sat Flow(s),veh/h/ln	1810	1615	0	1757	1810	1900
Q Serve(g_s), s	1.3	6.0	0.0	7.2	20.4	0.9
Cycle Q Clear(g_c), s	1.3	6.0	0.0	7.2	20.4	0.9
Prop In Lane	1.00	1.00		0.46	1.00	
Lane Grp Cap(c), veh/h	121	532	0	827	475	1520
V/C Ratio(X)	0.23	0.76	0.00	0.28	0.90	0.06
Avail Cap(c_a), veh/h	121	532	0	827	764	1520
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	39.8	27.0	0.0	14.5	32.0	1.9
Incr Delay (d2), s/veh	1.0	6.3	0.0	0.8	8.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	9.8	0.0	3.6	11.3	0.5
LnGrp Delay(d),s/veh	40.8	33.3	0.0	15.3	40.5	2.0
LnGrp LOS	D	C		B	D	A
Approach Vol, veh/h	432		230			515
Approach Delay, s/veh	33.8		15.3			33.8
Approach LOS	C		B			C

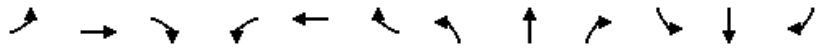
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	29.6	48.4				78.0		12.0
Change Period (Y+Rc), s	6.0	6.0				6.0		6.0
Max Green Setting (Gmax), s	38.0	28.0				72.0		6.0
Max Q Clear Time (g_c+I1), s	22.4	9.2				2.9		8.0
Green Ext Time (p_c), s	1.2	1.8				2.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	238	1	298	1160	829	0	0	709	432
Future Volume (veh/h)	0	0	0	238	1	298	1160	829	0	0	709	432
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		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	1900	1881	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				280	1	178	1365	975	0	0	834	160
Adj No. of Lanes				2	0	1	2	2	0	0	4	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, %				1	1	1	2	2	0	0	2	2
Cap, veh/h				509	0	234	1495	2608	0	0	1667	410
Arrive On Green				0.15	0.14	0.15	0.43	0.74	0.00	0.00	0.26	0.26
Sat Flow, veh/h				3476	0	1599	3442	3632	0	0	6669	1576
Grp Volume(v), veh/h				280	0	178	1365	975	0	0	834	160
Grp Sat Flow(s),veh/h/ln				1738	0	1599	1721	1770	0	0	1602	1576
Q Serve(g_s), s				6.2	0.0	8.8	30.6	8.2	0.0	0.0	9.1	6.9
Cycle Q Clear(g_c), s				6.2	0.0	8.8	30.6	8.2	0.0	0.0	9.1	6.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				509	0	234	1495	2608	0	0	1667	410
V/C Ratio(X)				0.55	0.00	0.76	0.91	0.37	0.00	0.00	0.50	0.39
Avail Cap(c_a), veh/h				1779	0	819	1900	3787	0	0	3047	749
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				32.7	0.0	33.8	21.8	3.9	0.0	0.0	25.9	25.1
Incr Delay (d2), s/veh				0.3	0.0	1.9	5.3	0.0	0.0	0.0	0.1	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.0	0.0	4.0	15.5	3.9	0.0	0.0	4.0	3.0
LnGrp Delay(d),s/veh				33.0	0.0	35.7	27.2	4.0	0.0	0.0	26.0	25.3
LnGrp LOS				C		D	C	A			C	C
Approach Vol, veh/h					458			2340			994	
Approach Delay, s/veh					34.1			17.5			25.9	
Approach LOS					C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		65.6			39.3	26.2		16.9
Change Period (Y+Rc), s		5.3			4.0	5.3		5.3
Max Green Setting (Gmax), s		87.7			45.0	38.7		41.7
Max Q Clear Time (g_c+I1), s		10.2			32.6	11.1		10.8
Green Ext Time (p_c), s		11.1			2.7	9.7		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	21.7
HCM 2010 LOS	C



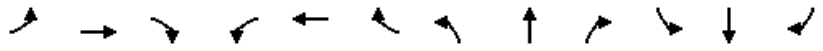
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	359	2	610	0	0	0	0	1609	195	313	662	0
Future Volume (veh/h)	359	2	610	0	0	0	0	1609	195	313	662	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845				0	1881	1900	1863	1863	0
Adj Flow Rate, veh/h	417	0	710				0	1871	211	364	770	0
Adj No. of Lanes	2	0	2				0	4	0	2	2	0
Peak Hour Factor	0.86	0.86	0.86				0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3				0	1	1	2	2	0
Cap, veh/h	1020	0	910				0	2619	295	457	2166	0
Arrive On Green	0.29	0.00	0.29				0.00	0.44	0.44	0.13	0.61	0.00
Sat Flow, veh/h	3514	0	3136				0	6208	670	3442	3632	0
Grp Volume(v), veh/h	417	0	710				0	1527	555	364	770	0
Grp Sat Flow(s),veh/h/ln	1757	0	1568				0	1618	1762	1721	1770	0
Q Serve(g_s), s	8.6	0.0	18.7				0.0	23.2	23.2	9.2	9.7	0.0
Cycle Q Clear(g_c), s	8.6	0.0	18.7				0.0	23.2	23.2	9.2	9.7	0.0
Prop In Lane	1.00		1.00				0.00		0.38	1.00		0.00
Lane Grp Cap(c), veh/h	1020	0	910				0	2138	776	457	2166	0
V/C Ratio(X)	0.41	0.00	0.78				0.00	0.71	0.71	0.80	0.36	0.00
Avail Cap(c_a), veh/h	2572	0	2296				0	2541	922	554	2611	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	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.8	0.0	29.4				0.0	20.6	20.7	37.9	8.7	0.0
Incr Delay (d2), s/veh	0.3	0.0	1.5				0.0	0.6	1.5	5.4	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	4.2	0.0	8.3				0.0	10.4	11.6	4.7	4.7	0.0
LnGrp Delay(d),s/veh	26.0	0.0	30.8				0.0	21.1	22.2	43.3	8.7	0.0
LnGrp LOS	C		C					C	C	D	A	
Approach Vol, veh/h		1127						2082			1134	
Approach Delay, s/veh		29.1						21.4			19.8	
Approach LOS		C						C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.5	44.5		30.2		60.0		
Change Period (Y+Rc), s	4.0	5.3		4.5		* 5.3		
Max Green Setting (Gmax), s	11.5	46.7		65.5		* 66		
Max Q Clear Time (g_c+I1), s	11.2	25.2		20.7		11.7		
Green Ext Time (p_c), s	0.2	14.0		4.9		22.4		

Intersection Summary	
HCM 2010 Ctrl Delay	23.0
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



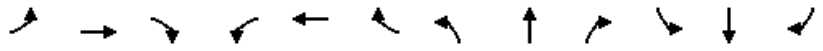
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	2	85	449	58	114	145	463	1293	6	610	39
Future Volume (veh/h)	24	2	85	449	58	114	145	463	1293	6	610	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1827	1827	1900	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	28	2	6	528	68	88	171	545	775	7	718	42
Adj No. of Lanes	1	1	0	3	1	0	1	2	2	1	2	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	8	8	8	4	4	4	2	2	2	5	5	5
Cap, veh/h	56	35	104	763	154	200	230	1466	1136	132	1191	70
Arrive On Green	0.03	0.09	0.08	0.16	0.21	0.20	0.13	0.41	0.41	0.08	0.36	0.35
Sat Flow, veh/h	1675	383	1149	4907	724	937	1774	3539	2742	1723	3301	193
Grp Volume(v), veh/h	28	0	8	528	0	156	171	545	775	7	374	386
Grp Sat Flow(s),veh/h/ln	1675	0	1532	1636	0	1662	1774	1770	1371	1723	1719	1775
Q Serve(g_s), s	1.0	0.0	0.3	6.0	0.0	4.8	5.5	6.3	13.6	0.2	10.5	10.5
Cycle Q Clear(g_c), s	1.0	0.0	0.3	6.0	0.0	4.8	5.5	6.3	13.6	0.2	10.5	10.5
Prop In Lane	1.00		0.75	1.00		0.56	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	56	0	139	763	0	354	230	1466	1136	132	620	641
V/C Ratio(X)	0.50	0.00	0.06	0.69	0.00	0.44	0.74	0.37	0.68	0.05	0.60	0.60
Avail Cap(c_a), veh/h	156	0	767	1208	0	1086	497	2764	2141	132	992	1025
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	0.0	24.6	23.5	0.0	20.3	24.7	11.9	14.1	25.2	15.4	15.4
Incr Delay (d2), s/veh	2.5	0.0	0.1	0.4	0.0	0.3	1.8	0.1	0.3	0.1	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.1	2.7	0.0	2.2	2.8	3.0	5.2	0.1	4.9	5.1
LnGrp Delay(d),s/veh	30.5	0.0	24.7	24.0	0.0	20.6	26.5	12.0	14.4	25.3	15.7	15.7
LnGrp LOS	C		C	C		C	C	B	B	C	B	B
Approach Vol, veh/h		36			684			1491			767	
Approach Delay, s/veh		29.2			23.2			14.9			15.8	
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	8.0	28.8	12.7	9.5	11.1	25.7	5.5	16.6
Change Period (Y+Rc), s	4.0	4.9	4.0	4.6	4.0	4.9	4.0	4.6
Max Green Setting (Gmax), s	4.0	45.5	14.0	29.0	16.0	33.5	5.0	38.0
Max Q Clear Time (g_c+I1), s	2.3	15.6	8.0	2.3	7.5	12.5	3.0	6.8
Green Ext Time (p_c), s	0.0	8.2	0.7	0.5	0.1	7.5	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.2
HCM 2010 LOS	B

Notes

User approved changes to right turn type.



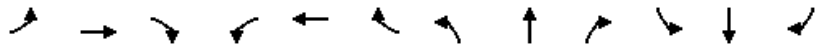
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	0	866	0	0	0	0	1632	441	198	714	0
Future Volume (veh/h)	251	0	866	0	0	0	0	1632	441	198	714	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	60				0	60	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	285	0	700				0	1855	501	225	811	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	945	0	983				0	2384	345	310	3154	0
Arrive On Green	0.08	0.00	0.08				0.00	0.18	0.17	0.03	0.22	0.00
Sat Flow, veh/h	3442	0	3610				0	4679	1058	3343	5103	0
Grp Volume(v), veh/h	285	0	700				0	1580	776	225	811	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1639	1672	1647	0
Q Serve(g_s), s	7.7	0.0	18.8				0.0	45.3	45.6	6.6	13.3	0.0
Cycle Q Clear(g_c), s	7.7	0.0	18.8				0.0	45.3	45.6	6.6	13.3	0.0
Prop In Lane	1.00		1.00				0.00		0.65	1.00		0.00
Lane Grp Cap(c), veh/h	945	0	983				0	1658	880	310	3154	0
V/C Ratio(X)	0.30	0.00	0.71				0.00	0.95	0.88	0.73	0.26	0.00
Avail Cap(c_a), veh/h	1089	0	1143				0	1823	891	424	3319	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.6	0.0	47.4				0.0	45.3	41.9	50.0	20.9	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.3				0.0	10.9	9.8	2.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	93.1				0.0	76.4	17.7	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	17.8				0.0	30.0	30.7	3.4	6.6	0.0
LnGrp Delay(d),s/veh	38.7	0.0	141.8				0.0	132.6	69.5	52.1	20.9	0.0
LnGrp LOS	D		F					F	E	D	C	
Approach Vol, veh/h		985						2356			1036	
Approach Delay, s/veh		111.9						111.8			27.7	
Approach LOS		F						F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	13.8	56.9		28.0		70.6		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	12.9	* 53		30.7		48.1		
Max Q Clear Time (g_c+I1), s	8.6	47.6		20.8		15.3		
Green Ext Time (p_c), s	0.3	4.3		1.8		4.0		

Intersection Summary	
HCM 2010 Ctrl Delay	91.9
HCM 2010 LOS	F

Notes

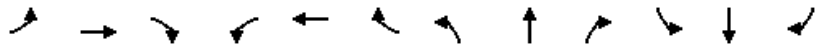
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	23	21	198	33	239	22	1472	123	164	910	21
Future Volume (veh/h)	27	23	21	198	33	239	22	1472	123	164	910	21
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	31	26	4	225	38	35	25	1673	135	186	1034	23
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	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	1	1	1	2	2	2	2	2	2
Cap, veh/h	65	55	96	268	282	239	41	1921	153	260	2232	50
Arrive On Green	0.07	0.07	0.06	0.15	0.15	0.15	0.02	0.58	0.57	0.08	0.63	0.63
Sat Flow, veh/h	977	819	1530	1792	1881	1596	1774	3320	265	3442	3538	79
Grp Volume(v), veh/h	57	0	4	225	38	35	25	884	924	186	517	540
Grp Sat Flow(s),veh/h/ln	1796	0	1530	1792	1881	1596	1774	1770	1815	1721	1770	1847
Q Serve(g_s), s	3.6	0.0	0.3	14.4	2.1	2.2	1.6	49.4	51.4	6.2	17.9	17.9
Cycle Q Clear(g_c), s	3.6	0.0	0.3	14.4	2.1	2.2	1.6	49.4	51.4	6.2	17.9	17.9
Prop In Lane	0.54		1.00	1.00		1.00	1.00		0.15	1.00		0.04
Lane Grp Cap(c), veh/h	120	0	96	268	282	239	41	1024	1050	260	1117	1165
V/C Ratio(X)	0.47	0.00	0.04	0.84	0.13	0.15	0.61	0.86	0.88	0.72	0.46	0.46
Avail Cap(c_a), veh/h	542	0	456	578	606	514	249	1127	1156	483	1127	1177
HCM Platoon Ratio	1.00	1.00	1.00	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	52.9	0.0	51.8	48.6	43.4	43.5	56.9	20.9	21.3	53.1	11.3	11.3
Incr Delay (d2), s/veh	1.1	0.0	0.1	2.7	0.1	0.1	5.2	6.1	7.0	1.4	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.1	7.3	1.1	1.0	0.9	25.8	27.7	3.0	8.7	9.0
LnGrp Delay(d),s/veh	54.0	0.0	51.9	51.3	43.5	43.6	62.1	26.9	28.3	54.5	11.4	11.4
LnGrp LOS	D		D	D	D	D	E	C	C	D	B	B
Approach Vol, veh/h		61			298			1833			1243	
Approach Delay, s/veh		53.8			49.4			28.1			17.9	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	72.1		11.4	6.2	78.3		21.7
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.0	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	8.2	53.4		5.6	3.6	19.9		16.4
Green Ext Time (p_c), s	0.2	14.1		0.1	0.0	23.4		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.7
HCM 2010 LOS	C



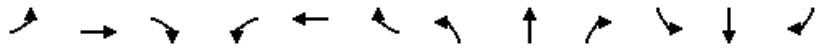
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	152	99	77	170	765	49	854	24	481	832	117
Future Volume (veh/h)	141	152	99	77	170	765	49	854	24	481	832	117
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1881	1881	1881	1881	1881	1900	1863	1863	1863
Adj Flow Rate, veh/h	158	171	38	87	191	860	55	960	26	540	935	56
Adj No. of Lanes	1	2	0	1	1	2	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	195	877	190	118	489	1416	293	1091	30	629	1114	671
Arrive On Green	0.11	0.30	0.30	0.07	0.26	0.26	0.16	0.31	0.30	0.18	0.31	0.31
Sat Flow, veh/h	1774	2884	625	1792	1881	3198	1792	3554	96	3442	3539	1580
Grp Volume(v), veh/h	158	103	106	87	191	860	55	483	503	540	935	56
Grp Sat Flow(s),veh/h/ln	1774	1770	1740	1792	1881	1599	1792	1787	1863	1721	1770	1580
Q Serve(g_s), s	9.8	4.9	5.1	5.4	9.5	23.2	3.0	29.0	29.0	17.2	27.8	1.2
Cycle Q Clear(g_c), s	9.8	4.9	5.1	5.4	9.5	23.2	3.0	29.0	29.0	17.2	27.8	1.2
Prop In Lane	1.00		0.36	1.00		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	195	538	529	118	489	1416	293	549	572	629	1114	671
V/C Ratio(X)	0.81	0.19	0.20	0.74	0.39	0.61	0.19	0.88	0.88	0.86	0.84	0.08
Avail Cap(c_a), veh/h	369	1157	1137	166	1014	2307	293	746	778	990	2136	1127
HCM Platoon Ratio	1.00	1.00	1.00	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	49.2	29.1	29.2	51.8	34.4	24.0	40.8	37.2	37.2	44.8	36.1	7.4
Incr Delay (d2), s/veh	3.1	0.1	0.1	5.1	0.2	0.2	0.1	7.4	7.1	2.7	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	2.4	2.5	2.8	5.0	10.2	1.5	15.5	16.1	8.4	13.6	0.5
LnGrp Delay(d),s/veh	52.3	29.1	29.3	56.9	34.6	24.2	40.9	44.6	44.3	47.5	36.7	7.4
LnGrp LOS	D	C	C	E	C	C	D	D	D	D	D	A
Approach Vol, veh/h		367			1138			1041			1531	
Approach Delay, s/veh		39.1			28.4			44.3			39.5	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	39.5	10.9	38.5	23.3	40.4	15.9	33.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	5.3	* 5.3	4.0	4.6
Max Green Setting (Gmax), s	32.6	46.7	10.0	73.4	11.0	* 68	23.0	60.4
Max Q Clear Time (g_c+I1), s	11.2	31.0	7.4	7.1	5.0	29.8	11.8	25.2
Green Ext Time (p_c), s	0.9	3.2	0.0	3.5	2.1	5.3	0.1	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	37.6
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



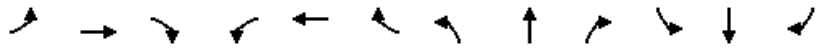
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	171	61	611	7	98	59	822	1459	14	70	848	158
Future Volume (veh/h)	171	61	611	7	98	59	822	1459	14	70	848	158
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
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	1881	1881	1881	1900	1863	1863	1881	1881	1881	1863	1863	1900
Adj Flow Rate, veh/h	173	62	138	7	99	13	830	1474	7	71	857	143
Adj No. of Lanes	1	1	2	0	1	1	2	2	1	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	2	2	2
Cap, veh/h	224	235	351	11	158	142	946	1948	852	101	1444	240
Arrive On Green	0.12	0.12	0.12	0.09	0.09	0.09	0.27	0.55	0.55	0.06	0.33	0.32
Sat Flow, veh/h	1792	1881	2814	123	1734	1550	3476	3574	1563	1774	4382	727
Grp Volume(v), veh/h	173	62	138	106	0	13	830	1474	7	71	662	338
Grp Sat Flow(s),veh/h/ln	1792	1881	1407	1857	0	1550	1738	1787	1563	1774	1695	1718
Q Serve(g_s), s	8.3	2.7	4.0	4.9	0.0	0.7	20.3	28.4	0.2	3.5	14.5	14.7
Cycle Q Clear(g_c), s	8.3	2.7	4.0	4.9	0.0	0.7	20.3	28.4	0.2	3.5	14.5	14.7
Prop In Lane	1.00		1.00	0.07		1.00	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	224	235	351	170	0	142	946	1948	852	101	1117	566
V/C Ratio(X)	0.77	0.26	0.39	0.62	0.00	0.09	0.88	0.76	0.01	0.71	0.59	0.60
Avail Cap(c_a), veh/h	294	308	461	824	0	688	1347	2537	1109	129	1367	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	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	37.7	35.3	35.9	39.0	0.0	37.1	31.0	15.7	9.3	41.3	24.9	25.0
Incr Delay (d2), s/veh	6.3	0.2	0.3	1.4	0.0	0.1	3.7	0.7	0.0	6.9	0.2	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	4.5	1.4	1.6	2.6	0.0	0.3	10.2	14.1	0.1	1.9	6.8	7.0
LnGrp Delay(d),s/veh	44.0	35.5	36.1	40.4	0.0	37.2	34.7	16.3	9.3	48.1	25.1	25.4
LnGrp LOS	D	D	D	D		D	C	B	A	D	C	C
Approach Vol, veh/h		373			119			2311			1071	
Approach Delay, s/veh		39.7			40.0			22.9			26.7	
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	8.6	53.3		15.5	27.7	34.1		11.6
Change Period (Y+Rc), s	4.0	5.3		4.9	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	6.6	62.7		14.1	34.0	* 35		39.0
Max Q Clear Time (g_c+I1), s	5.5	30.4		10.3	22.3	16.7		6.9
Green Ext Time (p_c), s	0.0	16.2		0.3	1.4	11.9		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.1
HCM 2010 LOS	C

Notes

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



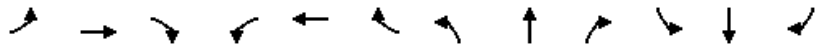
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	827	262	193	1249	71	478	143	181	64	180	114
Future Volume (veh/h)	47	827	262	193	1249	71	478	143	181	64	180	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	54	951	212	222	1436	29	549	164	63	74	207	116
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	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, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	62	1180	519	252	1559	682	599	668	548	101	269	151
Arrive On Green	0.03	0.33	0.33	0.14	0.44	0.44	0.17	0.35	0.35	0.06	0.24	0.23
Sat Flow, veh/h	1792	3574	1573	1792	3574	1563	3476	1881	1560	1810	1127	631
Grp Volume(v), veh/h	54	951	212	222	1436	29	549	164	63	74	0	323
Grp Sat Flow(s),veh/h/ln	1792	1787	1573	1792	1787	1563	1738	1881	1560	1810	0	1758
Q Serve(g_s), s	3.9	31.7	13.6	15.9	49.5	1.4	20.3	8.0	3.6	5.3	0.0	22.4
Cycle Q Clear(g_c), s	3.9	31.7	13.6	15.9	49.5	1.4	20.3	8.0	3.6	5.3	0.0	22.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	62	1180	519	252	1559	682	599	668	548	101	0	419
V/C Ratio(X)	0.88	0.81	0.41	0.88	0.92	0.04	0.92	0.25	0.12	0.73	0.00	0.77
Avail Cap(c_a), veh/h	62	1212	533	254	1595	697	599	723	593	159	0	527
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.8	40.0	33.9	55.1	34.7	21.2	53.2	29.8	28.7	60.7	0.0	46.5
Incr Delay (d2), s/veh	70.1	3.7	0.2	27.0	8.8	0.0	18.8	0.1	0.0	3.8	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	16.2	5.9	9.8	26.2	0.6	11.3	4.2	1.5	2.7	0.0	11.3
LnGrp Delay(d),s/veh	132.9	43.6	34.1	82.1	43.5	21.2	71.9	29.9	28.7	64.6	0.0	50.5
LnGrp LOS	F	D	C	F	D	C	E	C	C	E		D
Approach Vol, veh/h		1217			1687			776			397	
Approach Delay, s/veh		45.9			48.2			59.5			53.1	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	51.2	21.9	46.8	26.0	36.0	8.0	60.7
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	6.8	49.7	18.0	* 44	22.0	38.7	4.0	* 58
Max Q Clear Time (g_c+I1), s	7.3	10.0	17.9	33.7	22.3	24.4	5.9	51.5
Green Ext Time (p_c), s	0.0	1.8	0.0	7.4	0.0	1.6	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	50.2
HCM 2010 LOS	D

Notes

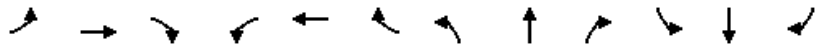
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	679	324	274	934	293	420	376	182	345	566	28
Future Volume (veh/h)	56	679	324	274	934	293	420	376	182	345	566	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	65	790	146	319	1086	177	488	437	193	401	658	31
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	79	1484	271	389	1253	204	550	666	291	469	880	41
Arrive On Green	0.04	0.34	0.34	0.11	0.41	0.41	0.16	0.28	0.27	0.13	0.25	0.25
Sat Flow, veh/h	1792	4329	792	3442	3042	495	3476	2403	1050	3476	3470	163
Grp Volume(v), veh/h	65	623	313	319	630	633	488	324	306	401	339	350
Grp Sat Flow(s),veh/h/ln	1792	1712	1698	1721	1770	1767	1738	1787	1666	1738	1787	1846
Q Serve(g_s), s	4.5	18.3	18.6	11.4	40.8	41.1	17.2	20.1	20.4	14.1	21.9	21.9
Cycle Q Clear(g_c), s	4.5	18.3	18.6	11.4	40.8	41.1	17.2	20.1	20.4	14.1	21.9	21.9
Prop In Lane	1.00		0.47	1.00		0.28	1.00		0.63	1.00		0.09
Lane Grp Cap(c), veh/h	79	1173	582	389	729	728	550	495	461	469	453	468
V/C Ratio(X)	0.83	0.53	0.54	0.82	0.87	0.87	0.89	0.65	0.66	0.86	0.75	0.75
Avail Cap(c_a), veh/h	79	1207	599	535	822	821	568	573	534	541	559	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.4	33.1	33.2	54.3	33.7	33.8	51.7	40.0	40.3	53.0	43.1	43.1
Incr Delay (d2), s/veh	46.6	0.2	0.4	5.1	8.0	8.3	14.7	1.4	1.6	10.3	3.1	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	8.7	8.8	5.7	21.6	21.7	9.4	10.1	9.6	7.5	11.2	11.6
LnGrp Delay(d),s/veh	106.1	33.3	33.6	59.4	41.7	42.1	66.4	41.4	41.9	63.3	46.2	46.2
LnGrp LOS	F	C	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1001			1582			1118			1090	
Approach Delay, s/veh		38.1			45.4			52.4			52.5	
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	20.4	39.5	17.7	47.8	23.3	36.6	9.0	56.4
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	19.0	39.7	19.0	43.7	20.0	38.7	5.0	57.7
Max Q Clear Time (g_c+I1), s	16.1	22.4	13.4	20.6	19.2	23.9	6.5	43.1
Green Ext Time (p_c), s	0.3	4.6	0.3	10.2	0.1	4.3	0.0	8.0

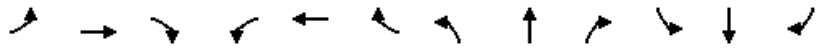
Intersection Summary	
HCM 2010 Ctrl Delay	47.1
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	579	80	58	983	172	217	89	59	391	90	270
Future Volume (veh/h)	226	579	80	58	983	172	217	89	59	391	90	270
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	254	651	79	65	1104	75	244	100	41	439	101	104
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	303	2105	253	94	1731	537	294	323	126	546	435	190
Arrive On Green	0.17	0.46	0.46	0.05	0.34	0.34	0.16	0.13	0.12	0.16	0.12	0.12
Sat Flow, veh/h	1774	4594	552	1774	5085	1576	1792	2512	980	3476	3574	1560
Grp Volume(v), veh/h	254	479	251	65	1104	75	244	70	71	439	101	104
Grp Sat Flow(s),veh/h/ln	1774	1695	1756	1774	1695	1576	1792	1787	1705	1738	1787	1560
Q Serve(g_s), s	11.3	7.3	7.4	2.9	14.9	2.7	10.8	2.9	3.1	10.0	2.1	5.1
Cycle Q Clear(g_c), s	11.3	7.3	7.4	2.9	14.9	2.7	10.8	2.9	3.1	10.0	2.1	5.1
Prop In Lane	1.00		0.31	1.00		1.00	1.00		0.57	1.00		1.00
Lane Grp Cap(c), veh/h	303	1553	804	94	1731	537	294	230	220	546	435	190
V/C Ratio(X)	0.84	0.31	0.31	0.69	0.64	0.14	0.83	0.30	0.32	0.80	0.23	0.55
Avail Cap(c_a), veh/h	402	2261	1171	206	2831	878	428	938	895	702	1745	761
HCM Platoon Ratio	1.00	1.00	1.00	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	32.8	14.0	14.0	38.0	22.7	18.7	33.1	32.3	32.5	33.2	32.4	33.8
Incr Delay (d2), s/veh	9.0	0.0	0.1	3.4	0.1	0.0	5.9	0.3	0.3	4.0	0.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	3.4	3.6	1.5	7.0	1.2	5.8	1.4	1.5	5.1	1.0	2.3
LnGrp Delay(d),s/veh	41.8	14.0	14.1	41.4	22.8	18.7	38.9	32.5	32.8	37.3	32.5	34.7
LnGrp LOS	D	B	B	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		984			1244			385			644	
Approach Delay, s/veh		21.2			23.6			36.6			36.1	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	15.3	7.8	42.2	16.9	14.8	17.4	32.6
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.0	42.4	9.0	54.0	19.0	39.4	18.0	45.0
Max Q Clear Time (g_c+I1), s	12.3	5.1	4.9	9.4	12.8	7.1	13.3	16.9
Green Ext Time (p_c), s	0.4	1.0	0.0	10.2	0.2	1.0	0.2	9.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.9
HCM 2010 LOS	C



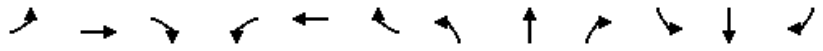
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↶	↱
Traffic Volume (veh/h)	0	1085	485	111	1210	0	0	0	0	447	1	523
Future Volume (veh/h)	0	1085	485	111	1210	0	0	0	0	447	1	523
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1179	192	121	1315	0				487	0	539
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1981	616	169	2632	0				1329	0	593
Arrive On Green	0.00	0.39	0.39	0.09	0.51	0.00				0.37	0.00	0.37
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1179	192	121	1315	0				487	0	539
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	15.6	7.1	5.1	14.3	0.0				8.5	0.0	27.4
Cycle Q Clear(g_c), s	0.0	15.6	7.1	5.1	14.3	0.0				8.5	0.0	27.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1981	616	169	2632	0				1329	0	593
V/C Ratio(X)	0.00	0.60	0.31	0.72	0.50	0.00				0.37	0.00	0.91
Avail Cap(c_a), veh/h	0	2730	849	382	3939	0				2721	0	1214
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	20.8	18.2	37.9	13.6	0.0				19.3	0.0	25.2
Incr Delay (d2), s/veh	0.0	0.1	0.1	2.1	0.1	0.0				0.1	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.3	3.2	1.4	6.7	0.0				4.1	0.0	12.4
LnGrp Delay(d),s/veh	0.0	20.9	18.3	40.0	13.6	0.0				19.3	0.0	27.5
LnGrp LOS		C	B	D	B					B		C
Approach Vol, veh/h		1371			1436						1026	
Approach Delay, s/veh		20.6			15.9						23.6	
Approach LOS		C			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	10.8	37.6		36.6		48.4		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	6.8	44.7		64.7		64.7		
Max Q Clear Time (g_c+I1), s	7.1	17.6		29.4		16.3		
Green Ext Time (p_c), s	0.1	14.7		1.9		18.7		

Intersection Summary	
HCM 2010 Ctrl Delay	19.6
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



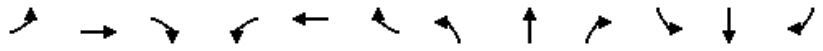
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1101	434	142	822	640	492	49	282	0	0	0
Future Volume (veh/h)	0	1101	434	142	822	640	492	49	282	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	0	1197	237	154	893	382	573	0	157			
Adj No. of Lanes	0	3	1	1	3	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	2303	716	208	3188	966	770	0	343			
Arrive On Green	0.00	0.45	0.45	0.12	0.63	0.63	0.22	0.00	0.22			
Sat Flow, veh/h	0	5253	1581	1774	5085	1541	3548	0	1581			
Grp Volume(v), veh/h	0	1197	237	154	893	382	573	0	157			
Grp Sat Flow(s),veh/h/ln	0	1695	1581	1774	1695	1541	1774	0	1581			
Q Serve(g_s), s	0.0	10.4	5.9	5.2	4.9	7.6	9.3	0.0	5.3			
Cycle Q Clear(g_c), s	0.0	10.4	5.9	5.2	4.9	7.6	9.3	0.0	5.3			
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2303	716	208	3188	966	770	0	343			
V/C Ratio(X)	0.00	0.52	0.33	0.74	0.28	0.40	0.74	0.00	0.46			
Avail Cap(c_a), veh/h	0	3902	1213	332	5142	1558	2780	0	1239			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	12.0	10.8	26.3	5.2	5.7	22.5	0.0	20.9			
Incr Delay (d2), s/veh	0.0	0.1	0.1	2.0	0.0	0.1	0.5	0.0	0.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	4.8	2.6	2.6	2.2	3.2	4.6	0.0	2.3			
LnGrp Delay(d),s/veh	0.0	12.1	10.9	28.2	5.2	5.8	23.0	0.0	21.3			
LnGrp LOS		B	B	C	A	A	C		C			
Approach Vol, veh/h		1434			1429			730				
Approach Delay, s/veh		11.9			7.8			22.6				
Approach LOS		B			A			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	10.7	32.7		18.2		43.4		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	11.0	46.7		47.7		61.7		
Max Q Clear Time (g_c+I1), s	7.2	12.4		11.3		9.6		
Green Ext Time (p_c), s	0.1	14.6		1.3		16.4		

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B

Notes

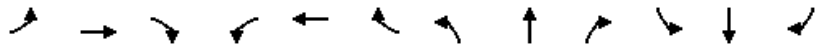
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	88	7	14	60	337	7	326	28	248	176	23
Future Volume (veh/h)	40	88	7	14	60	337	7	326	28	248	176	23
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.97	1.00		0.96	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	1845	1845	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	48	105	6	17	71	224	8	388	26	295	210	10
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	130	460	26	129	101	319	131	714	48	363	1180	56
Arrive On Green	0.07	0.26	0.26	0.07	0.26	0.26	0.07	0.21	0.20	0.20	0.34	0.33
Sat Flow, veh/h	1774	1744	100	1757	382	1207	1792	3391	226	1792	3472	164
Grp Volume(v), veh/h	48	0	111	17	0	295	8	204	210	295	108	112
Grp Sat Flow(s),veh/h/ln	1774	0	1843	1757	0	1589	1792	1787	1831	1792	1787	1850
Q Serve(g_s), s	1.6	0.0	2.9	0.6	0.0	10.3	0.3	6.2	6.3	9.6	2.6	2.6
Cycle Q Clear(g_c), s	1.6	0.0	2.9	0.6	0.0	10.3	0.3	6.2	6.3	9.6	2.6	2.6
Prop In Lane	1.00		0.05	1.00		0.76	1.00		0.12	1.00		0.09
Lane Grp Cap(c), veh/h	130	0	487	129	0	420	131	376	385	363	607	628
V/C Ratio(X)	0.37	0.00	0.23	0.13	0.00	0.70	0.06	0.54	0.55	0.81	0.18	0.18
Avail Cap(c_a), veh/h	333	0	1097	329	0	946	628	1463	1498	628	1463	1514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	27.1	0.0	17.7	26.6	0.0	20.6	26.5	21.6	21.6	23.3	14.2	14.2
Incr Delay (d2), s/veh	0.6	0.0	0.1	0.2	0.0	0.8	0.1	0.5	0.4	1.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.5	0.3	0.0	4.6	0.1	3.1	3.2	4.9	1.3	1.4
LnGrp Delay(d),s/veh	27.7	0.0	17.8	26.8	0.0	21.4	26.5	22.0	22.1	25.0	14.3	14.3
LnGrp LOS	C		B	C		C	C	C	C	C	B	B
Approach Vol, veh/h		159			312			422			515	
Approach Delay, s/veh		20.8			21.7			22.1			20.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	17.7	8.0	19.7	8.0	25.6	8.0	19.7
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	11.9	49.7	11.0	36.0	21.0	49.7	11.0	36.0
Max Q Clear Time (g_c+I1), s	11.6	8.3	2.6	4.9	2.3	4.6	3.6	12.3
Green Ext Time (p_c), s	0.3	2.1	0.0	1.5	0.0	2.1	0.0	1.4

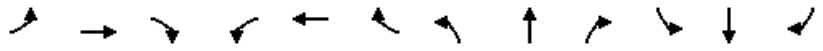
Intersection Summary	
HCM 2010 Ctrl Delay	21.3
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	184	179	323	172	161	95	732	261	149	923	61
Future Volume (veh/h)	122	184	179	323	172	161	95	732	261	149	923	61
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	134	202	175	355	189	159	104	804	274	164	1014	64
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	370	224	194	345	213	179	163	787	268	201	1098	69
Arrive On Green	0.21	0.24	0.24	0.19	0.23	0.23	0.09	0.30	0.30	0.11	0.32	0.32
Sat Flow, veh/h	1792	924	801	1774	925	778	1792	2615	891	1792	3409	215
Grp Volume(v), veh/h	134	0	377	355	0	348	104	549	529	164	532	546
Grp Sat Flow(s),veh/h/ln	1792	0	1725	1774	0	1704	1792	1787	1719	1792	1787	1837
Q Serve(g_s), s	7.1	0.0	23.4	21.5	0.0	21.9	6.2	33.3	33.3	9.9	31.8	31.8
Cycle Q Clear(g_c), s	7.1	0.0	23.4	21.5	0.0	21.9	6.2	33.3	33.3	9.9	31.8	31.8
Prop In Lane	1.00		0.46	1.00		0.46	1.00		0.52	1.00		0.12
Lane Grp Cap(c), veh/h	370	0	418	345	0	392	163	538	517	201	575	591
V/C Ratio(X)	0.36	0.00	0.90	1.03	0.00	0.89	0.64	1.02	1.02	0.82	0.92	0.92
Avail Cap(c_a), veh/h	370	0	532	345	0	602	170	538	517	235	602	619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.6	0.0	40.7	44.6	0.0	41.3	48.5	38.7	38.8	48.0	36.2	36.2
Incr Delay (d2), s/veh	0.2	0.0	13.9	56.3	0.0	7.1	5.4	44.3	45.3	15.0	19.1	18.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	12.8	15.8	0.0	11.0	3.3	22.9	22.2	5.8	18.7	19.2
LnGrp Delay(d),s/veh	37.8	0.0	54.6	100.9	0.0	48.4	53.9	82.9	84.1	63.0	55.3	55.0
LnGrp LOS	D		D	F		D	D	F	F	E	E	D
Approach Vol, veh/h		511			703			1182			1242	
Approach Delay, s/veh		50.2			74.9			80.9			56.2	
Approach LOS		D			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	31.6	13.6	40.4	26.4	30.3	15.9	38.1
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	21.0	33.6	10.0	36.8	16.0	38.6	14.0	32.8
Max Q Clear Time (g_c+I1), s	23.5	25.4	8.2	33.8	9.1	23.9	11.9	35.3
Green Ext Time (p_c), s	0.0	0.9	0.1	1.4	0.5	1.1	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	67.0
HCM 2010 LOS	E



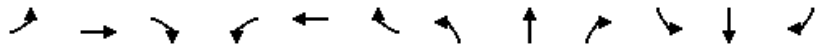
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	0	54	8	0	59	4	840	43	319	1056	75
Future Volume (veh/h)	229	0	54	8	0	59	4	840	43	319	1056	75
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1880	1900
Adj Flow Rate, veh/h	249	0	59	9	0	8	4	966	20	367	1214	82
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.87	0.92	0.87	0.92	0.87	0.87	0.87	0.87	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	169	0	146	33	0	13	9	1372	598	423	1971	133
Arrive On Green	0.10	0.00	0.09	0.02	0.00	0.02	0.01	0.38	0.38	0.24	0.58	0.57
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1557	1792	3396	229
Grp Volume(v), veh/h	249	0	59	9	0	8	4	966	20	367	638	658
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1557	1792	1786	1840
Q Serve(g_s), s	7.0	0.0	2.6	0.4	0.0	0.4	0.2	16.7	0.6	14.4	17.1	17.2
Cycle Q Clear(g_c), s	7.0	0.0	2.6	0.4	0.0	0.4	0.2	16.7	0.6	14.4	17.1	17.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	169	0	146	33	0	13	9	1372	598	423	1036	1067
V/C Ratio(X)	1.47	0.00	0.40	0.27	0.00	0.60	0.42	0.70	0.03	0.87	0.62	0.62
Avail Cap(c_a), veh/h	169	0	734	136	0	749	121	1715	747	623	1295	1334
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	0.0	31.4	35.5	0.0	36.0	36.4	19.1	14.1	26.9	10.1	10.1
Incr Delay (d2), s/veh	241.0	0.0	1.8	4.4	0.0	15.3	27.2	0.6	0.0	6.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.7	0.0	1.2	0.2	0.0	0.2	0.2	8.3	0.3	7.9	8.4	8.7
LnGrp Delay(d),s/veh	274.2	0.0	33.2	39.9	0.0	51.3	63.6	19.7	14.1	33.2	10.3	10.3
LnGrp LOS	F		C	D		D	E	B	B	C	B	B
Approach Vol, veh/h		308			17			990			1663	
Approach Delay, s/veh		228.0			45.3			19.8			15.3	
Approach LOS		F			D			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	80.8	32.9	6.8	12.8	6.4	47.4	13.0	6.6
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	25.8	34.7	5.0	34.0	5.0	52.7	7.0	* 34
Max Q Clear Time (g_c+I1), s	16.4	18.7	2.4	4.6	2.2	19.2	9.0	2.4
Green Ext Time (p_c), s	0.4	8.9	0.0	0.3	0.0	12.5	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	39.0
HCM 2010 LOS	D

Notes

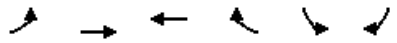
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	0	50	29	6	314	39	460	44	366	505	49
Future Volume (veh/h)	118	0	50	29	6	314	39	460	44	366	505	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	146	0	62	36	7	53	48	568	54	452	623	60
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	200	237	188	81	11	85	80	878	83	519	1679	161
Arrive On Green	0.11	0.00	0.12	0.05	0.06	0.06	0.04	0.26	0.26	0.29	0.51	0.50
Sat Flow, veh/h	1810	1900	1611	1792	189	1432	1810	3326	315	1792	3295	317
Grp Volume(v), veh/h	146	0	62	36	0	60	48	308	314	452	337	346
Grp Sat Flow(s),veh/h/ln	1810	1900	1611	1792	0	1621	1810	1805	1836	1792	1787	1825
Q Serve(g_s), s	4.9	0.0	2.2	1.2	0.0	2.3	1.6	9.5	9.5	15.0	7.1	7.2
Cycle Q Clear(g_c), s	4.9	0.0	2.2	1.2	0.0	2.3	1.6	9.5	9.5	15.0	7.1	7.2
Prop In Lane	1.00		1.00	1.00		0.88	1.00		0.17	1.00		0.17
Lane Grp Cap(c), veh/h	200	237	188	81	0	96	80	477	485	519	911	930
V/C Ratio(X)	0.73	0.00	0.33	0.44	0.00	0.62	0.60	0.65	0.65	0.87	0.37	0.37
Avail Cap(c_a), veh/h	275	1078	901	272	0	920	159	756	769	902	1491	1523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	0.0	25.4	29.1	0.0	28.7	29.4	20.4	20.5	21.1	9.3	9.3
Incr Delay (d2), s/veh	6.2	0.0	0.4	3.8	0.0	2.4	2.7	0.5	0.5	1.9	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	1.0	0.7	0.0	1.1	0.9	4.8	4.9	7.7	3.5	3.6
LnGrp Delay(d),s/veh	33.1	0.0	25.8	32.9	0.0	31.2	32.0	21.0	21.0	23.0	9.4	9.4
LnGrp LOS	C		C	C		C	C	C	C	C	A	A
Approach Vol, veh/h		208			96			670			1135	
Approach Delay, s/veh		30.9			31.8			21.8			14.8	
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	21.6	21.3	8.3	11.3	6.3	36.7	12.4	7.2
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	31.6	25.7	9.0	35.0	5.0	51.7	9.0	35.0
Max Q Clear Time (g_c+I1), s	17.6	11.5	3.2	4.2	3.6	9.2	6.9	4.3
Green Ext Time (p_c), s	0.6	4.5	0.0	0.3	0.0	5.6	0.1	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B



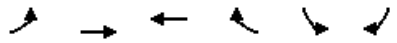
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	48	19	121	358	0
Future Volume (veh/h)	0	48	19	121	358	0
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	52	21	132	389	0
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2	2196	1098	983	437	390
Arrive On Green	0.00	0.62	0.62	0.62	0.25	0.00
Sat Flow, veh/h	1774	3632	1863	1583	1774	1583
Grp Volume(v), veh/h	0	52	21	132	389	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1583	1774	1583
Q Serve(g_s), s	0.0	0.5	0.4	3.1	19.1	0.0
Cycle Q Clear(g_c), s	0.0	0.5	0.4	3.1	19.1	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	2	2196	1098	983	437	390
V/C Ratio(X)	0.00	0.02	0.02	0.13	0.89	0.00
Avail Cap(c_a), veh/h	158	2196	1098	983	729	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	6.6	6.6	7.1	32.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	7.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.2	1.4	10.2	0.0
LnGrp Delay(d),s/veh	0.0	6.6	6.6	7.4	40.6	0.0
LnGrp LOS		A	A	A	D	
Approach Vol, veh/h		52	153		389	
Approach Delay, s/veh		6.6	7.2		40.6	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				61.8		28.2	0.0	61.8
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				41.0		37.0	8.0	27.0
Max Q Clear Time (g_c+I1), s				2.5		21.1	0.0	5.1
Green Ext Time (p_c), s				1.4		1.1	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	29.0
HCM 2010 LOS	C

Notes

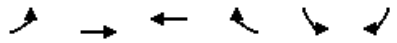
User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	406	141	127	196	0
Future Volume (veh/h)	0	406	141	127	196	0
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	441	153	138	213	0
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2	1573	812	682	749	669
Arrive On Green	0.00	0.44	0.44	0.44	0.42	0.00
Sat Flow, veh/h	1774	3632	1921	1534	1774	1583
Grp Volume(v), veh/h	0	441	148	143	213	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1592	1774	1583
Q Serve(g_s), s	0.0	7.1	4.6	4.9	7.1	0.0
Cycle Q Clear(g_c), s	0.0	7.1	4.6	4.9	7.1	0.0
Prop In Lane	1.00			0.96	1.00	1.00
Lane Grp Cap(c), veh/h	2	1573	786	708	749	669
V/C Ratio(X)	0.00	0.28	0.19	0.20	0.28	0.00
Avail Cap(c_a), veh/h	177	1573	786	708	749	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	15.9	15.2	15.3	17.1	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.5	0.6	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.5	2.3	2.3	3.6	0.0
LnGrp Delay(d),s/veh	0.0	16.3	15.7	15.9	18.0	0.0
LnGrp LOS		B	B	B	B	
Approach Vol, veh/h		441	291		213	
Approach Delay, s/veh		16.3	15.8		18.0	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				46.0		44.0	0.0	46.0
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				40.0		38.0	9.0	25.0
Max Q Clear Time (g_c+I1), s				9.1		9.1	0.0	6.9
Green Ext Time (p_c), s				5.0		0.6	0.0	4.3

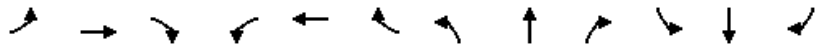
Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	259	401	187	128	970	44
Future Volume (veh/h)	259	401	187	128	970	44
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	305	472	220	151	1141	52
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	369	2346	592	277	1320	595
Arrive On Green	0.21	0.46	0.17	0.18	0.38	0.37
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	305	472	220	151	1141	52
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	10.5	3.5	3.5	5.5	19.3	1.3
Cycle Q Clear(g_c), s	10.5	3.5	3.5	5.5	19.3	1.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	369	2346	592	277	1320	595
V/C Ratio(X)	0.83	0.20	0.37	0.54	0.86	0.09
Avail Cap(c_a), veh/h	460	5605	2677	1210	2175	988
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	10.2	23.5	23.9	18.2	13.0
Incr Delay (d2), s/veh	9.8	0.0	0.1	0.6	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	1.6	1.7	2.4	9.4	0.6
LnGrp Delay(d),s/veh	33.9	10.2	23.7	24.5	19.3	13.0
LnGrp LOS	C	B	C	C	B	B
Approach Vol, veh/h		777	371		1193	
Approach Delay, s/veh		19.5	24.0		19.0	
Approach LOS		B	C		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		34.6			18.7	15.9		29.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		70.1			16.0	48.1		39.3
Max Q Clear Time (g_c+I1), s		5.5			12.5	7.5		21.3
Green Ext Time (p_c), s		3.1			0.3	3.1		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	20.0
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	1201	0	0	222	1072	101	0	143	0	0	0
Future Volume (veh/h)	175	1201	0	0	222	1072	101	0	143	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1845	1845	1845			
Adj Flow Rate, veh/h	180	1238	0	0	229	652	104	0	32			
Adj No. of Lanes	2	3	0	0	1	2	2	0	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, %	1	1	0	0	1	1	3	3	3			
Cap, veh/h	353	3386	0	0	879	1495	325	0	145			
Arrive On Green	0.10	0.66	0.00	0.00	0.47	0.47	0.09	0.00	0.09			
Sat Flow, veh/h	3476	5305	0	0	1881	3198	3514	0	1568			
Grp Volume(v), veh/h	180	1238	0	0	229	652	104	0	32			
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1881	1599	1757	0	1568			
Q Serve(g_s), s	1.9	4.2	0.0	0.0	2.9	5.3	1.1	0.0	0.7			
Cycle Q Clear(g_c), s	1.9	4.2	0.0	0.0	2.9	5.3	1.1	0.0	0.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	353	3386	0	0	879	1495	325	0	145			
V/C Ratio(X)	0.51	0.37	0.00	0.00	0.26	0.44	0.32	0.00	0.22			
Avail Cap(c_a), veh/h	674	8620	0	0	2622	4458	4135	0	1845			
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	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	16.5	3.0	0.0	0.0	6.2	6.9	16.4	0.0	16.3			
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	0.1	0.1	0.2	0.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.9	2.0	0.0	0.0	1.5	2.3	0.5	0.0	0.7			
LnGrp Delay(d),s/veh	16.9	3.0	0.0	0.0	6.3	7.0	16.6	0.0	16.5			
LnGrp LOS	B	A			A	A	B		B			
Approach Vol, veh/h		1418			881			136				
Approach Delay, s/veh		4.7			6.8			16.6				
Approach LOS		A			A			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		30.3		8.4	7.4	22.9		
Change Period (Y+Rc), s		5.3		5.3	4.0	5.3		
Max Green Setting (Gmax), s		64.4		45.0	7.0	53.4		
Max Q Clear Time (g_c+I1), s		6.2		3.1	3.9	7.3		
Green Ext Time (p_c), s		10.5		0.2	0.1	10.3		

Intersection Summary	
HCM 2010 Ctrl Delay	6.1
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	93.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	104	484	47	39	465	132
Future Vol, veh/h	104	484	47	39	465	132
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	111	515	50	41	495	140

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1201	71	0	0	91	0
Stage 1	71	-	-	-	-	-
Stage 2	1130	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	206	997	-	-	1517	-
Stage 1	957	-	-	-	-	-
Stage 2	311	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	133	997	-	-	1517	-
Mov Cap-2 Maneuver	133	-	-	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	201	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	195.2	0	6.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	464	1517	-
HCM Lane V/C Ratio	-	-	1.348	0.326	-
HCM Control Delay (s)	-	-	195.2	8.5	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	28.4	1.4	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	314	1187	972	93	386	452
Future Volume (veh/h)	314	1187	972	93	386	452
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1863	1863	1776	1776
Adj Flow Rate, veh/h	341	1290	1057	-97	420	221
Adj No. of Lanes	2	2	3	1	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	7	7
Cap, veh/h	478	2090	2005	624	490	770
Arrive On Green	0.14	0.58	0.39	0.00	0.29	0.29
Sat Flow, veh/h	3476	3668	5253	1583	1691	2656
Grp Volume(v), veh/h	341	1290	1057	-97	420	221
Grp Sat Flow(s),veh/h/ln	1738	1787	1695	1583	1691	1328
Q Serve(g_s), s	6.2	15.5	10.5	0.0	15.5	4.3
Cycle Q Clear(g_c), s	6.2	15.5	10.5	0.0	15.5	4.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	478	2090	2005	624	490	770
V/C Ratio(X)	0.71	0.62	0.53	-0.16	0.86	0.29
Avail Cap(c_a), veh/h	867	3214	3036	945	1334	2096
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	27.3	8.9	15.3	0.0	22.2	18.2
Incr Delay (d2), s/veh	0.7	0.1	0.1	0.0	1.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	7.6	4.9	0.0	7.5	3.5
LnGrp Delay(d),s/veh	28.0	9.0	15.4	0.0	23.9	18.3
LnGrp LOS	C	A	B		C	B
Approach Vol, veh/h		1631	960		641	
Approach Delay, s/veh		13.0	17.0		22.0	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				43.5		22.7	12.6	30.9
Change Period (Y+Rc), s				5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s				59.0		51.7	16.0	39.0
Max Q Clear Time (g_c+I1), s				17.5		17.5	8.2	12.5
Green Ext Time (p_c), s				15.6		1.2	0.4	13.1

Intersection Summary	
HCM 2010 Ctrl Delay	16.0
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1057	516	0	901	164	16
Future Volume (veh/h)	1057	516	0	901	164	16
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	1149	561	0	979	178	17
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2182	976	0	2182	986	453
Arrive On Green	0.62	0.62	0.00	0.62	0.29	0.29
Sat Flow, veh/h	3632	1583	0	3725	3442	1583
Grp Volume(v), veh/h	1149	561	0	979	178	17
Grp Sat Flow(s),veh/h/ln	1770	1583	0	1770	1721	1583
Q Serve(g_s), s	17.1	19.5	0.0	13.6	3.6	0.7
Cycle Q Clear(g_c), s	17.1	19.5	0.0	13.6	3.6	0.7
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2182	976	0	2182	986	453
V/C Ratio(X)	0.53	0.57	0.00	0.45	0.18	0.04
Avail Cap(c_a), veh/h	3232	1446	0	3232	986	453
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	10.1	10.5	0.0	9.4	24.9	23.8
Incr Delay (d2), s/veh	0.2	0.5	0.0	0.1	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	8.6	0.0	6.6	1.8	0.3
LnGrp Delay(d),s/veh	10.3	11.1	0.0	9.6	25.3	24.0
LnGrp LOS	B	B		A	C	C
Approach Vol, veh/h	1710			979	195	
Approach Delay, s/veh	10.5			9.6	25.1	
Approach LOS	B			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		31.0		61.5				61.5
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		26.5		84.5				84.5
Max Q Clear Time (g_c+I1), s		5.6		21.5				15.6
Green Ext Time (p_c), s		0.6		35.6				37.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	362	965	33	165	460	326
Future Volume (veh/h)	362	965	33	165	460	326
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1397	1397	1845	1845
Adj Flow Rate, veh/h	389	379	35	177	495	325
Adj No. of Lanes	2	1	2	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	36	36	3	3
Cap, veh/h	1235	547	134	746	964	444
Arrive On Green	0.35	0.35	0.05	0.53	0.28	0.28
Sat Flow, veh/h	3632	1567	2581	1397	3408	1568
Grp Volume(v), veh/h	389	379	35	177	495	325
Grp Sat Flow(s),veh/h/ln	1770	1567	1291	1397	1704	1568
Q Serve(g_s), s	3.3	8.6	0.5	2.8	5.0	7.8
Cycle Q Clear(g_c), s	3.3	8.6	0.5	2.8	5.0	7.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1235	547	134	746	964	444
V/C Ratio(X)	0.32	0.69	0.26	0.24	0.51	0.73
Avail Cap(c_a), veh/h	5798	2568	343	2660	1933	889
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	9.9	11.6	18.9	5.2	12.5	13.4
Incr Delay (d2), s/veh	0.1	0.6	1.0	0.1	0.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.8	0.2	1.1	2.4	3.4
LnGrp Delay(d),s/veh	9.9	12.2	19.9	5.2	12.6	14.3
LnGrp LOS	A	B	B	A	B	B
Approach Vol, veh/h	768			212	820	
Approach Delay, s/veh	11.0			7.6	13.3	
Approach LOS	B			A	B	

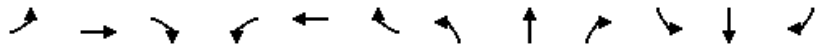
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		15.2	7.7	18.6				26.2
Change Period (Y+Rc), s		4.0	6.0	4.6				4.6
Max Green Setting (Gmax), s		23.0	5.0	67.4				78.4
Max Q Clear Time (g_c+I1), s		9.8	2.5	10.6				4.8
Green Ext Time (p_c), s		1.5	0.0	2.8				2.8

Intersection Summary	
HCM 2010 Ctrl Delay	11.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	198	1	266	823	778	0	0	650	434
Future Volume (veh/h)	0	0	0	198	1	266	823	778	0	0	650	434
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		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	1900	1881	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				233	1	140	968	915	0	0	765	163
Adj No. of Lanes				2	0	1	2	2	0	0	4	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, %				1	1	1	2	2	0	0	2	2
Cap, veh/h				519	0	239	1137	2519	0	0	1998	492
Arrive On Green				0.15	0.15	0.15	0.33	0.71	0.00	0.00	0.31	0.31
Sat Flow, veh/h				3476	0	1599	3442	3632	0	0	6669	1577
Grp Volume(v), veh/h				233	0	140	968	915	0	0	765	163
Grp Sat Flow(s),veh/h/ln				1738	0	1599	1721	1770	0	0	1602	1577
Q Serve(g_s), s				3.5	0.0	4.7	15.1	5.8	0.0	0.0	5.4	4.6
Cycle Q Clear(g_c), s				3.5	0.0	4.7	15.1	5.8	0.0	0.0	5.4	4.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				519	0	239	1137	2519	0	0	1998	492
V/C Ratio(X)				0.45	0.00	0.59	0.85	0.36	0.00	0.00	0.38	0.33
Avail Cap(c_a), veh/h				2597	0	1195	2691	5473	0	0	4453	1096
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				22.3	0.0	22.8	18.0	3.2	0.0	0.0	15.5	15.2
Incr Delay (d2), s/veh				0.2	0.0	0.9	0.7	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.7	0.0	2.1	7.2	2.8	0.0	0.0	2.3	2.0
LnGrp Delay(d),s/veh				22.5	0.0	23.7	18.7	3.3	0.0	0.0	15.5	15.3
LnGrp LOS				C		C	B	A			B	B
Approach Vol, veh/h					373			1883			928	
Approach Delay, s/veh					23.0			11.2			15.5	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		45.0			23.0	21.9		12.6
Change Period (Y+Rc), s		5.3			4.0	5.3		5.3
Max Green Setting (Gmax), s		87.7			45.0	38.7		41.7
Max Q Clear Time (g_c+I1), s		7.8			17.1	7.4		6.7
Green Ext Time (p_c), s		9.8			1.9	9.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	13.8
HCM 2010 LOS	B



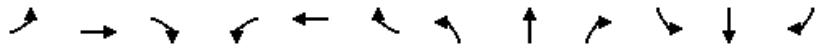
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	468	2	1081	0	0	0	0	1132	263	284	628	0
Future Volume (veh/h)	468	2	1081	0	0	0	0	1132	263	284	628	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845				0	1881	1900	1863	1863	0
Adj Flow Rate, veh/h	544	0	1258				0	1316	290	330	730	0
Adj No. of Lanes	2	0	2				0	4	0	2	2	0
Peak Hour Factor	0.86	0.86	0.86				0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3				0	1	1	2	2	0
Cap, veh/h	1678	0	1498				0	1566	344	378	1520	0
Arrive On Green	0.48	0.00	0.48				0.00	0.29	0.28	0.11	0.43	0.00
Sat Flow, veh/h	3514	0	3136				0	5613	1175	3442	3632	0
Grp Volume(v), veh/h	544	0	1258				0	1194	412	330	730	0
Grp Sat Flow(s),veh/h/ln	1757	0	1568				0	1618	1671	1721	1770	0
Q Serve(g_s), s	9.6	0.0	35.1				0.0	23.1	23.3	9.5	14.9	0.0
Cycle Q Clear(g_c), s	9.6	0.0	35.1				0.0	23.1	23.3	9.5	14.9	0.0
Prop In Lane	1.00		1.00				0.00		0.70	1.00		0.00
Lane Grp Cap(c), veh/h	1678	0	1498				0	1421	489	378	1520	0
V/C Ratio(X)	0.32	0.00	0.84				0.00	0.84	0.84	0.87	0.48	0.00
Avail Cap(c_a), veh/h	3051	0	2723				0	1453	500	378	1590	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	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.2	0.0	22.8				0.0	33.2	33.7	43.9	20.5	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.3				0.0	4.2	11.5	18.9	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
%ile BackOfQ(50%),veh/ln	4.6	0.0	15.3				0.0	10.8	12.2	5.5	7.2	0.0
LnGrp Delay(d),s/veh	16.3	0.0	24.2				0.0	37.4	45.2	62.8	20.6	0.0
LnGrp LOS	B		C					D	D	E	C	
Approach Vol, veh/h		1802						1606			1060	
Approach Delay, s/veh		21.8						39.4			33.8	
Approach LOS		C						D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.0	33.3		51.9		48.3		
Change Period (Y+Rc), s	4.0	5.3		4.5		* 5.3		
Max Green Setting (Gmax), s	11.0	28.7		86.5		* 45		
Max Q Clear Time (g_c+I1), s	11.6	25.3		37.1		16.9		
Green Ext Time (p_c), s	0.0	2.8		10.3		12.8		

Intersection Summary	
HCM 2010 Ctrl Delay	31.0
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



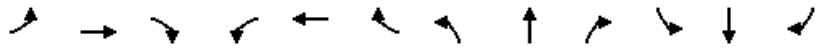
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	4	105	968	98	134	129	620	952	12	566	30
Future Volume (veh/h)	44	4	105	968	98	134	129	620	952	12	566	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1827	1827	1900	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	52	5	30	1139	115	112	152	729	374	14	666	31
Adj No. of Lanes	1	1	0	3	1	0	1	2	2	1	2	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	8	8	8	4	4	4	2	2	2	5	5	5
Cap, veh/h	64	19	112	1315	270	263	192	1313	1017	94	1062	49
Arrive On Green	0.04	0.09	0.08	0.27	0.32	0.31	0.11	0.37	0.37	0.05	0.32	0.31
Sat Flow, veh/h	1675	215	1288	4907	851	829	1774	3539	2741	1723	3345	156
Grp Volume(v), veh/h	52	0	35	1139	0	227	152	729	374	14	342	355
Grp Sat Flow(s),veh/h/ln	1675	0	1503	1636	0	1681	1774	1770	1371	1723	1719	1782
Q Serve(g_s), s	2.2	0.0	1.6	16.2	0.0	7.8	6.1	11.9	7.3	0.6	12.4	12.4
Cycle Q Clear(g_c), s	2.2	0.0	1.6	16.2	0.0	7.8	6.1	11.9	7.3	0.6	12.4	12.4
Prop In Lane	1.00		0.86	1.00		0.49	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	64	0	131	1315	0	532	192	1313	1017	94	546	566
V/C Ratio(X)	0.81	0.00	0.27	0.87	0.00	0.43	0.79	0.56	0.37	0.15	0.63	0.63
Avail Cap(c_a), veh/h	253	0	762	1546	0	1128	851	4267	3305	378	1625	1684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	0.0	31.4	25.5	0.0	19.8	31.7	18.2	16.7	32.9	21.2	21.3
Incr Delay (d2), s/veh	9.0	0.0	0.4	4.3	0.0	0.2	2.8	0.1	0.1	0.3	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.7	7.8	0.0	3.6	3.1	5.8	2.8	0.3	6.0	6.2
LnGrp Delay(d),s/veh	43.8	0.0	31.8	29.7	0.0	20.0	34.5	18.3	16.8	33.1	21.7	21.7
LnGrp LOS	D		C	C		C	C	B	B	C	C	C
Approach Vol, veh/h		87			1366			1255			711	
Approach Delay, s/veh		39.0			28.1			19.8			21.9	
Approach LOS		D			C			B			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	8.0	31.1	23.6	10.3	11.9	27.2	6.8	27.1
Change Period (Y+Rc), s	4.0	4.9	4.0	4.6	4.0	4.9	4.0	4.6
Max Green Setting (Gmax), s	4.0	87.1	23.0	36.4	35.0	68.1	11.0	48.4
Max Q Clear Time (g_c+I1), s	2.6	13.9	18.2	3.6	8.1	14.4	4.2	9.8
Green Ext Time (p_c), s	0.0	7.8	1.4	0.9	0.2	7.8	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	24.1
HCM 2010 LOS	C

Notes

User approved changes to right turn type.



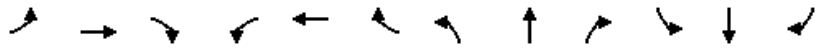
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	327	0	1500	0	0	0	0	1374	455	488	1159	0
Future Volume (veh/h)	327	0	1500	0	0	0	0	1374	455	488	1159	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	20				0	20	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	372	0	1421				0	1561	517	555	1317	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1162	0	1202				0	1931	345	621	3042	0
Arrive On Green	0.11	0.00	0.11				0.00	0.13	0.13	0.06	0.20	0.00
Sat Flow, veh/h	3442	0	3610				0	4464	1231	3343	5103	0
Grp Volume(v), veh/h	372	0	1421				0	1407	671	555	1317	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1598	1672	1647	0
Q Serve(g_s), s	17.1	0.0	57.2				0.0	69.0	69.0	28.3	40.0	0.0
Cycle Q Clear(g_c), s	17.1	0.0	57.2				0.0	69.0	69.0	28.3	40.0	0.0
Prop In Lane	1.00		1.00				0.00		0.77	1.00		0.00
Lane Grp Cap(c), veh/h	1162	0	1202				0	1347	674	621	3042	0
V/C Ratio(X)	0.32	0.00	1.18				0.00	1.04	1.00	0.89	0.43	0.00
Avail Cap(c_a), veh/h	1162	0	1202				0	1347	642	798	3042	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.2	0.0	76.5				0.0	74.5	74.6	79.0	42.2	0.0
Incr Delay (d2), s/veh	0.1	0.0	90.8				0.0	37.1	33.6	9.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	49.0				0.0	37.5	24.8	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	0.0	35.8				0.0	31.0	43.0	13.9	18.3	0.0
LnGrp Delay(d),s/veh	58.2	0.0	216.2				0.0	149.2	133.0	88.0	42.3	0.0
LnGrp LOS	E		F					F	F	F	D	
Approach Vol, veh/h		1793						2078			1872	
Approach Delay, s/veh		183.4						144.0			55.8	
Approach LOS		F						F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	36.8	73.0		62.0		109.8		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	41.9	* 68		56.7		60.1		
Max Q Clear Time (g_c+I1), s	30.3	71.0		59.2		42.0		
Green Ext Time (p_c), s	1.6	0.0		0.0		7.0		

Intersection Summary	
HCM 2010 Ctrl Delay	127.6
HCM 2010 LOS	F

Notes

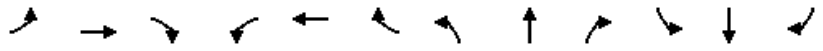
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	47	60	166	33	127	58	1022	144	201	1341	25
Future Volume (veh/h)	57	47	60	166	33	127	58	1022	144	201	1341	25
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	53	48	189	38	-93	66	1161	159	228	1524	27
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	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	1	1	1	2	2	2	2	2	2
Cap, veh/h	103	84	160	236	248	210	85	1631	223	298	1992	35
Arrive On Green	0.10	0.10	0.10	0.13	0.13	0.00	0.05	0.52	0.52	0.09	0.56	0.55
Sat Flow, veh/h	989	806	1545	1792	1881	1599	1774	3128	427	3442	3557	63
Grp Volume(v), veh/h	118	0	48	189	38	-93	66	655	665	228	757	794
Grp Sat Flow(s),veh/h/ln	1795	0	1545	1792	1881	1599	1774	1770	1786	1721	1770	1850
Q Serve(g_s), s	6.4	0.0	2.9	10.5	1.8	0.0	3.8	28.8	29.1	6.6	33.6	33.8
Cycle Q Clear(g_c), s	6.4	0.0	2.9	10.5	1.8	0.0	3.8	28.8	29.1	6.6	33.6	33.8
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.24	1.00		0.03
Lane Grp Cap(c), veh/h	186	0	160	236	248	210	85	923	931	298	991	1036
V/C Ratio(X)	0.63	0.00	0.30	0.80	0.15	-0.44	0.77	0.71	0.71	0.76	0.76	0.77
Avail Cap(c_a), veh/h	614	0	529	666	699	594	278	1298	1310	539	1298	1357
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.0	0.0	42.4	43.1	39.4	0.0	48.1	18.6	18.7	45.7	17.3	17.3
Incr Delay (d2), s/veh	1.3	0.0	0.4	2.4	0.1	0.0	5.5	0.4	0.5	1.5	1.4	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	3.3	0.0	1.3	5.4	1.0	0.0	2.0	14.1	14.3	3.2	16.6	17.6
LnGrp Delay(d),s/veh	45.3	0.0	42.8	45.5	39.5	0.0	53.7	19.0	19.2	47.2	18.6	18.7
LnGrp LOS	D		D	D	D		D	B	B	D	B	B
Approach Vol, veh/h		166			134			1386			1779	
Approach Delay, s/veh		44.6			75.4			20.7			22.3	
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	12.9	57.3		14.6	8.9	61.3		17.5
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.9	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	8.6	31.1		8.4	5.8	35.8		12.5
Green Ext Time (p_c), s	0.3	21.7		0.4	0.0	20.5		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	24.8
HCM 2010 LOS	C



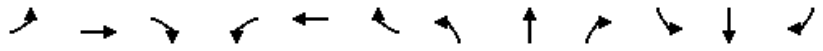
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	199	90	93	127	562	118	844	70	821	1155	134
Future Volume (veh/h)	155	199	90	93	127	562	118	844	70	821	1155	134
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1881	1881	1881	1881	1881	1900	1863	1863	1863
Adj Flow Rate, veh/h	174	224	28	104	143	631	133	948	78	922	1298	76
Adj No. of Lanes	1	2	0	1	1	2	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	201	721	89	128	350	1394	254	1065	88	877	1492	829
Arrive On Green	0.11	0.23	0.22	0.07	0.19	0.18	0.14	0.32	0.31	0.25	0.42	0.41
Sat Flow, veh/h	1774	3164	390	1792	1881	3198	1792	3341	275	3442	3539	1581
Grp Volume(v), veh/h	174	124	128	104	143	631	133	507	519	922	1298	76
Grp Sat Flow(s),veh/h/ln	1774	1770	1785	1792	1881	1599	1792	1787	1829	1721	1770	1581
Q Serve(g_s), s	12.1	7.3	7.5	7.2	8.4	17.4	8.6	33.9	33.9	32.0	42.1	1.4
Cycle Q Clear(g_c), s	12.1	7.3	7.5	7.2	8.4	17.4	8.6	33.9	33.9	32.0	42.1	1.4
Prop In Lane	1.00		0.22	1.00		1.00	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	201	403	407	128	350	1394	254	570	583	877	1492	829
V/C Ratio(X)	0.87	0.31	0.31	0.81	0.41	0.45	0.52	0.89	0.89	1.05	0.87	0.09
Avail Cap(c_a), veh/h	325	1042	1051	143	913	2352	254	683	699	877	1944	1031
HCM Platoon Ratio	1.00	1.00	1.00	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	54.8	40.3	40.4	57.5	45.1	24.9	50.0	40.7	40.8	46.8	33.2	5.4
Incr Delay (d2), s/veh	7.5	0.2	0.2	24.1	0.3	0.1	1.0	11.0	10.8	45.0	3.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	3.6	3.7	4.4	4.4	7.7	4.4	18.5	18.9	20.6	21.2	0.8
LnGrp Delay(d),s/veh	62.3	40.4	40.6	81.6	45.3	25.0	51.0	51.7	51.6	91.8	36.2	5.4
LnGrp LOS	E	D	D	F	D	C	D	D	D	F	D	A
Approach Vol, veh/h		426			878			1159			2296	
Approach Delay, s/veh		49.4			35.0			51.6			57.5	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.0	44.1	13.0	32.6	23.1	57.0	18.2	27.4
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	5.3	* 5.3	4.0	4.6
Max Green Setting (Gmax), s	32.0	46.7	10.0	73.4	11.0	* 68	23.0	60.4
Max Q Clear Time (g_c+I1), s	34.0	35.9	9.2	9.5	10.6	44.1	14.1	19.4
Green Ext Time (p_c), s	0.0	2.8	0.0	2.8	0.2	7.6	0.1	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	51.2
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



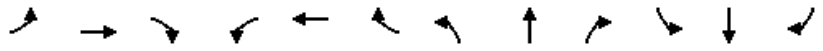
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	79	838	6	42	62	535	991	9	65	1357	183
Future Volume (veh/h)	159	79	838	6	42	62	535	991	9	65	1357	183
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	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	1881	1881	1881	1900	1863	1863	1881	1881	1881	1863	1863	1900
Adj Flow Rate, veh/h	161	80	367	6	42	16	540	1001	2	66	1371	168
Adj No. of Lanes	1	1	2	0	1	1	2	2	1	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	2	2	2
Cap, veh/h	294	309	462	11	80	76	627	2002	875	85	1923	236
Arrive On Green	0.16	0.16	0.16	0.05	0.05	0.05	0.18	0.56	0.56	0.05	0.42	0.41
Sat Flow, veh/h	1792	1881	2814	231	1620	1538	3476	3574	1563	1774	4581	561
Grp Volume(v), veh/h	161	80	367	48	0	16	540	1001	2	66	1015	524
Grp Sat Flow(s),veh/h/ln	1792	1881	1407	1851	0	1538	1738	1787	1563	1774	1695	1752
Q Serve(g_s), s	7.4	3.3	11.2	2.3	0.0	0.9	13.5	15.3	0.1	3.3	22.2	22.2
Cycle Q Clear(g_c), s	7.4	3.3	11.2	2.3	0.0	0.9	13.5	15.3	0.1	3.3	22.2	22.2
Prop In Lane	1.00		1.00	0.12		1.00	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	294	309	462	91	0	76	627	2002	875	85	1423	735
V/C Ratio(X)	0.55	0.26	0.79	0.53	0.00	0.21	0.86	0.50	0.00	0.78	0.71	0.71
Avail Cap(c_a), veh/h	360	378	565	806	0	670	854	2274	995	198	1703	880
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	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	34.4	32.7	36.0	41.6	0.0	40.9	35.6	12.0	8.7	42.2	21.5	21.6
Incr Delay (d2), s/veh	0.6	0.2	5.0	1.8	0.0	0.5	5.3	0.1	0.0	5.6	0.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	1.7	4.7	1.2	0.0	0.4	6.9	7.5	0.0	1.7	10.4	11.0
LnGrp Delay(d),s/veh	35.0	32.8	41.0	43.3	0.0	41.4	40.9	12.1	8.7	47.8	22.3	23.2
LnGrp LOS	C	C	D	D		D	D	B	A	D	C	C
Approach Vol, veh/h		608			64			1543			1605	
Approach Delay, s/veh		38.3			42.9			22.2			23.6	
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	54.2		18.7	20.2	42.3		8.4
Change Period (Y+Rc), s	4.0	5.3		4.9	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	10.0	55.7		17.1	22.0	* 44		39.0
Max Q Clear Time (g_c+I1), s	5.3	17.3		13.2	15.5	24.2		4.3
Green Ext Time (p_c), s	0.0	18.1		0.6	0.7	12.8		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	25.7
HCM 2010 LOS	C

Notes

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



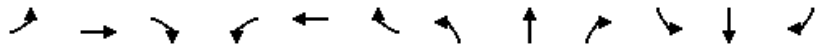
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	1255	481	118	915	40	323	57	88	49	33	80
Future Volume (veh/h)	107	1255	481	118	915	40	323	57	88	49	33	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	123	1443	464	136	1052	-7	371	66	-44	56	38	77
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	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, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	149	1651	728	162	1677	750	427	513	436	73	103	209
Arrive On Green	0.08	0.46	0.46	0.09	0.47	0.00	0.12	0.27	0.00	0.04	0.19	0.18
Sat Flow, veh/h	1792	3574	1575	1792	3574	1599	3476	1881	1599	1810	542	1098
Grp Volume(v), veh/h	123	1443	464	136	1052	-7	371	66	-44	56	0	115
Grp Sat Flow(s),veh/h/ln	1792	1787	1575	1792	1787	1599	1738	1881	1599	1810	0	1640
Q Serve(g_s), s	8.0	43.3	26.7	8.9	26.3	0.0	12.4	3.1	0.0	3.6	0.0	7.3
Cycle Q Clear(g_c), s	8.0	43.3	26.7	8.9	26.3	0.0	12.4	3.1	0.0	3.6	0.0	7.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	149	1651	728	162	1677	750	427	513	436	73	0	312
V/C Ratio(X)	0.82	0.87	0.64	0.84	0.63	-0.01	0.87	0.13	-0.10	0.77	0.00	0.37
Avail Cap(c_a), veh/h	196	1746	770	166	1686	754	468	729	620	137	0	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.6	28.8	24.4	53.1	23.7	0.0	51.1	32.5	0.0	56.4	0.0	42.3
Incr Delay (d2), s/veh	15.0	4.8	1.2	27.8	0.6	0.0	14.0	0.0	0.0	6.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	22.3	11.8	5.6	13.1	0.0	6.8	1.6	0.0	1.9	0.0	3.3
LnGrp Delay(d),s/veh	68.5	33.6	25.5	80.9	24.3	0.0	65.1	32.6	0.0	62.8	0.0	42.5
LnGrp LOS	E	C	C	F	C		E	C		E		D
Approach Vol, veh/h		2030			1181			393			171	
Approach Delay, s/veh		33.9			30.9			66.9			49.2	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	36.4	14.7	58.8	18.6	26.6	13.9	59.7
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	4.8	44.7	11.0	* 58	16.0	37.7	13.0	* 56
Max Q Clear Time (g_c+I1), s	5.6	5.1	10.9	45.3	14.4	9.3	10.0	28.3
Green Ext Time (p_c), s	0.0	0.6	0.0	9.4	0.1	0.6	0.0	16.1

Intersection Summary	
HCM 2010 Ctrl Delay	37.1
HCM 2010 LOS	D

Notes

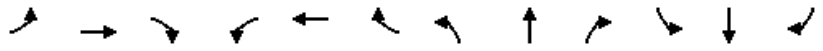
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	877	370	321	715	234	290	372	270	352	378	53
Future Volume (veh/h)	77	877	370	321	715	234	290	372	270	352	378	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	90	1020	199	373	831	108	337	433	295	409	440	60
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	113	1367	266	433	1202	156	400	567	383	473	950	129
Arrive On Green	0.06	0.32	0.31	0.13	0.38	0.37	0.12	0.28	0.27	0.14	0.30	0.29
Sat Flow, veh/h	1792	4276	832	3442	3145	409	3476	2022	1366	3476	3151	427
Grp Volume(v), veh/h	90	816	403	373	468	471	337	382	346	409	248	252
Grp Sat Flow(s),veh/h/ln	1792	1712	1684	1721	1770	1784	1738	1787	1601	1738	1787	1791
Q Serve(g_s), s	5.7	24.7	24.9	12.3	25.7	25.8	11.0	22.7	23.1	13.4	13.1	13.3
Cycle Q Clear(g_c), s	5.7	24.7	24.9	12.3	25.7	25.8	11.0	22.7	23.1	13.4	13.1	13.3
Prop In Lane	1.00		0.49	1.00		0.23	1.00		0.85	1.00		0.24
Lane Grp Cap(c), veh/h	113	1094	538	433	676	682	400	501	449	473	538	540
V/C Ratio(X)	0.79	0.75	0.75	0.86	0.69	0.69	0.84	0.76	0.77	0.86	0.46	0.47
Avail Cap(c_a), veh/h	170	1358	668	534	808	815	569	601	538	629	632	633
HCM Platoon Ratio	1.00	1.00	1.00	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	53.6	35.3	35.6	49.7	30.1	30.2	50.3	38.2	38.9	49.1	32.9	33.1
Incr Delay (d2), s/veh	7.6	1.3	2.6	9.9	1.3	1.3	5.5	3.7	4.4	7.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	11.9	11.9	6.4	12.8	13.0	5.6	11.7	10.8	6.9	6.5	6.6
LnGrp Delay(d),s/veh	61.2	36.5	38.2	59.6	31.4	31.5	55.8	41.9	43.3	56.7	33.1	33.3
LnGrp LOS	E	D	D	E	C	C	E	D	D	E	C	C
Approach Vol, veh/h		1309			1312			1065			909	
Approach Delay, s/veh		38.7			39.5			46.8			43.8	
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	19.8	36.5	18.6	41.1	17.4	39.0	11.3	48.3
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	21.8	37.7	18.0	44.7	19.0	39.7	11.0	51.7
Max Q Clear Time (g_c+I1), s	15.4	25.1	14.3	26.9	13.0	15.3	7.7	27.8
Green Ext Time (p_c), s	0.4	3.8	0.3	8.7	0.3	4.7	0.0	10.0

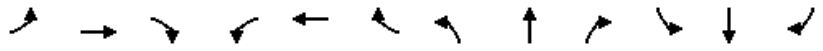
Intersection Summary	
HCM 2010 Ctrl Delay	41.8
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	218	882	180	160	1065	264	147	83	45	487	145	177
Future Volume (veh/h)	218	882	180	160	1065	264	147	83	45	487	145	177
Number	7	4	14	3	8	18	5	2	12	1	6	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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	245	991	191	180	1197	179	165	93	26	547	163	0
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	280	1792	344	215	1947	604	201	280	75	623	599	268
Arrive On Green	0.16	0.42	0.40	0.12	0.38	0.38	0.11	0.10	0.09	0.18	0.17	0.00
Sat Flow, veh/h	1774	4272	821	1774	5085	1577	1792	2783	750	3476	3574	1599
Grp Volume(v), veh/h	245	786	396	180	1197	179	165	58	61	547	163	0
Grp Sat Flow(s),veh/h/ln	1774	1695	1703	1774	1695	1577	1792	1787	1746	1738	1787	1599
Q Serve(g_s), s	12.0	15.6	15.8	8.8	16.9	7.0	8.0	2.7	2.9	13.7	3.5	0.0
Cycle Q Clear(g_c), s	12.0	15.6	15.8	8.8	16.9	7.0	8.0	2.7	2.9	13.7	3.5	0.0
Prop In Lane	1.00		0.48	1.00		1.00	1.00		0.43	1.00		1.00
Lane Grp Cap(c), veh/h	280	1422	714	215	1947	604	201	180	175	623	599	268
V/C Ratio(X)	0.88	0.55	0.55	0.84	0.61	0.30	0.82	0.33	0.34	0.88	0.27	0.00
Avail Cap(c_a), veh/h	318	1760	884	318	2640	819	422	876	855	701	1631	730
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00
Uniform Delay (d), s/veh	36.7	19.6	19.9	38.3	22.2	19.2	38.7	37.3	37.6	35.6	32.4	0.0
Incr Delay (d2), s/veh	19.3	0.1	0.3	7.8	0.1	0.1	3.2	0.4	0.4	10.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	7.3	7.5	4.8	7.9	3.1	4.2	1.4	1.4	7.4	1.8	0.0
LnGrp Delay(d),s/veh	56.0	19.7	20.1	46.1	22.3	19.3	41.9	37.7	38.1	46.0	32.5	0.0
LnGrp LOS	E	B	C	D	C	B	D	D	D	D	C	
Approach Vol, veh/h		1427			1556			284			710	
Approach Delay, s/veh		26.0			24.7			40.2			42.9	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	13.0	14.8	41.4	14.0	19.0	18.1	38.2
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	18.0	42.4	16.0	45.0	21.0	39.4	16.0	45.0
Max Q Clear Time (g_c+I1), s	15.7	4.9	10.8	17.8	10.0	5.5	14.0	18.9
Green Ext Time (p_c), s	0.3	1.0	0.1	13.4	0.1	1.0	0.1	13.1

Intersection Summary	
HCM 2010 Ctrl Delay	29.5
HCM 2010 LOS	C



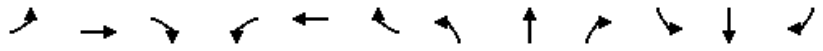
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↱	↱
Traffic Volume (veh/h)	0	1621	486	213	1771	0	0	0	0	741	7	847
Future Volume (veh/h)	0	1621	486	213	1771	0	0	0	0	741	7	847
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1762	193	232	1925	0				811	0	892
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1669	519	213	2397	0				1656	0	739
Arrive On Green	0.00	0.32	0.32	0.11	0.47	0.00				0.47	0.00	0.47
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1762	193	232	1925	0				811	0	892
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	39.0	11.1	13.0	38.4	0.0				19.0	0.0	56.0
Cycle Q Clear(g_c), s	0.0	39.0	11.1	13.0	38.4	0.0				19.0	0.0	56.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1669	519	213	2397	0				1656	0	739
V/C Ratio(X)	0.00	1.06	0.37	1.09	0.80	0.00				0.49	0.00	1.21
Avail Cap(c_a), veh/h	0	1669	519	213	2397	0				1656	0	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	40.5	31.1	53.5	27.3	0.0				22.1	0.0	32.0
Incr Delay (d2), s/veh	0.0	38.4	0.2	86.6	1.9	0.0				0.1	0.0	105.8
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	0.0	24.3	4.9	6.1	18.4	0.0				9.3	0.0	46.1
LnGrp Delay(d),s/veh	0.0	78.9	31.3	140.1	29.2	0.0				22.2	0.0	137.8
LnGrp LOS		F	C	F	C					C		F
Approach Vol, veh/h		1955			2157						1703	
Approach Delay, s/veh		74.2			41.1						82.7	
Approach LOS		E			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	17.0	43.0		60.0		60.0		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	13.0	37.7		54.7		54.7		
Max Q Clear Time (g_c+I1), s	15.0	41.0		58.0		40.4		
Green Ext Time (p_c), s	0.0	0.0		0.0		12.7		

Intersection Summary	
HCM 2010 Ctrl Delay	64.4
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.



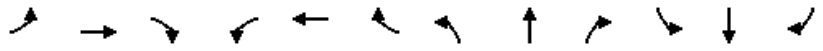
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰	↑↑↑	↱	↰	↲	↱			
Traffic Volume (veh/h)	0	1879	483	231	1301	655	683	53	392	0	0	0
Future Volume (veh/h)	0	1879	483	231	1301	655	683	53	392	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	0	2042	290	251	1414	398	783	0	276			
Adj No. of Lanes	0	3	1	1	3	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	2335	726	281	3342	1013	935	0	417			
Arrive On Green	0.00	0.46	0.46	0.16	0.66	0.66	0.26	0.00	0.26			
Sat Flow, veh/h	0	5253	1581	1774	5085	1541	3548	0	1582			
Grp Volume(v), veh/h	0	2042	290	251	1414	398	783	0	276			
Grp Sat Flow(s),veh/h/ln	0	1695	1581	1774	1695	1541	1774	0	1582			
Q Serve(g_s), s	0.0	36.6	12.2	14.0	13.3	12.0	21.0	0.0	15.7			
Cycle Q Clear(g_c), s	0.0	36.6	12.2	14.0	13.3	12.0	21.0	0.0	15.7			
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2335	726	281	3342	1013	935	0	417			
V/C Ratio(X)	0.00	0.87	0.40	0.89	0.42	0.39	0.84	0.00	0.66			
Avail Cap(c_a), veh/h	0	2356	733	282	3365	1020	1595	0	711			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	24.6	18.1	41.6	8.2	8.0	35.1	0.0	33.1			
Incr Delay (d2), s/veh	0.0	3.8	0.1	27.3	0.0	0.1	0.8	0.0	0.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	17.8	5.3	9.0	6.2	5.1	10.4	0.0	6.9			
LnGrp Delay(d),s/veh	0.0	28.4	18.2	68.9	8.2	8.1	35.9	0.0	33.8			
LnGrp LOS		C	B	E	A	A	D		C			
Approach Vol, veh/h		2332			2063			1059				
Approach Delay, s/veh		27.2			15.6			35.3				
Approach LOS		C			B			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	20.0	50.3		30.5		70.2		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	16.0	45.4		44.0		65.4		
Max Q Clear Time (g_c+I1), s	16.0	38.6		23.0		15.3		
Green Ext Time (p_c), s	0.0	6.4		2.0		35.5		

Intersection Summary	
HCM 2010 Ctrl Delay	24.4
HCM 2010 LOS	C

Notes

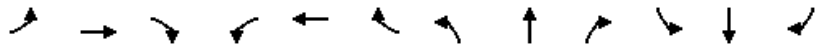
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	53	10	27	48	154	15	197	20	191	353	39
Future Volume (veh/h)	35	53	10	27	48	154	15	197	20	191	353	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	1.00		0.96	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	1900	1845	1845	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	42	63	10	32	57	6	18	235	17	227	420	29
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	173	160	25	171	167	18	174	799	57	312	1064	73
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.24	0.21	0.17	0.31	0.28
Sat Flow, veh/h	1774	1564	248	1757	1631	172	1792	3372	242	1792	3390	233
Grp Volume(v), veh/h	42	0	73	32	0	63	18	124	128	227	221	228
Grp Sat Flow(s),veh/h/ln	1774	0	1812	1757	0	1803	1792	1787	1827	1792	1787	1836
Q Serve(g_s), s	0.9	0.0	1.5	0.7	0.0	1.3	0.4	2.3	2.4	4.9	4.0	4.0
Cycle Q Clear(g_c), s	0.9	0.0	1.5	0.7	0.0	1.3	0.4	2.3	2.4	4.9	4.0	4.0
Prop In Lane	1.00		0.14	1.00		0.10	1.00		0.13	1.00		0.13
Lane Grp Cap(c), veh/h	173	0	185	171	0	185	174	423	433	312	561	576
V/C Ratio(X)	0.24	0.00	0.39	0.19	0.00	0.34	0.10	0.29	0.30	0.73	0.39	0.40
Avail Cap(c_a), veh/h	475	0	1586	470	0	1578	915	2216	2266	915	2216	2276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	17.3	17.1	0.0	17.2	16.9	12.9	13.0	16.0	11.0	11.1
Incr Delay (d2), s/veh	0.3	0.0	0.5	0.2	0.0	0.4	0.1	0.1	0.1	1.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.8	0.3	0.0	0.7	0.2	1.1	1.2	2.5	2.0	2.1
LnGrp Delay(d),s/veh	17.4	0.0	17.8	17.3	0.0	17.6	17.0	13.0	13.1	17.3	11.2	11.3
LnGrp LOS	B		B	B		B	B	B	B	B	B	B
Approach Vol, veh/h		115			95			270			676	
Approach Delay, s/veh		17.6			17.5			13.3			13.3	
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	11.2	13.7	8.0	8.2	8.0	16.9	8.0	8.2
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.7	11.0	36.0	21.0	49.7	11.0	36.0
Max Q Clear Time (g_c+I1), s	6.9	4.4	2.7	3.5	2.4	6.0	2.9	3.3
Green Ext Time (p_c), s	0.2	2.3	0.0	0.4	0.0	2.3	0.0	0.4

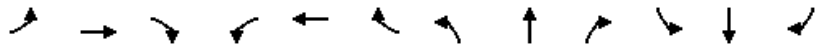
Intersection Summary	
HCM 2010 Ctrl Delay	14.1
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	122	63	237	105	106	127	657	282	313	647	90
Future Volume (veh/h)	67	122	63	237	105	106	127	657	282	313	647	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		0.98	1.00		0.97	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	134	47	260	115	98	140	722	297	344	711	96
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	95	183	64	172	167	143	175	876	360	386	1491	201
Arrive On Green	0.05	0.14	0.14	0.10	0.18	0.18	0.10	0.35	0.34	0.22	0.47	0.46
Sat Flow, veh/h	1792	1325	465	1774	918	782	1792	2469	1015	1792	3155	426
Grp Volume(v), veh/h	74	0	181	260	0	213	140	523	496	344	402	405
Grp Sat Flow(s),veh/h/ln	1792	0	1790	1774	0	1700	1792	1787	1697	1792	1787	1794
Q Serve(g_s), s	3.4	0.0	8.0	8.0	0.0	9.6	6.3	22.0	22.1	15.4	12.6	12.7
Cycle Q Clear(g_c), s	3.4	0.0	8.0	8.0	0.0	9.6	6.3	22.0	22.1	15.4	12.6	12.7
Prop In Lane	1.00		0.26	1.00		0.46	1.00		0.60	1.00		0.24
Lane Grp Cap(c), veh/h	95	0	247	172	0	310	175	634	602	386	844	847
V/C Ratio(X)	0.78	0.00	0.73	1.51	0.00	0.69	0.80	0.82	0.82	0.89	0.48	0.48
Avail Cap(c_a), veh/h	174	0	739	172	0	702	391	694	659	652	955	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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	0.0	34.0	37.2	0.0	31.5	36.4	24.2	24.6	31.4	14.8	14.9
Incr Delay (d2), s/veh	5.0	0.0	1.6	256.8	0.0	1.0	3.1	6.7	7.0	4.6	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	4.0	16.2	0.0	4.6	3.3	11.9	11.4	8.0	6.2	6.2
LnGrp Delay(d),s/veh	43.5	0.0	35.6	293.9	0.0	32.5	39.5	30.9	31.6	35.9	15.0	15.1
LnGrp LOS	D		D	F		C	D	C	C	D	B	B
Approach Vol, veh/h		255			473			1159			1151	
Approach Delay, s/veh		37.9			176.2			32.3			21.3	
Approach LOS		D			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.7	33.2	12.0	15.4	12.1	42.9	8.4	19.0
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	30.0	30.7	8.0	34.0	18.0	42.7	8.0	34.0
Max Q Clear Time (g_c+I1), s	17.4	24.1	10.0	10.0	8.3	14.7	5.4	11.6
Green Ext Time (p_c), s	0.4	3.9	0.0	1.3	0.1	8.1	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	51.0
HCM 2010 LOS	D



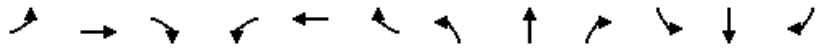
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	0	36	39	0	256	12	726	18	67	626	248
Future Volume (veh/h)	157	0	36	39	0	256	12	726	18	67	626	248
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	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	1900	1900	1900	1863	1881	1881	1881	1876	1900
Adj Flow Rate, veh/h	171	0	39	45	0	234	13	834	-8	77	720	270
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.87	0.92	0.87	0.92	0.87	0.87	0.87	0.87	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	251	0	443	122	0	289	75	1372	614	100	1008	378
Arrive On Green	0.14	0.00	0.25	0.07	0.00	0.18	0.04	0.38	0.00	0.06	0.40	0.38
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1599	1792	2539	952
Grp Volume(v), veh/h	171	0	39	45	0	234	13	834	-8	77	506	484
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1599	1792	1782	1708
Q Serve(g_s), s	6.9	0.0	1.4	1.8	0.0	10.4	0.5	14.1	0.0	3.2	17.9	18.0
Cycle Q Clear(g_c), s	6.9	0.0	1.4	1.8	0.0	10.4	0.5	14.1	0.0	3.2	17.9	18.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	251	0	443	122	0	289	75	1372	614	100	708	678
V/C Ratio(X)	0.68	0.00	0.09	0.37	0.00	0.81	0.17	0.61	-0.01	0.77	0.71	0.71
Avail Cap(c_a), veh/h	260	0	718	338	0	797	213	2097	938	287	1117	1070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	20.7	33.5	0.0	29.6	34.6	18.6	0.0	35.0	19.0	19.4
Incr Delay (d2), s/veh	6.7	0.0	0.1	1.9	0.0	2.1	1.1	0.2	0.0	4.7	0.5	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	3.8	0.0	0.6	1.0	0.0	4.8	0.3	7.0	0.0	1.7	8.8	8.5
LnGrp Delay(d),s/veh	37.3	0.0	20.8	35.3	0.0	31.6	35.7	18.7	0.0	39.7	19.5	19.9
LnGrp LOS	D		C	D		C	D	B		D	B	B
Approach Vol, veh/h		210			279			839			1067	
Approach Delay, s/veh		34.3			32.2			19.2			21.2	
Approach LOS		C			C			B			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	8.2	32.8	9.0	25.0	7.2	33.8	14.6	19.4
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	12.0	42.7	12.0	32.0	7.0	45.7	9.0	* 37
Max Q Clear Time (g_c+I1), s	5.2	16.1	3.8	3.4	2.5	20.0	8.9	12.4
Green Ext Time (p_c), s	0.0	8.5	0.0	1.1	0.0	8.5	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	22.9
HCM 2010 LOS	C

Notes

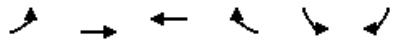
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	0	45	49	22	65	127	356	27	126	426	155
Future Volume (veh/h)	126	0	45	49	22	65	127	356	27	126	426	155
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	156	0	56	60	27	-255	157	440	33	156	526	191
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	281	86	73	190	0	493	203	1228	92	205	936	338
Arrive On Green	0.16	0.00	0.05	0.11	0.00	0.00	0.11	0.36	0.33	0.11	0.36	0.33
Sat Flow, veh/h	1810	1900	1610	1792	1881	0	1810	3400	254	1792	2574	931
Grp Volume(v), veh/h	156	0	56	60	-228	-228	157	233	240	156	365	352
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1792	1881	1599	1810	1805	1849	1792	1787	1717
Q Serve(g_s), s	3.4	0.0	1.5	1.3	0.0	0.0	3.6	4.1	4.1	3.6	7.0	7.2
Cycle Q Clear(g_c), s	3.4	0.0	1.5	1.3	0.0	0.0	3.6	4.1	4.1	3.6	7.0	7.2
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.14	1.00		0.54
Lane Grp Cap(c), veh/h	281	86	73	190	0	0	203	652	668	205	650	624
V/C Ratio(X)	0.55	0.00	0.77	0.32	0.00	0.00	0.77	0.36	0.36	0.76	0.56	0.56
Avail Cap(c_a), veh/h	464	1594	1351	501	0	0	380	1262	1293	1086	1957	1881
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	20.3	17.7	0.0	0.0	18.5	10.1	10.1	18.4	10.9	11.2
Incr Delay (d2), s/veh	1.7	0.0	6.1	0.9	0.0	0.0	2.4	0.1	0.1	2.2	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.8	0.7	0.0	0.0	1.9	2.0	2.1	1.9	3.5	3.4
LnGrp Delay(d),s/veh	18.4	0.0	26.4	18.7	0.0	0.0	20.9	10.2	10.3	20.6	11.2	11.5
LnGrp LOS	B		C	B			C	B	B	C	B	B
Approach Vol, veh/h		212			-396			630			873	
Approach Delay, s/veh		20.5			-2.8			12.9			13.0	
Approach LOS		C			A			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	8.9	19.5	8.6	5.9	8.8	19.6	10.7	3.8
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	26.0	28.7	10.0	36.0	9.0	45.7	9.0	37.0
Max Q Clear Time (g_c+I1), s	5.6	6.1	3.3	3.5	5.6	9.2	5.4	0.0
Green Ext Time (p_c), s	0.2	4.8	0.0	0.1	0.1	5.2	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B



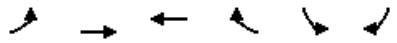
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	53	72	283	313	0
Future Volume (veh/h)	0	53	72	283	313	0
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	58	78	308	340	0
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2	2299	1149	1028	385	379
Arrive On Green	0.00	0.65	0.65	0.65	0.22	0.00
Sat Flow, veh/h	1774	3632	1863	1583	1774	1583
Grp Volume(v), veh/h	0	58	78	308	340	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1583	1774	1583
Q Serve(g_s), s	0.0	0.5	1.5	7.6	16.7	0.0
Cycle Q Clear(g_c), s	0.0	0.5	1.5	7.6	16.7	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	2	2299	1149	1028	385	379
V/C Ratio(X)	0.00	0.03	0.07	0.30	0.88	0.00
Avail Cap(c_a), veh/h	158	2299	1149	1028	611	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	5.6	5.8	6.9	34.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.7	9.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.8	3.5	9.1	0.0
LnGrp Delay(d),s/veh	0.0	5.6	5.9	7.6	43.2	0.0
LnGrp LOS		A	A	A	D	
Approach Vol, veh/h		58	386		340	
Approach Delay, s/veh		5.6	7.3		43.2	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				64.5		25.5	0.0	64.5
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				47.0		31.0	8.0	33.0
Max Q Clear Time (g_c+I1), s				2.5		18.7	0.0	9.6
Green Ext Time (p_c), s				3.3		0.8	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.7
HCM 2010 LOS	C

Notes

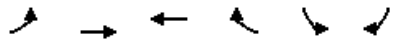
User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	365	355	122	141	0
Future Volume (veh/h)	0	365	355	122	141	0
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	397	386	133	153	0
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2	1770	1297	441	650	581
Arrive On Green	0.00	0.50	0.50	0.50	0.37	0.00
Sat Flow, veh/h	1774	3632	2687	883	1774	1583
Grp Volume(v), veh/h	0	397	262	257	153	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1707	1774	1583
Q Serve(g_s), s	0.0	5.7	7.8	8.0	5.4	0.0
Cycle Q Clear(g_c), s	0.0	5.7	7.8	8.0	5.4	0.0
Prop In Lane	1.00			0.52	1.00	1.00
Lane Grp Cap(c), veh/h	2	1770	885	853	650	581
V/C Ratio(X)	0.00	0.22	0.30	0.30	0.24	0.00
Avail Cap(c_a), veh/h	197	1770	885	853	650	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	12.7	13.2	13.2	19.8	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.9	0.9	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.8	4.0	3.9	2.8	0.0
LnGrp Delay(d),s/veh	0.0	13.0	14.1	14.2	20.6	0.0
LnGrp LOS		B	B	B	C	
Approach Vol, veh/h		397	519		153	
Approach Delay, s/veh		13.0	14.1		20.6	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				51.0		39.0	0.0	51.0
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				45.0		33.0	10.0	29.0
Max Q Clear Time (g_c+I1), s				7.7		7.4	0.0	10.0
Green Ext Time (p_c), s				6.4		0.4	0.0	5.4

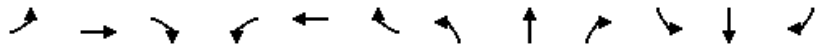
Intersection Summary	
HCM 2010 Ctrl Delay	14.6
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	204	361	497	100	1623	119
Future Volume (veh/h)	204	361	497	100	1623	119
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	240	425	585	118	1909	140
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	214	1885	772	345	1964	904
Arrive On Green	0.12	0.37	0.22	0.22	0.57	0.57
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	240	425	585	118	1909	140
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	15.0	7.1	19.3	7.8	66.0	5.2
Cycle Q Clear(g_c), s	15.0	7.1	19.3	7.8	66.0	5.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	214	1885	772	345	1964	904
V/C Ratio(X)	1.12	0.23	0.76	0.34	0.97	0.15
Avail Cap(c_a), veh/h	214	2899	1478	661	1981	912
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	54.8	26.9	45.6	41.1	26.1	12.9
Incr Delay (d2), s/veh	98.6	0.0	0.6	0.2	14.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	3.3	9.5	3.5	35.4	2.3
LnGrp Delay(d),s/veh	153.4	26.9	46.2	41.4	40.1	12.9
LnGrp LOS	F	C	D	D	D	B
Approach Vol, veh/h		665	703		2049	
Approach Delay, s/veh		72.6	45.4		38.3	
Approach LOS		E	D		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		50.2			19.0	31.2		74.4
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		69.7			13.0	50.7		69.7
Max Q Clear Time (g_c+I1), s		9.1			17.0	21.3		68.0
Green Ext Time (p_c), s		4.7			0.0	4.6		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	46.4
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	1830	0	0	293	1047	304	2	208	0	0	0
Future Volume (veh/h)	154	1830	0	0	293	1047	304	2	208	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1845	1845	1845			
Adj Flow Rate, veh/h	159	1887	0	0	302	626	314	0	99			
Adj No. of Lanes	2	3	0	0	1	2	2	0	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, %	1	1	0	0	1	1	3	3	3			
Cap, veh/h	261	3532	0	0	1008	1714	559	0	249			
Arrive On Green	0.08	0.69	0.00	0.00	0.54	0.54	0.16	0.00	0.16			
Sat Flow, veh/h	3476	5305	0	0	1881	3198	3514	0	1568			
Grp Volume(v), veh/h	159	1887	0	0	302	626	314	0	99			
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1881	1599	1757	0	1568			
Q Serve(g_s), s	2.3	9.5	0.0	0.0	4.6	5.9	4.3	0.0	3.0			
Cycle Q Clear(g_c), s	2.3	9.5	0.0	0.0	4.6	5.9	4.3	0.0	3.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	261	3532	0	0	1008	1714	559	0	249			
V/C Ratio(X)	0.61	0.53	0.00	0.00	0.30	0.37	0.56	0.00	0.40			
Avail Cap(c_a), veh/h	400	6469	0	0	2009	3415	3119	0	1392			
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	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.4	4.0	0.0	0.0	6.7	7.0	20.3	0.0	19.7			
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.1	4.4	0.0	0.0	2.4	2.5	2.1	0.0	2.7			
LnGrp Delay(d),s/veh	24.2	4.1	0.0	0.0	6.8	7.0	20.6	0.0	20.1			
LnGrp LOS	C	A			A	A	C		C			
Approach Vol, veh/h		2046			928			413				
Approach Delay, s/veh		5.6			6.9			20.5				
Approach LOS		A			A			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		39.9		12.3	7.9	31.9		
Change Period (Y+Rc), s		5.3		5.3	4.0	5.3		
Max Green Setting (Gmax), s		64.4		45.0	6.0	54.4		
Max Q Clear Time (g_c+I1), s		11.5		6.3	4.3	7.9		
Green Ext Time (p_c), s		19.5		0.7	0.0	18.8		

Intersection Summary	
HCM 2010 Ctrl Delay	7.8
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	11

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	398	119	100	409	85
Future Vol, veh/h	26	398	119	100	409	85
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	28	423	127	106	435	90

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1141	180	0	0	233	0
Stage 1	180	-	-	-	-	-
Stage 2	961	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	224	868	-	-	1346	-
Stage 1	856	-	-	-	-	-
Stage 2	374	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	148	868	-	-	1346	-
Mov Cap-2 Maneuver	148	-	-	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	247	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.8	0	7.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	669	1346	-
HCM Lane V/C Ratio	-	-	0.674	0.323	-
HCM Control Delay (s)	-	-	20.8	8.9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	5.2	1.4	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	204	1140	817	31	545	417
Future Volume (veh/h)	204	1140	817	31	545	417
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1863	1863	1776	1776
Adj Flow Rate, veh/h	222	1239	888	-164	592	183
Adj No. of Lanes	2	2	3	1	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	7	7
Cap, veh/h	317	1795	1797	559	646	1065
Arrive On Green	0.09	0.50	0.35	0.00	0.38	0.40
Sat Flow, veh/h	3476	3668	5253	1583	1691	2656
Grp Volume(v), veh/h	222	1239	888	-164	592	183
Grp Sat Flow(s),veh/h/ln	1738	1787	1695	1583	1691	1328
Q Serve(g_s), s	4.3	18.3	9.5	0.0	23.0	3.1
Cycle Q Clear(g_c), s	4.3	18.3	9.5	0.0	23.0	3.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	317	1795	1797	559	646	1065
V/C Ratio(X)	0.70	0.69	0.49	-0.29	0.92	0.17
Avail Cap(c_a), veh/h	452	2755	2964	923	1436	2305
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	30.5	13.1	17.5	0.0	20.3	13.3
Incr Delay (d2), s/veh	1.1	0.2	0.1	0.0	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	9.0	4.5	0.0	11.1	2.8
LnGrp Delay(d),s/veh	31.6	13.3	17.6	0.0	22.6	13.4
LnGrp LOS	C	B	B		C	B
Approach Vol, veh/h		1461	724		775	
Approach Delay, s/veh		16.1	21.6		20.4	
Approach LOS		B	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				38.7		30.4	10.3	28.4
Change Period (Y+Rc), s				5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s				52.0		58.7	9.0	39.0
Max Q Clear Time (g_c+I1), s				20.3		25.0	6.3	11.5
Green Ext Time (p_c), s				12.3		1.4	0.1	11.7

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1207	478	0	563	285	101
Future Volume (veh/h)	1207	478	0	563	285	101
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	1312	520	0	612	310	110
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2151	962	0	2151	1041	479
Arrive On Green	0.61	0.61	0.00	0.61	0.30	0.30
Sat Flow, veh/h	3632	1583	0	3725	3442	1583
Grp Volume(v), veh/h	1312	520	0	612	310	110
Grp Sat Flow(s),veh/h/ln	1770	1583	0	1770	1721	1583
Q Serve(g_s), s	20.6	17.1	0.0	7.3	6.2	4.6
Cycle Q Clear(g_c), s	20.6	17.1	0.0	7.3	6.2	4.6
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2151	962	0	2151	1041	479
V/C Ratio(X)	0.61	0.54	0.00	0.28	0.30	0.23
Avail Cap(c_a), veh/h	3371	1508	0	3371	1041	479
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	10.9	10.2	0.0	8.3	23.8	23.3
Incr Delay (d2), s/veh	0.3	0.5	0.0	0.1	0.7	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.5	0.0	3.6	3.0	2.2
LnGrp Delay(d),s/veh	11.2	10.7	0.0	8.4	24.6	24.4
LnGrp LOS	B	B		A	C	C
Approach Vol, veh/h	1832			612	420	
Approach Delay, s/veh	11.0			8.4	24.5	
Approach LOS	B			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		31.0		58.2				58.2
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		26.5		84.5				84.5
Max Q Clear Time (g_c+I1), s		8.2		22.6				9.3
Green Ext Time (p_c), s		1.4		31.1				33.7

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	169	813	100	625	575	79
Future Volume (veh/h)	169	813	100	625	575	79
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1397	1397	1845	1845
Adj Flow Rate, veh/h	182	215	108	672	618	59
Adj No. of Lanes	2	1	2	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	36	36	3	3
Cap, veh/h	1144	506	370	801	727	335
Arrive On Green	0.32	0.32	0.14	0.57	0.21	0.21
Sat Flow, veh/h	3632	1566	2581	1397	3408	1568
Grp Volume(v), veh/h	182	215	108	672	618	59
Grp Sat Flow(s),veh/h/ln	1770	1566	1291	1397	1704	1568
Q Serve(g_s), s	1.4	4.0	1.4	14.8	6.5	1.2
Cycle Q Clear(g_c), s	1.4	4.0	1.4	14.8	6.5	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1144	506	370	801	727	335
V/C Ratio(X)	0.16	0.42	0.29	0.84	0.85	0.18
Avail Cap(c_a), veh/h	5663	2506	688	2757	727	335
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	9.1	10.0	14.4	6.6	14.2	12.1
Incr Delay (d2), s/veh	0.0	0.2	0.4	0.9	9.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.8	0.5	5.6	3.9	0.5
LnGrp Delay(d),s/veh	9.1	10.2	14.8	7.5	23.1	12.1
LnGrp LOS	A	B	B	A	C	B
Approach Vol, veh/h	397			780	677	
Approach Delay, s/veh	9.7			8.5	22.2	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		12.0	9.4	16.1				25.5
Change Period (Y+Rc), s		4.0	6.0	4.6				4.6
Max Green Setting (Gmax), s		8.0	8.0	59.4				73.4
Max Q Clear Time (g_c+I1), s		8.5	3.4	6.0				16.8
Green Ext Time (p_c), s		0.0	0.1	4.1				4.1

Intersection Summary	
HCM 2010 Ctrl Delay	13.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	0	864	0	0	0	0	1632	435	198	713	0
Future Volume (veh/h)	251	0	864	0	0	0	0	1632	435	198	713	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	50				0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	285	0	698				0	1855	494	225	810	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	761	0	794				0	2480	536	295	3511	0
Arrive On Green	0.15	0.00	0.15				0.00	0.38	0.38	0.06	0.47	0.00
Sat Flow, veh/h	3442	0	3610				0	4693	1047	3343	5103	0
Grp Volume(v), veh/h	285	0	698				0	1574	775	225	810	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1642	1672	1647	0
Q Serve(g_s), s	9.2	0.0	23.2				0.0	51.8	52.2	8.1	12.0	0.0
Cycle Q Clear(g_c), s	9.2	0.0	23.2				0.0	51.8	52.2	8.1	12.0	0.0
Prop In Lane	1.00		1.00				0.00		0.64	1.00		0.00
Lane Grp Cap(c), veh/h	761	0	794				0	1959	965	295	3511	0
V/C Ratio(X)	0.37	0.00	0.88				0.00	0.80	0.80	0.76	0.23	0.00
Avail Cap(c_a), veh/h	931	0	976				0	2501	1225	340	4329	0
HCM Platoon Ratio	0.67	1.00	0.67				1.00	0.67	0.67	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.7	0.0	64.3				0.0	36.2	34.3	63.0	13.8	0.0
Incr Delay (d2), s/veh	0.1	0.0	6.9				0.0	1.2	2.4	7.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	172.1				0.0	13.4	6.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	24.2				0.0	22.6	29.4	4.5	6.0	0.0
LnGrp Delay(d),s/veh	49.8	0.0	243.4				0.0	50.8	42.8	69.9	13.8	0.0
LnGrp LOS	D		F					D	D	E	B	
Approach Vol, veh/h		983						2349			1035	
Approach Delay, s/veh		187.2						48.2			26.0	
Approach LOS		F						D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.9	74.8		32.1		90.7		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	12.0	* 91		32.7		107.1		
Max Q Clear Time (g_c+I1), s	10.1	54.2		25.2		14.0		
Green Ext Time (p_c), s	0.9	15.7		1.6		4.1		

Intersection Summary	
HCM 2010 Ctrl Delay	74.2
HCM 2010 LOS	E

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)	0	1083	485	111	1210	0	0	0	0	447	1	523
Future Volume (veh/h)	0	1083	485	111	1210	0	0	0	0	447	1	523
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1177	192	121	1315	0				487	0	539
Adj No. of Lanes	0	3	1	2	3	0				2	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2467	768	177	3203	0				813	0	725
Arrive On Green	0.00	0.48	0.48	0.09	0.62	0.00				0.23	0.00	0.23
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	3167
Grp Volume(v), veh/h	0	1177	192	121	1315	0				487	0	539
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	10.1	4.6	3.9	8.4	0.0				8.0	0.0	10.3
Cycle Q Clear(g_c), s	0.0	10.1	4.6	3.9	8.4	0.0				8.0	0.0	10.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2467	768	177	3203	0				813	0	725
V/C Ratio(X)	0.00	0.48	0.25	0.68	0.41	0.00				0.60	0.00	0.74
Avail Cap(c_a), veh/h	0	4822	1500	590	6634	0				2515	0	2244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.4	10.0	28.8	6.2	0.0				22.5	0.0	23.3
Incr Delay (d2), s/veh	0.0	0.1	0.1	1.8	0.0	0.0				0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.7	2.0	1.1	3.9	0.0				4.0	0.0	4.5
LnGrp Delay(d),s/veh	0.0	11.5	10.1	30.5	6.2	0.0				22.7	0.0	23.9
LnGrp LOS		B	B	C	A					C		C
Approach Vol, veh/h		1369			1436						1026	
Approach Delay, s/veh		11.3			8.3						23.3	
Approach LOS		B			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	9.3	36.1		19.7		45.5		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	19.0	60.7		45.7		83.7		
Max Q Clear Time (g_c+I1), s	5.9	12.1		12.3		10.4		
Green Ext Time (p_c), s	0.1	18.7		2.1		20.4		

Intersection Summary	
HCM 2010 Ctrl Delay	13.4
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	184	179	314	172	161	95	693	239	149	918	61
Future Volume (veh/h)	122	184	179	314	172	161	95	693	239	149	918	61
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98	1.00		1.00	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	134	202	175	345	189	159	104	762	250	164	1009	64
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	170	232	201	312	307	259	137	856	281	200	1224	78
Arrive On Green	0.09	0.25	0.25	0.18	0.33	0.33	0.08	0.32	0.32	0.11	0.36	0.35
Sat Flow, veh/h	1792	925	801	1774	927	780	1792	2643	867	1792	3408	216
Grp Volume(v), veh/h	134	0	377	345	0	348	104	515	497	164	529	544
Grp Sat Flow(s),veh/h/ln	1792	0	1725	1774	0	1707	1792	1787	1723	1792	1787	1836
Q Serve(g_s), s	8.1	0.0	23.2	19.5	0.0	19.0	6.3	30.4	30.4	9.9	29.9	29.9
Cycle Q Clear(g_c), s	8.1	0.0	23.2	19.5	0.0	19.0	6.3	30.4	30.4	9.9	29.9	29.9
Prop In Lane	1.00		0.46	1.00		0.46	1.00		0.50	1.00		0.12
Lane Grp Cap(c), veh/h	170	0	432	312	0	566	137	579	558	200	642	659
V/C Ratio(X)	0.79	0.00	0.87	1.11	0.00	0.61	0.76	0.89	0.89	0.82	0.82	0.82
Avail Cap(c_a), veh/h	250	0	537	312	0	593	154	600	578	218	664	682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	0.0	40.0	45.7	0.0	31.2	50.2	35.6	35.7	48.2	32.3	32.4
Incr Delay (d2), s/veh	5.4	0.0	10.8	82.4	0.0	1.2	14.8	14.4	14.9	18.2	7.5	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	12.4	16.6	0.0	9.1	3.7	17.2	16.7	5.9	16.0	16.5
LnGrp Delay(d),s/veh	54.5	0.0	50.8	128.1	0.0	32.4	65.0	50.0	50.6	66.4	39.9	39.7
LnGrp LOS	D		D	F		C	E	D	D	E	D	D
Approach Vol, veh/h		511			693			1116			1237	
Approach Delay, s/veh		51.7			80.1			51.7			43.3	
Approach LOS		D			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	40.7	23.0	31.3	12.0	44.6	14.0	40.3
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	13.0	36.7	19.0	34.0	9.0	40.7	15.0	38.0
Max Q Clear Time (g_c+I1), s	11.9	32.4	21.5	25.2	8.3	31.9	10.1	21.0
Green Ext Time (p_c), s	0.0	3.0	0.0	1.9	0.0	5.3	0.1	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	54.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱		↑↑	↱				↰↰		↱
Traffic Volume (veh/h)	0	389	253	0	184	128	0	0	0	970	0	43
Future Volume (veh/h)	0	389	253	0	184	128	0	0	0	970	0	43
Number	5	2	12	1	6	16				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1881	0	1881
Adj Flow Rate, veh/h	0	458	275	0	216	151				1141	0	51
Adj No. of Lanes	0	3	1	0	2	1				2	0	1
Peak Hour Factor	0.85	0.85	0.92	0.92	0.85	0.85				0.85	0.92	0.85
Percent Heavy Veh, %	0	2	2	0	2	2				1	0	1
Cap, veh/h	0	1525	475	0	1061	497				1462	0	651
Arrive On Green	0.00	0.30	0.30	0.00	0.30	0.31				0.42	0.00	0.41
Sat Flow, veh/h	0	5253	1583	0	3632	1583				3476	0	1599
Grp Volume(v), veh/h	0	458	275	0	216	151				1141	0	51
Grp Sat Flow(s),veh/h/ln	0	1695	1583	0	1770	1583				1738	0	1599
Q Serve(g_s), s	0.0	2.5	5.3	0.0	1.6	2.6				10.2	0.0	0.7
Cycle Q Clear(g_c), s	0.0	2.5	5.3	0.0	1.6	2.6				10.2	0.0	0.7
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1525	475	0	1061	497				1462	0	651
V/C Ratio(X)	0.00	0.30	0.58	0.00	0.20	0.30				0.78	0.00	0.08
Avail Cap(c_a), veh/h	0	7133	2221	0	4964	2243				5693	0	2597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.7	10.7	0.0	9.4	9.4				9.0	0.0	6.6
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.0	0.0	0.1				0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.2	2.3	0.0	0.8	1.2				4.8	0.0	0.3
LnGrp Delay(d),s/veh	0.0	9.8	11.1	0.0	9.5	9.5				9.4	0.0	6.6
LnGrp LOS		A	B		A	A				A		A
Approach Vol, veh/h		733			367						1192	
Approach Delay, s/veh		10.3			9.5						9.3	
Approach LOS		B			A						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		16.1				16.1		20.0
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		50.7				50.7		58.7
Max Q Clear Time (g_c+I1), s		7.3				4.6		12.2
Green Ext Time (p_c), s		3.5				3.5		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	9.6
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	104	482	47	39	449	130
Future Volume (veh/h)	104	482	47	39	449	130
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	111	513	50	41	478	138
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	281	722	373	306	528	1393
Arrive On Green	0.16	0.16	0.39	0.39	0.29	0.73
Sat Flow, veh/h	1810	1615	967	793	1810	1900
Grp Volume(v), veh/h	111	513	0	91	478	138
Grp Sat Flow(s),veh/h/ln	1810	1615	0	1760	1810	1900
Q Serve(g_s), s	5.0	14.0	0.0	3.0	22.9	1.9
Cycle Q Clear(g_c), s	5.0	14.0	0.0	3.0	22.9	1.9
Prop In Lane	1.00	1.00		0.45	1.00	
Lane Grp Cap(c), veh/h	281	722	0	680	528	1393
V/C Ratio(X)	0.39	0.71	0.00	0.13	0.91	0.10
Avail Cap(c_a), veh/h	281	722	0	680	784	1393
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	34.2	20.2	0.0	17.9	30.7	3.5
Incr Delay (d2), s/veh	0.9	3.3	0.0	0.4	10.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	10.9	0.0	1.5	12.9	1.0
LnGrp Delay(d),s/veh	35.1	23.4	0.0	18.3	40.9	3.6
LnGrp LOS	D	C		B	D	A
Approach Vol, veh/h	624		91			616
Approach Delay, s/veh	25.5		18.3			32.6
Approach LOS	C		B			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	31.2	39.8				71.0		19.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	39.0	22.0				66.0		14.0
Max Q Clear Time (g_c+I1), s	24.9	5.0				3.9		16.0
Green Ext Time (p_c), s	1.4	1.1				1.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	104	484	47	39	465	132
Future Volume (veh/h)	104	484	47	39	465	132
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	111	515	50	41	495	140
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	261	720	375	307	545	1414
Arrive On Green	0.14	0.14	0.39	0.39	0.30	0.74
Sat Flow, veh/h	1810	1615	967	793	1810	1900
Grp Volume(v), veh/h	111	515	0	91	495	140
Grp Sat Flow(s),veh/h/ln	1810	1615	0	1760	1810	1900
Q Serve(g_s), s	5.0	13.0	0.0	3.0	23.7	1.8
Cycle Q Clear(g_c), s	5.0	13.0	0.0	3.0	23.7	1.8
Prop In Lane	1.00	1.00		0.45	1.00	
Lane Grp Cap(c), veh/h	261	720	0	682	545	1414
V/C Ratio(X)	0.42	0.72	0.00	0.13	0.91	0.10
Avail Cap(c_a), veh/h	261	720	0	682	804	1414
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	35.1	20.3	0.0	17.8	30.2	3.2
Incr Delay (d2), s/veh	1.1	3.4	0.0	0.4	10.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	11.0	0.0	1.5	13.4	1.0
LnGrp Delay(d),s/veh	36.2	23.7	0.0	18.2	40.6	3.3
LnGrp LOS	D	C		B	D	A
Approach Vol, veh/h	626		91			635
Approach Delay, s/veh	25.9		18.2			32.4
Approach LOS	C		B			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	32.1	39.9				72.0		18.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	40.0	22.0				67.0		13.0
Max Q Clear Time (g_c+I1), s	25.7	5.0				3.8		15.0
Green Ext Time (p_c), s	1.4	1.1				1.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	412	295	0	208	128	0	0	0	970	0	43
Future Volume (veh/h)	0	412	295	0	208	128	0	0	0	970	0	43
Number	5	2	12	1	6	16				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1881	0	1881
Adj Flow Rate, veh/h	0	485	321	0	245	151				1141	0	51
Adj No. of Lanes	0	3	1	0	2	1				2	0	1
Peak Hour Factor	0.85	0.85	0.92	0.92	0.85	0.85				0.85	0.92	0.85
Percent Heavy Veh, %	0	2	2	0	2	2				1	0	1
Cap, veh/h	0	1650	514	0	1148	534				1441	0	642
Arrive On Green	0.00	0.32	0.32	0.00	0.32	0.34				0.41	0.00	0.40
Sat Flow, veh/h	0	5253	1583	0	3632	1583				3476	0	1599
Grp Volume(v), veh/h	0	485	321	0	245	151				1141	0	51
Grp Sat Flow(s),veh/h/ln	0	1695	1583	0	1770	1583				1738	0	1599
Q Serve(g_s), s	0.0	2.8	6.6	0.0	1.9	2.7				11.1	0.0	0.8
Cycle Q Clear(g_c), s	0.0	2.8	6.6	0.0	1.9	2.7				11.1	0.0	0.8
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1650	514	0	1148	534				1441	0	642
V/C Ratio(X)	0.00	0.29	0.63	0.00	0.21	0.28				0.79	0.00	0.08
Avail Cap(c_a), veh/h	0	6662	2074	0	4637	2095				5317	0	2425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.8	11.1	0.0	9.5	9.4				9.9	0.0	7.2
Incr Delay (d2), s/veh	0.0	0.0	0.5	0.0	0.0	0.1				0.4	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	0.0	1.3	2.9	0.0	1.0	1.2				5.3	0.0	0.3
LnGrp Delay(d),s/veh	0.0	9.8	11.5	0.0	9.5	9.5				10.2	0.0	7.2
LnGrp LOS		A	B		A	A				B		A
Approach Vol, veh/h		806			396						1192	
Approach Delay, s/veh		10.5			9.5						10.1	
Approach LOS		B			A						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		17.9				17.9		20.8
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		50.7				50.7		58.7
Max Q Clear Time (g_c+I1), s		8.6				4.7		13.1
Green Ext Time (p_c), s		3.9				3.9		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	10.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	327	0	1490	0	0	0	0	1374	452	488	1156	0
Future Volume (veh/h)	327	0	1490	0	0	0	0	1374	452	488	1156	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	10				0	10	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	372	0	1409				0	1561	514	555	1314	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1232	0	1273				0	2040	478	443	2910	0
Arrive On Green	0.24	0.00	0.24				0.00	0.28	0.28	0.09	0.39	0.00
Sat Flow, veh/h	3442	0	3610				0	4471	1226	3343	5103	0
Grp Volume(v), veh/h	372	0	1409				0	1405	670	555	1314	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1600	1672	1647	0
Q Serve(g_s), s	13.4	0.0	53.2				0.0	62.9	63.0	20.0	29.6	0.0
Cycle Q Clear(g_c), s	13.4	0.0	53.2				0.0	62.9	63.0	20.0	29.6	0.0
Prop In Lane	1.00		1.00				0.00		0.77	1.00		0.00
Lane Grp Cap(c), veh/h	1232	0	1273				0	1422	688	443	2910	0
V/C Ratio(X)	0.30	0.00	1.11				0.00	0.99	0.98	1.25	0.45	0.00
Avail Cap(c_a), veh/h	1232	0	1273				0	1422	678	443	2910	0
HCM Platoon Ratio	0.67	1.00	0.67				1.00	0.67	0.67	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.9	0.0	57.6				0.0	54.0	53.9	68.8	27.7	0.0
Incr Delay (d2), s/veh	0.1	0.0	59.9				0.0	20.8	28.4	131.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	25.1				0.0	13.4	3.8	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	28.0				0.0	24.2	34.4	17.3	13.5	0.0
LnGrp Delay(d),s/veh	42.0	0.0	142.7				0.0	88.3	86.1	199.8	27.8	0.0
LnGrp LOS	D		F					F	F	F	C	
Approach Vol, veh/h		1781						2075			1869	
Approach Delay, s/veh		121.7						87.6			78.9	
Approach LOS		F						F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	24.9	68.0		58.0		92.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	20.0	* 63		52.7		87.1		
Max Q Clear Time (g_c+I1), s	22.0	65.0		55.2		31.6		
Green Ext Time (p_c), s	0.0	0.0		0.0		8.7		

Intersection Summary	
HCM 2010 Ctrl Delay	95.3
HCM 2010 LOS	F

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)	0	1620	486	213	1769	0	0	0	0	741	7	847
Future Volume (veh/h)	0	1620	486	213	1769	0	0	0	0	741	7	847
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1761	193	232	1923	0				811	0	892
Adj No. of Lanes	0	3	1	2	3	0				2	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2190	682	267	3077	0				1158	0	1033
Arrive On Green	0.00	0.43	0.43	0.14	0.60	0.00				0.33	0.00	0.33
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	3167
Grp Volume(v), veh/h	0	1761	193	232	1923	0				811	0	892
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	32.1	8.4	12.4	25.7	0.0				21.4	0.0	28.3
Cycle Q Clear(g_c), s	0.0	32.1	8.4	12.4	25.7	0.0				21.4	0.0	28.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2190	682	267	3077	0				1158	0	1033
V/C Ratio(X)	0.00	0.80	0.28	0.87	0.63	0.00				0.70	0.00	0.86
Avail Cap(c_a), veh/h	0	2242	697	331	3295	0				1430	0	1276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.8	20.1	45.4	13.8	0.0				31.5	0.0	33.9
Incr Delay (d2), s/veh	0.0	2.0	0.1	16.0	0.2	0.0				0.7	0.0	4.6
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	0.0	15.6	3.7	4.0	12.2	0.0				10.6	0.0	13.0
LnGrp Delay(d),s/veh	0.0	28.8	20.1	61.5	14.0	0.0				32.3	0.0	38.4
LnGrp LOS		C	C	E	B					C		D
Approach Vol, veh/h		1954			2155						1703	
Approach Delay, s/veh		28.0			19.1						35.5	
Approach LOS		C			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	18.5	49.7		39.0		68.2		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	18.0	45.5		41.9		67.5		
Max Q Clear Time (g_c+I1), s	14.4	34.1		30.3		27.7		
Green Ext Time (p_c), s	0.1	10.3		3.4		29.9		

Intersection Summary	
HCM 2010 Ctrl Delay	26.9
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	112	73	45	92	85	140	626	142	286	611	90
Future Volume (veh/h)	67	112	73	45	92	85	140	626	142	286	611	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		0.98	1.00		0.97	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	123	58	49	101	75	154	688	143	314	671	96
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	95	216	102	63	159	118	195	1008	209	365	1368	195
Arrive On Green	0.05	0.18	0.18	0.04	0.16	0.16	0.11	0.34	0.32	0.20	0.44	0.42
Sat Flow, veh/h	1792	1203	567	1774	981	729	1792	2945	612	1792	3129	447
Grp Volume(v), veh/h	74	0	181	49	0	176	154	417	414	314	383	384
Grp Sat Flow(s),veh/h/ln	1792	0	1770	1774	0	1710	1792	1787	1770	1792	1787	1789
Q Serve(g_s), s	2.7	0.0	6.3	1.8	0.0	6.4	5.6	13.4	13.5	11.3	10.3	10.4
Cycle Q Clear(g_c), s	2.7	0.0	6.3	1.8	0.0	6.4	5.6	13.4	13.5	11.3	10.3	10.4
Prop In Lane	1.00		0.32	1.00		0.43	1.00		0.35	1.00		0.25
Lane Grp Cap(c), veh/h	95	0	317	63	0	277	195	612	606	365	781	782
V/C Ratio(X)	0.78	0.00	0.57	0.77	0.00	0.64	0.79	0.68	0.68	0.86	0.49	0.49
Avail Cap(c_a), veh/h	187	0	925	159	0	868	481	960	951	722	1200	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	0.0	25.1	32.0	0.0	26.2	29.1	18.9	19.1	25.8	13.5	13.6
Incr Delay (d2), s/veh	5.1	0.0	0.6	7.3	0.0	0.9	2.7	0.5	0.5	2.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	3.1	1.0	0.0	3.1	2.9	6.7	6.7	5.8	5.0	5.1
LnGrp Delay(d),s/veh	36.5	0.0	25.7	39.3	0.0	27.1	31.8	19.4	19.6	28.1	13.7	13.8
LnGrp LOS	D		C	D		C	C	B	B	C	B	B
Approach Vol, veh/h		255			225			985			1081	
Approach Delay, s/veh		28.9			29.8			21.4			17.9	
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	17.7	26.9	6.4	16.0	11.3	33.3	7.5	14.9
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	27.0	34.7	6.0	35.0	18.0	43.7	7.0	34.0
Max Q Clear Time (g_c+I1), s	13.3	15.5	3.8	8.3	7.6	12.4	4.7	8.4
Green Ext Time (p_c), s	0.4	5.9	0.0	1.2	0.1	6.6	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	21.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑↑↑	↱		↑↑	↱	↰↰	↱		
Traffic Volume (veh/h)	0	352	200	0	482	100	1623	112	0	0
Future Volume (veh/h)	0	352	200	0	482	100	1623	112	0	0
Number	5	2	12	1	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863	1863	1881		
Adj Flow Rate, veh/h	0	414	217	0	567	118	1764	132		
Adj No. of Lanes	0	3	1	0	2	1	2	1		
Peak Hour Factor	0.85	0.85	0.92	0.92	0.85	0.85	0.92	0.85		
Percent Heavy Veh, %	0	2	2	0	2	2	2	1		
Cap, veh/h	0	1319	381	0	918	411	2056	985		
Arrive On Green	0.00	0.26	0.24	0.00	0.26	0.26	0.60	0.62		
Sat Flow, veh/h	0	5253	1583	0	3632	1583	3442	1599		
Grp Volume(v), veh/h	0	414	217	0	567	118	1764	132		
Grp Sat Flow(s),veh/h/ln	0	1695	1583	0	1770	1583	1721	1599		
Q Serve(g_s), s	0.0	4.6	8.4	0.0	9.8	4.2	29.5	2.4		
Cycle Q Clear(g_c), s	0.0	4.6	8.4	0.0	9.8	4.2	29.5	2.4		
Prop In Lane	0.00		1.00	0.00		1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1319	381	0	918	411	2056	985		
V/C Ratio(X)	0.00	0.31	0.57	0.00	0.62	0.29	0.86	0.13		
Avail Cap(c_a), veh/h	0	3648	1106	0	2539	1136	2963	1406		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	20.8	23.3	0.0	22.8	20.7	11.6	5.6		
Incr Delay (d2), s/veh	0.0	0.1	0.5	0.0	0.3	0.1	1.9	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	2.2	3.7	0.0	4.8	1.8	14.3	1.1		
LnGrp Delay(d),s/veh	0.0	20.9	23.8	0.0	23.0	20.8	13.5	5.7		
LnGrp LOS		C	C		C	C	B	A		
Approach Vol, veh/h		631			685		1896			
Approach Delay, s/veh		21.9			22.6		12.9			
Approach LOS		C			C		B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.1		47.6		22.1		
Change Period (Y+Rc), s		5.3		6.0		5.3		
Max Green Setting (Gmax), s		48.7		60.0		48.7		
Max Q Clear Time (g_c+I1), s		10.4		31.5		11.8		
Green Ext Time (p_c), s		4.9		10.1		4.9		

Intersection Summary	
HCM 2010 Ctrl Delay	16.8
HCM 2010 LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	26	380	117	100	400	84
Future Volume (veh/h)	26	380	117	100	400	84
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	28	404	124	106	426	89
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	121	532	446	381	475	1520
Arrive On Green	0.07	0.07	0.47	0.47	0.26	0.80
Sat Flow, veh/h	1810	1615	947	810	1810	1900
Grp Volume(v), veh/h	28	404	0	230	426	89
Grp Sat Flow(s),veh/h/ln	1810	1615	0	1757	1810	1900
Q Serve(g_s), s	1.3	6.0	0.0	7.2	20.4	0.9
Cycle Q Clear(g_c), s	1.3	6.0	0.0	7.2	20.4	0.9
Prop In Lane	1.00	1.00		0.46	1.00	
Lane Grp Cap(c), veh/h	121	532	0	827	475	1520
V/C Ratio(X)	0.23	0.76	0.00	0.28	0.90	0.06
Avail Cap(c_a), veh/h	121	532	0	827	764	1520
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	39.8	27.0	0.0	14.5	32.0	1.9
Incr Delay (d2), s/veh	1.0	6.3	0.0	0.8	8.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	9.8	0.0	3.6	11.3	0.5
LnGrp Delay(d),s/veh	40.8	33.3	0.0	15.3	40.5	2.0
LnGrp LOS	D	C		B	D	A
Approach Vol, veh/h	432		230			515
Approach Delay, s/veh	33.8		15.3			33.8
Approach LOS	C		B			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	29.6	48.4				78.0		12.0
Change Period (Y+Rc), s	6.0	6.0				6.0		6.0
Max Green Setting (Gmax), s	38.0	28.0				72.0		6.0
Max Q Clear Time (g_c+I1), s	22.4	9.2				2.9		8.0
Green Ext Time (p_c), s	1.2	1.8				2.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (veh/h)	0	368	232	0	553	100	1623	112	0	0
Future Volume (veh/h)	0	368	232	0	553	100	1623	112	0	0
Number	5	2	12	1	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863	1863	1881		
Adj Flow Rate, veh/h	0	433	252	0	651	118	1764	132		
Adj No. of Lanes	0	3	1	0	2	1	2	1		
Peak Hour Factor	0.85	0.85	0.92	0.92	0.85	0.85	0.92	0.85		
Percent Heavy Veh, %	0	2	2	0	2	2	2	1		
Cap, veh/h	0	1501	436	0	1045	467	1938	932		
Arrive On Green	0.00	0.30	0.28	0.00	0.30	0.30	0.56	0.58		
Sat Flow, veh/h	0	5253	1583	0	3632	1583	3442	1599		
Grp Volume(v), veh/h	0	433	252	0	651	118	1764	132		
Grp Sat Flow(s),veh/h/ln	0	1695	1583	0	1770	1583	1721	1599		
Q Serve(g_s), s	0.0	4.3	9.0	0.0	10.4	3.7	30.1	2.5		
Cycle Q Clear(g_c), s	0.0	4.3	9.0	0.0	10.4	3.7	30.1	2.5		
Prop In Lane	0.00		1.00	0.00		1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1501	436	0	1045	467	1938	932		
V/C Ratio(X)	0.00	0.29	0.58	0.00	0.62	0.25	0.91	0.14		
Avail Cap(c_a), veh/h	0	4032	1224	0	2806	1255	3080	1463		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	17.8	20.5	0.0	20.0	17.6	12.8	6.2		
Incr Delay (d2), s/veh	0.0	0.0	0.5	0.0	0.2	0.1	1.9	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	2.0	4.0	0.0	5.1	1.6	14.5	1.1		
LnGrp Delay(d),s/veh	0.0	17.8	20.9	0.0	20.2	17.7	14.8	6.2		
LnGrp LOS		B	C		C	B	B	A		
Approach Vol, veh/h		685			769		1896			
Approach Delay, s/veh		19.0			19.8		14.2			
Approach LOS		B			B		B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		23.4		42.2		23.4		
Change Period (Y+Rc), s		5.3		5.3		5.3		
Max Green Setting (Gmax), s		50.7		58.7		50.7		
Max Q Clear Time (g_c+I1), s		11.0		32.1		12.4		
Green Ext Time (p_c), s		5.7		4.8		5.6		

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	0	866	0	0	0	0	1632	441	198	714	0
Future Volume (veh/h)	251	0	866	0	0	0	0	1632	441	198	714	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	50				0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	285	0	700				0	1855	501	225	811	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	752	0	782				0	2454	521	299	3466	0
Arrive On Green	0.15	0.00	0.15				0.00	0.38	0.37	0.06	0.47	0.00
Sat Flow, veh/h	3442	0	3610				0	4680	1058	3343	5103	0
Grp Volume(v), veh/h	285	0	700				0	1580	776	225	811	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1639	1672	1647	0
Q Serve(g_s), s	8.2	0.0	20.8				0.0	47.0	47.4	7.3	10.8	0.0
Cycle Q Clear(g_c), s	8.2	0.0	20.8				0.0	47.0	47.4	7.3	10.8	0.0
Prop In Lane	1.00		1.00				0.00		0.65	1.00		0.00
Lane Grp Cap(c), veh/h	752	0	782				0	1916	946	299	3466	0
V/C Ratio(X)	0.38	0.00	0.89				0.00	0.82	0.82	0.75	0.23	0.00
Avail Cap(c_a), veh/h	822	0	862				0	2157	1055	320	3808	0
HCM Platoon Ratio	0.67	1.00	0.67				1.00	0.67	0.67	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.3	0.0	51.7				0.0	32.4	31.1	53.1	12.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	10.5				0.0	2.2	4.2	7.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	182.7				0.0	15.7	7.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	22.7				0.0	20.5	27.0	3.9	5.2	0.0
LnGrp Delay(d),s/veh	42.4	0.0	244.9				0.0	50.3	42.3	60.9	12.1	0.0
LnGrp LOS	D		F					D	D	E	B	
Approach Vol, veh/h		985						2356			1036	
Approach Delay, s/veh		186.3						47.7			22.7	
Approach LOS		F						D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.5	66.2		29.0		80.7		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	10.0	* 70		25.7		84.1		
Max Q Clear Time (g_c+I1), s	9.3	49.4		22.8		12.8		
Green Ext Time (p_c), s	0.4	11.9		0.9		4.1		

Intersection Summary	
HCM 2010 Ctrl Delay	73.0
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1085	485	111	1210	0	0	0	0	447	1	523
Future Volume (veh/h)	0	1085	485	111	1210	0	0	0	0	447	1	523
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1179	192	121	1315	0				487	0	539
Adj No. of Lanes	0	3	1	2	3	0				2	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2468	768	177	3204	0				813	0	725
Arrive On Green	0.00	0.48	0.48	0.09	0.62	0.00				0.23	0.00	0.23
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	3167
Grp Volume(v), veh/h	0	1179	192	121	1315	0				487	0	539
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	10.1	4.6	3.9	8.4	0.0				8.0	0.0	10.3
Cycle Q Clear(g_c), s	0.0	10.1	4.6	3.9	8.4	0.0				8.0	0.0	10.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2468	768	177	3204	0				813	0	725
V/C Ratio(X)	0.00	0.48	0.25	0.68	0.41	0.00				0.60	0.00	0.74
Avail Cap(c_a), veh/h	0	4817	1499	589	6627	0				2512	0	2242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.4	10.0	28.8	6.2	0.0				22.5	0.0	23.4
Incr Delay (d2), s/veh	0.0	0.1	0.1	1.8	0.0	0.0				0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.7	2.0	1.1	3.9	0.0				4.0	0.0	4.5
LnGrp Delay(d),s/veh	0.0	11.5	10.1	30.6	6.2	0.0				22.7	0.0	23.9
LnGrp LOS		B	B	C	A					C		C
Approach Vol, veh/h		1371			1436						1026	
Approach Delay, s/veh		11.3			8.3						23.4	
Approach LOS		B			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	9.4	36.2		19.7		45.5		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	19.0	60.7		45.7		83.7		
Max Q Clear Time (g_c+I1), s	5.9	12.1		12.3		10.4		
Green Ext Time (p_c), s	0.1	18.7		2.1		20.5		

Intersection Summary	
HCM 2010 Ctrl Delay	13.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	180	183	225	167	144	100	718	122	140	925	61
Future Volume (veh/h)	122	180	183	225	167	144	100	718	122	140	925	61
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98	1.00		1.00	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	134	198	179	247	184	140	110	789	121	154	1016	64
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	172	230	208	286	311	237	145	1019	156	192	1208	76
Arrive On Green	0.10	0.25	0.25	0.16	0.32	0.31	0.08	0.33	0.32	0.11	0.35	0.35
Sat Flow, veh/h	1792	905	818	1774	974	741	1792	3105	476	1792	3409	215
Grp Volume(v), veh/h	134	0	377	247	0	324	110	454	456	154	533	547
Grp Sat Flow(s),veh/h/ln	1792	0	1722	1774	0	1714	1792	1787	1795	1792	1787	1837
Q Serve(g_s), s	7.5	0.0	21.4	13.9	0.0	16.3	6.2	23.5	23.5	8.6	28.1	28.1
Cycle Q Clear(g_c), s	7.5	0.0	21.4	13.9	0.0	16.3	6.2	23.5	23.5	8.6	28.1	28.1
Prop In Lane	1.00		0.47	1.00		0.43	1.00		0.27	1.00		0.12
Lane Grp Cap(c), veh/h	172	0	438	286	0	548	145	586	589	192	633	651
V/C Ratio(X)	0.78	0.00	0.86	0.86	0.00	0.59	0.76	0.77	0.77	0.80	0.84	0.84
Avail Cap(c_a), veh/h	271	0	579	337	0	643	166	665	668	218	718	738
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	0.0	36.6	41.9	0.0	29.4	46.1	31.0	31.1	44.7	30.5	30.5
Incr Delay (d2), s/veh	2.9	0.0	8.0	16.2	0.0	0.4	13.1	4.2	4.2	14.8	7.2	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	11.1	8.1	0.0	7.7	3.6	12.3	12.3	5.1	15.2	15.6
LnGrp Delay(d),s/veh	48.2	0.0	44.6	58.1	0.0	29.8	59.3	35.2	35.3	59.6	37.7	37.5
LnGrp LOS	D		D	E		C	E	D	D	E	D	D
Approach Vol, veh/h		511			571			1020			1234	
Approach Delay, s/veh		45.6			42.1			37.9			40.3	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	38.5	20.0	29.6	11.8	41.1	13.4	36.3
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	12.0	37.7	19.0	34.0	9.0	40.7	15.0	38.0
Max Q Clear Time (g_c+I1), s	10.6	25.5	15.9	23.4	8.2	30.1	9.5	18.3
Green Ext Time (p_c), s	0.0	6.2	0.1	2.0	0.0	5.7	0.1	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	40.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	312	430	0	0	213	128	0	0	0	970	0	44
Future Volume (veh/h)	312	430	0	0	213	128	0	0	0	970	0	44
Number	5	2	12	1	6	16				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863				1881	0	1881
Adj Flow Rate, veh/h	367	506	0	0	251	151				1141	0	52
Adj No. of Lanes	1	3	0	0	2	1				2	0	1
Peak Hour Factor	0.85	0.85	0.92	0.92	0.85	0.85				0.85	0.92	0.85
Percent Heavy Veh, %	2	2	0	0	2	2				1	0	1
Cap, veh/h	424	2452	0	0	583	272				1299	0	586
Arrive On Green	0.24	0.48	0.00	0.00	0.16	0.17				0.37	0.00	0.37
Sat Flow, veh/h	1774	5253	0	0	3632	1583				3476	0	1599
Grp Volume(v), veh/h	367	506	0	0	251	151				1141	0	52
Grp Sat Flow(s),veh/h/ln	1774	1695	0	0	1770	1583				1738	0	1599
Q Serve(g_s), s	13.9	4.0	0.0	0.0	4.5	6.1				21.5	0.0	1.5
Cycle Q Clear(g_c), s	13.9	4.0	0.0	0.0	4.5	6.1				21.5	0.0	1.5
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	424	2452	0	0	583	272				1299	0	586
V/C Ratio(X)	0.87	0.21	0.00	0.00	0.43	0.56				0.88	0.00	0.09
Avail Cap(c_a), veh/h	493	5274	0	0	2408	1089				1844	0	837
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	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	25.6	10.4	0.0	0.0	26.3	26.6				20.5	0.0	14.5
Incr Delay (d2), s/veh	13.4	0.0	0.0	0.0	0.2	0.7				2.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	1.9	0.0	0.0	2.2	2.7				10.8	0.0	0.7
LnGrp Delay(d),s/veh	38.9	10.5	0.0	0.0	26.5	27.2				23.3	0.0	14.6
LnGrp LOS	D	B			C	C				C		B
Approach Vol, veh/h		873			402						1193	
Approach Delay, s/veh		22.4			26.8						22.9	
Approach LOS		C			C						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		39.1			22.3	16.8		31.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		72.7			19.0	47.7		36.7
Max Q Clear Time (g_c+I1), s		6.0			15.9	8.1		23.5
Green Ext Time (p_c), s		3.4			0.4	3.4		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	23.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	430	312	0	213	128	0	0	0	970	0	44
Future Volume (veh/h)	0	430	312	0	213	128	0	0	0	970	0	44
Number	5	2	12	1	6	16				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1881	0	1881
Adj Flow Rate, veh/h	0	506	339	0	251	151				1141	0	52
Adj No. of Lanes	0	3	1	0	2	1				2	0	1
Peak Hour Factor	0.85	0.85	0.92	0.92	0.85	0.85				0.85	0.92	0.85
Percent Heavy Veh, %	0	2	2	0	2	2				1	0	1
Cap, veh/h	0	1700	529	0	1183	549				1433	0	639
Arrive On Green	0.00	0.33	0.33	0.00	0.33	0.35				0.41	0.00	0.40
Sat Flow, veh/h	0	5253	1583	0	3632	1583				3476	0	1599
Grp Volume(v), veh/h	0	506	339	0	251	151				1141	0	52
Grp Sat Flow(s),veh/h/ln	0	1695	1583	0	1770	1583				1738	0	1599
Q Serve(g_s), s	0.0	2.9	7.2	0.0	2.0	2.7				11.4	0.0	0.8
Cycle Q Clear(g_c), s	0.0	2.9	7.2	0.0	2.0	2.7				11.4	0.0	0.8
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1700	529	0	1183	549				1433	0	639
V/C Ratio(X)	0.00	0.30	0.64	0.00	0.21	0.28				0.80	0.00	0.08
Avail Cap(c_a), veh/h	0	6473	2015	0	4505	2035				5166	0	2356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.8	11.2	0.0	9.5	9.4				10.2	0.0	7.4
Incr Delay (d2), s/veh	0.0	0.0	0.5	0.0	0.0	0.1				0.4	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	0.0	1.4	3.2	0.0	1.0	1.2				5.5	0.0	0.4
LnGrp Delay(d),s/veh	0.0	9.8	11.7	0.0	9.5	9.5				10.6	0.0	7.4
LnGrp LOS		A	B		A	A				B		A
Approach Vol, veh/h		845			402						1193	
Approach Delay, s/veh		10.6			9.5						10.5	
Approach LOS		B			A						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		18.6				18.6		21.2
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		50.7				50.7		58.7
Max Q Clear Time (g_c+I1), s		9.2				4.7		13.4
Green Ext Time (p_c), s		4.1				4.1		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	327	0	1500	0	0	0	0	1374	455	488	1159	0
Future Volume (veh/h)	327	0	1500	0	0	0	0	1374	455	488	1159	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	10				0	10	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	372	0	1421				0	1561	517	555	1317	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1232	0	1273				0	2039	479	443	2910	0
Arrive On Green	0.24	0.00	0.24				0.00	0.28	0.28	0.09	0.39	0.00
Sat Flow, veh/h	3442	0	3610				0	4465	1231	3343	5103	0
Grp Volume(v), veh/h	372	0	1421				0	1407	671	555	1317	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1598	1672	1647	0
Q Serve(g_s), s	13.4	0.0	53.2				0.0	63.0	63.1	20.0	29.6	0.0
Cycle Q Clear(g_c), s	13.4	0.0	53.2				0.0	63.0	63.1	20.0	29.6	0.0
Prop In Lane	1.00		1.00				0.00		0.77	1.00		0.00
Lane Grp Cap(c), veh/h	1232	0	1273				0	1422	687	443	2910	0
V/C Ratio(X)	0.30	0.00	1.12				0.00	0.99	0.98	1.25	0.45	0.00
Avail Cap(c_a), veh/h	1232	0	1273				0	1422	678	443	2910	0
HCM Platoon Ratio	0.67	1.00	0.67				1.00	0.67	0.67	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.9	0.0	57.6				0.0	54.0	53.9	68.8	27.7	0.0
Incr Delay (d2), s/veh	0.1	0.0	63.6				0.0	21.2	28.8	131.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	24.9				0.0	14.2	4.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	28.5				0.0	24.4	34.6	17.3	13.5	0.0
LnGrp Delay(d),s/veh	42.0	0.0	146.2				0.0	89.4	86.8	199.8	27.8	0.0
LnGrp LOS	D		F					F	F	F	C	
Approach Vol, veh/h		1793						2078			1872	
Approach Delay, s/veh		124.5						88.6			78.8	
Approach LOS		F						F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	24.9	68.0		58.0		92.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	20.0	* 63		52.7		87.1		
Max Q Clear Time (g_c+I1), s	22.0	65.1		55.2		31.6		
Green Ext Time (p_c), s	0.0	0.0		0.0		8.7		

Intersection Summary	
HCM 2010 Ctrl Delay	96.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1621	486	213	1771	0	0	0	0	741	7	847
Future Volume (veh/h)	0	1621	486	213	1771	0	0	0	0	741	7	847
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1762	193	232	1925	0				811	0	892
Adj No. of Lanes	0	3	1	2	3	0				2	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2191	682	267	3077	0				1158	0	1033
Arrive On Green	0.00	0.43	0.43	0.14	0.60	0.00				0.33	0.00	0.33
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	3167
Grp Volume(v), veh/h	0	1762	193	232	1925	0				811	0	892
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	32.1	8.4	12.4	25.8	0.0				21.4	0.0	28.3
Cycle Q Clear(g_c), s	0.0	32.1	8.4	12.4	25.8	0.0				21.4	0.0	28.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2191	682	267	3077	0				1158	0	1033
V/C Ratio(X)	0.00	0.80	0.28	0.87	0.63	0.00				0.70	0.00	0.86
Avail Cap(c_a), veh/h	0	2241	697	331	3295	0				1429	0	1276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.8	20.1	45.4	13.8	0.0				31.5	0.0	33.9
Incr Delay (d2), s/veh	0.0	2.0	0.1	16.0	0.2	0.0				0.7	0.0	4.6
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	0.0	15.6	3.7	4.0	12.2	0.0				10.6	0.0	13.0
LnGrp Delay(d),s/veh	0.0	28.8	20.1	61.5	14.0	0.0				32.3	0.0	38.4
LnGrp LOS		C	C	E	B					C		D
Approach Vol, veh/h		1955			2157						1703	
Approach Delay, s/veh		28.0			19.1						35.5	
Approach LOS		C			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	18.5	49.7		39.0		68.2		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	18.0	45.5		41.9		67.5		
Max Q Clear Time (g_c+I1), s	14.4	34.1		30.3		27.8		
Green Ext Time (p_c), s	0.1	10.3		3.4		29.9		

Intersection Summary	
HCM 2010 Ctrl Delay	26.9
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	112	73	45	92	85	140	656	142	286	650	90
Future Volume (veh/h)	67	112	73	45	92	85	140	656	142	286	650	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		0.98	1.00		0.97	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	123	58	49	101	75	154	721	143	314	714	96
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	96	219	103	67	163	121	183	1053	209	275	1280	172
Arrive On Green	0.05	0.18	0.18	0.04	0.17	0.17	0.10	0.35	0.33	0.15	0.41	0.38
Sat Flow, veh/h	1792	1203	567	1774	982	729	1792	2972	589	1792	3157	424
Grp Volume(v), veh/h	74	0	181	49	0	176	154	433	431	314	404	406
Grp Sat Flow(s),veh/h/ln	1792	0	1770	1774	0	1710	1792	1787	1774	1792	1787	1794
Q Serve(g_s), s	2.4	0.0	5.5	1.6	0.0	5.6	5.0	12.1	12.2	9.0	10.2	10.3
Cycle Q Clear(g_c), s	2.4	0.0	5.5	1.6	0.0	5.6	5.0	12.1	12.2	9.0	10.2	10.3
Prop In Lane	1.00		0.32	1.00		0.43	1.00		0.33	1.00		0.24
Lane Grp Cap(c), veh/h	96	0	323	67	0	284	183	633	629	275	725	727
V/C Ratio(X)	0.77	0.00	0.56	0.74	0.00	0.62	0.84	0.68	0.68	1.14	0.56	0.56
Avail Cap(c_a), veh/h	1038	0	1025	1027	0	991	183	822	816	275	913	917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	0.0	21.9	28.0	0.0	22.7	25.9	16.1	16.4	24.9	13.4	13.5
Incr Delay (d2), s/veh	4.9	0.0	0.6	5.8	0.0	0.8	26.8	0.8	0.8	98.6	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	2.7	0.9	0.0	2.7	3.8	6.0	6.0	11.9	5.0	5.0
LnGrp Delay(d),s/veh	32.4	0.0	22.4	33.8	0.0	23.6	52.7	16.9	17.2	123.5	13.7	13.8
LnGrp LOS	C		C	C		C	D	B	B	F	B	B
Approach Vol, veh/h		255			225			1018			1124	
Approach Delay, s/veh		25.3			25.8			22.4			44.4	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	24.8	6.2	14.7	10.0	27.8	7.1	13.8
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	9.0	25.7	34.0	34.0	6.0	28.7	34.0	34.0
Max Q Clear Time (g_c+I1), s	11.0	14.2	3.6	7.5	7.0	12.3	4.4	7.6
Green Ext Time (p_c), s	0.0	5.0	0.0	1.2	0.0	6.0	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	32.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	379	0	0	581	100	0	0	0	1623	0	119
Future Volume (veh/h)	241	379	0	0	581	100	0	0	0	1623	0	119
Number	5	2	12	1	6	16				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863				1881	0	1881
Adj Flow Rate, veh/h	284	446	0	0	684	118				1909	0	140
Adj No. of Lanes	1	3	0	0	2	1				2	0	1
Peak Hour Factor	0.85	0.85	0.92	0.92	0.85	0.85				0.85	0.92	0.85
Percent Heavy Veh, %	2	2	0	0	2	2				1	0	1
Cap, veh/h	273	2261	0	0	878	393				1605	0	739
Arrive On Green	0.15	0.44	0.00	0.00	0.25	0.25				0.46	0.00	0.46
Sat Flow, veh/h	1774	5253	0	0	3632	1583				3476	0	1599
Grp Volume(v), veh/h	284	446	0	0	684	118				1909	0	140
Grp Sat Flow(s),veh/h/ln	1774	1695	0	0	1770	1583				1738	0	1599
Q Serve(g_s), s	14.3	5.0	0.0	0.0	16.8	5.6				43.0	0.0	4.8
Cycle Q Clear(g_c), s	14.3	5.0	0.0	0.0	16.8	5.6				43.0	0.0	4.8
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	273	2261	0	0	878	393				1605	0	739
V/C Ratio(X)	1.04	0.20	0.00	0.00	0.78	0.30				1.19	0.00	0.19
Avail Cap(c_a), veh/h	273	3769	0	0	1901	850				1605	0	739
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	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	39.4	15.7	0.0	0.0	32.6	28.4				25.0	0.0	14.8
Incr Delay (d2), s/veh	65.9	0.0	0.0	0.0	0.6	0.2				91.6	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	12.0	2.3	0.0	0.0	8.2	2.5				40.9	0.0	2.1
LnGrp Delay(d),s/veh	105.3	15.8	0.0	0.0	33.2	28.6				116.7	0.0	14.8
LnGrp LOS	F	B			C	C				F		B
Approach Vol, veh/h		730			802						2049	
Approach Delay, s/veh		50.6			32.5						109.7	
Approach LOS		D			C						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		46.1			19.0	27.1		47.0
Change Period (Y+Rc), s		* 6			6.0	5.3		5.3
Max Green Setting (Gmax), s		* 68			13.0	48.7		41.7
Max Q Clear Time (g_c+I1), s		7.0			16.3	18.8		45.0
Green Ext Time (p_c), s		2.8			0.0	3.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	80.4
HCM 2010 LOS	F

Notes

21: Deer Valley Road & Balfour Road

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	26	398	119	100	409	85
Future Volume (veh/h)	26	398	119	100	409	85
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	28	423	127	106	435	90
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	152	567	471	393	483	1540
Arrive On Green	0.08	0.08	0.49	0.49	0.27	0.81
Sat Flow, veh/h	1810	1615	959	800	1810	1900
Grp Volume(v), veh/h	28	423	0	233	435	90
Grp Sat Flow(s),veh/h/ln	1810	1615	0	1759	1810	1900
Q Serve(g_s), s	1.4	8.0	0.0	7.4	22.0	0.9
Cycle Q Clear(g_c), s	1.4	8.0	0.0	7.4	22.0	0.9
Prop In Lane	1.00	1.00		0.45	1.00	
Lane Grp Cap(c), veh/h	152	567	0	863	483	1540
V/C Ratio(X)	0.18	0.75	0.00	0.27	0.90	0.06
Avail Cap(c_a), veh/h	152	567	0	863	838	1540
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	40.5	27.1	0.0	14.2	33.6	1.8
Incr Delay (d2), s/veh	0.6	5.3	0.0	0.8	7.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	10.6	0.0	3.7	12.0	0.5
LnGrp Delay(d),s/veh	41.0	32.4	0.0	15.0	40.7	1.9
LnGrp LOS	D	C		B	D	A
Approach Vol, veh/h	451		233			525
Approach Delay, s/veh	33.0		15.0			34.1
Approach LOS	C		B			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	30.4	51.6				82.0		13.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	44.0	28.0				77.0		8.0
Max Q Clear Time (g_c+I1), s	24.0	9.4				2.9		10.0
Green Ext Time (p_c), s	1.3	1.8				2.2		0.0

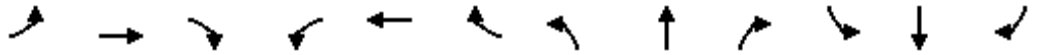
Intersection Summary	
HCM 2010 Ctrl Delay	30.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	379	241	0	581	100	0	0	0	1623	0	119
Future Volume (veh/h)	0	379	241	0	581	100	0	0	0	1623	0	119
Number	5	2	12	1	6	16				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1881	0	1881
Adj Flow Rate, veh/h	0	446	262	0	684	118				1909	0	140
Adj No. of Lanes	0	3	1	0	2	1				2	0	1
Peak Hour Factor	0.85	0.85	0.92	0.92	0.85	0.85				0.85	0.92	0.85
Percent Heavy Veh, %	0	2	2	0	2	2				1	0	1
Cap, veh/h	0	1486	435	0	1034	463				2089	0	961
Arrive On Green	0.00	0.29	0.27	0.00	0.29	0.29				0.60	0.00	0.60
Sat Flow, veh/h	0	5253	1583	0	3632	1583				3476	0	1599
Grp Volume(v), veh/h	0	446	262	0	684	118				1909	0	140
Grp Sat Flow(s),veh/h/ln	0	1695	1583	0	1770	1583				1738	0	1599
Q Serve(g_s), s	0.0	5.1	10.8	0.0	12.7	4.3				36.5	0.0	2.9
Cycle Q Clear(g_c), s	0.0	5.1	10.8	0.0	12.7	4.3				36.5	0.0	2.9
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1486	435	0	1034	463				2089	0	961
V/C Ratio(X)	0.00	0.30	0.60	0.00	0.66	0.25				0.91	0.00	0.15
Avail Cap(c_a), veh/h	0	3390	1028	0	2359	1056				2873	0	1322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	20.6	23.6	0.0	23.3	20.3				13.2	0.0	6.5
Incr Delay (d2), s/veh	0.0	0.0	0.5	0.0	0.3	0.1				3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	4.7	0.0	6.2	1.9				18.2	0.0	1.3
LnGrp Delay(d),s/veh	0.0	20.6	24.1	0.0	23.6	20.4				16.5	0.0	6.6
LnGrp LOS		C	C		C	C				B		A
Approach Vol, veh/h		708			802						2049	
Approach Delay, s/veh		21.9			23.1						15.8	
Approach LOS		C			C						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		25.9				25.9		49.1
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		48.7				48.7		60.7
Max Q Clear Time (g_c+I1), s		12.8				14.7		38.5
Green Ext Time (p_c), s		5.9				5.9		5.3

Intersection Summary	
HCM 2010 Ctrl Delay	18.7
HCM 2010 LOS	B

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	370	0	450	1020	870	0	0	810	540
Future Volume (veh/h)	0	0	0	370	0	450	1020	870	0	0	810	540
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		0.99
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				1881	0	1881	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				402	0	329	1109	946	0	0	880	265
Adj No. of Lanes				2	0	1	2	2	0	0	4	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				1	0	1	2	2	0	0	2	2
Cap, veh/h				847	0	390	1209	2380	0	0	1790	439
Arrive On Green				0.24	0.00	0.24	0.35	0.67	0.00	0.00	0.28	0.28
Sat Flow, veh/h				3476	0	1599	3442	3632	0	0	6669	1572
Grp Volume(v), veh/h				402	0	329	1109	946	0	0	880	265
Grp Sat Flow(s),veh/h/ln				1738	0	1599	1721	1770	0	0	1602	1572
Q Serve(g_s), s				9.4	0.0	18.7	29.4	11.4	0.0	0.0	11.0	13.9
Cycle Q Clear(g_c), s				9.4	0.0	18.7	29.4	11.4	0.0	0.0	11.0	13.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				847	0	390	1209	2380	0	0	1790	439
V/C Ratio(X)				0.47	0.00	0.84	0.92	0.40	0.00	0.00	0.49	0.60
Avail Cap(c_a), veh/h				1566	0	720	1622	3300	0	0	2685	659
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				30.9	0.0	34.4	29.6	7.0	0.0	0.0	28.7	29.8
Incr Delay (d2), s/veh				0.2	0.0	2.0	5.9	0.0	0.0	0.0	0.1	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.5	0.0	8.4	15.0	5.5	0.0	0.0	4.8	6.1
LnGrp Delay(d),s/veh				31.0	0.0	36.3	35.6	7.0	0.0	0.0	28.8	30.3
LnGrp LOS				C		D	D	A			C	C
Approach Vol, veh/h					731			2055			1145	
Approach Delay, s/veh					33.4			22.4			29.2	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		68.2			37.5	30.7		27.3
Change Period (Y+Rc), s		5.3			4.0	5.3		5.3
Max Green Setting (Gmax), s		87.7			45.0	38.7		41.7
Max Q Clear Time (g_c+I1), s		13.4			31.4	15.9		20.7
Green Ext Time (p_c), s		11.7			2.1	9.4		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	26.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	440	10	600	0	0	0	0	1480	210	290	890	0
Future Volume (veh/h)	440	10	600	0	0	0	0	1480	210	290	890	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845				0	1881	1900	1863	1863	0
Adj Flow Rate, veh/h	478	0	659				0	1609	213	315	967	0
Adj No. of Lanes	2	0	2				0	4	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3				0	1	1	2	2	0
Cap, veh/h	999	0	892				0	2605	345	403	2117	0
Arrive On Green	0.28	0.00	0.28				0.00	0.45	0.43	0.12	0.60	0.00
Sat Flow, veh/h	3514	0	3136				0	6090	771	3442	3632	0
Grp Volume(v), veh/h	478	0	659				0	1340	482	315	967	0
Grp Sat Flow(s),veh/h/ln	1757	0	1568				0	1618	1744	1721	1770	0
Q Serve(g_s), s	8.9	0.0	15.1				0.0	16.7	16.8	7.1	12.0	0.0
Cycle Q Clear(g_c), s	8.9	0.0	15.1				0.0	16.7	16.8	7.1	12.0	0.0
Prop In Lane	1.00		1.00				0.00		0.44	1.00		0.00
Lane Grp Cap(c), veh/h	999	0	892				0	2170	780	403	2117	0
V/C Ratio(X)	0.48	0.00	0.74				0.00	0.62	0.62	0.78	0.46	0.00
Avail Cap(c_a), veh/h	3058	0	2729				0	2816	1012	564	2812	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	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.5	0.0	25.7				0.0	16.7	17.0	34.0	8.8	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.2				0.0	0.1	0.3	2.9	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
%ile BackOfQ(50%),veh/ln	4.4	0.0	6.6				0.0	7.5	8.1	3.5	5.8	0.0
LnGrp Delay(d),s/veh	23.9	0.0	26.9				0.0	16.8	17.3	36.9	8.9	0.0
LnGrp LOS	C		C					B	B	D	A	
Approach Vol, veh/h		1137						1822			1282	
Approach Delay, s/veh		25.6						17.0			15.8	
Approach LOS		C						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	13.3	39.5		26.6		52.7		
Change Period (Y+Rc), s	4.0	5.3		4.5		* 5.3		
Max Green Setting (Gmax), s	13.0	44.7		68.5		* 63		
Max Q Clear Time (g_c+I1), s	10.1	18.8		17.1		14.0		
Green Ext Time (p_c), s	0.2	15.3		5.0		20.7		

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	10	110	450	60	130	190	590	1370	120	720	100
Future Volume (veh/h)	30	10	110	450	60	130	190	590	1370	120	720	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		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1827	1827	1900	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	33	11	33	489	65	99	207	641	800	130	783	106
Adj No. of Lanes	1	1	0	3	1	0	1	2	2	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, %	8	8	8	4	4	4	2	2	2	5	5	5
Cap, veh/h	46	36	109	657	132	200	252	1477	1144	180	1156	156
Arrive On Green	0.03	0.09	0.09	0.13	0.20	0.19	0.14	0.42	0.42	0.10	0.38	0.37
Sat Flow, veh/h	1675	383	1149	4907	654	997	1774	3539	2742	1723	3043	412
Grp Volume(v), veh/h	33	0	44	489	0	164	207	641	800	130	442	447
Grp Sat Flow(s),veh/h/ln	1675	0	1532	1636	0	1651	1774	1770	1371	1723	1719	1736
Q Serve(g_s), s	1.3	0.0	1.7	6.2	0.0	5.7	7.3	8.3	15.4	4.7	13.8	13.8
Cycle Q Clear(g_c), s	1.3	0.0	1.7	6.2	0.0	5.7	7.3	8.3	15.4	4.7	13.8	13.8
Prop In Lane	1.00		0.75	1.00		0.60	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	46	0	145	657	0	332	252	1477	1144	180	653	659
V/C Ratio(X)	0.71	0.00	0.30	0.74	0.00	0.49	0.82	0.43	0.70	0.72	0.68	0.68
Avail Cap(c_a), veh/h	104	0	908	918	0	1184	332	1986	1539	215	857	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	0.0	27.3	26.7	0.0	22.9	26.7	13.3	15.4	27.8	16.6	16.7
Incr Delay (d2), s/veh	7.2	0.0	0.4	1.1	0.0	0.4	9.1	0.1	0.4	6.7	0.6	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	0.7	0.0	0.7	2.8	0.0	2.6	4.2	4.0	5.8	2.6	6.6	6.7
LnGrp Delay(d),s/veh	38.2	0.0	27.7	27.8	0.0	23.3	35.8	13.4	15.8	34.5	17.2	17.3
LnGrp LOS	D		C	C		C	D	B	B	C	B	B
Approach Vol, veh/h		77			653			1648			1019	
Approach Delay, s/veh		32.2			26.7			17.4			19.5	
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	10.7	30.8	12.6	10.1	13.1	28.4	5.8	16.9
Change Period (Y+Rc), s	4.0	4.9	4.0	4.6	4.0	4.9	4.0	4.6
Max Green Setting (Gmax), s	8.6	35.1	12.0	37.4	12.0	31.1	4.0	45.4
Max Q Clear Time (g_c+I1), s	10.7	17.4	8.2	3.7	9.3	15.8	3.3	7.7
Green Ext Time (p_c), s	0.0	8.2	0.4	0.7	0.1	7.6	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	20.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	0	1110	0	0	0	0	1830	410	210	970	0
Future Volume (veh/h)	230	0	1110	0	0	0	0	1830	410	210	970	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	60				0	60	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	250	0	935				0	1989	446	228	1054	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	798	0	805				0	2590	406	296	3429	0
Arrive On Green	0.08	0.00	0.07				0.00	0.18	0.18	0.03	0.23	0.00
Sat Flow, veh/h	3442	0	3610				0	4851	916	3343	5103	0
Grp Volume(v), veh/h	250	0	935				0	1622	813	228	1054	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1669	1672	1647	0
Q Serve(g_s), s	7.3	0.0	24.2				0.0	50.1	50.5	7.2	18.9	0.0
Cycle Q Clear(g_c), s	7.3	0.0	24.2				0.0	50.1	50.5	7.2	18.9	0.0
Prop In Lane	1.00		1.00				0.00		0.55	1.00		0.00
Lane Grp Cap(c), veh/h	798	0	805				0	1878	953	296	3429	0
V/C Ratio(X)	0.31	0.00	1.16				0.00	0.86	0.85	0.77	0.31	0.00
Avail Cap(c_a), veh/h	807	0	819				0	1918	955	376	3411	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.7	0.0	50.3				0.0	42.8	41.3	51.3	20.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	86.1				0.0	4.1	7.2	5.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	196.6				0.0	30.3	12.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	34.5				0.0	23.8	30.6	3.6	8.7	0.0
LnGrp Delay(d),s/veh	41.8	0.0	332.9				0.0	77.1	60.6	56.6	20.1	0.0
LnGrp LOS	D		F					E	E	E	C	
Approach Vol, veh/h		1185						2435			1282	
Approach Delay, s/veh		271.5						71.6			26.6	
Approach LOS		F						E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.4	63.3		29.0		77.6		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	12.6	* 60		23.7		50.1		
Max Q Clear Time (g_c+I1), s	9.2	52.5		26.2		20.9		
Green Ext Time (p_c), s	0.3	5.8		0.0		5.4		

Intersection Summary	
HCM 2010 Ctrl Delay	108.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	30	30	200	40	250	40	1830	200	190	870	30
Future Volume (veh/h)	40	30	30	200	40	250	40	1830	200	190	870	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		0.98	1.00		1.00	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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	33	13	217	43	45	43	1989	213	207	946	32
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	75	57	113	255	268	227	55	1972	207	199	2223	75
Arrive On Green	0.07	0.07	0.07	0.14	0.14	0.14	0.03	0.61	0.61	0.06	0.64	0.63
Sat Flow, veh/h	1015	779	1536	1792	1881	1596	1774	3232	340	3442	3491	118
Grp Volume(v), veh/h	76	0	13	217	43	45	43	1073	1129	207	480	498
Grp Sat Flow(s),veh/h/ln	1794	0	1536	1792	1881	1596	1774	1770	1802	1721	1770	1839
Q Serve(g_s), s	5.7	0.0	1.1	16.3	2.8	3.4	3.3	83.0	84.4	8.0	18.7	18.7
Cycle Q Clear(g_c), s	5.7	0.0	1.1	16.3	2.8	3.4	3.3	83.0	84.4	8.0	18.7	18.7
Prop In Lane	0.57		1.00	1.00		1.00	1.00		0.19	1.00		0.06
Lane Grp Cap(c), veh/h	132	0	113	255	268	227	55	1080	1100	199	1127	1171
V/C Ratio(X)	0.58	0.00	0.11	0.85	0.16	0.20	0.78	0.99	1.03	1.04	0.43	0.43
Avail Cap(c_a), veh/h	454	0	389	474	498	422	115	1080	1100	199	1127	1171
HCM Platoon Ratio	1.00	1.00	1.00	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	62.0	0.0	59.8	57.8	52.0	52.3	66.5	26.7	27.0	65.1	12.5	12.5
Incr Delay (d2), s/veh	1.5	0.0	0.2	3.1	0.1	0.2	8.4	25.6	34.2	74.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.5	8.3	1.5	1.5	1.8	47.9	52.0	5.9	9.1	9.4
LnGrp Delay(d),s/veh	63.4	0.0	60.0	60.9	52.1	52.5	74.9	52.3	61.2	139.8	12.6	12.6
LnGrp LOS	E		E	E	D	D	E	D	F	F	B	B
Approach Vol, veh/h		89			305			2245			1185	
Approach Delay, s/veh		62.9			58.4			57.2			34.8	
Approach LOS		E			E			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	88.4		14.2	8.3	92.1		23.7
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	8.0	83.8		35.0	9.0	82.8		36.0
Max Q Clear Time (g_c+I1), s	10.0	86.4		7.7	5.3	20.7		18.3
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	32.9		0.4

Intersection Summary		
HCM 2010 Ctrl Delay	50.5	
HCM 2010 LOS	D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	170	100	70	220	910	70	890	30	510	920	140
Future Volume (veh/h)	140	170	100	70	220	910	70	890	30	510	920	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1881	1881	1881	1881	1881	1900	1863	1863	1863
Adj Flow Rate, veh/h	152	185	38	76	239	989	76	967	32	554	1000	79
Adj No. of Lanes	1	2	0	1	1	2	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	177	980	197	96	543	1483	267	1098	36	619	1175	667
Arrive On Green	0.10	0.33	0.33	0.05	0.29	0.28	0.15	0.31	0.30	0.18	0.33	0.32
Sat Flow, veh/h	1774	2929	588	1792	1881	3198	1792	3529	117	3442	3539	1580
Grp Volume(v), veh/h	152	110	113	76	239	989	76	490	509	554	1000	79
Grp Sat Flow(s),veh/h/ln	1774	1770	1747	1792	1881	1599	1792	1787	1859	1721	1770	1580
Q Serve(g_s), s	11.2	5.9	6.1	5.6	13.7	31.8	5.0	34.5	34.5	20.9	34.9	2.2
Cycle Q Clear(g_c), s	11.2	5.9	6.1	5.6	13.7	31.8	5.0	34.5	34.5	20.9	34.9	2.2
Prop In Lane	1.00		0.34	1.00		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	177	592	585	96	543	1483	267	556	578	619	1175	667
V/C Ratio(X)	0.86	0.19	0.19	0.79	0.44	0.67	0.28	0.88	0.88	0.90	0.85	0.12
Avail Cap(c_a), veh/h	254	747	738	189	724	1791	267	795	827	909	2136	1096
HCM Platoon Ratio	1.00	1.00	1.00	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	58.8	31.3	31.4	62.0	38.4	27.6	50.1	43.3	43.4	53.2	41.2	9.6
Incr Delay (d2), s/veh	13.3	0.1	0.1	5.3	0.2	0.4	0.2	6.3	6.0	6.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	2.9	3.0	2.9	7.1	14.1	2.5	18.0	18.7	10.5	17.2	1.1
LnGrp Delay(d),s/veh	72.1	31.3	31.5	67.3	38.6	28.0	50.3	49.6	49.4	59.4	41.9	9.6
LnGrp LOS	E	C	C	E	D	C	D	D	D	E	D	A
Approach Vol, veh/h		375			1304			1075			1633	
Approach Delay, s/veh		47.9			32.2			49.6			46.3	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	45.2	11.1	48.4	25.1	48.0	17.2	42.3
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	5.3	* 5.3	4.0	4.6
Max Green Setting (Gmax), s	35.6	57.7	14.0	55.4	14.0	* 79	19.0	50.4
Max Q Clear Time (g_c+I2), s	22.9	36.5	7.6	8.1	7.0	36.9	13.2	33.8
Green Ext Time (p_c), s	1.0	3.5	0.0	4.3	2.4	5.8	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	43.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	60	660	10	100	60	880	1300	20	70	810	160
Future Volume (veh/h)	200	60	660	10	100	60	880	1300	20	70	810	160
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1881	1881	1881	1900	1863	1863	1881	1881	1881	1863	1863	1900
Adj Flow Rate, veh/h	217	65	202	11	109	14	957	1413	14	76	880	156
Adj No. of Lanes	1	1	2	0	1	1	2	2	1	1	3	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, %	1	1	1	2	2	2	1	1	1	2	2	2
Cap, veh/h	266	279	418	16	156	144	1038	1953	854	97	1281	226
Arrive On Green	0.15	0.15	0.15	0.09	0.09	0.09	0.30	0.55	0.55	0.05	0.30	0.29
Sat Flow, veh/h	1792	1881	2814	170	1684	1551	3476	3574	1563	1774	4336	764
Grp Volume(v), veh/h	217	65	202	120	0	14	957	1413	14	76	687	349
Grp Sat Flow(s),veh/h/ln	1792	1881	1407	1854	0	1551	1738	1787	1563	1774	1695	1710
Q Serve(g_s), s	11.9	3.1	6.7	6.4	0.0	0.8	27.0	30.1	0.4	4.3	18.1	18.3
Cycle Q Clear(g_c), s	11.9	3.1	6.7	6.4	0.0	0.8	27.0	30.1	0.4	4.3	18.1	18.3
Prop In Lane	1.00		1.00	0.09		1.00	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	266	279	418	172	0	144	1038	1953	854	97	1002	505
V/C Ratio(X)	0.82	0.23	0.48	0.70	0.00	0.10	0.92	0.72	0.02	0.78	0.69	0.69
Avail Cap(c_a), veh/h	297	312	467	714	0	597	1200	2194	959	105	1111	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	41.8	38.1	39.6	44.6	0.0	42.1	34.4	17.2	10.5	47.3	31.5	31.7
Incr Delay (d2), s/veh	13.1	0.2	0.3	1.9	0.0	0.1	10.0	0.8	0.0	25.9	1.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	1.6	2.6	3.4	0.0	0.4	14.3	14.9	0.2	2.8	8.7	9.0
LnGrp Delay(d),s/veh	54.9	38.2	39.9	46.5	0.0	42.2	44.4	18.1	10.5	73.2	32.7	34.1
LnGrp LOS	D	D	D	D		D	D	B	B	E	C	C
Approach Vol, veh/h		484			134			2384			1112	
Approach Delay, s/veh		46.4			46.1			28.6			35.9	
Approach LOS		D			D			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	9.5	59.4		19.0	34.3	34.6		13.4
Change Period (Y+Rc), s	4.0	5.3		4.9	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	6.6	60.9		15.9	35.0	* 33		39.0
Max Q Clear Time (g_c+I1), s	10.3	32.1		13.9	29.0	20.3		8.4
Green Ext Time (p_c), s	0.0	15.1		0.2	1.3	8.7		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	33.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	990	200	200	1330	80	330	150	180	70	180	120
Future Volume (veh/h)	50	990	200	200	1330	80	330	150	180	70	180	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		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	54	1076	133	217	1446	37	359	163	59	76	196	116
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	70	1315	579	244	1662	727	414	589	487	97	272	161
Arrive On Green	0.04	0.37	0.37	0.14	0.47	0.47	0.12	0.31	0.31	0.05	0.25	0.24
Sat Flow, veh/h	1792	3574	1574	1792	3574	1563	3476	1881	1558	1810	1101	652
Grp Volume(v), veh/h	54	1076	133	217	1446	37	359	163	59	76	0	312
Grp Sat Flow(s),veh/h/ln	1792	1787	1574	1792	1787	1563	1738	1881	1558	1810	0	1753
Q Serve(g_s), s	3.7	33.6	7.2	14.7	44.9	1.6	12.5	8.0	3.3	5.1	0.0	20.1
Cycle Q Clear(g_c), s	3.7	33.6	7.2	14.7	44.9	1.6	12.5	8.0	3.3	5.1	0.0	20.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	70	1315	579	244	1662	727	414	589	487	97	0	433
V/C Ratio(X)	0.78	0.82	0.23	0.89	0.87	0.05	0.87	0.28	0.12	0.78	0.00	0.72
Avail Cap(c_a), veh/h	87	1390	612	290	1796	785	479	686	568	161	0	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.8	35.3	26.9	52.4	29.7	18.1	53.4	31.9	30.3	57.7	0.0	42.8
Incr Delay (d2), s/veh	22.1	3.5	0.1	22.2	4.3	0.0	12.6	0.1	0.0	5.1	0.0	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	2.3	17.2	3.2	8.8	23.1	0.7	6.8	4.2	1.4	2.7	0.0	10.0
LnGrp Delay(d),s/veh	80.9	38.7	27.0	74.6	34.0	18.1	65.9	32.0	30.3	62.8	0.0	44.8
LnGrp LOS	F	D	C	E	C	B	E	C	C	E		D
Approach Vol, veh/h		1263			1700			581			388	
Approach Delay, s/veh		39.3			38.8			52.8			48.4	
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	10.6	42.6	20.8	49.4	18.7	34.5	8.8	61.4
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	11.6	43.7	20.0	* 48	17.0	37.7	6.0	* 62
Max Q Clear Time (g_c+I1), s	7.1	10.0	16.7	35.6	14.5	22.1	5.7	46.9
Green Ext Time (p_c), s	0.0	1.7	0.1	8.9	0.2	1.6	0.0	10.3

Intersection Summary	
HCM 2010 Ctrl Delay	42.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	740	300	300	950	300	420	390	120	340	530	20
Future Volume (veh/h)	40	740	300	300	950	300	420	390	120	340	530	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	804	110	326	1033	173	457	424	113	370	576	20
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	55	1529	208	393	1271	213	522	776	205	437	894	31
Arrive On Green	0.03	0.34	0.32	0.11	0.42	0.41	0.15	0.28	0.27	0.13	0.25	0.24
Sat Flow, veh/h	1792	4544	617	3442	3028	506	3476	2783	734	3476	3520	122
Grp Volume(v), veh/h	43	604	310	326	603	603	457	271	266	370	292	304
Grp Sat Flow(s),veh/h/ln	1792	1712	1737	1721	1770	1765	1738	1787	1731	1738	1787	1855
Q Serve(g_s), s	2.6	15.7	15.9	10.2	33.0	33.3	14.2	14.2	14.5	11.5	16.1	16.1
Cycle Q Clear(g_c), s	2.6	15.7	15.9	10.2	33.0	33.3	14.2	14.2	14.5	11.5	16.1	16.1
Prop In Lane	1.00		0.36	1.00		0.29	1.00		0.42	1.00		0.07
Lane Grp Cap(c), veh/h	55	1152	584	393	743	741	522	498	482	437	454	471
V/C Ratio(X)	0.78	0.52	0.53	0.83	0.81	0.81	0.88	0.54	0.55	0.85	0.64	0.64
Avail Cap(c_a), veh/h	65	1404	712	593	966	964	631	661	641	599	645	670
HCM Platoon Ratio	1.00	1.00	1.00	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	53.1	29.5	29.7	47.8	28.1	28.4	45.8	33.8	34.2	47.2	36.7	36.7
Incr Delay (d2), s/veh	33.0	0.1	0.3	3.7	3.1	3.2	10.1	0.3	0.4	6.2	0.6	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	1.8	7.4	7.6	5.0	16.7	16.8	7.5	7.0	7.0	5.9	8.0	8.3
LnGrp Delay(d),s/veh	86.0	29.6	30.0	51.5	31.2	31.5	55.9	34.1	34.5	53.4	37.2	37.3
LnGrp LOS	F	C	C	D	C	C	E	C	C	D	D	D
Approach Vol, veh/h		957			1532			994			966	
Approach Delay, s/veh		32.3			35.7			44.3			43.4	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	34.7	16.6	41.1	20.6	32.0	7.4	50.3
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	13.9	39.5	19.0	43.9	20.0	38.5	4.0	58.9
Max Q Clear Time (g_c+I1), s	12.2	16.5	12.2	17.9	16.2	18.1	4.6	35.3
Green Ext Time (p_c), s	0.4	4.0	0.4	10.1	0.4	3.9	0.0	9.7

Intersection Summary		
HCM 2010 Ctrl Delay		38.5
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	650	60	100	1090	310	290	450	240	360	200	310
Future Volume (veh/h)	300	650	60	100	1090	310	290	450	240	360	200	310
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	326	707	54	109	1185	223	315	489	237	391	217	145
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	350	2087	158	117	1534	475	341	596	287	450	693	304
Arrive On Green	0.20	0.43	0.42	0.07	0.30	0.30	0.19	0.25	0.25	0.13	0.19	0.19
Sat Flow, veh/h	1774	4816	366	1774	5085	1575	1792	2340	1128	3476	3574	1567
Grp Volume(v), veh/h	326	496	265	109	1185	223	315	373	353	391	217	145
Grp Sat Flow(s),veh/h/ln	1774	1695	1792	1774	1695	1575	1792	1787	1681	1738	1787	1567
Q Serve(g_s), s	24.7	13.3	13.5	8.4	29.0	15.8	23.6	26.9	27.2	15.1	7.1	11.2
Cycle Q Clear(g_c), s	24.7	13.3	13.5	8.4	29.0	15.8	23.6	26.9	27.2	15.1	7.1	11.2
Prop In Lane	1.00		0.20	1.00		1.00	1.00		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	350	1469	776	117	1534	475	341	455	428	450	693	304
V/C Ratio(X)	0.93	0.34	0.34	0.93	0.77	0.47	0.93	0.82	0.83	0.87	0.31	0.48
Avail Cap(c_a), veh/h	441	1834	970	117	1822	564	511	653	614	788	1098	481
HCM Platoon Ratio	1.00	1.00	1.00	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	54.0	25.7	25.9	63.6	43.5	38.9	54.4	48.0	48.5	58.4	47.3	49.0
Incr Delay (d2), s/veh	21.3	0.1	0.1	62.0	1.4	0.3	13.7	3.6	4.1	2.1	0.1	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	14.2	6.2	6.7	6.1	13.8	6.9	13.0	13.7	13.1	7.4	3.5	4.9
LnGrp Delay(d),s/veh	75.3	25.8	26.0	125.5	44.9	39.1	68.1	51.6	52.7	60.5	47.4	49.4
LnGrp LOS	E	C	C	F	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1087			1517			1041			753	
Approach Delay, s/veh		40.7			49.8			57.0			54.6	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.7	38.8	13.0	63.2	30.0	30.5	31.0	45.2
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	21.6	48.7	9.0	72.7	39.0	40.7	34.0	47.7
Max Q Clear Time (g_c+I1), s	17.1	29.2	10.4	15.5	25.6	13.2	26.7	31.0
Green Ext Time (p_c), s	0.6	3.7	0.0	12.1	0.4	3.9	0.3	8.4

Intersection Summary		
HCM 2010 Ctrl Delay		50.1
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1200	550	90	1480	0	0	0	0	460	10	770
Future Volume (veh/h)	0	1200	550	90	1480	0	0	0	0	460	10	770
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1304	263	98	1609	0				508	0	808
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1646	512	107	2085	0				1887	0	842
Arrive On Green	0.00	0.32	0.32	0.05	0.41	0.00				0.53	0.00	0.53
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1304	263	98	1609	0				508	0	808
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	29.8	17.2	6.4	34.9	0.0				10.1	0.0	62.8
Cycle Q Clear(g_c), s	0.0	29.8	17.2	6.4	34.9	0.0				10.1	0.0	62.8
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1646	512	107	2085	0				1887	0	842
V/C Ratio(X)	0.00	0.79	0.51	0.92	0.77	0.00				0.27	0.00	0.96
Avail Cap(c_a), veh/h	0	1714	533	107	2153	0				2149	0	959
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	39.8	35.6	60.6	33.1	0.0				16.5	0.0	28.8
Incr Delay (d2), s/veh	0.0	2.3	0.3	59.6	1.5	0.0				0.0	0.0	18.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.5	7.6	2.6	16.8	0.0				4.9	0.0	31.6
LnGrp Delay(d),s/veh	0.0	42.1	35.9	120.3	34.6	0.0				16.5	0.0	46.9
LnGrp LOS		D	D	F	C					B		D
Approach Vol, veh/h		1567			1707						1316	
Approach Delay, s/veh		41.1			39.5						35.1	
Approach LOS		D			D						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	11.0	45.3		72.5		56.3		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	7.0	41.7		76.7		52.7		
Max Q Clear Time (g_c+I1), s	19.4	31.8		64.8		36.9		
Green Ext Time (p_c), s	0.0	8.2		2.4		12.1		

Intersection Summary	
HCM 2010 Ctrl Delay	38.8
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1080	580	140	900	720	670	20	750	0	0	0
Future Volume (veh/h)	0	1080	580	140	900	720	670	20	750	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	0	1174	395	152	978	469	744	0	665			
Adj No. of Lanes	0	3	1	1	3	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	1838	571	79	2292	693	1633	0	728			
Arrive On Green	0.00	0.36	0.36	0.04	0.45	0.45	0.46	0.00	0.46			
Sat Flow, veh/h	0	5253	1581	1774	5085	1537	3548	0	1582			
Grp Volume(v), veh/h	0	1174	395	152	978	469	744	0	665			
Grp Sat Flow(s),veh/h/ln	0	1695	1581	1774	1695	1537	1774	0	1582			
Q Serve(g_s), s	0.0	17.2	19.1	4.0	11.7	21.7	12.9	0.0	35.1			
Cycle Q Clear(g_c), s	0.0	17.2	19.1	4.0	11.7	21.7	12.9	0.0	35.1			
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	1838	571	79	2292	693	1633	0	728			
V/C Ratio(X)	0.00	0.64	0.69	1.92	0.43	0.68	0.46	0.00	0.91			
Avail Cap(c_a), veh/h	0	2097	652	79	2550	771	2649	0	1181			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	23.8	24.4	42.9	16.8	19.5	16.5	0.0	22.6			
Incr Delay (d2), s/veh	0.0	0.3	1.9	458.0	0.0	1.5	0.1	0.0	4.6			
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	0.0	8.1	8.6	12.0	5.4	9.4	6.3	0.0	16.1			
LnGrp Delay(d),s/veh	0.0	24.1	26.3	500.9	16.8	21.0	16.6	0.0	27.1			
LnGrp LOS		C	C	F	B	C	B		C			
Approach Vol, veh/h		1569			1599			1409				
Approach Delay, s/veh		24.7			64.1			21.6				
Approach LOS		C			E			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	8.0	36.4		45.3		44.4		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	4.0	35.7		65.7		43.7		
Max Q Clear Time (g_c+I1), s	6.0	21.1		37.1		23.7		
Green Ext Time (p_c), s	0.0	9.9		2.8		12.3		

Intersection Summary	
HCM 2010 Ctrl Delay	37.5
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	90	10	10	60	340	10	140	20	250	100	30
Future Volume (veh/h)	40	90	10	10	60	340	10	140	20	250	100	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		0.98	1.00		0.97	1.00		0.95	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	1900	1845	1845	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	98	9	11	65	208	11	152	15	272	109	18
Adj No. of Lanes	1	1	0	1	1	0	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, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	138	426	39	136	96	307	139	549	53	341	862	139
Arrive On Green	0.08	0.25	0.25	0.08	0.25	0.25	0.08	0.17	0.14	0.19	0.28	0.26
Sat Flow, veh/h	1774	1678	154	1757	378	1210	1792	3275	318	1792	3074	496
Grp Volume(v), veh/h	43	0	107	11	0	273	11	82	85	272	62	65
Grp Sat Flow(s),veh/h/ln	1774	0	1833	1757	0	1588	1792	1787	1807	1792	1787	1783
Q Serve(g_s), s	1.2	0.0	2.4	0.3	0.0	8.0	0.3	2.1	2.1	7.5	1.3	1.4
Cycle Q Clear(g_c), s	1.2	0.0	2.4	0.3	0.0	8.0	0.3	2.1	2.1	7.5	1.3	1.4
Prop In Lane	1.00		0.08	1.00		0.76	1.00		0.18	1.00		0.28
Lane Grp Cap(c), veh/h	138	0	465	136	0	403	139	300	303	341	501	500
V/C Ratio(X)	0.31	0.00	0.23	0.08	0.00	0.68	0.08	0.27	0.28	0.80	0.12	0.13
Avail Cap(c_a), veh/h	276	0	1743	136	0	1387	139	1110	1122	1183	2151	2146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.5	0.0	15.2	22.0	0.0	17.3	22.0	18.7	18.8	19.9	13.8	14.0
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.1	0.0	0.7	0.1	0.2	0.2	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	1.2	0.1	0.0	3.6	0.1	1.0	1.1	3.9	0.7	0.7
LnGrp Delay(d),s/veh	22.9	0.0	15.3	22.1	0.0	18.1	22.1	18.9	19.0	21.5	13.9	14.0
LnGrp LOS	C		B	C		B	C	B	B	C	B	B
Approach Vol, veh/h		150			284			178			399	
Approach Delay, s/veh		17.5			18.2			19.1			19.1	
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	13.8	12.6	8.0	17.1	8.0	18.4	8.0	17.1
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	9.8	30.7	4.0	49.0	4.0	60.7	8.0	45.0
Max Q Clear Time (g_c+I1), s	10.5	4.1	2.3	4.4	2.3	3.4	3.2	10.0
Green Ext Time (p_c), s	0.3	0.9	0.0	1.4	0.0	0.9	0.0	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	200	200	260	190	150	160	770	200	110	1060	80
Future Volume (veh/h)	140	200	200	260	190	150	160	770	200	110	1060	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		0.99	1.00		0.98	1.00		1.00	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	152	217	195	283	207	146	174	837	204	120	1152	84
Adj No. of Lanes	1	1	0	1	1	0	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	179	238	214	276	321	226	124	1067	260	124	1263	92
Arrive On Green	0.10	0.26	0.26	0.16	0.32	0.32	0.07	0.37	0.36	0.07	0.37	0.36
Sat Flow, veh/h	1792	907	815	1774	1009	711	1792	2848	694	1792	3372	246
Grp Volume(v), veh/h	152	0	412	283	0	353	174	525	516	120	610	626
Grp Sat Flow(s),veh/h/ln	1792	0	1723	1774	0	1720	1792	1787	1755	1792	1787	1830
Q Serve(g_s), s	9.6	0.0	26.8	18.0	0.0	20.4	8.0	30.1	30.2	7.7	37.5	37.6
Cycle Q Clear(g_c), s	9.6	0.0	26.8	18.0	0.0	20.4	8.0	30.1	30.2	7.7	37.5	37.6
Prop In Lane	1.00		0.47	1.00		0.41	1.00		0.40	1.00		0.13
Lane Grp Cap(c), veh/h	179	0	452	276	0	547	124	669	657	124	669	686
V/C Ratio(X)	0.85	0.00	0.91	1.02	0.00	0.65	1.40	0.78	0.78	0.97	0.91	0.91
Avail Cap(c_a), veh/h	201	0	507	276	0	580	124	680	668	124	680	697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	0.0	41.4	48.8	0.0	33.9	53.8	32.0	32.3	53.7	34.3	34.5
Incr Delay (d2), s/veh	22.9	0.0	18.5	60.7	0.0	1.7	222.9	5.4	5.5	70.3	16.0	16.0
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	5.9	0.0	15.0	13.4	0.0	10.0	11.6	15.9	15.6	6.2	21.4	22.0
LnGrp Delay(d),s/veh	74.0	0.0	59.8	109.6	0.0	35.5	276.7	37.4	37.8	124.0	50.3	50.4
LnGrp LOS	E		E	F		D	F	D	D	F	D	D
Approach Vol, veh/h		564			636			1215			1356	
Approach Delay, s/veh		63.7			68.5			71.8			56.9	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	47.3	22.0	34.3	12.0	47.3	15.6	40.7
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	8.0	42.7	18.0	34.0	8.0	42.7	13.0	39.0
Max Q Clear Time (g_c+I1), s	10.7	32.2	20.0	28.8	10.0	39.6	11.6	22.4
Green Ext Time (p_c), s	0.0	6.5	0.0	1.5	0.0	2.4	0.0	2.7

Intersection Summary	
HCM 2010 Ctrl Delay	64.7
HCM 2010 LOS	E

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	160	900	70	380	1180
Future Volume (veh/h)	20	160	900	70	380	1180
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		0.97	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1881	1881	1881	1881
Adj Flow Rate, veh/h	22	117	978	49	413	1283
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	176	157	1559	680	450	2714
Arrive On Green	0.10	0.10	0.44	0.44	0.25	0.76
Sat Flow, veh/h	1810	1615	3668	1558	1792	3668
Grp Volume(v), veh/h	22	117	978	49	413	1283
Grp Sat Flow(s),veh/h/ln	1810	1615	1787	1558	1792	1787
Q Serve(g_s), s	0.6	3.9	11.8	1.0	12.5	7.5
Cycle Q Clear(g_c), s	0.6	3.9	11.8	1.0	12.5	7.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	176	157	1559	680	450	2714
V/C Ratio(X)	0.13	0.75	0.63	0.07	0.92	0.47
Avail Cap(c_a), veh/h	1105	986	1925	839	450	3080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	24.5	12.2	9.1	20.3	2.5
Incr Delay (d2), s/veh	0.1	2.6	0.2	0.0	23.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	5.7	0.4	9.0	3.6
LnGrp Delay(d),s/veh	23.1	27.1	12.4	9.2	43.4	2.6
LnGrp LOS	C	C	B	A	D	A
Approach Vol, veh/h	139		1027			1696
Approach Delay, s/veh	26.5		12.2			12.5
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	18.0	28.3				46.3		9.4
Change Period (Y+Rc), s	4.0	5.3				5.3		4.0
Max Green Setting (Gmax), s	14.0	28.7				46.7		34.0
Max Q Clear Time (g_c+I1), s	14.5	13.8				9.5		5.9
Green Ext Time (p_c), s	0.0	9.1				14.4		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	80	10	450	0	440	50	540	690	10
Future Volume (veh/h)	0	0	0	80	10	450	0	440	50	540	690	10
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		0.98	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h				87	11	194	0	478	54	587	750	11
Adj No. of Lanes				1	2	0	1	1	0	2	1	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				1	1	1	0	0	0	1	1	1
Cap, veh/h				357	299	267	3	667	75	731	1245	18
Arrive On Green				0.20	0.17	0.17	0.00	0.40	0.38	0.21	0.67	0.65
Sat Flow, veh/h				1792	1787	1596	1810	1673	189	3476	1849	27
Grp Volume(v), veh/h				87	11	194	0	0	532	587	0	761
Grp Sat Flow(s),veh/h/ln				1792	1787	1596	1810	0	1862	1738	0	1876
Q Serve(g_s), s				2.6	0.3	7.2	0.0	0.0	15.1	10.1	0.0	14.0
Cycle Q Clear(g_c), s				2.6	0.3	7.2	0.0	0.0	15.1	10.1	0.0	14.0
Prop In Lane				1.00		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h				357	299	267	3	0	743	731	0	1263
V/C Ratio(X)				0.24	0.04	0.73	0.00	0.00	0.72	0.80	0.00	0.60
Avail Cap(c_a), veh/h				999	940	840	115	0	1781	1828	0	2662
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh				21.1	21.9	24.7	0.0	0.0	15.9	23.5	0.0	5.6
Incr Delay (d2), s/veh				0.3	0.0	3.7	0.0	0.0	0.5	0.8	0.0	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.3	0.2	3.5	0.0	0.0	7.8	4.9	0.0	7.0
LnGrp Delay(d),s/veh				21.5	21.9	28.5	0.0	0.0	16.4	24.3	0.0	5.8
LnGrp LOS				C	C	C			B	C		A
Approach Vol, veh/h					292			532			1348	
Approach Delay, s/veh					26.1			16.4			13.9	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	17.2	29.0			0.0	46.2		16.5
Change Period (Y+Rc), s	4.0	5.3			4.0	5.3		6.0
Max Green Setting (Gmax), s	33.0	58.7			4.0	87.7		33.0
Max Q Clear Time (g_c+I1), s	11.2	17.1			0.0	16.0		9.2
Green Ext Time (p_c), s	1.1	6.6			0.0	6.7		1.4

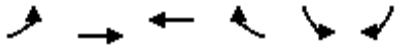
Intersection Summary	
HCM 2010 Ctrl Delay	16.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	390	20	40	510	130	150	120	70	120	30	140
Future Volume (veh/h)	100	390	20	40	510	130	150	120	70	120	30	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	109	424	22	43	554	141	163	130	76	130	33	152
Adj No. of Lanes	1	2	0	1	2	0	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	1267	66	55	911	231	190	684	377	157	516	462
Arrive On Green	0.08	0.37	0.37	0.03	0.33	0.33	0.11	0.31	0.31	0.09	0.29	0.29
Sat Flow, veh/h	1774	3424	177	1774	2798	710	1774	2204	1214	1774	1770	1583
Grp Volume(v), veh/h	109	219	227	43	350	345	163	103	103	130	33	152
Grp Sat Flow(s),veh/h/ln	1774	1770	1831	1774	1770	1738	1774	1770	1648	1774	1770	1583
Q Serve(g_s), s	7.3	10.7	10.7	2.9	19.9	20.1	10.8	5.1	5.5	8.6	1.6	9.0
Cycle Q Clear(g_c), s	7.3	10.7	10.7	2.9	19.9	20.1	10.8	5.1	5.5	8.6	1.6	9.0
Prop In Lane	1.00		0.10	1.00		0.41	1.00		0.74	1.00		1.00
Lane Grp Cap(c), veh/h	134	655	678	55	577	566	190	549	512	157	516	462
V/C Ratio(X)	0.82	0.33	0.34	0.78	0.61	0.61	0.86	0.19	0.20	0.83	0.06	0.33
Avail Cap(c_a), veh/h	148	655	678	103	577	566	222	549	512	222	516	462
HCM Platoon Ratio	1.00	1.00	1.00	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	54.7	27.2	27.2	57.7	34.0	34.0	52.7	30.3	30.4	53.8	30.7	33.3
Incr Delay (d2), s/veh	26.6	1.4	1.3	20.7	4.7	4.8	24.1	0.2	0.2	16.1	0.2	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	5.5	5.7	1.7	10.5	10.4	6.6	2.5	2.5	4.9	0.8	4.2
LnGrp Delay(d),s/veh	81.3	28.5	28.5	78.4	38.7	38.9	76.7	30.5	30.6	69.8	30.9	35.2
LnGrp LOS	F	C	C	E	D	D	E	C	C	E	C	D
Approach Vol, veh/h		555			738			369			315	
Approach Delay, s/veh		38.9			41.1			51.0			49.1	
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	16.6	43.2	9.7	50.4	18.9	41.0	15.0	45.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	15.0	35.0	7.0	39.0	15.0	35.0	10.0	36.0
Max Q Clear Time (g_c+I1), s	10.6	7.5	4.9	12.7	12.8	11.0	9.3	22.1
Green Ext Time (p_c), s	0.1	2.5	0.0	8.0	0.1	2.4	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	43.6
HCM 2010 LOS	D

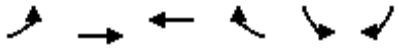
Notes



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	520	540	240	200	40
Future Volume (veh/h)	50	520	540	240	200	40
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	54	565	587	261	217	43
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	70	1883	1044	464	635	567
Arrive On Green	0.04	0.53	0.44	0.44	0.36	0.36
Sat Flow, veh/h	1774	3632	2479	1060	1774	1583
Grp Volume(v), veh/h	54	565	435	413	217	43
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1676	1774	1583
Q Serve(g_s), s	3.3	9.7	20.0	20.0	9.8	2.0
Cycle Q Clear(g_c), s	3.3	9.7	20.0	20.0	9.8	2.0
Prop In Lane	1.00			0.63	1.00	1.00
Lane Grp Cap(c), veh/h	70	1883	775	734	635	567
V/C Ratio(X)	0.77	0.30	0.56	0.56	0.34	0.08
Avail Cap(c_a), veh/h	179	1883	775	734	635	567
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	51.9	14.2	22.8	22.9	25.6	23.1
Incr Delay (d2), s/veh	16.5	0.4	2.9	3.1	1.5	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	4.8	10.3	9.9	5.0	2.2
LnGrp Delay(d),s/veh	68.3	14.6	25.8	26.0	27.1	23.4
LnGrp LOS	E	B	C	C	C	C
Approach Vol, veh/h		619	848		260	
Approach Delay, s/veh		19.3	25.9		26.5	
Approach LOS		B	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				64.0		45.0	10.3	53.7
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				58.0		39.0	11.0	41.0
Max Q Clear Time (g_c+I1), s				11.7		11.8	5.3	22.0
Green Ext Time (p_c), s				12.1		0.8	0.0	8.8

Intersection Summary	
HCM 2010 Ctrl Delay	23.6
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	300	530	840	570	960	90
Future Volume (veh/h)	300	530	840	570	960	90
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	326	576	913	620	1043	98
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	326	3215	1468	657	1046	481
Arrive On Green	0.18	0.63	0.41	0.41	0.30	0.30
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	326	576	913	620	1043	98
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	22.0	5.6	24.3	45.1	35.8	5.5
Cycle Q Clear(g_c), s	22.0	5.6	24.3	45.1	35.8	5.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	326	3215	1468	657	1046	481
V/C Ratio(X)	1.00	0.18	0.62	0.94	1.00	0.20
Avail Cap(c_a), veh/h	326	3231	1480	662	1046	481
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	48.8	9.1	27.6	33.7	41.7	31.1
Incr Delay (d2), s/veh	49.5	0.0	0.6	21.9	27.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.2	2.6	11.9	23.6	21.0	2.4
LnGrp Delay(d),s/veh	98.3	9.1	28.2	55.6	68.8	31.2
LnGrp LOS	F	A	C	E	E	C
Approach Vol, veh/h		902	1533		1141	
Approach Delay, s/veh		41.4	39.3		65.6	
Approach LOS		D	D		E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		79.6			26.0	53.6		40.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		74.7			20.0	48.7		34.7
Max Q Clear Time (g_c+I1), s		7.6			24.0	47.1		37.8
Green Ext Time (p_c), s		10.0			0.0	1.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	1140	0	0	880	1020	530	0	220	0	0	0
Future Volume (veh/h)	350	1140	0	0	880	1020	530	0	220	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1845	1845	1845			
Adj Flow Rate, veh/h	380	1239	0	0	1110	530	576	0	117			
Adj No. of Lanes	2	3	0	0	2	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	1	1	0	0	1	1	3	3	3			
Cap, veh/h	469	3494	0	0	1853	788	752	0	336			
Arrive On Green	0.13	0.68	0.00	0.00	0.49	0.49	0.21	0.00	0.21			
Sat Flow, veh/h	3476	5305	0	0	3762	1599	3514	0	1568			
Grp Volume(v), veh/h	380	1239	0	0	1110	530	576	0	117			
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1881	1599	1757	0	1568			
Q Serve(g_s), s	8.0	7.7	0.0	0.0	16.1	19.1	11.7	0.0	4.8			
Cycle Q Clear(g_c), s	8.0	7.7	0.0	0.0	16.1	19.1	11.7	0.0	4.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	469	3494	0	0	1853	788	752	0	336			
V/C Ratio(X)	0.81	0.35	0.00	0.00	0.60	0.67	0.77	0.00	0.35			
Avail Cap(c_a), veh/h	551	4456	0	0	2469	1049	2148	0	959			
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	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	31.8	5.1	0.0	0.0	13.8	14.6	28.0	0.0	25.3			
Incr Delay (d2), s/veh	6.6	0.0	0.0	0.0	0.1	0.4	0.6	0.0	0.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.3	3.6	0.0	0.0	8.4	8.5	5.7	0.0	4.4			
LnGrp Delay(d),s/veh	38.4	5.1	0.0	0.0	13.9	15.0	28.6	0.0	25.5			
LnGrp LOS	D	A			B	B	C		C			
Approach Vol, veh/h		1619			1640			693				
Approach Delay, s/veh		12.9			14.3			28.1				
Approach LOS		B			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		55.5		20.2	14.2	41.3		
Change Period (Y+Rc), s		5.3		5.3	4.0	5.3		
Max Green Setting (Gmax), s		64.4		45.0	12.0	48.4		
Max Q Clear Time (g_c+I1), s		9.7		13.7	10.0	21.1		
Green Ext Time (p_c), s		19.6		1.2	0.2	14.9		

Intersection Summary	
HCM 2010 Ctrl Delay	16.1
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	258.5

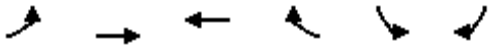
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	200	480	40	70	420	160
Future Vol, veh/h	200	480	40	70	420	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	217	522	43	76	457	174

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1169	82	0	0	120	0
Stage 1	82	-	-	-	-	-
Stage 2	1087	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	~ 215	983	-	-	1480	-
Stage 1	946	-	-	-	-	-
Stage 2	326	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 141	983	-	-	1480	-
Mov Cap-2 Maneuver	~ 141	-	-	-	-	-
Stage 1	946	-	-	-	-	-
Stage 2	~ 215	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 515.5	0	6.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	357	1480	-
HCM Lane V/C Ratio	-	-	2.07	0.308	-
HCM Control Delay (s)	-	-	$ 515.5	8.5	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	53	1.3	-

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	530	1420	1050	250	490	1100
Future Volume (veh/h)	530	1420	1050	250	490	1100
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	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	1881	1881	1863	1863	1863	1863
Adj Flow Rate, veh/h	576	1543	1141	74	533	926
Adj No. of Lanes	2	2	3	1	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	2	2
Cap, veh/h	637	2150	1952	594	584	1429
Arrive On Green	0.18	0.60	0.38	0.38	0.33	0.33
Sat Flow, veh/h	3476	3668	5253	1549	1774	2787
Grp Volume(v), veh/h	576	1543	1141	74	533	926
Grp Sat Flow(s),veh/h/ln	1738	1787	1695	1549	1774	1393
Q Serve(g_s), s	18.8	35.1	20.7	3.6	33.4	28.1
Cycle Q Clear(g_c), s	18.8	35.1	20.7	3.6	33.4	28.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	637	2150	1952	594	584	1429
V/C Ratio(X)	0.90	0.72	0.58	0.12	0.91	0.65
Avail Cap(c_a), veh/h	719	2958	2981	908	704	1616
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	46.4	16.2	28.4	23.1	37.3	20.6
Incr Delay (d2), s/veh	13.0	0.3	0.1	0.0	13.3	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	10.2	17.2	9.6	3.8	18.4	22.2
LnGrp Delay(d),s/veh	59.3	16.5	28.5	23.2	50.5	21.1
LnGrp LOS	E	B	C	C	D	C
Approach Vol, veh/h		2119	1215		1459	
Approach Delay, s/veh		28.1	28.2		31.9	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				73.8		42.2	25.3	48.5
Change Period (Y+Rc), s				5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s				94.7		46.0	24.0	66.7
Max Q Clear Time (g_c+I1), s				37.1		35.4	20.8	22.7
Green Ext Time (p_c), s				22.6		2.8	0.4	20.5

Intersection Summary	
HCM 2010 Ctrl Delay	29.3
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1350	560	0	1080	220	40
Future Volume (veh/h)	1350	560	0	1080	220	40
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	1467	609	0	1174	239	43
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2288	1024	0	2288	1033	475
Arrive On Green	0.65	0.65	0.00	0.65	0.30	0.30
Sat Flow, veh/h	3632	1583	0	3725	3442	1583
Grp Volume(v), veh/h	1467	609	0	1174	239	43
Grp Sat Flow(s),veh/h/ln	1770	1583	0	1770	1721	1583
Q Serve(g_s), s	37.5	33.1	0.0	26.3	7.8	2.9
Cycle Q Clear(g_c), s	37.5	33.1	0.0	26.3	7.8	2.9
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2288	1024	0	2288	1033	475
V/C Ratio(X)	0.64	0.59	0.00	0.51	0.23	0.09
Avail Cap(c_a), veh/h	2879	1288	0	2879	1033	475
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.52	0.52	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	15.2	0.0	14.0	39.5	37.8
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.2	0.5	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	18.2	14.5	0.0	12.8	3.8	1.3
LnGrp Delay(d),s/veh	16.2	15.5	0.0	14.2	40.0	38.1
LnGrp LOS	B	B		B	D	D
Approach Vol, veh/h	2076			1174	282	
Approach Delay, s/veh	16.0			14.2	39.7	
Approach LOS	B			B	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		49.0		101.0				101.0
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		19.5		121.5				121.5
Max Q Clear Time (g_c+I1), s		9.8		39.5				28.3
Green Ext Time (p_c), s		0.7		56.9				61.9

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	470	960	350	90	550	350
Future Volume (veh/h)	470	960	350	90	550	350
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1397	1397	1845	1845
Adj Flow Rate, veh/h	511	377	380	98	598	354
Adj No. of Lanes	2	1	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	36	36	3	3
Cap, veh/h	1123	497	546	834	908	418
Arrive On Green	0.32	0.32	0.21	0.60	0.27	0.27
Sat Flow, veh/h	3632	1566	2581	1397	3408	1568
Grp Volume(v), veh/h	511	377	380	98	598	354
Grp Sat Flow(s),veh/h/ln	1770	1566	1291	1397	1704	1568
Q Serve(g_s), s	6.7	12.7	8.0	1.8	9.1	12.5
Cycle Q Clear(g_c), s	6.7	12.7	8.0	1.8	9.1	12.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1123	497	546	834	908	418
V/C Ratio(X)	0.46	0.76	0.70	0.12	0.66	0.85
Avail Cap(c_a), veh/h	2660	1177	661	1503	1106	509
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	15.9	18.0	21.3	5.1	19.1	20.4
Incr Delay (d2), s/veh	0.1	0.9	2.5	0.0	0.6	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	5.6	3.0	0.7	4.3	6.5
LnGrp Delay(d),s/veh	16.1	18.9	23.8	5.1	19.7	29.7
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	888			478	952	
Approach Delay, s/veh	17.3			20.0	23.4	
Approach LOS	B			B	C	

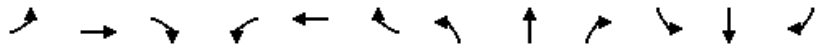
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		19.6	16.4	22.6				39.0
Change Period (Y+Rc), s		4.0	6.0	4.6				4.6
Max Green Setting (Gmax), s		19.0	13.0	43.4				62.4
Max Q Clear Time (g_c+I1), s		14.5	10.0	14.7				3.8
Green Ext Time (p_c), s		1.1	0.4	3.0				3.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	220	0	280	950	1160	0	0	760	600
Future Volume (veh/h)	0	0	0	220	0	280	950	1160	0	0	760	600
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		0.99
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				1881	0	1881	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				239	0	144	1033	1261	0	0	826	330
Adj No. of Lanes				2	0	1	2	2	0	0	4	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				1	0	1	2	2	0	0	2	2
Cap, veh/h				477	0	220	1162	2679	0	0	2347	577
Arrive On Green				0.14	0.00	0.14	0.34	0.76	0.00	0.00	0.37	0.37
Sat Flow, veh/h				3476	0	1599	3442	3632	0	0	6669	1575
Grp Volume(v), veh/h				239	0	144	1033	1261	0	0	826	330
Grp Sat Flow(s),veh/h/ln				1738	0	1599	1721	1770	0	0	1602	1575
Q Serve(g_s), s				4.8	0.0	6.5	21.5	10.2	0.0	0.0	7.1	12.7
Cycle Q Clear(g_c), s				4.8	0.0	6.5	21.5	10.2	0.0	0.0	7.1	12.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				477	0	220	1162	2679	0	0	2347	577
V/C Ratio(X)				0.50	0.00	0.66	0.89	0.47	0.00	0.00	0.35	0.57
Avail Cap(c_a), veh/h				1976	0	909	2048	4165	0	0	3389	833
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				30.2	0.0	30.9	23.7	3.5	0.0	0.0	17.4	19.2
Incr Delay (d2), s/veh				0.3	0.0	1.2	1.1	0.0	0.0	0.0	0.0	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.3	0.0	2.9	10.4	4.9	0.0	0.0	3.1	5.6
LnGrp Delay(d),s/veh				30.5	0.0	32.2	24.8	3.5	0.0	0.0	17.5	19.5
LnGrp LOS				C		C	C	A			B	B
Approach Vol, veh/h					383			2294			1156	
Approach Delay, s/veh					31.1			13.1			18.1	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		61.2			29.5	31.7		14.4
Change Period (Y+Rc), s		5.3			4.0	5.3		5.3
Max Green Setting (Gmax), s		87.7			45.0	38.7		41.7
Max Q Clear Time (g_c+I1), s		12.2			23.5	14.7		8.5
Green Ext Time (p_c), s		15.6			2.1	11.7		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	16.4
HCM 2010 LOS	B



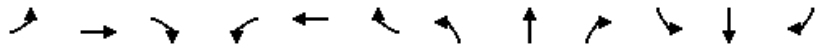
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	440	10	780	0	0	0	0	1670	240	280	700	0
Future Volume (veh/h)	440	10	780	0	0	0	0	1670	240	280	700	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845				0	1881	1900	1863	1863	0
Adj Flow Rate, veh/h	478	0	855				0	1815	246	304	761	0
Adj No. of Lanes	2	0	2				0	4	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3				0	1	1	2	2	0
Cap, veh/h	1203	0	1074				0	2419	328	377	1967	0
Arrive On Green	0.34	0.00	0.34				0.00	0.42	0.40	0.11	0.56	0.00
Sat Flow, veh/h	3514	0	3136				0	6071	787	3442	3632	0
Grp Volume(v), veh/h	478	0	855				0	1517	544	304	761	0
Grp Sat Flow(s),veh/h/ln	1757	0	1568				0	1618	1741	1721	1770	0
Q Serve(g_s), s	9.5	0.0	22.5				0.0	24.2	24.3	7.9	11.1	0.0
Cycle Q Clear(g_c), s	9.5	0.0	22.5				0.0	24.2	24.3	7.9	11.1	0.0
Prop In Lane	1.00		1.00				0.00		0.45	1.00		0.00
Lane Grp Cap(c), veh/h	1203	0	1074				0	2022	725	377	1967	0
V/C Ratio(X)	0.40	0.00	0.80				0.00	0.75	0.75	0.81	0.39	0.00
Avail Cap(c_a), veh/h	2847	0	2541				0	2232	801	452	2247	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	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.9	0.0	27.2				0.0	22.6	22.9	39.7	11.5	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.4				0.0	1.1	3.0	7.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	9.9				0.0	11.0	12.3	4.1	5.4	0.0
LnGrp Delay(d),s/veh	23.1	0.0	28.5				0.0	23.7	25.9	47.0	11.5	0.0
LnGrp LOS	C		C					C	C	D	B	
Approach Vol, veh/h		1333						2061			1065	
Approach Delay, s/veh		26.6						24.3			21.6	
Approach LOS		C						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.0	42.1		35.3		56.1		
Change Period (Y+Rc), s	4.0	5.3		4.5		* 5.3		
Max Green Setting (Gmax), s	12.0	40.7		73.5		* 58		
Max Q Clear Time (g_c+I1), s	11.9	26.3		24.5		13.1		
Green Ext Time (p_c), s	0.1	10.4		6.3		20.6		

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



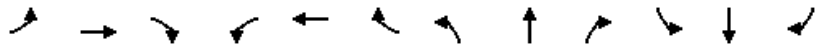
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	10	180	580	70	160	150	860	1370	20	700	40
Future Volume (veh/h)	80	10	180	580	70	160	150	860	1370	20	700	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1827	1827	1900	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	87	11	109	630	76	132	163	935	800	22	761	40
Adj No. of Lanes	1	1	0	3	1	0	1	2	2	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, %	8	8	8	4	4	4	2	2	2	5	5	5
Cap, veh/h	110	19	190	807	143	249	202	1525	1182	91	1230	65
Arrive On Green	0.07	0.14	0.13	0.16	0.24	0.23	0.11	0.43	0.43	0.05	0.37	0.36
Sat Flow, veh/h	1675	138	1363	4907	600	1043	1774	3539	2743	1723	3323	175
Grp Volume(v), veh/h	87	0	120	630	0	208	163	935	800	22	394	407
Grp Sat Flow(s),veh/h/ln	1675	0	1500	1636	0	1643	1774	1770	1371	1723	1719	1778
Q Serve(g_s), s	3.9	0.0	5.7	9.3	0.0	8.4	6.8	15.4	17.7	0.9	14.1	14.1
Cycle Q Clear(g_c), s	3.9	0.0	5.7	9.3	0.0	8.4	6.8	15.4	17.7	0.9	14.1	14.1
Prop In Lane	1.00		0.91	1.00		0.63	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	110	0	209	807	0	392	202	1525	1182	91	636	658
V/C Ratio(X)	0.79	0.00	0.57	0.78	0.00	0.53	0.81	0.61	0.68	0.24	0.62	0.62
Avail Cap(c_a), veh/h	222	0	855	1561	0	1242	376	2487	1927	91	934	967
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	0.0	30.6	30.2	0.0	25.2	32.6	16.6	17.2	34.3	19.4	19.4
Incr Delay (d2), s/veh	4.8	0.0	0.9	0.6	0.0	0.4	2.9	0.1	0.3	0.5	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	2.4	4.2	0.0	3.8	3.5	7.6	6.7	0.5	6.7	7.0
LnGrp Delay(d),s/veh	39.5	0.0	31.5	30.8	0.0	25.6	35.5	16.7	17.5	34.8	19.8	19.8
LnGrp LOS	D		C	C		C	D	B	B	C	B	B
Approach Vol, veh/h		207			838			1898			823	
Approach Delay, s/veh		34.9			29.6			18.7			20.2	
Approach LOS		C			C			B			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	8.0	36.5	16.4	14.5	12.6	31.9	8.9	22.0
Change Period (Y+Rc), s	4.0	4.9	4.0	4.6	4.0	4.9	4.0	4.6
Max Green Setting (Gmax), s	4.0	52.1	24.0	42.4	16.0	40.1	10.0	56.4
Max Q Clear Time (g_c+I1), s	2.9	19.7	11.3	7.7	8.8	16.1	5.9	10.4
Green Ext Time (p_c), s	0.0	11.9	1.1	1.2	0.1	10.7	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	22.3
HCM 2010 LOS	C

Notes

User approved changes to right turn type.



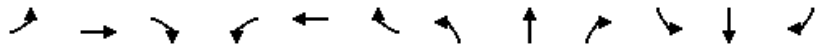
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	550	0	2460	0	0	0	0	1830	440	620	840	0
Future Volume (veh/h)	550	0	2460	0	0	0	0	1830	440	620	840	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	20				0	20	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	598	0	2402				0	1989	478	674	913	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1099	0	1132				0	2025	131	569	3082	0
Arrive On Green	0.11	0.00	0.10				0.00	0.14	0.14	0.06	0.21	0.00
Sat Flow, veh/h	3442	0	3610				0	4788	965	3343	5103	0
Grp Volume(v), veh/h	598	0	2402				0	1647	820	674	913	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1655	1672	1647	0
Q Serve(g_s), s	23.2	0.0	44.2				0.0	59.0	59.0	24.0	22.0	0.0
Cycle Q Clear(g_c), s	23.2	0.0	44.2				0.0	59.0	59.0	24.0	22.0	0.0
Prop In Lane	1.00		1.00				0.00		0.58	1.00		0.00
Lane Grp Cap(c), veh/h	1099	0	1132				0	1404	752	569	3082	0
V/C Ratio(X)	0.54	0.00	2.12				0.00	1.17	1.09	1.18	0.30	0.00
Avail Cap(c_a), veh/h	1099	0	1132				0	1404	693	569	3082	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.3	0.0	63.2				0.0	60.7	60.7	66.5	29.8	0.0
Incr Delay (d2), s/veh	0.3	0.0	507.5				0.0	85.8	60.2	99.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	28.9				0.0	32.1	21.7	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	74.6				0.0	34.4	46.9	19.0	10.1	0.0
LnGrp Delay(d),s/veh	53.6	0.0	599.5				0.0	178.6	142.6	166.0	29.8	0.0
LnGrp LOS	D		F					F	F	F	C	
Approach Vol, veh/h		3000						2467			1587	
Approach Delay, s/veh		490.7						166.7			87.6	
Approach LOS		F						F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	28.9	63.0		49.0		91.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	24.0	* 58		43.7		32.9		
Max Q Clear Time (g_c+I1), s	26.0	61.0		46.2		24.0		
Green Ext Time (p_c), s	0.0	0.0		0.0		3.8		

Intersection Summary	
HCM 2010 Ctrl Delay	286.7
HCM 2010 LOS	F

Notes

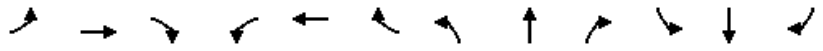
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	50	70	160	40	150	80	980	140	260	1200	40
Future Volume (veh/h)	60	50	70	160	40	150	80	980	140	260	1200	40
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	54	56	174	43	-64	87	1065	148	283	1304	42
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	105	87	166	227	239	203	112	1519	211	364	1853	60
Arrive On Green	0.11	0.11	0.11	0.13	0.13	0.00	0.06	0.49	0.48	0.11	0.53	0.52
Sat Flow, veh/h	981	815	1546	1792	1881	1599	1774	3121	433	3442	3497	113
Grp Volume(v), veh/h	119	0	56	174	43	-64	87	603	610	283	659	687
Grp Sat Flow(s),veh/h/ln	1796	0	1546	1792	1881	1599	1774	1770	1785	1721	1770	1840
Q Serve(g_s), s	5.8	0.0	3.1	8.7	1.9	0.0	4.5	24.5	24.6	7.4	25.8	25.8
Cycle Q Clear(g_c), s	5.8	0.0	3.1	8.7	1.9	0.0	4.5	24.5	24.6	7.4	25.8	25.8
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.24	1.00		0.06
Lane Grp Cap(c), veh/h	192	0	166	227	239	203	112	861	869	364	938	975
V/C Ratio(X)	0.62	0.00	0.34	0.77	0.18	-0.32	0.78	0.70	0.70	0.78	0.70	0.70
Avail Cap(c_a), veh/h	681	0	587	719	754	641	250	1400	1412	709	1515	1576
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	0.0	38.2	39.0	36.0	0.0	42.6	18.4	18.5	40.2	16.3	16.3
Incr Delay (d2), s/veh	1.2	0.0	0.4	2.0	0.1	0.0	4.4	0.4	0.4	1.4	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	1.3	4.4	1.0	0.0	2.3	12.0	12.1	3.6	12.5	13.1
LnGrp Delay(d),s/veh	40.6	0.0	38.6	41.0	36.1	0.0	47.0	18.8	18.9	41.5	16.6	16.6
LnGrp LOS	D		D	D	D		D	B	B	D	B	B
Approach Vol, veh/h		175			153			1300			1629	
Approach Delay, s/veh		40.0			56.8			20.8			21.0	
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	13.8	48.9		13.9	9.8	52.9		15.7
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	9.8	72.4		35.0	13.0	78.4		36.4
Max Q Clear Time (g_c+I1), s	7.4	26.6		7.8	6.5	27.8		10.7
Green Ext Time (p_c), s	0.4	17.7		0.4	0.0	18.2		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	23.6
HCM 2010 LOS	C



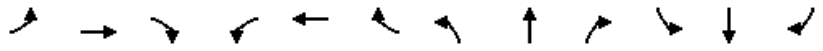
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	190	100	60	150	570	110	860	40	840	1280	190
Future Volume (veh/h)	170	190	100	60	150	570	110	860	40	840	1280	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1881	1881	1881	1881	1881	1900	1863	1863	1863
Adj Flow Rate, veh/h	185	207	38	65	163	620	120	935	42	913	1391	134
Adj No. of Lanes	1	2	0	1	1	2	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	209	730	132	83	325	1454	235	1062	48	985	1595	885
Arrive On Green	0.12	0.24	0.24	0.05	0.17	0.17	0.13	0.30	0.30	0.29	0.45	0.44
Sat Flow, veh/h	1774	2988	538	1792	1881	3198	1792	3482	156	3442	3539	1581
Grp Volume(v), veh/h	185	121	124	65	163	620	120	480	497	913	1391	134
Grp Sat Flow(s),veh/h/ln	1774	1770	1756	1792	1881	1599	1792	1787	1851	1721	1770	1581
Q Serve(g_s), s	13.9	7.5	7.8	4.9	10.7	17.8	8.5	34.7	34.7	35.0	48.3	2.5
Cycle Q Clear(g_c), s	13.9	7.5	7.8	4.9	10.7	17.8	8.5	34.7	34.7	35.0	48.3	2.5
Prop In Lane	1.00		0.31	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	209	433	429	83	325	1454	235	545	565	985	1595	885
V/C Ratio(X)	0.88	0.28	0.29	0.78	0.50	0.43	0.51	0.88	0.88	0.93	0.87	0.15
Avail Cap(c_a), veh/h	274	544	540	171	468	1697	251	713	739	1393	2350	1222
HCM Platoon Ratio	1.00	1.00	1.00	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	59.0	41.6	41.8	64.1	50.9	25.1	55.0	44.9	44.9	47.1	33.8	5.2
Incr Delay (d2), s/veh	19.1	0.1	0.1	5.9	0.4	0.1	0.6	8.4	8.1	7.0	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	3.7	3.8	2.6	5.6	7.9	4.2	18.3	19.0	17.6	24.0	1.3
LnGrp Delay(d),s/veh	78.1	41.7	41.9	69.9	51.3	25.1	55.6	53.2	53.0	54.0	35.6	5.2
LnGrp LOS	E	D	D	E	D	C	E	D	D	D	D	A
Approach Vol, veh/h		430			848			1097			2438	
Approach Delay, s/veh		57.4			33.6			53.4			40.8	
Approach LOS		E			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	42.9	45.4	10.3	37.2	23.1	65.2	20.0	27.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	5.3	* 5.3	4.0	4.6
Max Green Setting (Gmax), s	35.9	52.9	13.0	41.2	19.0	* 89	21.0	33.2
Max Q Clear Time (g_c+I1), s	37.8	36.7	6.9	9.8	10.5	50.3	15.9	19.8
Green Ext Time (p_c), s	1.9	3.5	0.0	2.8	2.6	9.6	0.1	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	43.9
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



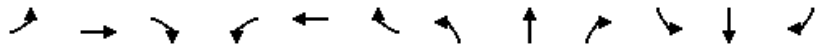
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	80	870	10	50	60	620	1050	20	90	1150	210
Future Volume (veh/h)	130	80	870	10	50	60	620	1050	20	90	1150	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	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	1881	1881	1881	1900	1863	1863	1881	1881	1881	1863	1863	1900
Adj Flow Rate, veh/h	141	87	431	11	54	14	674	1141	14	98	1250	210
Adj No. of Lanes	1	1	2	0	1	1	2	2	1	1	3	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, %	1	1	1	2	2	2	1	1	1	2	2	2
Cap, veh/h	326	342	512	18	90	90	751	1976	864	122	1748	294
Arrive On Green	0.18	0.18	0.18	0.06	0.06	0.06	0.22	0.55	0.55	0.07	0.40	0.39
Sat Flow, veh/h	1792	1881	2814	313	1535	1542	3476	3574	1563	1774	4373	735
Grp Volume(v), veh/h	141	87	431	65	0	14	674	1141	14	98	969	491
Grp Sat Flow(s),veh/h/ln	1792	1881	1407	1847	0	1542	1738	1787	1563	1774	1695	1718
Q Serve(g_s), s	8.1	4.6	17.1	4.0	0.0	1.0	21.9	24.3	0.5	6.3	27.8	27.9
Cycle Q Clear(g_c), s	8.1	4.6	17.1	4.0	0.0	1.0	21.9	24.3	0.5	6.3	27.8	27.9
Prop In Lane	1.00		1.00	0.17		1.00	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	326	342	512	108	0	90	751	1976	864	122	1355	687
V/C Ratio(X)	0.43	0.25	0.84	0.60	0.00	0.16	0.90	0.58	0.02	0.80	0.72	0.72
Avail Cap(c_a), veh/h	434	456	682	622	0	519	1170	2587	1132	199	1694	858
HCM Platoon Ratio	1.00	1.00	1.00	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	42.1	40.7	45.8	53.3	0.0	51.9	44.2	17.0	11.7	53.2	29.2	29.4
Incr Delay (d2), s/veh	0.3	0.1	5.6	2.0	0.0	0.3	4.3	0.1	0.0	4.5	0.7	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	4.0	2.4	7.0	2.1	0.0	0.4	10.9	11.9	0.2	3.3	13.2	13.5
LnGrp Delay(d),s/veh	42.4	40.8	51.4	55.3	0.0	52.2	48.4	17.1	11.7	57.7	29.9	30.7
LnGrp LOS	D	D	D	E		D	D	B	B	E	C	C
Approach Vol, veh/h		659			79			1829			1558	
Approach Delay, s/veh		48.1			54.7			28.6			31.9	
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	12.0	68.1		25.1	29.0	51.0		10.8
Change Period (Y+Rc), s	4.0	5.3		4.9	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	13.0	82.6		27.2	39.0	* 57		39.0
Max Q Clear Time (g_c+I1), s	8.1	26.3		19.1	23.9	29.9		6.0
Green Ext Time (p_c), s	0.0	21.7		1.0	1.2	15.8		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	33.5
HCM 2010 LOS	C

Notes

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



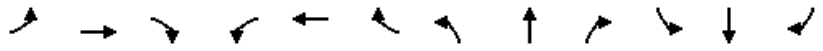
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1260	270	110	1000	50	210	60	80	50	40	90
Future Volume (veh/h)	110	1260	270	110	1000	50	210	60	80	50	40	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	120	1370	209	120	1087	4	228	65	-50	54	43	84
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	147	1775	782	147	1775	776	292	456	387	70	110	214
Arrive On Green	0.08	0.50	0.50	0.08	0.50	0.50	0.08	0.24	0.00	0.04	0.20	0.19
Sat Flow, veh/h	1792	3574	1576	1792	3574	1563	3476	1881	1599	1810	557	1088
Grp Volume(v), veh/h	120	1370	209	120	1087	4	228	65	-50	54	0	127
Grp Sat Flow(s),veh/h/ln	1792	1787	1576	1792	1787	1563	1738	1881	1599	1810	0	1645
Q Serve(g_s), s	7.5	35.7	8.8	7.5	25.1	0.1	7.3	3.1	0.0	3.4	0.0	7.7
Cycle Q Clear(g_c), s	7.5	35.7	8.8	7.5	25.1	0.1	7.3	3.1	0.0	3.4	0.0	7.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.66
Lane Grp Cap(c), veh/h	147	1775	782	147	1775	776	292	456	387	70	0	324
V/C Ratio(X)	0.81	0.77	0.27	0.81	0.61	0.01	0.78	0.14	-0.13	0.77	0.00	0.39
Avail Cap(c_a), veh/h	314	2691	1186	314	2691	1177	548	774	658	174	0	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.6	23.5	16.7	51.6	20.8	14.5	51.3	34.0	0.0	54.4	0.0	40.3
Incr Delay (d2), s/veh	4.1	0.3	0.1	4.1	0.1	0.0	1.7	0.1	0.0	6.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	17.6	3.8	3.9	12.4	0.1	3.6	1.6	0.0	1.8	0.0	3.5
LnGrp Delay(d),s/veh	55.6	23.8	16.8	55.6	20.9	14.5	53.0	34.0	0.0	60.9	0.0	40.6
LnGrp LOS	E	C	B	E	C	B	D	C		E		D
Approach Vol, veh/h		1699			1211			243			181	
Approach Delay, s/veh		25.2			24.3			58.8			46.7	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	31.7	13.4	60.7	13.6	26.5	13.4	60.7
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	4.4	45.7	20.0	* 86	18.0	38.7	20.0	* 86
Max Q Clear Time (g_c+I1), s	5.4	5.1	9.5	37.7	9.3	9.7	9.5	27.1
Green Ext Time (p_c), s	0.0	0.7	0.1	18.8	0.3	0.6	0.1	19.8

Intersection Summary	
HCM 2010 Ctrl Delay	28.5
HCM 2010 LOS	C

Notes

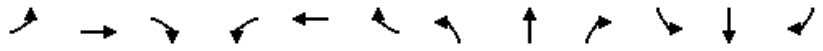
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	870	380	230	870	270	270	390	210	360	290	30
Future Volume (veh/h)	80	870	380	230	870	270	270	390	210	360	290	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		0.96	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	87	946	197	250	946	140	293	424	211	391	315	31
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	110	1578	327	315	1245	184	360	602	296	461	953	93
Arrive On Green	0.06	0.37	0.36	0.09	0.40	0.39	0.10	0.26	0.25	0.13	0.29	0.28
Sat Flow, veh/h	1792	4227	877	3442	3087	457	3476	2302	1132	3476	3280	320
Grp Volume(v), veh/h	87	766	377	250	542	544	293	328	307	391	170	176
Grp Sat Flow(s),veh/h/ln	1792	1712	1680	1721	1770	1775	1738	1787	1648	1738	1787	1813
Q Serve(g_s), s	5.4	20.5	20.7	8.1	29.9	30.0	9.4	18.8	19.3	12.5	8.5	8.6
Cycle Q Clear(g_c), s	5.4	20.5	20.7	8.1	29.9	30.0	9.4	18.8	19.3	12.5	8.5	8.6
Prop In Lane	1.00		0.52	1.00		0.26	1.00		0.69	1.00		0.18
Lane Grp Cap(c), veh/h	110	1278	627	315	713	715	360	467	431	461	519	527
V/C Ratio(X)	0.79	0.60	0.60	0.79	0.76	0.76	0.81	0.70	0.71	0.85	0.33	0.33
Avail Cap(c_a), veh/h	221	2112	1036	607	1185	1189	674	756	697	796	819	831
HCM Platoon Ratio	1.00	1.00	1.00	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	52.5	28.7	29.0	50.5	29.1	29.3	49.8	37.9	38.5	48.1	31.6	31.7
Incr Delay (d2), s/veh	4.6	0.2	0.3	1.7	0.6	0.6	1.7	0.7	0.8	1.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	9.7	9.6	3.9	14.7	14.8	4.6	9.4	8.8	6.1	4.2	4.4
LnGrp Delay(d),s/veh	57.1	28.9	29.4	52.2	29.8	29.9	51.5	38.6	39.3	49.8	31.7	31.8
LnGrp LOS	E	C	C	D	C	C	D	D	D	D	C	C
Approach Vol, veh/h		1230			1336			928			737	
Approach Delay, s/veh		31.0			34.0			42.9			41.3	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.1	33.7	14.4	46.4	15.8	37.0	11.0	49.7
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	26.0	46.7	20.0	68.7	22.0	50.7	14.0	74.7
Max Q Clear Time (g_c+I1), s	14.5	21.3	10.1	22.7	11.4	10.6	7.4	32.0
Green Ext Time (p_c), s	0.6	3.5	0.3	12.6	0.4	3.6	0.0	12.5

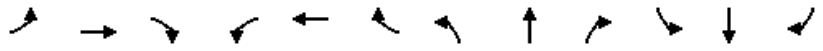
Intersection Summary	
HCM 2010 Ctrl Delay	36.4
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	1220	140	210	1320	320	250	440	220	520	200	180
Future Volume (veh/h)	300	1220	140	210	1320	320	250	440	220	520	200	180
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	326	1326	141	228	1435	234	272	478	215	565	217	4
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	271	1646	175	252	1741	540	260	589	263	478	849	373
Arrive On Green	0.15	0.35	0.34	0.14	0.34	0.34	0.15	0.25	0.24	0.14	0.24	0.24
Sat Flow, veh/h	1774	4661	496	1774	5085	1576	1792	2403	1074	3476	3574	1569
Grp Volume(v), veh/h	326	964	503	228	1435	234	272	355	338	565	217	4
Grp Sat Flow(s),veh/h/ln	1774	1695	1766	1774	1695	1576	1792	1787	1690	1738	1787	1569
Q Serve(g_s), s	20.0	33.7	33.7	16.6	33.8	15.0	19.0	24.5	24.8	18.0	6.5	0.3
Cycle Q Clear(g_c), s	20.0	33.7	33.7	16.6	33.8	15.0	19.0	24.5	24.8	18.0	6.5	0.3
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	271	1198	624	252	1741	540	260	438	414	478	849	373
V/C Ratio(X)	1.20	0.81	0.81	0.91	0.82	0.43	1.05	0.81	0.82	1.18	0.26	0.01
Avail Cap(c_a), veh/h	271	1225	638	258	1799	558	260	610	577	478	1193	524
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.4	38.3	38.4	55.3	39.4	33.2	55.9	46.5	47.0	56.4	40.5	38.2
Incr Delay (d2), s/veh	120.8	3.6	6.7	31.2	2.9	0.2	68.3	3.8	4.4	101.6	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	18.8	16.3	17.7	10.3	16.3	6.5	14.3	12.6	12.1	15.3	3.2	0.1
LnGrp Delay(d),s/veh	176.3	41.9	45.2	86.5	42.4	33.4	124.2	50.4	51.4	158.0	40.6	38.2
LnGrp LOS	F	D	D	F	D	C	F	D	D	F	D	D
Approach Vol, veh/h		1793			1897			965			786	
Approach Delay, s/veh		67.2			46.6			71.6			125.0	
Approach LOS		E			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	36.1	22.6	50.2	23.0	35.1	24.0	48.8
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	18.0	43.4	19.0	46.0	19.0	42.4	20.0	45.0
Max Q Clear Time (g_c+I1), s	20.0	26.8	18.6	35.7	21.0	8.5	22.0	35.8
Green Ext Time (p_c), s	0.0	3.1	0.0	8.3	0.0	3.5	0.0	7.5

Intersection Summary	
HCM 2010 Ctrl Delay	69.1
HCM 2010 LOS	E



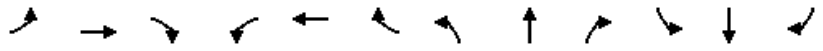
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰↰	↑↑↑					↰	↰	↱
Traffic Volume (veh/h)	0	2100	860	220	2110	0	0	0	0	710	10	910
Future Volume (veh/h)	0	2100	860	220	2110	0	0	0	0	710	10	910
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	2283	600	239	2293	0				780	0	960
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2260	703	158	2876	0				1277	0	570
Arrive On Green	0.00	0.44	0.44	0.08	0.56	0.00				0.36	0.00	0.36
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	2283	600	239	2293	0				780	0	960
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	44.0	33.7	8.0	35.5	0.0				18.0	0.0	36.0
Cycle Q Clear(g_c), s	0.0	44.0	33.7	8.0	35.5	0.0				18.0	0.0	36.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2260	703	158	2876	0				1277	0	570
V/C Ratio(X)	0.00	1.01	0.85	1.52	0.80	0.00				0.61	0.00	1.68
Avail Cap(c_a), veh/h	0	2260	703	158	2876	0				1277	0	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	28.0	25.1	46.0	17.5	0.0				26.3	0.0	32.0
Incr Delay (d2), s/veh	0.0	21.5	9.5	261.9	1.5	0.0				0.6	0.0	315.5
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	0.0	25.2	16.7	7.9	17.0	0.0				8.9	0.0	65.6
LnGrp Delay(d),s/veh	0.0	49.5	34.6	307.9	19.0	0.0				26.9	0.0	347.5
LnGrp LOS		F	C	F	B					C		F
Approach Vol, veh/h		2883			2532						1740	
Approach Delay, s/veh		46.4			46.3						203.8	
Approach LOS		D			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	12.0	48.0		40.0		60.0		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	8.0	42.7		34.7		54.7		
Max Q Clear Time (g_c+I1), s	10.0	46.0		38.0		37.5		
Green Ext Time (p_c), s	0.0	0.0		0.0		16.5		

Intersection Summary	
HCM 2010 Ctrl Delay	84.6
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.



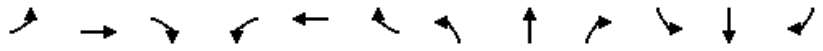
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰	↑↑↑	↱	↰	↵	↱			
Traffic Volume (veh/h)	0	2010	800	140	900	720	870	60	380	0	0	0
Future Volume (veh/h)	0	2010	800	140	900	720	870	60	380	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	0	2185	635	152	978	469	992	0	263			
Adj No. of Lanes	0	3	1	1	3	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	2348	730	181	3064	928	1137	0	507			
Arrive On Green	0.00	0.46	0.46	0.10	0.60	0.60	0.32	0.00	0.32			
Sat Flow, veh/h	0	5253	1581	1774	5085	1540	3548	0	1582			
Grp Volume(v), veh/h	0	2185	635	152	978	469	992	0	263			
Grp Sat Flow(s),veh/h/ln	0	1695	1581	1774	1695	1540	1774	0	1582			
Q Serve(g_s), s	0.0	42.1	37.5	8.7	9.8	18.1	27.4	0.0	14.1			
Cycle Q Clear(g_c), s	0.0	42.1	37.5	8.7	9.8	18.1	27.4	0.0	14.1			
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2348	730	181	3064	928	1137	0	507			
V/C Ratio(X)	0.00	0.93	0.87	0.84	0.32	0.51	0.87	0.00	0.52			
Avail Cap(c_a), veh/h	0	2353	732	188	3088	935	1676	0	747			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	26.4	25.1	45.7	10.2	11.8	33.3	0.0	28.7			
Incr Delay (d2), s/veh	0.0	7.2	10.6	24.9	0.0	0.2	2.6	0.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	21.2	18.4	5.5	4.5	7.6	13.8	0.0	6.2			
LnGrp Delay(d),s/veh	0.0	33.6	35.7	70.6	10.2	12.0	35.8	0.0	29.0			
LnGrp LOS		C	D	E	B	B	D		C			
Approach Vol, veh/h		2820			1599			1255				
Approach Delay, s/veh		34.1			16.4			34.4				
Approach LOS		C			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.6	51.9		37.2		66.5		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	11.6	46.7		47.7		61.7		
Max Q Clear Time (g_c+I1), s	10.7	44.1		29.4		20.1		
Green Ext Time (p_c), s	0.0	2.5		2.4		30.8		

Intersection Summary	
HCM 2010 Ctrl Delay	29.2
HCM 2010 LOS	C

Notes

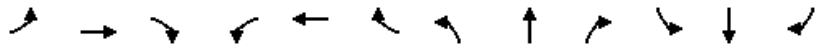
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	60	10	10	50	170	10	70	20	200	110	40
Future Volume (veh/h)	40	60	10	10	50	170	10	70	20	200	110	40
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.95	1.00		0.96	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	1900	1845	1845	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	65	9	11	54	23	11	76	15	217	120	28
Adj No. of Lanes	1	1	0	1	1	0	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, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	187	178	25	185	135	57	189	557	106	311	738	167
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.19	0.15	0.17	0.26	0.22
Sat Flow, veh/h	1774	1597	221	1757	1207	514	1792	2971	566	1792	2885	652
Grp Volume(v), veh/h	43	0	74	11	0	77	11	45	46	217	73	75
Grp Sat Flow(s),veh/h/ln	1774	0	1818	1757	0	1721	1792	1787	1750	1792	1787	1750
Q Serve(g_s), s	0.8	0.0	1.4	0.2	0.0	1.6	0.2	0.8	0.8	4.3	1.2	1.3
Cycle Q Clear(g_c), s	0.8	0.0	1.4	0.2	0.0	1.6	0.2	0.8	0.8	4.3	1.2	1.3
Prop In Lane	1.00		0.12	1.00		0.30	1.00		0.32	1.00		0.37
Lane Grp Cap(c), veh/h	187	0	203	185	0	192	189	335	328	311	457	448
V/C Ratio(X)	0.23	0.00	0.36	0.06	0.00	0.40	0.06	0.13	0.14	0.70	0.16	0.17
Avail Cap(c_a), veh/h	561	0	2252	278	0	1860	283	1460	1430	1653	2826	2768
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.6	0.0	15.6	15.3	0.0	15.7	15.3	12.8	13.0	14.7	11.0	11.2
Incr Delay (d2), s/veh	0.2	0.0	0.4	0.0	0.0	0.5	0.0	0.1	0.1	1.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.7	0.1	0.0	0.8	0.1	0.4	0.4	2.2	0.6	0.6
LnGrp Delay(d),s/veh	15.8	0.0	16.0	15.3	0.0	16.2	15.3	12.9	13.1	15.8	11.0	11.2
LnGrp LOS	B		B	B		B	B	B	B	B	B	B
Approach Vol, veh/h		117			88			102			365	
Approach Delay, s/veh		15.9			16.1			13.3			13.9	
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	10.6	11.1	8.0	8.2	8.0	13.7	8.0	8.2
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	35.0	29.7	6.0	47.0	6.0	58.7	12.0	41.0
Max Q Clear Time (g_c+I1), s	6.3	2.8	2.2	3.4	2.2	3.3	2.8	3.6
Green Ext Time (p_c), s	0.3	0.7	0.0	0.5	0.0	0.8	0.0	0.5

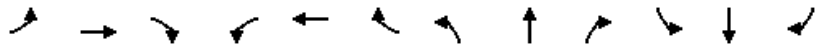
Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	80	80	60	100	90	190	850	140	110	660	90
Future Volume (veh/h)	110	80	80	60	100	90	190	850	140	110	660	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		0.98	1.00		0.97	1.00		1.00	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	120	87	65	65	109	81	207	924	139	120	717	95
Adj No. of Lanes	1	1	0	1	1	0	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	154	207	155	83	166	123	255	1311	197	156	1156	153
Arrive On Green	0.09	0.21	0.21	0.05	0.17	0.17	0.14	0.42	0.40	0.09	0.37	0.35
Sat Flow, veh/h	1792	994	743	1774	981	729	1792	3115	469	1792	3163	419
Grp Volume(v), veh/h	120	0	152	65	0	190	207	530	533	120	405	407
Grp Sat Flow(s),veh/h/ln	1792	0	1736	1774	0	1711	1792	1787	1796	1792	1787	1794
Q Serve(g_s), s	4.4	0.0	5.1	2.4	0.0	7.0	7.6	16.5	16.5	4.4	12.5	12.6
Cycle Q Clear(g_c), s	4.4	0.0	5.1	2.4	0.0	7.0	7.6	16.5	16.5	4.4	12.5	12.6
Prop In Lane	1.00		0.43	1.00		0.43	1.00		0.26	1.00		0.23
Lane Grp Cap(c), veh/h	154	0	362	83	0	290	255	752	756	156	653	656
V/C Ratio(X)	0.78	0.00	0.42	0.78	0.00	0.66	0.81	0.70	0.71	0.77	0.62	0.62
Avail Cap(c_a), veh/h	292	0	875	289	0	862	690	1218	1225	876	1404	1409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	0.0	23.2	31.8	0.0	26.2	28.1	16.1	16.3	30.1	17.6	17.7
Incr Delay (d2), s/veh	3.2	0.0	0.3	6.0	0.0	0.9	2.4	0.5	0.5	3.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	2.5	1.3	0.0	3.3	3.9	8.2	8.3	2.3	6.3	6.3
LnGrp Delay(d),s/veh	33.4	0.0	23.5	37.8	0.0	27.1	30.5	16.6	16.7	33.2	17.9	18.1
LnGrp LOS	C		C	D		C	C	B	B	C	B	B
Approach Vol, veh/h		272			255			1270			932	
Approach Delay, s/veh		27.9			29.9			18.9			19.9	
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	9.9	32.4	7.2	18.1	13.6	28.7	9.8	15.4
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	33.0	44.7	11.0	34.0	26.0	51.7	11.0	34.0
Max Q Clear Time (g_c+I1), s	6.4	18.5	4.4	7.1	9.6	14.6	6.4	9.0
Green Ext Time (p_c), s	0.1	8.1	0.0	1.2	0.2	8.7	0.1	1.1

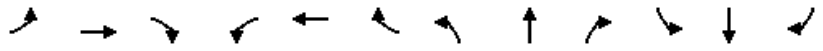
Intersection Summary	
HCM 2010 Ctrl Delay	21.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	150	0	330	0	700	40	60	650	0
Future Volume (veh/h)	0	0	0	150	0	330	0	700	40	60	650	0
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		0.97	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1900	1900	0	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h				163	0	302	0	761	16	65	707	0
Adj No. of Lanes				0	1	1	0	2	1	1	2	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	2	0	0	1	1	1	1	1
Cap, veh/h				443	0	395	0	1488	649	91	2013	0
Arrive On Green				0.24	0.00	0.24	0.00	0.42	0.42	0.05	0.56	0.00
Sat Flow, veh/h				1810	0	1615	0	3668	1558	1792	3668	0
Grp Volume(v), veh/h				163	0	302	0	761	16	65	707	0
Grp Sat Flow(s),veh/h/ln				1810	0	1615	0	1787	1558	1792	1787	0
Q Serve(g_s), s				3.1	0.0	7.2	0.0	6.6	0.3	1.5	4.5	0.0
Cycle Q Clear(g_c), s				3.1	0.0	7.2	0.0	6.6	0.3	1.5	4.5	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				443	0	395	0	1488	649	91	2013	0
V/C Ratio(X)				0.37	0.00	0.76	0.00	0.51	0.02	0.71	0.35	0.00
Avail Cap(c_a), veh/h				1911	0	1706	0	4289	1870	602	5834	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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				13.1	0.0	14.6	0.0	9.0	7.2	19.5	5.0	0.0
Incr Delay (d2), s/veh				0.2	0.0	1.2	0.0	0.1	0.0	3.9	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.6	0.0	3.4	0.0	3.2	0.1	0.8	2.2	0.0
LnGrp Delay(d),s/veh				13.2	0.0	15.8	0.0	9.1	7.2	23.3	5.0	0.0
LnGrp LOS				B		B		A	A	C	A	
Approach Vol, veh/h					465			777			772	
Approach Delay, s/veh					14.9			9.1			6.5	
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	6.1	21.3				27.5		14.2
Change Period (Y+Rc), s	4.0	5.3				5.3		4.0
Max Green Setting (Gmax), s	4.0	48.7				66.7		44.0
Max Q Clear Time (g_c+I1), s	3.5	8.6				6.5		9.2
Green Ext Time (p_c), s	0.0	7.3				7.4		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.4
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	110	30	450	10	590	60	400	350	0
Future Volume (veh/h)	0	0	0	110	30	450	10	590	60	400	350	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		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	0	0	0	120	33	194	11	641	65	435	380	0
Adj No. of Lanes	1	2	0	1	2	0	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, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	4	7	0	224	298	267	20	1047	106	505	2098	0
Arrive On Green	0.00	0.00	0.00	0.13	0.17	0.17	0.01	0.32	0.29	0.28	0.59	0.00
Sat Flow, veh/h	1810	3705	0	1792	1787	1596	1810	3306	335	1792	3668	0
Grp Volume(v), veh/h	0	0	0	120	33	194	11	350	356	435	380	0
Grp Sat Flow(s),veh/h/ln	1810	1805	0	1792	1787	1596	1810	1805	1836	1792	1787	0
Q Serve(g_s), s	0.0	0.0	0.0	3.2	0.8	5.9	0.3	8.4	8.4	11.8	2.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.2	0.8	5.9	0.3	8.4	8.4	11.8	2.5	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.18	1.00		0.00
Lane Grp Cap(c), veh/h	4	7	0	224	298	267	20	572	581	505	2098	0
V/C Ratio(X)	0.00	0.00	0.00	0.53	0.11	0.73	0.54	0.61	0.61	0.86	0.18	0.00
Avail Cap(c_a), veh/h	248	1765	0	596	1223	1092	142	1412	1436	1471	5451	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	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	0.0	0.0	0.0	21.0	18.1	20.2	25.1	14.8	14.9	17.4	4.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.0	0.1	1.4	7.9	0.4	0.4	1.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.7	0.4	2.7	0.2	4.2	4.3	6.0	1.2	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	22.9	18.1	21.6	33.0	15.2	15.3	19.2	4.9	0.0
LnGrp LOS				C	B	C	C	B	B	B	A	
Approach Vol, veh/h		0			347			717			815	
Approach Delay, s/veh		0.0			21.8			15.5			12.5	
Approach LOS					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	18.4	20.2	10.4	2.1	4.6	34.0	0.0	12.5
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	42.0	38.7	15.0	25.0	4.0	76.7	5.0	35.0
Max Q Clear Time (g_c+I1), s	13.8	10.4	5.2	0.0	2.3	4.5	0.0	7.9
Green Ext Time (p_c), s	0.7	4.5	0.2	0.0	0.0	4.6	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

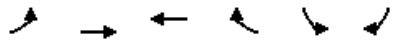
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	400	60	70	410	190	80	90	180	120	30	130
Future Volume (veh/h)	170	400	60	70	410	190	80	90	180	120	30	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	185	435	65	76	446	207	87	98	196	130	33	141
Adj No. of Lanes	1	2	0	1	2	0	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	1546	230	97	1021	470	110	277	248	158	324	290
Arrive On Green	0.12	0.50	0.50	0.05	0.43	0.43	0.06	0.16	0.16	0.09	0.18	0.18
Sat Flow, veh/h	1774	3092	459	1774	2356	1085	1774	1770	1583	1774	1770	1583
Grp Volume(v), veh/h	185	248	252	76	334	319	87	98	196	130	33	141
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1671	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	12.3	9.8	9.9	5.1	15.8	16.0	5.8	5.9	14.3	8.6	1.9	9.6
Cycle Q Clear(g_c), s	12.3	9.8	9.9	5.1	15.8	16.0	5.8	5.9	14.3	8.6	1.9	9.6
Prop In Lane	1.00		0.26	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	885	891	97	767	724	110	277	248	158	324	290
V/C Ratio(X)	0.86	0.28	0.28	0.78	0.44	0.44	0.79	0.35	0.79	0.82	0.10	0.49
Avail Cap(c_a), veh/h	340	885	891	177	767	724	207	277	248	266	324	290
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	17.5	17.5	56.0	23.8	23.8	55.5	45.2	48.7	53.7	40.8	43.9
Incr Delay (d2), s/veh	12.2	0.8	0.8	12.8	1.8	1.9	11.8	0.8	15.8	10.2	0.6	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	4.9	5.0	2.8	8.1	7.7	3.2	3.0	7.4	4.7	1.0	4.7
LnGrp Delay(d),s/veh	63.9	18.2	18.3	68.8	25.6	25.8	67.3	46.0	64.5	64.0	41.4	49.6
LnGrp LOS	E	B	B	E	C	C	E	D	E	E	D	D
Approach Vol, veh/h		685			729			381			304	
Approach Delay, s/veh		30.6			30.2			60.4			54.9	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	24.8	12.6	66.0	13.5	28.0	20.6	58.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	18.0	18.0	12.0	48.0	14.0	22.0	23.0	37.0
Max Q Clear Time (g_c+I1), s	10.6	16.3	7.1	11.9	7.8	11.6	14.3	18.0
Green Ext Time (p_c), s	0.2	0.5	0.1	8.9	0.1	2.1	0.3	7.2

Intersection Summary	
HCM 2010 Ctrl Delay	39.4
HCM 2010 LOS	D

Notes

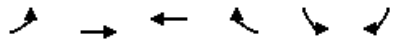
User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	140	470	580	280	220	90
Future Volume (veh/h)	140	470	580	280	220	90
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	152	511	630	304	239	98
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	187	2084	966	466	493	440
Arrive On Green	0.11	0.59	0.42	0.42	0.28	0.28
Sat Flow, veh/h	1774	3632	2410	1118	1774	1583
Grp Volume(v), veh/h	152	511	481	453	239	98
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1665	1774	1583
Q Serve(g_s), s	7.5	6.2	19.6	19.6	10.1	4.3
Cycle Q Clear(g_c), s	7.5	6.2	19.6	19.6	10.1	4.3
Prop In Lane	1.00			0.67	1.00	1.00
Lane Grp Cap(c), veh/h	187	2084	737	694	493	440
V/C Ratio(X)	0.81	0.25	0.65	0.65	0.48	0.22
Avail Cap(c_a), veh/h	296	2084	737	694	493	440
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	39.4	8.9	21.0	21.0	27.1	25.0
Incr Delay (d2), s/veh	8.9	0.3	4.5	4.7	3.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.1	10.4	9.8	5.4	4.3
LnGrp Delay(d),s/veh	48.3	9.2	25.5	25.8	30.5	26.2
LnGrp LOS	D	A	C	C	C	C
Approach Vol, veh/h		663	934		337	
Approach Delay, s/veh		18.1	25.6		29.3	
Approach LOS		B	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				59.0		31.0	15.5	43.5
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				53.0		25.0	15.0	32.0
Max Q Clear Time (g_c+I1), s				8.2		12.1	9.5	21.6
Green Ext Time (p_c), s				12.4		0.8	0.2	6.2

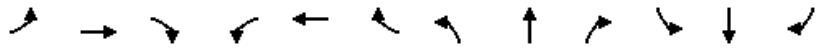
Intersection Summary	
HCM 2010 Ctrl Delay	23.7
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	500	870	980	280	1560	530
Future Volume (veh/h)	500	870	980	280	1560	530
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	543	946	1065	304	1696	576
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	389	3041	1237	553	1194	549
Arrive On Green	0.22	0.60	0.35	0.35	0.34	0.34
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	543	946	1065	304	1696	576
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	30.0	12.6	38.3	21.1	47.0	47.0
Cycle Q Clear(g_c), s	30.0	12.6	38.3	21.1	47.0	47.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	389	3041	1237	553	1194	549
V/C Ratio(X)	1.40	0.31	0.86	0.55	1.42	1.05
Avail Cap(c_a), veh/h	389	3159	1319	590	1194	549
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	53.4	13.6	41.4	35.8	44.9	44.9
Incr Delay (d2), s/veh	193.2	0.0	5.4	0.4	194.2	51.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	55.5	5.9	19.7	9.4	54.6	28.5
LnGrp Delay(d),s/veh	246.6	13.6	46.8	36.3	239.1	96.7
LnGrp LOS	F	B	D	D	F	F
Approach Vol, veh/h		1489	1369		2272	
Approach Delay, s/veh		98.6	44.4		203.0	
Approach LOS		F	D		F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		85.8			34.0	51.8		51.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		83.7			28.0	49.7		45.7
Max Q Clear Time (g_c+I1), s		14.6			32.0	40.3		49.0
Green Ext Time (p_c), s		14.1			0.0	6.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	130.4
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	650	1780	0	0	640	990	620	0	410	0	0	0
Future Volume (veh/h)	650	1780	0	0	640	990	620	0	410	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1845	1845	1845			
Adj Flow Rate, veh/h	707	1935	0	0	947	432	674	0	324			
Adj No. of Lanes	2	3	0	0	2	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	1	1	0	0	1	1	3	3	3			
Cap, veh/h	770	3503	0	0	1593	677	858	0	383			
Arrive On Green	0.22	0.68	0.00	0.00	0.42	0.42	0.24	0.00	0.24			
Sat Flow, veh/h	3476	5305	0	0	3762	1599	3514	0	1568			
Grp Volume(v), veh/h	707	1935	0	0	947	432	674	0	324			
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1881	1599	1757	0	1568			
Q Serve(g_s), s	21.5	20.8	0.0	0.0	21.0	23.1	19.4	0.0	21.3			
Cycle Q Clear(g_c), s	21.5	20.8	0.0	0.0	21.0	23.1	19.4	0.0	21.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	770	3503	0	0	1593	677	858	0	383			
V/C Ratio(X)	0.92	0.55	0.00	0.00	0.59	0.64	0.79	0.00	0.85			
Avail Cap(c_a), veh/h	834	4062	0	0	1934	822	1502	0	670			
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	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	41.2	8.8	0.0	0.0	24.1	24.7	38.3	0.0	39.0			
Incr Delay (d2), s/veh	13.7	0.1	0.0	0.0	0.1	0.6	0.6	0.0	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			
%ile BackOfQ(50%),veh/ln	11.8	9.7	0.0	0.0	10.9	10.3	9.5	0.0	17.3			
LnGrp Delay(d),s/veh	54.9	8.8	0.0	0.0	24.2	25.3	38.9	0.0	41.0			
LnGrp LOS	D	A			C	C	D		D			
Approach Vol, veh/h		2642			1379			998				
Approach Delay, s/veh		21.2			24.5			39.6				
Approach LOS		C			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		77.9		30.4	28.0	49.9		
Change Period (Y+Rc), s		5.3		5.3	4.0	5.3		
Max Green Setting (Gmax), s		84.4		45.0	26.0	54.4		
Max Q Clear Time (g_c+I1), s		22.8		23.3	23.5	25.1		
Green Ext Time (p_c), s		29.0		1.8	0.5	19.5		

Intersection Summary		
HCM 2010 Ctrl Delay		25.8
HCM 2010 LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	32.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	380	120	180	420	80
Future Vol, veh/h	60	380	120	180	420	80
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, %	0	0	0	0	0	0
Mvmt Flow	65	413	130	196	457	87

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1228	228	0	0	326	0
Stage 1	228	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	199	816	-	-	1245	-
Stage 1	815	-	-	-	-	-
Stage 2	359	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	122	816	-	-	1245	-
Mov Cap-2 Maneuver	122	-	-	-	-	-
Stage 1	815	-	-	-	-	-
Stage 2	220	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	82.9	0	8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	460	1245	-
HCM Lane V/C Ratio	-	-	1.04	0.367	-
HCM Control Delay (s)	-	-	82.9	9.6	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	14.6	1.7	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	360	1280	1060	60	690	1010
Future Volume (veh/h)	360	1280	1060	60	690	1010
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1863	1863	1776	1776
Adj Flow Rate, veh/h	391	1391	1152	-133	750	828
Adj No. of Lanes	2	2	3	1	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	7	7
Cap, veh/h	400	1734	1687	525	741	1470
Arrive On Green	0.12	0.49	0.33	0.00	0.44	0.44
Sat Flow, veh/h	3476	3668	5253	1583	1691	2656
Grp Volume(v), veh/h	391	1391	1152	-133	750	828
Grp Sat Flow(s),veh/h/ln	1738	1787	1695	1583	1691	1328
Q Serve(g_s), s	11.7	34.2	20.4	0.0	45.7	21.1
Cycle Q Clear(g_c), s	11.7	34.2	20.4	0.0	45.7	21.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	400	1734	1687	525	741	1470
V/C Ratio(X)	0.98	0.80	0.68	-0.25	1.01	0.56
Avail Cap(c_a), veh/h	400	1929	1965	612	741	1470
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	46.0	22.6	30.1	0.0	29.3	15.1
Incr Delay (d2), s/veh	38.9	2.0	0.5	0.0	36.1	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	7.8	17.3	9.6	0.0	28.6	17.4
LnGrp Delay(d),s/veh	84.9	24.6	30.7	0.0	65.4	15.4
LnGrp LOS	F	C	C		F	B
Approach Vol, veh/h		1782	1019		1578	
Approach Delay, s/veh		37.9	34.7		39.2	
Approach LOS		D	C		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				54.6		49.7	16.0	38.6
Change Period (Y+Rc), s				5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s				55.0		45.7	12.0	39.0
Max Q Clear Time (g_c+I1), s				36.2		47.7	13.7	22.4
Green Ext Time (p_c), s				11.8		0.0	0.0	10.9

Intersection Summary	
HCM 2010 Ctrl Delay	37.6
HCM 2010 LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1640	330	0	870	250	230
Future Volume (veh/h)	1640	330	0	870	250	230
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	1783	359	0	946	272	250
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2266	1014	0	2266	977	450
Arrive On Green	0.64	0.64	0.00	0.64	0.28	0.28
Sat Flow, veh/h	3632	1583	0	3725	3442	1583
Grp Volume(v), veh/h	1783	359	0	946	272	250
Grp Sat Flow(s),veh/h/ln	1770	1583	0	1770	1721	1583
Q Serve(g_s), s	38.6	11.1	0.0	13.9	6.5	14.2
Cycle Q Clear(g_c), s	38.6	11.1	0.0	13.9	6.5	14.2
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2266	1014	0	2266	977	450
V/C Ratio(X)	0.79	0.35	0.00	0.42	0.28	0.56
Avail Cap(c_a), veh/h	2413	1079	0	2413	977	450
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	13.8	8.8	0.0	9.3	29.4	32.1
Incr Delay (d2), s/veh	1.7	0.2	0.0	0.1	0.7	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	4.8	0.0	6.7	3.2	6.8
LnGrp Delay(d),s/veh	15.5	9.0	0.0	9.5	30.1	37.0
LnGrp LOS	B	A		A	C	D
Approach Vol, veh/h	2142			946	522	
Approach Delay, s/veh	14.4			9.5	33.4	
Approach LOS	B			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		34.0		71.6				71.6
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		29.5		71.5				71.5
Max Q Clear Time (g_c+I1), s		16.2		40.6				15.9
Green Ext Time (p_c), s		1.6		26.5				43.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	560	840	300	270	540	170
Future Volume (veh/h)	560	840	300	270	540	170
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1397	1397	1845	1845
Adj Flow Rate, veh/h	609	247	326	293	587	159
Adj No. of Lanes	2	1	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	36	36	3	3
Cap, veh/h	1070	473	543	835	794	365
Arrive On Green	0.30	0.30	0.21	0.60	0.23	0.23
Sat Flow, veh/h	3632	1565	2581	1397	3408	1568
Grp Volume(v), veh/h	609	247	326	293	587	159
Grp Sat Flow(s),veh/h/ln	1770	1565	1291	1397	1704	1568
Q Serve(g_s), s	6.8	6.2	5.4	5.0	7.5	4.1
Cycle Q Clear(g_c), s	6.8	6.2	5.4	5.0	7.5	4.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1070	473	543	835	794	365
V/C Ratio(X)	0.57	0.52	0.60	0.35	0.74	0.44
Avail Cap(c_a), veh/h	5778	2555	876	2873	2529	1164
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	13.9	13.6	16.8	4.8	16.8	15.4
Incr Delay (d2), s/veh	0.2	0.3	1.1	0.1	0.5	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	3.3	2.7	2.0	1.9	3.6	1.8
LnGrp Delay(d),s/veh	14.0	14.0	17.9	4.9	17.3	15.7
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	856			619	746	
Approach Delay, s/veh	14.0			11.8	17.0	
Approach LOS	B			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		15.0	13.9	18.3				32.2
Change Period (Y+Rc), s		4.0	6.0	4.6				4.6
Max Green Setting (Gmax), s		35.0	14.0	76.4				96.4
Max Q Clear Time (g_c+I1), s		9.5	7.4	8.8				7.0
Green Ext Time (p_c), s		1.5	0.6	4.2				4.2

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	370	0	450	1163	897	0	0	822	540
Future Volume (veh/h)	0	0	0	370	0	450	1163	897	0	0	822	540
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		0.99
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				1881	0	1881	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				402	0	329	1264	975	0	0	893	265
Adj No. of Lanes				2	0	1	2	2	0	0	4	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				1	0	1	2	2	0	0	2	2
Cap, veh/h				809	0	372	1342	2405	0	0	1650	405
Arrive On Green				0.23	0.00	0.23	0.39	0.68	0.00	0.00	0.26	0.26
Sat Flow, veh/h				3476	0	1599	3442	3632	0	0	6669	1571
Grp Volume(v), veh/h				402	0	329	1264	975	0	0	893	265
Grp Sat Flow(s),veh/h/ln				1738	0	1599	1721	1770	0	0	1602	1571
Q Serve(g_s), s				11.0	0.0	21.8	38.8	13.3	0.0	0.0	13.2	16.5
Cycle Q Clear(g_c), s				11.0	0.0	21.8	38.8	13.3	0.0	0.0	13.2	16.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				809	0	372	1342	2405	0	0	1650	405
V/C Ratio(X)				0.50	0.00	0.88	0.94	0.41	0.00	0.00	0.54	0.66
Avail Cap(c_a), veh/h				1340	0	617	1431	2852	0	0	2295	563
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				36.4	0.0	40.6	32.2	7.8	0.0	0.0	35.1	36.3
Incr Delay (d2), s/veh				0.2	0.0	4.8	11.8	0.0	0.0	0.0	0.1	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.3	0.0	10.1	20.5	6.5	0.0	0.0	5.8	7.2
LnGrp Delay(d),s/veh				36.6	0.0	45.3	43.9	7.8	0.0	0.0	35.2	37.0
LnGrp LOS				D		D	D	A			D	D
Approach Vol, veh/h					731			2239			1158	
Approach Delay, s/veh					40.5			28.2			35.6	
Approach LOS					D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		79.2			46.2	33.0		30.3
Change Period (Y+Rc), s		5.3			4.0	5.3		5.3
Max Green Setting (Gmax), s		87.7			45.0	38.7		41.7
Max Q Clear Time (g_c+I1), s		15.3			40.8	18.5		23.8
Green Ext Time (p_c), s		12.2			1.4	9.2		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	32.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	10	639	0	0	0	0	1650	210	290	902	0
Future Volume (veh/h)	410	10	639	0	0	0	0	1650	210	290	902	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845				0	1881	1900	1863	1863	0
Adj Flow Rate, veh/h	446	0	702				0	1793	213	315	980	0
Adj No. of Lanes	2	0	2				0	4	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3				0	1	1	2	2	0
Cap, veh/h	1026	0	916				0	2626	312	413	2143	0
Arrive On Green	0.29	0.00	0.29				0.00	0.44	0.44	0.12	0.61	0.00
Sat Flow, veh/h	3514	0	3136				0	6171	702	3442	3632	0
Grp Volume(v), veh/h	446	0	702				0	1473	533	315	980	0
Grp Sat Flow(s),veh/h/ln	1757	0	1568				0	1618	1756	1721	1770	0
Q Serve(g_s), s	8.8	0.0	17.5				0.0	20.8	20.8	7.6	13.0	0.0
Cycle Q Clear(g_c), s	8.8	0.0	17.5				0.0	20.8	20.8	7.6	13.0	0.0
Prop In Lane	1.00		1.00				0.00		0.40	1.00		0.00
Lane Grp Cap(c), veh/h	1026	0	916				0	2157	781	413	2143	0
V/C Ratio(X)	0.43	0.00	0.77				0.00	0.68	0.68	0.76	0.46	0.00
Avail Cap(c_a), veh/h	2823	0	2520				0	2555	924	541	2617	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	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.6	0.0	27.7				0.0	19.0	19.1	36.6	9.2	0.0
Incr Delay (d2), s/veh	0.3	0.0	1.4				0.0	0.4	1.1	3.1	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
%ile BackOfQ(50%),veh/ln	4.3	0.0	7.8				0.0	9.4	10.3	3.8	6.3	0.0
LnGrp Delay(d),s/veh	24.9	0.0	29.1				0.0	19.4	20.2	39.7	9.3	0.0
LnGrp LOS	C		C					B	C	D	A	
Approach Vol, veh/h		1148						2006			1295	
Approach Delay, s/veh		27.5						19.6			16.7	
Approach LOS		C						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	13.8	43.0		29.1		56.8		
Change Period (Y+Rc), s	4.0	5.3		4.5		* 5.3		
Max Green Setting (Gmax), s	13.8	44.7		68.5		* 63		
Max Q Clear Time (g_c+I1), s	19.6	22.8		19.5		15.0		
Green Ext Time (p_c), s	0.2	14.8		5.1		23.1		

Intersection Summary	
HCM 2010 Ctrl Delay	20.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	30	110	455	60	130	190	590	1280	120	720	100
Future Volume (veh/h)	30	30	110	455	60	130	190	590	1280	120	720	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		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1827	1827	1900	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	33	33	33	495	65	99	207	641	702	130	783	106
Adj No. of Lanes	1	1	0	3	1	0	1	2	2	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, %	8	8	8	4	4	4	2	2	2	5	5	5
Cap, veh/h	59	84	84	694	138	210	263	1436	1112	191	1121	152
Arrive On Green	0.04	0.10	0.10	0.14	0.21	0.20	0.15	0.41	0.41	0.11	0.37	0.36
Sat Flow, veh/h	1675	802	802	4907	654	997	1774	3539	2742	1723	3043	412
Grp Volume(v), veh/h	33	0	66	495	0	164	207	641	702	130	442	447
Grp Sat Flow(s),veh/h/ln	1675	0	1603	1636	0	1651	1774	1770	1371	1723	1719	1736
Q Serve(g_s), s	1.3	0.0	2.5	6.3	0.0	5.7	7.3	8.6	13.4	4.7	14.3	14.3
Cycle Q Clear(g_c), s	1.3	0.0	2.5	6.3	0.0	5.7	7.3	8.6	13.4	4.7	14.3	14.3
Prop In Lane	1.00		0.50	1.00		0.60	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	59	0	168	694	0	348	263	1436	1112	191	633	639
V/C Ratio(X)	0.56	0.00	0.39	0.71	0.00	0.47	0.79	0.45	0.63	0.68	0.70	0.70
Avail Cap(c_a), veh/h	115	0	930	939	0	1160	339	1929	1494	224	832	840
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	0.0	27.4	26.8	0.0	22.7	26.8	14.1	15.5	27.9	17.6	17.6
Incr Delay (d2), s/veh	3.1	0.0	0.6	0.8	0.0	0.4	6.6	0.1	0.2	4.4	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	1.1	2.9	0.0	2.6	4.0	4.2	5.1	2.5	6.9	7.0
LnGrp Delay(d),s/veh	34.1	0.0	28.0	27.6	0.0	23.1	33.4	14.2	15.7	32.3	18.5	18.5
LnGrp LOS	C		C	C		C	C	B	B	C	B	B
Approach Vol, veh/h		99			659			1550			1019	
Approach Delay, s/veh		30.0			26.5			17.4			20.3	
Approach LOS		C			C			B			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	10.8	30.9	12.7	10.9	13.2	28.5	5.8	17.9
Change Period (Y+Rc), s	4.0	4.9	4.0	4.6	4.0	4.9	4.0	4.6
Max Green Setting (Gmax), s	8.6	35.1	12.0	37.4	12.0	31.1	4.0	45.4
Max Q Clear Time (g_c+I1), s	10.7	15.4	8.3	4.5	9.3	16.3	3.3	7.7
Green Ext Time (p_c), s	0.0	8.3	0.4	0.8	0.1	7.2	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	20.5
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	0	1126	0	0	0	0	1830	423	210	975	0
Future Volume (veh/h)	230	0	1126	0	0	0	0	1830	423	210	975	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	60				0	60	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	250	0	952				0	1989	460	228	1060	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	771	0	805				0	2595	407	311	3412	0
Arrive On Green	0.07	0.00	0.07				0.00	0.18	0.18	0.03	0.23	0.00
Sat Flow, veh/h	3442	0	3610				0	4825	938	3343	5103	0
Grp Volume(v), veh/h	250	0	952				0	1633	816	228	1060	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1665	1672	1647	0
Q Serve(g_s), s	7.4	0.0	24.2				0.0	50.7	51.1	7.2	19.1	0.0
Cycle Q Clear(g_c), s	7.4	0.0	24.2				0.0	50.7	51.1	7.2	19.1	0.0
Prop In Lane	1.00		1.00				0.00		0.56	1.00		0.00
Lane Grp Cap(c), veh/h	771	0	805				0	1868	947	311	3412	0
V/C Ratio(X)	0.32	0.00	1.18				0.00	0.87	0.86	0.73	0.31	0.00
Avail Cap(c_a), veh/h	779	0	817				0	1901	944	391	3396	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.2	0.0	50.2				0.0	43.2	41.7	51.0	20.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	94.5				0.0	4.6	7.9	3.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	193.1				0.0	33.1	13.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	35.1				0.0	24.5	31.2	3.5	8.8	0.0
LnGrp Delay(d),s/veh	42.3	0.0	337.8				0.0	80.9	62.6	54.6	20.3	0.0
LnGrp LOS	D		F					F	E	D	C	
Approach Vol, veh/h		1202						2449			1288	
Approach Delay, s/veh		276.4						74.8			26.4	
Approach LOS		F						E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.4	63.5		29.0		77.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	12.6	* 60		23.7		50.1		
Max Q Clear Time (g_c+I1), s	9.2	53.1		26.2		21.1		
Green Ext Time (p_c), s	0.3	5.5		0.0		5.4		

Intersection Summary	
HCM 2010 Ctrl Delay	111.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	30	30	200	40	250	40	2002	200	190	921	30
Future Volume (veh/h)	40	30	30	200	40	250	40	2002	200	190	921	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		0.98	1.00		1.00	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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	33	13	217	43	45	43	2176	213	207	1001	32
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	78	60	113	254	267	226	62	1989	191	212	2226	71
Arrive On Green	0.08	0.08	0.07	0.14	0.14	0.14	0.03	0.61	0.61	0.06	0.64	0.63
Sat Flow, veh/h	1015	779	1536	1792	1881	1596	1774	3262	314	3442	3498	112
Grp Volume(v), veh/h	76	0	13	217	43	45	43	1164	1225	207	506	527
Grp Sat Flow(s),veh/h/ln	1794	0	1536	1792	1881	1596	1774	1770	1806	1721	1770	1840
Q Serve(g_s), s	5.6	0.0	1.1	16.4	2.8	3.4	3.3	84.3	84.3	8.3	20.2	20.2
Cycle Q Clear(g_c), s	5.6	0.0	1.1	16.4	2.8	3.4	3.3	84.3	84.3	8.3	20.2	20.2
Prop In Lane	0.57		1.00	1.00		1.00	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	138	0	113	254	267	226	62	1079	1101	212	1126	1171
V/C Ratio(X)	0.55	0.00	0.12	0.85	0.16	0.20	0.70	1.08	1.11	0.98	0.45	0.45
Avail Cap(c_a), veh/h	461	0	389	473	497	421	122	1079	1101	212	1126	1171
HCM Platoon Ratio	1.00	1.00	1.00	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	61.5	0.0	59.9	57.9	52.1	52.4	66.0	27.0	27.0	64.8	12.8	12.8
Incr Delay (d2), s/veh	1.3	0.0	0.2	3.2	0.1	0.2	5.2	51.3	63.5	55.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.5	8.3	1.5	1.5	1.7	56.1	61.0	5.6	9.9	10.3
LnGrp Delay(d),s/veh	62.8	0.0	60.0	61.1	52.2	52.5	71.2	78.3	90.5	120.1	12.9	12.9
LnGrp LOS	E		E	E	D	D	E	F	F	F	B	B
Approach Vol, veh/h		89			305			2432			1240	
Approach Delay, s/veh		62.4			58.6			84.3			30.8	
Approach LOS		E			E			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	88.4		14.2	8.3	92.1		23.7
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	8.0	83.8		35.0	9.0	82.8		36.0
Max Q Clear Time (g_c+I1), s	10.3	86.3		7.6	5.3	22.2		18.4
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	38.4		0.4

Intersection Summary		
HCM 2010 Ctrl Delay	65.6	
HCM 2010 LOS	E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	140	100	70	220	910	70	903	30	510	941	140
Future Volume (veh/h)	140	140	100	70	220	910	70	903	30	510	941	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1881	1881	1881	1881	1881	1900	1863	1863	1863
Adj Flow Rate, veh/h	152	152	38	76	239	989	76	982	32	554	1023	79
Adj No. of Lanes	1	2	0	1	1	2	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	183	931	226	103	536	1495	267	1097	36	629	1183	692
Arrive On Green	0.10	0.33	0.33	0.06	0.28	0.28	0.15	0.31	0.31	0.18	0.33	0.33
Sat Flow, veh/h	1774	2815	683	1792	1881	3198	1792	3531	115	3442	3539	1580
Grp Volume(v), veh/h	152	94	96	76	239	989	76	497	517	554	1023	79
Grp Sat Flow(s),veh/h/ln	1774	1770	1729	1792	1881	1599	1792	1787	1859	1721	1770	1580
Q Serve(g_s), s	11.2	5.0	5.3	5.6	13.9	31.9	5.0	35.5	35.5	21.0	36.2	2.2
Cycle Q Clear(g_c), s	11.2	5.0	5.3	5.6	13.9	31.9	5.0	35.5	35.5	21.0	36.2	2.2
Prop In Lane	1.00		0.40	1.00		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	183	585	571	103	536	1495	267	555	577	629	1183	692
V/C Ratio(X)	0.83	0.16	0.17	0.74	0.45	0.66	0.28	0.90	0.90	0.88	0.86	0.11
Avail Cap(c_a), veh/h	259	739	722	194	716	1801	267	777	809	913	2095	1099
HCM Platoon Ratio	1.00	1.00	1.00	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	58.9	31.7	31.8	62.1	39.2	27.5	50.6	44.1	44.1	53.3	41.7	9.2
Incr Delay (d2), s/veh	10.3	0.0	0.1	3.9	0.2	0.4	0.2	8.0	7.7	5.3	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	2.5	2.5	2.9	7.3	14.1	2.5	18.8	19.5	10.5	17.7	1.1
LnGrp Delay(d),s/veh	69.2	31.7	31.9	66.0	39.4	27.9	50.8	52.1	51.8	58.6	42.5	9.2
LnGrp LOS	E	C	C	E	D	C	D	D	D	E	D	A
Approach Vol, veh/h		342			1304			1090			1656	
Approach Delay, s/veh		48.4			32.2			51.8			46.3	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	46.4	11.2	48.3	24.8	49.5	17.3	42.2
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	5.3	* 5.3	4.0	4.6
Max Green Setting (Gmax), s	35.6	57.7	14.0	55.4	14.0	* 79	19.0	50.4
Max Q Clear Time (g_c+I1), s	13.6	37.5	7.6	7.3	7.0	38.2	13.2	33.9
Green Ext Time (p_c), s	1.0	3.5	0.0	4.1	2.4	6.0	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	43.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	60	672	10	100	60	907	1470	20	70	861	160
Future Volume (veh/h)	200	60	672	10	100	60	907	1470	20	70	861	160
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1881	1881	1881	1900	1863	1863	1881	1881	1881	1863	1863	1900
Adj Flow Rate, veh/h	217	65	215	11	109	14	986	1598	14	76	936	156
Adj No. of Lanes	1	1	2	0	1	1	2	2	1	1	3	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, %	1	1	1	2	2	2	1	1	1	2	2	2
Cap, veh/h	258	271	405	16	163	150	1071	1950	853	105	1299	216
Arrive On Green	0.14	0.14	0.14	0.10	0.10	0.10	0.31	0.55	0.55	0.06	0.30	0.29
Sat Flow, veh/h	1792	1881	2814	170	1684	1551	3476	3574	1563	1774	4380	727
Grp Volume(v), veh/h	217	65	215	120	0	14	986	1598	14	76	724	368
Grp Sat Flow(s),veh/h/ln	1792	1881	1407	1854	0	1551	1738	1787	1563	1774	1695	1717
Q Serve(g_s), s	12.3	3.2	7.4	6.5	0.0	0.9	28.7	38.5	0.4	4.4	20.0	20.1
Cycle Q Clear(g_c), s	12.3	3.2	7.4	6.5	0.0	0.9	28.7	38.5	0.4	4.4	20.0	20.1
Prop In Lane	1.00		1.00	0.09		1.00	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	258	271	405	179	0	150	1071	1950	853	105	1005	509
V/C Ratio(X)	0.84	0.24	0.53	0.67	0.00	0.09	0.92	0.82	0.02	0.72	0.72	0.72
Avail Cap(c_a), veh/h	281	295	441	700	0	585	1179	2097	917	110	1072	543
HCM Platoon Ratio	1.00	1.00	1.00	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	43.6	39.7	41.5	45.7	0.0	43.1	35.0	19.6	10.9	48.4	32.9	33.1
Incr Delay (d2), s/veh	17.4	0.2	0.4	1.6	0.0	0.1	10.5	2.3	0.0	16.9	1.8	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	7.3	1.7	2.9	3.4	0.0	0.4	15.3	19.5	0.2	2.6	9.6	10.0
LnGrp Delay(d),s/veh	61.0	39.9	41.9	47.3	0.0	43.2	45.5	21.8	10.9	65.2	34.7	36.7
LnGrp LOS	E	D	D	D		D	D	C	B	E	C	D
Approach Vol, veh/h		497			134			2598			1168	
Approach Delay, s/veh		50.0			46.9			30.8			37.4	
Approach LOS		D			D			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	9.7	61.9		19.5	35.7	35.8		13.6
Change Period (Y+Rc), s	4.0	5.3		4.9	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	6.0	60.9		15.9	35.0	* 33		39.0
Max Q Clear Time (g_c+I1), s	10.4	40.5		14.3	30.7	22.1		8.5
Green Ext Time (p_c), s	0.0	13.7		0.2	1.1	8.2		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	35.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	993	260	203	1398	80	459	150	181	70	181	120
Future Volume (veh/h)	50	993	260	203	1398	80	459	150	181	70	181	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		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	54	1079	199	221	1520	37	499	163	60	76	197	116
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	76	1318	580	252	1669	730	469	591	483	103	261	153
Arrive On Green	0.04	0.37	0.37	0.14	0.47	0.47	0.13	0.31	0.31	0.06	0.24	0.23
Sat Flow, veh/h	1792	3574	1574	1792	3574	1563	3476	1881	1557	1810	1104	650
Grp Volume(v), veh/h	54	1079	199	221	1520	37	499	163	60	76	0	313
Grp Sat Flow(s),veh/h/ln	1792	1787	1574	1792	1787	1563	1738	1881	1557	1810	0	1753
Q Serve(g_s), s	3.9	35.4	11.9	15.7	51.2	1.7	17.5	8.4	3.6	5.4	0.0	21.5
Cycle Q Clear(g_c), s	3.9	35.4	11.9	15.7	51.2	1.7	17.5	8.4	3.6	5.4	0.0	21.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	76	1318	580	252	1669	730	469	591	483	103	0	414
V/C Ratio(X)	0.71	0.82	0.34	0.88	0.91	0.05	1.06	0.28	0.12	0.74	0.00	0.76
Avail Cap(c_a), veh/h	90	1331	586	283	1716	750	469	641	525	160	0	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.3	37.0	29.6	54.6	32.1	18.9	56.1	33.4	32.1	60.2	0.0	46.2
Incr Delay (d2), s/veh	13.8	3.8	0.1	21.8	7.4	0.0	59.7	0.1	0.0	3.8	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	18.1	5.2	9.3	26.8	0.7	12.2	4.4	1.5	2.8	0.0	10.9
LnGrp Delay(d),s/veh	75.1	40.9	29.7	76.4	39.4	18.9	115.8	33.5	32.1	64.0	0.0	49.7
LnGrp LOS	E	D	C	E	D	B	F	C	C	E		D
Approach Vol, veh/h		1332			1778			722			389	
Approach Delay, s/veh		40.6			43.6			90.3			52.5	
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	10.9	45.5	21.8	51.5	21.0	35.4	9.0	64.3
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	11.0	43.7	20.0	* 48	17.0	37.7	6.0	* 62
Max Q Clear Time (g_c+I1), s	7.4	10.4	17.7	37.4	19.5	23.5	5.9	53.2
Green Ext Time (p_c), s	0.0	1.7	0.1	8.1	0.0	1.5	0.0	6.9

Intersection Summary	
HCM 2010 Ctrl Delay	51.5
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	741	308	320	950	300	488	413	168	340	557	20
Future Volume (veh/h)	40	741	308	320	950	300	488	413	168	340	557	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	805	119	348	1033	173	530	449	166	370	605	20
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	63	1433	210	422	1232	206	593	739	271	444	873	29
Arrive On Green	0.03	0.32	0.32	0.12	0.41	0.41	0.17	0.29	0.29	0.13	0.25	0.24
Sat Flow, veh/h	1792	4492	658	3442	3028	506	3476	2546	932	3476	3527	116
Grp Volume(v), veh/h	43	612	312	348	603	603	530	314	301	370	306	319
Grp Sat Flow(s),veh/h/ln	1792	1712	1726	1721	1770	1765	1738	1787	1691	1738	1787	1856
Q Serve(g_s), s	2.8	17.6	17.8	11.7	36.3	36.5	17.7	17.9	18.2	12.3	18.4	18.5
Cycle Q Clear(g_c), s	2.8	17.6	17.8	11.7	36.3	36.5	17.7	17.9	18.2	12.3	18.4	18.5
Prop In Lane	1.00		0.38	1.00		0.29	1.00		0.55	1.00		0.06
Lane Grp Cap(c), veh/h	63	1093	551	422	720	718	593	519	491	444	442	459
V/C Ratio(X)	0.69	0.56	0.57	0.82	0.84	0.84	0.89	0.60	0.61	0.83	0.69	0.69
Avail Cap(c_a), veh/h	68	1283	647	567	887	885	602	603	571	572	588	611
HCM Platoon Ratio	1.00	1.00	1.00	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	56.5	33.4	33.5	50.7	31.6	31.7	48.1	36.2	36.4	50.4	40.5	40.5
Incr Delay (d2), s/veh	18.0	0.2	0.3	5.4	5.0	5.1	15.1	0.6	0.8	6.5	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	1.7	8.4	8.5	5.9	18.7	18.8	9.7	8.9	8.6	6.3	9.2	9.6
LnGrp Delay(d),s/veh	74.5	33.6	33.9	56.2	36.6	36.8	63.1	36.8	37.2	56.9	41.6	41.6
LnGrp LOS	E	C	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		967			1554			1145			995	
Approach Delay, s/veh		35.5			41.0			49.1			47.3	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	39.2	18.0	42.6	23.7	34.1	7.6	53.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	14.6	39.5	19.0	43.9	20.0	38.5	4.0	58.9
Max Q Clear Time (g_c+I1), s	11.3	20.2	13.7	19.8	19.7	20.5	4.8	38.5
Green Ext Time (p_c), s	0.3	4.3	0.3	9.9	0.1	4.3	0.0	9.2

Intersection Summary		
HCM 2010 Ctrl Delay		43.2
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	311	653	60	100	1090	310	290	450	240	360	202	315
Future Volume (veh/h)	311	653	60	100	1090	310	290	450	240	360	202	315
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	338	710	54	109	1185	223	315	489	237	391	220	150
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	366	2084	158	121	1495	463	345	582	280	460	672	295
Arrive On Green	0.21	0.43	0.43	0.07	0.29	0.29	0.19	0.25	0.24	0.13	0.19	0.19
Sat Flow, veh/h	1774	4818	364	1774	5085	1575	1792	2340	1128	3476	3574	1567
Grp Volume(v), veh/h	338	498	266	109	1185	223	315	373	353	391	220	150
Grp Sat Flow(s),veh/h/ln	1774	1695	1792	1774	1695	1575	1792	1787	1681	1738	1787	1567
Q Serve(g_s), s	26.1	13.7	13.8	8.5	30.0	16.3	24.1	27.7	28.0	15.4	7.4	12.0
Cycle Q Clear(g_c), s	26.1	13.7	13.8	8.5	30.0	16.3	24.1	27.7	28.0	15.4	7.4	12.0
Prop In Lane	1.00		0.20	1.00		1.00	1.00		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	366	1467	775	121	1495	463	345	444	418	460	672	295
V/C Ratio(X)	0.92	0.34	0.34	0.90	0.79	0.48	0.91	0.84	0.85	0.85	0.33	0.51
Avail Cap(c_a), veh/h	438	1775	938	121	1753	543	506	629	591	783	1053	462
HCM Platoon Ratio	1.00	1.00	1.00	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	54.4	26.4	26.4	64.7	45.4	40.6	55.3	49.9	50.1	59.3	49.1	51.0
Incr Delay (d2), s/veh	21.1	0.1	0.1	52.4	1.8	0.3	12.6	5.0	5.6	1.7	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.9	6.4	6.9	5.9	14.3	7.1	13.1	14.3	13.6	7.5	3.7	5.2
LnGrp Delay(d),s/veh	75.5	26.4	26.5	117.2	47.3	40.9	67.9	54.9	55.8	61.1	49.2	51.5
LnGrp LOS	E	C	C	F	D	D	E	D	E	E	D	D
Approach Vol, veh/h		1102			1517			1041			761	
Approach Delay, s/veh		41.5			51.4			59.1			55.8	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	39.6	13.0	65.3	30.4	31.1	32.4	45.9
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	18.0	48.7	9.0	72.7	39.0	40.7	34.0	47.7
Max Q Clear Time (g_c+I1), s	17.4	30.0	10.5	15.8	26.1	14.0	28.1	32.0
Green Ext Time (p_c), s	0.6	3.6	0.0	12.1	0.4	3.9	0.3	8.1

Intersection Summary	
HCM 2010 Ctrl Delay	51.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1211	550	90	1484	0	0	0	0	460	10	770
Future Volume (veh/h)	0	1211	550	90	1484	0	0	0	0	460	10	770
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1316	263	98	1613	0				508	0	808
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1609	501	114	2043	0				1875	0	837
Arrive On Green	0.00	0.31	0.31	0.06	0.40	0.00				0.53	0.00	0.53
Sat Flow, veh/h	0	5305	1597	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1316	263	98	1613	0				508	0	808
Grp Sat Flow(s),veh/h/ln	0	1712	1597	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	30.8	17.6	6.4	35.9	0.0				10.3	0.0	64.0
Cycle Q Clear(g_c), s	0.0	30.8	17.6	6.4	35.9	0.0				10.3	0.0	64.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1609	501	114	2043	0				1875	0	837
V/C Ratio(X)	0.00	0.82	0.53	0.86	0.79	0.00				0.27	0.00	0.97
Avail Cap(c_a), veh/h	0	1665	518	114	2099	0				2104	0	939
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	41.3	36.7	60.8	34.4	0.0				16.9	0.0	29.6
Incr Delay (d2), s/veh	0.0	3.0	0.4	43.7	1.9	0.0				0.0	0.0	19.8
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	0.0	14.9	7.8	2.4	17.2	0.0				5.0	0.0	32.4
LnGrp Delay(d),s/veh	0.0	44.2	37.1	104.6	36.3	0.0				16.9	0.0	49.3
LnGrp LOS		D	D	F	D					B		D
Approach Vol, veh/h		1579			1711						1316	
Approach Delay, s/veh		43.0			40.2						36.8	
Approach LOS		D			D						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	11.0	45.6		73.6		56.6		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	7.0	41.7		76.7		52.7		
Max Q Clear Time (g_c+I1), s	19.4	32.8		66.0		37.9		
Green Ext Time (p_c), s	0.0	7.5		2.3		11.5		

Intersection Summary	
HCM 2010 Ctrl Delay	40.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1091	580	140	904	720	670	20	750	0	0	0
Future Volume (veh/h)	0	1091	580	140	904	720	670	20	750	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	0	1186	395	152	983	469	744	0	665			
Adj No. of Lanes	0	3	1	1	3	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	1788	556	88	2236	676	1613	0	719			
Arrive On Green	0.00	0.35	0.35	0.05	0.44	0.44	0.45	0.00	0.45			
Sat Flow, veh/h	0	5253	1581	1774	5085	1536	3548	0	1582			
Grp Volume(v), veh/h	0	1186	395	152	983	469	744	0	665			
Grp Sat Flow(s),veh/h/ln	0	1695	1581	1774	1695	1536	1774	0	1582			
Q Serve(g_s), s	0.0	17.9	19.6	4.5	12.2	22.4	13.1	0.0	35.9			
Cycle Q Clear(g_c), s	0.0	17.9	19.6	4.5	12.2	22.4	13.1	0.0	35.9			
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	1788	556	88	2236	676	1613	0	719			
V/C Ratio(X)	0.00	0.66	0.71	1.73	0.44	0.69	0.46	0.00	0.92			
Avail Cap(c_a), veh/h	0	2027	630	88	2475	748	2587	0	1154			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	24.9	25.4	43.2	17.7	20.5	17.1	0.0	23.3			
Incr Delay (d2), s/veh	0.0	0.5	2.4	370.9	0.1	1.9	0.1	0.0	5.8			
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	0.0	8.4	8.9	11.2	5.7	9.7	6.4	0.0	16.7			
LnGrp Delay(d),s/veh	0.0	25.4	27.9	414.1	17.7	22.4	17.2	0.0	29.1			
LnGrp LOS		C	C	F	B	C	B		C			
Approach Vol, veh/h		1581			1604			1409				
Approach Delay, s/veh		26.0			56.6			22.8				
Approach LOS		C			E			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	8.0	36.7		46.1		44.7		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	4.0	35.7		65.7		43.7		
Max Q Clear Time (g_c+I1), s	6.5	21.6		37.9		24.4		
Green Ext Time (p_c), s	0.0	9.7		2.8		12.1		

Intersection Summary	
HCM 2010 Ctrl Delay	35.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	90	12	115	60	340	12	297	93	250	170	30
Future Volume (veh/h)	40	90	12	115	60	340	12	297	93	250	170	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		0.98	1.00		0.97	1.00		0.96	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	1845	1845	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	98	11	125	65	208	13	323	94	272	185	18
Adj No. of Lanes	1	1	0	1	1	0	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, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	135	358	40	197	96	307	137	593	169	345	1100	106
Arrive On Green	0.08	0.22	0.21	0.11	0.25	0.25	0.08	0.22	0.21	0.19	0.33	0.33
Sat Flow, veh/h	1774	1642	184	1757	378	1209	1792	2719	776	1792	3291	317
Grp Volume(v), veh/h	43	0	109	125	0	273	13	210	207	272	100	103
Grp Sat Flow(s),veh/h/ln	1774	0	1826	1757	0	1587	1792	1787	1708	1792	1787	1820
Q Serve(g_s), s	1.4	0.0	2.9	4.0	0.0	9.2	0.4	6.1	6.4	8.5	2.3	2.4
Cycle Q Clear(g_c), s	1.4	0.0	2.9	4.0	0.0	9.2	0.4	6.1	6.4	8.5	2.3	2.4
Prop In Lane	1.00		0.10	1.00		0.76	1.00		0.45	1.00		0.17
Lane Grp Cap(c), veh/h	135	0	399	197	0	403	137	389	372	345	597	608
V/C Ratio(X)	0.32	0.00	0.27	0.63	0.00	0.68	0.10	0.54	0.56	0.79	0.17	0.17
Avail Cap(c_a), veh/h	255	0	1129	521	0	1223	137	975	932	1017	1852	1887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	0.0	19.2	25.1	0.0	20.0	25.4	20.5	20.7	22.7	13.9	13.9
Incr Delay (d2), s/veh	0.5	0.0	0.1	1.3	0.0	0.7	0.1	0.4	0.5	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.5	2.0	0.0	4.1	0.2	3.1	3.0	4.4	1.1	1.2
LnGrp Delay(d),s/veh	26.3	0.0	19.3	26.3	0.0	20.8	25.5	20.9	21.1	24.2	13.9	14.0
LnGrp LOS	C		B	C		C	C	C	C	C	B	B
Approach Vol, veh/h		152			398			430			475	
Approach Delay, s/veh		21.3			22.5			21.2			19.8	
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	14.9	17.7	10.1	16.4	8.0	24.5	8.0	18.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	33.0	31.7	17.0	36.0	4.0	60.7	8.0	45.0
Max Q Clear Time (g_c+I1), s	10.5	8.4	6.0	4.9	2.4	4.4	3.4	11.2
Green Ext Time (p_c), s	0.3	2.0	0.1	1.4	0.0	2.1	0.0	1.4

Intersection Summary		
HCM 2010 Ctrl Delay		21.1
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	200	102	260	190	150	110	925	200	100	1119	80
Future Volume (veh/h)	140	200	102	260	190	150	110	925	200	100	1119	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		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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	152	217	89	283	207	146	120	1005	204	109	1216	84
Adj No. of Lanes	1	1	0	1	1	0	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	189	264	108	307	278	196	142	1198	243	126	1339	92
Arrive On Green	0.11	0.21	0.20	0.17	0.28	0.27	0.08	0.40	0.40	0.07	0.40	0.39
Sat Flow, veh/h	1792	1262	518	1774	1008	711	1792	2960	600	1792	3387	234
Grp Volume(v), veh/h	152	0	306	283	0	353	120	606	603	109	641	659
Grp Sat Flow(s),veh/h/ln	1792	0	1780	1774	0	1719	1792	1787	1773	1792	1787	1833
Q Serve(g_s), s	8.9	0.0	17.6	16.8	0.0	20.0	7.1	32.6	32.8	6.4	36.1	36.3
Cycle Q Clear(g_c), s	8.9	0.0	17.6	16.8	0.0	20.0	7.1	32.6	32.8	6.4	36.1	36.3
Prop In Lane	1.00		0.29	1.00		0.41	1.00		0.34	1.00		0.13
Lane Grp Cap(c), veh/h	189	0	372	307	0	475	142	724	718	126	707	725
V/C Ratio(X)	0.80	0.00	0.82	0.92	0.00	0.74	0.84	0.84	0.84	0.87	0.91	0.91
Avail Cap(c_a), veh/h	243	0	574	307	0	619	142	739	733	126	722	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.7	0.0	40.5	43.5	0.0	35.3	48.5	28.6	28.8	49.2	30.5	30.5
Incr Delay (d2), s/veh	10.7	0.0	3.0	31.3	0.0	2.3	32.8	7.8	8.0	41.7	14.6	14.6
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	5.0	0.0	8.9	10.9	0.0	9.8	4.8	17.5	17.7	4.6	20.7	21.3
LnGrp Delay(d),s/veh	57.5	0.0	43.5	74.8	0.0	37.6	81.4	36.4	36.8	90.9	45.0	45.1
LnGrp LOS	E		D	E		D	F	D	D	F	D	D
Approach Vol, veh/h		458			636			1329			1409	
Approach Delay, s/veh		48.2			54.2			40.6			48.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	48.1	22.0	25.8	12.0	47.1	14.8	33.0
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.7	18.0	34.0	8.0	42.7	14.0	38.0
Max Q Clear Time (g_c+I1), s	9.4	34.8	18.8	19.6	9.1	38.3	10.9	22.0
Green Ext Time (p_c), s	0.0	6.3	0.0	2.1	0.0	3.5	0.1	2.2

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)	62	0	13	20	0	160	6	963	70	380	1095	45
Future Volume (veh/h)	62	0	13	20	0	160	6	963	70	380	1095	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1880	1900
Adj Flow Rate, veh/h	67	0	14	22	0	117	7	1047	49	413	1190	49
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	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, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	86	0	187	54	0	151	16	1279	557	457	2006	83
Arrive On Green	0.05	0.00	0.12	0.03	0.00	0.10	0.01	0.36	0.36	0.25	0.57	0.57
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1557	1792	3498	144
Grp Volume(v), veh/h	67	0	14	22	0	117	7	1047	49	413	608	631
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1557	1792	1786	1855
Q Serve(g_s), s	3.1	0.0	0.7	1.0	0.0	5.8	0.3	22.0	1.7	18.5	18.2	18.2
Cycle Q Clear(g_c), s	3.1	0.0	0.7	1.0	0.0	5.8	0.3	22.0	1.7	18.5	18.2	18.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	86	0	187	54	0	151	16	1279	557	457	1024	1064
V/C Ratio(X)	0.78	0.00	0.07	0.40	0.00	0.77	0.44	0.82	0.09	0.90	0.59	0.59
Avail Cap(c_a), veh/h	150	0	650	120	0	663	107	1391	606	487	1024	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	0.0	32.5	39.4	0.0	36.4	40.8	24.1	17.6	29.9	11.4	11.4
Incr Delay (d2), s/veh	13.9	0.0	0.2	4.8	0.0	3.2	17.9	3.3	0.0	18.7	0.6	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	1.8	0.0	0.3	0.6	0.0	2.7	0.2	11.4	0.7	11.4	9.1	9.5
LnGrp Delay(d),s/veh	52.9	0.0	32.6	44.2	0.0	39.6	58.7	27.5	17.7	48.5	12.0	12.1
LnGrp LOS	D		C	D		D	E	C	B	D	B	B
Approach Vol, veh/h		81			139			1103			1652	
Approach Delay, s/veh		49.4			40.3			27.2			21.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	34.4	8.0	15.8	6.7	52.3	10.0	13.7
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	22.6	31.7	5.0	34.0	5.0	46.7	7.0	* 34
Max Q Clear Time (g_c+I1), s	10.5	24.0	3.0	2.7	2.3	20.2	5.1	7.8
Green Ext Time (p_c), s	0.1	5.1	0.0	0.5	0.0	11.7	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	25.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	264	41	80	133	393	19	443	50	540	703	20
Future Volume (veh/h)	98	264	41	80	133	393	19	443	50	540	703	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	107	287	45	87	145	132	21	482	54	587	764	22
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	2	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, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	153	550	85	126	297	250	49	794	89	746	1527	44
Arrive On Green	0.08	0.18	0.17	0.07	0.16	0.16	0.03	0.24	0.24	0.21	0.43	0.42
Sat Flow, veh/h	1810	3133	486	1792	1839	1552	1810	3270	365	3476	3548	102
Grp Volume(v), veh/h	107	164	168	87	141	136	21	265	271	587	385	401
Grp Sat Flow(s),veh/h/ln	1810	1805	1813	1792	1787	1604	1810	1805	1830	1738	1787	1863
Q Serve(g_s), s	3.7	5.4	5.5	3.1	4.7	5.1	0.7	8.5	8.6	10.4	10.2	10.2
Cycle Q Clear(g_c), s	3.7	5.4	5.5	3.1	4.7	5.1	0.7	8.5	8.6	10.4	10.2	10.2
Prop In Lane	1.00		0.27	1.00		0.97	1.00		0.20	1.00		0.05
Lane Grp Cap(c), veh/h	153	317	318	126	288	259	49	439	445	746	769	802
V/C Ratio(X)	0.70	0.52	0.53	0.69	0.49	0.53	0.43	0.60	0.61	0.79	0.50	0.50
Avail Cap(c_a), veh/h	375	985	989	317	975	875	153	727	737	1469	1324	1380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	24.3	24.4	29.5	24.8	25.0	31.2	21.9	21.9	24.2	13.5	13.5
Incr Delay (d2), s/veh	5.6	1.3	1.4	6.5	0.5	0.6	2.2	0.5	0.5	0.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	2.8	2.9	1.8	2.3	2.3	0.4	4.3	4.4	5.0	5.1	5.3
LnGrp Delay(d),s/veh	34.6	25.6	25.8	36.0	25.3	25.6	33.3	22.4	22.4	24.9	13.6	13.6
LnGrp LOS	C	C	C	D	C	C	C	C	C	C	B	B
Approach Vol, veh/h		439			364			557			1373	
Approach Delay, s/veh		27.9			28.0			22.8			18.4	
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	17.5	20.6	10.1	16.9	5.3	32.8	11.0	16.0
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	4.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	27.6	25.7	11.0	35.0	5.0	47.7	13.0	* 35
Max Q Clear Time (g_c+I1), s	12.4	10.6	5.1	7.5	2.7	12.2	5.7	7.1
Green Ext Time (p_c), s	1.1	4.7	0.1	2.7	0.0	5.8	0.1	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

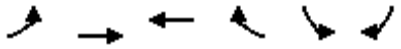
Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	551	20	40	576	130	150	120	70	120	30	142
Future Volume (veh/h)	100	551	20	40	576	130	150	120	70	120	30	142
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	109	599	22	43	626	141	163	130	76	130	33	154
Adj No. of Lanes	1	2	0	1	2	0	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	1288	47	55	936	210	190	684	377	157	516	462
Arrive On Green	0.08	0.37	0.37	0.03	0.33	0.33	0.11	0.31	0.31	0.09	0.29	0.29
Sat Flow, veh/h	1774	3482	128	1774	2872	646	1774	2204	1214	1774	1770	1583
Grp Volume(v), veh/h	109	304	317	43	385	382	163	103	103	130	33	154
Grp Sat Flow(s),veh/h/ln	1774	1770	1840	1774	1770	1749	1774	1770	1648	1774	1770	1583
Q Serve(g_s), s	7.3	15.7	15.7	2.9	22.5	22.6	10.8	5.1	5.5	8.6	1.6	9.2
Cycle Q Clear(g_c), s	7.3	15.7	15.7	2.9	22.5	22.6	10.8	5.1	5.5	8.6	1.6	9.2
Prop In Lane	1.00		0.07	1.00		0.37	1.00		0.74	1.00		1.00
Lane Grp Cap(c), veh/h	134	655	681	55	577	570	190	549	512	157	516	462
V/C Ratio(X)	0.82	0.46	0.47	0.78	0.67	0.67	0.86	0.19	0.20	0.83	0.06	0.33
Avail Cap(c_a), veh/h	148	655	681	103	577	570	222	549	512	222	516	462
HCM Platoon Ratio	1.00	1.00	1.00	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	54.7	28.8	28.8	57.7	34.9	34.9	52.7	30.3	30.4	53.8	30.7	33.3
Incr Delay (d2), s/veh	26.6	2.4	2.3	20.7	6.0	6.2	24.1	0.2	0.2	16.1	0.2	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	8.1	8.4	1.7	12.0	11.9	6.6	2.5	2.5	4.9	0.8	4.3
LnGrp Delay(d),s/veh	81.3	31.1	31.0	78.4	40.9	41.0	76.7	30.5	30.6	69.8	30.9	35.3
LnGrp LOS	F	C	C	E	D	D	E	C	C	E	C	D
Approach Vol, veh/h		730			810			369			317	
Approach Delay, s/veh		38.6			43.0			51.0			49.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	43.2	9.7	50.4	18.9	41.0	15.0	45.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	15.0	35.0	7.0	39.0	15.0	35.0	10.0	36.0
Max Q Clear Time (g_c+I1), s	10.6	7.5	4.9	17.7	12.8	11.2	9.3	24.6
Green Ext Time (p_c), s	0.1	2.5	0.0	9.3	0.1	2.4	0.0	6.4

Intersection Summary	
HCM 2010 Ctrl Delay	43.7
HCM 2010 LOS	D

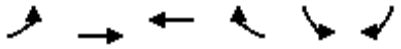
Notes



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	74	658	596	240	200	50
Future Volume (veh/h)	74	658	596	240	200	50
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	80	715	648	261	217	54
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	102	1883	1034	416	635	567
Arrive On Green	0.06	0.53	0.42	0.42	0.36	0.36
Sat Flow, veh/h	1774	3632	2558	992	1774	1583
Grp Volume(v), veh/h	80	715	465	444	217	54
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1688	1774	1583
Q Serve(g_s), s	4.9	12.9	22.6	22.6	9.8	2.5
Cycle Q Clear(g_c), s	4.9	12.9	22.6	22.6	9.8	2.5
Prop In Lane	1.00			0.59	1.00	1.00
Lane Grp Cap(c), veh/h	102	1883	742	708	635	567
V/C Ratio(X)	0.78	0.38	0.63	0.63	0.34	0.10
Avail Cap(c_a), veh/h	179	1883	742	708	635	567
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	50.7	15.0	24.9	24.9	25.6	23.3
Incr Delay (d2), s/veh	12.1	0.6	4.0	4.2	1.5	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	2.7	6.4	11.8	11.3	5.0	2.7
LnGrp Delay(d),s/veh	62.8	15.5	28.9	29.1	27.1	23.6
LnGrp LOS	E	B	C	C	C	C
Approach Vol, veh/h		795	909		271	
Approach Delay, s/veh		20.3	29.0		26.4	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				64.0		45.0	12.3	51.7
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				58.0		39.0	11.0	41.0
Max Q Clear Time (g_c+I1), s				14.9		11.8	6.9	24.6
Green Ext Time (p_c), s				14.8		0.8	0.1	9.4

Intersection Summary	
HCM 2010 Ctrl Delay	25.1
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	364	603	885	570	960	101
Future Volume (veh/h)	364	603	885	570	960	101
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	396	655	962	620	1043	110
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	304	3162	1432	647	1021	463
Arrive On Green	0.17	0.62	0.40	0.41	0.29	0.29
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	396	655	962	620	1043	110
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	20.5	6.7	26.6	45.6	35.2	6.3
Cycle Q Clear(g_c), s	20.5	6.7	26.6	45.6	35.2	6.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	304	3162	1432	647	1021	463
V/C Ratio(X)	1.30	0.21	0.67	0.96	1.02	0.24
Avail Cap(c_a), veh/h	304	3171	1439	650	1021	463
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	49.6	9.8	29.1	34.4	42.3	32.4
Incr Delay (d2), s/veh	158.8	0.0	1.0	24.9	33.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.3	3.1	13.2	24.3	21.5	2.8
LnGrp Delay(d),s/veh	208.4	9.8	30.1	59.3	75.9	32.5
LnGrp LOS	F	A	C	E	F	C
Approach Vol, veh/h		1051	1582		1153	
Approach Delay, s/veh		84.7	41.6		71.8	
Approach LOS		F	D		E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		79.8			26.0	53.8		40.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		74.7			20.0	48.7		34.7
Max Q Clear Time (g_c+I1), s		8.7			22.5	47.6		37.2
Green Ext Time (p_c), s		11.3			0.0	0.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	62.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	379	1184	0	0	899	570	556	0	220	0	0	0
Future Volume (veh/h)	379	1184	0	0	899	570	556	0	220	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1845	1845	1845			
Adj Flow Rate, veh/h	412	1287	0	0	977	143	604	0	117			
Adj No. of Lanes	2	3	0	0	2	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	1	1	0	0	1	1	3	3	3			
Cap, veh/h	533	3297	0	0	1645	699	766	0	342			
Arrive On Green	0.15	0.64	0.00	0.00	0.44	0.44	0.22	0.00	0.22			
Sat Flow, veh/h	3476	5305	0	0	3762	1599	3514	0	1568			
Grp Volume(v), veh/h	412	1287	0	0	977	143	604	0	117			
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1881	1599	1757	0	1568			
Q Serve(g_s), s	7.8	8.2	0.0	0.0	13.5	3.8	11.1	0.0	4.3			
Cycle Q Clear(g_c), s	7.8	8.2	0.0	0.0	13.5	3.8	11.1	0.0	4.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	533	3297	0	0	1645	699	766	0	342			
V/C Ratio(X)	0.77	0.39	0.00	0.00	0.59	0.20	0.79	0.00	0.34			
Avail Cap(c_a), veh/h	634	4868	0	0	2687	1142	2335	0	1042			
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	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	27.8	5.9	0.0	0.0	14.6	11.9	25.3	0.0	22.6			
Incr Delay (d2), s/veh	3.9	0.0	0.0	0.0	0.1	0.1	0.7	0.0	0.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.0	3.8	0.0	0.0	6.9	1.7	5.4	0.0	4.0			
LnGrp Delay(d),s/veh	31.8	5.9	0.0	0.0	14.8	12.0	26.0	0.0	22.9			
LnGrp LOS	C	A			B	B	C		C			
Approach Vol, veh/h		1699			1120			721				
Approach Delay, s/veh		12.2			14.4			25.5				
Approach LOS		B			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		48.8		19.7	14.0	34.7		
Change Period (Y+Rc), s		5.3		5.3	4.0	5.3		
Max Green Setting (Gmax), s		64.4		45.0	12.0	48.4		
Max Q Clear Time (g_c+I1), s		10.2		13.1	9.8	15.5		
Green Ext Time (p_c), s		16.0		1.3	0.2	13.9		

Intersection Summary	
HCM 2010 Ctrl Delay	15.6
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	334.2

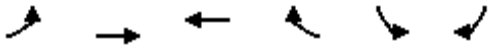
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	200	498	45	70	463	171
Future Vol, veh/h	200	498	45	70	463	171
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	217	541	49	76	503	186

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1279	87	0	0	125	0
Stage 1	87	-	-	-	-	-
Stage 2	1192	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	~ 185	977	-	-	1474	-
Stage 1	941	-	-	-	-	-
Stage 2	291	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 115	977	-	-	1474	-
Mov Cap-2 Maneuver	~ 115	-	-	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	~ 180	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 687	0	6.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	310	1474	-
HCM Lane V/C Ratio	-	-	2.447	0.341	-
HCM Control Delay (s)	-	-	$ 687	8.7	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	60.8	1.5	-

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	546	1431	1060	250	490	1100
Future Volume (veh/h)	546	1431	1060	250	490	1100
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	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	1881	1881	1863	1863	1863	1863
Adj Flow Rate, veh/h	593	1555	1152	74	533	926
Adj No. of Lanes	2	2	3	1	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	2	2
Cap, veh/h	663	2139	1922	585	588	1455
Arrive On Green	0.19	0.60	0.38	0.38	0.33	0.33
Sat Flow, veh/h	3476	3668	5253	1549	1774	2787
Grp Volume(v), veh/h	593	1555	1152	74	533	926
Grp Sat Flow(s),veh/h/ln	1738	1787	1695	1549	1774	1393
Q Serve(g_s), s	19.7	36.6	21.5	3.7	34.0	28.1
Cycle Q Clear(g_c), s	19.7	36.6	21.5	3.7	34.0	28.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	663	2139	1922	585	588	1455
V/C Ratio(X)	0.89	0.73	0.60	0.13	0.91	0.64
Avail Cap(c_a), veh/h	720	2877	2890	880	698	1627
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	46.7	16.9	29.6	24.0	37.8	20.2
Incr Delay (d2), s/veh	12.4	0.3	0.1	0.0	12.8	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	10.6	18.0	10.0	3.9	18.7	22.5
LnGrp Delay(d),s/veh	59.1	17.2	29.7	24.1	50.6	20.7
LnGrp LOS	E	B	C	C	D	C
Approach Vol, veh/h		2148	1226		1459	
Approach Delay, s/veh		28.8	29.3		31.6	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				75.6		42.7	26.1	49.5
Change Period (Y+Rc), s				5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s				94.7		46.0	24.0	66.7
Max Q Clear Time (g_c+I1), s				38.6		36.0	21.7	23.5
Green Ext Time (p_c), s				22.8		2.7	0.4	20.7

Intersection Summary	
HCM 2010 Ctrl Delay	29.8
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1361	560	0	1085	225	40
Future Volume (veh/h)	1361	560	0	1085	225	40
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	1479	609	0	1179	245	43
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2292	1025	0	2292	1006	463
Arrive On Green	0.65	0.65	0.00	0.65	0.29	0.29
Sat Flow, veh/h	3632	1583	0	3725	3442	1583
Grp Volume(v), veh/h	1479	609	0	1179	245	43
Grp Sat Flow(s),veh/h/ln	1770	1583	0	1770	1721	1583
Q Serve(g_s), s	37.9	33.0	0.0	26.4	8.1	3.0
Cycle Q Clear(g_c), s	37.9	33.0	0.0	26.4	8.1	3.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2292	1025	0	2292	1006	463
V/C Ratio(X)	0.65	0.59	0.00	0.51	0.24	0.09
Avail Cap(c_a), veh/h	2867	1282	0	2867	1006	463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.51	0.51	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	15.1	0.0	14.0	40.4	38.6
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.2	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	18.5	14.5	0.0	12.8	4.0	1.4
LnGrp Delay(d),s/veh	16.2	15.4	0.0	14.1	41.0	39.0
LnGrp LOS	B	B		B	D	D
Approach Vol, veh/h	2088			1179	288	
Approach Delay, s/veh	15.9			14.1	40.7	
Approach LOS	B			B	D	

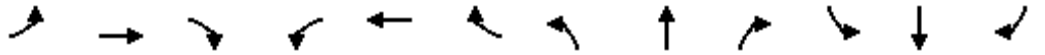
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		48.3		101.7				101.7
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		19.5		121.5				121.5
Max Q Clear Time (g_c+I1), s		10.1		39.9				28.4
Green Ext Time (p_c), s		0.7		57.2				62.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.4
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	470	960	350	90	555	350
Future Volume (veh/h)	470	960	350	90	555	350
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1397	1397	1845	1845
Adj Flow Rate, veh/h	511	377	380	98	603	354
Adj No. of Lanes	2	1	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	36	36	3	3
Cap, veh/h	1117	494	488	835	930	428
Arrive On Green	0.32	0.32	0.19	0.60	0.27	0.27
Sat Flow, veh/h	3632	1566	2581	1397	3408	1568
Grp Volume(v), veh/h	511	377	380	98	603	354
Grp Sat Flow(s),veh/h/ln	1770	1566	1291	1397	1704	1568
Q Serve(g_s), s	6.8	12.8	8.2	1.8	9.2	12.5
Cycle Q Clear(g_c), s	6.8	12.8	8.2	1.8	9.2	12.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1117	494	488	835	930	428
V/C Ratio(X)	0.46	0.76	0.78	0.12	0.65	0.83
Avail Cap(c_a), veh/h	2641	1168	592	1494	1130	520
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	16.1	18.2	22.7	5.1	18.9	20.1
Incr Delay (d2), s/veh	0.1	0.9	5.4	0.0	0.5	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	5.6	3.3	0.7	4.3	6.3
LnGrp Delay(d),s/veh	16.2	19.1	28.1	5.1	19.4	27.7
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	888			478	957	
Approach Delay, s/veh	17.4			23.4	22.5	
Approach LOS	B			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		19.6	16.6	22.7				39.3
Change Period (Y+Rc), s		4.0	6.0	4.6				4.6
Max Green Setting (Gmax), s		19.0	13.0	43.4				62.4
Max Q Clear Time (g_c+I1), s		14.5	10.2	14.8				3.8
Green Ext Time (p_c), s		1.1	0.4	3.0				3.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	220	0	280	1052	1183	0	0	795	600
Future Volume (veh/h)	0	0	0	220	0	280	1052	1183	0	0	795	600
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		0.99
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				1881	0	1881	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				239	0	144	1143	1286	0	0	864	330
Adj No. of Lanes				2	0	1	2	2	0	0	4	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				1	0	1	2	2	0	0	2	2
Cap, veh/h				464	0	213	1262	2723	0	0	2269	557
Arrive On Green				0.13	0.00	0.13	0.37	0.77	0.00	0.00	0.35	0.35
Sat Flow, veh/h				3476	0	1599	3442	3632	0	0	6669	1574
Grp Volume(v), veh/h				239	0	144	1143	1286	0	0	864	330
Grp Sat Flow(s),veh/h/ln				1738	0	1599	1721	1770	0	0	1602	1574
Q Serve(g_s), s				5.3	0.0	7.1	25.9	10.8	0.0	0.0	8.3	14.1
Cycle Q Clear(g_c), s				5.3	0.0	7.1	25.9	10.8	0.0	0.0	8.3	14.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				464	0	213	1262	2723	0	0	2269	557
V/C Ratio(X)				0.52	0.00	0.67	0.91	0.47	0.00	0.00	0.38	0.59
Avail Cap(c_a), veh/h				1814	0	835	1880	3823	0	0	3111	764
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				33.2	0.0	34.0	24.7	3.4	0.0	0.0	19.9	21.7
Incr Delay (d2), s/veh				0.3	0.0	1.4	3.5	0.0	0.0	0.0	0.0	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.5	0.0	3.2	12.8	5.2	0.0	0.0	3.7	6.2
LnGrp Delay(d),s/veh				33.5	0.0	35.4	28.2	3.5	0.0	0.0	19.9	22.1
LnGrp LOS				C		D	C	A			B	C
Approach Vol, veh/h					383			2429			1194	
Approach Delay, s/veh					34.2			15.1			20.5	
Approach LOS					C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		67.4			34.2	33.2		15.0
Change Period (Y+Rc), s		5.3			4.0	5.3		5.3
Max Green Setting (Gmax), s		87.7			45.0	38.7		41.7
Max Q Clear Time (g_c+I1), s		12.8			27.9	16.1		9.1
Green Ext Time (p_c), s		16.5			2.3	11.8		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	440	10	900	0	0	0	0	1795	240	280	735	0
Future Volume (veh/h)	440	10	900	0	0	0	0	1795	240	280	735	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845				0	1881	1900	1863	1863	0
Adj Flow Rate, veh/h	478	0	985				0	1951	246	304	799	0
Adj No. of Lanes	2	0	2				0	4	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3				0	1	1	2	2	0
Cap, veh/h	1332	0	1188				0	2330	293	367	1877	0
Arrive On Green	0.38	0.00	0.38				0.00	0.40	0.38	0.11	0.53	0.00
Sat Flow, veh/h	3514	0	3136				0	6128	739	3442	3632	0
Grp Volume(v), veh/h	478	0	985				0	1614	583	304	799	0
Grp Sat Flow(s),veh/h/ln	1757	0	1568				0	1618	1749	1721	1770	0
Q Serve(g_s), s	10.0	0.0	29.2				0.0	30.8	30.9	8.9	14.0	0.0
Cycle Q Clear(g_c), s	10.0	0.0	29.2				0.0	30.8	30.9	8.9	14.0	0.0
Prop In Lane	1.00		1.00				0.00		0.42	1.00		0.00
Lane Grp Cap(c), veh/h	1332	0	1188				0	1928	695	367	1877	0
V/C Ratio(X)	0.36	0.00	0.83				0.00	0.84	0.84	0.83	0.43	0.00
Avail Cap(c_a), veh/h	2535	0	2263				0	1987	716	403	2001	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	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.9	0.0	28.8				0.0	27.9	28.2	44.9	14.6	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.6				0.0	3.0	7.9	11.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	12.8				0.0	14.3	16.4	4.8	6.8	0.0
LnGrp Delay(d),s/veh	23.1	0.0	30.4				0.0	30.9	36.1	56.1	14.7	0.0
LnGrp LOS	C		C					C	D	E	B	
Approach Vol, veh/h		1463						2197			1103	
Approach Delay, s/veh		28.0						32.3			26.1	
Approach LOS		C						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.0	44.7		42.9		59.7		
Change Period (Y+Rc), s	4.0	5.3		4.5		* 5.3		
Max Green Setting (Gmax), s	12.0	40.7		73.5		* 58		
Max Q Clear Time (g_c+I1), s	10.9	32.9		31.2		16.0		
Green Ext Time (p_c), s	0.1	6.5		7.2		22.0		

Intersection Summary	
HCM 2010 Ctrl Delay	29.5
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	10	180	585	70	160	150	860	1340	20	700	40
Future Volume (veh/h)	80	10	180	585	70	160	150	860	1340	20	700	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1827	1827	1900	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	87	11	109	636	76	132	163	935	768	22	761	40
Adj No. of Lanes	1	1	0	3	1	0	1	2	2	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, %	8	8	8	4	4	4	2	2	2	5	5	5
Cap, veh/h	110	19	190	814	144	250	202	1515	1174	92	1221	64
Arrive On Green	0.07	0.14	0.13	0.17	0.24	0.23	0.11	0.43	0.43	0.05	0.37	0.36
Sat Flow, veh/h	1675	138	1363	4907	600	1043	1774	3539	2743	1723	3323	175
Grp Volume(v), veh/h	87	0	120	636	0	208	163	935	768	22	394	407
Grp Sat Flow(s),veh/h/ln	1675	0	1500	1636	0	1643	1774	1770	1371	1723	1719	1778
Q Serve(g_s), s	3.8	0.0	5.6	9.3	0.0	8.3	6.7	15.4	16.7	0.9	14.1	14.1
Cycle Q Clear(g_c), s	3.8	0.0	5.6	9.3	0.0	8.3	6.7	15.4	16.7	0.9	14.1	14.1
Prop In Lane	1.00		0.91	1.00		0.63	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	110	0	210	814	0	394	202	1515	1174	92	632	654
V/C Ratio(X)	0.79	0.00	0.57	0.78	0.00	0.53	0.81	0.62	0.65	0.24	0.62	0.62
Avail Cap(c_a), veh/h	223	0	859	1569	0	1247	378	2499	1936	92	939	971
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	0.0	30.5	30.0	0.0	25.0	32.5	16.7	17.1	34.1	19.5	19.5
Incr Delay (d2), s/veh	4.8	0.0	0.9	0.6	0.0	0.4	2.9	0.2	0.2	0.5	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	2.4	4.2	0.0	3.8	3.5	7.6	6.3	0.5	6.7	7.0
LnGrp Delay(d),s/veh	39.4	0.0	31.4	30.6	0.0	25.4	35.4	16.8	17.3	34.6	19.9	19.9
LnGrp LOS	D		C	C		C	D	B	B	C	B	B
Approach Vol, veh/h		207			844			1866			823	
Approach Delay, s/veh		34.7			29.3			18.6			20.3	
Approach LOS		C			C			B			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	8.0	36.1	16.5	14.5	12.5	31.6	8.9	22.0
Change Period (Y+Rc), s	4.0	4.9	4.0	4.6	4.0	4.9	4.0	4.6
Max Green Setting (Gmax), s	4.0	52.1	24.0	42.4	16.0	40.1	10.0	56.4
Max Q Clear Time (g_c+I1), s	2.9	18.7	11.3	7.6	8.7	16.1	5.8	10.3
Green Ext Time (p_c), s	0.0	11.9	1.1	1.2	0.1	10.6	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	22.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	550	0	2499	0	0	0	0	1800	439	620	845	0
Future Volume (veh/h)	550	0	2499	0	0	0	0	1800	439	620	845	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	20				0	20	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	598	0	2444				0	1957	477	674	918	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1099	0	1132				0	2025	131	569	3082	0
Arrive On Green	0.11	0.00	0.10				0.00	0.14	0.14	0.06	0.21	0.00
Sat Flow, veh/h	3442	0	3610				0	4775	976	3343	5103	0
Grp Volume(v), veh/h	598	0	2444				0	1626	808	674	918	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1653	1672	1647	0
Q Serve(g_s), s	23.2	0.0	44.2				0.0	59.0	59.0	24.0	22.2	0.0
Cycle Q Clear(g_c), s	23.2	0.0	44.2				0.0	59.0	59.0	24.0	22.2	0.0
Prop In Lane	1.00		1.00				0.00		0.59	1.00		0.00
Lane Grp Cap(c), veh/h	1099	0	1132				0	1404	752	569	3082	0
V/C Ratio(X)	0.54	0.00	2.16				0.00	1.16	1.07	1.18	0.30	0.00
Avail Cap(c_a), veh/h	1099	0	1132				0	1404	692	569	3082	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.3	0.0	63.2				0.0	60.7	60.7	66.5	29.8	0.0
Incr Delay (d2), s/veh	0.3	0.0	524.1				0.0	79.7	54.5	99.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	28.4				0.0	32.5	22.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	76.3				0.0	33.6	45.7	19.0	10.1	0.0
LnGrp Delay(d),s/veh	53.6	0.0	615.7				0.0	172.9	137.3	166.0	29.9	0.0
LnGrp LOS	D		F					F	F	F	C	
Approach Vol, veh/h		3042						2434			1592	
Approach Delay, s/veh		505.2						161.1			87.5	
Approach LOS		F						F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	28.9	63.0		49.0		91.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	24.0	* 58		43.7		32.9		
Max Q Clear Time (g_c+I1), s	26.0	61.0		46.2		24.2		
Green Ext Time (p_c), s	0.0	0.0		0.0		3.8		

Intersection Summary	
HCM 2010 Ctrl Delay	292.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	50	70	160	40	150	80	1105	140	260	1355	40
Future Volume (veh/h)	60	50	70	160	40	150	80	1105	140	260	1355	40
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	54	56	174	43	-64	87	1201	148	283	1473	42
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	102	85	161	222	233	198	111	1639	201	354	1957	56
Arrive On Green	0.10	0.10	0.10	0.12	0.12	0.00	0.06	0.52	0.51	0.10	0.56	0.55
Sat Flow, veh/h	981	815	1545	1792	1881	1599	1774	3173	390	3442	3512	100
Grp Volume(v), veh/h	119	0	56	174	43	-64	87	668	681	283	741	774
Grp Sat Flow(s),veh/h/ln	1796	0	1545	1792	1881	1599	1774	1770	1793	1721	1770	1843
Q Serve(g_s), s	6.7	0.0	3.5	9.9	2.2	0.0	5.1	30.8	31.1	8.4	33.5	33.7
Cycle Q Clear(g_c), s	6.7	0.0	3.5	9.9	2.2	0.0	5.1	30.8	31.1	8.4	33.5	33.7
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.22	1.00		0.05
Lane Grp Cap(c), veh/h	187	0	161	222	233	198	111	914	926	354	986	1027
V/C Ratio(X)	0.64	0.00	0.35	0.78	0.18	-0.32	0.79	0.73	0.73	0.80	0.75	0.75
Avail Cap(c_a), veh/h	599	0	515	632	663	564	220	1231	1247	623	1332	1387
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	0.0	43.7	44.6	41.2	0.0	48.5	19.7	19.8	46.0	17.7	17.8
Incr Delay (d2), s/veh	1.4	0.0	0.5	2.3	0.1	0.0	4.6	0.8	0.9	1.6	1.0	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	3.4	0.0	1.5	5.0	1.1	0.0	2.6	15.3	15.6	4.1	16.5	17.3
LnGrp Delay(d),s/veh	46.5	0.0	44.2	46.9	41.3	0.0	53.1	20.5	20.7	47.6	18.7	18.8
LnGrp LOS	D		D	D	D		D	C	C	D	B	B
Approach Vol, veh/h		175			153			1436			1798	
Approach Delay, s/veh		45.8			64.9			22.6			23.3	
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	14.8	58.2		14.9	10.5	62.5		17.0
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	10.8	72.4		35.0	13.0	78.4		36.4
Max Q Clear Time (g_c+I1), s	10.4	33.1		8.7	7.1	35.7		11.9
Green Ext Time (p_c), s	0.4	20.5		0.4	0.0	21.3		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	190	90	60	150	570	110	869	40	840	1344	190
Future Volume (veh/h)	170	190	90	60	150	570	110	869	40	840	1344	190
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1881	1881	1881	1881	1881	1900	1863	1863	1863
Adj Flow Rate, veh/h	185	207	27	65	163	620	120	945	42	913	1461	134
Adj No. of Lanes	1	2	0	1	1	2	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	209	767	99	83	324	1452	202	1070	48	985	1666	916
Arrive On Green	0.12	0.24	0.24	0.05	0.17	0.17	0.11	0.31	0.30	0.29	0.47	0.46
Sat Flow, veh/h	1774	3147	405	1792	1881	3198	1792	3484	155	3442	3539	1581
Grp Volume(v), veh/h	185	115	119	65	163	620	120	485	502	913	1461	134
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1792	1881	1599	1792	1787	1852	1721	1770	1581
Q Serve(g_s), s	14.1	7.2	7.4	4.9	10.8	18.0	8.7	35.4	35.4	35.4	51.1	2.6
Cycle Q Clear(g_c), s	14.1	7.2	7.4	4.9	10.8	18.0	8.7	35.4	35.4	35.4	51.1	2.6
Prop In Lane	1.00		0.23	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	209	431	434	83	324	1452	202	549	569	985	1666	916
V/C Ratio(X)	0.88	0.27	0.27	0.78	0.50	0.43	0.59	0.88	0.88	0.93	0.88	0.15
Avail Cap(c_a), veh/h	271	539	543	170	463	1689	248	706	731	1379	2326	1211
HCM Platoon Ratio	1.00	1.00	1.00	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	59.6	42.0	42.1	64.7	51.5	25.4	57.9	45.2	45.3	47.6	32.7	4.8
Incr Delay (d2), s/veh	19.7	0.1	0.1	5.9	0.5	0.1	1.0	9.0	8.7	7.2	2.3	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	8.1	3.5	3.7	2.6	5.7	7.9	4.4	18.9	19.5	17.9	25.5	1.3
LnGrp Delay(d),s/veh	79.3	42.1	42.2	70.6	51.9	25.5	58.9	54.2	53.9	54.8	35.1	4.8
LnGrp LOS	E	D	D	E	D	C	E	D	D	D	D	A
Approach Vol, veh/h		419			848			1107			2508	
Approach Delay, s/veh		58.6			34.0			54.6			40.6	
Approach LOS		E			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	46.2	10.4	37.4	20.8	68.6	20.2	27.6
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	5.3	* 5.3	4.0	4.6
Max Green Setting (Gmax), s	55.0	52.9	13.0	41.2	19.0	* 89	21.0	33.2
Max Q Clear Time (g_c+I1), s	37.4	37.4	6.9	9.4	10.7	53.1	16.1	20.0
Green Ext Time (p_c), s	1.9	3.4	0.0	2.7	2.6	10.2	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	44.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	80	885	10	50	60	643	1175	10	60	1305	210
Future Volume (veh/h)	130	80	885	10	50	60	643	1175	10	60	1305	210
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.97	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	1881	1881	1881	1900	1863	1863	1881	1881	1881	1863	1863	1900
Adj Flow Rate, veh/h	141	87	447	11	54	14	699	1277	3	65	1418	210
Adj No. of Lanes	1	1	2	0	1	1	2	2	1	1	3	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, %	1	1	1	2	2	2	1	1	1	2	2	2
Cap, veh/h	329	345	516	18	88	89	767	2100	919	83	1822	270
Arrive On Green	0.18	0.18	0.18	0.06	0.06	0.06	0.22	0.59	0.59	0.05	0.41	0.40
Sat Flow, veh/h	1792	1881	2814	313	1535	1542	3476	3574	1563	1774	4462	660
Grp Volume(v), veh/h	141	87	447	65	0	14	699	1277	3	65	1077	551
Grp Sat Flow(s),veh/h/ln	1792	1881	1407	1847	0	1542	1738	1787	1563	1774	1695	1732
Q Serve(g_s), s	9.0	5.1	19.8	4.4	0.0	1.1	25.2	29.4	0.1	4.7	35.4	35.5
Cycle Q Clear(g_c), s	9.0	5.1	19.8	4.4	0.0	1.1	25.2	29.4	0.1	4.7	35.4	35.5
Prop In Lane	1.00		1.00	0.17		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	329	345	516	106	0	89	767	2100	919	83	1384	707
V/C Ratio(X)	0.43	0.25	0.87	0.61	0.00	0.16	0.91	0.61	0.00	0.78	0.78	0.78
Avail Cap(c_a), veh/h	392	412	616	561	0	468	1055	2335	1021	180	1528	781
HCM Platoon Ratio	1.00	1.00	1.00	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	46.5	44.9	50.9	59.1	0.0	57.6	48.8	17.0	10.9	60.6	32.9	33.1
Incr Delay (d2), s/veh	0.3	0.1	9.6	2.1	0.0	0.3	7.6	0.2	0.0	5.8	2.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	2.6	8.4	2.3	0.0	0.5	13.0	14.4	0.0	2.4	16.8	17.8
LnGrp Delay(d),s/veh	46.8	45.0	60.5	61.2	0.0	57.9	56.5	17.2	10.9	66.4	35.0	37.0
LnGrp LOS	D	D	E	E		E	E	B	B	E	C	D
Approach Vol, veh/h		675			79			1979			1693	
Approach Delay, s/veh		55.7			60.7			31.1			36.9	
Approach LOS		E			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	79.5		27.6	32.3	57.1		11.4
Change Period (Y+Rc), s	4.0	5.3		4.9	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	13.6	82.6		27.2	39.0	* 57		39.0
Max Q Clear Time (g_c+I1), s	10.7	31.4		21.8	27.2	37.5		6.4
Green Ext Time (p_c), s	0.0	25.6		0.9	1.2	14.4		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	37.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1270	451	118	1049	50	310	61	81	50	41	90
Future Volume (veh/h)	110	1270	451	118	1049	50	310	61	81	50	41	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		0.98	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	120	1380	406	128	1140	4	337	66	-49	54	45	84
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	145	1754	773	153	1771	774	391	491	418	70	108	201
Arrive On Green	0.08	0.49	0.49	0.09	0.50	0.50	0.11	0.26	0.00	0.04	0.19	0.18
Sat Flow, veh/h	1792	3574	1576	1792	3574	1563	3476	1881	1599	1810	574	1072
Grp Volume(v), veh/h	120	1380	406	128	1140	4	337	66	-49	54	0	129
Grp Sat Flow(s),veh/h/ln	1792	1787	1576	1792	1787	1563	1738	1881	1599	1810	0	1646
Q Serve(g_s), s	8.5	41.4	22.9	9.1	30.6	0.2	12.3	3.5	0.0	3.8	0.0	9.0
Cycle Q Clear(g_c), s	8.5	41.4	22.9	9.1	30.6	0.2	12.3	3.5	0.0	3.8	0.0	9.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	145	1754	773	153	1771	774	391	491	418	70	0	308
V/C Ratio(X)	0.83	0.79	0.53	0.83	0.64	0.01	0.86	0.13	-0.12	0.77	0.00	0.42
Avail Cap(c_a), veh/h	277	2376	1047	277	2376	1039	484	683	581	154	0	509
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.6	27.3	22.6	58.2	24.2	16.5	56.4	36.6	0.0	61.6	0.0	46.8
Incr Delay (d2), s/veh	4.5	0.9	0.2	4.5	0.1	0.0	10.7	0.0	0.0	6.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	20.5	10.0	4.7	15.1	0.1	6.5	1.8	0.0	2.0	0.0	4.1
LnGrp Delay(d),s/veh	63.1	28.2	22.8	62.7	24.3	16.5	67.2	36.6	0.0	68.2	0.0	47.1
LnGrp LOS	E	C	C	E	C	B	E	D		E		D
Approach Vol, veh/h		1906			1272			354			183	
Approach Delay, s/veh		29.2			28.2			70.8			53.3	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	37.8	15.1	67.5	18.6	28.2	14.5	68.1
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	11.0	45.7	20.0	* 86	18.0	38.7	20.0	* 86
Max Q Clear Time (g_c+I1), s	5.8	5.5	11.1	43.4	14.3	11.0	10.5	32.6
Green Ext Time (p_c), s	0.0	0.7	0.1	19.9	0.2	0.6	0.1	21.6

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	871	405	290	870	270	319	412	256	360	372	30
Future Volume (veh/h)	80	871	405	290	870	270	319	412	256	360	372	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		0.96	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	87	947	224	315	946	140	347	448	261	391	404	31
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	110	1444	340	377	1233	182	411	592	342	457	965	74
Arrive On Green	0.06	0.35	0.35	0.11	0.40	0.40	0.12	0.27	0.26	0.13	0.29	0.28
Sat Flow, veh/h	1792	4112	969	3442	3087	457	3476	2162	1249	3476	3358	256
Grp Volume(v), veh/h	87	788	383	315	542	544	347	370	339	391	214	221
Grp Sat Flow(s),veh/h/ln	1792	1712	1658	1721	1770	1775	1738	1787	1625	1738	1787	1827
Q Serve(g_s), s	5.7	23.2	23.3	10.7	31.7	31.7	11.7	22.6	23.0	13.2	11.6	11.7
Cycle Q Clear(g_c), s	5.7	23.2	23.3	10.7	31.7	31.7	11.7	22.6	23.0	13.2	11.6	11.7
Prop In Lane	1.00		0.58	1.00		0.26	1.00		0.77	1.00		0.14
Lane Grp Cap(c), veh/h	110	1202	582	377	706	708	411	490	445	457	514	525
V/C Ratio(X)	0.79	0.66	0.66	0.84	0.77	0.77	0.84	0.75	0.76	0.86	0.42	0.42
Avail Cap(c_a), veh/h	210	2006	971	576	1126	1129	640	718	653	756	778	795
HCM Platoon Ratio	1.00	1.00	1.00	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	55.3	32.7	32.7	52.2	31.1	31.1	51.6	39.7	40.3	50.8	34.5	34.6
Incr Delay (d2), s/veh	4.7	0.2	0.5	3.9	0.7	0.7	3.6	1.2	1.5	2.5	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	11.0	10.7	5.3	15.6	15.7	5.8	11.4	10.5	6.5	5.7	5.9
LnGrp Delay(d),s/veh	60.1	32.9	33.2	56.0	31.8	31.8	55.2	40.9	41.8	53.3	34.7	34.8
LnGrp LOS	E	C	C	E	C	C	E	D	D	D	C	C
Approach Vol, veh/h		1258			1401			1056			826	
Approach Delay, s/veh		34.9			37.2			45.9			43.5	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	36.7	17.1	46.0	18.1	38.3	11.3	51.7
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	26.3	46.7	20.0	68.7	22.0	50.7	14.0	74.7
Max Q Clear Time (g_c+I1), s	15.2	25.0	12.7	25.3	13.7	13.7	7.7	33.7
Green Ext Time (p_c), s	0.6	4.2	0.4	12.8	0.4	4.4	0.0	12.7

Intersection Summary	
HCM 2010 Ctrl Delay	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	316	1222	140	210	1230	320	250	440	220	520	205	195
Future Volume (veh/h)	316	1222	140	210	1230	320	250	440	220	520	205	195
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	343	1328	141	228	1337	234	272	478	215	565	223	20
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	274	1629	173	252	1714	531	263	591	264	483	852	374
Arrive On Green	0.15	0.35	0.35	0.14	0.34	0.34	0.15	0.25	0.24	0.14	0.24	0.24
Sat Flow, veh/h	1774	4662	495	1774	5085	1576	1792	2403	1074	3476	3574	1569
Grp Volume(v), veh/h	343	966	503	228	1337	234	272	355	338	565	223	20
Grp Sat Flow(s),veh/h/ln	1774	1695	1766	1774	1695	1576	1792	1787	1690	1738	1787	1569
Q Serve(g_s), s	20.0	33.6	33.6	16.4	30.6	15.0	19.0	24.2	24.5	18.0	6.6	1.3
Cycle Q Clear(g_c), s	20.0	33.6	33.6	16.4	30.6	15.0	19.0	24.2	24.5	18.0	6.6	1.3
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	274	1184	617	252	1714	531	263	440	416	483	852	374
V/C Ratio(X)	1.25	0.82	0.82	0.90	0.78	0.44	1.03	0.81	0.81	1.17	0.26	0.05
Avail Cap(c_a), veh/h	274	1238	645	260	1818	564	263	617	583	483	1206	530
HCM Platoon Ratio	1.00	1.00	1.00	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	54.7	38.3	38.3	54.7	38.6	33.4	55.2	45.9	46.4	55.7	40.1	38.1
Incr Delay (d2), s/veh	139.8	3.8	7.1	30.5	1.9	0.2	64.8	3.6	4.1	96.5	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	20.4	16.3	17.6	10.2	14.7	6.5	14.1	12.4	11.9	15.1	3.3	0.6
LnGrp Delay(d),s/veh	194.5	42.1	45.4	85.2	40.5	33.6	120.1	49.5	50.5	152.3	40.1	38.1
LnGrp LOS	F	D	D	F	D	C	F	D	D	F	D	D
Approach Vol, veh/h		1812			1799			965			808	
Approach Delay, s/veh		71.9			45.3			69.8			118.5	
Approach LOS		E			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	35.9	22.4	49.2	23.0	34.9	24.0	47.6
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	18.0	43.4	19.0	46.0	19.0	42.4	20.0	45.0
Max Q Clear Time (g_c+I1), s	20.0	26.5	18.4	35.6	21.0	8.6	22.0	32.6
Green Ext Time (p_c), s	0.0	3.2	0.0	8.2	0.0	3.5	0.0	9.5

Intersection Summary	
HCM 2010 Ctrl Delay	69.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2107	860	220	2122	0	0	0	0	710	10	910
Future Volume (veh/h)	0	2107	860	220	2122	0	0	0	0	710	10	910
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	2290	600	239	2307	0				780	0	960
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2260	703	158	2876	0				1277	0	570
Arrive On Green	0.00	0.44	0.44	0.08	0.56	0.00				0.36	0.00	0.36
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	2290	600	239	2307	0				780	0	960
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	44.0	33.7	8.0	35.9	0.0				18.0	0.0	36.0
Cycle Q Clear(g_c), s	0.0	44.0	33.7	8.0	35.9	0.0				18.0	0.0	36.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2260	703	158	2876	0				1277	0	570
V/C Ratio(X)	0.00	1.01	0.85	1.52	0.80	0.00				0.61	0.00	1.68
Avail Cap(c_a), veh/h	0	2260	703	158	2876	0				1277	0	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	28.0	25.1	46.0	17.6	0.0				26.3	0.0	32.0
Incr Delay (d2), s/veh	0.0	22.3	9.5	261.9	1.6	0.0				0.6	0.0	315.5
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	0.0	25.4	16.7	7.9	17.3	0.0				8.9	0.0	65.6
LnGrp Delay(d),s/veh	0.0	50.3	34.6	307.9	19.2	0.0				26.9	0.0	347.5
LnGrp LOS		F	C	F	B					C		F
Approach Vol, veh/h		2890			2546						1740	
Approach Delay, s/veh		47.1			46.3						203.8	
Approach LOS		D			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	12.0	48.0		40.0		60.0		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	8.0	42.7		34.7		54.7		
Max Q Clear Time (g_c+I1), s	10.0	46.0		38.0		37.9		
Green Ext Time (p_c), s	0.0	0.0		0.0		16.2		

Intersection Summary	
HCM 2010 Ctrl Delay	84.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2017	800	120	1472	730	870	60	450	0	0	0
Future Volume (veh/h)	0	2017	800	120	1472	730	870	60	450	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	0	2192	635	130	1600	479	992	0	339			
Adj No. of Lanes	0	3	1	1	3	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	2392	744	159	3046	923	1144	0	510			
Arrive On Green	0.00	0.47	0.47	0.09	0.60	0.60	0.32	0.00	0.32			
Sat Flow, veh/h	0	5253	1581	1774	5085	1540	3548	0	1582			
Grp Volume(v), veh/h	0	2192	635	130	1600	479	992	0	339			
Grp Sat Flow(s),veh/h/ln	0	1695	1581	1774	1695	1540	1774	0	1582			
Q Serve(g_s), s	0.0	40.9	36.2	7.3	18.8	18.4	26.8	0.0	18.8			
Cycle Q Clear(g_c), s	0.0	40.9	36.2	7.3	18.8	18.4	26.8	0.0	18.8			
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2392	744	159	3046	923	1144	0	510			
V/C Ratio(X)	0.00	0.92	0.85	0.82	0.53	0.52	0.87	0.00	0.66			
Avail Cap(c_a), veh/h	0	2396	745	192	3145	952	1706	0	761			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	25.1	23.9	45.6	11.9	11.9	32.5	0.0	29.8			
Incr Delay (d2), s/veh	0.0	6.0	9.1	17.2	0.1	0.2	2.3	0.0	0.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	20.4	17.6	4.4	8.8	7.8	13.5	0.0	8.3			
LnGrp Delay(d),s/veh	0.0	31.1	32.9	62.8	12.0	12.1	34.7	0.0	30.3			
LnGrp LOS		C	C	E	B	B	C		C			
Approach Vol, veh/h		2827			2209			1331				
Approach Delay, s/veh		31.5			15.0			33.6				
Approach LOS		C			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	13.1	51.9		36.8		65.0		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	11.0	46.7		47.7		61.7		
Max Q Clear Time (g_c+I1), s	9.3	42.9		28.8		20.8		
Green Ext Time (p_c), s	0.0	3.7		2.6		34.8		

Intersection Summary	
HCM 2010 Ctrl Delay	26.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	60	15	65	50	170	20	190	79	200	323	40
Future Volume (veh/h)	40	60	15	65	50	170	20	190	79	200	323	40
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.95	1.00		0.96	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	1900	1845	1845	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	65	14	71	54	23	22	207	79	217	351	28
Adj No. of Lanes	1	1	0	1	1	0	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, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	169	165	36	168	135	57	171	615	226	302	1060	84
Arrive On Green	0.10	0.11	0.11	0.10	0.11	0.11	0.10	0.24	0.21	0.17	0.32	0.29
Sat Flow, veh/h	1774	1479	319	1757	1207	514	1792	2532	929	1792	3351	266
Grp Volume(v), veh/h	43	0	79	71	0	77	22	144	142	217	186	193
Grp Sat Flow(s),veh/h/ln	1774	0	1798	1757	0	1721	1792	1787	1674	1792	1787	1829
Q Serve(g_s), s	0.9	0.0	1.7	1.6	0.0	1.7	0.5	2.8	3.0	4.8	3.3	3.4
Cycle Q Clear(g_c), s	0.9	0.0	1.7	1.6	0.0	1.7	0.5	2.8	3.0	4.8	3.3	3.4
Prop In Lane	1.00		0.18	1.00		0.30	1.00		0.55	1.00		0.15
Lane Grp Cap(c), veh/h	169	0	201	168	0	192	171	434	407	302	565	579
V/C Ratio(X)	0.25	0.00	0.39	0.42	0.00	0.40	0.13	0.33	0.35	0.72	0.33	0.33
Avail Cap(c_a), veh/h	507	0	2015	251	0	1682	256	1321	1237	1495	2556	2616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	0.0	17.3	17.9	0.0	17.3	17.4	13.1	13.5	16.5	10.9	11.0
Incr Delay (d2), s/veh	0.3	0.0	0.5	0.6	0.0	0.5	0.1	0.2	0.2	1.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.9	0.8	0.0	0.8	0.2	1.4	1.4	2.5	1.6	1.7
LnGrp Delay(d),s/veh	17.9	0.0	17.8	18.5	0.0	17.8	17.5	13.2	13.6	17.7	11.1	11.2
LnGrp LOS	B		B	B		B	B	B	B	B	B	B
Approach Vol, veh/h		122			148			308			596	
Approach Delay, s/veh		17.8			18.2			13.7			13.5	
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	11.1	14.2	8.0	8.7	8.0	17.3	8.0	8.7
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	35.0	29.7	6.0	47.0	6.0	58.7	12.0	41.0
Max Q Clear Time (g_c+I1), s	10.8	5.0	3.6	3.7	2.5	5.4	2.9	3.7
Green Ext Time (p_c), s	0.3	2.2	0.0	0.5	0.0	2.3	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	14.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	110	45	60	100	90	90	987	140	200	837	90
Future Volume (veh/h)	90	110	45	60	100	90	90	987	140	200	837	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		0.98	1.00		0.97	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	98	120	27	65	109	81	98	1073	139	217	910	95
Adj No. of Lanes	1	1	0	1	1	0	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	126	273	61	84	158	117	127	1382	179	258	1653	173
Arrive On Green	0.07	0.18	0.18	0.05	0.16	0.16	0.07	0.43	0.42	0.14	0.51	0.49
Sat Flow, veh/h	1792	1482	334	1774	981	729	1792	3182	412	1792	3258	340
Grp Volume(v), veh/h	98	0	147	65	0	190	98	602	610	217	499	506
Grp Sat Flow(s),veh/h/ln	1792	0	1816	1774	0	1710	1792	1787	1807	1792	1787	1811
Q Serve(g_s), s	4.5	0.0	6.0	3.0	0.0	8.8	4.5	24.1	24.3	9.9	16.0	16.1
Cycle Q Clear(g_c), s	4.5	0.0	6.0	3.0	0.0	8.8	4.5	24.1	24.3	9.9	16.0	16.1
Prop In Lane	1.00		0.18	1.00		0.43	1.00		0.23	1.00		0.19
Lane Grp Cap(c), veh/h	126	0	334	84	0	276	127	776	785	258	907	919
V/C Ratio(X)	0.78	0.00	0.44	0.78	0.00	0.69	0.77	0.78	0.78	0.84	0.55	0.55
Avail Cap(c_a), veh/h	235	0	735	232	0	692	555	979	990	704	1128	1143
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.4	0.0	30.4	39.6	0.0	33.2	38.3	20.3	20.4	35.0	14.1	14.2
Incr Delay (d2), s/veh	3.9	0.0	0.3	5.7	0.0	1.2	3.8	2.3	2.3	2.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	3.1	1.6	0.0	4.3	2.4	12.4	12.6	5.1	8.0	8.1
LnGrp Delay(d),s/veh	42.3	0.0	30.7	45.3	0.0	34.4	42.1	22.6	22.7	37.9	14.3	14.4
LnGrp LOS	D		C	D		C	D	C	C	D	B	B
Approach Vol, veh/h		245			255			1310			1222	
Approach Delay, s/veh		35.4			37.2			24.1			18.5	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	40.5	8.0	19.5	9.9	46.6	9.9	17.5
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	33.0	44.7	11.0	34.0	26.0	51.7	11.0	34.0
Max Q Clear Time (g_c+I1), s	11.9	26.3	5.0	8.0	6.5	18.1	6.5	10.8
Green Ext Time (p_c), s	0.3	8.9	0.0	1.1	0.1	11.2	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	23.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	0	9	150	0	330	19	738	40	60	655	137
Future Volume (veh/h)	49	0	9	150	0	330	19	738	40	60	655	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1878	1900
Adj Flow Rate, veh/h	53	0	10	163	0	302	21	802	16	65	712	149
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	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, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	138	0	299	210	0	366	78	1335	582	83	1073	224
Arrive On Green	0.08	0.00	0.19	0.12	0.00	0.23	0.04	0.37	0.37	0.05	0.37	0.35
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1557	1792	2939	615
Grp Volume(v), veh/h	53	0	10	163	0	302	21	802	16	65	432	429
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1557	1792	1784	1769
Q Serve(g_s), s	1.9	0.0	0.3	5.7	0.0	11.6	0.7	11.8	0.4	2.3	13.3	13.3
Cycle Q Clear(g_c), s	1.9	0.0	0.3	5.7	0.0	11.6	0.7	11.8	0.4	2.3	13.3	13.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	138	0	299	210	0	366	78	1335	582	83	651	646
V/C Ratio(X)	0.38	0.00	0.03	0.78	0.00	0.82	0.27	0.60	0.03	0.78	0.66	0.66
Avail Cap(c_a), veh/h	190	0	872	526	0	1236	171	2078	905	247	1092	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	21.7	28.1	0.0	24.0	30.2	16.5	13.0	30.8	17.4	17.6
Incr Delay (d2), s/veh	1.7	0.0	0.0	6.0	0.0	1.8	1.8	0.2	0.0	6.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.2	3.2	0.0	5.4	0.4	5.8	0.2	1.3	6.6	6.5
LnGrp Delay(d),s/veh	30.4	0.0	21.7	34.1	0.0	25.8	32.0	16.7	13.0	36.8	17.8	18.0
LnGrp LOS	C		C	C		C	C	B	B	D	B	B
Approach Vol, veh/h		63			465			839			926	
Approach Delay, s/veh		29.0			28.7			17.0			19.3	
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	7.0	28.4	13.6	16.3	7.6	27.9	9.1	20.8
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	9.0	36.7	19.0	34.0	5.0	38.7	5.0	* 50
Max Q Clear Time (g_c+I1), s	4.3	13.8	7.7	2.3	2.7	15.3	3.9	13.6
Green Ext Time (p_c), s	0.0	7.2	0.3	1.2	0.0	7.2	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	20.6
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	178	33	110	267	409	65	600	60	360	359	45
Future Volume (veh/h)	98	178	33	110	267	409	65	600	60	360	359	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	107	193	36	120	290	150	71	652	65	391	390	49
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	2	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, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	192	548	100	211	441	222	91	988	98	524	1275	159
Arrive On Green	0.11	0.18	0.18	0.12	0.19	0.19	0.05	0.30	0.28	0.15	0.40	0.38
Sat Flow, veh/h	1810	3047	558	1792	2302	1160	1810	3312	330	3476	3199	399
Grp Volume(v), veh/h	107	113	116	120	223	217	71	355	362	391	217	222
Grp Sat Flow(s),veh/h/ln	1810	1805	1800	1792	1787	1674	1810	1805	1837	1738	1787	1811
Q Serve(g_s), s	3.5	3.5	3.6	4.0	7.3	7.6	2.4	10.8	10.9	6.8	5.2	5.3
Cycle Q Clear(g_c), s	3.5	3.5	3.6	4.0	7.3	7.6	2.4	10.8	10.9	6.8	5.2	5.3
Prop In Lane	1.00		0.31	1.00		0.69	1.00		0.18	1.00		0.22
Lane Grp Cap(c), veh/h	192	325	324	211	342	321	91	538	548	524	712	722
V/C Ratio(X)	0.56	0.35	0.36	0.57	0.65	0.67	0.78	0.66	0.66	0.75	0.30	0.31
Avail Cap(c_a), veh/h	201	1001	998	568	1359	1273	115	1401	1426	1652	2123	2151
HCM Platoon Ratio	1.00	1.00	1.00	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	26.8	22.6	22.7	26.3	23.6	23.7	29.6	19.4	19.5	25.7	13.0	13.1
Incr Delay (d2), s/veh	3.1	0.2	0.2	2.4	0.8	0.9	18.0	0.5	0.5	0.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.7	1.8	2.1	3.7	3.6	1.7	5.5	5.6	3.3	2.6	2.7
LnGrp Delay(d),s/veh	29.9	22.9	22.9	28.7	24.4	24.6	47.6	19.9	20.0	26.5	13.1	13.2
LnGrp LOS	C	C	C	C	C	C	D	B	B	C	B	B
Approach Vol, veh/h		336			560			788			830	
Approach Delay, s/veh		25.1			25.4			22.4			19.4	
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	13.5	22.8	11.4	15.4	7.2	29.2	10.7	16.1
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	30.0	47.7	18.0	35.0	4.0	73.7	5.0	48.0
Max Q Clear Time (g_c+I1), s	12.8	12.9	6.0	5.6	4.4	7.3	5.5	9.6
Green Ext Time (p_c), s	0.7	4.6	0.2	2.3	0.0	4.7	0.0	2.3

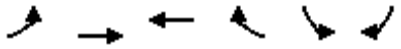
Intersection Summary		
HCM 2010 Ctrl Delay		22.5
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	524	60	70	610	190	80	90	180	120	30	135
Future Volume (veh/h)	170	524	60	70	610	190	80	90	180	120	30	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	185	570	65	76	663	207	87	98	196	130	33	147
Adj No. of Lanes	1	2	0	1	2	0	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	1601	182	97	1151	359	110	277	248	158	324	290
Arrive On Green	0.12	0.50	0.50	0.05	0.43	0.43	0.06	0.16	0.16	0.09	0.18	0.18
Sat Flow, veh/h	1774	3204	364	1774	2657	829	1774	1770	1583	1774	1770	1583
Grp Volume(v), veh/h	185	314	321	76	441	429	87	98	196	130	33	147
Grp Sat Flow(s),veh/h/ln	1774	1770	1798	1774	1770	1716	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	12.3	13.0	13.0	5.1	22.6	22.6	5.8	5.9	14.3	8.6	1.9	10.0
Cycle Q Clear(g_c), s	12.3	13.0	13.0	5.1	22.6	22.6	5.8	5.9	14.3	8.6	1.9	10.0
Prop In Lane	1.00		0.20	1.00		0.48	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	885	899	97	767	744	110	277	248	158	324	290
V/C Ratio(X)	0.86	0.36	0.36	0.78	0.58	0.58	0.79	0.35	0.79	0.82	0.10	0.51
Avail Cap(c_a), veh/h	340	885	899	177	767	744	207	277	248	266	324	290
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	18.2	18.3	56.0	25.7	25.7	55.5	45.2	48.7	53.7	40.8	44.1
Incr Delay (d2), s/veh	12.2	1.1	1.1	12.8	3.1	3.2	11.8	0.8	15.8	10.2	0.6	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	6.6	6.7	2.8	11.7	11.4	3.2	3.0	7.4	4.7	1.0	4.9
LnGrp Delay(d),s/veh	63.9	19.4	19.4	68.8	28.8	28.9	67.3	46.0	64.5	64.0	41.4	50.3
LnGrp LOS	E	B	B	E	C	C	E	D	E	E	D	D
Approach Vol, veh/h		820			946			381			310	
Approach Delay, s/veh		29.4			32.1			60.4			55.1	
Approach LOS		C			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	24.8	12.6	66.0	13.5	28.0	20.6	58.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	18.0	18.0	12.0	48.0	14.0	22.0	23.0	37.0
Max Q Clear Time (g_c+I1), s	10.6	16.3	7.1	15.0	7.8	12.0	14.3	24.6
Green Ext Time (p_c), s	0.2	0.5	0.1	12.5	0.1	2.1	0.3	7.4

Intersection Summary	
HCM 2010 Ctrl Delay	38.5
HCM 2010 LOS	D

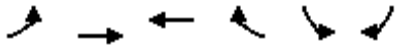
Notes



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	157	578	749	280	220	121
Future Volume (veh/h)	157	578	749	280	220	121
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	171	628	814	304	239	132
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	207	2084	1024	382	493	440
Arrive On Green	0.12	0.59	0.41	0.41	0.28	0.28
Sat Flow, veh/h	1774	3632	2618	942	1774	1583
Grp Volume(v), veh/h	171	628	570	548	239	132
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1697	1774	1583
Q Serve(g_s), s	8.5	8.0	25.4	25.5	10.1	5.9
Cycle Q Clear(g_c), s	8.5	8.0	25.4	25.5	10.1	5.9
Prop In Lane	1.00			0.55	1.00	1.00
Lane Grp Cap(c), veh/h	207	2084	718	688	493	440
V/C Ratio(X)	0.83	0.30	0.79	0.80	0.48	0.30
Avail Cap(c_a), veh/h	296	2084	718	688	493	440
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	38.9	9.2	23.5	23.5	27.1	25.6
Incr Delay (d2), s/veh	12.1	0.4	8.9	9.3	3.4	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	3.9	14.1	13.6	5.4	5.9
LnGrp Delay(d),s/veh	50.9	9.6	32.3	32.8	30.5	27.4
LnGrp LOS	D	A	C	C	C	C
Approach Vol, veh/h		799	1118		371	
Approach Delay, s/veh		18.5	32.5		29.4	
Approach LOS		B	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				59.0		31.0	16.5	42.5
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				53.0		25.0	15.0	32.0
Max Q Clear Time (g_c+I1), s				10.0		12.1	10.5	27.5
Green Ext Time (p_c), s				16.5		1.0	0.2	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	27.1
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	546	927	1117	280	1560	563
Future Volume (veh/h)	546	927	1117	280	1560	563
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	593	1008	1214	304	1696	612
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	372	3085	1287	576	1168	537
Arrive On Green	0.21	0.61	0.36	0.36	0.34	0.34
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	593	1008	1214	304	1696	612
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	29.3	13.6	46.5	21.1	47.0	47.0
Cycle Q Clear(g_c), s	29.3	13.6	46.5	21.1	47.0	47.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	372	3085	1287	576	1168	537
V/C Ratio(X)	1.60	0.33	0.94	0.53	1.45	1.14
Avail Cap(c_a), veh/h	372	3091	1291	577	1168	537
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	55.3	13.5	43.1	35.1	46.4	46.4
Incr Delay (d2), s/veh	280.3	0.0	13.6	0.5	208.2	83.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	48.2	6.4	25.2	9.4	56.2	33.0
LnGrp Delay(d),s/veh	335.6	13.5	56.7	35.5	254.6	129.5
LnGrp LOS	F	B	E	D	F	F
Approach Vol, veh/h		1601	1518		2308	
Approach Delay, s/veh		132.8	52.4		221.4	
Approach LOS		F	D		F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		88.8			34.0	54.8		51.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		83.7			28.0	49.7		45.7
Max Q Clear Time (g_c+I1), s		15.6			31.3	48.5		49.0
Green Ext Time (p_c), s		17.1			0.0	1.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	148.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	669	1818	0	0	697	990	700	0	410	0	0	0
Future Volume (veh/h)	669	1818	0	0	697	990	700	0	410	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1845	1845	1845			
Adj Flow Rate, veh/h	727	1976	0	0	978	452	761	0	324			
Adj No. of Lanes	2	3	0	0	2	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	1	1	0	0	1	1	3	3	3			
Cap, veh/h	777	3480	0	0	1577	670	888	0	396			
Arrive On Green	0.22	0.68	0.00	0.00	0.42	0.42	0.25	0.00	0.25			
Sat Flow, veh/h	3476	5305	0	0	3762	1599	3514	0	1568			
Grp Volume(v), veh/h	727	1976	0	0	978	452	761	0	324			
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1881	1599	1757	0	1568			
Q Serve(g_s), s	23.6	23.1	0.0	0.0	23.4	26.3	23.7	0.0	22.3			
Cycle Q Clear(g_c), s	23.6	23.1	0.0	0.0	23.4	26.3	23.7	0.0	22.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	777	3480	0	0	1577	670	888	0	396			
V/C Ratio(X)	0.94	0.57	0.00	0.00	0.62	0.67	0.86	0.00	0.82			
Avail Cap(c_a), veh/h	787	3834	0	0	1826	776	1417	0	632			
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	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	43.7	9.7	0.0	0.0	26.2	27.0	40.9	0.0	40.4			
Incr Delay (d2), s/veh	17.8	0.1	0.0	0.0	0.3	1.3	1.8	0.0	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			
%ile BackOfQ(50%),veh/ln	18.2	10.8	0.0	0.0	12.1	11.8	11.7	0.0	18.2			
LnGrp Delay(d),s/veh	61.6	9.8	0.0	0.0	26.4	28.3	42.7	0.0	42.4			
LnGrp LOS	E	A			C	C	D		D			
Approach Vol, veh/h		2703			1430			1085				
Approach Delay, s/veh		23.7			27.0			42.6				
Approach LOS		C			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		81.8		33.0	29.7	52.1		
Change Period (Y+Rc), s		5.3		5.3	4.0	5.3		
Max Green Setting (Gmax), s		84.4		45.0	26.0	54.4		
Max Q Clear Time (g_c+I1), s		25.1		25.7	25.6	28.3		
Green Ext Time (p_c), s		30.0		2.0	0.1	18.5		

Intersection Summary	
HCM 2010 Ctrl Delay	28.5
HCM 2010 LOS	C

Notes

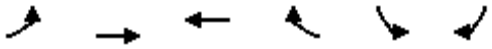
Intersection	
Int Delay, s/veh	59.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	431	134	180	453	89
Future Vol, veh/h	60	431	134	180	453	89
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, %	0	0	0	0	0	0
Mvmt Flow	65	468	146	196	492	97

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1325	243	0	0	341	0
Stage 1	243	-	-	-	-	-
Stage 2	1082	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	174	801	-	-	1229	-
Stage 1	802	-	-	-	-	-
Stage 2	328	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	100	801	-	-	1229	-
Mov Cap-2 Maneuver	100	-	-	-	-	-
Stage 1	802	-	-	-	-	-
Stage 2	189	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	153.7	0	8.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	431	1229	-
HCM Lane V/C Ratio	-	-	1.238	0.401	-
HCM Control Delay (s)	-	-	153.7	9.9	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	22	2	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	372	1289	1088	60	690	1010
Future Volume (veh/h)	372	1289	1088	60	690	1010
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1863	1863	1776	1776
Adj Flow Rate, veh/h	404	1401	1183	-133	750	828
Adj No. of Lanes	2	2	3	1	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	7	7
Cap, veh/h	398	1744	1704	531	737	1528
Arrive On Green	0.11	0.49	0.34	0.00	0.44	0.45
Sat Flow, veh/h	3476	3668	5253	1583	1691	2656
Grp Volume(v), veh/h	404	1401	1183	-133	750	828
Grp Sat Flow(s),veh/h/ln	1738	1787	1695	1583	1691	1328
Q Serve(g_s), s	12.0	34.6	21.1	0.0	45.7	20.2
Cycle Q Clear(g_c), s	12.0	34.6	21.1	0.0	45.7	20.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	398	1744	1705	531	737	1528
V/C Ratio(X)	1.02	0.80	0.69	-0.25	1.02	0.54
Avail Cap(c_a), veh/h	398	1919	1955	609	737	1528
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	46.4	22.6	30.2	0.0	29.6	13.7
Incr Delay (d2), s/veh	49.1	2.1	0.7	0.0	37.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	17.4	10.0	0.0	28.8	0.0
LnGrp Delay(d),s/veh	95.6	24.7	30.8	0.0	67.2	14.0
LnGrp LOS	F	C	C		F	B
Approach Vol, veh/h		1805	1050		1578	
Approach Delay, s/veh		40.6	34.8		39.2	
Approach LOS		D	C		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				55.1		49.7	16.0	39.1
Change Period (Y+Rc), s				5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s				55.0		45.7	12.0	39.0
Max Q Clear Time (g_c+I1), s				36.6		47.7	14.0	23.1
Green Ext Time (p_c), s				11.9		0.0	0.0	10.7

Intersection Summary	
HCM 2010 Ctrl Delay	38.7
HCM 2010 LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1649	330	0	884	264	230
Future Volume (veh/h)	1649	330	0	884	264	230
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	1792	359	0	961	287	250
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2296	1027	0	2296	947	436
Arrive On Green	0.65	0.65	0.00	0.65	0.28	0.28
Sat Flow, veh/h	3632	1583	0	3725	3442	1583
Grp Volume(v), veh/h	1792	359	0	961	287	250
Grp Sat Flow(s),veh/h/ln	1770	1583	0	1770	1721	1583
Q Serve(g_s), s	37.9	10.8	0.0	13.8	6.9	14.3
Cycle Q Clear(g_c), s	37.9	10.8	0.0	13.8	6.9	14.3
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2296	1027	0	2296	947	436
V/C Ratio(X)	0.78	0.35	0.00	0.42	0.30	0.57
Avail Cap(c_a), veh/h	2453	1097	0	2453	947	436
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	13.2	8.4	0.0	8.9	30.2	32.8
Incr Delay (d2), s/veh	1.6	0.2	0.0	0.1	0.8	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.7	4.7	0.0	6.7	3.4	6.9
LnGrp Delay(d),s/veh	14.7	8.6	0.0	9.0	31.0	38.3
LnGrp LOS	B	A		A	C	D
Approach Vol, veh/h	2151			961	537	
Approach Delay, s/veh	13.7			9.0	34.4	
Approach LOS	B			A	C	

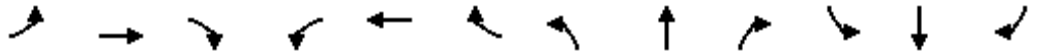
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		72.3				72.3
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		28.5		72.5				72.5
Max Q Clear Time (g_c+I1), s		16.3		39.9				15.8
Green Ext Time (p_c), s		1.6		27.9				44.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.5
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	560	810	300	270	546	170
Future Volume (veh/h)	560	810	300	270	546	170
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1397	1397	1845	1845
Adj Flow Rate, veh/h	609	214	326	293	593	159
Adj No. of Lanes	2	1	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	36	36	3	3
Cap, veh/h	1063	470	474	835	798	367
Arrive On Green	0.30	0.30	0.18	0.60	0.23	0.23
Sat Flow, veh/h	3632	1565	2581	1397	3408	1568
Grp Volume(v), veh/h	609	214	326	293	593	159
Grp Sat Flow(s),veh/h/ln	1770	1565	1291	1397	1704	1568
Q Serve(g_s), s	6.9	5.3	5.6	5.1	7.7	4.1
Cycle Q Clear(g_c), s	6.9	5.3	5.6	5.1	7.7	4.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1063	470	474	835	798	367
V/C Ratio(X)	0.57	0.46	0.69	0.35	0.74	0.43
Avail Cap(c_a), veh/h	5733	2535	793	2851	2509	1154
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	14.1	13.5	18.1	4.9	16.9	15.5
Incr Delay (d2), s/veh	0.2	0.3	1.8	0.1	0.5	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	3.4	2.3	2.1	2.0	3.6	1.8
LnGrp Delay(d),s/veh	14.2	13.7	19.9	5.0	17.4	15.8
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	823			619	752	
Approach Delay, s/veh	14.1			12.8	17.1	
Approach LOS	B			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		15.1	14.1	18.3				32.4
Change Period (Y+Rc), s		4.0	6.0	4.6				4.6
Max Green Setting (Gmax), s		35.0	14.0	76.4				96.4
Max Q Clear Time (g_c+I1), s		9.7	7.6	8.9				7.1
Green Ext Time (p_c), s		1.5	0.6	4.1				4.1

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	370	0	450	1195	903	0	0	823	540
Future Volume (veh/h)	0	0	0	370	0	450	1195	903	0	0	823	540
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		0.99
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				1881	0	1881	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				402	0	329	1299	982	0	0	895	265
Adj No. of Lanes				2	0	1	2	2	0	0	4	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				1	0	1	2	2	0	0	2	2
Cap, veh/h				807	0	371	1362	2414	0	0	1635	401
Arrive On Green				0.23	0.00	0.23	0.40	0.68	0.00	0.00	0.26	0.26
Sat Flow, veh/h				3476	0	1599	3442	3632	0	0	6669	1571
Grp Volume(v), veh/h				402	0	329	1299	982	0	0	895	265
Grp Sat Flow(s),veh/h/ln				1738	0	1599	1721	1770	0	0	1602	1571
Q Serve(g_s), s				11.3	0.0	22.3	41.0	13.7	0.0	0.0	13.6	16.9
Cycle Q Clear(g_c), s				11.3	0.0	22.3	41.0	13.7	0.0	0.0	13.6	16.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				807	0	371	1362	2414	0	0	1635	401
V/C Ratio(X)				0.50	0.00	0.89	0.95	0.41	0.00	0.00	0.55	0.66
Avail Cap(c_a), veh/h				1309	0	602	1397	2786	0	0	2242	550
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				37.4	0.0	41.6	32.9	7.8	0.0	0.0	36.1	37.4
Incr Delay (d2), s/veh				0.2	0.0	5.6	14.1	0.0	0.0	0.0	0.1	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.4	0.0	10.5	22.2	6.7	0.0	0.0	6.0	7.4
LnGrp Delay(d),s/veh				37.5	0.0	47.2	46.9	7.9	0.0	0.0	36.2	38.1
LnGrp LOS				D		D	D	A			D	D
Approach Vol, veh/h					731			2281			1160	
Approach Delay, s/veh					41.9			30.1			36.7	
Approach LOS					D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		81.2			47.9	33.4		30.8
Change Period (Y+Rc), s		5.3			4.0	5.3		5.3
Max Green Setting (Gmax), s		87.7			45.0	38.7		41.7
Max Q Clear Time (g_c+I1), s		15.7			43.0	18.9		24.3
Green Ext Time (p_c), s		12.3			0.8	9.1		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	10	643	0	0	0	0	1688	210	290	903	0
Future Volume (veh/h)	410	10	643	0	0	0	0	1688	210	290	903	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845				0	1881	1900	1863	1863	0
Adj Flow Rate, veh/h	446	0	706				0	1835	213	315	982	0
Adj No. of Lanes	2	0	2				0	4	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3				0	1	1	2	2	0
Cap, veh/h	1028	0	918				0	2644	307	412	2145	0
Arrive On Green	0.29	0.00	0.29				0.00	0.45	0.44	0.12	0.61	0.00
Sat Flow, veh/h	3514	0	3136				0	6188	688	3442	3632	0
Grp Volume(v), veh/h	446	0	706				0	1503	545	315	982	0
Grp Sat Flow(s),veh/h/ln	1757	0	1568				0	1618	1759	1721	1770	0
Q Serve(g_s), s	8.9	0.0	17.9				0.0	21.6	21.7	7.7	13.2	0.0
Cycle Q Clear(g_c), s	8.9	0.0	17.9				0.0	21.6	21.7	7.7	13.2	0.0
Prop In Lane	1.00		1.00				0.00		0.39	1.00		0.00
Lane Grp Cap(c), veh/h	1028	0	918				0	2166	785	412	2145	0
V/C Ratio(X)	0.43	0.00	0.77				0.00	0.69	0.69	0.76	0.46	0.00
Avail Cap(c_a), veh/h	2787	0	2488				0	2522	914	534	2584	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	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.9	0.0	28.1				0.0	19.3	19.4	37.1	9.3	0.0
Incr Delay (d2), s/veh	0.3	0.0	1.4				0.0	0.5	1.3	3.4	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
%ile BackOfQ(50%),veh/ln	4.4	0.0	7.9				0.0	9.7	10.7	3.9	6.4	0.0
LnGrp Delay(d),s/veh	25.2	0.0	29.5				0.0	19.8	20.7	40.5	9.4	0.0
LnGrp LOS	C		C					B	C	D	A	
Approach Vol, veh/h		1152						2048			1297	
Approach Delay, s/veh		27.8						20.1			16.9	
Approach LOS		C						C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	13.9	43.6		29.5		57.5		
Change Period (Y+Rc), s	4.0	5.3		4.5		* 5.3		
Max Green Setting (Gmax), s	13.6	44.7		68.5		* 63		
Max Q Clear Time (g_c+I1), s	19.7	23.7		19.9		15.2		
Green Ext Time (p_c), s	0.2	14.7		5.1		23.7		

Intersection Summary	
HCM 2010 Ctrl Delay	21.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	30	110	456	60	130	190	590	1280	120	720	100
Future Volume (veh/h)	30	30	110	456	60	130	190	590	1280	120	720	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		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1827	1827	1900	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	33	33	33	496	65	99	207	641	702	130	783	106
Adj No. of Lanes	1	1	0	3	1	0	1	2	2	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, %	8	8	8	4	4	4	2	2	2	5	5	5
Cap, veh/h	59	84	84	694	138	210	263	1435	1112	191	1120	152
Arrive On Green	0.04	0.10	0.10	0.14	0.21	0.20	0.15	0.41	0.41	0.11	0.37	0.36
Sat Flow, veh/h	1675	802	802	4907	654	997	1774	3539	2742	1723	3043	412
Grp Volume(v), veh/h	33	0	66	496	0	164	207	641	702	130	442	447
Grp Sat Flow(s),veh/h/ln	1675	0	1603	1636	0	1651	1774	1770	1371	1723	1719	1736
Q Serve(g_s), s	1.3	0.0	2.5	6.3	0.0	5.7	7.4	8.6	13.4	4.7	14.3	14.3
Cycle Q Clear(g_c), s	1.3	0.0	2.5	6.3	0.0	5.7	7.4	8.6	13.4	4.7	14.3	14.3
Prop In Lane	1.00		0.50	1.00		0.60	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	59	0	168	694	0	348	263	1435	1112	191	633	639
V/C Ratio(X)	0.56	0.00	0.39	0.71	0.00	0.47	0.79	0.45	0.63	0.68	0.70	0.70
Avail Cap(c_a), veh/h	115	0	930	939	0	1160	339	1928	1494	224	831	840
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	0.0	27.4	26.8	0.0	22.7	26.8	14.1	15.5	27.9	17.6	17.6
Incr Delay (d2), s/veh	3.1	0.0	0.6	0.9	0.0	0.4	6.6	0.1	0.2	4.4	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	1.1	2.9	0.0	2.6	4.0	4.2	5.1	2.5	6.9	7.0
LnGrp Delay(d),s/veh	34.1	0.0	28.0	27.6	0.0	23.1	33.4	14.2	15.7	32.3	18.5	18.5
LnGrp LOS	C		C	C		C	C	B	B	C	B	B
Approach Vol, veh/h		99			660			1550			1019	
Approach Delay, s/veh		30.0			26.5			17.5			20.3	
Approach LOS		C			C			B			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	10.8	30.9	12.7	10.9	13.2	28.5	5.8	17.9
Change Period (Y+Rc), s	4.0	4.9	4.0	4.6	4.0	4.9	4.0	4.6
Max Green Setting (Gmax), s	8.0	35.1	12.0	37.4	12.0	31.1	4.0	45.4
Max Q Clear Time (g_c+I1), s	10.7	15.4	8.3	4.5	9.4	16.3	3.3	7.7
Green Ext Time (p_c), s	0.0	8.3	0.4	0.8	0.1	7.2	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	20.5
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	0	1128	0	0	0	0	1830	426	210	976	0
Future Volume (veh/h)	230	0	1128	0	0	0	0	1830	426	210	976	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	60				0	60	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	250	0	954				0	1989	463	228	1061	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	771	0	805				0	2597	409	311	3412	0
Arrive On Green	0.07	0.00	0.07				0.00	0.18	0.18	0.03	0.23	0.00
Sat Flow, veh/h	3442	0	3610				0	4819	943	3343	5103	0
Grp Volume(v), veh/h	250	0	954				0	1635	817	228	1061	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1664	1672	1647	0
Q Serve(g_s), s	7.4	0.0	24.2				0.0	50.8	51.2	7.2	19.1	0.0
Cycle Q Clear(g_c), s	7.4	0.0	24.2				0.0	50.8	51.2	7.2	19.1	0.0
Prop In Lane	1.00		1.00				0.00		0.57	1.00		0.00
Lane Grp Cap(c), veh/h	771	0	805				0	1869	947	311	3412	0
V/C Ratio(X)	0.32	0.00	1.18				0.00	0.87	0.86	0.73	0.31	0.00
Avail Cap(c_a), veh/h	779	0	817				0	1900	943	391	3397	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.2	0.0	50.2				0.0	43.3	41.7	51.0	20.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	95.5				0.0	4.6	8.0	3.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	192.7				0.0	33.4	13.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	35.2				0.0	24.6	31.3	3.5	8.8	0.0
LnGrp Delay(d),s/veh	42.3	0.0	338.4				0.0	81.3	62.8	54.6	20.4	0.0
LnGrp LOS	D		F					F	E	D	C	
Approach Vol, veh/h		1204						2452			1289	
Approach Delay, s/veh		277.0						75.1			26.4	
Approach LOS		F						E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.4	63.5		29.0		77.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	12.6	* 60		23.7		50.1		
Max Q Clear Time (g_c+I1), s	9.2	53.2		26.2		21.1		
Green Ext Time (p_c), s	0.3	5.4		0.0		5.4		

Intersection Summary	
HCM 2010 Ctrl Delay	111.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	30	30	200	40	250	40	2038	200	190	926	30
Future Volume (veh/h)	40	30	30	200	40	250	40	2038	200	190	926	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		0.98	1.00		1.00	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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	33	13	217	43	45	43	2215	213	207	1007	32
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	78	60	113	254	267	226	62	1992	188	212	2227	71
Arrive On Green	0.08	0.08	0.07	0.14	0.14	0.14	0.03	0.61	0.61	0.06	0.64	0.63
Sat Flow, veh/h	1015	779	1536	1792	1881	1596	1774	3268	309	3442	3499	111
Grp Volume(v), veh/h	76	0	13	217	43	45	43	1183	1245	207	509	530
Grp Sat Flow(s),veh/h/ln	1794	0	1536	1792	1881	1596	1774	1770	1807	1721	1770	1840
Q Serve(g_s), s	5.6	0.0	1.1	16.4	2.8	3.4	3.3	84.3	84.3	8.3	20.3	20.3
Cycle Q Clear(g_c), s	5.6	0.0	1.1	16.4	2.8	3.4	3.3	84.3	84.3	8.3	20.3	20.3
Prop In Lane	0.57		1.00	1.00		1.00	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	138	0	113	254	267	226	62	1079	1102	212	1126	1171
V/C Ratio(X)	0.55	0.00	0.12	0.85	0.16	0.20	0.70	1.10	1.13	0.98	0.45	0.45
Avail Cap(c_a), veh/h	461	0	389	473	497	421	122	1079	1102	212	1126	1171
HCM Platoon Ratio	1.00	1.00	1.00	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	61.5	0.0	59.9	57.9	52.1	52.4	66.0	27.0	27.0	64.8	12.8	12.8
Incr Delay (d2), s/veh	1.3	0.0	0.2	3.2	0.1	0.2	5.2	57.7	70.3	55.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.5	8.3	1.5	1.5	1.7	58.0	63.2	5.6	9.9	10.3
LnGrp Delay(d),s/veh	62.8	0.0	60.0	61.1	52.2	52.5	71.2	84.7	97.4	120.1	12.9	12.9
LnGrp LOS	E		E	E	D	D	E	F	F	F	B	B
Approach Vol, veh/h		89			305			2471			1246	
Approach Delay, s/veh		62.4			58.6			90.8			30.7	
Approach LOS		E			E			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	88.4		14.2	8.3	92.1		23.7
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	8.0	83.8		35.0	9.0	82.8		36.0
Max Q Clear Time (g_c+I1), s	10.3	86.3		7.6	5.3	22.3		18.4
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	39.5		0.4

Intersection Summary		
HCM 2010 Ctrl Delay	69.6	
HCM 2010 LOS	E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	140	100	70	220	910	70	906	30	510	943	140
Future Volume (veh/h)	140	140	100	70	220	910	70	906	30	510	943	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1881	1881	1881	1881	1881	1900	1863	1863	1863
Adj Flow Rate, veh/h	152	152	38	76	239	989	76	985	32	554	1025	79
Adj No. of Lanes	1	2	0	1	1	2	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	183	930	226	103	536	1495	268	1099	36	628	1185	692
Arrive On Green	0.10	0.33	0.33	0.06	0.28	0.28	0.15	0.31	0.31	0.18	0.33	0.33
Sat Flow, veh/h	1774	2815	683	1792	1881	3198	1792	3532	115	3442	3539	1580
Grp Volume(v), veh/h	152	94	96	76	239	989	76	498	519	554	1025	79
Grp Sat Flow(s),veh/h/ln	1774	1770	1729	1792	1881	1599	1792	1787	1859	1721	1770	1580
Q Serve(g_s), s	11.3	5.0	5.3	5.6	14.0	32.0	5.1	35.8	35.8	21.1	36.4	2.2
Cycle Q Clear(g_c), s	11.3	5.0	5.3	5.6	14.0	32.0	5.1	35.8	35.8	21.1	36.4	2.2
Prop In Lane	1.00		0.40	1.00		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	183	585	571	103	536	1495	268	556	579	628	1185	692
V/C Ratio(X)	0.83	0.16	0.17	0.74	0.45	0.66	0.28	0.90	0.90	0.88	0.87	0.11
Avail Cap(c_a), veh/h	258	737	719	193	713	1796	268	774	806	910	2087	1095
HCM Platoon Ratio	1.00	1.00	1.00	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	59.1	31.8	31.9	62.3	39.4	27.6	50.7	44.2	44.2	53.5	41.8	9.2
Incr Delay (d2), s/veh	10.5	0.0	0.1	3.9	0.2	0.4	0.2	8.2	7.9	5.4	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	2.5	2.6	2.9	7.3	14.2	2.5	18.8	19.6	10.5	17.9	1.1
LnGrp Delay(d),s/veh	69.6	31.8	32.0	66.2	39.6	28.0	50.9	52.4	52.1	58.9	42.6	9.2
LnGrp LOS	E	C	C	E	D	C	D	D	D	E	D	A
Approach Vol, veh/h		342			1304			1093			1658	
Approach Delay, s/veh		48.7			32.3			52.1			46.5	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.0	46.6	11.2	48.5	24.9	49.8	17.3	42.3
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	5.3	* 5.3	4.0	4.6
Max Green Setting (Gmax), s	35.6	57.7	14.0	55.4	14.0	* 79	19.0	50.4
Max Q Clear Time (g_c+I2), s	23.1	37.8	7.6	7.3	7.1	38.4	13.3	34.0
Green Ext Time (p_c), s	1.0	3.5	0.0	4.1	2.4	6.0	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	43.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	60	673	10	100	60	913	1508	20	70	866	160
Future Volume (veh/h)	200	60	673	10	100	60	913	1508	20	70	866	160
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1881	1881	1881	1900	1863	1863	1881	1881	1881	1863	1863	1900
Adj Flow Rate, veh/h	217	65	217	11	109	14	992	1639	14	76	941	156
Adj No. of Lanes	1	1	2	0	1	1	2	2	1	1	3	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, %	1	1	1	2	2	2	1	1	1	2	2	2
Cap, veh/h	257	270	404	16	162	150	1075	1954	854	105	1300	215
Arrive On Green	0.14	0.14	0.14	0.10	0.10	0.10	0.31	0.55	0.55	0.06	0.30	0.29
Sat Flow, veh/h	1792	1881	2814	170	1684	1551	3476	3574	1563	1774	4384	724
Grp Volume(v), veh/h	217	65	217	120	0	14	992	1639	14	76	727	370
Grp Sat Flow(s),veh/h/ln	1792	1881	1407	1854	0	1551	1738	1787	1563	1774	1695	1718
Q Serve(g_s), s	12.4	3.2	7.5	6.6	0.0	0.9	29.0	40.4	0.4	4.4	20.2	20.3
Cycle Q Clear(g_c), s	12.4	3.2	7.5	6.6	0.0	0.9	29.0	40.4	0.4	4.4	20.2	20.3
Prop In Lane	1.00		1.00	0.09		1.00	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	257	270	404	179	0	150	1075	1954	854	105	1005	509
V/C Ratio(X)	0.84	0.24	0.54	0.67	0.00	0.09	0.92	0.84	0.02	0.72	0.72	0.73
Avail Cap(c_a), veh/h	279	293	439	696	0	582	1173	2086	912	110	1067	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	43.9	39.9	41.8	45.9	0.0	43.3	35.1	20.0	10.9	48.6	33.1	33.3
Incr Delay (d2), s/veh	17.7	0.2	0.4	1.6	0.0	0.1	10.9	2.8	0.0	17.1	1.9	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	7.4	1.7	2.9	3.4	0.0	0.4	15.5	20.6	0.2	2.7	9.8	10.2
LnGrp Delay(d),s/veh	61.6	40.1	42.2	47.5	0.0	43.4	46.0	22.8	10.9	65.8	35.0	37.1
LnGrp LOS	E	D	D	D		D	D	C	B	E	D	D
Approach Vol, veh/h		499			134			2645			1173	
Approach Delay, s/veh		50.4			47.1			31.4			37.7	
Approach LOS		D			D			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	9.7	62.3		19.5	36.0	36.0		13.6
Change Period (Y+Rc), s	4.0	5.3		4.9	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	6.0	60.9		15.9	35.0	* 33		39.0
Max Q Clear Time (g_c+I1), s	10.4	42.4		14.4	31.0	22.3		8.6
Green Ext Time (p_c), s	0.0	13.0		0.2	1.0	8.2		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	35.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	994	266	203	1413	80	488	150	182	70	181	120
Future Volume (veh/h)	50	994	266	203	1413	80	488	150	182	70	181	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		0.98	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	54	1080	205	221	1536	37	530	163	61	76	197	116
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	60	1280	564	235	1629	712	560	635	520	103	257	151
Arrive On Green	0.03	0.36	0.36	0.13	0.46	0.46	0.16	0.34	0.33	0.06	0.23	0.23
Sat Flow, veh/h	1792	3574	1574	1792	3574	1563	3476	1881	1559	1810	1103	650
Grp Volume(v), veh/h	54	1080	205	221	1536	37	530	163	61	76	0	313
Grp Sat Flow(s),veh/h/ln	1792	1787	1574	1792	1787	1563	1738	1881	1559	1810	0	1753
Q Serve(g_s), s	4.0	37.1	12.8	16.3	54.7	1.8	20.1	8.4	3.6	5.5	0.0	22.2
Cycle Q Clear(g_c), s	4.0	37.1	12.8	16.3	54.7	1.8	20.1	8.4	3.6	5.5	0.0	22.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	60	1280	564	235	1629	712	560	635	520	103	0	409
V/C Ratio(X)	0.89	0.84	0.36	0.94	0.94	0.05	0.95	0.26	0.12	0.74	0.00	0.77
Avail Cap(c_a), veh/h	60	1295	570	235	1643	718	560	666	546	156	0	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	64.2	39.4	31.6	57.4	34.6	20.2	55.3	32.0	30.8	61.9	0.0	47.8
Incr Delay (d2), s/veh	76.9	4.9	0.1	41.8	11.2	0.0	24.9	0.1	0.0	3.8	0.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	19.2	5.6	10.8	29.4	0.8	11.6	4.4	1.6	2.9	0.0	11.3
LnGrp Delay(d),s/veh	141.0	44.3	31.7	99.2	45.8	20.2	80.2	32.1	30.8	65.7	0.0	52.5
LnGrp LOS	F	D	C	F	D	C	F	C	C	E		D
Approach Vol, veh/h		1339			1794			754			389	
Approach Delay, s/veh		46.3			51.9			65.8			55.1	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	49.8	21.0	51.5	25.0	35.9	8.0	64.5
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	11.0	46.7	17.0	* 48	21.0	36.7	4.0	* 61
Max Q Clear Time (g_c+I1), s	7.5	10.4	18.3	39.1	22.1	24.2	6.0	56.7
Green Ext Time (p_c), s	0.0	1.8	0.0	7.0	0.0	1.4	0.0	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	52.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	742	309	322	950	300	503	418	179	340	560	20
Future Volume (veh/h)	40	742	309	322	950	300	503	418	179	340	560	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	807	120	350	1033	173	547	454	178	370	609	20
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	63	1427	210	423	1230	206	598	730	284	444	874	29
Arrive On Green	0.03	0.32	0.32	0.12	0.41	0.41	0.17	0.29	0.29	0.13	0.25	0.24
Sat Flow, veh/h	1792	4488	662	3442	3028	506	3476	2499	971	3476	3528	116
Grp Volume(v), veh/h	43	614	313	350	603	603	547	323	309	370	308	321
Grp Sat Flow(s),veh/h/ln	1792	1712	1726	1721	1770	1765	1738	1787	1683	1738	1787	1856
Q Serve(g_s), s	2.8	17.8	18.0	11.8	36.6	36.8	18.4	18.7	19.0	12.4	18.7	18.7
Cycle Q Clear(g_c), s	2.8	17.8	18.0	11.8	36.6	36.8	18.4	18.7	19.0	12.4	18.7	18.7
Prop In Lane	1.00		0.38	1.00		0.29	1.00		0.58	1.00		0.06
Lane Grp Cap(c), veh/h	63	1089	549	423	719	717	598	522	492	444	443	460
V/C Ratio(X)	0.69	0.56	0.57	0.83	0.84	0.84	0.92	0.62	0.63	0.83	0.70	0.70
Avail Cap(c_a), veh/h	68	1275	643	563	882	879	598	600	565	568	585	607
HCM Platoon Ratio	1.00	1.00	1.00	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	56.9	33.8	33.9	51.0	31.9	31.9	48.5	36.5	36.7	50.8	40.8	40.8
Incr Delay (d2), s/veh	18.4	0.2	0.3	5.7	5.1	5.2	18.5	0.9	1.0	6.7	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	8.4	8.7	6.0	18.9	19.0	10.4	9.3	9.0	6.4	9.4	9.8
LnGrp Delay(d),s/veh	75.3	34.0	34.2	56.8	37.0	37.2	67.0	37.3	37.7	57.5	42.0	42.0
LnGrp LOS	E	C	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		970			1556			1179			999	
Approach Delay, s/veh		35.9			41.5			51.2			47.7	
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	18.7	39.6	18.2	42.7	24.0	34.3	7.7	53.2
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	14.6	39.5	19.0	43.9	20.0	38.5	4.0	58.9
Max Q Clear Time (g_c+I1), s	14.4	21.0	13.8	20.0	20.4	20.7	4.8	38.8
Green Ext Time (p_c), s	0.3	4.4	0.3	9.9	0.0	4.3	0.0	9.2

Intersection Summary	
HCM 2010 Ctrl Delay	44.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	313	654	60	100	1090	310	290	450	240	360	202	315
Future Volume (veh/h)	313	654	60	100	1090	310	290	450	240	360	202	315
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	340	711	54	109	1185	223	315	489	237	391	220	150
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	368	2089	158	120	1493	462	345	581	280	459	672	294
Arrive On Green	0.21	0.43	0.43	0.07	0.29	0.29	0.19	0.25	0.24	0.13	0.19	0.19
Sat Flow, veh/h	1774	4819	364	1774	5085	1575	1792	2340	1128	3476	3574	1567
Grp Volume(v), veh/h	340	499	266	109	1185	223	315	373	353	391	220	150
Grp Sat Flow(s),veh/h/ln	1774	1695	1792	1774	1695	1575	1792	1787	1681	1738	1787	1567
Q Serve(g_s), s	26.4	13.7	13.9	8.6	30.1	16.3	24.2	27.8	28.1	15.4	7.5	12.1
Cycle Q Clear(g_c), s	26.4	13.7	13.9	8.6	30.1	16.3	24.2	27.8	28.1	15.4	7.5	12.1
Prop In Lane	1.00		0.20	1.00		1.00	1.00		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	368	1469	777	120	1493	462	345	444	417	459	672	294
V/C Ratio(X)	0.92	0.34	0.34	0.91	0.79	0.48	0.91	0.84	0.85	0.85	0.33	0.51
Avail Cap(c_a), veh/h	436	1769	935	120	1747	541	504	627	589	780	1050	460
HCM Platoon Ratio	1.00	1.00	1.00	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	54.5	26.4	26.4	65.0	45.6	40.8	55.5	50.1	50.3	59.5	49.3	51.2
Incr Delay (d2), s/veh	21.5	0.1	0.1	53.4	1.9	0.3	12.7	5.1	5.7	1.8	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.1	6.5	6.9	6.0	14.4	7.2	13.2	14.4	13.7	7.6	3.7	5.2
LnGrp Delay(d),s/veh	76.0	26.5	26.5	118.3	47.5	41.1	68.2	55.1	56.1	61.3	49.4	51.7
LnGrp LOS	E	C	C	F	D	D	E	E	E	E	D	D
Approach Vol, veh/h		1105			1517			1041			761	
Approach Delay, s/veh		41.7			51.6			59.4			56.0	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	39.6	13.0	65.6	30.5	31.2	32.6	46.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	18.0	48.7	9.0	72.7	39.0	40.7	34.0	47.7
Max Q Clear Time (g_c+I1), s	17.4	30.1	10.6	15.9	26.2	14.1	28.4	32.1
Green Ext Time (p_c), s	0.6	3.6	0.0	12.2	0.4	3.9	0.3	8.1

Intersection Summary	
HCM 2010 Ctrl Delay	51.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1213	550	90	1484	0	0	0	0	460	10	770
Future Volume (veh/h)	0	1213	550	90	1484	0	0	0	0	460	10	770
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1318	263	98	1613	0				508	0	808
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1610	501	114	2044	0				1875	0	837
Arrive On Green	0.00	0.31	0.31	0.06	0.40	0.00				0.53	0.00	0.53
Sat Flow, veh/h	0	5305	1597	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1318	263	98	1613	0				508	0	808
Grp Sat Flow(s),veh/h/ln	0	1712	1597	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	30.9	17.6	6.4	35.9	0.0				10.3	0.0	64.0
Cycle Q Clear(g_c), s	0.0	30.9	17.6	6.4	35.9	0.0				10.3	0.0	64.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1610	501	114	2044	0				1875	0	837
V/C Ratio(X)	0.00	0.82	0.53	0.86	0.79	0.00				0.27	0.00	0.97
Avail Cap(c_a), veh/h	0	1664	518	114	2098	0				2104	0	939
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	41.3	36.7	60.8	34.4	0.0				16.9	0.0	29.6
Incr Delay (d2), s/veh	0.0	3.0	0.4	43.8	1.9	0.0				0.0	0.0	19.8
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	0.0	15.1	7.8	2.4	17.2	0.0				5.0	0.0	32.4
LnGrp Delay(d),s/veh	0.0	44.3	37.1	104.7	36.3	0.0				16.9	0.0	49.4
LnGrp LOS		D	D	F	D					B		D
Approach Vol, veh/h		1581			1711						1316	
Approach Delay, s/veh		43.1			40.2						36.8	
Approach LOS		D			D						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	11.0	45.6		73.6		56.6		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	7.0	41.7		76.7		52.7		
Max Q Clear Time (g_c+I1), s	12.4	32.9		66.0		37.9		
Green Ext Time (p_c), s	0.0	7.4		2.3		11.5		

Intersection Summary	
HCM 2010 Ctrl Delay	40.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1093	580	140	904	720	670	20	750	0	0	0
Future Volume (veh/h)	0	1093	580	140	904	720	670	20	750	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	0	1188	395	152	983	469	744	0	665			
Adj No. of Lanes	0	3	1	1	3	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	1788	556	88	2236	676	1613	0	719			
Arrive On Green	0.00	0.35	0.35	0.05	0.44	0.44	0.45	0.00	0.45			
Sat Flow, veh/h	0	5253	1581	1774	5085	1536	3548	0	1582			
Grp Volume(v), veh/h	0	1188	395	152	983	469	744	0	665			
Grp Sat Flow(s),veh/h/ln	0	1695	1581	1774	1695	1536	1774	0	1582			
Q Serve(g_s), s	0.0	17.9	19.6	4.5	12.2	22.4	13.1	0.0	35.9			
Cycle Q Clear(g_c), s	0.0	17.9	19.6	4.5	12.2	22.4	13.1	0.0	35.9			
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	1788	556	88	2236	676	1613	0	719			
V/C Ratio(X)	0.00	0.66	0.71	1.73	0.44	0.69	0.46	0.00	0.92			
Avail Cap(c_a), veh/h	0	2027	630	88	2475	748	2586	0	1153			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	24.9	25.4	43.2	17.7	20.5	17.1	0.0	23.3			
Incr Delay (d2), s/veh	0.0	0.5	2.4	371.0	0.1	1.9	0.1	0.0	5.8			
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	0.0	8.4	8.9	11.2	5.7	9.7	6.4	0.0	16.7			
LnGrp Delay(d),s/veh	0.0	25.4	27.9	414.2	17.7	22.4	17.2	0.0	29.1			
LnGrp LOS		C	C	F	B	C	B		C			
Approach Vol, veh/h		1583			1604			1409				
Approach Delay, s/veh		26.0			56.7			22.8				
Approach LOS		C			E			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	8.0	36.7		46.1		44.7		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	4.0	35.7		65.7		43.7		
Max Q Clear Time (g_c+I1), s	6.5	21.6		37.9		24.4		
Green Ext Time (p_c), s	0.0	9.7		2.8		12.1		

Intersection Summary	
HCM 2010 Ctrl Delay	35.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	90	12	116	60	340	12	332	96	250	177	30
Future Volume (veh/h)	40	90	12	116	60	340	12	332	96	250	177	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		0.98	1.00		0.97	1.00		0.96	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	1845	1845	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	98	11	126	65	208	13	361	97	272	192	18
Adj No. of Lanes	1	1	0	1	1	0	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, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	132	415	47	131	96	306	134	629	166	344	1136	105
Arrive On Green	0.07	0.25	0.24	0.07	0.25	0.24	0.07	0.23	0.22	0.19	0.34	0.34
Sat Flow, veh/h	1774	1642	184	1757	378	1209	1792	2772	733	1792	3303	306
Grp Volume(v), veh/h	43	0	109	126	0	273	13	231	227	272	103	107
Grp Sat Flow(s),veh/h/ln	1774	0	1827	1757	0	1587	1792	1787	1718	1792	1787	1822
Q Serve(g_s), s	1.4	0.0	2.9	4.3	0.0	9.4	0.4	6.9	7.1	8.7	2.4	2.5
Cycle Q Clear(g_c), s	1.4	0.0	2.9	4.3	0.0	9.4	0.4	6.9	7.1	8.7	2.4	2.5
Prop In Lane	1.00		0.10	1.00		0.76	1.00		0.43	1.00		0.17
Lane Grp Cap(c), veh/h	132	0	462	131	0	401	134	406	390	344	615	627
V/C Ratio(X)	0.32	0.00	0.24	0.96	0.00	0.68	0.10	0.57	0.58	0.79	0.17	0.17
Avail Cap(c_a), veh/h	250	0	1500	131	0	1198	134	925	889	1025	1814	1850
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	0.0	17.9	27.8	0.0	20.5	26.0	20.7	20.9	23.2	13.8	13.8
Incr Delay (d2), s/veh	0.5	0.0	0.1	65.9	0.0	0.8	0.1	0.5	0.5	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.4	4.5	0.0	4.2	0.2	3.4	3.4	4.5	1.2	1.3
LnGrp Delay(d),s/veh	27.0	0.0	18.0	93.7	0.0	21.3	26.1	21.2	21.4	24.8	13.8	13.9
LnGrp LOS	C		B	F		C	C	C	C	C	B	B
Approach Vol, veh/h		152			399			471			482	
Approach Delay, s/veh		20.5			44.1			21.4			20.0	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	18.5	8.0	18.7	8.0	25.5	8.0	18.7
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	24.6	30.7	4.0	49.0	4.0	60.7	8.0	45.0
Max Q Clear Time (g_c+I1), s	10.7	9.1	6.3	4.9	2.4	4.5	3.4	11.4
Green Ext Time (p_c), s	0.3	2.2	0.0	1.4	0.0	2.3	0.0	1.4

Intersection Summary		
HCM 2010 Ctrl Delay		26.9
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	200	102	260	190	150	100	958	200	110	1124	80
Future Volume (veh/h)	140	200	102	260	190	150	100	958	200	110	1124	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		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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	152	217	89	283	207	146	109	1041	204	120	1222	84
Adj No. of Lanes	1	1	0	1	1	0	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	189	264	108	307	278	196	142	1180	231	142	1342	92
Arrive On Green	0.11	0.21	0.20	0.17	0.28	0.27	0.08	0.40	0.39	0.08	0.40	0.39
Sat Flow, veh/h	1792	1262	518	1774	1008	711	1792	2980	583	1792	3388	233
Grp Volume(v), veh/h	152	0	306	283	0	353	109	623	622	120	644	662
Grp Sat Flow(s),veh/h/ln	1792	0	1780	1774	0	1719	1792	1787	1776	1792	1787	1833
Q Serve(g_s), s	8.9	0.0	17.6	16.8	0.0	20.0	6.4	34.6	34.9	7.1	36.4	36.6
Cycle Q Clear(g_c), s	8.9	0.0	17.6	16.8	0.0	20.0	6.4	34.6	34.9	7.1	36.4	36.6
Prop In Lane	1.00		0.29	1.00		0.41	1.00		0.33	1.00		0.13
Lane Grp Cap(c), veh/h	189	0	372	307	0	475	142	708	703	142	708	726
V/C Ratio(X)	0.80	0.00	0.82	0.92	0.00	0.74	0.77	0.88	0.88	0.84	0.91	0.91
Avail Cap(c_a), veh/h	226	0	574	307	0	634	142	721	717	142	721	740
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.8	0.0	40.5	43.6	0.0	35.4	48.3	30.0	30.1	48.6	30.5	30.6
Incr Delay (d2), s/veh	13.5	0.0	3.1	31.6	0.0	2.0	19.9	11.6	12.0	33.1	15.0	15.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	9.0	10.9	0.0	9.8	3.9	19.2	19.5	4.8	20.8	21.4
LnGrp Delay(d),s/veh	60.3	0.0	43.6	75.2	0.0	37.4	68.2	41.5	42.1	81.7	45.5	45.6
LnGrp LOS	E		D	E		D	E	D	D	F	D	D
Approach Vol, veh/h		458			636			1354			1426	
Approach Delay, s/veh		49.1			54.2			44.0			48.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	47.2	22.0	25.8	12.0	47.2	14.8	33.1
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	8.0	42.7	18.0	34.0	8.0	42.7	13.0	39.0
Max Q Clear Time (g_c+I1), s	10.9	36.9	18.8	19.6	8.4	38.6	10.9	22.0
Green Ext Time (p_c), s	0.0	4.5	0.0	2.1	0.0	3.3	0.0	2.2

Intersection Summary		
HCM 2010 Ctrl Delay		48.0
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	0	16	20	0	160	7	1012	70	380	1096	50
Future Volume (veh/h)	76	0	16	20	0	160	7	1012	70	380	1096	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1880	1900
Adj Flow Rate, veh/h	83	0	17	22	0	117	8	1100	49	413	1191	54
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	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, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	106	0	205	54	0	151	18	1375	599	395	1967	89
Arrive On Green	0.06	0.00	0.13	0.03	0.00	0.10	0.01	0.38	0.38	0.22	0.57	0.56
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1557	1792	3481	158
Grp Volume(v), veh/h	83	0	17	22	0	117	8	1100	49	413	611	634
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1557	1792	1786	1853
Q Serve(g_s), s	3.9	0.0	0.8	1.0	0.0	5.9	0.4	23.0	1.7	18.5	19.0	19.0
Cycle Q Clear(g_c), s	3.9	0.0	0.8	1.0	0.0	5.9	0.4	23.0	1.7	18.5	19.0	19.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	106	0	205	54	0	151	18	1375	599	395	1009	1047
V/C Ratio(X)	0.79	0.00	0.08	0.41	0.00	0.77	0.44	0.80	0.08	1.05	0.61	0.61
Avail Cap(c_a), veh/h	106	0	641	119	0	692	106	1541	671	395	1009	1047
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	32.2	40.0	0.0	36.9	41.3	23.0	16.4	32.7	12.1	12.1
Incr Delay (d2), s/veh	31.3	0.0	0.2	4.9	0.0	3.1	16.3	2.4	0.0	57.9	0.7	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	2.8	0.0	0.4	0.6	0.0	2.8	0.3	11.8	0.7	15.5	9.5	9.9
LnGrp Delay(d),s/veh	70.3	0.0	32.3	44.9	0.0	40.1	57.6	25.4	16.4	90.7	12.8	12.8
LnGrp LOS	E		C	D		D	E	C	B	F	B	B
Approach Vol, veh/h		100			139			1157			1658	
Approach Delay, s/veh		63.8			40.8			25.2			32.2	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	37.1	8.0	16.9	6.9	52.3	11.0	13.9
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	8.0	35.7	5.0	34.0	5.0	46.7	5.0	* 36
Max Q Clear Time (g_c+I1), s	20.5	25.0	3.0	2.8	2.4	21.0	5.9	7.9
Green Ext Time (p_c), s	0.0	6.8	0.0	0.5	0.0	12.0	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	31.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	298	49	80	78	453	20	444	50	440	706	21
Future Volume (veh/h)	117	298	49	80	78	453	20	444	50	440	706	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	127	324	53	87	85	197	22	483	54	478	767	23
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	2	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, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	151	663	107	126	358	320	50	796	89	631	1407	42
Arrive On Green	0.08	0.21	0.21	0.07	0.20	0.20	0.03	0.24	0.24	0.18	0.40	0.39
Sat Flow, veh/h	1810	3111	504	1792	1787	1597	1810	3271	364	3476	3543	106
Grp Volume(v), veh/h	127	187	190	87	85	197	22	266	271	478	387	403
Grp Sat Flow(s),veh/h/ln	1810	1805	1810	1792	1787	1597	1810	1805	1830	1738	1787	1862
Q Serve(g_s), s	4.6	6.0	6.1	3.1	2.6	7.4	0.8	8.6	8.7	8.6	11.0	11.0
Cycle Q Clear(g_c), s	4.6	6.0	6.1	3.1	2.6	7.4	0.8	8.6	8.7	8.6	11.0	11.0
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.20	1.00		0.06
Lane Grp Cap(c), veh/h	151	385	386	126	358	320	50	439	445	631	710	739
V/C Ratio(X)	0.84	0.48	0.49	0.69	0.24	0.62	0.44	0.60	0.61	0.76	0.55	0.55
Avail Cap(c_a), veh/h	151	969	972	285	1149	1026	123	743	753	1446	1357	1414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	22.8	22.9	30.0	22.2	24.1	31.6	22.2	22.3	25.7	15.3	15.4
Incr Delay (d2), s/veh	33.1	0.9	1.0	6.6	0.1	0.7	2.2	0.5	0.5	0.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	3.1	3.2	1.8	1.3	3.3	0.4	4.3	4.4	4.2	5.4	5.7
LnGrp Delay(d),s/veh	63.0	23.8	23.9	36.6	22.3	24.8	33.9	22.7	22.8	26.4	15.6	15.6
LnGrp LOS	E	C	C	D	C	C	C	C	C	C	B	B
Approach Vol, veh/h		504			369			559			1268	
Approach Delay, s/veh		33.7			27.0			23.2			19.7	
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	15.5	20.9	10.1	19.6	5.3	31.1	11.0	18.7
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	4.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	27.0	26.7	10.0	35.0	4.0	49.7	5.0	* 42
Max Q Clear Time (g_c+I1), s	10.6	10.7	5.1	8.1	2.8	13.0	6.6	9.4
Green Ext Time (p_c), s	0.9	4.9	0.1	3.1	0.0	5.8	0.0	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

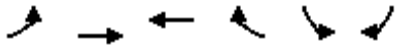
Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	585	20	40	582	130	150	120	70	120	30	142
Future Volume (veh/h)	100	585	20	40	582	130	150	120	70	120	30	142
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	109	636	22	43	633	141	163	130	76	130	33	154
Adj No. of Lanes	1	2	0	1	2	0	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	1291	45	55	938	209	190	684	377	157	516	462
Arrive On Green	0.08	0.37	0.37	0.03	0.33	0.33	0.11	0.31	0.31	0.09	0.29	0.29
Sat Flow, veh/h	1774	3490	121	1774	2879	640	1774	2204	1214	1774	1770	1583
Grp Volume(v), veh/h	109	322	336	43	389	385	163	103	103	130	33	154
Grp Sat Flow(s),veh/h/ln	1774	1770	1841	1774	1770	1750	1774	1770	1648	1774	1770	1583
Q Serve(g_s), s	7.3	16.8	16.9	2.9	22.8	22.8	10.8	5.1	5.5	8.6	1.6	9.2
Cycle Q Clear(g_c), s	7.3	16.8	16.9	2.9	22.8	22.8	10.8	5.1	5.5	8.6	1.6	9.2
Prop In Lane	1.00		0.07	1.00		0.37	1.00		0.74	1.00		1.00
Lane Grp Cap(c), veh/h	134	655	681	55	577	570	190	549	512	157	516	462
V/C Ratio(X)	0.82	0.49	0.49	0.78	0.67	0.68	0.86	0.19	0.20	0.83	0.06	0.33
Avail Cap(c_a), veh/h	148	655	681	103	577	570	222	549	512	222	516	462
HCM Platoon Ratio	1.00	1.00	1.00	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	54.7	29.1	29.1	57.7	34.9	35.0	52.7	30.3	30.4	53.8	30.7	33.3
Incr Delay (d2), s/veh	26.6	2.6	2.5	20.7	6.2	6.3	24.1	0.2	0.2	16.1	0.2	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	8.7	9.1	1.7	12.1	12.0	6.6	2.5	2.5	4.9	0.8	4.3
LnGrp Delay(d),s/veh	81.3	31.7	31.7	78.4	41.1	41.3	76.7	30.5	30.6	69.8	30.9	35.3
LnGrp LOS	F	C	C	E	D	D	E	C	C	E	C	D
Approach Vol, veh/h		767			817			369			317	
Approach Delay, s/veh		38.7			43.2			51.0			49.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	43.2	9.7	50.4	18.9	41.0	15.0	45.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	15.0	35.0	7.0	39.0	15.0	35.0	10.0	36.0
Max Q Clear Time (g_c+I1), s	10.6	7.5	4.9	18.9	12.8	11.2	9.3	24.8
Green Ext Time (p_c), s	0.1	2.5	0.0	9.4	0.1	2.4	0.0	6.5

Intersection Summary	
HCM 2010 Ctrl Delay	43.8
HCM 2010 LOS	D

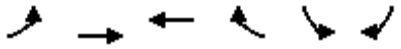
Notes



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	78	687	602	240	200	50
Future Volume (veh/h)	78	687	602	240	200	50
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	85	747	654	261	217	54
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	108	1883	1028	410	635	567
Arrive On Green	0.06	0.53	0.42	0.42	0.36	0.36
Sat Flow, veh/h	1774	3632	2565	986	1774	1583
Grp Volume(v), veh/h	85	747	468	447	217	54
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1689	1774	1583
Q Serve(g_s), s	5.2	13.6	22.9	22.9	9.8	2.5
Cycle Q Clear(g_c), s	5.2	13.6	22.9	22.9	9.8	2.5
Prop In Lane	1.00			0.58	1.00	1.00
Lane Grp Cap(c), veh/h	108	1883	736	703	635	567
V/C Ratio(X)	0.78	0.40	0.64	0.64	0.34	0.10
Avail Cap(c_a), veh/h	179	1883	736	703	635	567
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	50.5	15.1	25.3	25.3	25.6	23.3
Incr Delay (d2), s/veh	11.7	0.6	4.2	4.4	1.5	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	2.9	6.8	12.0	11.5	5.0	2.7
LnGrp Delay(d),s/veh	62.2	15.8	29.4	29.6	27.1	23.6
LnGrp LOS	E	B	C	C	C	C
Approach Vol, veh/h		832	915		271	
Approach Delay, s/veh		20.5	29.5		26.4	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				64.0		45.0	12.7	51.3
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				58.0		39.0	11.0	41.0
Max Q Clear Time (g_c+I1), s				15.6		11.8	7.2	24.9
Green Ext Time (p_c), s				15.3		0.8	0.1	9.5

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	378	618	890	570	960	102
Future Volume (veh/h)	378	618	890	570	960	102
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	411	672	967	620	1043	111
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	304	3162	1433	647	1021	463
Arrive On Green	0.17	0.62	0.40	0.41	0.29	0.29
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	411	672	967	620	1043	111
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	20.5	6.9	26.8	45.6	35.2	6.3
Cycle Q Clear(g_c), s	20.5	6.9	26.8	45.6	35.2	6.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	304	3162	1433	647	1021	463
V/C Ratio(X)	1.35	0.21	0.68	0.96	1.02	0.24
Avail Cap(c_a), veh/h	304	3171	1439	650	1021	463
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	49.6	9.9	29.2	34.4	42.3	32.5
Incr Delay (d2), s/veh	179.3	0.0	1.0	24.9	33.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.1	3.2	13.2	24.3	21.5	2.8
LnGrp Delay(d),s/veh	228.9	9.9	30.2	59.3	75.9	32.6
LnGrp LOS	F	A	C	E	F	C
Approach Vol, veh/h		1083	1587		1154	
Approach Delay, s/veh		93.0	41.6		71.7	
Approach LOS		F	D		E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		79.8			26.0	53.8		40.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		74.7			20.0	48.7		34.7
Max Q Clear Time (g_c+I1), s		8.9			22.5	47.6		37.2
Green Ext Time (p_c), s		11.6			0.0	0.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.2
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	385	1193	0	0	901	570	559	0	220	0	0	0
Future Volume (veh/h)	385	1193	0	0	901	570	559	0	220	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1845	1845	1845			
Adj Flow Rate, veh/h	418	1297	0	0	979	143	608	0	117			
Adj No. of Lanes	2	3	0	0	2	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	1	1	0	0	1	1	3	3	3			
Cap, veh/h	538	3299	0	0	1644	699	768	0	343			
Arrive On Green	0.15	0.64	0.00	0.00	0.44	0.44	0.22	0.00	0.22			
Sat Flow, veh/h	3476	5305	0	0	3762	1599	3514	0	1568			
Grp Volume(v), veh/h	418	1297	0	0	979	143	608	0	117			
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1881	1599	1757	0	1568			
Q Serve(g_s), s	8.0	8.3	0.0	0.0	13.7	3.8	11.3	0.0	4.4			
Cycle Q Clear(g_c), s	8.0	8.3	0.0	0.0	13.7	3.8	11.3	0.0	4.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	538	3299	0	0	1644	699	768	0	343			
V/C Ratio(X)	0.78	0.39	0.00	0.00	0.60	0.20	0.79	0.00	0.34			
Avail Cap(c_a), veh/h	629	4824	0	0	2663	1132	2314	0	1033			
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	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	28.1	5.9	0.0	0.0	14.8	12.0	25.5	0.0	22.8			
Incr Delay (d2), s/veh	4.3	0.0	0.0	0.0	0.1	0.1	0.7	0.0	0.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.2	3.9	0.0	0.0	7.1	1.7	5.6	0.0	4.0			
LnGrp Delay(d),s/veh	32.4	5.9	0.0	0.0	14.9	12.1	26.2	0.0	23.0			
LnGrp LOS	C	A			B	B	C		C			
Approach Vol, veh/h		1715			1122			725				
Approach Delay, s/veh		12.4			14.6			25.7				
Approach LOS		B			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		49.2		19.9	14.2	35.0		
Change Period (Y+Rc), s		5.3		5.3	4.0	5.3		
Max Green Setting (Gmax), s		64.4		45.0	12.0	48.4		
Max Q Clear Time (g_c+I1), s		10.3		13.3	10.0	15.7		
Green Ext Time (p_c), s		16.1		1.3	0.2	14.0		

Intersection Summary	
HCM 2010 Ctrl Delay	15.8
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	353.3

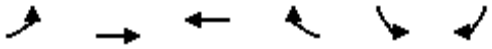
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	200	498	45	70	472	173
Future Vol, veh/h	200	498	45	70	472	173
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	217	541	49	76	513	188

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1301	87	0	0	125	0
Stage 1	87	-	-	-	-	-
Stage 2	1214	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	~ 179	977	-	-	1474	-
Stage 1	941	-	-	-	-	-
Stage 2	284	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 109	977	-	-	1474	-
Mov Cap-2 Maneuver	~ 109	-	-	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	~ 174	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 732.1	0	6.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	298	1474	-
HCM Lane V/C Ratio	-	-	2.546	0.348	-
HCM Control Delay (s)	-	-	$ 732.1	8.7	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	62.2	1.6	-

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	549	1433	1060	250	490	1100
Future Volume (veh/h)	549	1433	1060	250	490	1100
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	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	1881	1881	1863	1863	1863	1863
Adj Flow Rate, veh/h	597	1558	1152	74	533	926
Adj No. of Lanes	2	2	3	1	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	2	2
Cap, veh/h	666	2140	1921	585	588	1457
Arrive On Green	0.19	0.60	0.38	0.38	0.33	0.33
Sat Flow, veh/h	3476	3668	5253	1549	1774	2787
Grp Volume(v), veh/h	597	1558	1152	74	533	926
Grp Sat Flow(s),veh/h/ln	1738	1787	1695	1549	1774	1393
Q Serve(g_s), s	19.9	36.8	21.6	3.7	34.1	28.2
Cycle Q Clear(g_c), s	19.9	36.8	21.6	3.7	34.1	28.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	666	2140	1921	585	588	1457
V/C Ratio(X)	0.90	0.73	0.60	0.13	0.91	0.64
Avail Cap(c_a), veh/h	718	2867	2880	877	695	1626
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	46.8	16.9	29.7	24.1	37.9	20.2
Incr Delay (d2), s/veh	12.7	0.4	0.1	0.0	13.0	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	10.7	18.1	10.2	3.9	18.9	22.5
LnGrp Delay(d),s/veh	59.5	17.3	29.8	24.2	50.9	20.7
LnGrp LOS	E	B	C	C	D	C
Approach Vol, veh/h		2155	1226		1459	
Approach Delay, s/veh		29.0	29.5		31.7	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				75.9		42.8	26.2	49.6
Change Period (Y+Rc), s				5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s				94.7		46.0	24.0	66.7
Max Q Clear Time (g_c+I1), s				38.8		36.1	21.9	23.6
Green Ext Time (p_c), s				22.8		2.7	0.3	20.7

Intersection Summary	
HCM 2010 Ctrl Delay	29.9
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1363	560	0	1085	225	40
Future Volume (veh/h)	1363	560	0	1085	225	40
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	1482	609	0	1179	245	43
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2295	1027	0	2295	1003	462
Arrive On Green	0.65	0.65	0.00	0.65	0.29	0.29
Sat Flow, veh/h	3632	1583	0	3725	3442	1583
Grp Volume(v), veh/h	1482	609	0	1179	245	43
Grp Sat Flow(s),veh/h/ln	1770	1583	0	1770	1721	1583
Q Serve(g_s), s	38.0	33.0	0.0	26.3	8.1	3.0
Cycle Q Clear(g_c), s	38.0	33.0	0.0	26.3	8.1	3.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2295	1027	0	2295	1003	462
V/C Ratio(X)	0.65	0.59	0.00	0.51	0.24	0.09
Avail Cap(c_a), veh/h	2867	1282	0	2867	1003	462
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.51	0.51	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	15.1	0.0	13.9	40.5	38.7
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.2	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	18.6	14.5	0.0	12.8	4.0	1.4
LnGrp Delay(d),s/veh	16.1	15.3	0.0	14.1	41.1	39.1
LnGrp LOS	B	B		B	D	D
Approach Vol, veh/h	2091			1179	288	
Approach Delay, s/veh	15.9			14.1	40.8	
Approach LOS	B			B	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		48.2		101.8				101.8
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		19.5		121.5				121.5
Max Q Clear Time (g_c+I1), s		10.1		40.0				28.3
Green Ext Time (p_c), s		0.7		57.3				62.6

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	470	960	350	90	556	350
Future Volume (veh/h)	470	960	350	90	556	350
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1397	1397	1845	1845
Adj Flow Rate, veh/h	511	377	380	98	604	354
Adj No. of Lanes	2	1	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	36	36	3	3
Cap, veh/h	1117	494	488	835	930	428
Arrive On Green	0.32	0.32	0.19	0.60	0.27	0.27
Sat Flow, veh/h	3632	1566	2581	1397	3408	1568
Grp Volume(v), veh/h	511	377	380	98	604	354
Grp Sat Flow(s),veh/h/ln	1770	1566	1291	1397	1704	1568
Q Serve(g_s), s	6.8	12.8	8.2	1.8	9.2	12.5
Cycle Q Clear(g_c), s	6.8	12.8	8.2	1.8	9.2	12.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1117	494	488	835	930	428
V/C Ratio(X)	0.46	0.76	0.78	0.12	0.65	0.83
Avail Cap(c_a), veh/h	2641	1168	592	1494	1130	520
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	16.1	18.2	22.7	5.1	18.9	20.1
Incr Delay (d2), s/veh	0.1	0.9	5.4	0.0	0.5	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	5.6	3.3	0.7	4.3	6.3
LnGrp Delay(d),s/veh	16.2	19.1	28.1	5.1	19.4	27.7
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	888			478	958	
Approach Delay, s/veh	17.4			23.4	22.5	
Approach LOS	B			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		19.6	16.6	22.7				39.3
Change Period (Y+Rc), s		4.0	6.0	4.6				4.6
Max Green Setting (Gmax), s		19.0	13.0	43.4				62.4
Max Q Clear Time (g_c+I1), s		14.5	10.2	14.8				3.8
Green Ext Time (p_c), s		1.1	0.4	3.0				3.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	220	0	280	1074	1186	0	0	801	600
Future Volume (veh/h)	0	0	0	220	0	280	1074	1186	0	0	801	600
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		0.99
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				1881	0	1881	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				239	0	144	1167	1289	0	0	871	330
Adj No. of Lanes				2	0	1	2	2	0	0	4	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				1	0	1	2	2	0	0	2	2
Cap, veh/h				461	0	212	1284	2732	0	0	2250	553
Arrive On Green				0.13	0.00	0.13	0.37	0.77	0.00	0.00	0.35	0.35
Sat Flow, veh/h				3476	0	1599	3442	3632	0	0	6669	1574
Grp Volume(v), veh/h				239	0	144	1167	1289	0	0	871	330
Grp Sat Flow(s),veh/h/ln				1738	0	1599	1721	1770	0	0	1602	1574
Q Serve(g_s), s				5.4	0.0	7.2	27.0	11.0	0.0	0.0	8.6	14.4
Cycle Q Clear(g_c), s				5.4	0.0	7.2	27.0	11.0	0.0	0.0	8.6	14.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				461	0	212	1284	2732	0	0	2250	553
V/C Ratio(X)				0.52	0.00	0.68	0.91	0.47	0.00	0.00	0.39	0.60
Avail Cap(c_a), veh/h				1781	0	819	1846	3754	0	0	3055	751
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				33.9	0.0	34.7	24.9	3.4	0.0	0.0	20.4	22.3
Incr Delay (d2), s/veh				0.3	0.0	1.4	4.1	0.0	0.0	0.0	0.0	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.6	0.0	3.2	13.5	5.2	0.0	0.0	3.8	6.3
LnGrp Delay(d),s/veh				34.2	0.0	36.1	29.1	3.5	0.0	0.0	20.5	22.7
LnGrp LOS				C		D	C	A			C	C
Approach Vol, veh/h					383			2456			1201	
Approach Delay, s/veh					34.9			15.6			21.1	
Approach LOS					C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		68.8			35.3	33.5		15.1
Change Period (Y+Rc), s		5.3			4.0	5.3		5.3
Max Green Setting (Gmax), s		87.7			45.0	38.7		41.7
Max Q Clear Time (g_c+I1), s		13.0			29.0	16.4		9.2
Green Ext Time (p_c), s		16.7			2.3	11.7		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	19.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	440	10	925	0	0	0	0	1820	240	280	741	0
Future Volume (veh/h)	440	10	925	0	0	0	0	1820	240	280	741	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845				0	1881	1900	1863	1863	0
Adj Flow Rate, veh/h	478	0	1012				0	1978	246	304	805	0
Adj No. of Lanes	2	0	2				0	4	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3				0	1	1	2	2	0
Cap, veh/h	1359	0	1213				0	2306	286	366	1857	0
Arrive On Green	0.39	0.00	0.39				0.00	0.39	0.38	0.11	0.52	0.00
Sat Flow, veh/h	3514	0	3136				0	6138	730	3442	3632	0
Grp Volume(v), veh/h	478	0	1012				0	1634	590	304	805	0
Grp Sat Flow(s),veh/h/ln	1757	0	1568				0	1618	1751	1721	1770	0
Q Serve(g_s), s	10.1	0.0	30.6				0.0	32.3	32.4	9.1	14.7	0.0
Cycle Q Clear(g_c), s	10.1	0.0	30.6				0.0	32.3	32.4	9.1	14.7	0.0
Prop In Lane	1.00		1.00				0.00		0.42	1.00		0.00
Lane Grp Cap(c), veh/h	1359	0	1213				0	1905	687	366	1857	0
V/C Ratio(X)	0.35	0.00	0.83				0.00	0.86	0.86	0.83	0.43	0.00
Avail Cap(c_a), veh/h	2481	0	2215				0	1945	702	394	1959	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	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.8	0.0	29.1				0.0	29.1	29.4	45.9	15.3	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.6				0.0	3.8	9.8	12.1	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
%ile BackOfQ(50%),veh/ln	4.9	0.0	13.5				0.0	15.0	17.5	4.9	7.2	0.0
LnGrp Delay(d),s/veh	23.0	0.0	30.7				0.0	32.9	39.2	58.0	15.4	0.0
LnGrp LOS	C		C					C	D	E	B	
Approach Vol, veh/h		1490						2224			1109	
Approach Delay, s/veh		28.2						34.6			27.1	
Approach LOS		C						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.1	45.1		44.5		60.3		
Change Period (Y+Rc), s	4.0	5.3		4.5		* 5.3		
Max Green Setting (Gmax), s	12.0	40.7		73.5		* 58		
Max Q Clear Time (g_c+I1), s	11.1	34.4		32.6		16.7		
Green Ext Time (p_c), s	0.1	5.4		7.4		22.3		

Intersection Summary	
HCM 2010 Ctrl Delay	30.9
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	10	180	588	70	160	150	860	1340	20	700	40
Future Volume (veh/h)	80	10	180	588	70	160	150	860	1340	20	700	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1827	1827	1900	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	87	11	109	639	76	132	163	935	768	22	761	40
Adj No. of Lanes	1	1	0	3	1	0	1	2	2	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, %	8	8	8	4	4	4	2	2	2	5	5	5
Cap, veh/h	110	19	190	817	144	251	202	1514	1174	92	1220	64
Arrive On Green	0.07	0.14	0.13	0.17	0.24	0.23	0.11	0.43	0.43	0.05	0.37	0.36
Sat Flow, veh/h	1675	138	1363	4907	600	1043	1774	3539	2743	1723	3323	175
Grp Volume(v), veh/h	87	0	120	639	0	208	163	935	768	22	394	407
Grp Sat Flow(s),veh/h/ln	1675	0	1500	1636	0	1643	1774	1770	1371	1723	1719	1778
Q Serve(g_s), s	3.8	0.0	5.6	9.4	0.0	8.3	6.7	15.4	16.7	0.9	14.1	14.1
Cycle Q Clear(g_c), s	3.8	0.0	5.6	9.4	0.0	8.3	6.7	15.4	16.7	0.9	14.1	14.1
Prop In Lane	1.00		0.91	1.00		0.63	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	110	0	209	817	0	395	202	1514	1174	92	631	653
V/C Ratio(X)	0.79	0.00	0.57	0.78	0.00	0.53	0.81	0.62	0.65	0.24	0.62	0.62
Avail Cap(c_a), veh/h	223	0	858	1566	0	1246	378	2495	1934	92	938	970
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	0.0	30.5	30.0	0.0	25.0	32.5	16.7	17.1	34.1	19.5	19.6
Incr Delay (d2), s/veh	4.8	0.0	0.9	0.6	0.0	0.4	2.9	0.2	0.2	0.5	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	2.4	4.2	0.0	3.8	3.5	7.6	6.3	0.5	6.7	7.0
LnGrp Delay(d),s/veh	39.4	0.0	31.4	30.7	0.0	25.4	35.4	16.9	17.3	34.6	19.9	19.9
LnGrp LOS	D		C	C		C	D	B	B	C	B	B
Approach Vol, veh/h		207			847			1866			823	
Approach Delay, s/veh		34.8			29.4			18.7			20.3	
Approach LOS		C			C			B			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	8.0	36.2	16.5	14.5	12.6	31.6	8.9	22.1
Change Period (Y+Rc), s	4.0	4.9	4.0	4.6	4.0	4.9	4.0	4.6
Max Green Setting (Gmax), s	4.0	52.1	24.0	42.4	16.0	40.1	10.0	56.4
Max Q Clear Time (g_c+I1), s	2.9	18.7	11.4	7.6	8.7	16.1	5.8	10.3
Green Ext Time (p_c), s	0.0	11.9	1.1	1.2	0.1	10.6	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	22.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	550	0	2509	0	0	0	0	1800	441	620	848	0
Future Volume (veh/h)	550	0	2509	0	0	0	0	1800	441	620	848	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	20				0	20	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	598	0	2455				0	1957	479	674	922	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1099	0	1132				0	2024	131	569	3082	0
Arrive On Green	0.11	0.00	0.10				0.00	0.14	0.14	0.06	0.21	0.00
Sat Flow, veh/h	3442	0	3610				0	4771	979	3343	5103	0
Grp Volume(v), veh/h	598	0	2455				0	1628	808	674	922	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1652	1672	1647	0
Q Serve(g_s), s	23.2	0.0	44.2				0.0	59.0	59.0	24.0	22.3	0.0
Cycle Q Clear(g_c), s	23.2	0.0	44.2				0.0	59.0	59.0	24.0	22.3	0.0
Prop In Lane	1.00		1.00				0.00		0.59	1.00		0.00
Lane Grp Cap(c), veh/h	1099	0	1132				0	1404	752	569	3082	0
V/C Ratio(X)	0.54	0.00	2.17				0.00	1.16	1.07	1.18	0.30	0.00
Avail Cap(c_a), veh/h	1099	0	1132				0	1404	692	569	3082	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.3	0.0	63.2				0.0	60.7	60.7	66.5	29.9	0.0
Incr Delay (d2), s/veh	0.3	0.0	528.5				0.0	80.1	54.8	99.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	28.3				0.0	32.5	22.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	76.8				0.0	33.7	45.7	19.0	10.2	0.0
LnGrp Delay(d),s/veh	53.6	0.0	619.9				0.0	173.3	137.5	166.0	29.9	0.0
LnGrp LOS	D		F					F	F	F	C	
Approach Vol, veh/h		3053						2436			1596	
Approach Delay, s/veh		509.0						161.4			87.4	
Approach LOS		F						F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	28.9	63.0		49.0		91.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	24.0	* 58		43.7		32.9		
Max Q Clear Time (g_c+I1), s	26.0	61.0		46.2		24.3		
Green Ext Time (p_c), s	0.0	0.0		0.0		3.7		

Intersection Summary	
HCM 2010 Ctrl Delay	294.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	50	70	160	40	150	80	1130	140	260	1386	40
Future Volume (veh/h)	60	50	70	160	40	150	80	1130	140	260	1386	40
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	54	56	174	43	-64	87	1228	148	283	1507	42
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	101	84	160	221	233	198	111	1660	199	352	1974	55
Arrive On Green	0.10	0.10	0.10	0.12	0.12	0.00	0.06	0.52	0.52	0.10	0.56	0.56
Sat Flow, veh/h	981	815	1545	1792	1881	1599	1774	3182	382	3442	3515	98
Grp Volume(v), veh/h	119	0	56	174	43	-64	87	681	695	283	757	792
Grp Sat Flow(s),veh/h/ln	1796	0	1545	1792	1881	1599	1774	1770	1794	1721	1770	1843
Q Serve(g_s), s	6.8	0.0	3.6	10.1	2.2	0.0	5.2	32.1	32.5	8.6	35.2	35.4
Cycle Q Clear(g_c), s	6.8	0.0	3.6	10.1	2.2	0.0	5.2	32.1	32.5	8.6	35.2	35.4
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.21	1.00		0.05
Lane Grp Cap(c), veh/h	186	0	160	221	233	198	111	923	936	352	994	1035
V/C Ratio(X)	0.64	0.00	0.35	0.79	0.18	-0.32	0.79	0.74	0.74	0.80	0.76	0.76
Avail Cap(c_a), veh/h	585	0	504	617	648	551	215	1203	1220	609	1302	1356
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	0.0	44.8	45.7	42.2	0.0	49.6	20.0	20.1	47.1	18.0	18.1
Incr Delay (d2), s/veh	1.4	0.0	0.5	2.3	0.1	0.0	4.6	1.1	1.1	1.6	1.3	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	3.5	0.0	1.6	5.2	1.2	0.0	2.7	15.8	16.3	4.2	17.4	18.2
LnGrp Delay(d),s/veh	47.6	0.0	45.3	48.0	42.3	0.0	54.2	21.1	21.3	48.8	19.3	19.4
LnGrp LOS	D		D	D	D		D	C	C	D	B	B
Approach Vol, veh/h		175			153			1463			1832	
Approach Delay, s/veh		46.9			66.5			23.1			23.9	
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	15.0	60.0		15.1	10.7	64.3		17.3
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	11.0	72.4		35.0	13.0	78.4		36.4
Max Q Clear Time (g_c+I1), s	10.6	34.5		8.8	7.2	37.4		12.1
Green Ext Time (p_c), s	0.4	20.9		0.4	0.0	21.7		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	190	90	60	150	570	110	871	40	840	1357	190
Future Volume (veh/h)	170	190	90	60	150	570	110	871	40	840	1357	190
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1881	1881	1881	1881	1881	1900	1863	1863	1863
Adj Flow Rate, veh/h	185	207	27	65	163	620	120	947	42	913	1475	134
Adj No. of Lanes	1	2	0	1	1	2	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	209	767	99	83	324	1451	196	1072	48	984	1680	922
Arrive On Green	0.12	0.24	0.24	0.05	0.17	0.17	0.11	0.31	0.30	0.29	0.47	0.47
Sat Flow, veh/h	1774	3147	405	1792	1881	3198	1792	3484	155	3442	3539	1581
Grp Volume(v), veh/h	185	115	119	65	163	620	120	486	503	913	1475	134
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1792	1881	1599	1792	1787	1852	1721	1770	1581
Q Serve(g_s), s	14.1	7.2	7.4	4.9	10.8	18.1	8.8	35.5	35.6	35.5	51.6	2.6
Cycle Q Clear(g_c), s	14.1	7.2	7.4	4.9	10.8	18.1	8.8	35.5	35.6	35.5	51.6	2.6
Prop In Lane	1.00		0.23	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	209	431	434	83	324	1451	196	550	570	984	1680	922
V/C Ratio(X)	0.88	0.27	0.27	0.78	0.50	0.43	0.61	0.88	0.88	0.93	0.88	0.15
Avail Cap(c_a), veh/h	271	538	542	169	462	1687	247	704	730	1376	2321	1209
HCM Platoon Ratio	1.00	1.00	1.00	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	59.7	42.1	42.2	64.9	51.6	25.5	58.5	45.3	45.3	47.7	32.5	4.7
Incr Delay (d2), s/veh	19.9	0.1	0.1	5.9	0.5	0.1	1.2	9.1	8.8	7.3	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	3.6	3.7	2.6	5.7	7.9	4.4	18.9	19.6	17.9	25.8	1.3
LnGrp Delay(d),s/veh	79.6	42.2	42.3	70.8	52.1	25.5	59.6	54.4	54.1	55.0	35.0	4.7
LnGrp LOS	E	D	D	E	D	C	E	D	D	D	C	A
Approach Vol, veh/h		419			848			1109			2522	
Approach Delay, s/veh		58.8			34.1			54.8			40.6	
Approach LOS		E			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	46.3	10.4	37.5	20.3	69.3	20.2	27.7
Change Period (Y+Rc), s	4.0	5.3	4.0	4.6	5.3	* 5.3	4.0	4.6
Max Green Setting (Gmax), s	55.0	52.9	13.0	41.2	19.0	* 89	21.0	33.2
Max Q Clear Time (g_c+I1), s	37.5	37.6	6.9	9.4	10.8	53.6	16.1	20.1
Green Ext Time (p_c), s	1.9	3.4	0.0	2.7	2.6	10.4	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	44.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	80	891	10	50	60	646	1200	10	60	1336	210
Future Volume (veh/h)	130	80	891	10	50	60	646	1200	10	60	1336	210
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.97	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	1881	1881	1881	1900	1863	1863	1881	1881	1881	1863	1863	1900
Adj Flow Rate, veh/h	141	87	453	11	54	14	702	1304	3	65	1452	210
Adj No. of Lanes	1	1	2	0	1	1	2	2	1	1	3	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, %	1	1	1	2	2	2	1	1	1	2	2	2
Cap, veh/h	331	347	520	18	88	88	769	2104	920	83	1831	265
Arrive On Green	0.18	0.18	0.18	0.06	0.06	0.06	0.22	0.59	0.59	0.05	0.41	0.40
Sat Flow, veh/h	1792	1881	2814	313	1535	1542	3476	3574	1563	1774	4478	647
Grp Volume(v), veh/h	141	87	453	65	0	14	702	1304	3	65	1099	563
Grp Sat Flow(s),veh/h/ln	1792	1881	1407	1847	0	1542	1738	1787	1563	1774	1695	1735
Q Serve(g_s), s	9.1	5.2	20.4	4.5	0.0	1.1	25.8	30.9	0.1	4.7	37.0	37.1
Cycle Q Clear(g_c), s	9.1	5.2	20.4	4.5	0.0	1.1	25.8	30.9	0.1	4.7	37.0	37.1
Prop In Lane	1.00		1.00	0.17		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	331	347	520	106	0	88	769	2104	920	83	1386	710
V/C Ratio(X)	0.43	0.25	0.87	0.61	0.00	0.16	0.91	0.62	0.00	0.78	0.79	0.79
Avail Cap(c_a), veh/h	385	405	605	551	0	460	1038	2295	1004	177	1502	769
HCM Platoon Ratio	1.00	1.00	1.00	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	47.1	45.5	51.8	60.2	0.0	58.6	49.7	17.4	11.1	61.6	33.8	33.9
Incr Delay (d2), s/veh	0.3	0.1	10.7	2.1	0.0	0.3	8.2	0.3	0.0	5.9	2.4	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	2.7	8.7	2.4	0.0	0.5	13.3	15.3	0.0	2.5	17.7	18.8
LnGrp Delay(d),s/veh	47.5	45.7	62.4	62.3	0.0	58.9	57.9	17.7	11.1	67.5	36.2	38.6
LnGrp LOS	D	D	E	E		E	E	B	B	E	D	D
Approach Vol, veh/h		681			79			2009			1727	
Approach Delay, s/veh		57.2			61.7			31.7			38.2	
Approach LOS		E			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	10.1	80.9		28.1	32.9	58.1		11.5
Change Period (Y+Rc), s	4.0	5.3		4.9	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	13.6	82.6		27.2	39.0	* 57		39.0
Max Q Clear Time (g_c+I1), s	10.7	32.9		22.4	27.8	39.1		6.5
Green Ext Time (p_c), s	0.0	26.2		0.8	1.1	13.7		0.2

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 (veh/h)	110	1272	486	119	1059	50	328	61	81	50	41	90
Future Volume (veh/h)	110	1272	486	119	1059	50	328	61	81	50	41	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		0.98	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	120	1383	444	129	1151	4	357	66	-49	54	45	84
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	145	1751	772	154	1770	774	409	497	423	70	106	199
Arrive On Green	0.08	0.49	0.49	0.09	0.50	0.50	0.12	0.26	0.00	0.04	0.19	0.18
Sat Flow, veh/h	1792	3574	1575	1792	3574	1563	3476	1881	1599	1810	574	1072
Grp Volume(v), veh/h	120	1383	444	129	1151	4	357	66	-49	54	0	129
Grp Sat Flow(s),veh/h/ln	1792	1787	1575	1792	1787	1563	1738	1881	1599	1810	0	1646
Q Serve(g_s), s	8.7	42.6	26.5	9.4	31.7	0.2	13.4	3.5	0.0	3.9	0.0	9.2
Cycle Q Clear(g_c), s	8.7	42.6	26.5	9.4	31.7	0.2	13.4	3.5	0.0	3.9	0.0	9.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	145	1751	772	154	1770	774	409	497	423	70	0	305
V/C Ratio(X)	0.83	0.79	0.58	0.84	0.65	0.01	0.87	0.13	-0.12	0.77	0.00	0.42
Avail Cap(c_a), veh/h	271	2324	1024	271	2324	1016	473	668	568	150	0	498
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.9	28.1	24.0	59.5	24.9	16.9	57.4	37.1	0.0	63.0	0.0	48.0
Incr Delay (d2), s/veh	4.6	1.0	0.3	4.6	0.2	0.0	13.4	0.0	0.0	6.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	21.2	11.6	4.9	15.7	0.1	7.2	1.8	0.0	2.1	0.0	4.2
LnGrp Delay(d),s/veh	64.5	29.0	24.2	64.1	25.0	16.9	70.8	37.1	0.0	69.6	0.0	48.4
LnGrp LOS	E	C	C	E	C	B	E	D		E		D
Approach Vol, veh/h		1947			1284			374			183	
Approach Delay, s/veh		30.1			28.9			74.2			54.6	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	39.0	15.4	68.8	19.6	28.5	14.7	69.5
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	11.0	45.7	20.0	* 86	18.0	38.7	20.0	* 86
Max Q Clear Time (g_c+I1), s	10.7	5.5	11.4	44.6	15.4	11.2	10.7	33.7
Green Ext Time (p_c), s	0.0	0.7	0.1	20.0	0.2	0.6	0.1	21.9

Intersection Summary	
HCM 2010 Ctrl Delay	35.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	871	410	300	870	270	329	415	262	360	386	30
Future Volume (veh/h)	80	871	410	300	870	270	329	415	262	360	386	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		0.96	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	87	947	230	326	946	140	358	451	268	391	420	31
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	110	1421	344	387	1231	182	421	591	348	457	963	71
Arrive On Green	0.06	0.35	0.35	0.11	0.40	0.40	0.12	0.28	0.26	0.13	0.29	0.28
Sat Flow, veh/h	1792	4087	989	3442	3087	457	3476	2144	1264	3476	3368	248
Grp Volume(v), veh/h	87	793	384	326	542	544	358	375	344	391	222	229
Grp Sat Flow(s),veh/h/ln	1792	1712	1652	1721	1770	1775	1738	1787	1622	1738	1787	1829
Q Serve(g_s), s	5.8	23.7	23.8	11.2	32.0	32.0	12.1	23.2	23.5	13.3	12.2	12.3
Cycle Q Clear(g_c), s	5.8	23.7	23.8	11.2	32.0	32.0	12.1	23.2	23.5	13.3	12.2	12.3
Prop In Lane	1.00		0.60	1.00		0.26	1.00		0.78	1.00		0.14
Lane Grp Cap(c), veh/h	110	1190	575	387	706	708	421	492	447	457	511	523
V/C Ratio(X)	0.79	0.67	0.67	0.84	0.77	0.77	0.85	0.76	0.77	0.86	0.43	0.44
Avail Cap(c_a), veh/h	208	1991	961	572	1117	1120	635	713	647	751	772	790
HCM Platoon Ratio	1.00	1.00	1.00	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	55.7	33.3	33.4	52.4	31.4	31.4	51.8	40.0	40.6	51.2	35.1	35.2
Incr Delay (d2), s/veh	4.8	0.2	0.5	4.9	0.7	0.7	4.5	1.5	1.8	2.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	11.2	11.0	5.6	15.6	15.7	6.1	11.7	10.8	6.5	6.1	6.3
LnGrp Delay(d),s/veh	60.5	33.6	33.9	57.2	32.0	32.0	56.3	41.5	42.4	53.8	35.3	35.4
LnGrp LOS	E	C	C	E	C	C	E	D	D	D	D	D
Approach Vol, veh/h		1264			1412			1077			842	
Approach Delay, s/veh		35.5			37.9			46.7			43.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	37.2	17.5	45.9	18.6	38.4	11.4	52.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	26.0	46.7	20.0	68.7	22.0	50.7	14.0	74.7
Max Q Clear Time (g_c+I1), s	15.3	25.5	13.2	25.8	14.1	14.3	7.8	34.0
Green Ext Time (p_c), s	0.6	4.2	0.4	12.9	0.4	4.5	0.0	12.7

Intersection Summary		
HCM 2010 Ctrl Delay		40.4
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	317	1223	140	210	1230	320	250	440	220	520	205	197
Future Volume (veh/h)	317	1223	140	210	1230	320	250	440	220	520	205	197
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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	1863	1863	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	345	1329	141	228	1337	234	272	478	215	565	223	22
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	274	1629	173	252	1714	531	263	591	264	483	852	374
Arrive On Green	0.15	0.35	0.35	0.14	0.34	0.34	0.15	0.25	0.24	0.14	0.24	0.24
Sat Flow, veh/h	1774	4662	495	1774	5085	1576	1792	2403	1074	3476	3574	1569
Grp Volume(v), veh/h	345	966	504	228	1337	234	272	355	338	565	223	22
Grp Sat Flow(s),veh/h/ln	1774	1695	1767	1774	1695	1576	1792	1787	1690	1738	1787	1569
Q Serve(g_s), s	20.0	33.6	33.6	16.4	30.6	15.0	19.0	24.2	24.5	18.0	6.6	1.4
Cycle Q Clear(g_c), s	20.0	33.6	33.6	16.4	30.6	15.0	19.0	24.2	24.5	18.0	6.6	1.4
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	274	1184	617	252	1714	531	263	440	416	483	852	374
V/C Ratio(X)	1.26	0.82	0.82	0.90	0.78	0.44	1.03	0.81	0.81	1.17	0.26	0.06
Avail Cap(c_a), veh/h	274	1238	645	260	1818	564	263	617	583	483	1206	530
HCM Platoon Ratio	1.00	1.00	1.00	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	54.7	38.3	38.3	54.7	38.6	33.4	55.2	45.9	46.4	55.7	40.1	38.1
Incr Delay (d2), s/veh	142.7	3.8	7.1	30.5	1.9	0.2	64.8	3.6	4.1	96.6	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	20.6	16.3	17.6	10.2	14.7	6.5	14.1	12.4	11.9	15.1	3.3	0.6
LnGrp Delay(d),s/veh	197.5	42.2	45.4	85.2	40.5	33.6	120.1	49.5	50.5	152.3	40.1	38.1
LnGrp LOS	F	D	D	F	D	C	F	D	D	F	D	D
Approach Vol, veh/h		1815			1799			965			810	
Approach Delay, s/veh		72.6			45.3			69.8			118.3	
Approach LOS		E			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	35.9	22.4	49.2	23.0	34.9	24.0	47.6
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	18.0	43.4	19.0	46.0	19.0	42.4	20.0	45.0
Max Q Clear Time (g_c+I1), s	20.0	26.5	18.4	35.6	21.0	8.6	22.0	32.6
Green Ext Time (p_c), s	0.0	3.2	0.0	8.2	0.0	3.6	0.0	9.5

Intersection Summary	
HCM 2010 Ctrl Delay	69.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2108	860	220	2124	0	0	0	0	710	10	910
Future Volume (veh/h)	0	2108	860	220	2124	0	0	0	0	710	10	910
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	2291	600	239	2309	0				780	0	960
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2260	703	158	2876	0				1277	0	570
Arrive On Green	0.00	0.44	0.44	0.08	0.56	0.00				0.36	0.00	0.36
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	2291	600	239	2309	0				780	0	960
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	44.0	33.7	8.0	35.9	0.0				18.0	0.0	36.0
Cycle Q Clear(g_c), s	0.0	44.0	33.7	8.0	35.9	0.0				18.0	0.0	36.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2260	703	158	2876	0				1277	0	570
V/C Ratio(X)	0.00	1.01	0.85	1.52	0.80	0.00				0.61	0.00	1.68
Avail Cap(c_a), veh/h	0	2260	703	158	2876	0				1277	0	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	28.0	25.1	46.0	17.6	0.0				26.3	0.0	32.0
Incr Delay (d2), s/veh	0.0	22.4	9.5	261.9	1.6	0.0				0.6	0.0	315.5
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	0.0	25.4	16.7	7.9	17.3	0.0				8.9	0.0	65.6
LnGrp Delay(d),s/veh	0.0	50.4	34.6	307.9	19.2	0.0				26.9	0.0	347.5
LnGrp LOS		F	C	F	B					C		F
Approach Vol, veh/h		2891			2548						1740	
Approach Delay, s/veh		47.2			46.3						203.8	
Approach LOS		D			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	12.0	48.0		40.0		60.0		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	8.0	42.7		34.7		54.7		
Max Q Clear Time (g_c+I1), s	10.0	46.0		38.0		37.9		
Green Ext Time (p_c), s	0.0	0.0		0.0		16.1		

Intersection Summary	
HCM 2010 Ctrl Delay	84.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2018	800	170	1474	730	870	60	380	0	0	0
Future Volume (veh/h)	0	2018	800	170	1474	730	870	60	380	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	0	2193	635	185	1602	479	992	0	263			
Adj No. of Lanes	0	3	1	1	3	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	2337	727	187	3067	929	1136	0	506			
Arrive On Green	0.00	0.46	0.46	0.11	0.60	0.60	0.32	0.00	0.32			
Sat Flow, veh/h	0	5253	1581	1774	5085	1540	3548	0	1582			
Grp Volume(v), veh/h	0	2193	635	185	1602	479	992	0	263			
Grp Sat Flow(s),veh/h/ln	0	1695	1581	1774	1695	1540	1774	0	1582			
Q Serve(g_s), s	0.0	42.8	37.9	10.9	19.1	18.7	27.5	0.0	14.2			
Cycle Q Clear(g_c), s	0.0	42.8	37.9	10.9	19.1	18.7	27.5	0.0	14.2			
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2337	727	187	3067	929	1136	0	506			
V/C Ratio(X)	0.00	0.94	0.87	0.99	0.52	0.52	0.87	0.00	0.52			
Avail Cap(c_a), veh/h	0	2338	727	187	3069	930	1665	0	742			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	26.8	25.5	46.6	12.0	11.9	33.5	0.0	28.9			
Incr Delay (d2), s/veh	0.0	8.1	11.0	62.6	0.1	0.2	2.7	0.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	21.6	18.6	8.5	8.9	7.9	13.9	0.0	6.2			
LnGrp Delay(d),s/veh	0.0	34.9	36.5	109.2	12.1	12.2	36.2	0.0	29.2			
LnGrp LOS		C	D	F	B	B	D		C			
Approach Vol, veh/h		2828			2266			1255				
Approach Delay, s/veh		35.2			20.0			34.7				
Approach LOS		D			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.0	52.0		37.4		67.0		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	11.0	46.7		47.7		61.7		
Max Q Clear Time (g_c+I1), s	12.9	44.8		29.5		21.1		
Green Ext Time (p_c), s	0.0	1.9		2.4		34.6		

Intersection Summary	
HCM 2010 Ctrl Delay	29.7
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	60	15	68	50	170	20	212	131	200	363	40
Future Volume (veh/h)	40	60	15	68	50	170	20	212	131	200	363	40
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.95	1.00		0.96	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	1845	1845	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	65	14	74	54	23	22	230	135	217	395	28
Adj No. of Lanes	1	1	0	1	1	0	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, %	2	2	2	3	3	3	1	1	1	1	1	1
Cap, veh/h	162	165	35	160	134	57	163	580	325	298	1156	82
Arrive On Green	0.09	0.11	0.11	0.09	0.11	0.11	0.09	0.27	0.24	0.17	0.34	0.31
Sat Flow, veh/h	1774	1479	319	1757	1207	514	1792	2179	1220	1792	3383	239
Grp Volume(v), veh/h	43	0	79	74	0	77	22	187	178	217	208	215
Grp Sat Flow(s),veh/h/ln	1774	0	1798	1757	0	1721	1792	1787	1612	1792	1787	1835
Q Serve(g_s), s	1.0	0.0	1.8	1.8	0.0	1.8	0.5	3.8	4.1	5.0	3.8	3.9
Cycle Q Clear(g_c), s	1.0	0.0	1.8	1.8	0.0	1.8	0.5	3.8	4.1	5.0	3.8	3.9
Prop In Lane	1.00		0.18	1.00		0.30	1.00		0.76	1.00		0.13
Lane Grp Cap(c), veh/h	162	0	200	160	0	192	163	476	429	298	611	627
V/C Ratio(X)	0.27	0.00	0.39	0.46	0.00	0.40	0.13	0.39	0.42	0.73	0.34	0.34
Avail Cap(c_a), veh/h	485	0	1926	240	0	1608	245	1263	1139	1429	2444	2509
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	0.0	18.1	18.9	0.0	18.1	18.3	13.2	13.7	17.3	10.8	10.8
Incr Delay (d2), s/veh	0.3	0.0	0.5	0.8	0.0	0.5	0.1	0.2	0.2	1.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.9	0.9	0.0	0.9	0.3	1.8	1.8	2.6	1.9	1.9
LnGrp Delay(d),s/veh	18.9	0.0	18.6	19.7	0.0	18.6	18.5	13.4	14.0	18.6	10.9	11.0
LnGrp LOS	B		B	B		B	B	B	B	B	B	B
Approach Vol, veh/h		122			151			387			640	
Approach Delay, s/veh		18.7			19.2			13.9			13.5	
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	11.3	15.7	8.0	8.9	8.0	19.0	8.0	8.9
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	35.0	29.7	6.0	47.0	6.0	58.7	12.0	41.0
Max Q Clear Time (g_c+I1), s	7.0	6.1	3.8	3.8	2.5	5.9	3.0	3.8
Green Ext Time (p_c), s	0.3	2.7	0.0	0.5	0.0	2.8	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	110	45	60	100	90	140	1006	140	200	866	90
Future Volume (veh/h)	90	110	45	60	100	90	140	1006	140	200	866	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		0.98	1.00		0.97	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	98	120	27	65	109	81	152	1093	139	217	941	95
Adj No. of Lanes	1	1	0	1	1	0	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	126	272	61	84	158	117	189	1397	177	257	1557	157
Arrive On Green	0.07	0.18	0.18	0.05	0.16	0.16	0.11	0.44	0.42	0.14	0.48	0.46
Sat Flow, veh/h	1792	1482	334	1774	981	729	1792	3190	405	1792	3270	330
Grp Volume(v), veh/h	98	0	147	65	0	190	152	612	620	217	514	522
Grp Sat Flow(s),veh/h/ln	1792	0	1816	1774	0	1710	1792	1787	1808	1792	1787	1813
Q Serve(g_s), s	4.6	0.0	6.1	3.1	0.0	8.9	7.1	24.9	25.1	10.1	18.0	18.1
Cycle Q Clear(g_c), s	4.6	0.0	6.1	3.1	0.0	8.9	7.1	24.9	25.1	10.1	18.0	18.1
Prop In Lane	1.00		0.18	1.00		0.43	1.00		0.22	1.00		0.18
Lane Grp Cap(c), veh/h	126	0	333	84	0	275	189	783	792	257	851	864
V/C Ratio(X)	0.78	0.00	0.44	0.78	0.00	0.69	0.81	0.78	0.78	0.84	0.60	0.60
Avail Cap(c_a), veh/h	231	0	725	229	0	682	547	965	976	694	1112	1128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	30.9	40.2	0.0	33.8	37.3	20.5	20.6	35.5	16.4	16.5
Incr Delay (d2), s/veh	3.9	0.0	0.3	5.7	0.0	1.2	3.1	2.6	2.6	2.9	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	3.1	1.6	0.0	4.3	3.7	12.8	13.0	5.1	8.9	9.1
LnGrp Delay(d),s/veh	42.9	0.0	31.2	45.9	0.0	34.9	40.3	23.1	23.3	38.4	16.7	16.8
LnGrp LOS	D		C	D		C	D	C	C	D	B	B
Approach Vol, veh/h		245			255			1384			1253	
Approach Delay, s/veh		35.9			37.7			25.1			20.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.2	41.3	8.0	19.6	13.0	44.6	10.0	17.7
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	33.6	44.7	11.0	34.0	26.0	51.7	11.0	34.0
Max Q Clear Time (g_c+I1), s	12.1	27.1	5.1	8.1	9.1	20.1	6.6	10.9
Green Ext Time (p_c), s	0.3	8.9	0.0	1.1	0.2	11.4	0.0	1.1

Intersection Summary		
HCM 2010 Ctrl Delay	25.1	
HCM 2010 LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	0	11	150	0	330	23	800	40	60	698	163
Future Volume (veh/h)	56	0	11	150	0	330	23	800	40	60	698	163
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1878	1900
Adj Flow Rate, veh/h	61	0	12	163	0	302	25	870	16	65	759	177
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	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, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	139	0	297	209	0	363	82	1401	611	83	1098	256
Arrive On Green	0.08	0.00	0.19	0.12	0.00	0.22	0.05	0.39	0.39	0.05	0.38	0.36
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1558	1792	2873	670
Grp Volume(v), veh/h	61	0	12	163	0	302	25	870	16	65	471	465
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1558	1792	1784	1759
Q Serve(g_s), s	2.3	0.0	0.4	6.1	0.0	12.4	0.9	13.6	0.4	2.5	15.5	15.5
Cycle Q Clear(g_c), s	2.3	0.0	0.4	6.1	0.0	12.4	0.9	13.6	0.4	2.5	15.5	15.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	139	0	297	209	0	363	82	1401	611	83	682	673
V/C Ratio(X)	0.44	0.00	0.04	0.78	0.00	0.83	0.31	0.62	0.03	0.78	0.69	0.69
Avail Cap(c_a), veh/h	178	0	818	493	0	1159	160	1949	849	231	1024	1010
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	23.2	30.0	0.0	25.8	32.1	17.0	13.0	32.9	18.1	18.3
Incr Delay (d2), s/veh	2.2	0.0	0.1	6.3	0.0	1.9	2.1	0.2	0.0	5.9	0.5	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	1.2	0.0	0.2	3.4	0.0	5.7	0.5	6.7	0.2	1.4	7.7	7.6
LnGrp Delay(d),s/veh	32.8	0.0	23.2	36.2	0.0	27.7	34.2	17.2	13.0	38.7	18.5	18.8
LnGrp LOS	C		C	D		C	C	B	B	D	B	B
Approach Vol, veh/h		73			465			911			1001	
Approach Delay, s/veh		31.2			30.7			17.6			20.0	
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	7.2	31.3	14.0	17.1	7.9	30.6	9.5	21.7
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	9.6	36.7	19.0	34.0	5.0	38.7	5.0	* 50
Max Q Clear Time (g_c+I1), s	4.3	15.6	8.1	2.4	2.9	17.5	4.3	14.4
Green Ext Time (p_c), s	0.0	7.8	0.3	1.3	0.0	7.8	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	199	37	110	352	361	73	602	60	360	361	48
Future Volume (veh/h)	110	199	37	110	352	361	73	602	60	360	361	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	120	216	40	120	383	97	79	654	65	391	392	52
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	2	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, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	195	582	106	209	566	142	102	982	97	520	1238	163
Arrive On Green	0.11	0.19	0.19	0.12	0.20	0.20	0.06	0.30	0.28	0.15	0.39	0.37
Sat Flow, veh/h	1810	3051	555	1792	2832	710	1810	3313	329	3476	3176	419
Grp Volume(v), veh/h	120	126	130	120	240	240	79	356	363	391	219	225
Grp Sat Flow(s),veh/h/ln	1810	1805	1801	1792	1787	1755	1810	1805	1837	1738	1787	1807
Q Serve(g_s), s	4.1	4.0	4.1	4.1	8.1	8.2	2.8	11.2	11.3	7.0	5.5	5.7
Cycle Q Clear(g_c), s	4.1	4.0	4.1	4.1	8.1	8.2	2.8	11.2	11.3	7.0	5.5	5.7
Prop In Lane	1.00		0.31	1.00		0.40	1.00		0.18	1.00		0.23
Lane Grp Cap(c), veh/h	195	344	343	209	357	350	102	535	544	520	697	705
V/C Ratio(X)	0.61	0.37	0.38	0.57	0.67	0.68	0.78	0.67	0.67	0.75	0.32	0.32
Avail Cap(c_a), veh/h	195	973	971	552	1322	1298	112	1363	1387	1607	2065	2089
HCM Platoon Ratio	1.00	1.00	1.00	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	27.7	22.9	22.9	27.1	24.0	24.1	30.2	20.0	20.1	26.4	13.8	13.9
Incr Delay (d2), s/veh	5.6	0.2	0.3	2.5	0.8	0.9	23.3	0.5	0.5	0.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.0	2.0	2.2	4.0	4.1	2.0	5.6	5.7	3.4	2.8	2.8
LnGrp Delay(d),s/veh	33.3	23.1	23.2	29.6	24.8	25.0	53.6	20.5	20.7	27.3	13.9	14.0
LnGrp LOS	C	C	C	C	C	C	D	C	C	C	B	B
Approach Vol, veh/h		376			600			798			835	
Approach Delay, s/veh		26.4			25.8			23.9			20.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	23.2	11.6	16.4	7.6	29.3	11.0	17.0
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	30.0	47.7	18.0	35.0	4.0	73.7	5.0	48.0
Max Q Clear Time (g_c+I1), s	10.1	13.3	6.1	6.1	4.8	7.7	6.1	10.2
Green Ext Time (p_c), s	0.7	4.7	0.2	2.5	0.0	4.7	0.0	2.5

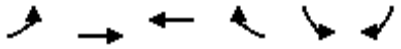
Intersection Summary	
HCM 2010 Ctrl Delay	23.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	545	60	70	647	190	80	90	180	120	30	135
Future Volume (veh/h)	170	545	60	70	647	190	80	90	180	120	30	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	185	592	65	76	703	207	87	98	196	130	33	147
Adj No. of Lanes	1	2	0	1	2	0	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	1608	176	97	1169	344	110	277	248	158	324	290
Arrive On Green	0.12	0.50	0.50	0.05	0.43	0.43	0.06	0.16	0.16	0.09	0.18	0.18
Sat Flow, veh/h	1774	3218	353	1774	2698	794	1774	1770	1583	1774	1770	1583
Grp Volume(v), veh/h	185	325	332	76	461	449	87	98	196	130	33	147
Grp Sat Flow(s),veh/h/ln	1774	1770	1801	1774	1770	1723	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	12.3	13.5	13.6	5.1	24.0	24.0	5.8	5.9	14.3	8.6	1.9	10.0
Cycle Q Clear(g_c), s	12.3	13.5	13.6	5.1	24.0	24.0	5.8	5.9	14.3	8.6	1.9	10.0
Prop In Lane	1.00		0.20	1.00		0.46	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	885	900	97	767	746	110	277	248	158	324	290
V/C Ratio(X)	0.86	0.37	0.37	0.78	0.60	0.60	0.79	0.35	0.79	0.82	0.10	0.51
Avail Cap(c_a), veh/h	340	885	900	177	767	746	207	277	248	266	324	290
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	18.4	18.4	56.0	26.1	26.1	55.5	45.2	48.7	53.7	40.8	44.1
Incr Delay (d2), s/veh	12.2	1.2	1.2	12.8	3.5	3.6	11.8	0.8	15.8	10.2	0.6	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	6.9	7.0	2.8	12.4	12.1	3.2	3.0	7.4	4.7	1.0	4.9
LnGrp Delay(d),s/veh	63.9	19.6	19.6	68.8	29.5	29.6	67.3	46.0	64.5	64.0	41.4	50.3
LnGrp LOS	E	B	B	E	C	C	E	D	E	E	D	D
Approach Vol, veh/h		842			986			381			310	
Approach Delay, s/veh		29.3			32.6			60.4			55.1	
Approach LOS		C			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	24.8	12.6	66.0	13.5	28.0	20.6	58.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	18.0	18.0	12.0	48.0	14.0	22.0	23.0	37.0
Max Q Clear Time (g_c+I1), s	10.6	16.3	7.1	15.6	7.8	12.0	14.3	26.0
Green Ext Time (p_c), s	0.2	0.5	0.1	13.1	0.1	2.1	0.3	7.0

Intersection Summary	
HCM 2010 Ctrl Delay	38.5
HCM 2010 LOS	D

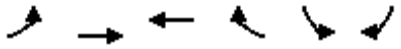
Notes



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	159	596	781	280	220	126
Future Volume (veh/h)	159	596	781	280	220	126
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	173	648	849	304	239	137
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	209	2084	1034	369	493	440
Arrive On Green	0.12	0.59	0.40	0.40	0.28	0.28
Sat Flow, veh/h	1774	3632	2650	914	1774	1583
Grp Volume(v), veh/h	173	648	587	566	239	137
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1701	1774	1583
Q Serve(g_s), s	8.6	8.3	26.6	26.7	10.1	6.2
Cycle Q Clear(g_c), s	8.6	8.3	26.6	26.7	10.1	6.2
Prop In Lane	1.00			0.54	1.00	1.00
Lane Grp Cap(c), veh/h	209	2084	716	688	493	440
V/C Ratio(X)	0.83	0.31	0.82	0.82	0.48	0.31
Avail Cap(c_a), veh/h	296	2084	716	688	493	440
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	38.8	9.3	23.9	23.9	27.1	25.7
Incr Delay (d2), s/veh	12.4	0.4	10.2	10.7	3.4	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	4.2	14.9	14.5	5.4	6.1
LnGrp Delay(d),s/veh	51.2	9.7	34.1	34.6	30.5	27.5
LnGrp LOS	D	A	C	C	C	C
Approach Vol, veh/h		821	1153		376	
Approach Delay, s/veh		18.4	34.4		29.4	
Approach LOS		B	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				59.0		31.0	16.6	42.4
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				53.0		25.0	15.0	32.0
Max Q Clear Time (g_c+I1), s				10.3		12.1	10.6	28.7
Green Ext Time (p_c), s				17.3		1.0	0.2	2.7

Intersection Summary	
HCM 2010 Ctrl Delay	28.0
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	554	937	1142	280	1560	570
Future Volume (veh/h)	554	937	1142	280	1560	570
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	602	1018	1241	304	1696	620
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	371	3088	1289	577	1167	537
Arrive On Green	0.21	0.61	0.36	0.36	0.34	0.34
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	602	1018	1241	304	1696	620
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	29.3	13.8	48.1	21.1	47.0	47.0
Cycle Q Clear(g_c), s	29.3	13.8	48.1	21.1	47.0	47.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	371	3088	1289	577	1167	537
V/C Ratio(X)	1.62	0.33	0.96	0.53	1.45	1.15
Avail Cap(c_a), veh/h	371	3088	1289	577	1167	537
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	55.3	13.5	43.6	35.0	46.5	46.5
Incr Delay (d2), s/veh	291.8	0.0	16.8	0.5	208.9	89.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	44.4	6.4	26.4	9.3	56.4	34.0
LnGrp Delay(d),s/veh	347.1	13.5	60.3	35.5	255.4	135.8
LnGrp LOS	F	B	E	D	F	F
Approach Vol, veh/h		1620	1545		2316	
Approach Delay, s/veh		137.5	55.4		223.4	
Approach LOS		F	E		F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		89.0			34.0	55.0		51.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		83.7			28.0	49.7		45.7
Max Q Clear Time (g_c+I1), s		15.8			31.3	50.1		49.0
Green Ext Time (p_c), s		17.7			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	150.6
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	673	1824	0	0	707	990	715	0	410	0	0	0
Future Volume (veh/h)	673	1824	0	0	707	990	715	0	410	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1845	1845	1845			
Adj Flow Rate, veh/h	732	1983	0	0	983	456	777	0	324			
Adj No. of Lanes	2	3	0	0	2	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	1	1	0	0	1	1	3	3	3			
Cap, veh/h	776	3465	0	0	1569	667	902	0	403			
Arrive On Green	0.22	0.67	0.00	0.00	0.42	0.42	0.26	0.00	0.26			
Sat Flow, veh/h	3476	5305	0	0	3762	1599	3514	0	1568			
Grp Volume(v), veh/h	732	1983	0	0	983	456	777	0	324			
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1881	1599	1757	0	1568			
Q Serve(g_s), s	24.1	23.8	0.0	0.0	24.0	27.1	24.6	0.0	22.6			
Cycle Q Clear(g_c), s	24.1	23.8	0.0	0.0	24.0	27.1	24.6	0.0	22.6			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	776	3465	0	0	1569	667	902	0	403			
V/C Ratio(X)	0.94	0.57	0.00	0.00	0.63	0.68	0.86	0.00	0.80			
Avail Cap(c_a), veh/h	776	3778	0	0	1799	765	1397	0	623			
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	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	44.5	10.0	0.0	0.0	26.8	27.7	41.3	0.0	40.6			
Incr Delay (d2), s/veh	19.6	0.1	0.0	0.0	0.3	1.5	2.2	0.0	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			
%ile BackOfQ(50%),veh/ln	18.7	11.2	0.0	0.0	12.5	12.2	12.1	0.0	18.5			
LnGrp Delay(d),s/veh	64.1	10.1	0.0	0.0	27.1	29.2	43.5	0.0	42.7			
LnGrp LOS	E	B			C	C	D		D			
Approach Vol, veh/h		2715			1439			1101				
Approach Delay, s/veh		24.7			27.8			43.3				
Approach LOS		C			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		82.6		33.9	30.0	52.6		
Change Period (Y+Rc), s		5.3		5.3	4.0	5.3		
Max Green Setting (Gmax), s		84.4		45.0	26.0	54.4		
Max Q Clear Time (g_c+I1), s		25.8		26.6	26.1	29.1		
Green Ext Time (p_c), s		30.1		2.0	0.0	18.2		

Intersection Summary	
HCM 2010 Ctrl Delay	29.4
HCM 2010 LOS	C

Notes

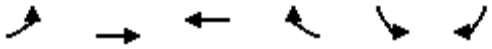
Intersection	
Int Delay, s/veh	64.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	439	136	180	458	90
Future Vol, veh/h	60	439	136	180	458	90
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, %	0	0	0	0	0	0
Mvmt Flow	65	477	148	196	498	98

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1339	246	0	0	343	0
Stage 1	246	-	-	-	-	-
Stage 2	1093	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	170	798	-	-	1227	-
Stage 1	800	-	-	-	-	-
Stage 2	324	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	97	798	-	-	1227	-
Mov Cap-2 Maneuver	97	-	-	-	-	-
Stage 1	800	-	-	-	-	-
Stage 2	185	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	166.5	0	8.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	427	1227	-
HCM Lane V/C Ratio	-	-	1.27	0.406	-
HCM Control Delay (s)	-	-	166.5	9.9	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	23.2	2	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	374	1290	1093	60	690	1010
Future Volume (veh/h)	374	1290	1093	60	690	1010
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1863	1863	1776	1776
Adj Flow Rate, veh/h	407	1402	1188	-133	750	828
Adj No. of Lanes	2	2	3	1	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	7	7
Cap, veh/h	398	1745	1707	532	737	1527
Arrive On Green	0.11	0.49	0.34	0.00	0.44	0.45
Sat Flow, veh/h	3476	3668	5253	1583	1691	2656
Grp Volume(v), veh/h	407	1402	1188	-133	750	828
Grp Sat Flow(s),veh/h/ln	1738	1787	1695	1583	1691	1328
Q Serve(g_s), s	12.0	34.7	21.2	0.0	45.7	20.2
Cycle Q Clear(g_c), s	12.0	34.7	21.2	0.0	45.7	20.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	398	1745	1707	532	737	1527
V/C Ratio(X)	1.02	0.80	0.70	-0.25	1.02	0.54
Avail Cap(c_a), veh/h	398	1918	1953	608	737	1527
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	46.5	22.6	30.2	0.0	29.6	13.8
Incr Delay (d2), s/veh	51.4	2.1	0.7	0.0	37.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	17.4	10.0	0.0	29.0	0.0
LnGrp Delay(d),s/veh	97.8	24.7	30.9	0.0	67.4	14.0
LnGrp LOS	F	C	C		F	B
Approach Vol, veh/h		1809	1055		1578	
Approach Delay, s/veh		41.1	34.8		39.4	
Approach LOS		D	C		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				55.2		49.7	16.0	39.2
Change Period (Y+Rc), s				5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s				55.0		45.7	12.0	39.0
Max Q Clear Time (g_c+I1), s				36.7		47.7	14.0	23.2
Green Ext Time (p_c), s				11.9		0.0	0.0	10.7

Intersection Summary	
HCM 2010 Ctrl Delay	39.0
HCM 2010 LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1650	330	0	886	267	230
Future Volume (veh/h)	1650	330	0	886	267	230
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	1793	359	0	963	290	250
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	2296	1027	0	2296	947	436
Arrive On Green	0.65	0.65	0.00	0.65	0.28	0.28
Sat Flow, veh/h	3632	1583	0	3725	3442	1583
Grp Volume(v), veh/h	1793	359	0	963	290	250
Grp Sat Flow(s),veh/h/ln	1770	1583	0	1770	1721	1583
Q Serve(g_s), s	38.0	10.8	0.0	13.8	7.0	14.3
Cycle Q Clear(g_c), s	38.0	10.8	0.0	13.8	7.0	14.3
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2296	1027	0	2296	947	436
V/C Ratio(X)	0.78	0.35	0.00	0.42	0.31	0.57
Avail Cap(c_a), veh/h	2452	1097	0	2452	947	436
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	13.2	8.4	0.0	8.9	30.2	32.9
Incr Delay (d2), s/veh	1.6	0.2	0.0	0.1	0.8	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.7	4.7	0.0	6.7	3.5	6.9
LnGrp Delay(d),s/veh	14.8	8.6	0.0	9.0	31.1	38.3
LnGrp LOS	B	A		A	C	D
Approach Vol, veh/h	2152			963	540	
Approach Delay, s/veh	13.7			9.0	34.4	
Approach LOS	B			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		33.0		72.4				72.4
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		28.5		72.5				72.5
Max Q Clear Time (g_c+I1), s		16.3		40.0				15.8
Green Ext Time (p_c), s		1.6		27.9				44.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.5
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	560	810	300	270	549	170
Future Volume (veh/h)	560	810	300	270	549	170
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1397	1397	1845	1845
Adj Flow Rate, veh/h	609	214	326	293	597	159
Adj No. of Lanes	2	1	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	36	36	3	3
Cap, veh/h	1062	469	474	834	802	369
Arrive On Green	0.30	0.30	0.18	0.60	0.24	0.24
Sat Flow, veh/h	3632	1565	2581	1397	3408	1568
Grp Volume(v), veh/h	609	214	326	293	597	159
Grp Sat Flow(s),veh/h/ln	1770	1565	1291	1397	1704	1568
Q Serve(g_s), s	6.9	5.3	5.6	5.1	7.7	4.1
Cycle Q Clear(g_c), s	6.9	5.3	5.6	5.1	7.7	4.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1062	469	474	834	802	369
V/C Ratio(X)	0.57	0.46	0.69	0.35	0.74	0.43
Avail Cap(c_a), veh/h	5719	2529	791	2844	2503	1152
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	14.1	13.5	18.2	4.9	16.9	15.5
Incr Delay (d2), s/veh	0.2	0.3	1.8	0.1	0.5	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	3.4	2.3	2.1	2.0	3.7	1.8
LnGrp Delay(d),s/veh	14.3	13.8	20.0	5.0	17.4	15.8
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	823			619	756	
Approach Delay, s/veh	14.2			12.9	17.1	
Approach LOS	B			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		15.2	14.1	18.3				32.4
Change Period (Y+Rc), s		4.0	6.0	4.6				4.6
Max Green Setting (Gmax), s		35.0	14.0	76.4				96.4
Max Q Clear Time (g_c+I1), s		9.7	7.6	8.9				7.1
Green Ext Time (p_c), s		1.5	0.6	4.1				4.1

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	0	1126	0	0	0	0	1830	423	210	975	0
Future Volume (veh/h)	230	0	1126	0	0	0	0	1830	423	210	975	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	50				0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	250	0	952				0	1989	460	228	1060	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	967	0	1010				0	2532	426	237	3246	0
Arrive On Green	0.19	0.00	0.19				0.00	0.37	0.37	0.05	0.44	0.00
Sat Flow, veh/h	3442	0	3610				0	4825	938	3343	5103	0
Grp Volume(v), veh/h	250	0	952				0	1633	816	228	1060	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1665	1672	1647	0
Q Serve(g_s), s	8.9	0.0	37.5				0.0	65.9	66.6	9.8	20.3	0.0
Cycle Q Clear(g_c), s	8.9	0.0	37.5				0.0	65.9	66.6	9.8	20.3	0.0
Prop In Lane	1.00		1.00				0.00		0.56	1.00		0.00
Lane Grp Cap(c), veh/h	967	0	1010				0	1866	940	237	3246	0
V/C Ratio(X)	0.26	0.00	0.94				0.00	0.88	0.87	0.96	0.33	0.00
Avail Cap(c_a), veh/h	1006	0	1056				0	1966	976	243	3375	0
HCM Platoon Ratio	0.67	1.00	0.67				1.00	0.67	0.67	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.1	0.0	61.3				0.0	44.8	43.1	70.5	20.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	15.2				0.0	4.3	7.8	46.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	152.6				0.0	23.3	9.7	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	29.7				0.0	28.6	38.2	6.2	9.5	0.0
LnGrp Delay(d),s/veh	47.1	0.0	229.1				0.0	72.4	60.6	116.9	20.1	0.0
LnGrp LOS	D		F					E	E	F	C	
Approach Vol, veh/h		1202						2449			1288	
Approach Delay, s/veh		191.3						68.5			37.2	
Approach LOS		F						E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.9	83.8		45.6		98.7		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	10.0	* 84		41.7		98.1		
Max Q Clear Time (g_c+I1), s	11.8	68.6		39.5		22.3		
Green Ext Time (p_c), s	0.0	10.3		0.9		5.6		

Intersection Summary	
HCM 2010 Ctrl Delay	90.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	30	30	200	40	250	40	2002	200	190	921	30
Future Volume (veh/h)	40	30	30	200	40	250	40	2002	200	190	921	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		0.98	1.00		1.00	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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	33	13	248	0	45	43	2176	213	207	1001	32
Adj No. of Lanes	0	1	1	2	0	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	79	61	114	336	0	149	62	2134	205	198	2367	76
Arrive On Green	0.08	0.08	0.07	0.09	0.00	0.09	0.03	0.65	0.65	0.06	0.68	0.67
Sat Flow, veh/h	1015	779	1536	3583	0	1594	1774	3262	314	3442	3498	112
Grp Volume(v), veh/h	76	0	13	248	0	45	43	1164	1225	207	506	527
Grp Sat Flow(s),veh/h/ln	1794	0	1536	1792	0	1594	1774	1770	1806	1721	1770	1840
Q Serve(g_s), s	5.3	0.0	1.0	8.8	0.0	3.4	3.1	85.3	85.3	7.5	16.9	16.9
Cycle Q Clear(g_c), s	5.3	0.0	1.0	8.8	0.0	3.4	3.1	85.3	85.3	7.5	16.9	16.9
Prop In Lane	0.57		1.00	1.00		1.00	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	140	0	114	336	0	149	62	1158	1182	198	1198	1245
V/C Ratio(X)	0.54	0.00	0.11	0.74	0.00	0.30	0.69	1.01	1.04	1.05	0.42	0.42
Avail Cap(c_a), veh/h	488	0	412	1003	0	446	129	1158	1182	198	1198	1245
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	0.0	56.4	57.5	0.0	55.1	62.2	22.6	22.6	61.5	9.5	9.6
Incr Delay (d2), s/veh	1.2	0.0	0.2	1.2	0.0	0.4	5.1	27.8	36.2	76.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.4	4.4	0.0	1.5	1.6	50.1	53.9	5.7	8.2	8.5
LnGrp Delay(d),s/veh	59.1	0.0	56.5	58.7	0.0	55.5	67.3	50.3	58.8	138.0	9.6	9.6
LnGrp LOS	E		E	E		E	E	F	F	F	A	A
Approach Vol, veh/h		89			293			2432			1240	
Approach Delay, s/veh		58.7			58.2			54.9			31.1	
Approach LOS		E			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	11.0	89.4		13.7	8.1	92.3		16.3
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	7.0	84.8		35.0	9.0	82.8		36.0
Max Q Clear Time (g_c+I1), s	9.5	87.3		7.3	5.1	18.9		10.8
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	39.6		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	47.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	311	653	60	100	1090	310	290	450	240	360	202	315
Future Volume (veh/h)	311	653	60	100	1090	310	290	450	240	360	202	315
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	338	710	54	109	1185	223	315	489	237	391	220	150
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	368	2030	153	138	1484	667	345	585	282	456	673	627
Arrive On Green	0.21	0.42	0.42	0.08	0.29	0.29	0.19	0.25	0.25	0.13	0.19	0.19
Sat Flow, veh/h	1774	4818	364	1774	5085	1575	1792	2340	1128	3476	3574	1567
Grp Volume(v), veh/h	338	498	266	109	1185	223	315	373	353	391	220	150
Grp Sat Flow(s),veh/h/ln	1774	1695	1792	1774	1695	1575	1792	1787	1681	1738	1787	1567
Q Serve(g_s), s	25.8	13.8	14.0	8.4	29.8	13.2	23.9	27.4	27.7	15.3	7.4	8.9
Cycle Q Clear(g_c), s	25.8	13.8	14.0	8.4	29.8	13.2	23.9	27.4	27.7	15.3	7.4	8.9
Prop In Lane	1.00		0.20	1.00		1.00	1.00		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	368	1428	755	138	1484	667	345	447	420	456	673	627
V/C Ratio(X)	0.92	0.35	0.35	0.79	0.80	0.33	0.91	0.83	0.84	0.86	0.33	0.24
Avail Cap(c_a), veh/h	506	1645	869	237	1696	733	485	699	658	590	1037	786
HCM Platoon Ratio	1.00	1.00	1.00	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	53.8	27.2	27.2	62.8	45.3	26.9	54.8	49.2	49.5	58.9	48.6	28.0
Incr Delay (d2), s/veh	15.2	0.1	0.1	3.8	2.1	0.1	14.2	2.8	3.2	8.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	6.4	6.9	4.3	14.2	5.8	13.2	13.9	13.2	7.8	3.6	3.8
LnGrp Delay(d),s/veh	69.0	27.2	27.3	66.6	47.4	27.0	68.9	52.0	52.7	67.0	48.7	28.0
LnGrp LOS	E	C	C	E	D	C	E	D	D	E	D	C
Approach Vol, veh/h		1102			1517			1041			761	
Approach Delay, s/veh		40.1			45.8			57.4			54.0	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.7	39.4	14.3	63.2	30.2	30.9	32.2	45.2
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	23.0	53.7	18.0	66.7	37.0	39.7	39.0	45.7
Max Q Clear Time (g_c+I1), s	17.3	29.7	10.4	16.0	25.9	10.9	27.8	31.8
Green Ext Time (p_c), s	0.4	3.8	0.1	12.0	0.3	3.9	0.4	7.6

Intersection Summary	
HCM 2010 Ctrl Delay	48.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1200	550	90	1484	0	0	0	0	460	10	770
Future Volume (veh/h)	0	1200	550	90	1484	0	0	0	0	460	10	770
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1304	263	98	1613	0				508	0	808
Adj No. of Lanes	0	3	1	2	3	0				2	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2425	755	141	3003	0				1074	0	959
Arrive On Green	0.00	0.47	0.47	0.07	0.58	0.00				0.30	0.00	0.30
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	3167
Grp Volume(v), veh/h	0	1304	263	98	1613	0				508	0	808
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	15.3	8.9	4.1	16.2	0.0				9.9	0.0	20.4
Cycle Q Clear(g_c), s	0.0	15.3	8.9	4.1	16.2	0.0				9.9	0.0	20.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2425	755	141	3003	0				1074	0	959
V/C Ratio(X)	0.00	0.54	0.35	0.70	0.54	0.00				0.47	0.00	0.84
Avail Cap(c_a), veh/h	0	3444	1072	312	4468	0				2338	0	2087
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.9	14.2	38.7	10.7	0.0				24.2	0.0	27.8
Incr Delay (d2), s/veh	0.0	0.1	0.1	2.3	0.1	0.0				0.1	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.3	3.9	1.2	7.6	0.0				4.9	0.0	9.0
LnGrp Delay(d),s/veh	0.0	16.0	14.3	41.0	10.8	0.0				24.3	0.0	28.6
LnGrp LOS		B	B	D	B					C		C
Approach Vol, veh/h		1567			1711						1316	
Approach Delay, s/veh		15.7			12.5						27.0	
Approach LOS		B			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	9.6	45.1		30.6		54.7		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	13.0	56.7		55.7		73.7		
Max Q Clear Time (g_c+I1), s	6.1	17.3		22.4		18.2		
Green Ext Time (p_c), s	0.1	22.5		2.9		26.4		

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	613	374	0	890	570	0	0	0	960	0	101
Future Volume (veh/h)	0	613	374	0	890	570	0	0	0	960	0	101
Number	5	2	12	1	6	16				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1881	0	1881
Adj Flow Rate, veh/h	0	666	407	0	967	620				1043	0	110
Adj No. of Lanes	0	3	1	0	2	1				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2				1	0	1
Cap, veh/h	0	2589	806	0	1802	817				1209	0	545
Arrive On Green	0.00	0.51	0.51	0.00	0.51	0.52				0.35	0.00	0.34
Sat Flow, veh/h	0	5253	1583	0	3632	1583				3476	0	1599
Grp Volume(v), veh/h	0	666	407	0	967	620				1043	0	110
Grp Sat Flow(s),veh/h/ln	0	1695	1583	0	1770	1583				1738	0	1599
Q Serve(g_s), s	0.0	5.2	12.0	0.0	13.0	22.0				19.7	0.0	3.4
Cycle Q Clear(g_c), s	0.0	5.2	12.0	0.0	13.0	22.0				19.7	0.0	3.4
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2589	806	0	1802	817				1209	0	545
V/C Ratio(X)	0.00	0.26	0.50	0.00	0.54	0.76				0.86	0.00	0.20
Avail Cap(c_a), veh/h	0	4013	1250	0	2793	1261				2669	0	1217
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.8	11.4	0.0	11.7	13.6				21.4	0.0	16.5
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.1	0.6				0.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	5.2	0.0	6.3	9.6				9.5	0.0	1.5
LnGrp Delay(d),s/veh	0.0	9.8	11.6	0.0	11.8	14.1				22.2	0.0	16.5
LnGrp LOS		A	B		B	B				C		B
Approach Vol, veh/h		1073			1587						1153	
Approach Delay, s/veh		10.5			12.7						21.6	
Approach LOS		B			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		41.2				41.2		29.3
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		55.7				55.7		53.7
Max Q Clear Time (g_c+I1), s		14.0				24.0		21.7
Green Ext Time (p_c), s		12.8				12.0		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	200	493	45	70	452	170
Future Volume (veh/h)	200	493	45	70	452	170
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	217	536	49	76	491	185
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	485	949	90	139	578	1037
Arrive On Green	0.27	0.27	0.13	0.13	0.32	0.55
Sat Flow, veh/h	1810	1615	673	1043	1810	1900
Grp Volume(v), veh/h	217	536	0	125	491	185
Grp Sat Flow(s),veh/h/ln	1810	1615	0	1716	1810	1900
Q Serve(g_s), s	5.4	11.0	0.0	3.7	13.6	2.6
Cycle Q Clear(g_c), s	5.4	11.0	0.0	3.7	13.6	2.6
Prop In Lane	1.00	1.00		0.61	1.00	
Lane Grp Cap(c), veh/h	485	949	0	229	578	1037
V/C Ratio(X)	0.45	0.56	0.00	0.55	0.85	0.18
Avail Cap(c_a), veh/h	606	1057	0	639	1246	2193
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	16.4	6.8	0.0	21.8	17.1	6.1
Incr Delay (d2), s/veh	0.6	0.6	0.0	2.0	3.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	4.9	0.0	1.9	7.3	1.4
LnGrp Delay(d),s/veh	17.0	7.4	0.0	23.8	20.7	6.2
LnGrp LOS	B	A		C	C	A
Approach Vol, veh/h	753		125			676
Approach Delay, s/veh	10.2		23.8			16.7
Approach LOS	B		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	22.2	12.2				34.3		19.4
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	37.0	20.0				62.0		18.0
Max Q Clear Time (g_c+I1), s	15.6	5.7				4.6		13.0
Green Ext Time (p_c), s	1.6	1.5				2.0		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	14.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	550	0	2499	0	0	0	0	1250	439	620	1045	0
Future Volume (veh/h)	550	0	2499	0	0	0	0	1250	439	620	1045	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	598	0	2444				0	1359	477	674	1136	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1551	0	1608				0	1211	425	443	2452	0
Arrive On Green	0.30	0.00	0.30				0.00	0.22	0.22	0.09	0.33	0.00
Sat Flow, veh/h	3442	0	3610				0	4399	1282	3343	5103	0
Grp Volume(v), veh/h	598	0	2444				0	1247	589	674	1136	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1582	1672	1647	0
Q Serve(g_s), s	20.7	0.0	67.2				0.0	50.0	50.0	20.0	27.4	0.0
Cycle Q Clear(g_c), s	20.7	0.0	67.2				0.0	50.0	50.0	20.0	27.4	0.0
Prop In Lane	1.00		1.00				0.00		0.81	1.00		0.00
Lane Grp Cap(c), veh/h	1551	0	1608				0	1111	524	443	2452	0
V/C Ratio(X)	0.39	0.00	1.52				0.00	1.12	1.12	1.52	0.46	0.00
Avail Cap(c_a), veh/h	1551	0	1608				0	1111	524	443	2452	0
HCM Platoon Ratio	0.67	1.00	0.67				1.00	0.67	0.67	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.2	0.0	52.9				0.0	58.7	58.9	68.8	34.5	0.0
Incr Delay (d2), s/veh	0.1	0.0	237.3				0.0	67.3	77.7	245.8	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
%ile BackOfQ(50%),veh/ln	9.9	0.0	57.6				0.0	22.3	33.1	24.3	12.5	0.0
LnGrp Delay(d),s/veh	36.2	0.0	290.3				0.0	126.0	136.7	314.5	34.6	0.0
LnGrp LOS	D		F					F	F	F	C	
Approach Vol, veh/h		3042						1836			1810	
Approach Delay, s/veh		240.3						129.4			138.8	
Approach LOS		F						F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	24.9	54.0		72.0		78.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	20.0	* 49		66.7		73.1		
Max Q Clear Time (g_c+I1), s	22.0	52.0		69.2		29.4		
Green Ext Time (p_c), s	0.0	0.0		0.0		7.5		

Intersection Summary	
HCM 2010 Ctrl Delay	182.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	50	70	160	40	150	80	1107	140	260	1353	40
Future Volume (veh/h)	60	50	70	160	40	150	80	1107	140	260	1353	40
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	54	56	108	135	-64	87	1203	148	283	1471	42
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	103	85	162	185	194	165	111	1682	206	355	2004	57
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.00	0.06	0.53	0.52	0.10	0.57	0.56
Sat Flow, veh/h	981	815	1546	1792	1881	1599	1774	3173	389	3442	3512	100
Grp Volume(v), veh/h	119	0	56	108	135	-64	87	669	682	283	740	773
Grp Sat Flow(s),veh/h/ln	1796	0	1546	1792	1881	1599	1774	1770	1793	1721	1770	1843
Q Serve(g_s), s	6.4	0.0	3.4	5.8	7.0	0.0	4.9	28.8	29.1	8.1	31.1	31.3
Cycle Q Clear(g_c), s	6.4	0.0	3.4	5.8	7.0	0.0	4.9	28.8	29.1	8.1	31.1	31.3
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.22	1.00		0.05
Lane Grp Cap(c), veh/h	188	0	162	185	194	165	111	938	950	355	1010	1051
V/C Ratio(X)	0.63	0.00	0.35	0.58	0.69	-0.39	0.79	0.71	0.72	0.80	0.73	0.74
Avail Cap(c_a), veh/h	624	0	537	658	691	587	176	1335	1352	547	1440	1500
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.2	0.0	41.9	43.1	43.6	0.0	46.6	17.9	18.0	44.2	16.0	16.0
Incr Delay (d2), s/veh	1.3	0.0	0.5	1.1	1.7	0.0	4.6	0.4	0.4	2.2	0.5	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	3.2	0.0	1.5	2.9	3.7	0.0	2.5	14.0	14.3	4.0	15.1	15.8
LnGrp Delay(d),s/veh	44.5	0.0	42.4	44.2	45.3	0.0	51.1	18.3	18.4	46.4	16.5	16.5
LnGrp LOS	D		D	D	D		D	B	B	D	B	B
Approach Vol, veh/h		175			179			1438			1796	
Approach Delay, s/veh		43.8			60.8			20.4			21.2	
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	14.4	57.4		14.6	10.3	61.5		14.4
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.0	75.4		35.0	10.0	81.4		36.4
Max Q Clear Time (g_c+I1), s	10.1	31.1		8.4	6.9	33.3		9.0
Green Ext Time (p_c), s	0.3	21.7		0.4	0.0	22.5		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	316	1422	70	90	1230	270	250	440	220	490	185	195
Future Volume (veh/h)	316	1422	70	90	1230	270	250	440	220	490	185	195
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.97
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	343	1546	65	98	1337	179	272	478	215	533	201	20
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	290	2182	92	121	1732	763	466	573	256	460	360	435
Arrive On Green	0.16	0.44	0.44	0.07	0.34	0.34	0.26	0.24	0.23	0.13	0.10	0.10
Sat Flow, veh/h	1774	5002	210	1774	5085	1576	1792	2403	1074	3476	3574	1555
Grp Volume(v), veh/h	343	1048	563	98	1337	179	272	355	338	533	201	20
Grp Sat Flow(s),veh/h/ln	1774	1695	1822	1774	1695	1576	1792	1787	1690	1738	1787	1555
Q Serve(g_s), s	21.0	32.4	32.4	7.0	30.2	8.5	17.0	24.2	24.5	17.0	6.9	0.6
Cycle Q Clear(g_c), s	21.0	32.4	32.4	7.0	30.2	8.5	17.0	24.2	24.5	17.0	6.9	0.6
Prop In Lane	1.00		0.12	1.00		1.00	1.00		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	290	1479	795	121	1732	763	466	426	403	460	360	435
V/C Ratio(X)	1.18	0.71	0.71	0.81	0.77	0.23	0.58	0.83	0.84	1.16	0.56	0.05
Avail Cap(c_a), veh/h	290	1488	799	152	1835	795	466	623	589	460	1245	820
HCM Platoon Ratio	1.00	1.00	1.00	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	53.7	29.5	29.5	59.0	37.8	19.3	41.4	46.4	46.9	55.7	55.0	14.0
Incr Delay (d2), s/veh	111.2	1.3	2.5	18.2	1.7	0.1	1.3	4.1	4.8	92.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.2	15.4	16.8	4.0	14.4	3.7	8.5	12.4	12.0	14.1	3.4	0.3
LnGrp Delay(d),s/veh	164.9	30.9	32.0	77.2	39.6	19.4	42.7	50.5	51.7	148.4	55.5	14.0
LnGrp LOS	F	C	C	E	D	B	D	D	D	F	E	B
Approach Vol, veh/h		1954			1614			965			754	
Approach Delay, s/veh		54.7			39.6			48.7			120.1	
Approach LOS		D			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	34.6	12.7	60.0	38.7	16.9	25.0	47.7
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	5.3	* 5.3	4.0	5.3
Max Green Setting (Gmax), s	17.0	43.4	11.0	55.0	17.0	* 43	21.0	45.0
Max Q Clear Time (g_c+I1), s	19.0	26.5	9.0	34.4	19.0	8.9	23.0	32.2
Green Ext Time (p_c), s	0.0	1.9	0.0	14.3	0.0	0.8	0.0	10.0

Intersection Summary	
HCM 2010 Ctrl Delay	58.3
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1710	550	180	1742	0	0	0	0	710	10	910
Future Volume (veh/h)	0	1710	550	180	1742	0	0	0	0	710	10	910
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1859	263	196	1893	0				780	0	960
Adj No. of Lanes	0	3	1	2	3	0				2	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2287	712	231	3097	0				1121	0	1000
Arrive On Green	0.00	0.45	0.45	0.12	0.60	0.00				0.32	0.00	0.32
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	3167
Grp Volume(v), veh/h	0	1859	263	196	1893	0				780	0	960
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	31.1	10.8	9.6	22.9	0.0				19.0	0.0	29.4
Cycle Q Clear(g_c), s	0.0	31.1	10.8	9.6	22.9	0.0				19.0	0.0	29.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2287	712	231	3097	0				1121	0	1000
V/C Ratio(X)	0.00	0.81	0.37	0.85	0.61	0.00				0.70	0.00	0.96
Avail Cap(c_a), veh/h	0	2330	725	239	3162	0				1121	0	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.8	18.2	42.7	12.3	0.0				29.6	0.0	33.2
Incr Delay (d2), s/veh	0.0	2.1	0.1	21.9	0.2	0.0				1.6	0.0	19.2
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	0.0	15.1	4.8	3.3	10.8	0.0				9.6	0.0	15.5
LnGrp Delay(d),s/veh	0.0	25.9	18.3	64.6	12.6	0.0				31.2	0.0	52.4
LnGrp LOS		C	B	E	B					C		D
Approach Vol, veh/h		2122			2089						1740	
Approach Delay, s/veh		25.0			17.4						42.9	
Approach LOS		C			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.6	48.0		35.2		63.6		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	12.0	43.5		29.9		59.5		
Max Q Clear Time (g_c+I1), s	11.6	33.1		31.4		24.9		
Green Ext Time (p_c), s	0.0	9.6		0.0		27.5		

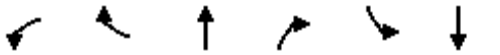
Intersection Summary	
HCM 2010 Ctrl Delay	27.6
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	934	553	0	1130	280	0	0	0	1560	0	562
Future Volume (veh/h)	0	934	553	0	1130	280	0	0	0	1560	0	562
Number	5	2	12	1	6	16				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1881	0	1881
Adj Flow Rate, veh/h	0	1015	601	0	1228	304				1696	0	611
Adj No. of Lanes	0	3	1	0	2	1				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2				1	0	1
Cap, veh/h	0	2134	649	0	1485	664				1806	0	831
Arrive On Green	0.00	0.42	0.41	0.00	0.42	0.42				0.52	0.00	0.52
Sat Flow, veh/h	0	5253	1583	0	3632	1583				3476	0	1599
Grp Volume(v), veh/h	0	1015	601	0	1228	304				1696	0	611
Grp Sat Flow(s),veh/h/ln	0	1695	1583	0	1770	1583				1738	0	1599
Q Serve(g_s), s	0.0	19.0	47.5	0.0	40.6	18.1				60.2	0.0	39.1
Cycle Q Clear(g_c), s	0.0	19.0	47.5	0.0	40.6	18.1				60.2	0.0	39.1
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2134	649	0	1485	664				1806	0	831
V/C Ratio(X)	0.00	0.48	0.93	0.00	0.83	0.46				0.94	0.00	0.74
Avail Cap(c_a), veh/h	0	2165	659	0	1507	674				2008	0	924
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.7	36.9	0.0	33.9	27.4				29.6	0.0	24.6
Incr Delay (d2), s/veh	0.0	0.1	18.7	0.0	3.6	0.2				8.4	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.9	24.1	0.0	20.5	8.0				30.8	0.0	17.7
LnGrp Delay(d),s/veh	0.0	27.7	55.7	0.0	37.6	27.6				38.0	0.0	26.8
LnGrp LOS		C	E		D	C				D		C
Approach Vol, veh/h		1616			1532						2307	
Approach Delay, s/veh		38.1			35.6						35.1	
Approach LOS		D			D						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		59.2				59.2		72.3
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		54.7				54.7		74.7
Max Q Clear Time (g_c+I1), s		49.5				42.6		62.2
Green Ext Time (p_c), s		4.4				9.0		4.8

Intersection Summary	
HCM 2010 Ctrl Delay	36.1
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	337	134	260	366	89
Future Volume (veh/h)	30	337	134	260	366	89
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	33	366	146	283	398	97
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	262	662	185	358	480	1282
Arrive On Green	0.14	0.14	0.32	0.32	0.27	0.67
Sat Flow, veh/h	1810	1615	579	1123	1810	1900
Grp Volume(v), veh/h	33	366	0	429	398	97
Grp Sat Flow(s),veh/h/ln	1810	1615	0	1702	1810	1900
Q Serve(g_s), s	0.9	8.0	0.0	12.7	11.5	1.0
Cycle Q Clear(g_c), s	0.9	8.0	0.0	12.7	11.5	1.0
Prop In Lane	1.00	1.00		0.66	1.00	
Lane Grp Cap(c), veh/h	262	662	0	543	480	1282
V/C Ratio(X)	0.13	0.55	0.00	0.79	0.83	0.08
Avail Cap(c_a), veh/h	262	662	0	892	1243	2472
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	20.6	12.5	0.0	17.1	19.2	3.1
Incr Delay (d2), s/veh	0.2	1.0	0.0	2.6	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.4	0.0	6.4	6.1	0.5
LnGrp Delay(d),s/veh	20.8	13.5	0.0	19.8	22.9	3.1
LnGrp LOS	C	B		B	C	A
Approach Vol, veh/h	399		429			495
Approach Delay, s/veh	14.1		19.8			19.0
Approach LOS	B		B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	19.7	22.7				42.3		13.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	38.0	29.0				72.0		8.0
Max Q Clear Time (g_c+I1), s	13.5	14.7				3.0		10.0
Green Ext Time (p_c), s	1.2	3.0				4.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	0	1128	0	0	0	0	1830	426	210	1676	0
Future Volume (veh/h)	230	0	1128	0	0	0	0	1830	426	210	1676	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	40				0	40	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1810	1810	0
Adj Flow Rate, veh/h	250	0	954				0	1989	463	228	1822	0
Adj No. of Lanes	2	0	3				0	3	1	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	999	0	1048				0	1866	851	210	3205	0
Arrive On Green	0.19	0.00	0.19				0.00	0.38	0.37	0.04	0.44	0.00
Sat Flow, veh/h	3442	0	3610				0	4098	1538	3343	5103	0
Grp Volume(v), veh/h	250	0	954				0	1989	463	228	1822	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1538	1672	1647	0
Q Serve(g_s), s	9.2	0.0	38.9				0.0	84.0	35.2	9.5	41.1	0.0
Cycle Q Clear(g_c), s	9.2	0.0	38.9				0.0	84.0	35.2	9.5	41.1	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	999	0	1048				0	1866	851	210	3205	0
V/C Ratio(X)	0.25	0.00	0.91				0.00	1.07	0.54	1.08	0.57	0.00
Avail Cap(c_a), veh/h	1009	0	1058				0	1885	859	213	3237	0
HCM Platoon Ratio	0.67	1.00	0.67				1.00	0.67	0.67	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.9	0.0	60.8				0.0	47.3	32.5	72.3	26.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	11.2				0.0	40.9	0.4	86.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	97.1				0.0	69.3	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	25.0				0.0	46.3	15.3	6.9	19.1	0.0
LnGrp Delay(d),s/veh	46.9	0.0	169.1				0.0	157.5	32.9	158.2	26.9	0.0
LnGrp LOS	D		F					F	C	F	C	
Approach Vol, veh/h		1204						2452			2050	
Approach Delay, s/veh		143.7						133.9			41.5	
Approach LOS		F						F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	13.9	88.4		47.1		102.3		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	9.0	* 84		43.3		96.5		
Max Q Clear Time (g_c+I1), s	11.5	86.0		40.9		43.1		
Green Ext Time (p_c), s	0.0	0.0		1.0		12.9		

Intersection Summary	
HCM 2010 Ctrl Delay	102.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	30	30	200	40	250	40	2038	200	190	926	30
Future Volume (veh/h)	40	30	30	200	40	250	40	2038	200	190	926	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		0.98	1.00		1.00	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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	33	13	248	0	45	43	2215	213	207	1007	32
Adj No. of Lanes	0	1	1	2	0	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	79	61	114	336	0	149	62	2137	202	198	2368	75
Arrive On Green	0.08	0.08	0.07	0.09	0.00	0.09	0.03	0.65	0.65	0.06	0.68	0.67
Sat Flow, veh/h	1015	779	1536	3583	0	1594	1774	3268	309	3442	3499	111
Grp Volume(v), veh/h	76	0	13	248	0	45	43	1183	1245	207	509	530
Grp Sat Flow(s),veh/h/ln	1794	0	1536	1792	0	1594	1774	1770	1807	1721	1770	1840
Q Serve(g_s), s	5.3	0.0	1.0	8.8	0.0	3.4	3.1	85.3	85.3	7.5	17.0	17.0
Cycle Q Clear(g_c), s	5.3	0.0	1.0	8.8	0.0	3.4	3.1	85.3	85.3	7.5	17.0	17.0
Prop In Lane	0.57		1.00	1.00		1.00	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	140	0	114	336	0	149	62	1158	1182	198	1198	1245
V/C Ratio(X)	0.54	0.00	0.11	0.74	0.00	0.30	0.69	1.02	1.05	1.05	0.43	0.43
Avail Cap(c_a), veh/h	488	0	412	1003	0	446	129	1158	1182	198	1198	1245
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	0.0	56.4	57.5	0.0	55.1	62.2	22.6	22.6	61.5	9.6	9.6
Incr Delay (d2), s/veh	1.2	0.0	0.2	1.2	0.0	0.4	5.1	32.1	41.4	76.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.4	4.4	0.0	1.5	1.6	51.5	55.6	5.7	8.2	8.6
LnGrp Delay(d),s/veh	59.1	0.0	56.5	58.7	0.0	55.5	67.3	54.7	64.0	138.0	9.7	9.7
LnGrp LOS	E		E	E		E	E	F	F	F	A	A
Approach Vol, veh/h		89			293			2471			1246	
Approach Delay, s/veh		58.7			58.2			59.6			31.0	
Approach LOS		E			E			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	89.4		13.7	8.1	92.3		16.3
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	7.0	84.8		35.0	9.0	82.8		36.0
Max Q Clear Time (g_c+I1), s	9.5	87.3		7.3	5.1	19.0		10.8
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	40.8		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	50.8
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	263	654	20	40	1090	180	290	450	240	470	102	315
Future Volume (veh/h)	263	654	20	40	1090	180	290	450	240	470	102	315
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.97
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	286	711	11	43	1185	82	315	489	237	511	111	150
Adj No. of Lanes	1	3	0	1	3	1	2	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	317	2259	35	62	1496	463	1008	564	272	572	379	165
Arrive On Green	0.18	0.44	0.44	0.03	0.29	0.29	0.29	0.24	0.24	0.16	0.11	0.11
Sat Flow, veh/h	1774	5158	80	1774	5085	1575	3476	2340	1128	3476	3574	1557
Grp Volume(v), veh/h	286	467	255	43	1185	82	315	373	353	511	111	150
Grp Sat Flow(s),veh/h/ln	1774	1695	1847	1774	1695	1575	1738	1787	1680	1738	1787	1557
Q Serve(g_s), s	21.6	12.3	12.3	3.3	29.3	5.3	9.7	27.4	27.6	19.7	3.9	9.4
Cycle Q Clear(g_c), s	21.6	12.3	12.3	3.3	29.3	5.3	9.7	27.4	27.6	19.7	3.9	9.4
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	317	1485	809	62	1496	463	1008	431	405	572	379	165
V/C Ratio(X)	0.90	0.31	0.32	0.70	0.79	0.18	0.31	0.87	0.87	0.89	0.29	0.91
Avail Cap(c_a), veh/h	552	1790	976	240	1793	555	1008	630	592	623	1286	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	55.0	25.0	25.0	65.3	44.4	35.9	37.9	49.7	50.0	55.9	56.4	31.7
Incr Delay (d2), s/veh	5.3	0.0	0.1	5.1	1.7	0.1	0.1	6.1	6.9	13.8	0.2	7.4
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	11.0	5.8	6.3	1.7	13.9	2.3	4.6	14.2	13.6	10.5	2.0	5.4
LnGrp Delay(d),s/veh	60.3	25.1	25.1	70.4	46.1	36.0	37.9	55.8	56.9	69.7	56.5	39.0
LnGrp LOS	E	C	C	E	D	D	D	E	E	E	E	D
Approach Vol, veh/h		1008			1310			1041			772	
Approach Delay, s/veh		35.1			46.3			50.8			61.9	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	37.8	8.3	64.7	44.5	19.3	27.9	45.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	5.3	* 5.3	4.0	5.3
Max Green Setting (Gmax), s	24.0	47.7	18.0	71.7	23.0	* 49	42.0	47.7
Max Q Clear Time (g_c+I1), s	21.7	29.6	5.3	14.3	11.7	11.4	23.6	31.3
Green Ext Time (p_c), s	0.3	2.2	0.0	11.1	2.7	0.6	0.3	7.9

Intersection Summary	
HCM 2010 Ctrl Delay	47.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1120	550	90	1244	0	0	0	0	460	10	550
Future Volume (veh/h)	0	1120	550	90	1244	0	0	0	0	460	10	550
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1217	263	98	1352	0				508	0	569
Adj No. of Lanes	0	3	1	2	3	0				2	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2516	783	146	3167	0				846	0	755
Arrive On Green	0.00	0.49	0.49	0.07	0.62	0.00				0.24	0.00	0.24
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	3167
Grp Volume(v), veh/h	0	1217	263	98	1352	0				508	0	569
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	10.5	6.7	3.2	9.1	0.0				8.4	0.0	11.1
Cycle Q Clear(g_c), s	0.0	10.5	6.7	3.2	9.1	0.0				8.4	0.0	11.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2516	783	146	3167	0				846	0	755
V/C Ratio(X)	0.00	0.48	0.34	0.67	0.43	0.00				0.60	0.00	0.75
Avail Cap(c_a), veh/h	0	4429	1378	401	5746	0				3007	0	2684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.3	10.3	29.9	6.6	0.0				22.4	0.0	23.4
Incr Delay (d2), s/veh	0.0	0.1	0.1	2.0	0.0	0.0				0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.0	2.9	0.9	4.3	0.0				4.1	0.0	4.9
LnGrp Delay(d),s/veh	0.0	11.4	10.4	31.9	6.6	0.0				22.7	0.0	24.0
LnGrp LOS		B	B	C	A					C		C
Approach Vol, veh/h		1480			1450						1077	
Approach Delay, s/veh		11.2			8.4						23.4	
Approach LOS		B			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	8.4	37.3		20.6		45.7		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	13.0	56.7		55.7		73.7		
Max Q Clear Time (g_c+I1), s	5.2	12.5		13.1		11.1		
Green Ext Time (p_c), s	0.1	19.5		2.3		21.6		

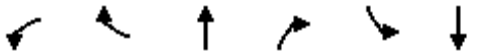
Intersection Summary	
HCM 2010 Ctrl Delay	13.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	631	391	0	895	570	0	0	0	960	0	102
Future Volume (veh/h)	0	631	391	0	895	570	0	0	0	960	0	102
Number	5	2	12	1	6	16				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1881	0	1881
Adj Flow Rate, veh/h	0	686	425	0	973	620				1043	0	111
Adj No. of Lanes	0	3	1	0	2	1				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2				1	0	1
Cap, veh/h	0	2596	808	0	1807	820				1208	0	544
Arrive On Green	0.00	0.51	0.51	0.00	0.51	0.52				0.35	0.00	0.34
Sat Flow, veh/h	0	5253	1583	0	3632	1583				3476	0	1599
Grp Volume(v), veh/h	0	686	425	0	973	620				1043	0	111
Grp Sat Flow(s),veh/h/ln	0	1695	1583	0	1770	1583				1738	0	1599
Q Serve(g_s), s	0.0	5.4	12.8	0.0	13.2	22.1				19.9	0.0	3.5
Cycle Q Clear(g_c), s	0.0	5.4	12.8	0.0	13.2	22.1				19.9	0.0	3.5
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2596	808	0	1807	820				1208	0	544
V/C Ratio(X)	0.00	0.26	0.53	0.00	0.54	0.76				0.86	0.00	0.20
Avail Cap(c_a), veh/h	0	3981	1240	0	2771	1251				2648	0	1207
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.8	11.6	0.0	11.8	13.6				21.6	0.0	16.6
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.1	0.5				0.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.5	5.6	0.0	6.4	9.6				9.7	0.0	1.6
LnGrp Delay(d),s/veh	0.0	9.9	11.8	0.0	11.8	14.1				22.4	0.0	16.7
LnGrp LOS		A	B		B	B				C		B
Approach Vol, veh/h		1111			1593						1154	
Approach Delay, s/veh		10.6			12.7						21.8	
Approach LOS		B			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		41.6				41.6		29.5
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		55.7				55.7		53.7
Max Q Clear Time (g_c+I1), s		14.8				24.1		21.9
Green Ext Time (p_c), s		13.1				12.2		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	14.9
HCM 2010 LOS	B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	100	493	45	70	459	173
Future Volume (veh/h)	100	493	45	70	459	173
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	109	536	49	76	499	188
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	478	950	89	138	587	1045
Arrive On Green	0.26	0.26	0.13	0.13	0.32	0.55
Sat Flow, veh/h	1810	1615	673	1043	1810	1900
Grp Volume(v), veh/h	109	536	0	125	499	188
Grp Sat Flow(s),veh/h/ln	1810	1615	0	1716	1810	1900
Q Serve(g_s), s	2.5	11.0	0.0	3.7	13.8	2.7
Cycle Q Clear(g_c), s	2.5	11.0	0.0	3.7	13.8	2.7
Prop In Lane	1.00	1.00		0.61	1.00	
Lane Grp Cap(c), veh/h	478	950	0	227	587	1045
V/C Ratio(X)	0.23	0.56	0.00	0.55	0.85	0.18
Avail Cap(c_a), veh/h	606	1065	0	607	1279	2192
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	15.5	6.8	0.0	21.8	16.9	6.0
Incr Delay (d2), s/veh	0.2	0.5	0.0	2.1	3.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	4.9	0.0	1.9	7.4	1.4
LnGrp Delay(d),s/veh	15.7	7.4	0.0	23.9	20.5	6.1
LnGrp LOS	B	A		C	C	A
Approach Vol, veh/h	645		125			687
Approach Delay, s/veh	8.8		23.9			16.6
Approach LOS	A		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	22.4	12.1				34.6		19.2
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	38.0	19.0				62.0		18.0
Max Q Clear Time (g_c+I1), s	15.8	5.7				4.7		13.0
Green Ext Time (p_c), s	1.6	1.5				2.0		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	13.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	550	0	2509	0	0	0	0	1250	441	620	1048	0
Future Volume (veh/h)	550	0	2509	0	0	0	0	1250	441	620	1048	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	598	0	2455				0	1359	479	674	1139	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1551	0	1608				0	1209	426	443	2452	0
Arrive On Green	0.30	0.00	0.30				0.00	0.22	0.22	0.09	0.33	0.00
Sat Flow, veh/h	3442	0	3610				0	4394	1286	3343	5103	0
Grp Volume(v), veh/h	598	0	2455				0	1249	589	674	1139	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1582	1672	1647	0
Q Serve(g_s), s	20.7	0.0	67.2				0.0	50.0	50.0	20.0	27.5	0.0
Cycle Q Clear(g_c), s	20.7	0.0	67.2				0.0	50.0	50.0	20.0	27.5	0.0
Prop In Lane	1.00		1.00				0.00		0.81	1.00		0.00
Lane Grp Cap(c), veh/h	1551	0	1608				0	1111	524	443	2452	0
V/C Ratio(X)	0.39	0.00	1.53				0.00	1.12	1.12	1.52	0.46	0.00
Avail Cap(c_a), veh/h	1551	0	1608				0	1111	524	443	2452	0
HCM Platoon Ratio	0.67	1.00	0.67				1.00	0.67	0.67	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.2	0.0	52.9				0.0	58.7	58.9	68.8	34.5	0.0
Incr Delay (d2), s/veh	0.1	0.0	240.4				0.0	67.9	78.2	245.8	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
%ile BackOfQ(50%),veh/ln	9.9	0.0	58.1				0.0	22.4	33.2	24.3	12.5	0.0
LnGrp Delay(d),s/veh	36.2	0.0	293.3				0.0	126.6	137.2	314.5	34.6	0.0
LnGrp LOS	D		F					F	F	F	C	
Approach Vol, veh/h		3053						1838			1813	
Approach Delay, s/veh		243.0						130.0			138.7	
Approach LOS		F						F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	24.9	54.0		72.0		78.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	20.0	* 49		66.7		73.1		
Max Q Clear Time (g_c+I1), s	22.0	52.0		69.2		29.5		
Green Ext Time (p_c), s	0.0	0.0		0.0		7.6		

Intersection Summary	
HCM 2010 Ctrl Delay	183.8
HCM 2010 LOS	F

Notes

5: Lone Tree Way & Davison Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	50	70	160	40	150	80	1130	140	260	1386	40
Future Volume (veh/h)	60	50	70	160	40	150	80	1130	140	260	1386	40
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	54	56	108	135	-64	87	1228	148	283	1507	42
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	102	85	161	184	193	164	110	1706	205	352	2025	56
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.00	0.06	0.54	0.53	0.10	0.58	0.57
Sat Flow, veh/h	981	815	1545	1792	1881	1599	1774	3182	382	3442	3515	98
Grp Volume(v), veh/h	119	0	56	108	135	-64	87	681	695	283	757	792
Grp Sat Flow(s),veh/h/ln	1796	0	1545	1792	1881	1599	1774	1770	1794	1721	1770	1843
Q Serve(g_s), s	6.6	0.0	3.5	6.0	7.2	0.0	5.0	30.0	30.4	8.3	32.8	33.0
Cycle Q Clear(g_c), s	6.6	0.0	3.5	6.0	7.2	0.0	5.0	30.0	30.4	8.3	32.8	33.0
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.21	1.00		0.05
Lane Grp Cap(c), veh/h	187	0	161	184	193	164	110	949	962	352	1020	1062
V/C Ratio(X)	0.64	0.00	0.35	0.59	0.70	-0.39	0.79	0.72	0.72	0.81	0.74	0.75
Avail Cap(c_a), veh/h	608	0	523	641	673	572	154	1317	1336	499	1420	1479
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	0.0	43.1	44.3	44.9	0.0	47.8	18.1	18.2	45.4	16.2	16.3
Incr Delay (d2), s/veh	1.3	0.0	0.5	1.1	1.7	0.0	10.7	0.5	0.6	4.1	0.7	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	3.3	0.0	1.5	3.0	3.8	0.0	2.8	14.7	15.0	4.2	16.0	16.9
LnGrp Delay(d),s/veh	45.8	0.0	43.5	45.4	46.6	0.0	58.5	18.6	18.8	49.5	17.0	17.0
LnGrp LOS	D		D	D	D		E	B	B	D	B	B
Approach Vol, veh/h		175			179			1463			1832	
Approach Delay, s/veh		45.1			62.5			21.1			22.0	
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	14.6	59.5		14.8	10.4	63.6		14.6
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	15.0	76.4		35.0	9.0	82.4		36.4
Max Q Clear Time (g_c+I1), s	10.3	32.4		8.6	7.0	35.0		9.2
Green Ext Time (p_c), s	0.2	22.5		0.4	0.0	23.3		0.5

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)	317	1423	70	90	1230	270	250	440	220	490	185	197
Future Volume (veh/h)	317	1423	70	90	1230	270	250	440	220	490	185	197
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	345	1547	65	98	1337	179	272	478	215	533	201	22
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	290	2182	92	121	1732	763	466	573	256	460	360	435
Arrive On Green	0.16	0.44	0.44	0.07	0.34	0.34	0.26	0.24	0.23	0.13	0.10	0.10
Sat Flow, veh/h	1774	5002	210	1774	5085	1576	1792	2403	1074	3476	3574	1555
Grp Volume(v), veh/h	345	1048	564	98	1337	179	272	355	338	533	201	22
Grp Sat Flow(s),veh/h/ln	1774	1695	1822	1774	1695	1576	1792	1787	1690	1738	1787	1555
Q Serve(g_s), s	21.0	32.4	32.4	7.0	30.2	8.5	17.0	24.2	24.5	17.0	6.9	0.7
Cycle Q Clear(g_c), s	21.0	32.4	32.4	7.0	30.2	8.5	17.0	24.2	24.5	17.0	6.9	0.7
Prop In Lane	1.00		0.12	1.00		1.00	1.00		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	290	1479	795	121	1732	763	466	426	403	460	360	435
V/C Ratio(X)	1.19	0.71	0.71	0.81	0.77	0.23	0.58	0.83	0.84	1.16	0.56	0.05
Avail Cap(c_a), veh/h	290	1487	799	152	1835	795	466	623	589	460	1245	820
HCM Platoon Ratio	1.00	1.00	1.00	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	53.7	29.5	29.5	59.0	37.8	19.3	41.4	46.4	46.9	55.7	55.0	14.0
Incr Delay (d2), s/veh	113.8	1.3	2.5	18.3	1.7	0.1	1.3	4.1	4.8	92.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.4	15.4	16.8	4.0	14.4	3.7	8.5	12.4	12.0	14.1	3.4	0.3
LnGrp Delay(d),s/veh	167.5	30.9	32.0	77.2	39.6	19.4	42.7	50.5	51.7	148.5	55.5	14.0
LnGrp LOS	F	C	C	E	D	B	D	D	D	F	E	B
Approach Vol, veh/h		1957			1614			965			756	
Approach Delay, s/veh		55.3			39.6			48.7			119.8	
Approach LOS		E			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	34.6	12.7	60.0	38.7	16.9	25.0	47.7
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	5.3	* 5.3	4.0	5.3
Max Green Setting (Gmax), s	17.0	43.4	11.0	55.0	17.0	* 43	21.0	45.0
Max Q Clear Time (g_c+I1), s	19.0	26.5	9.0	34.4	19.0	8.9	23.0	32.2
Green Ext Time (p_c), s	0.0	1.9	0.0	14.3	0.0	0.8	0.0	10.0

Intersection Summary	
HCM 2010 Ctrl Delay	58.5
HCM 2010 LOS	E

Notes

11: SR 4 Eastbound & Lone Tree Way

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1710	550	180	1744	0	0	0	0	710	10	910
Future Volume (veh/h)	0	1710	550	180	1744	0	0	0	0	710	10	910
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1859	263	196	1896	0				780	0	960
Adj No. of Lanes	0	3	1	2	3	0				2	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2287	712	231	3097	0				1121	0	1000
Arrive On Green	0.00	0.45	0.45	0.12	0.60	0.00				0.32	0.00	0.32
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	3167
Grp Volume(v), veh/h	0	1859	263	196	1896	0				780	0	960
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	31.1	10.8	9.6	22.9	0.0				19.0	0.0	29.4
Cycle Q Clear(g_c), s	0.0	31.1	10.8	9.6	22.9	0.0				19.0	0.0	29.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2287	712	231	3097	0				1121	0	1000
V/C Ratio(X)	0.00	0.81	0.37	0.85	0.61	0.00				0.70	0.00	0.96
Avail Cap(c_a), veh/h	0	2329	725	239	3161	0				1121	0	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.8	18.2	42.7	12.3	0.0				29.6	0.0	33.2
Incr Delay (d2), s/veh	0.0	2.1	0.1	21.9	0.2	0.0				1.6	0.0	19.2
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	0.0	15.1	4.8	3.3	10.8	0.0				9.6	0.0	15.5
LnGrp Delay(d),s/veh	0.0	25.9	18.3	64.6	12.6	0.0				31.2	0.0	52.4
LnGrp LOS		C	B	E	B					C		D
Approach Vol, veh/h		2122			2092						1740	
Approach Delay, s/veh		25.0			17.4						42.9	
Approach LOS		C			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.6	48.0		35.2		63.6		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	12.0	43.5		29.9		59.5		
Max Q Clear Time (g_c+I1), s	11.6	33.1		31.4		24.9		
Green Ext Time (p_c), s	0.0	9.6		0.0		27.5		

Intersection Summary	
HCM 2010 Ctrl Delay	27.6
HCM 2010 LOS	C

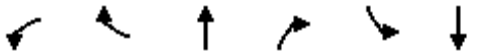
Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	945	562	0	1158	280	0	0	0	1560	0	570
Future Volume (veh/h)	0	945	562	0	1158	280	0	0	0	1560	0	570
Number	5	2	12	1	6	16				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1881	0	1881
Adj Flow Rate, veh/h	0	1027	611	0	1259	304				1696	0	620
Adj No. of Lanes	0	3	1	0	2	1				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2				1	0	1
Cap, veh/h	0	2137	650	0	1487	665				1805	0	830
Arrive On Green	0.00	0.42	0.41	0.00	0.42	0.42				0.52	0.00	0.52
Sat Flow, veh/h	0	5253	1583	0	3632	1583				3476	0	1599
Grp Volume(v), veh/h	0	1027	611	0	1259	304				1696	0	620
Grp Sat Flow(s),veh/h/ln	0	1695	1583	0	1770	1583				1738	0	1599
Q Serve(g_s), s	0.0	19.4	49.0	0.0	42.3	18.2				60.5	0.0	40.2
Cycle Q Clear(g_c), s	0.0	19.4	49.0	0.0	42.3	18.2				60.5	0.0	40.2
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2137	650	0	1487	665				1805	0	830
V/C Ratio(X)	0.00	0.48	0.94	0.00	0.85	0.46				0.94	0.00	0.75
Avail Cap(c_a), veh/h	0	2155	655	0	1500	671				1999	0	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.8	37.4	0.0	34.5	27.5				29.8	0.0	24.9
Incr Delay (d2), s/veh	0.0	0.1	21.3	0.0	4.4	0.2				8.5	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.0	25.2	0.0	21.5	8.0				31.1	0.0	18.3
LnGrp Delay(d),s/veh	0.0	27.9	58.7	0.0	38.9	27.7				38.3	0.0	27.4
LnGrp LOS		C	E		D	C				D		C
Approach Vol, veh/h		1638			1563						2316	
Approach Delay, s/veh		39.4			36.7						35.4	
Approach LOS		D			D						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		59.5				59.5		72.6
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		54.7				54.7		74.7
Max Q Clear Time (g_c+I1), s		51.0				44.3		62.5
Green Ext Time (p_c), s		3.3				8.0		4.8

Intersection Summary	
HCM 2010 Ctrl Delay	37.0
HCM 2010 LOS	D

21: Deer Valley Road & Balfour Road



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	343	136	260	370	90
Future Volume (veh/h)	30	343	136	260	370	90
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	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	33	373	148	283	402	98
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	238	638	181	346	476	1275
Arrive On Green	0.13	0.13	0.31	0.31	0.26	0.67
Sat Flow, veh/h	1810	1615	585	1118	1810	1900
Grp Volume(v), veh/h	33	373	0	431	402	98
Grp Sat Flow(s),veh/h/ln	1810	1615	0	1703	1810	1900
Q Serve(g_s), s	1.0	8.0	0.0	14.2	12.8	1.1
Cycle Q Clear(g_c), s	1.0	8.0	0.0	14.2	12.8	1.1
Prop In Lane	1.00	1.00		0.66	1.00	
Lane Grp Cap(c), veh/h	238	638	0	527	476	1275
V/C Ratio(X)	0.14	0.59	0.00	0.82	0.84	0.08
Avail Cap(c_a), veh/h	238	638	0	756	1101	2187
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	23.4	14.5	0.0	19.4	21.2	3.5
Incr Delay (d2), s/veh	0.3	1.4	0.0	4.8	4.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	5.1	0.0	7.4	6.9	0.6
LnGrp Delay(d),s/veh	23.6	15.9	0.0	24.2	25.4	3.5
LnGrp LOS	C	B		C	C	A
Approach Vol, veh/h	406		431			500
Approach Delay, s/veh	16.5		24.2			21.1
Approach LOS	B		C			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	22.0	24.8				46.8		14.0
Change Period (Y+Rc), s	6.0	6.0				6.0		6.0
Max Green Setting (Gmax), s	37.0	27.0				70.0		8.0
Max Q Clear Time (g_c+I1), s	14.8	16.2				3.1		10.0
Green Ext Time (p_c), s	1.2	2.6				4.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	0	796	0	0	0	0	1349	383	118	839	0
Future Volume (veh/h)	158	0	796	0	0	0	0	1349	383	118	839	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	60				0	60	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	180	0	621				0	1533	435	134	953	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	659	0	561				0	2373	565	209	3544	0
Arrive On Green	0.07	0.00	0.07				0.00	0.18	0.18	0.02	0.23	0.00
Sat Flow, veh/h	3442	0	3610				0	4627	1101	3343	5103	0
Grp Volume(v), veh/h	180	0	621				0	1324	644	134	953	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1630	1672	1647	0
Q Serve(g_s), s	3.9	0.0	13.3				0.0	29.0	29.0	3.1	12.5	0.0
Cycle Q Clear(g_c), s	3.9	0.0	13.3				0.0	29.0	29.0	3.1	12.5	0.0
Prop In Lane	1.00		1.00				0.00		0.68	1.00		0.00
Lane Grp Cap(c), veh/h	659	0	561				0	1934	938	209	3544	0
V/C Ratio(X)	0.27	0.00	1.11				0.00	0.68	0.69	0.64	0.27	0.00
Avail Cap(c_a), veh/h	748	0	748				0	2917	1418	556	3378	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.2	0.0	49.4				0.0	29.1	27.7	42.9	14.8	0.0
Incr Delay (d2), s/veh	0.1	0.0	64.8				0.0	0.2	0.3	1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	273.5				0.0	12.4	5.9	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	28.8				0.0	13.7	17.1	1.7	6.4	0.0
LnGrp Delay(d),s/veh	36.3	0.0	387.7				0.0	41.6	33.9	44.1	14.8	0.0
LnGrp LOS	D		F					D	C	D	B	
Approach Vol, veh/h		801						1968			1087	
Approach Delay, s/veh		308.7						39.1			18.5	
Approach LOS		F						D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	9.9	47.5		20.7		57.5		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	13.0	* 67		15.7		45.1		
Max Q Clear Time (g_c+I1), s	5.1	31.0		15.3		14.5		
Green Ext Time (p_c), s	0.3	11.6		0.1		4.6		

Intersection Summary	
HCM 2010 Ctrl Delay	89.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	22	20	178	31	228	21	1067	109	156	765	20
Future Volume (veh/h)	26	22	20	178	31	228	21	1067	109	156	765	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	30	25	3	202	35	22	24	1212	119	177	869	22
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	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	1	1	1	2	2	2	2	2	2
Cap, veh/h	61	51	96	268	282	239	37	1638	160	265	1971	50
Arrive On Green	0.06	0.06	0.06	0.15	0.15	0.15	0.02	0.50	0.50	0.08	0.56	0.55
Sat Flow, veh/h	979	816	1530	1792	1881	1596	1774	3256	319	3442	3525	89
Grp Volume(v), veh/h	55	0	3	202	35	22	24	657	674	177	436	455
Grp Sat Flow(s),veh/h/ln	1796	0	1530	1792	1881	1596	1774	1770	1805	1721	1770	1845
Q Serve(g_s), s	2.3	0.0	0.1	8.3	1.2	0.9	1.0	22.7	22.8	3.9	11.1	11.1
Cycle Q Clear(g_c), s	2.3	0.0	0.1	8.3	1.2	0.9	1.0	22.7	22.8	3.9	11.1	11.1
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.18	1.00		0.05
Lane Grp Cap(c), veh/h	113	0	96	268	282	239	37	890	908	265	990	1032
V/C Ratio(X)	0.49	0.00	0.03	0.75	0.12	0.09	0.65	0.74	0.74	0.67	0.44	0.44
Avail Cap(c_a), veh/h	815	0	695	883	927	787	368	1721	1756	714	1721	1795
HCM Platoon Ratio	1.00	1.00	1.00	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	34.9	0.0	33.9	31.4	28.4	28.3	37.5	15.1	15.2	34.6	9.9	10.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.6	0.1	0.1	6.9	0.5	0.5	1.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.1	4.2	0.6	0.4	0.6	11.1	11.3	1.9	5.4	5.6
LnGrp Delay(d),s/veh	36.2	0.0	34.0	33.0	28.5	28.3	44.4	15.6	15.7	35.7	10.1	10.1
LnGrp LOS	D		C	C	C	C	D	B	B	D	B	B
Approach Vol, veh/h		58			259			1355			1068	
Approach Delay, s/veh		36.0			32.0			16.2			14.3	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	42.8		8.8	5.6	47.1		15.5
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.0	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	5.9	24.8		4.3	3.0	13.1		10.3
Green Ext Time (p_c), s	0.2	13.4		0.1	0.0	13.7		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	17.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	718	193	181	946	68	312	136	170	61	170	109
Future Volume (veh/h)	45	718	193	181	946	68	312	136	170	61	170	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	52	825	133	208	1087	25	359	156	50	70	195	110
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	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, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	67	1109	488	242	1458	637	439	648	537	91	302	170
Arrive On Green	0.04	0.31	0.31	0.13	0.41	0.41	0.13	0.34	0.34	0.05	0.27	0.26
Sat Flow, veh/h	1792	3574	1573	1792	3574	1562	3476	1881	1560	1810	1125	634
Grp Volume(v), veh/h	52	825	133	208	1087	25	359	156	50	70	0	305
Grp Sat Flow(s),veh/h/ln	1792	1787	1573	1792	1787	1562	1738	1881	1560	1810	0	1759
Q Serve(g_s), s	2.9	20.6	6.4	11.3	25.8	1.0	10.0	5.9	2.2	3.8	0.0	15.3
Cycle Q Clear(g_c), s	2.9	20.6	6.4	11.3	25.8	1.0	10.0	5.9	2.2	3.8	0.0	15.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	67	1109	488	242	1458	637	439	648	537	91	0	472
V/C Ratio(X)	0.78	0.74	0.27	0.86	0.75	0.04	0.82	0.24	0.09	0.77	0.00	0.65
Avail Cap(c_a), veh/h	108	1362	600	377	1900	830	906	1019	845	200	0	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.6	30.8	25.9	42.2	25.1	17.8	42.4	23.4	22.1	46.8	0.0	32.5
Incr Delay (d2), s/veh	7.1	1.3	0.1	7.2	0.8	0.0	1.5	0.1	0.0	5.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	10.4	2.8	6.1	12.8	0.4	4.9	3.1	0.9	2.0	0.0	7.5
LnGrp Delay(d),s/veh	54.7	32.1	26.0	49.4	25.9	17.8	43.9	23.4	22.2	51.9	0.0	33.1
LnGrp LOS	D	C	C	D	C	B	D	C	C	D		C
Approach Vol, veh/h		1010			1320			565			375	
Approach Delay, s/veh		32.5			29.4			36.3			36.6	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	38.3	17.4	34.9	16.6	30.7	7.7	44.7
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	11.0	52.7	21.0	* 38	26.0	37.7	6.0	* 53
Max Q Clear Time (g_c+I1), s	5.9	7.9	13.3	22.6	12.0	17.3	4.9	27.8
Green Ext Time (p_c), s	0.0	1.7	0.2	7.9	0.6	1.6	0.0	10.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	615	268	239	644	215	385	305	148	297	524	20
Future Volume (veh/h)	27	615	268	239	644	215	385	305	148	297	524	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1881	1863	1863	1863	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	31	715	81	278	749	86	448	355	153	345	609	21
Adj No. of Lanes	1	2	1	1	2	1	2	2	0	2	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	39	1023	434	307	1548	683	511	690	292	410	897	31
Arrive On Green	0.02	0.29	0.29	0.17	0.44	0.44	0.15	0.28	0.27	0.12	0.25	0.24
Sat Flow, veh/h	1792	3574	1517	1774	3539	1562	3476	2430	1028	3476	3521	121
Grp Volume(v), veh/h	31	715	81	278	749	86	448	259	249	345	309	321
Grp Sat Flow(s),veh/h/ln	1792	1787	1517	1774	1770	1562	1738	1787	1671	1738	1787	1855
Q Serve(g_s), s	2.0	20.6	4.6	17.7	17.4	3.8	14.6	14.0	14.5	11.2	18.0	18.0
Cycle Q Clear(g_c), s	2.0	20.6	4.6	17.7	17.4	3.8	14.6	14.0	14.5	11.2	18.0	18.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.62	1.00		0.07
Lane Grp Cap(c), veh/h	39	1023	434	307	1548	683	511	508	475	410	455	473
V/C Ratio(X)	0.79	0.70	0.19	0.91	0.48	0.13	0.88	0.51	0.52	0.84	0.68	0.68
Avail Cap(c_a), veh/h	93	1156	490	415	1789	789	633	615	575	603	600	622
HCM Platoon Ratio	1.00	1.00	1.00	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	56.2	36.7	31.0	46.8	23.1	19.3	48.2	34.6	35.1	49.8	38.7	38.8
Incr Delay (d2), s/veh	12.4	1.2	0.1	16.0	0.1	0.0	9.8	0.3	0.3	4.7	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	1.1	10.3	2.0	10.0	8.5	1.6	7.7	7.0	6.7	5.6	8.9	9.3
LnGrp Delay(d),s/veh	68.6	37.9	31.1	62.8	23.2	19.3	58.0	34.9	35.4	54.5	39.6	39.7
LnGrp LOS	E	D	C	E	C	B	E	C	D	D	D	D
Approach Vol, veh/h		827			1113			956			975	
Approach Delay, s/veh		38.4			32.8			45.8			44.9	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	36.8	24.0	37.0	21.0	33.4	6.5	54.5
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	20.6	38.4	27.0	36.0	21.0	37.4	6.0	57.0
Max Q Clear Time (g_c+I1), s	13.2	16.5	19.7	22.6	16.6	20.0	4.0	19.4
Green Ext Time (p_c), s	0.4	4.0	0.2	5.6	0.4	3.8	0.0	7.6

Intersection Summary	
HCM 2010 Ctrl Delay	40.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	500	17	26	824	147	33	40	22	355	61	221
Future Volume (veh/h)	202	500	17	26	824	147	33	40	22	355	61	221
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	227	562	8	29	926	47	37	45	0	399	69	49
Adj No. of Lanes	1	2	1	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	276	1652	728	45	1710	530	54	376	0	519	801	352
Arrive On Green	0.16	0.47	0.47	0.03	0.34	0.34	0.03	0.11	0.00	0.15	0.22	0.22
Sat Flow, veh/h	1774	3539	1561	1774	5085	1576	1792	3668	0	3476	3574	1569
Grp Volume(v), veh/h	227	562	8	29	926	47	37	45	0	399	69	49
Grp Sat Flow(s),veh/h/ln	1774	1770	1561	1774	1695	1576	1792	1787	0	1738	1787	1569
Q Serve(g_s), s	7.8	6.4	0.2	1.0	9.3	1.3	1.3	0.7	0.0	7.0	1.0	1.6
Cycle Q Clear(g_c), s	7.8	6.4	0.2	1.0	9.3	1.3	1.3	0.7	0.0	7.0	1.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	1652	728	45	1710	530	54	376	0	519	801	352
V/C Ratio(X)	0.82	0.34	0.01	0.65	0.54	0.09	0.68	0.12	0.00	0.77	0.09	0.14
Avail Cap(c_a), veh/h	506	3270	1442	169	3731	1157	199	2475	0	881	2985	1310
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	10.7	9.0	30.5	17.0	14.3	30.3	25.6	0.0	25.8	19.4	19.6
Incr Delay (d2), s/veh	2.3	0.0	0.0	5.7	0.1	0.0	5.5	0.1	0.0	0.9	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	3.1	0.1	0.6	4.4	0.6	0.7	0.4	0.0	3.4	0.5	0.7
LnGrp Delay(d),s/veh	28.1	10.7	9.0	36.2	17.1	14.4	35.8	25.6	0.0	26.7	19.4	19.7
LnGrp LOS	C	B	A	D	B	B	D	C		C	B	B
Approach Vol, veh/h		797			1002			82			517	
Approach Delay, s/veh		15.7			17.5			30.2			25.1	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	10.6	5.6	33.4	5.9	18.1	13.8	25.2
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.6	42.4	6.0	57.0	7.0	51.4	18.0	45.0
Max Q Clear Time (g_c+I1), s	9.8	2.7	3.0	8.4	3.3	3.6	9.8	11.3
Green Ext Time (p_c), s	0.5	0.5	0.0	7.7	0.0	0.5	0.2	7.4

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	928	437	73	1098	0	0	0	0	379	1	522
Future Volume (veh/h)	0	928	437	73	1098	0	0	0	0	379	1	522
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1009	140	79	1193	0				413	0	538
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1989	619	107	2560	0				1374	0	613
Arrive On Green	0.00	0.39	0.39	0.05	0.50	0.00				0.39	0.00	0.39
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1009	140	79	1193	0				413	0	538
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	10.5	4.1	2.8	10.6	0.0				5.7	0.0	22.1
Cycle Q Clear(g_c), s	0.0	10.5	4.1	2.8	10.6	0.0				5.7	0.0	22.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1989	619	107	2560	0				1374	0	613
V/C Ratio(X)	0.00	0.51	0.23	0.74	0.47	0.00				0.30	0.00	0.88
Avail Cap(c_a), veh/h	0	3371	1049	450	4837	0				3341	0	1491
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.4	14.4	32.7	11.5	0.0				14.9	0.0	19.9
Incr Delay (d2), s/veh	0.0	0.1	0.1	3.7	0.0	0.0				0.0	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	5.0	1.8	0.8	5.0	0.0				2.8	0.0	9.8
LnGrp Delay(d),s/veh	0.0	16.4	14.5	36.4	11.5	0.0				14.9	0.0	21.6
LnGrp LOS		B	B	D	B					B		C
Approach Vol, veh/h		1149			1272						951	
Approach Delay, s/veh		16.2			13.1						18.7	
Approach LOS		B			B						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	7.8	31.1		31.1		38.9		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	16.0	44.7		64.7		64.7		
Max Q Clear Time (g_c+I1), s	4.8	12.5		24.1		12.6		
Green Ext Time (p_c), s	0.1	13.3		1.7		15.1		

Intersection Summary	
HCM 2010 Ctrl Delay	15.7
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	170	178	214	159	123	97	632	116	82	864	58
Future Volume (veh/h)	116	170	178	214	159	123	97	632	116	82	864	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		0.98	1.00		1.00	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	127	187	174	235	175	117	107	695	114	90	949	61
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	159	219	204	271	320	214	135	1119	183	115	1202	77
Arrive On Green	0.09	0.25	0.25	0.15	0.31	0.31	0.08	0.36	0.35	0.06	0.35	0.34
Sat Flow, veh/h	1792	891	829	1774	1033	691	1792	3073	504	1792	3404	219
Grp Volume(v), veh/h	127	0	361	235	0	292	107	404	405	90	498	512
Grp Sat Flow(s),veh/h/ln	1792	0	1720	1774	0	1724	1792	1787	1790	1792	1787	1836
Q Serve(g_s), s	6.4	0.0	18.5	12.0	0.0	13.0	5.4	17.2	17.2	4.6	23.1	23.1
Cycle Q Clear(g_c), s	6.4	0.0	18.5	12.0	0.0	13.0	5.4	17.2	17.2	4.6	23.1	23.1
Prop In Lane	1.00		0.48	1.00		0.40	1.00		0.28	1.00		0.12
Lane Grp Cap(c), veh/h	159	0	423	271	0	534	135	651	652	115	631	648
V/C Ratio(X)	0.80	0.00	0.85	0.87	0.00	0.55	0.79	0.62	0.62	0.78	0.79	0.79
Avail Cap(c_a), veh/h	310	0	633	384	0	709	174	793	794	174	793	814
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	0.0	33.3	38.3	0.0	26.5	42.0	24.1	24.3	42.6	26.8	26.9
Incr Delay (d2), s/veh	3.5	0.0	4.8	10.7	0.0	0.3	12.9	0.4	0.4	5.8	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	9.3	6.7	0.0	6.2	3.2	8.5	8.5	2.5	11.9	12.2
LnGrp Delay(d),s/veh	44.8	0.0	38.1	48.9	0.0	26.8	54.9	24.6	24.8	48.4	30.1	30.1
LnGrp LOS	D		D	D		C	D	C	C	D	C	C
Approach Vol, veh/h		488			527			916			1100	
Approach Delay, s/veh		39.9			36.7			28.2			31.6	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	37.7	18.1	26.7	11.0	36.6	12.2	32.6
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	9.0	39.7	20.0	34.0	9.0	39.7	16.0	38.0
Max Q Clear Time (g_c+I1), s	10.6	19.2	14.0	20.5	7.4	25.1	8.4	15.0
Green Ext Time (p_c), s	0.0	7.1	0.2	2.1	0.0	6.2	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	32.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	0	20	8	0	56	5	736	41	294	944	41
Future Volume (veh/h)	92	0	20	8	0	56	5	736	41	294	944	41
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1880	1900
Adj Flow Rate, veh/h	100	0	22	9	0	4	5	846	18	338	1085	45
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.87	0.92	0.87	0.92	0.87	0.87	0.87	0.87	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	131	0	120	21	0	22	12	1405	612	397	2095	87
Arrive On Green	0.07	0.00	0.08	0.01	0.00	0.01	0.01	0.39	0.39	0.22	0.60	0.58
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1558	1792	3496	145
Grp Volume(v), veh/h	100	0	22	9	0	4	5	846	18	338	554	576
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1558	1792	1786	1855
Q Serve(g_s), s	3.2	0.0	0.7	0.3	0.0	0.1	0.2	10.7	0.4	10.3	10.3	10.3
Cycle Q Clear(g_c), s	3.2	0.0	0.7	0.3	0.0	0.1	0.2	10.7	0.4	10.3	10.3	10.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	131	0	120	21	0	22	12	1405	612	397	1070	1111
V/C Ratio(X)	0.77	0.00	0.18	0.43	0.00	0.18	0.42	0.60	0.03	0.85	0.52	0.52
Avail Cap(c_a), veh/h	420	0	1166	159	0	963	156	2068	901	723	1582	1642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.9	0.0	24.7	28.0	0.0	27.8	28.2	13.8	10.6	21.3	6.6	6.7
Incr Delay (d2), s/veh	9.0	0.0	0.7	13.1	0.0	1.4	22.1	0.2	0.0	2.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.3	0.2	0.0	0.1	0.2	5.3	0.2	5.3	5.0	5.2
LnGrp Delay(d),s/veh	34.9	0.0	25.4	41.1	0.0	29.2	50.3	13.9	10.6	23.3	6.8	6.8
LnGrp LOS	C		C	D		C	D	B	B	C	A	A
Approach Vol, veh/h		122			13			869			1468	
Approach Delay, s/veh		33.2			37.4			14.1			10.6	
Approach LOS		C			D			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	16.6	26.4	5.2	8.8	4.9	38.2	8.7	5.3
Change Period (Y+Rc), s	4.0	5.3	4.5	4.5	4.5	5.3	4.5	* 4.5
Max Green Setting (Gmax), s	23.6	31.7	5.0	42.0	5.0	49.2	13.5	* 34
Max Q Clear Time (g_c+I1), s	12.3	12.7	2.3	2.7	2.2	12.3	5.2	2.1
Green Ext Time (p_c), s	0.4	8.3	0.0	0.1	0.0	10.2	0.1	0.1

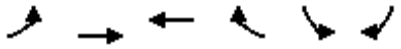
Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	0	34	31	0	303	19	338	36	363	466	38
Future Volume (veh/h)	91	0	34	31	0	303	19	338	36	363	466	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	112	0	42	38	0	39	23	417	44	448	575	47
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	149	0	128	73	0	61	40	858	90	519	1769	144
Arrive On Green	0.08	0.00	0.08	0.04	0.00	0.04	0.02	0.26	0.23	0.29	0.53	0.50
Sat Flow, veh/h	1810	0	1609	1792	0	1593	1810	3290	345	1792	3347	273
Grp Volume(v), veh/h	112	0	42	38	0	39	23	228	233	448	307	315
Grp Sat Flow(s),veh/h/ln	1810	0	1609	1792	0	1593	1810	1805	1830	1792	1787	1833
Q Serve(g_s), s	3.0	0.0	1.2	1.0	0.0	1.2	0.6	5.4	5.4	11.9	4.9	5.0
Cycle Q Clear(g_c), s	3.0	0.0	1.2	1.0	0.0	1.2	0.6	5.4	5.4	11.9	4.9	5.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		0.15
Lane Grp Cap(c), veh/h	149	0	128	73	0	61	40	471	477	519	945	969
V/C Ratio(X)	0.75	0.00	0.33	0.52	0.00	0.64	0.58	0.48	0.49	0.86	0.32	0.33
Avail Cap(c_a), veh/h	739	0	1494	318	0	1111	325	1360	1379	1714	2735	2806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.5	0.0	21.8	23.6	0.0	23.8	24.3	15.7	15.8	16.9	6.7	6.8
Incr Delay (d2), s/veh	7.3	0.0	0.5	5.5	0.0	4.2	4.9	0.3	0.3	1.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.6	0.6	0.0	0.6	0.4	2.7	2.8	6.1	2.4	2.5
LnGrp Delay(d),s/veh	29.8	0.0	22.4	29.1	0.0	28.0	29.3	16.0	16.1	18.6	6.8	6.9
LnGrp LOS	C		C	C		C	C	B	B	B	A	A
Approach Vol, veh/h		154			77			484			1070	
Approach Delay, s/veh		27.8			28.5			16.7			11.8	
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	18.5	17.1	6.6	8.0	5.1	30.5	8.6	5.9
Change Period (Y+Rc), s	4.0	5.3	4.5	4.0	4.0	5.3	4.5	4.0
Max Green Setting (Gmax), s	48.0	36.5	8.9	46.6	9.0	75.5	20.5	35.0
Max Q Clear Time (g_c+I1), s	13.9	7.4	3.0	3.2	2.6	7.0	5.0	3.2
Green Ext Time (p_c), s	0.7	4.3	0.0	0.3	0.0	4.5	0.2	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	94	919	0
Future Volume (veh/h)	0	0	0	94	919	0
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1881	1881
Adj Flow Rate, veh/h	0	0	0	111	1081	0
Adj No. of Lanes	0	1	1	0	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	0	278	0	236	1685	775
Arrive On Green	0.00	0.00	0.00	0.09	0.48	0.00
Sat Flow, veh/h	0	1863	0	1583	3476	1599
Grp Volume(v), veh/h	0	0	0	111	1081	0
Grp Sat Flow(s),veh/h/ln	0	1863	0	1583	1738	1599
Q Serve(g_s), s	0.0	0.0	0.0	1.5	5.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.5	5.1	0.0
Prop In Lane	0.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	278	0	236	1685	775
V/C Ratio(X)	0.00	0.00	0.00	0.47	0.64	0.00
Avail Cap(c_a), veh/h	0	2216	0	1884	13679	6293
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.1	4.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.7	2.3	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	9.7	4.4	0.0
LnGrp LOS				A	A	
Approach Vol, veh/h		0	111		1081	
Approach Delay, s/veh		0.0	9.7		4.4	
Approach LOS			A		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		7.3				7.3		14.6
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		24.7				24.7		84.7
Max Q Clear Time (g_c+I1), s		0.0				3.5		7.1
Green Ext Time (p_c), s		0.0				0.3		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	4.9
HCM 2010 LOS	A

Notes

Intersection	
Int Delay, s/veh	50.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	105	374	27	39	463	82
Future Vol, veh/h	105	374	27	39	463	82
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	112	398	29	41	493	87

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1121	49	0	0	70	0
Stage 1	49	-	-	-	-	-
Stage 2	1072	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	230	1025	-	-	1544	-
Stage 1	979	-	-	-	-	-
Stage 2	332	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	153	1025	-	-	1544	-
Mov Cap-2 Maneuver	153	-	-	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	220	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	107.7	0	7.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	456	1544	-
HCM Lane V/C Ratio	-	-	1.117	0.319	-
HCM Control Delay (s)	-	-	107.7	8.4	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	17.6	1.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	0	799	0	0	0	0	1360	386	118	841	0
Future Volume (veh/h)	158	0	799	0	0	0	0	1360	386	118	841	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	60				0	60	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	180	0	624				0	1545	439	134	956	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	658	0	561				0	2382	568	209	3549	0
Arrive On Green	0.07	0.00	0.07				0.00	0.18	0.18	0.02	0.23	0.00
Sat Flow, veh/h	3442	0	3610				0	4625	1103	3343	5103	0
Grp Volume(v), veh/h	180	0	624				0	1335	649	134	956	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1630	1672	1647	0
Q Serve(g_s), s	3.9	0.0	13.5				0.0	29.6	29.6	3.1	12.6	0.0
Cycle Q Clear(g_c), s	3.9	0.0	13.5				0.0	29.6	29.6	3.1	12.6	0.0
Prop In Lane	1.00		1.00				0.00		0.68	1.00		0.00
Lane Grp Cap(c), veh/h	658	0	561				0	1941	942	209	3549	0
V/C Ratio(X)	0.27	0.00	1.11				0.00	0.69	0.69	0.64	0.27	0.00
Avail Cap(c_a), veh/h	740	0	740				0	2884	1402	550	3386	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.5	0.0	49.4				0.0	29.3	28.0	43.2	14.9	0.0
Incr Delay (d2), s/veh	0.1	0.0	67.2				0.0	0.2	0.3	1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	272.2				0.0	12.4	5.9	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	28.9				0.0	13.9	17.3	1.7	6.5	0.0
LnGrp Delay(d),s/veh	36.5	0.0	388.8				0.0	41.9	34.2	44.4	14.9	0.0
LnGrp LOS	D		F					D	C	D	B	
Approach Vol, veh/h		804						1984			1090	
Approach Delay, s/veh		309.9						39.4			18.5	
Approach LOS		F						D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	10.0	48.2		20.9		58.2		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	13.0	* 67		15.7		45.1		
Max Q Clear Time (g_c+I1), s	5.1	31.6		15.5		14.6		
Green Ext Time (p_c), s	0.3	11.7		0.1		4.6		

Intersection Summary	
HCM 2010 Ctrl Delay	89.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	22	20	178	31	228	21	1096	109	156	775	20
Future Volume (veh/h)	26	22	20	178	31	228	21	1096	109	156	775	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	30	25	3	202	35	22	24	1245	119	177	881	22
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	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	1	1	1	2	2	2	2	2	2
Cap, veh/h	61	51	96	267	280	237	37	1667	159	263	1997	50
Arrive On Green	0.06	0.06	0.06	0.15	0.15	0.15	0.02	0.51	0.50	0.08	0.57	0.56
Sat Flow, veh/h	979	816	1530	1792	1881	1596	1774	3265	311	3442	3527	88
Grp Volume(v), veh/h	55	0	3	202	35	22	24	673	691	177	442	461
Grp Sat Flow(s),veh/h/ln	1796	0	1530	1792	1881	1596	1774	1770	1807	1721	1770	1845
Q Serve(g_s), s	2.3	0.0	0.1	8.6	1.3	0.9	1.1	23.8	24.1	4.0	11.5	11.5
Cycle Q Clear(g_c), s	2.3	0.0	0.1	8.6	1.3	0.9	1.1	23.8	24.1	4.0	11.5	11.5
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.17	1.00		0.05
Lane Grp Cap(c), veh/h	113	0	96	267	280	237	37	903	922	263	1002	1045
V/C Ratio(X)	0.49	0.00	0.03	0.76	0.13	0.09	0.65	0.75	0.75	0.67	0.44	0.44
Avail Cap(c_a), veh/h	792	0	675	858	901	764	358	1673	1708	694	1673	1744
HCM Platoon Ratio	1.00	1.00	1.00	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	36.0	0.0	34.9	32.4	29.3	29.1	38.6	15.3	15.4	35.7	10.0	10.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.7	0.1	0.1	7.1	0.5	0.5	1.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.1	4.4	0.7	0.4	0.6	11.7	12.0	1.9	5.6	5.8
LnGrp Delay(d),s/veh	37.2	0.0	35.0	34.1	29.4	29.2	45.6	15.8	15.9	36.8	10.1	10.1
LnGrp LOS	D		C	C	C	C	D	B	B	D	B	B
Approach Vol, veh/h		58			259			1388			1080	
Approach Delay, s/veh		37.1			33.0			16.4			14.4	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.1	44.5		9.0	5.6	48.9		15.8
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.0	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	10.3	26.1		4.3	3.1	13.5		10.6
Green Ext Time (p_c), s	0.2	13.8		0.1	0.0	14.3		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	17.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	727	196	181	964	68	329	136	170	61	170	109
Future Volume (veh/h)	45	727	196	181	964	68	329	136	170	61	170	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	52	836	136	208	1108	25	378	156	50	70	195	110
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	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, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	67	1110	489	241	1458	637	456	653	542	91	299	169
Arrive On Green	0.04	0.31	0.31	0.13	0.41	0.41	0.13	0.35	0.35	0.05	0.27	0.25
Sat Flow, veh/h	1792	3574	1573	1792	3574	1562	3476	1881	1560	1810	1124	634
Grp Volume(v), veh/h	52	836	136	208	1108	25	378	156	50	70	0	305
Grp Sat Flow(s),veh/h/ln	1792	1787	1573	1792	1787	1562	1738	1881	1560	1810	0	1759
Q Serve(g_s), s	2.9	21.4	6.6	11.5	27.0	1.0	10.8	6.0	2.2	3.9	0.0	15.7
Cycle Q Clear(g_c), s	2.9	21.4	6.6	11.5	27.0	1.0	10.8	6.0	2.2	3.9	0.0	15.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	67	1110	489	241	1458	637	456	653	542	91	0	468
V/C Ratio(X)	0.78	0.75	0.28	0.86	0.76	0.04	0.83	0.24	0.09	0.77	0.00	0.65
Avail Cap(c_a), veh/h	106	1337	588	388	1899	830	821	981	814	196	0	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.5	31.5	26.4	43.0	25.8	18.1	43.0	23.6	22.4	47.7	0.0	33.3
Incr Delay (d2), s/veh	7.1	1.5	0.1	6.2	0.9	0.0	1.5	0.1	0.0	5.2	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	10.8	2.9	6.1	13.4	0.4	5.2	3.1	1.0	2.1	0.0	7.7
LnGrp Delay(d),s/veh	55.6	33.0	26.5	49.3	26.7	18.1	44.6	23.7	22.4	52.8	0.0	33.9
LnGrp LOS	E	C	C	D	C	B	D	C	C	D		C
Approach Vol, veh/h		1024			1341			584			375	
Approach Delay, s/veh		33.3			30.1			37.1			37.4	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	39.3	17.7	35.6	17.3	31.0	7.8	45.5
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	11.0	51.7	22.0	* 38	24.0	38.7	6.0	* 54
Max Q Clear Time (g_c+I1), s	5.9	8.0	13.5	23.4	12.8	17.7	4.9	29.0
Green Ext Time (p_c), s	0.0	1.7	0.2	7.8	0.5	1.6	0.0	10.2

Intersection Summary	
HCM 2010 Ctrl Delay	33.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	615	277	248	644	215	409	322	177	297	529	20
Future Volume (veh/h)	27	615	277	248	644	215	409	322	177	297	529	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1881	1863	1863	1863	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	31	715	91	288	749	86	476	374	187	345	615	21
Adj No. of Lanes	1	2	1	1	2	1	2	2	0	2	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	39	1004	426	316	1547	682	532	668	328	407	894	30
Arrive On Green	0.02	0.28	0.28	0.18	0.44	0.44	0.15	0.29	0.28	0.12	0.25	0.24
Sat Flow, veh/h	1792	3574	1516	1774	3539	1562	3476	2304	1132	3476	3522	120
Grp Volume(v), veh/h	31	715	91	288	749	86	476	289	272	345	312	324
Grp Sat Flow(s),veh/h/ln	1792	1787	1516	1774	1770	1562	1738	1787	1650	1738	1787	1855
Q Serve(g_s), s	2.1	21.4	5.5	19.0	18.0	3.9	16.0	16.3	16.8	11.6	18.8	18.8
Cycle Q Clear(g_c), s	2.1	21.4	5.5	19.0	18.0	3.9	16.0	16.3	16.8	11.6	18.8	18.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.69	1.00		0.06
Lane Grp Cap(c), veh/h	39	1004	426	316	1547	682	532	518	478	407	453	471
V/C Ratio(X)	0.79	0.71	0.21	0.91	0.48	0.13	0.89	0.56	0.57	0.85	0.69	0.69
Avail Cap(c_a), veh/h	90	1119	474	402	1731	764	583	595	549	583	595	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	38.5	32.8	48.1	24.0	20.0	49.5	35.8	36.4	51.6	40.2	40.3
Incr Delay (d2), s/veh	12.4	1.5	0.1	19.1	0.1	0.0	14.5	0.4	0.4	5.6	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	1.2	10.8	2.3	11.0	8.8	1.7	8.7	8.1	7.7	5.9	9.4	9.8
LnGrp Delay(d),s/veh	70.5	40.0	32.9	67.2	24.0	20.0	64.0	36.2	36.8	57.2	41.3	41.3
LnGrp LOS	E	D	C	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		837			1123			1037			981	
Approach Delay, s/veh		40.4			34.8			49.1			46.9	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	38.5	25.2	37.5	22.3	34.2	6.6	56.1
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	20.0	38.4	27.0	36.0	20.0	38.4	6.0	57.0
Max Q Clear Time (g_c+I1), s	13.6	18.8	21.0	23.4	18.0	20.8	4.1	20.0
Green Ext Time (p_c), s	0.4	4.2	0.2	5.4	0.2	4.1	0.0	7.6

Intersection Summary	
HCM 2010 Ctrl Delay	42.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	519	17	26	830	147	33	40	22	355	61	222
Future Volume (veh/h)	204	519	17	26	830	147	33	40	22	355	61	222
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	229	583	8	29	933	47	37	45	0	399	69	50
Adj No. of Lanes	1	2	1	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	278	1663	733	45	1721	533	54	373	0	518	798	350
Arrive On Green	0.16	0.47	0.47	0.03	0.34	0.34	0.03	0.10	0.00	0.15	0.22	0.22
Sat Flow, veh/h	1774	3539	1561	1774	5085	1576	1792	3668	0	3476	3574	1569
Grp Volume(v), veh/h	229	583	8	29	933	47	37	45	0	399	69	50
Grp Sat Flow(s),veh/h/ln	1774	1770	1561	1774	1695	1576	1792	1787	0	1738	1787	1569
Q Serve(g_s), s	8.0	6.7	0.2	1.0	9.5	1.3	1.3	0.7	0.0	7.0	1.0	1.6
Cycle Q Clear(g_c), s	8.0	6.7	0.2	1.0	9.5	1.3	1.3	0.7	0.0	7.0	1.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	278	1663	733	45	1721	533	54	373	0	518	798	350
V/C Ratio(X)	0.82	0.35	0.01	0.65	0.54	0.09	0.68	0.12	0.00	0.77	0.09	0.14
Avail Cap(c_a), veh/h	502	3242	1430	167	3700	1147	197	2455	0	874	2960	1299
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	10.7	9.0	30.7	17.1	14.4	30.6	25.8	0.0	26.0	19.6	19.8
Incr Delay (d2), s/veh	2.4	0.0	0.0	5.7	0.1	0.0	5.6	0.1	0.0	0.9	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	3.2	0.1	0.6	4.4	0.6	0.7	0.4	0.0	3.4	0.5	0.7
LnGrp Delay(d),s/veh	28.3	10.8	9.0	36.5	17.2	14.4	36.1	25.9	0.0	27.0	19.6	19.9
LnGrp LOS	C	B	A	D	B	B	D	C		C	B	B
Approach Vol, veh/h		820			1009			82			518	
Approach Delay, s/veh		15.6			17.6			30.5			25.3	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	10.6	5.6	33.9	5.9	18.2	14.0	25.5
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.6	42.4	6.0	57.0	7.0	51.4	18.0	45.0
Max Q Clear Time (g_c+I1), s	10.0	2.7	3.0	8.7	3.3	3.6	10.0	11.5
Green Ext Time (p_c), s	0.5	0.5	0.0	7.9	0.0	0.5	0.2	7.6

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	933	447	73	1102	0	0	0	0	379	1	523
Future Volume (veh/h)	0	933	447	73	1102	0	0	0	0	379	1	523
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1014	151	79	1198	0				413	0	539
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1993	620	107	2562	0				1375	0	614
Arrive On Green	0.00	0.39	0.39	0.05	0.50	0.00				0.39	0.00	0.39
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1014	151	79	1198	0				413	0	539
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	10.6	4.5	2.8	10.7	0.0				5.7	0.0	22.3
Cycle Q Clear(g_c), s	0.0	10.6	4.5	2.8	10.7	0.0				5.7	0.0	22.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1993	620	107	2562	0				1375	0	614
V/C Ratio(X)	0.00	0.51	0.24	0.74	0.47	0.00				0.30	0.00	0.88
Avail Cap(c_a), veh/h	0	3350	1042	447	4806	0				3321	0	1482
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.5	14.6	32.9	11.5	0.0				15.0	0.0	20.0
Incr Delay (d2), s/veh	0.0	0.1	0.1	3.7	0.0	0.0				0.0	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	5.0	2.0	0.8	5.0	0.0				2.8	0.0	9.9
LnGrp Delay(d),s/veh	0.0	16.5	14.7	36.6	11.6	0.0				15.0	0.0	21.7
LnGrp LOS		B	B	D	B					B		C
Approach Vol, veh/h		1165			1277						952	
Approach Delay, s/veh		16.3			13.1						18.8	
Approach LOS		B			B						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	7.8	31.4		31.3		39.2		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	16.0	44.7		64.7		64.7		
Max Q Clear Time (g_c+I1), s	4.8	12.6		24.3		12.7		
Green Ext Time (p_c), s	0.1	13.4		1.7		15.2		

Intersection Summary	
HCM 2010 Ctrl Delay	15.8
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	170	181	214	159	123	114	701	116	82	888	58
Future Volume (veh/h)	116	170	181	214	159	123	114	701	116	82	888	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		0.98	1.00		0.98	1.00		1.00	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	127	187	177	235	175	117	125	770	114	90	976	61
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	158	216	205	268	319	213	154	1175	174	115	1208	76
Arrive On Green	0.09	0.25	0.25	0.15	0.31	0.31	0.09	0.38	0.36	0.06	0.35	0.34
Sat Flow, veh/h	1792	883	836	1774	1033	691	1792	3122	462	1792	3411	213
Grp Volume(v), veh/h	127	0	364	235	0	292	125	441	443	90	511	526
Grp Sat Flow(s),veh/h/ln	1792	0	1719	1774	0	1724	1792	1787	1797	1792	1787	1837
Q Serve(g_s), s	6.8	0.0	19.9	12.7	0.0	13.8	6.7	20.0	20.1	4.9	25.4	25.4
Cycle Q Clear(g_c), s	6.8	0.0	19.9	12.7	0.0	13.8	6.7	20.0	20.1	4.9	25.4	25.4
Prop In Lane	1.00		0.49	1.00		0.40	1.00		0.26	1.00		0.12
Lane Grp Cap(c), veh/h	158	0	421	268	0	532	154	672	676	115	633	651
V/C Ratio(X)	0.81	0.00	0.86	0.88	0.00	0.55	0.81	0.66	0.66	0.78	0.81	0.81
Avail Cap(c_a), veh/h	293	0	596	362	0	669	165	748	752	165	748	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	0.0	35.4	40.7	0.0	28.2	44.0	25.3	25.5	45.2	28.6	28.7
Incr Delay (d2), s/veh	3.7	0.0	6.9	13.5	0.0	0.3	22.2	1.2	1.2	8.7	4.7	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	10.2	7.2	0.0	6.6	4.3	10.0	10.1	2.7	13.3	13.7
LnGrp Delay(d),s/veh	47.5	0.0	42.3	54.1	0.0	28.5	66.1	26.5	26.7	53.9	33.4	33.3
LnGrp LOS	D		D	D		C	E	C	C	D	C	C
Approach Vol, veh/h		491			527			1009			1127	
Approach Delay, s/veh		43.7			39.9			31.5			35.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	40.9	18.8	28.0	12.4	38.7	12.6	34.2
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	9.0	39.7	20.0	34.0	9.0	39.7	16.0	38.0
Max Q Clear Time (g_c+I1), s	10.9	22.1	14.7	21.9	8.7	27.4	8.8	15.8
Green Ext Time (p_c), s	0.0	7.2	0.2	2.0	0.0	6.0	0.1	2.4

Intersection Summary			
HCM 2010 Ctrl Delay		36.0	
HCM 2010 LOS		D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	0	32	8	0	56	9	757	41	294	959	53
Future Volume (veh/h)	158	0	32	8	0	56	9	757	41	294	959	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1880	1900
Adj Flow Rate, veh/h	172	0	35	9	0	4	10	870	18	338	1102	58
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.87	0.92	0.87	0.92	0.87	0.87	0.87	0.87	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	216	0	182	21	0	7	23	1376	599	392	2013	106
Arrive On Green	0.12	0.00	0.11	0.01	0.00	0.00	0.01	0.38	0.38	0.22	0.58	0.56
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1557	1792	3453	182
Grp Volume(v), veh/h	172	0	35	9	0	4	10	870	18	338	570	590
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1557	1792	1786	1848
Q Serve(g_s), s	5.9	0.0	1.3	0.3	0.0	0.2	0.4	12.5	0.5	11.4	12.3	12.4
Cycle Q Clear(g_c), s	5.9	0.0	1.3	0.3	0.0	0.2	0.4	12.5	0.5	11.4	12.3	12.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	216	0	182	21	0	7	23	1376	599	392	1041	1077
V/C Ratio(X)	0.79	0.00	0.19	0.43	0.00	0.58	0.44	0.63	0.03	0.86	0.55	0.55
Avail Cap(c_a), veh/h	324	0	1006	144	0	873	141	1931	841	683	1490	1542
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	0.0	25.2	30.9	0.0	31.3	30.8	15.7	12.0	23.7	8.0	8.1
Incr Delay (d2), s/veh	7.8	0.0	0.5	13.3	0.0	25.1	13.0	0.2	0.0	2.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.6	0.2	0.0	0.1	0.3	6.1	0.2	5.9	6.1	6.3
LnGrp Delay(d),s/veh	34.7	0.0	25.7	44.2	0.0	56.4	43.8	15.9	12.1	25.9	8.2	8.3
LnGrp LOS	C		C	D		E	D	B	B	C	A	A
Approach Vol, veh/h		207			13			898			1498	
Approach Delay, s/veh		33.2			48.0			16.1			12.2	
Approach LOS		C			D			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	17.8	28.2	5.2	11.7	5.3	40.7	12.2	4.8
Change Period (Y+Rc), s	4.0	5.3	4.5	4.5	4.5	5.3	4.5	* 4.5
Max Green Setting (Gmax), s	24.0	32.7	5.0	40.0	5.0	51.2	11.5	* 34
Max Q Clear Time (g_c+I1), s	13.4	14.5	2.3	3.3	2.4	14.4	7.9	2.2
Green Ext Time (p_c), s	0.4	8.4	0.0	0.2	0.0	10.7	0.1	0.2

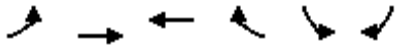
Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	0	48	31	0	303	25	342	36	363	478	53
Future Volume (veh/h)	112	0	48	31	0	303	25	342	36	363	478	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	138	0	59	38	0	39	31	422	44	448	590	65
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	179	0	154	73	0	60	50	858	89	513	1685	185
Arrive On Green	0.10	0.00	0.10	0.04	0.00	0.04	0.03	0.26	0.24	0.29	0.52	0.49
Sat Flow, veh/h	1810	0	1610	1792	0	1593	1810	3294	342	1792	3248	357
Grp Volume(v), veh/h	138	0	59	38	0	39	31	230	236	448	324	331
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1792	0	1593	1810	1805	1831	1792	1787	1818
Q Serve(g_s), s	3.9	0.0	1.8	1.1	0.0	1.3	0.9	5.6	5.7	12.4	5.5	5.6
Cycle Q Clear(g_c), s	3.9	0.0	1.8	1.1	0.0	1.3	0.9	5.6	5.7	12.4	5.5	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		0.20
Lane Grp Cap(c), veh/h	179	0	154	73	0	60	50	470	477	513	927	943
V/C Ratio(X)	0.77	0.00	0.38	0.52	0.00	0.65	0.62	0.49	0.49	0.87	0.35	0.35
Avail Cap(c_a), veh/h	295	0	1135	234	0	1071	278	1283	1301	792	1785	1816
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	0.0	22.1	24.5	0.0	24.7	25.0	16.3	16.5	17.7	7.4	7.5
Incr Delay (d2), s/veh	6.9	0.0	0.6	5.7	0.0	4.3	4.5	0.3	0.3	4.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.8	0.7	0.0	0.6	0.5	2.9	2.9	6.7	2.7	2.8
LnGrp Delay(d),s/veh	29.8	0.0	22.7	30.2	0.0	29.0	29.5	16.6	16.8	22.2	7.4	7.5
LnGrp LOS	C		C	C		C	C	B	B	C	A	A
Approach Vol, veh/h		197			77			497			1103	
Approach Delay, s/veh		27.7			29.6			17.5			13.5	
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	18.9	17.6	6.6	9.0	5.4	31.0	9.6	6.0
Change Period (Y+Rc), s	4.0	5.3	4.5	4.0	4.0	5.3	4.5	4.0
Max Green Setting (Gmax), s	23.6	35.7	6.8	36.7	8.0	50.7	8.5	35.0
Max Q Clear Time (g_c+I1), s	14.4	7.7	3.1	3.8	2.9	7.6	5.9	3.3
Green Ext Time (p_c), s	0.5	4.5	0.0	0.3	0.0	4.7	0.1	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	16.7
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	94	929	0
Future Volume (veh/h)	0	0	0	94	929	0
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1881	1881
Adj Flow Rate, veh/h	0	0	0	111	1093	0
Adj No. of Lanes	0	1	1	0	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	0	277	0	235	1694	779
Arrive On Green	0.00	0.00	0.00	0.09	0.49	0.00
Sat Flow, veh/h	0	1863	0	1583	3476	1599
Grp Volume(v), veh/h	0	0	0	111	1093	0
Grp Sat Flow(s),veh/h/ln	0	1863	0	1583	1738	1599
Q Serve(g_s), s	0.0	0.0	0.0	1.5	5.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.5	5.2	0.0
Prop In Lane	0.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	277	0	235	1694	779
V/C Ratio(X)	0.00	0.00	0.00	0.47	0.65	0.00
Avail Cap(c_a), veh/h	0	2204	0	1873	13600	6257
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.2	4.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.7	2.5	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	9.7	4.4	0.0
LnGrp LOS				A	A	
Approach Vol, veh/h		0	111		1093	
Approach Delay, s/veh		0.0	9.7		4.4	
Approach LOS			A		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		7.3				7.3		14.7
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		24.7				24.7		84.7
Max Q Clear Time (g_c+I1), s		0.0				3.5		7.2
Green Ext Time (p_c), s		0.0				0.3		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	4.9
HCM 2010 LOS	A

Notes

Intersection	
Int Delay, s/veh	65.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	105	382	28	39	487	84
Future Vol, veh/h	105	382	28	39	487	84
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	112	406	30	41	518	89

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1177	51	0	0	71	0
Stage 1	51	-	-	-	-	-
Stage 2	1126	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	213	1023	-	-	1542	-
Stage 1	977	-	-	-	-	-
Stage 2	313	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	138	1023	-	-	1542	-
Mov Cap-2 Maneuver	138	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	203	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	142.2	0	7.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	429	1542	-
HCM Lane V/C Ratio	-	-	1.208	0.336	-
HCM Control Delay (s)	-	-	142.2	8.5	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	20.6	1.5	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	291	0	1336	0	0	0	0	1170	389	162	866	0
Future Volume (veh/h)	291	0	1336	0	0	0	0	1170	389	162	866	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	20				0	20	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	1881				0	1881	1900	1881	1881	0
Adj Flow Rate, veh/h	297	0	1108				0	1194	397	165	884	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	0	1				0	1	1	1	1	0
Cap, veh/h	933	0	655				0	1774	549	248	3316	0
Arrive On Green	0.10	0.00	0.10				0.00	0.15	0.14	0.02	0.19	0.00
Sat Flow, veh/h	3476	0	3646				0	4539	1254	3476	5305	0
Grp Volume(v), veh/h	297	0	1108				0	1067	524	165	884	0
Grp Sat Flow(s),veh/h/ln	1738	0	1215				0	1129	1655	1738	1712	0
Q Serve(g_s), s	6.2	0.0	24.1				0.0	23.8	23.9	3.7	11.7	0.0
Cycle Q Clear(g_c), s	6.2	0.0	24.1				0.0	23.8	23.9	3.7	11.7	0.0
Prop In Lane	1.00		1.00				0.00		0.76	1.00		0.00
Lane Grp Cap(c), veh/h	933	0	655				0	1551	753	248	3316	0
V/C Ratio(X)	0.32	0.00	1.69				0.00	0.69	0.70	0.67	0.27	0.00
Avail Cap(c_a), veh/h	1095	0	1112				0	3756	1836	657	2999	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.8	0.0	63.3				0.0	30.1	29.7	47.4	18.5	0.0
Incr Delay (d2), s/veh	0.1	0.0	317.2				0.0	0.2	0.4	1.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	61.0				0.0	2.2	1.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	34.1				0.0	8.8	12.3	2.3	6.7	0.0
LnGrp Delay(d),s/veh	37.9	0.0	441.6				0.0	32.5	31.2	48.5	18.5	0.0
LnGrp LOS	D		F					C	C	D	B	
Approach Vol, veh/h		1405						1591			1049	
Approach Delay, s/veh		356.2						32.0			23.2	
Approach LOS		F						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	10.9	39.5		29.0		50.3		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	15.0	* 87		23.7		43.1		
Max Q Clear Time (g_c+I1), s	5.7	25.9		26.1		13.7		
Green Ext Time (p_c), s	0.5	8.6		0.0		4.2		

Intersection Summary	
HCM 2010 Ctrl Delay	142.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	45	57	134	31	121	55	749	111	191	942	24
Future Volume (veh/h)	54	45	57	134	31	121	55	749	111	191	942	24
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	55	46	8	137	32	20	56	764	105	195	961	23
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	97	81	154	218	229	194	74	1296	178	311	1638	39
Arrive On Green	0.10	0.10	0.10	0.12	0.12	0.12	0.04	0.41	0.40	0.09	0.46	0.45
Sat Flow, veh/h	997	834	1574	1792	1881	1595	1792	3152	433	3476	3567	85
Grp Volume(v), veh/h	101	0	8	137	32	20	56	433	436	195	481	503
Grp Sat Flow(s),veh/h/ln	1831	0	1574	1792	1881	1595	1792	1787	1798	1738	1787	1866
Q Serve(g_s), s	3.0	0.0	0.3	4.2	0.9	0.6	1.8	10.8	10.8	3.1	11.4	11.4
Cycle Q Clear(g_c), s	3.0	0.0	0.3	4.2	0.9	0.6	1.8	10.8	10.8	3.1	11.4	11.4
Prop In Lane	0.54		1.00	1.00		1.00	1.00		0.24	1.00		0.05
Lane Grp Cap(c), veh/h	179	0	154	218	229	194	74	735	739	311	821	857
V/C Ratio(X)	0.56	0.00	0.05	0.63	0.14	0.10	0.76	0.59	0.59	0.63	0.59	0.59
Avail Cap(c_a), veh/h	1122	0	965	1192	1252	1061	502	2347	2361	974	2347	2450
HCM Platoon Ratio	1.00	1.00	1.00	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	24.6	0.0	23.4	23.8	22.4	22.3	27.1	13.1	13.1	25.1	11.4	11.4
Incr Delay (d2), s/veh	1.0	0.0	0.1	1.1	0.1	0.1	5.8	0.3	0.3	0.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.1	2.1	0.5	0.3	1.0	5.4	5.4	1.5	5.5	5.8
LnGrp Delay(d),s/veh	25.7	0.0	23.4	25.0	22.5	22.4	32.9	13.4	13.4	25.9	11.7	11.7
LnGrp LOS	C		C	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		109			189			925			1179	
Approach Delay, s/veh		25.5			24.3			14.6			14.0	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	27.5		9.6	6.4	30.2		11.0
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.6	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	5.1	12.8		5.0	3.8	13.4		6.2
Green Ext Time (p_c), s	0.3	9.9		0.3	0.0	9.9		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	15.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	968	272	104	720	38	199	53	83	47	30	76
Future Volume (veh/h)	102	968	272	104	720	38	199	53	83	47	30	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		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	106	1008	211	108	750	14	207	55	21	49	31	22
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	138	1527	675	166	1584	693	320	335	282	66	126	89
Arrive On Green	0.08	0.43	0.43	0.09	0.44	0.44	0.09	0.18	0.18	0.04	0.12	0.10
Sat Flow, veh/h	1792	3574	1579	1792	3574	1564	3476	1881	1586	1792	1021	725
Grp Volume(v), veh/h	106	1008	211	108	750	14	207	55	21	49	0	53
Grp Sat Flow(s),veh/h/ln	1792	1787	1579	1792	1787	1564	1738	1881	1586	1792	0	1746
Q Serve(g_s), s	3.5	13.6	5.3	3.5	8.9	0.3	3.5	1.5	0.7	1.6	0.0	1.7
Cycle Q Clear(g_c), s	3.5	13.6	5.3	3.5	8.9	0.3	3.5	1.5	0.7	1.6	0.0	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	138	1527	675	166	1584	693	320	335	282	66	0	215
V/C Ratio(X)	0.77	0.66	0.31	0.65	0.47	0.02	0.65	0.16	0.07	0.74	0.00	0.25
Avail Cap(c_a), veh/h	445	3017	1333	445	3017	1321	1036	1526	1286	267	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.4	13.8	11.4	26.5	11.9	9.5	26.5	21.0	20.7	28.8	0.0	24.2
Incr Delay (d2), s/veh	3.4	0.2	0.1	1.6	0.1	0.0	0.8	0.1	0.0	5.8	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	6.6	2.3	1.8	4.4	0.1	1.7	0.8	0.3	0.9	0.0	0.8
LnGrp Delay(d),s/veh	30.8	14.0	11.5	28.1	11.9	9.5	27.3	21.1	20.7	34.6	0.0	24.4
LnGrp LOS	C	B	B	C	B	A	C	C	C	C		C
Approach Vol, veh/h		1325			872			283			102	
Approach Delay, s/veh		14.9			13.9			25.6			29.3	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	14.8	9.6	29.8	9.6	11.4	8.6	30.8
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	9.6	47.7	15.0	* 51	18.0	38.7	15.0	* 51
Max Q Clear Time (g_c+I1), s	12.6	3.5	5.5	15.6	5.5	3.7	5.5	10.9
Green Ext Time (p_c), s	0.0	0.4	0.1	10.0	0.3	0.4	0.1	10.3

Intersection Summary	
HCM 2010 Ctrl Delay	16.3
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	735	220	278	524	176	270	325	224	252	311	24
Future Volume (veh/h)	67	735	220	278	524	176	270	325	224	252	311	24
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	70	766	123	290	546	69	281	339	191	262	324	21
Adj No. of Lanes	1	2	1	1	2	1	2	2	0	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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	91	1109	483	330	1586	710	359	523	288	340	788	51
Arrive On Green	0.05	0.31	0.31	0.18	0.44	0.44	0.10	0.23	0.22	0.10	0.23	0.21
Sat Flow, veh/h	1810	3610	1572	1810	3610	1615	3510	2232	1231	3510	3442	222
Grp Volume(v), veh/h	70	766	123	290	546	69	281	273	257	262	169	176
Grp Sat Flow(s),veh/h/ln	1810	1805	1572	1810	1805	1615	1755	1805	1658	1755	1805	1859
Q Serve(g_s), s	3.4	16.7	5.3	13.9	8.9	2.2	7.0	12.2	12.6	6.5	7.1	7.2
Cycle Q Clear(g_c), s	3.4	16.7	5.3	13.9	8.9	2.2	7.0	12.2	12.6	6.5	7.1	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.74	1.00		0.12
Lane Grp Cap(c), veh/h	91	1109	483	330	1586	710	359	423	389	340	413	426
V/C Ratio(X)	0.77	0.69	0.25	0.88	0.34	0.10	0.78	0.64	0.66	0.77	0.41	0.41
Avail Cap(c_a), veh/h	223	1507	656	709	2477	1108	472	802	737	472	802	826
HCM Platoon Ratio	1.00	1.00	1.00	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	41.9	27.2	23.3	35.6	16.5	14.7	39.1	30.8	31.5	39.4	29.3	29.4
Incr Delay (d2), s/veh	5.1	0.3	0.1	3.0	0.0	0.0	4.4	0.6	0.7	3.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	8.4	2.3	7.2	4.4	1.0	3.6	6.1	5.8	3.3	3.6	3.7
LnGrp Delay(d),s/veh	47.0	27.5	23.4	38.6	16.6	14.7	43.6	31.5	32.2	42.5	29.5	29.6
LnGrp LOS	D	C	C	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h		959			905			811			607	
Approach Delay, s/veh		28.4			23.5			35.9			35.2	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	24.9	20.3	31.5	13.1	24.5	8.5	43.3
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	12.0	38.4	35.0	36.0	12.0	38.4	11.0	60.0
Max Q Clear Time (g_c+I1), s	9.5	14.6	15.9	18.7	9.0	9.2	5.4	10.9
Green Ext Time (p_c), s	0.2	3.0	0.4	5.6	0.2	3.1	0.0	6.7

Intersection Summary		
HCM 2010 Ctrl Delay		30.2
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	782	34	73	919	223	27	48	24	442	82	151
Future Volume (veh/h)	167	782	34	73	919	223	27	48	24	442	82	151
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	174	815	11	76	957	75	28	50	3	460	85	54
Adj No. of Lanes	1	2	1	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	216	1469	656	98	1772	544	43	459	27	575	984	432
Arrive On Green	0.12	0.41	0.41	0.05	0.35	0.35	0.02	0.13	0.11	0.17	0.28	0.28
Sat Flow, veh/h	1792	3574	1596	1792	5136	1576	1792	3426	204	3476	3574	1568
Grp Volume(v), veh/h	174	815	11	76	957	75	28	26	27	460	85	54
Grp Sat Flow(s),veh/h/ln	1792	1787	1596	1792	1712	1576	1792	1787	1842	1738	1787	1568
Q Serve(g_s), s	6.4	11.9	0.3	2.9	10.2	2.2	1.1	0.9	0.9	8.7	1.2	1.8
Cycle Q Clear(g_c), s	6.4	11.9	0.3	2.9	10.2	2.2	1.1	0.9	0.9	8.7	1.2	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	216	1469	656	98	1772	544	43	239	247	575	984	432
V/C Ratio(X)	0.80	0.55	0.02	0.78	0.54	0.14	0.65	0.11	0.11	0.80	0.09	0.13
Avail Cap(c_a), veh/h	368	2533	1130	315	3488	1070	158	1172	1208	969	3025	1327
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	15.3	11.9	31.8	18.0	15.4	33.0	25.9	26.0	27.4	18.3	18.5
Incr Delay (d2), s/veh	2.7	0.1	0.0	4.8	0.1	0.0	5.9	0.1	0.1	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	5.8	0.1	1.5	4.8	1.0	0.6	0.4	0.5	4.2	0.6	0.8
LnGrp Delay(d),s/veh	31.8	15.4	11.9	36.7	18.1	15.4	38.9	26.0	26.1	28.3	18.3	18.6
LnGrp LOS	C	B	B	D	B	B	D	C	C	C	B	B
Approach Vol, veh/h		1000			1108			81			599	
Approach Delay, s/veh		18.3			19.2			30.5			26.0	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	13.1	7.7	32.0	5.6	22.8	12.2	27.5
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	11.0	43.4	12.0	47.0	6.0	56.4	14.0	45.0
Max Q Clear Time (g_c+I1), s	10.7	2.9	4.9	13.9	3.1	3.8	8.4	12.2
Green Ext Time (p_c), s	0.6	0.5	0.0	9.6	0.0	0.6	0.1	9.5

Intersection Summary	
HCM 2010 Ctrl Delay	20.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1475	480	151	1521	0	0	0	0	630	7	723
Future Volume (veh/h)	0	1475	480	151	1521	0	0	0	0	630	7	723
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	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
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	0	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	1553	203	159	1601	0				668	0	734
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1772	541	187	2415	0				1716	0	766
Arrive On Green	0.00	0.34	0.34	0.09	0.47	0.00				0.47	0.00	0.47
Sat Flow, veh/h	0	5358	1583	1990	5358	0				3619	0	1615
Grp Volume(v), veh/h	0	1553	203	159	1601	0				668	0	734
Grp Sat Flow(s),veh/h/ln	0	1729	1583	995	1729	0				1810	0	1615
Q Serve(g_s), s	0.0	37.5	12.9	10.5	31.8	0.0				15.9	0.0	58.3
Cycle Q Clear(g_c), s	0.0	37.5	12.9	10.5	31.8	0.0				15.9	0.0	58.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1772	541	187	2415	0				1716	0	766
V/C Ratio(X)	0.00	0.88	0.38	0.85	0.66	0.00				0.39	0.00	0.96
Avail Cap(c_a), veh/h	0	1791	547	239	2570	0				1793	0	800
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	41.2	33.1	59.4	27.5	0.0				22.6	0.0	33.7
Incr Delay (d2), s/veh	0.0	5.0	0.2	16.7	0.4	0.0				0.1	0.0	21.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.6	5.7	3.3	15.2	0.0				7.9	0.0	30.4
LnGrp Delay(d),s/veh	0.0	46.2	33.3	76.1	27.9	0.0				22.6	0.0	55.1
LnGrp LOS		D	C	E	C					C		E
Approach Vol, veh/h		1756			1760						1402	
Approach Delay, s/veh		44.7			32.3						39.7	
Approach LOS		D			C						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	16.5	49.5		67.2		66.0		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	16.0	44.7		64.7		64.7		
Max Q Clear Time (g_c+I1), s	12.5	39.5		60.3		33.8		
Green Ext Time (p_c), s	0.1	4.7		1.5		21.1		

Intersection Summary	
HCM 2010 Ctrl Delay	38.8
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	103	85	43	88	71	125	600	135	105	589	86
Future Volume (veh/h)	64	103	85	43	88	71	125	600	135	105	589	86
Number	7	4	14	3	8	18	5	2	12	1	6	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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	69	111	79	46	95	58	134	645	126	113	633	79
Adj No. of Lanes	1	1	0	1	1	0	1	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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	93	161	115	71	158	97	173	1104	215	145	1134	141
Arrive On Green	0.05	0.16	0.16	0.04	0.14	0.14	0.10	0.37	0.34	0.08	0.35	0.32
Sat Flow, veh/h	1810	1034	736	1810	1106	675	1810	3013	588	1810	3231	403
Grp Volume(v), veh/h	69	0	190	46	0	153	134	386	385	113	353	359
Grp Sat Flow(s),veh/h/ln	1810	0	1770	1810	0	1781	1810	1805	1796	1810	1805	1829
Q Serve(g_s), s	1.7	0.0	4.5	1.1	0.0	3.6	3.2	7.7	7.8	2.7	7.0	7.1
Cycle Q Clear(g_c), s	1.7	0.0	4.5	1.1	0.0	3.6	3.2	7.7	7.8	2.7	7.0	7.1
Prop In Lane	1.00		0.42	1.00		0.38	1.00		0.33	1.00		0.22
Lane Grp Cap(c), veh/h	93	0	275	71	0	255	173	661	658	145	633	642
V/C Ratio(X)	0.74	0.00	0.69	0.65	0.00	0.60	0.77	0.58	0.59	0.78	0.56	0.56
Avail Cap(c_a), veh/h	406	0	1350	1380	0	2317	325	1174	1168	284	1134	1149
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	17.8	21.1	0.0	17.9	19.7	11.4	11.6	20.1	11.7	11.8
Incr Delay (d2), s/veh	4.2	0.0	1.2	3.8	0.0	0.8	2.8	0.3	0.3	3.4	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.3	0.6	0.0	1.8	1.7	3.8	3.8	1.5	3.5	3.6
LnGrp Delay(d),s/veh	25.1	0.0	19.0	24.9	0.0	18.8	22.5	11.7	11.9	23.5	12.0	12.1
LnGrp LOS	C		B	C		B	C	B	B	C	B	B
Approach Vol, veh/h		259			199			905			825	
Approach Delay, s/veh		20.6			20.2			13.4			13.6	
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	7.6	20.3	5.7	10.9	8.3	19.6	6.3	10.4
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	7.6	27.7	34.0	34.0	8.0	26.7	10.0	58.0
Max Q Clear Time (g_c+I1), s	4.7	9.8	3.1	6.5	5.2	9.1	3.7	5.6
Green Ext Time (p_c), s	0.0	5.3	0.0	1.1	0.0	5.2	0.0	1.2

Intersection Summary		
HCM 2010 Ctrl Delay		14.9
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	0	13	38	0	244	16	619	18	52	521	137
Future Volume (veh/h)	67	0	13	38	0	244	16	619	18	52	521	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1900	1900	1900	1893	1900
Adj Flow Rate, veh/h	73	0	14	44	0	15	17	720	18	60	606	149
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.86	0.92	0.86	0.92	0.86	0.86	0.86	0.86	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	2	0	0	0	0	0
Cap, veh/h	123	0	134	87	0	102	38	1433	627	88	1179	289
Arrive On Green	0.07	0.00	0.08	0.05	0.00	0.06	0.02	0.40	0.40	0.05	0.41	0.38
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3610	1579	1810	2864	703
Grp Volume(v), veh/h	73	0	14	44	0	15	17	720	18	60	380	375
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1805	1579	1810	1798	1769
Q Serve(g_s), s	1.6	0.0	0.3	1.0	0.0	0.4	0.4	6.1	0.3	1.3	6.4	6.5
Cycle Q Clear(g_c), s	1.6	0.0	0.3	1.0	0.0	0.4	0.4	6.1	0.3	1.3	6.4	6.5
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	123	0	134	87	0	102	38	1433	627	88	740	728
V/C Ratio(X)	0.59	0.00	0.10	0.50	0.00	0.15	0.45	0.50	0.03	0.68	0.51	0.52
Avail Cap(c_a), veh/h	726	0	1669	337	0	1362	387	3940	1724	404	1949	1917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	17.0	18.7	0.0	17.8	19.5	9.2	7.4	18.9	8.8	9.1
Incr Delay (d2), s/veh	4.5	0.0	0.3	4.4	0.0	0.2	7.9	0.1	0.0	3.5	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.2	0.6	0.0	0.2	0.3	3.0	0.1	0.7	3.1	3.2
LnGrp Delay(d),s/veh	22.7	0.0	17.4	23.2	0.0	18.1	27.4	9.3	7.4	22.3	9.1	9.3
LnGrp LOS	C		B	C		B	C	A	A	C	A	A
Approach Vol, veh/h		87			59			755			815	
Approach Delay, s/veh		21.9			21.9			9.6			10.1	
Approach LOS		C			C			A			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	6.0	20.0	6.4	7.9	5.4	20.6	7.3	7.1
Change Period (Y+Rc), s	4.0	5.3	4.5	4.5	4.5	5.3	4.5	* 4.5
Max Green Setting (Gmax), s	9.6	42.7	7.5	42.5	8.8	42.4	16.5	* 34
Max Q Clear Time (g_c+I1), s	2.3	8.1	3.0	2.3	2.4	8.5	3.6	2.4
Green Ext Time (p_c), s	0.0	6.6	0.0	0.1	0.0	6.6	0.1	0.1

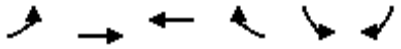
Intersection Summary	
HCM 2010 Ctrl Delay	10.9
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	0	35	47	0	62	56	279	26	120	341	116
Future Volume (veh/h)	113	0	35	47	0	62	56	279	26	120	341	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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	128	0	40	53	0	4	64	317	27	136	388	132
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	191	0	83	106	0	7	98	945	80	178	862	290
Arrive On Green	0.11	0.00	0.05	0.06	0.00	0.00	0.05	0.28	0.24	0.10	0.32	0.28
Sat Flow, veh/h	1810	0	1615	1810	0	1615	1810	3369	285	1810	2655	892
Grp Volume(v), veh/h	128	0	40	53	0	4	64	169	175	136	262	258
Grp Sat Flow(s),veh/h/ln	1810	0	1615	1810	0	1615	1810	1805	1850	1810	1805	1743
Q Serve(g_s), s	2.2	0.0	0.8	0.9	0.0	0.1	1.1	2.4	2.4	2.4	3.7	3.9
Cycle Q Clear(g_c), s	2.2	0.0	0.8	0.9	0.0	0.1	1.1	2.4	2.4	2.4	3.7	3.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.51
Lane Grp Cap(c), veh/h	191	0	83	106	0	7	98	506	519	178	586	566
V/C Ratio(X)	0.67	0.00	0.48	0.50	0.00	0.57	0.65	0.33	0.34	0.76	0.45	0.46
Avail Cap(c_a), veh/h	1149	0	2302	533	0	1751	1009	1678	1719	1009	1678	1620
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	14.9	14.7	0.0	16.0	15.0	9.2	9.3	14.2	8.6	8.9
Incr Delay (d2), s/veh	4.0	0.0	1.6	3.6	0.0	23.9	2.7	0.1	0.1	2.6	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.4	0.6	0.0	0.1	0.6	1.2	1.2	1.3	1.9	1.9
LnGrp Delay(d),s/veh	17.9	0.0	16.5	18.3	0.0	40.0	17.7	9.4	9.5	16.8	8.8	9.1
LnGrp LOS	B		B	B		D	B	A	A	B	A	A
Approach Vol, veh/h		168			57			408			656	
Approach Delay, s/veh		17.6			19.9			10.7			10.6	
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	7.2	13.1	6.4	5.7	5.7	14.5	7.9	4.1
Change Period (Y+Rc), s	4.0	5.3	4.5	4.0	4.0	5.3	4.5	4.0
Max Green Setting (Gmax), s	18.6	28.7	9.5	46.0	18.0	28.7	20.5	35.0
Max Q Clear Time (g_c+I1), s	4.4	4.4	2.9	2.8	3.1	5.9	4.2	2.1
Green Ext Time (p_c), s	0.1	3.3	0.0	0.1	0.0	3.3	0.3	0.1

Intersection Summary		
HCM 2010 Ctrl Delay		11.9
HCM 2010 LOS		B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	66	1451	0
Future Volume (veh/h)	0	0	0	66	1451	0
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	0	0	72	1577	0
Adj No. of Lanes	0	1	1	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	209	0	178	2085	959
Arrive On Green	0.00	0.00	0.00	0.06	0.59	0.00
Sat Flow, veh/h	0	1900	0	1615	3510	1615
Grp Volume(v), veh/h	0	0	0	72	1577	0
Grp Sat Flow(s),veh/h/ln	0	1900	0	1615	1755	1615
Q Serve(g_s), s	0.0	0.0	0.0	1.2	8.9	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.2	8.9	0.0
Prop In Lane	0.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	209	0	178	2085	959
V/C Ratio(X)	0.00	0.00	0.00	0.41	0.76	0.00
Avail Cap(c_a), veh/h	0	1829	0	1555	11179	5143
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	11.8	4.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.5	4.2	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	12.4	4.3	0.0
LnGrp LOS				B	A	
Approach Vol, veh/h		0	72		1577	
Approach Delay, s/veh		0.0	12.4		4.3	
Approach LOS			B		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		7.0				7.0		20.0
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		24.7				24.7		84.7
Max Q Clear Time (g_c+I1), s		0.0				3.2		10.9
Green Ext Time (p_c), s		0.0				0.2		3.8

Intersection Summary	
HCM 2010 Ctrl Delay	4.6
HCM 2010 LOS	A

Notes

Intersection	
Int Delay, s/veh	9.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	320	47	87	365	33
Future Vol, veh/h	25	320	47	87	365	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	27	352	52	96	401	36

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	937	99	0	0	147	0
Stage 1	99	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	296	962	-	-	1447	-
Stage 1	930	-	-	-	-	-
Stage 2	428	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	212	962	-	-	1447	-
Mov Cap-2 Maneuver	212	-	-	-	-	-
Stage 1	930	-	-	-	-	-
Stage 2	307	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	7.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	766	1447	-
HCM Lane V/C Ratio	-	-	0.495	0.277	-
HCM Control Delay (s)	-	-	14.2	8.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	2.8	1.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	291	0	1346	0	0	0	0	1178	391	162	873	0
Future Volume (veh/h)	291	0	1346	0	0	0	0	1178	391	162	873	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	20				0	20	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	1881				0	1881	1900	1881	1881	0
Adj Flow Rate, veh/h	291	0	1091				0	1178	391	162	873	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	0	1				0	1	1	1	1	0
Cap, veh/h	914	0	716				0	1631	534	347	3291	0
Arrive On Green	0.10	0.00	0.10				0.00	0.14	0.14	0.04	0.20	0.00
Sat Flow, veh/h	3476	0	3646				0	4541	1252	3476	5305	0
Grp Volume(v), veh/h	291	0	1091				0	1052	517	162	873	0
Grp Sat Flow(s),veh/h/ln	1738	0	1215				0	1129	1655	1738	1712	0
Q Serve(g_s), s	6.6	0.0	25.2				0.0	25.2	25.4	3.9	12.3	0.0
Cycle Q Clear(g_c), s	6.6	0.0	25.2				0.0	25.2	25.4	3.9	12.3	0.0
Prop In Lane	1.00		1.00				0.00		0.76	1.00		0.00
Lane Grp Cap(c), veh/h	914	0	716				0	1453	709	347	3291	0
V/C Ratio(X)	0.32	0.00	1.52				0.00	0.72	0.73	0.47	0.27	0.00
Avail Cap(c_a), veh/h	1032	0	1083				0	3216	1572	881	4878	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.7	0.0	60.0				0.0	31.8	31.9	45.8	19.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	1893.3				0.0	0.3	0.5	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	65.5				0.0	0.3	0.2	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	140.7				0.0	8.1	11.9	2.2	6.7	0.0
LnGrp Delay(d),s/veh	37.8	0.0	2018.8				0.0	32.4	32.6	46.2	19.1	0.0
LnGrp LOS	D		F					C	C	D	B	
Approach Vol, veh/h		1382						1569			1035	
Approach Delay, s/veh		1601.7						32.5			23.3	
Approach LOS		F						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.2	40.7		30.0		54.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	21.0	* 80		24.7		80.1		
Max Q Clear Time (g_c+I1), s	5.9	27.4		27.2		14.3		
Green Ext Time (p_c), s	3.6	8.4		0.0		4.3		

Intersection Summary	
HCM 2010 Ctrl Delay	574.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	45	57	134	31	121	55	767	111	191	976	24
Future Volume (veh/h)	54	45	57	134	31	121	55	767	111	191	976	24
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	54	45	7	134	31	18	55	767	103	191	976	23
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	104	87	151	212	222	188	89	1306	175	335	1641	39
Arrive On Green	0.10	0.10	0.10	0.12	0.12	0.12	0.05	0.41	0.40	0.10	0.46	0.45
Sat Flow, veh/h	999	832	1574	1792	1881	1595	1792	3162	425	3476	3569	84
Grp Volume(v), veh/h	99	0	7	134	31	18	55	433	437	191	489	510
Grp Sat Flow(s),veh/h/ln	1831	0	1574	1792	1881	1595	1792	1787	1800	1738	1787	1866
Q Serve(g_s), s	2.9	0.0	0.2	4.0	0.8	0.6	1.7	10.7	10.7	3.0	11.5	11.5
Cycle Q Clear(g_c), s	2.9	0.0	0.2	4.0	0.8	0.6	1.7	10.7	10.7	3.0	11.5	11.5
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.24	1.00		0.05
Lane Grp Cap(c), veh/h	191	0	151	212	222	188	89	738	743	335	822	858
V/C Ratio(X)	0.52	0.00	0.05	0.63	0.14	0.10	0.62	0.59	0.59	0.57	0.59	0.59
Avail Cap(c_a), veh/h	1146	0	971	1197	1257	1065	521	2359	2376	1011	2359	2463
HCM Platoon Ratio	1.00	1.00	1.00	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	24.1	0.0	23.3	23.8	22.4	22.3	26.4	12.9	13.0	24.5	11.4	11.4
Incr Delay (d2), s/veh	0.8	0.0	0.0	1.2	0.1	0.1	2.6	0.3	0.3	0.6	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.1	2.1	0.4	0.3	0.9	5.2	5.3	1.5	5.6	5.9
LnGrp Delay(d),s/veh	24.9	0.0	23.4	25.0	22.5	22.4	29.1	13.2	13.2	25.1	11.7	11.7
LnGrp LOS	C		C	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		106			183			925			1190	
Approach Delay, s/veh		24.8			24.3			14.1			13.8	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	27.5		9.4	6.3	30.2		10.8
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.0	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	5.0	12.7		4.9	3.7	13.5		6.0
Green Ext Time (p_c), s	0.2	10.1		0.3	0.0	10.0		0.3

Intersection Summary			
HCM 2010 Ctrl Delay		15.2	
HCM 2010 LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	998	282	104	731	38	210	53	83	47	30	76
Future Volume (veh/h)	102	998	282	104	731	38	210	53	83	47	30	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		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	102	998	210	104	731	12	210	53	18	47	30	19
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	147	1531	676	177	1591	696	353	315	252	80	119	75
Arrive On Green	0.08	0.43	0.43	0.10	0.45	0.45	0.10	0.17	0.16	0.04	0.11	0.10
Sat Flow, veh/h	1792	3574	1579	1792	3574	1564	3476	1881	1584	1792	1074	680
Grp Volume(v), veh/h	102	998	210	104	731	12	210	53	18	47	0	49
Grp Sat Flow(s),veh/h/ln	1792	1787	1579	1792	1787	1564	1738	1881	1584	1792	0	1754
Q Serve(g_s), s	3.3	13.2	5.2	3.3	8.5	0.3	3.4	1.4	0.6	1.5	0.0	1.5
Cycle Q Clear(g_c), s	3.3	13.2	5.2	3.3	8.5	0.3	3.4	1.4	0.6	1.5	0.0	1.5
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	147	1531	676	177	1591	696	353	315	252	80	0	194
V/C Ratio(X)	0.70	0.65	0.31	0.59	0.46	0.02	0.60	0.17	0.07	0.59	0.00	0.25
Avail Cap(c_a), veh/h	467	3084	1362	467	3084	1350	1081	1557	1297	256	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.6	13.5	11.2	25.6	11.5	9.2	25.5	21.2	21.3	27.9	0.0	24.3
Incr Delay (d2), s/veh	2.2	0.2	0.1	1.2	0.1	0.0	0.6	0.1	0.0	2.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	6.4	2.3	1.7	4.2	0.1	1.7	0.7	0.3	0.8	0.0	0.8
LnGrp Delay(d),s/veh	28.8	13.7	11.3	26.8	11.6	9.2	26.1	21.3	21.3	30.4	0.0	24.5
LnGrp LOS	C	B	B	C	B	A	C	C	C	C		C
Approach Vol, veh/h		1310			847			281			96	
Approach Delay, s/veh		14.5			13.4			24.9			27.4	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	14.8	9.4	29.2	9.5	11.4	8.4	30.2
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	8.0	48.7	15.0	* 51	18.0	38.7	15.0	* 51
Max Q Clear Time (g_c+I1), s	5.3	3.4	5.3	15.2	5.4	3.5	5.3	10.5
Green Ext Time (p_c), s	0.0	0.3	0.1	9.8	0.3	0.3	0.1	10.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.8
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	735	250	311	524	176	285	336	243	252	330	24
Future Volume (veh/h)	67	735	250	311	524	176	285	336	243	252	330	24
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	67	735	144	311	524	62	285	336	201	252	330	20
Adj No. of Lanes	1	2	1	1	2	1	2	2	0	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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	97	1050	457	359	1573	704	381	497	291	348	756	46
Arrive On Green	0.05	0.29	0.29	0.20	0.44	0.44	0.11	0.23	0.22	0.10	0.22	0.21
Sat Flow, veh/h	1810	3610	1570	1810	3610	1615	3510	2179	1275	3510	3457	209
Grp Volume(v), veh/h	67	735	144	311	524	62	285	277	260	252	172	178
Grp Sat Flow(s),veh/h/ln	1810	1805	1570	1810	1805	1615	1755	1805	1649	1755	1805	1861
Q Serve(g_s), s	3.3	16.4	6.5	15.0	8.7	2.0	7.1	12.6	13.1	6.3	7.4	7.5
Cycle Q Clear(g_c), s	3.3	16.4	6.5	15.0	8.7	2.0	7.1	12.6	13.1	6.3	7.4	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.77	1.00		0.11
Lane Grp Cap(c), veh/h	97	1050	457	359	1573	704	381	412	376	348	394	407
V/C Ratio(X)	0.69	0.70	0.32	0.87	0.33	0.09	0.75	0.67	0.69	0.73	0.43	0.44
Avail Cap(c_a), veh/h	230	1459	635	691	2378	1064	525	797	729	486	777	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	28.5	25.0	35.1	16.8	15.0	39.0	31.8	32.1	39.5	30.5	30.5
Incr Delay (d2), s/veh	3.4	0.3	0.1	2.6	0.0	0.0	2.2	0.7	0.9	1.6	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	8.2	2.8	7.8	4.3	0.9	3.6	6.4	6.0	3.1	3.7	3.8
LnGrp Delay(d),s/veh	45.4	28.9	25.1	37.7	16.9	15.0	41.3	32.5	33.0	41.1	30.8	30.8
LnGrp LOS	D	C	C	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h		946			897			822			602	
Approach Delay, s/veh		29.5			24.0			35.7			35.1	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	25.4	21.4	31.1	13.3	24.5	8.3	44.1
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	12.6	39.4	34.0	36.0	13.0	38.4	11.0	59.0
Max Q Clear Time (g_c+I1), s	9.3	15.1	17.0	18.4	9.1	9.5	5.3	10.7
Green Ext Time (p_c), s	0.2	3.1	0.4	5.4	0.2	3.1	0.0	6.3

Intersection Summary	
HCM 2010 Ctrl Delay	30.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	794	34	73	940	223	27	48	24	442	82	154
Future Volume (veh/h)	168	794	34	73	940	223	27	48	24	442	82	154
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		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	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	168	794	10	73	940	66	27	48	2	442	82	51
Adj No. of Lanes	1	2	1	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	223	1422	635	107	1711	525	56	434	18	584	933	409
Arrive On Green	0.12	0.40	0.40	0.06	0.33	0.33	0.03	0.12	0.12	0.17	0.26	0.26
Sat Flow, veh/h	1792	3574	1595	1792	5136	1576	1792	3496	145	3476	3574	1568
Grp Volume(v), veh/h	168	794	10	73	940	66	27	24	26	442	82	51
Grp Sat Flow(s),veh/h/ln	1792	1787	1595	1792	1712	1576	1792	1787	1853	1738	1787	1568
Q Serve(g_s), s	6.0	11.4	0.3	2.6	9.9	1.9	1.0	0.8	0.8	8.0	1.2	1.6
Cycle Q Clear(g_c), s	6.0	11.4	0.3	2.6	9.9	1.9	1.0	0.8	0.8	8.0	1.2	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	223	1422	635	107	1711	525	56	222	230	584	933	409
V/C Ratio(X)	0.75	0.56	0.02	0.68	0.55	0.13	0.48	0.11	0.11	0.76	0.09	0.12
Avail Cap(c_a), veh/h	419	2668	1191	311	3523	1081	149	1156	1199	1022	3066	1345
HCM Platoon Ratio	1.00	1.00	1.00	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	28.1	15.5	12.1	30.6	18.0	15.4	31.6	25.8	25.8	26.3	18.5	18.7
Incr Delay (d2), s/veh	2.0	0.1	0.0	2.9	0.1	0.0	2.4	0.1	0.1	0.8	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	5.6	0.1	1.4	4.7	0.8	0.5	0.4	0.4	3.9	0.6	0.7
LnGrp Delay(d),s/veh	30.0	15.6	12.1	33.5	18.2	15.4	34.0	25.9	25.9	27.1	18.6	18.8
LnGrp LOS	C	B	B	C	B	B	C	C	C	C	B	B
Approach Vol, veh/h		972			1079			77			575	
Approach Delay, s/veh		18.0			19.0			28.7			25.1	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	13.0	7.5	31.2	5.6	22.1	11.8	26.9
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	10.6	42.4	11.0	49.0	5.0	56.4	15.0	45.0
Max Q Clear Time (g_c+I1), s	10.0	2.8	4.6	13.4	3.0	3.6	8.0	11.9
Green Ext Time (p_c), s	0.6	0.5	0.0	9.4	0.0	0.5	0.1	9.2

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1479	486	151	1535	0	0	0	0	630	7	726
Future Volume (veh/h)	0	1479	486	151	1535	0	0	0	0	630	7	726
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	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
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	0	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	1479	184	151	1535	0				635	0	699
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1799	549	188	2434	0				1644	0	734
Arrive On Green	0.00	0.35	0.35	0.09	0.47	0.00				0.45	0.00	0.45
Sat Flow, veh/h	0	5358	1583	1990	5358	0				3619	0	1615
Grp Volume(v), veh/h	0	1479	184	151	1535	0				635	0	699
Grp Sat Flow(s),veh/h/ln	0	1729	1583	995	1729	0				1810	0	1615
Q Serve(g_s), s	0.0	32.7	10.8	9.3	28.0	0.0				14.6	0.0	52.3
Cycle Q Clear(g_c), s	0.0	32.7	10.8	9.3	28.0	0.0				14.6	0.0	52.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1799	549	188	2434	0				1644	0	734
V/C Ratio(X)	0.00	0.82	0.33	0.80	0.63	0.00				0.39	0.00	0.95
Avail Cap(c_a), veh/h	0	1867	570	262	2693	0				1879	0	839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	37.5	30.3	55.7	25.1	0.0				22.7	0.0	33.0
Incr Delay (d2), s/veh	0.0	2.8	0.1	8.6	0.3	0.0				0.1	0.0	29.3
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	0.0	16.1	4.7	2.8	13.4	0.0				7.2	0.0	29.3
LnGrp Delay(d),s/veh	0.0	40.3	30.4	64.3	25.4	0.0				22.7	0.0	62.3
LnGrp LOS		D	C	E	C					C		E
Approach Vol, veh/h		1663			1686						1334	
Approach Delay, s/veh		39.2			28.9						43.5	
Approach LOS		D			C						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.4	48.4		61.8		63.7		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	16.0	44.7		64.7		64.7		
Max Q Clear Time (g_c+I1), s	11.3	34.7		54.3		30.0		
Green Ext Time (p_c), s	0.1	8.4		2.2		21.4		

Intersection Summary	
HCM 2010 Ctrl Delay	36.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	103	95	43	88	71	136	645	135	105	672	86
Future Volume (veh/h)	64	103	95	43	88	71	136	645	135	105	672	86
Number	7	4	14	3	8	18	5	2	12	1	6	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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	64	103	83	43	88	53	136	645	116	105	672	73
Adj No. of Lanes	1	1	0	1	1	0	1	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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	107	158	127	86	167	100	196	1145	206	155	1156	125
Arrive On Green	0.06	0.16	0.15	0.05	0.15	0.14	0.11	0.37	0.36	0.09	0.35	0.34
Sat Flow, veh/h	1810	975	786	1810	1112	670	1810	3059	549	1810	3286	357
Grp Volume(v), veh/h	64	0	186	43	0	141	136	380	381	105	369	376
Grp Sat Flow(s),veh/h/ln	1810	0	1761	1810	0	1782	1810	1805	1803	1810	1805	1837
Q Serve(g_s), s	1.6	0.0	4.6	1.1	0.0	3.4	3.4	7.7	7.8	2.6	7.7	7.7
Cycle Q Clear(g_c), s	1.6	0.0	4.6	1.1	0.0	3.4	3.4	7.7	7.8	2.6	7.7	7.7
Prop In Lane	1.00		0.45	1.00		0.38	1.00		0.30	1.00		0.19
Lane Grp Cap(c), veh/h	107	0	285	86	0	267	196	676	675	155	635	646
V/C Ratio(X)	0.60	0.00	0.65	0.50	0.00	0.53	0.69	0.56	0.56	0.68	0.58	0.58
Avail Cap(c_a), veh/h	371	0	1465	254	0	1367	684	1685	1683	645	1646	1675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	0.0	18.3	21.5	0.0	18.2	19.9	11.5	11.6	20.5	12.2	12.3
Incr Delay (d2), s/veh	2.0	0.0	1.0	1.7	0.0	0.6	1.7	0.3	0.3	1.9	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.3	0.6	0.0	1.7	1.8	3.9	3.9	1.4	3.8	3.9
LnGrp Delay(d),s/veh	23.2	0.0	19.2	23.2	0.0	18.8	21.6	11.8	11.8	22.5	12.5	12.6
LnGrp LOS	C		B	C		B	C	B	B	C	B	B
Approach Vol, veh/h		250			184			897			850	
Approach Delay, s/veh		20.3			19.9			13.3			13.8	
Approach LOS		C			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	7.5	22.1	5.7	11.0	8.5	21.1	6.2	10.4
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	16.6	42.7	6.0	38.0	17.0	41.7	9.0	35.0
Max Q Clear Time (g_c+I1), s	14.6	9.8	3.1	6.6	5.4	9.7	3.6	5.4
Green Ext Time (p_c), s	0.1	6.1	0.0	1.1	0.1	6.0	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	0	21	38	0	244	29	632	18	52	575	176
Future Volume (veh/h)	110	0	21	38	0	244	29	632	18	52	575	176
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1900	1900	1900	1891	1900
Adj Flow Rate, veh/h	110	0	21	38	0	-25	29	632	15	52	575	176
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.86	0.92	0.86	0.92	0.86	0.86	0.86	0.86	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	2	0	0	0	0	0
Cap, veh/h	156	0	137	100	0	498	61	1384	605	102	1032	315
Arrive On Green	0.09	0.00	0.09	0.06	0.00	0.00	0.03	0.38	0.38	0.06	0.38	0.37
Sat Flow, veh/h	1774	0	1583	1810	1900	0	1774	3610	1579	1810	2713	828
Grp Volume(v), veh/h	110	0	21	38	-25	-25	29	632	15	52	380	371
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	1900	1615	1774	1805	1579	1810	1797	1745
Q Serve(g_s), s	2.4	0.0	0.5	0.8	0.0	0.0	0.6	5.3	0.2	1.1	6.7	6.7
Cycle Q Clear(g_c), s	2.4	0.0	0.5	0.8	0.0	0.0	0.6	5.3	0.2	1.1	6.7	6.7
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	156	0	137	100	0	0	61	1384	605	102	683	664
V/C Ratio(X)	0.70	0.00	0.15	0.38	0.00	0.00	0.48	0.46	0.02	0.51	0.56	0.56
Avail Cap(c_a), veh/h	685	0	1755	361	0	0	376	3615	1581	473	1844	1791
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	0.0	17.0	18.3	0.0	0.0	19.0	9.3	7.7	18.4	9.8	9.9
Incr Delay (d2), s/veh	5.9	0.0	0.5	2.4	0.0	0.0	5.7	0.1	0.0	1.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.2	0.5	0.0	0.0	0.4	2.6	0.1	0.6	3.3	3.3
LnGrp Delay(d),s/veh	23.7	0.0	17.5	20.6	0.0	0.0	24.8	9.3	7.7	19.9	10.0	10.2
LnGrp LOS	C		B	C			C	A	A	B	B	B
Approach Vol, veh/h		131			-12			676			803	
Approach Delay, s/veh		22.7			-65.4			10.0			10.7	
Approach LOS		C			A			A			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	20.2	6.2	8.0	5.9	20.1	8.0	6.2
Change Period (Y+Rc), s	4.0	5.3	4.5	4.5	4.5	5.3	4.5	* 4.5
Max Green Setting (Gmax), s	10.0	39.7	7.5	44.5	8.5	40.7	15.5	* 37
Max Q Clear Time (g_c+I1), s	2.1	7.3	2.8	2.5	2.6	8.7	4.4	0.0
Green Ext Time (p_c), s	0.0	6.0	0.0	0.1	0.0	6.0	0.2	0.0

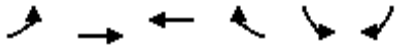
Intersection Summary	
HCM 2010 Ctrl Delay	12.0
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	0	45	47	0	62	73	292	26	120	349	170
Future Volume (veh/h)	126	0	45	47	0	62	73	292	26	120	349	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	126	0	45	47	0	-4	73	292	23	120	349	170
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	219	0	92	125	0	478	136	949	74	182	723	346
Arrive On Green	0.12	0.00	0.04	0.07	0.00	0.00	0.08	0.28	0.26	0.10	0.31	0.29
Sat Flow, veh/h	1810	0	1615	1810	1900	0	1810	3393	266	1810	2370	1134
Grp Volume(v), veh/h	126	0	45	47	-4	-4	73	155	160	120	264	255
Grp Sat Flow(s),veh/h/ln	1810	0	1615	1810	1900	1615	1810	1805	1853	1810	1805	1700
Q Serve(g_s), s	2.1	0.0	0.9	0.8	0.0	0.0	1.2	2.2	2.2	2.0	3.8	4.0
Cycle Q Clear(g_c), s	2.1	0.0	0.9	0.8	0.0	0.0	1.2	2.2	2.2	2.0	3.8	4.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.14	1.00		0.67
Lane Grp Cap(c), veh/h	219	0	92	125	0	0	136	505	519	182	551	519
V/C Ratio(X)	0.58	0.00	0.49	0.38	0.00	0.00	0.54	0.31	0.31	0.66	0.48	0.49
Avail Cap(c_a), veh/h	905	0	2165	486	0	0	820	2098	2154	876	2155	2029
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	14.9	14.2	0.0	0.0	14.3	9.1	9.1	13.9	9.1	9.2
Incr Delay (d2), s/veh	2.4	0.0	1.5	1.9	0.0	0.0	1.2	0.1	0.1	1.5	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.4	0.5	0.0	0.0	0.7	1.1	1.1	1.1	1.9	1.9
LnGrp Delay(d),s/veh	15.7	0.0	16.4	16.1	0.0	0.0	15.5	9.2	9.2	15.4	9.3	9.5
LnGrp LOS	B		B	B			B	A	A	B	A	A
Approach Vol, veh/h		171			39			388			639	
Approach Delay, s/veh		15.9			19.4			10.4			10.5	
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	6.7	13.8	6.2	5.3	5.9	14.6	7.9	3.7
Change Period (Y+Rc), s	4.0	5.3	4.5	4.0	4.0	5.3	4.5	4.0
Max Green Setting (Gmax), s	15.0	36.7	8.1	42.4	14.0	37.7	15.5	35.0
Max Q Clear Time (g_c+I1), s	4.1	4.2	2.8	2.9	3.2	6.0	4.1	0.0
Green Ext Time (p_c), s	0.1	3.3	0.0	0.1	0.0	3.3	0.2	0.0

Intersection Summary		
HCM 2010 Ctrl Delay		11.5
HCM 2010 LOS		B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	66	1457	0
Future Volume (veh/h)	0	0	0	66	1457	0
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	0	0	66	1457	0
Adj No. of Lanes	0	1	1	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	111	0	94	1925	854
Arrive On Green	0.00	0.00	0.00	0.08	0.55	0.00
Sat Flow, veh/h	0	1900	0	1615	3510	1615
Grp Volume(v), veh/h	0	0	0	66	1457	0
Grp Sat Flow(s),veh/h/ln	0	1900	0	1615	1755	1615
Q Serve(g_s), s	0.0	0.0	0.0	1.0	8.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.0	8.2	0.0
Prop In Lane	0.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	111	0	94	1925	854
V/C Ratio(X)	0.00	0.00	0.00	0.70	0.76	0.00
Avail Cap(c_a), veh/h	0	1827	0	1553	11644	5325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	11.6	4.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.5	3.9	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	15.2	4.7	0.0
LnGrp LOS				B	A	
Approach Vol, veh/h		0	66		1457	
Approach Delay, s/veh		0.0	15.2		4.7	
Approach LOS			B		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		6.8				6.8		18.9
Change Period (Y+Rc), s		5.3				5.3		5.3
Max Green Setting (Gmax), s		24.7				24.7		84.7
Max Q Clear Time (g_c+I1), s		0.0				3.0		10.2
Green Ext Time (p_c), s		0.0				0.2		3.4

Intersection Summary	
HCM 2010 Ctrl Delay	5.2
HCM 2010 LOS	A

Notes

Intersection	
Int Delay, s/veh	9.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	347	50	87	381	35
Future Vol, veh/h	25	347	50	87	381	35
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	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	347	50	87	381	35

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	979	103	0	0	151	0
Stage 1	103	-	-	-	-	-
Stage 2	876	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	280	957	-	-	1442	-
Stage 1	926	-	-	-	-	-
Stage 2	411	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	197	957	-	-	1442	-
Mov Cap-2 Maneuver	197	-	-	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	289	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.4	0	7.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	760	1442	-
HCM Lane V/C Ratio	-	-	0.538	0.29	-
HCM Control Delay (s)	-	-	14.4	8.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	3.5	1.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	0	855	0	0	0	0	1639	415	198	712	0
Future Volume (veh/h)	251	0	855	0	0	0	0	1639	415	198	712	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	60				0	60	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	285	0	688				0	1862	472	225	809	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	964	0	975				0	2411	353	295	3181	0
Arrive On Green	0.08	0.00	0.08				0.00	0.18	0.17	0.03	0.22	0.00
Sat Flow, veh/h	3442	0	3610				0	4739	1008	3343	5103	0
Grp Volume(v), veh/h	285	0	688				0	1562	772	225	809	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1649	1672	1647	0
Q Serve(g_s), s	7.7	0.0	18.3				0.0	44.2	44.5	6.5	13.1	0.0
Cycle Q Clear(g_c), s	7.7	0.0	18.3				0.0	44.2	44.5	6.5	13.1	0.0
Prop In Lane	1.00		1.00				0.00		0.61	1.00		0.00
Lane Grp Cap(c), veh/h	964	0	975				0	1670	891	295	3181	0
V/C Ratio(X)	0.30	0.00	0.71				0.00	0.94	0.87	0.76	0.25	0.00
Avail Cap(c_a), veh/h	1128	0	1154				0	1855	912	411	3348	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.1	0.0	47.2				0.0	45.3	41.0	50.1	20.5	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.1				0.0	8.5	8.3	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	92.4				0.0	67.8	15.3	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	17.5				0.0	28.5	29.3	3.4	6.6	0.0
LnGrp Delay(d),s/veh	38.1	0.0	140.7				0.0	121.6	64.6	53.3	20.5	0.0
LnGrp LOS	D		F					F	E	D	C	
Approach Vol, veh/h		973						2334			1034	
Approach Delay, s/veh		110.7						102.8			27.6	
Approach LOS		F						F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	13.7	56.5		27.5		70.2		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	12.0	* 53		30.7		48.1		
Max Q Clear Time (g_c+I1), s	8.5	46.5		20.3		15.1		
Green Ext Time (p_c), s	0.3	5.1		1.8		4.0		

Intersection Summary	
HCM 2010 Ctrl Delay	86.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	23	21	198	33	239	22	1336	123	164	875	21
Future Volume (veh/h)	27	23	21	198	33	239	22	1336	123	164	875	21
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	31	26	4	225	38	35	25	1518	135	186	994	23
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	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	1	1	1	2	2	2	2	2	2
Cap, veh/h	62	52	97	274	288	244	35	1842	163	252	2169	50
Arrive On Green	0.06	0.06	0.06	0.15	0.15	0.15	0.02	0.56	0.55	0.07	0.61	0.61
Sat Flow, veh/h	977	819	1531	1792	1881	1596	1774	3290	290	3442	3534	82
Grp Volume(v), veh/h	57	0	4	225	38	35	25	811	842	186	498	519
Grp Sat Flow(s),veh/h/ln	1796	0	1531	1792	1881	1596	1774	1770	1811	1721	1770	1846
Q Serve(g_s), s	3.3	0.0	0.3	12.9	1.9	2.0	1.5	39.6	40.7	5.6	16.1	16.1
Cycle Q Clear(g_c), s	3.3	0.0	0.3	12.9	1.9	2.0	1.5	39.6	40.7	5.6	16.1	16.1
Prop In Lane	0.54		1.00	1.00		1.00	1.00		0.16	1.00		0.04
Lane Grp Cap(c), veh/h	114	0	97	274	288	244	35	991	1014	252	1086	1133
V/C Ratio(X)	0.50	0.00	0.04	0.82	0.13	0.14	0.72	0.82	0.83	0.74	0.46	0.46
Avail Cap(c_a), veh/h	591	0	503	640	672	570	267	1247	1276	517	1247	1301
HCM Platoon Ratio	1.00	1.00	1.00	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	48.2	0.0	46.8	43.7	39.0	39.0	51.9	19.0	19.3	48.3	11.0	11.1
Incr Delay (d2), s/veh	1.3	0.0	0.1	2.3	0.1	0.1	9.8	2.8	3.1	1.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.1	6.6	1.0	0.9	0.8	19.9	21.0	2.7	7.8	8.1
LnGrp Delay(d),s/veh	49.5	0.0	46.9	46.0	39.0	39.1	61.7	21.9	22.4	49.9	11.2	11.2
LnGrp LOS	D		D	D	D	D	E	C	C	D	B	B
Approach Vol, veh/h		61			298			1678			1203	
Approach Delay, s/veh		49.3			44.3			22.7			17.1	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.8	63.6		10.7	6.1	69.3		20.3
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.8	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	17.6	42.7		5.3	3.5	18.1		14.9
Green Ext Time (p_c), s	0.2	16.3		0.1	0.0	20.2		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	23.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	838	202	190	1244	71	327	143	179	64	179	114
Future Volume (veh/h)	47	838	202	190	1244	71	327	143	179	64	179	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	54	963	143	218	1430	29	376	164	61	74	206	116
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	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, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	60	1251	551	245	1620	708	439	616	510	95	285	161
Arrive On Green	0.03	0.35	0.35	0.14	0.45	0.45	0.13	0.33	0.33	0.05	0.25	0.24
Sat Flow, veh/h	1792	3574	1574	1792	3574	1563	3476	1881	1559	1810	1125	633
Grp Volume(v), veh/h	54	963	143	218	1430	29	376	164	61	74	0	322
Grp Sat Flow(s),veh/h/ln	1792	1787	1574	1792	1787	1563	1738	1881	1559	1810	0	1758
Q Serve(g_s), s	3.6	28.8	7.8	14.3	43.7	1.2	12.7	7.7	3.3	4.8	0.0	20.1
Cycle Q Clear(g_c), s	3.6	28.8	7.8	14.3	43.7	1.2	12.7	7.7	3.3	4.8	0.0	20.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	60	1251	551	245	1620	708	439	616	510	95	0	446
V/C Ratio(X)	0.90	0.77	0.26	0.89	0.88	0.04	0.86	0.27	0.12	0.78	0.00	0.72
Avail Cap(c_a), veh/h	60	1311	577	269	1728	756	637	800	663	166	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.8	34.7	27.9	50.9	29.9	18.3	51.3	29.7	28.2	56.2	0.0	41.1
Incr Delay (d2), s/veh	81.1	2.4	0.1	25.7	5.2	0.0	5.5	0.1	0.0	5.1	0.0	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	3.1	14.6	3.4	8.8	22.6	0.5	6.4	4.0	1.4	2.6	0.0	10.0
LnGrp Delay(d),s/veh	138.9	37.1	28.0	76.6	35.1	18.3	56.9	29.8	28.3	61.3	0.0	42.9
LnGrp LOS	F	D	C	E	D	B	E	C	C	E		D
Approach Vol, veh/h		1160			1677			601			396	
Approach Delay, s/veh		40.7			40.2			46.6			46.3	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	43.3	20.4	46.0	19.2	34.4	8.0	58.4
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	11.0	49.7	18.0	* 44	22.0	38.7	4.0	* 58
Max Q Clear Time (g_c+I1), s	16.8	9.7	16.3	30.8	14.7	22.1	5.6	45.7
Green Ext Time (p_c), s	0.0	1.8	0.1	9.0	0.4	1.6	0.0	8.5

Intersection Summary	
HCM 2010 Ctrl Delay	42.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	677	334	273	934	293	415	350	170	345	553	28
Future Volume (veh/h)	56	677	334	273	934	293	415	350	170	345	553	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	65	787	157	317	1086	177	483	407	179	401	643	31
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	72	1494	295	375	1274	207	535	674	292	457	892	43
Arrive On Green	0.04	0.35	0.34	0.11	0.42	0.41	0.15	0.28	0.27	0.13	0.26	0.25
Sat Flow, veh/h	1792	4267	842	3442	3042	495	3476	2409	1045	3476	3466	167
Grp Volume(v), veh/h	65	630	314	317	630	633	483	301	285	401	331	343
Grp Sat Flow(s),veh/h/ln	1792	1712	1686	1721	1770	1767	1738	1787	1667	1738	1787	1845
Q Serve(g_s), s	4.5	18.1	18.5	11.2	39.8	40.1	16.9	18.0	18.5	14.0	20.9	20.9
Cycle Q Clear(g_c), s	4.5	18.1	18.5	11.2	39.8	40.1	16.9	18.0	18.5	14.0	20.9	20.9
Prop In Lane	1.00		0.50	1.00		0.28	1.00		0.63	1.00		0.09
Lane Grp Cap(c), veh/h	72	1199	590	375	741	740	535	500	466	457	460	475
V/C Ratio(X)	0.90	0.53	0.53	0.84	0.85	0.85	0.90	0.60	0.61	0.88	0.72	0.72
Avail Cap(c_a), veh/h	72	1246	613	529	844	843	562	593	553	534	578	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.1	32.0	32.4	54.0	32.4	32.7	51.4	38.6	39.1	52.7	41.9	41.9
Incr Delay (d2), s/veh	69.9	0.1	0.4	6.3	6.7	7.0	16.7	0.5	0.7	12.4	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	3.6	8.6	8.6	5.7	20.8	21.0	9.4	8.9	8.6	7.5	10.6	10.9
LnGrp Delay(d),s/veh	129.0	32.1	32.7	60.3	39.1	39.7	68.1	39.1	39.8	65.1	44.0	44.0
LnGrp LOS	F	C	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1009			1580			1069			1075	
Approach Delay, s/veh		38.6			43.6			52.4			51.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.3	38.6	17.5	47.3	23.0	35.8	9.0	55.8
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.3	39.7	19.0	43.7	20.0	38.7	5.0	57.7
Max Q Clear Time (g_c+I1), s	16.0	20.5	13.2	20.5	18.9	22.9	6.5	42.1
Green Ext Time (p_c), s	0.3	4.4	0.3	10.3	0.1	4.2	0.0	8.4

Intersection Summary	
HCM 2010 Ctrl Delay	46.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	599	80	53	992	172	217	89	46	391	88	269
Future Volume (veh/h)	219	599	80	53	992	172	217	89	46	391	88	269
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	246	673	79	60	1115	75	244	100	27	439	99	103
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	286	2172	252	77	1795	557	285	384	100	528	465	203
Arrive On Green	0.16	0.47	0.45	0.04	0.35	0.35	0.16	0.14	0.12	0.15	0.13	0.13
Sat Flow, veh/h	1774	4613	536	1774	5085	1577	1792	2805	732	3476	3574	1561
Grp Volume(v), veh/h	246	493	259	60	1115	75	244	62	65	439	99	103
Grp Sat Flow(s),veh/h/ln	1774	1695	1759	1774	1695	1577	1792	1787	1750	1738	1787	1561
Q Serve(g_s), s	11.0	7.3	7.5	2.7	14.7	2.6	10.8	2.5	2.7	10.0	2.0	5.0
Cycle Q Clear(g_c), s	11.0	7.3	7.5	2.7	14.7	2.6	10.8	2.5	2.7	10.0	2.0	5.0
Prop In Lane	1.00		0.30	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	286	1596	828	77	1795	557	285	245	240	528	465	203
V/C Ratio(X)	0.86	0.31	0.31	0.78	0.62	0.13	0.86	0.26	0.27	0.83	0.21	0.51
Avail Cap(c_a), veh/h	393	2309	1198	197	2900	899	419	962	942	685	1792	783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	13.3	13.5	38.5	21.8	17.8	33.2	31.3	31.6	33.4	31.6	32.9
Incr Delay (d2), s/veh	10.4	0.0	0.1	6.3	0.1	0.0	7.8	0.2	0.2	5.3	0.1	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	6.2	3.4	3.6	1.5	6.9	1.1	5.9	1.3	1.3	5.1	1.0	2.2
LnGrp Delay(d),s/veh	43.6	13.3	13.5	44.8	21.9	17.9	41.1	31.5	31.9	38.8	31.7	33.6
LnGrp LOS	D	B	B	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		998			1250			371			641	
Approach Delay, s/veh		20.8			22.8			37.9			36.8	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	15.1	7.5	42.2	16.9	14.6	17.1	32.7
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.3	42.4	9.0	54.0	19.0	39.4	18.0	45.0
Max Q Clear Time (g_c+I1), s	12.0	4.7	4.7	9.5	12.8	7.0	13.0	16.7
Green Ext Time (p_c), s	0.4	0.9	0.0	10.5	0.2	0.9	0.2	9.6

Intersection Summary	
HCM 2010 Ctrl Delay	26.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1084	505	111	1216	0	0	0	0	447	1	525
Future Volume (veh/h)	0	1084	505	111	1216	0	0	0	0	447	1	525
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1178	214	121	1322	0				487	0	542
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2031	632	158	2685	0				1358	0	606
Arrive On Green	0.00	0.40	0.40	0.08	0.52	0.00				0.38	0.00	0.38
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1178	214	121	1322	0				487	0	542
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	15.2	7.9	5.1	14.0	0.0				8.3	0.0	27.2
Cycle Q Clear(g_c), s	0.0	15.2	7.9	5.1	14.0	0.0				8.3	0.0	27.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2031	632	158	2685	0				1358	0	606
V/C Ratio(X)	0.00	0.58	0.34	0.77	0.49	0.00				0.36	0.00	0.89
Avail Cap(c_a), veh/h	0	2790	868	372	4003	0				2766	0	1234
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	20.1	17.9	38.2	13.0	0.0				18.7	0.0	24.5
Incr Delay (d2), s/veh	0.0	0.1	0.1	2.9	0.1	0.0				0.1	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.2	3.5	1.4	6.6	0.0				4.1	0.0	12.2
LnGrp Delay(d),s/veh	0.0	20.2	18.0	41.1	13.0	0.0				18.8	0.0	26.5
LnGrp LOS		C	B	D	B					B		C
Approach Vol, veh/h		1392			1443						1029	
Approach Delay, s/veh		19.8			15.4						22.8	
Approach LOS		B			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	10.8	37.5		36.4		48.3		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	16.8	44.7		64.7		64.7		
Max Q Clear Time (g_c+I1), s	7.1	17.2		29.2		16.0		
Green Ext Time (p_c), s	0.1	14.9		1.9		18.9		

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	184	186	287	172	161	102	653	170	149	918	61
Future Volume (veh/h)	122	184	186	287	172	161	102	653	170	149	918	61
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	134	202	182	315	189	159	112	718	174	164	1009	64
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	374	230	207	342	219	185	139	814	197	217	1120	71
Arrive On Green	0.21	0.25	0.24	0.19	0.24	0.23	0.08	0.29	0.27	0.12	0.33	0.32
Sat Flow, veh/h	1792	906	816	1774	925	778	1792	2851	691	1792	3407	216
Grp Volume(v), veh/h	134	0	384	315	0	348	112	450	442	164	529	544
Grp Sat Flow(s),veh/h/ln	1792	0	1722	1774	0	1704	1792	1787	1755	1792	1787	1836
Q Serve(g_s), s	6.9	0.0	23.3	18.9	0.0	21.3	6.7	26.1	26.1	9.6	30.7	30.7
Cycle Q Clear(g_c), s	6.9	0.0	23.3	18.9	0.0	21.3	6.7	26.1	26.1	9.6	30.7	30.7
Prop In Lane	1.00		0.47	1.00		0.46	1.00		0.39	1.00		0.12
Lane Grp Cap(c), veh/h	374	0	436	342	0	404	139	510	501	217	588	604
V/C Ratio(X)	0.36	0.00	0.88	0.92	0.00	0.86	0.80	0.88	0.88	0.76	0.90	0.90
Avail Cap(c_a), veh/h	374	0	554	343	0	626	165	561	551	231	627	644
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	0.0	39.3	43.0	0.0	40.0	49.3	37.0	37.3	46.2	34.7	34.8
Incr Delay (d2), s/veh	0.2	0.0	11.0	28.8	0.0	4.7	18.0	13.3	13.6	11.0	14.8	14.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	12.4	12.0	0.0	10.5	4.0	14.8	14.5	5.4	17.6	18.0
LnGrp Delay(d),s/veh	36.9	0.0	50.2	71.9	0.0	44.7	67.3	50.4	50.9	57.2	49.6	49.4
LnGrp LOS	D		D	E		D	E	D	D	E	D	D
Approach Vol, veh/h		518			663			1004			1237	
Approach Delay, s/veh		46.8			57.6			52.5			50.5	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.9	31.5	12.4	39.7	26.7	29.8	17.1	35.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	21.0	33.6	10.0	36.8	16.0	38.6	14.0	32.8
Max Q Clear Time (g_c+I1), s	20.9	25.3	8.7	32.7	8.9	23.3	11.6	28.1
Green Ext Time (p_c), s	0.0	0.9	0.1	1.7	0.4	1.1	0.1	1.6

Intersection Summary		
HCM 2010 Ctrl Delay		51.9
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	0	20	8	0	59	5	813	43	319	1046	41
Future Volume (veh/h)	92	0	20	8	0	59	5	813	43	319	1046	41
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	100	0	22	9	0	8	5	934	20	367	1202	45
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.87	0.92	0.87	0.92	0.87	0.87	0.87	0.87	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	178	0	153	74	0	13	64	1414	616	416	2080	78
Arrive On Green	0.10	0.00	0.07	0.04	0.00	0.01	0.04	0.40	0.40	0.23	0.59	0.57
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1558	1792	3512	131
Grp Volume(v), veh/h	100	0	22	9	0	8	5	934	20	367	611	636
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1558	1792	1786	1857
Q Serve(g_s), s	3.7	0.0	0.9	0.3	0.0	0.3	0.2	14.6	0.5	13.5	14.5	14.5
Cycle Q Clear(g_c), s	3.7	0.0	0.9	0.3	0.0	0.3	0.2	14.6	0.5	13.5	14.5	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	178	0	153	74	0	13	64	1414	616	416	1058	1100
V/C Ratio(X)	0.56	0.00	0.14	0.12	0.00	0.60	0.08	0.66	0.03	0.88	0.58	0.58
Avail Cap(c_a), veh/h	234	0	834	185	0	804	182	1883	821	655	1412	1468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	29.2	31.6	0.0	33.8	31.8	16.9	12.6	25.3	8.6	8.7
Incr Delay (d2), s/veh	2.8	0.0	0.4	0.7	0.0	15.1	0.5	0.2	0.0	5.5	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.4	0.2	0.0	0.2	0.1	7.2	0.2	7.3	7.0	7.3
LnGrp Delay(d),s/veh	32.1	0.0	29.6	32.3	0.0	48.8	32.4	17.1	12.6	30.8	8.8	8.9
LnGrp LOS	C		C	C		D	C	B	B	C	A	A
Approach Vol, veh/h		122			17			959			1614	
Approach Delay, s/veh		31.6			40.1			17.1			13.8	
Approach LOS		C			D			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	9.9	31.0	6.8	10.6	6.5	44.5	10.8	6.6
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	5.9	34.7	5.0	34.0	5.0	52.7	7.0	* 34
Max Q Clear Time (g_c+I1), s	5.5	16.6	2.3	2.9	2.2	16.5	5.7	2.3
Green Ext Time (p_c), s	0.4	9.1	0.0	0.1	0.0	12.0	0.0	0.1

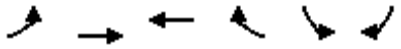
Intersection Summary	
HCM 2010 Ctrl Delay	16.0
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	0	34	29	0	314	19	461	44	366	471	39
Future Volume (veh/h)	91	0	34	29	0	314	19	461	44	366	471	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	112	0	42	36	0	53	23	569	54	452	581	48
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	204	0	140	129	0	74	39	933	88	512	1823	150
Arrive On Green	0.11	0.00	0.09	0.07	0.00	0.05	0.02	0.28	0.26	0.29	0.55	0.52
Sat Flow, veh/h	1810	0	1609	1792	0	1592	1810	3326	315	1792	3344	276
Grp Volume(v), veh/h	112	0	42	36	0	53	23	308	315	452	310	319
Grp Sat Flow(s),veh/h/ln	1810	0	1609	1792	0	1592	1810	1805	1836	1792	1787	1833
Q Serve(g_s), s	3.4	0.0	1.4	1.1	0.0	1.9	0.7	8.6	8.7	14.1	5.6	5.6
Cycle Q Clear(g_c), s	3.4	0.0	1.4	1.1	0.0	1.9	0.7	8.6	8.7	14.1	5.6	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		0.15
Lane Grp Cap(c), veh/h	204	0	140	129	0	74	39	506	515	512	974	999
V/C Ratio(X)	0.55	0.00	0.30	0.28	0.00	0.72	0.60	0.61	0.61	0.88	0.32	0.32
Avail Cap(c_a), veh/h	341	0	965	338	0	955	155	835	850	952	1623	1664
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	0.0	25.0	25.6	0.0	27.5	28.3	18.2	18.3	19.9	7.3	7.4
Incr Delay (d2), s/veh	2.3	0.0	0.4	1.2	0.0	4.8	5.4	0.4	0.4	2.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.6	0.6	0.0	0.9	0.4	4.3	4.4	7.2	2.7	2.9
LnGrp Delay(d),s/veh	26.7	0.0	25.4	26.8	0.0	32.3	33.7	18.7	18.8	21.9	7.4	7.4
LnGrp LOS	C		C	C		C	C	B	B	C	A	A
Approach Vol, veh/h		154			89			646			1081	
Approach Delay, s/veh		26.4			30.1			19.2			13.5	
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	30.7	20.4	8.2	9.1	5.2	35.8	10.6	6.7
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	31.6	25.7	9.0	35.0	5.0	51.7	9.0	35.0
Max Q Clear Time (g_c+I1), s	16.1	10.7	3.1	3.4	2.7	7.6	5.4	3.9
Green Ext Time (p_c), s	0.6	4.4	0.0	0.3	0.0	5.3	0.1	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	17.1
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	221	382	158	136	970	32
Future Volume (veh/h)	221	382	158	136	970	32
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	260	449	186	160	1141	38
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	369	2394	689	308	1367	629
Arrive On Green	0.21	0.47	0.19	0.19	0.39	0.39
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	260	449	186	160	1141	38
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	8.0	3.0	2.6	5.3	17.4	0.9
Cycle Q Clear(g_c), s	8.0	3.0	2.6	5.3	17.4	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	369	2394	689	308	1367	629
V/C Ratio(X)	0.71	0.19	0.27	0.52	0.83	0.06
Avail Cap(c_a), veh/h	543	6177	2974	1331	2401	1104
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	21.6	9.0	20.1	21.2	16.1	11.1
Incr Delay (d2), s/veh	2.5	0.0	0.1	0.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	1.4	1.3	2.4	8.3	0.4
LnGrp Delay(d),s/veh	24.1	9.0	20.2	21.7	16.6	11.1
LnGrp LOS	C	A	C	C	B	B
Approach Vol, veh/h		709	346		1179	
Approach Delay, s/veh		14.6	20.9		16.5	
Approach LOS		B	C		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		31.7			16.2	15.5		27.1
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		70.1			16.0	48.1		39.3
Max Q Clear Time (g_c+I1), s		5.0			10.0	7.3		19.4
Green Ext Time (p_c), s		2.9			0.4	2.9		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	63.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	104	468	45	39	422	124
Future Vol, veh/h	104	468	45	39	422	124
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	111	498	48	41	449	132

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1099	69	0	0	89	0
Stage 1	69	-	-	-	-	-
Stage 2	1030	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	237	1000	-	-	1519	-
Stage 1	959	-	-	-	-	-
Stage 2	347	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	161	1000	-	-	1519	-
Mov Cap-2 Maneuver	161	-	-	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	236	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	128.1	0	6.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	513	1519	-
HCM Lane V/C Ratio	-	-	1.186	0.296	-
HCM Control Delay (s)	-	-	128.1	8.4	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	22.2	1.2	-

Approach	
Approach Direction	NB
Median Present?	No
Approach Delay(s)	4.2
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	169
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.43
Prob of Blocked Lane	0.25
Delay for adq Gap	9.72
Avg Ped Delay (s)	4.22

Approach	
Approach Direction	SB
Median Present?	No
Approach Delay(s)	4.2
Level of Service	A

Crosswalk	
Length (ft)	32
Lanes Crossed	2
Veh Vol Crossed	169
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No
Critical Headway (s)	12.14
Prob of Delayed X-ing	0.43
Prob of Blocked Lane	0.25
Delay for adq Gap	9.72
Avg Ped Delay (s)	4.22

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	327	0	1466	0	0	0	0	1378	438	488	1154	0
Future Volume (veh/h)	327	0	1466	0	0	0	0	1378	438	488	1154	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	20				0	20	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	372	0	1382				0	1566	498	555	1311	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1162	0	1202				0	1936	345	621	3042	0
Arrive On Green	0.11	0.00	0.11				0.00	0.13	0.13	0.06	0.20	0.00
Sat Flow, veh/h	3442	0	3610				0	4507	1196	3343	5103	0
Grp Volume(v), veh/h	372	0	1382				0	1396	668	555	1311	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1605	1672	1647	0
Q Serve(g_s), s	17.1	0.0	57.2				0.0	69.0	69.0	28.3	39.8	0.0
Cycle Q Clear(g_c), s	17.1	0.0	57.2				0.0	69.0	69.0	28.3	39.8	0.0
Prop In Lane	1.00		1.00				0.00		0.75	1.00		0.00
Lane Grp Cap(c), veh/h	1162	0	1202				0	1347	674	621	3042	0
V/C Ratio(X)	0.32	0.00	1.15				0.00	1.04	0.99	0.89	0.43	0.00
Avail Cap(c_a), veh/h	1162	0	1202				0	1347	645	798	3042	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.2	0.0	76.5				0.0	74.5	74.6	79.0	42.2	0.0
Incr Delay (d2), s/veh	0.1	0.0	77.4				0.0	34.4	32.8	9.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	50.4				0.0	37.8	23.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	0.0	34.3				0.0	30.6	42.5	13.9	18.2	0.0
LnGrp Delay(d),s/veh	58.2	0.0	204.2				0.0	146.8	130.4	88.0	42.2	0.0
LnGrp LOS	E		F					F	F	F	D	
Approach Vol, veh/h		1754						2064			1866	
Approach Delay, s/veh		173.3						141.5			55.8	
Approach LOS		F						F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	36.8	73.0		62.0		109.8		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	41.0	* 68		56.7		60.1		
Max Q Clear Time (g_c+I1), s	30.3	71.0		59.2		41.8		
Green Ext Time (p_c), s	1.6	0.0		0.0		7.0		

Intersection Summary	
HCM 2010 Ctrl Delay	123.2
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	47	60	166	33	127	58	923	144	201	1225	25
Future Volume (veh/h)	57	47	60	166	33	127	58	923	144	201	1225	25
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	53	48	189	38	-93	66	1049	159	228	1392	27
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	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	1	1	1	2	2	2	2	2	2
Cap, veh/h	105	86	164	239	251	213	85	1531	232	306	1909	37
Arrive On Green	0.11	0.11	0.11	0.13	0.13	0.00	0.05	0.50	0.49	0.09	0.54	0.53
Sat Flow, veh/h	989	806	1546	1792	1881	1599	1774	3082	466	3442	3550	69
Grp Volume(v), veh/h	118	0	48	189	38	-93	66	602	606	228	693	726
Grp Sat Flow(s),veh/h/ln	1795	0	1546	1792	1881	1599	1774	1770	1779	1721	1770	1849
Q Serve(g_s), s	5.8	0.0	2.6	9.4	1.6	0.0	3.4	23.8	23.9	5.9	27.3	27.4
Cycle Q Clear(g_c), s	5.8	0.0	2.6	9.4	1.6	0.0	3.4	23.8	23.9	5.9	27.3	27.4
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.26	1.00		0.04
Lane Grp Cap(c), veh/h	191	0	164	239	251	213	85	879	884	306	952	994
V/C Ratio(X)	0.62	0.00	0.29	0.79	0.15	-0.44	0.77	0.68	0.69	0.74	0.73	0.73
Avail Cap(c_a), veh/h	685	0	590	742	779	662	309	1447	1454	600	1447	1511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	39.2	0.0	37.8	38.5	35.2	0.0	43.2	17.6	17.7	40.8	16.1	16.1
Incr Delay (d2), s/veh	1.2	0.0	0.4	2.2	0.1	0.0	5.5	0.4	0.4	1.4	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	1.1	4.8	0.9	0.0	1.8	11.6	11.7	2.9	13.4	14.0
LnGrp Delay(d),s/veh	40.4	0.0	38.2	40.7	35.3	0.0	48.7	18.0	18.1	42.1	16.5	16.5
LnGrp LOS	D		D	D	D		D	B	B	D	B	B
Approach Vol, veh/h		166			134			1274			1647	
Approach Delay, s/veh		39.8			67.5			19.6			20.1	
Approach LOS		D			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	49.6		13.8	8.4	53.3		16.2
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.6	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	7.9	25.9		7.8	5.4	29.4		11.4
Green Ext Time (p_c), s	0.3	19.1		0.4	0.0	18.6		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	22.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	1294	285	109	916	40	209	56	87	49	32	80
Future Volume (veh/h)	107	1294	285	109	916	40	209	56	87	49	32	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		0.99	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	123	1487	239	125	1053	-7	240	64	-45	56	37	77
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	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, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	151	1735	765	152	1738	778	306	459	390	73	104	217
Arrive On Green	0.08	0.49	0.49	0.09	0.49	0.00	0.09	0.24	0.00	0.04	0.20	0.18
Sat Flow, veh/h	1792	3574	1575	1792	3574	1599	3476	1881	1599	1810	532	1108
Grp Volume(v), veh/h	123	1487	239	125	1053	-7	240	64	-45	56	0	114
Grp Sat Flow(s),veh/h/ln	1792	1787	1575	1792	1787	1599	1738	1881	1599	1810	0	1640
Q Serve(g_s), s	7.4	40.3	10.1	7.5	23.6	0.0	7.4	2.9	0.0	3.4	0.0	6.6
Cycle Q Clear(g_c), s	7.4	40.3	10.1	7.5	23.6	0.0	7.4	2.9	0.0	3.4	0.0	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.68
Lane Grp Cap(c), veh/h	151	1735	765	152	1738	778	306	459	390	73	0	321
V/C Ratio(X)	0.82	0.86	0.31	0.82	0.61	-0.01	0.79	0.14	-0.12	0.77	0.00	0.35
Avail Cap(c_a), veh/h	212	1888	832	179	1823	816	506	788	670	148	0	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.4	24.9	17.1	49.4	20.5	0.0	49.1	32.5	0.0	52.2	0.0	38.5
Incr Delay (d2), s/veh	10.7	3.6	0.1	19.2	0.4	0.0	1.7	0.1	0.0	6.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	20.7	4.4	4.5	11.6	0.0	3.6	1.5	0.0	1.8	0.0	3.0
LnGrp Delay(d),s/veh	60.1	28.5	17.2	68.6	20.9	0.0	50.8	32.6	0.0	58.5	0.0	38.8
LnGrp LOS	E	C	B	E	C		D	C		E		D
Approach Vol, veh/h		1849			1171			259			170	
Approach Delay, s/veh		29.1			26.1			55.1			45.3	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	30.8	13.3	57.3	13.7	25.5	13.2	57.4
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	9.6	44.7	11.0	* 58	16.0	37.7	13.0	* 56
Max Q Clear Time (g_c+I1), s	5.4	4.9	9.5	42.3	9.4	8.6	9.4	25.6
Green Ext Time (p_c), s	0.0	0.6	0.0	10.8	0.2	0.6	0.0	16.5

Intersection Summary	
HCM 2010 Ctrl Delay	30.9
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	876	404	314	715	234	291	358	269	352	334	53
Future Volume (veh/h)	77	876	404	314	715	234	291	358	269	352	334	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	90	1019	239	365	831	108	338	416	294	409	388	60
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	113	1341	314	426	1215	158	401	550	385	473	919	141
Arrive On Green	0.06	0.33	0.33	0.12	0.39	0.39	0.12	0.28	0.27	0.14	0.30	0.29
Sat Flow, veh/h	1792	4116	964	3442	3145	409	3476	1990	1392	3476	3094	474
Grp Volume(v), veh/h	90	847	411	365	468	471	338	373	337	409	223	225
Grp Sat Flow(s),veh/h/ln	1792	1712	1656	1721	1770	1784	1738	1787	1595	1738	1787	1781
Q Serve(g_s), s	5.7	25.7	25.8	12.1	25.6	25.6	11.1	22.2	22.6	13.4	11.6	11.8
Cycle Q Clear(g_c), s	5.7	25.7	25.8	12.1	25.6	25.6	11.1	22.2	22.6	13.4	11.6	11.8
Prop In Lane	1.00		0.58	1.00		0.23	1.00		0.87	1.00		0.27
Lane Grp Cap(c), veh/h	113	1116	540	426	684	689	401	494	441	473	531	529
V/C Ratio(X)	0.79	0.76	0.76	0.86	0.68	0.68	0.84	0.76	0.76	0.86	0.42	0.43
Avail Cap(c_a), veh/h	170	1358	657	534	809	815	569	601	536	629	632	630
HCM Platoon Ratio	1.00	1.00	1.00	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	53.6	35.0	35.1	49.8	29.7	29.7	50.3	38.4	39.1	49.1	32.7	33.0
Incr Delay (d2), s/veh	7.6	1.5	3.2	9.3	1.3	1.3	5.6	3.3	4.0	7.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	12.4	12.2	6.3	12.7	12.8	5.6	11.3	10.4	6.9	5.8	5.9
LnGrp Delay(d),s/veh	61.2	36.6	38.3	59.1	31.0	31.0	55.9	41.7	43.1	56.7	32.9	33.2
LnGrp LOS	E	D	D	E	C	C	E	D	D	E	C	C
Approach Vol, veh/h		1348			1304			1048			857	
Approach Delay, s/veh		38.7			38.8			46.7			44.4	
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	9.8	36.1	18.3	41.8	17.4	38.5	11.3	48.8
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	21.6	37.7	18.0	44.7	19.0	39.7	11.0	51.7
Max Q Clear Time (g_c+I1), s	15.4	24.6	14.1	27.8	13.1	13.8	7.7	27.6
Green Ext Time (p_c), s	0.4	3.7	0.3	8.7	0.3	4.4	0.0	10.3

Intersection Summary	
HCM 2010 Ctrl Delay	41.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	902	180	143	1092	264	147	83	37	487	140	174
Future Volume (veh/h)	214	902	180	143	1092	264	147	83	37	487	140	174
Number	7	4	14	3	8	18	5	2	12	1	6	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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	240	1013	191	161	1227	179	165	93	17	547	157	-3
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	275	1863	351	196	1980	614	201	294	52	623	587	262
Arrive On Green	0.16	0.43	0.43	0.11	0.39	0.39	0.11	0.10	0.08	0.18	0.16	0.00
Sat Flow, veh/h	1774	4289	807	1774	5085	1577	1792	3030	541	3476	3574	1599
Grp Volume(v), veh/h	240	800	404	161	1227	179	165	54	56	547	157	-3
Grp Sat Flow(s),veh/h/ln	1774	1695	1706	1774	1695	1577	1792	1787	1783	1738	1787	1599
Q Serve(g_s), s	11.8	15.6	15.7	7.9	17.3	7.0	8.0	2.5	2.6	13.7	3.4	0.0
Cycle Q Clear(g_c), s	11.8	15.6	15.7	7.9	17.3	7.0	8.0	2.5	2.6	13.7	3.4	0.0
Prop In Lane	1.00		0.47	1.00		1.00	1.00		0.30	1.00		1.00
Lane Grp Cap(c), veh/h	275	1472	741	196	1980	614	201	173	173	623	587	262
V/C Ratio(X)	0.87	0.54	0.54	0.82	0.62	0.29	0.82	0.31	0.32	0.88	0.27	-0.01
Avail Cap(c_a), veh/h	318	1758	885	318	2637	818	421	875	873	701	1629	729
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00
Uniform Delay (d), s/veh	36.9	18.7	18.7	38.9	21.9	18.8	38.8	37.5	37.8	35.7	32.6	0.0
Incr Delay (d2), s/veh	18.6	0.1	0.2	3.8	0.1	0.1	3.2	0.4	0.4	10.4	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	7.2	7.2	7.3	4.1	8.1	3.0	4.2	1.3	1.3	7.4	1.7	0.0
LnGrp Delay(d),s/veh	55.4	18.8	18.9	42.6	22.1	18.9	41.9	37.9	38.2	46.1	32.7	0.0
LnGrp LOS	E	B	B	D	C	B	D	D	D	D	C	
Approach Vol, veh/h		1444			1567			275			701	
Approach Delay, s/veh		24.9			23.8			40.4			43.3	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	12.7	13.8	42.8	14.0	18.7	17.8	38.8
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.0	42.4	16.0	45.0	21.0	39.4	16.0	45.0
Max Q Clear Time (g_c+I1), s	15.7	4.6	9.9	17.7	10.0	5.4	13.8	19.3
Green Ext Time (p_c), s	0.3	0.9	0.1	13.8	0.1	0.9	0.1	13.4

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1625	503	213	1788	0	0	0	0	741	7	854
Future Volume (veh/h)	0	1625	503	213	1788	0	0	0	0	741	7	854
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1766	212	232	1943	0				811	0	899
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1669	519	213	2397	0				1656	0	739
Arrive On Green	0.00	0.32	0.32	0.11	0.47	0.00				0.47	0.00	0.47
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1766	212	232	1943	0				811	0	899
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	39.0	12.4	13.0	38.9	0.0				19.0	0.0	56.0
Cycle Q Clear(g_c), s	0.0	39.0	12.4	13.0	38.9	0.0				19.0	0.0	56.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1669	519	213	2397	0				1656	0	739
V/C Ratio(X)	0.00	1.06	0.41	1.09	0.81	0.00				0.49	0.00	1.22
Avail Cap(c_a), veh/h	0	1669	519	213	2397	0				1656	0	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	40.5	31.5	53.5	27.5	0.0				22.1	0.0	32.0
Incr Delay (d2), s/veh	0.0	39.2	0.2	86.6	2.0	0.0				0.1	0.0	109.7
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	0.0	24.5	5.5	6.1	18.8	0.0				9.3	0.0	46.9
LnGrp Delay(d),s/veh	0.0	79.7	31.7	140.1	29.5	0.0				22.2	0.0	141.7
LnGrp LOS		F	C	F	C					C		F
Approach Vol, veh/h		1978			2175						1710	
Approach Delay, s/veh		74.6			41.3						85.0	
Approach LOS		E			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	17.0	43.0		60.0		60.0		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	13.0	37.7		54.7		54.7		
Max Q Clear Time (g_c+I1), s	15.0	41.0		58.0		40.9		
Green Ext Time (p_c), s	0.0	0.0		0.0		12.3		

Intersection Summary	
HCM 2010 Ctrl Delay	65.3
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	122	88	81	105	106	131	610	222	313	630	90
Future Volume (veh/h)	67	122	88	81	105	106	131	610	222	313	630	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		0.98	1.00		0.97	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	134	75	89	115	98	144	670	231	344	692	96
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	95	192	107	114	166	142	181	884	305	389	1431	198
Arrive On Green	0.05	0.17	0.17	0.06	0.18	0.18	0.10	0.34	0.32	0.22	0.46	0.44
Sat Flow, veh/h	1792	1127	631	1774	918	782	1792	2606	898	1792	3143	436
Grp Volume(v), veh/h	74	0	209	89	0	213	144	459	442	344	393	395
Grp Sat Flow(s),veh/h/ln	1792	0	1758	1774	0	1700	1792	1787	1718	1792	1787	1792
Q Serve(g_s), s	3.1	0.0	8.6	3.8	0.0	9.0	6.0	17.5	17.6	14.2	11.7	11.8
Cycle Q Clear(g_c), s	3.1	0.0	8.6	3.8	0.0	9.0	6.0	17.5	17.6	14.2	11.7	11.8
Prop In Lane	1.00		0.36	1.00		0.46	1.00		0.52	1.00		0.24
Lane Grp Cap(c), veh/h	95	0	299	114	0	308	181	606	582	389	813	815
V/C Ratio(X)	0.78	0.00	0.70	0.78	0.00	0.69	0.79	0.76	0.76	0.88	0.48	0.48
Avail Cap(c_a), veh/h	188	0	782	186	0	756	422	748	719	703	1029	1031
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	0.0	29.9	35.2	0.0	29.3	33.6	22.5	22.8	29.0	14.5	14.7
Incr Delay (d2), s/veh	5.0	0.0	1.1	4.3	0.0	1.0	3.0	2.6	2.7	2.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	4.2	2.0	0.0	4.3	3.1	9.0	8.7	7.3	5.8	5.9
LnGrp Delay(d),s/veh	40.7	0.0	31.0	39.5	0.0	30.3	36.5	25.1	25.6	31.7	14.7	14.8
LnGrp LOS	D		C	D		C	D	C	C	C	B	B
Approach Vol, veh/h		283			302			1045			1132	
Approach Delay, s/veh		33.5			33.0			26.9			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	20.6	29.9	8.9	17.0	11.7	38.8	8.1	17.8
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	30.6	30.7	8.0	34.0	18.0	42.7	8.0	34.0
Max Q Clear Time (g_c+I1), s	16.2	19.6	5.8	10.6	8.0	13.8	5.1	11.0
Green Ext Time (p_c), s	0.4	5.0	0.0	1.4	0.1	7.2	0.0	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	0	13	39	0	256	16	713	18	67	588	137
Future Volume (veh/h)	67	0	13	39	0	256	16	713	18	67	588	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1878	1900
Adj Flow Rate, veh/h	73	0	14	45	0	234	17	820	-8	77	676	149
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.87	0.92	0.87	0.92	0.87	0.87	0.87	0.87	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	163	0	366	79	0	296	75	1326	593	99	1083	239
Arrive On Green	0.09	0.00	0.20	0.04	0.00	0.18	0.04	0.37	0.00	0.06	0.37	0.35
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1599	1792	2908	640
Grp Volume(v), veh/h	73	0	14	45	0	234	17	820	-8	77	414	411
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1599	1792	1784	1765
Q Serve(g_s), s	2.3	0.0	0.4	1.5	0.0	8.3	0.6	11.3	0.0	2.6	11.4	11.5
Cycle Q Clear(g_c), s	2.3	0.0	0.4	1.5	0.0	8.3	0.6	11.3	0.0	2.6	11.4	11.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	163	0	366	79	0	296	75	1326	593	99	664	657
V/C Ratio(X)	0.45	0.00	0.04	0.57	0.00	0.79	0.23	0.62	-0.01	0.78	0.62	0.62
Avail Cap(c_a), veh/h	324	0	893	360	0	991	244	2609	1167	357	1391	1376
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.9	0.0	18.8	28.3	0.0	23.5	27.9	15.5	0.0	28.1	15.5	15.7
Incr Delay (d2), s/veh	1.9	0.0	0.0	6.2	0.0	1.8	1.5	0.2	0.0	4.9	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.2	0.9	0.0	3.9	0.3	5.6	0.0	1.4	5.7	5.7
LnGrp Delay(d),s/veh	27.9	0.0	18.8	34.5	0.0	25.3	29.4	15.7	0.0	33.0	15.8	16.0
LnGrp LOS	C		B	C		C	C	B		C	B	B
Approach Vol, veh/h		87			279			829			902	
Approach Delay, s/veh		26.4			26.8			16.1			17.4	
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	7.3	26.4	8.6	17.9	7.2	26.5	9.5	17.1
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	12.6	42.7	12.0	32.0	7.0	45.7	9.0	* 37
Max Q Clear Time (g_c+I1), s	4.6	13.3	3.5	2.4	2.6	13.5	4.3	10.3
Green Ext Time (p_c), s	0.0	7.5	0.0	1.0	0.0	7.6	0.0	0.9

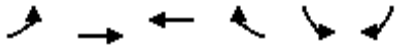
Intersection Summary	
HCM 2010 Ctrl Delay	18.5
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	0	35	49	0	65	56	360	27	126	403	117
Future Volume (veh/h)	113	0	35	49	0	65	56	360	27	126	403	117
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	140	0	43	60	0	-255	69	444	33	156	498	144
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	280	0	62	206	0	493	99	1051	78	206	1012	291
Arrive On Green	0.15	0.00	0.04	0.11	0.00	0.00	0.05	0.31	0.27	0.11	0.37	0.33
Sat Flow, veh/h	1810	0	1610	1792	1881	0	1810	3402	252	1792	2741	788
Grp Volume(v), veh/h	140	0	43	60	-255	-255	69	235	242	156	324	318
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1792	1881	1599	1810	1805	1849	1792	1787	1742
Q Serve(g_s), s	2.7	0.0	1.0	1.2	0.0	0.0	1.4	3.9	4.0	3.2	5.3	5.4
Cycle Q Clear(g_c), s	2.7	0.0	1.0	1.2	0.0	0.0	1.4	3.9	4.0	3.2	5.3	5.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.14	1.00		0.45
Lane Grp Cap(c), veh/h	280	0	62	206	0	0	99	558	571	206	660	643
V/C Ratio(X)	0.50	0.00	0.69	0.29	0.00	0.00	0.70	0.42	0.42	0.76	0.49	0.50
Avail Cap(c_a), veh/h	526	0	1533	569	0	0	431	1432	1467	1232	2222	2166
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.6	0.0	18.0	15.3	0.0	0.0	17.6	10.4	10.5	16.2	9.2	9.5
Incr Delay (d2), s/veh	1.4	0.0	5.1	0.8	0.0	0.0	3.3	0.2	0.2	2.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.5	0.6	0.0	0.0	0.8	1.9	2.1	1.7	2.6	2.6
LnGrp Delay(d),s/veh	16.0	0.0	23.1	16.1	0.0	0.0	20.9	10.6	10.7	18.4	9.4	9.7
LnGrp LOS	B		C	B			C	B	B	B	A	A
Approach Vol, veh/h		183			-450			546			798	
Approach Delay, s/veh		17.7			-2.1			11.9			11.3	
Approach LOS		B			A			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	8.3	15.7	8.3	5.5	6.1	18.0	9.9	3.9
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	26.0	28.7	10.0	36.0	9.0	45.7	9.0	37.0
Max Q Clear Time (g_c+I1), s	5.2	6.0	3.2	3.0	3.4	7.4	4.7	0.0
Green Ext Time (p_c), s	0.2	4.4	0.0	0.1	0.0	4.7	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.3
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	179	351	403	126	1623	79
Future Volume (veh/h)	179	351	403	126	1623	79
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	211	413	474	148	1909	93
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	220	1801	669	299	2003	922
Arrive On Green	0.12	0.35	0.19	0.19	0.58	0.58
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	211	413	474	148	1909	93
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	13.6	6.6	14.4	9.6	59.4	3.0
Cycle Q Clear(g_c), s	13.6	6.6	14.4	9.6	59.4	3.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	220	1801	669	299	2003	922
V/C Ratio(X)	0.96	0.23	0.71	0.49	0.95	0.10
Avail Cap(c_a), veh/h	220	3137	1599	715	2144	987
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	50.1	26.1	43.7	41.7	22.9	11.0
Incr Delay (d2), s/veh	48.4	0.0	0.5	0.5	9.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	3.1	7.1	4.2	31.1	1.3
LnGrp Delay(d),s/veh	98.5	26.1	44.2	42.2	32.8	11.0
LnGrp LOS	F	C	D	D	C	B
Approach Vol, veh/h		624	622		2002	
Approach Delay, s/veh		50.6	43.7		31.8	
Approach LOS		D	D		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		44.8			19.0	25.8		70.3
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		69.7			13.0	50.7		69.7
Max Q Clear Time (g_c+I1), s		8.6			15.6	16.4		61.4
Green Ext Time (p_c), s		4.1			0.0	4.0		3.6

Intersection Summary	
HCM 2010 Ctrl Delay	37.7
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	9.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	340	110	100	381	80
Future Vol, veh/h	26	340	110	100	381	80
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	28	362	117	106	405	85

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1066	170	0	0	223	0
Stage 1	170	-	-	-	-	-
Stage 2	896	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	248	879	-	-	1358	-
Stage 1	865	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	170	879	-	-	1358	-
Mov Cap-2 Maneuver	170	-	-	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	276	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.2	0	7.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	678	1358	-
HCM Lane V/C Ratio	-	-	0.574	0.298	-
HCM Control Delay (s)	-	-	17.2	8.8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	3.7	1.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	0	858	0	0	0	0	1650	418	198	714	0
Future Volume (veh/h)	251	0	858	0	0	0	0	1650	418	198	714	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	60				0	60	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	285	0	691				0	1875	475	225	811	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	942	0	977				0	2393	330	310	3157	0
Arrive On Green	0.08	0.00	0.08				0.00	0.18	0.17	0.03	0.22	0.00
Sat Flow, veh/h	3442	0	3610				0	4740	1008	3343	5103	0
Grp Volume(v), veh/h	285	0	691				0	1573	777	225	811	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1649	1672	1647	0
Q Serve(g_s), s	7.7	0.0	18.5				0.0	44.8	45.1	6.5	13.2	0.0
Cycle Q Clear(g_c), s	7.7	0.0	18.5				0.0	44.8	45.1	6.5	13.2	0.0
Prop In Lane	1.00		1.00				0.00		0.61	1.00		0.00
Lane Grp Cap(c), veh/h	942	0	977				0	1658	885	310	3157	0
V/C Ratio(X)	0.30	0.00	0.71				0.00	0.95	0.88	0.72	0.26	0.00
Avail Cap(c_a), veh/h	1096	0	1149				0	1834	902	426	3327	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.6	0.0	47.2				0.0	45.3	41.7	49.9	20.8	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.2				0.0	10.2	9.4	2.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	92.6				0.0	74.4	17.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	17.6				0.0	29.6	30.4	3.4	6.6	0.0
LnGrp Delay(d),s/veh	38.7	0.0	141.0				0.0	130.0	68.2	51.9	20.8	0.0
LnGrp LOS	D		F					F	E	D	C	
Approach Vol, veh/h		976						2350			1036	
Approach Delay, s/veh		111.1						109.6			27.6	
Approach LOS		F						F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	13.7	56.7		27.6		70.4		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	12.0	* 53		30.7		48.1		
Max Q Clear Time (g_c+I1), s	8.5	47.1		20.5		15.2		
Green Ext Time (p_c), s	0.3	4.7		1.8		4.0		

Intersection Summary	
HCM 2010 Ctrl Delay	90.4
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	23	21	198	33	239	22	1365	123	164	885	21
Future Volume (veh/h)	27	23	21	198	33	239	22	1365	123	164	885	21
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	31	26	4	225	38	35	25	1551	135	186	1006	23
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	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	1	1	1	2	2	2	2	2	2
Cap, veh/h	66	55	96	272	285	242	43	1860	161	266	2183	50
Arrive On Green	0.07	0.07	0.06	0.15	0.15	0.15	0.02	0.56	0.56	0.08	0.62	0.61
Sat Flow, veh/h	977	819	1531	1792	1881	1596	1774	3297	285	3442	3535	81
Grp Volume(v), veh/h	57	0	4	225	38	35	25	827	859	186	504	525
Grp Sat Flow(s),veh/h/ln	1796	0	1531	1792	1881	1596	1774	1770	1812	1721	1770	1846
Q Serve(g_s), s	3.3	0.0	0.3	13.3	1.9	2.1	1.5	41.7	42.9	5.7	16.6	16.6
Cycle Q Clear(g_c), s	3.3	0.0	0.3	13.3	1.9	2.1	1.5	41.7	42.9	5.7	16.6	16.6
Prop In Lane	0.54		1.00	1.00		1.00	1.00		0.16	1.00		0.04
Lane Grp Cap(c), veh/h	121	0	96	272	285	242	43	998	1022	266	1093	1140
V/C Ratio(X)	0.47	0.00	0.04	0.83	0.13	0.14	0.59	0.83	0.84	0.70	0.46	0.46
Avail Cap(c_a), veh/h	585	0	491	623	654	555	268	1215	1244	521	1215	1268
HCM Platoon Ratio	1.00	1.00	1.00	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	49.0	0.0	48.0	44.9	40.1	40.1	52.7	19.4	19.7	49.1	11.2	11.2
Incr Delay (d2), s/veh	1.0	0.0	0.1	2.5	0.1	0.1	4.7	3.4	3.8	1.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.1	6.8	1.0	0.9	0.8	21.2	22.3	2.8	8.1	8.5
LnGrp Delay(d),s/veh	50.0	0.0	48.1	47.4	40.1	40.2	57.3	22.9	23.5	50.3	11.3	11.3
LnGrp LOS	D		D	D	D	D	E	C	C	D	B	B
Approach Vol, veh/h		61			298			1711			1215	
Approach Delay, s/veh		49.9			45.6			23.7			17.3	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	65.6		10.9	6.1	71.4		20.6
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.0	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	17.3	44.9		5.3	3.5	18.6		15.3
Green Ext Time (p_c), s	0.2	16.1		0.1	0.0	20.9		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	847	205	190	1262	71	344	143	179	64	179	114
Future Volume (veh/h)	47	847	205	190	1262	71	344	143	179	64	179	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	54	974	147	218	1451	29	395	164	61	74	206	116
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	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, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	66	1259	554	251	1627	711	469	610	499	102	276	156
Arrive On Green	0.04	0.35	0.35	0.14	0.46	0.46	0.14	0.32	0.32	0.06	0.25	0.24
Sat Flow, veh/h	1792	3574	1574	1792	3574	1563	3476	1881	1558	1810	1125	633
Grp Volume(v), veh/h	54	974	147	218	1451	29	395	164	61	74	0	322
Grp Sat Flow(s),veh/h/ln	1792	1787	1574	1792	1787	1563	1738	1881	1558	1810	0	1758
Q Serve(g_s), s	3.7	29.6	8.1	14.5	45.4	1.3	13.5	7.9	3.4	4.9	0.0	20.6
Cycle Q Clear(g_c), s	3.7	29.6	8.1	14.5	45.4	1.3	13.5	7.9	3.4	4.9	0.0	20.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	66	1259	554	251	1627	711	469	610	499	102	0	432
V/C Ratio(X)	0.82	0.77	0.27	0.87	0.89	0.04	0.84	0.27	0.12	0.73	0.00	0.75
Avail Cap(c_a), veh/h	66	1298	572	272	1709	747	641	774	635	171	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.3	35.2	28.2	51.4	30.5	18.4	51.5	30.5	29.3	56.6	0.0	42.6
Incr Delay (d2), s/veh	50.1	2.6	0.1	22.1	5.9	0.0	5.6	0.1	0.0	3.7	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	15.1	3.6	8.7	23.7	0.5	6.8	4.1	1.5	2.5	0.0	10.3
LnGrp Delay(d),s/veh	108.4	37.8	28.3	73.5	36.3	18.4	57.0	30.6	29.4	60.3	0.0	45.1
LnGrp LOS	F	D	C	E	D	B	E	C	C	E		D
Approach Vol, veh/h		1175			1698			620			396	
Approach Delay, s/veh		39.8			40.8			47.3			47.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	44.4	20.6	46.7	20.0	34.8	8.0	59.2
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	11.6	49.7	18.0	* 44	22.0	38.7	4.0	* 58
Max Q Clear Time (g_c+I1), s	10.9	9.9	16.5	31.6	15.5	22.6	5.7	47.4
Green Ext Time (p_c), s	0.0	1.8	0.0	8.6	0.4	1.6	0.0	7.6

Intersection Summary	
HCM 2010 Ctrl Delay	42.3
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	677	343	282	934	293	439	367	199	345	558	28
Future Volume (veh/h)	56	677	343	282	934	293	439	367	199	345	558	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	65	787	168	328	1086	177	510	427	212	401	649	31
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	78	1429	302	397	1251	203	564	643	316	468	871	42
Arrive On Green	0.04	0.34	0.34	0.12	0.41	0.41	0.16	0.28	0.28	0.13	0.25	0.25
Sat Flow, veh/h	1792	4209	889	3442	3042	495	3476	2305	1132	3476	3467	165
Grp Volume(v), veh/h	65	639	316	328	630	633	510	330	309	401	334	346
Grp Sat Flow(s),veh/h/ln	1792	1712	1675	1721	1770	1767	1738	1787	1649	1738	1787	1846
Q Serve(g_s), s	4.5	19.1	19.4	11.8	41.1	41.4	18.2	20.6	21.0	14.3	21.7	21.8
Cycle Q Clear(g_c), s	4.5	19.1	19.4	11.8	41.1	41.4	18.2	20.6	21.0	14.3	21.7	21.8
Prop In Lane	1.00		0.53	1.00		0.28	1.00		0.69	1.00		0.09
Lane Grp Cap(c), veh/h	78	1162	568	397	728	727	564	499	460	468	449	464
V/C Ratio(X)	0.83	0.55	0.56	0.83	0.87	0.87	0.90	0.66	0.67	0.86	0.74	0.75
Avail Cap(c_a), veh/h	78	1198	586	532	816	815	564	569	525	537	555	573
HCM Platoon Ratio	1.00	1.00	1.00	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	59.9	33.9	34.0	54.6	34.0	34.1	51.9	40.2	40.5	53.4	43.5	43.6
Incr Delay (d2), s/veh	48.4	0.3	0.6	5.9	8.2	8.5	17.5	1.6	1.9	10.6	3.1	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	3.3	9.1	9.1	5.9	21.8	21.9	10.1	10.4	9.8	7.5	11.2	11.5
LnGrp Delay(d),s/veh	108.4	34.1	34.6	60.5	42.2	42.6	69.5	41.8	42.5	64.0	46.6	46.6
LnGrp LOS	F	C	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1020			1591			1149			1081	
Approach Delay, s/veh		39.0			46.1			54.3			53.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.5	40.0	18.1	47.7	24.0	36.5	9.0	56.7
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.5	39.7	19.0	43.7	20.0	38.7	5.0	57.7
Max Q Clear Time (g_c+I1), s	16.3	23.0	13.8	21.4	20.2	23.8	6.5	43.4
Green Ext Time (p_c), s	0.2	4.5	0.3	10.2	0.0	4.3	0.0	8.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	618	80	53	998	172	217	89	46	391	88	270
Future Volume (veh/h)	221	618	80	53	998	172	217	89	46	391	88	270
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	248	694	79	60	1121	75	244	100	27	439	99	104
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	297	2148	242	87	1759	545	294	359	94	545	432	189
Arrive On Green	0.17	0.46	0.46	0.05	0.35	0.35	0.16	0.13	0.12	0.16	0.12	0.12
Sat Flow, veh/h	1774	4629	522	1774	5085	1576	1792	2805	732	3476	3574	1559
Grp Volume(v), veh/h	248	507	266	60	1121	75	244	62	65	439	99	104
Grp Sat Flow(s),veh/h/ln	1774	1695	1762	1774	1695	1576	1792	1787	1750	1738	1787	1559
Q Serve(g_s), s	11.1	7.7	7.8	2.7	15.2	2.7	10.8	2.6	2.7	10.0	2.1	5.2
Cycle Q Clear(g_c), s	11.1	7.7	7.8	2.7	15.2	2.7	10.8	2.6	2.7	10.0	2.1	5.2
Prop In Lane	1.00		0.30	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	297	1573	817	87	1759	545	294	229	224	545	432	189
V/C Ratio(X)	0.84	0.32	0.33	0.69	0.64	0.14	0.83	0.27	0.29	0.81	0.23	0.55
Avail Cap(c_a), veh/h	400	2250	1169	205	2817	873	425	933	914	698	1736	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	13.9	13.9	38.4	22.5	18.4	33.2	32.4	32.5	33.4	32.6	34.0
Incr Delay (d2), s/veh	8.4	0.0	0.1	3.5	0.1	0.0	6.0	0.2	0.3	4.1	0.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	3.6	3.8	1.4	7.1	1.2	5.8	1.3	1.3	5.1	1.0	2.3
LnGrp Delay(d),s/veh	41.5	13.9	14.0	42.0	22.7	18.5	39.3	32.6	32.8	37.5	32.7	34.9
LnGrp LOS	D	B	B	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1021			1256			371			642	
Approach Delay, s/veh		20.6			23.3			37.0			36.4	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.4	15.3	7.5	42.9	17.0	14.7	17.2	33.2
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.0	42.4	9.0	54.0	19.0	39.4	18.0	45.0
Max Q Clear Time (g_c+I1), s	12.0	4.7	4.7	9.8	12.8	7.2	13.1	17.2
Green Ext Time (p_c), s	0.4	0.9	0.0	10.7	0.2	0.9	0.2	9.7

Intersection Summary	
HCM 2010 Ctrl Delay	26.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1089	515	111	1220	0	0	0	0	447	1	526
Future Volume (veh/h)	0	1089	515	111	1220	0	0	0	0	447	1	526
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1184	225	121	1326	0				487	0	543
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1981	616	168	2629	0				1336	0	596
Arrive On Green	0.00	0.39	0.39	0.09	0.51	0.00				0.38	0.00	0.38
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1184	225	121	1326	0				487	0	543
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	15.8	8.7	5.1	14.6	0.0				8.5	0.0	28.0
Cycle Q Clear(g_c), s	0.0	15.8	8.7	5.1	14.6	0.0				8.5	0.0	28.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1981	616	168	2629	0				1336	0	596
V/C Ratio(X)	0.00	0.60	0.37	0.72	0.50	0.00				0.36	0.00	0.91
Avail Cap(c_a), veh/h	0	2697	839	378	3890	0				2687	0	1199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	21.1	18.9	38.4	13.8	0.0				19.4	0.0	25.5
Incr Delay (d2), s/veh	0.0	0.1	0.1	2.2	0.1	0.0				0.1	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.5	3.8	1.4	6.9	0.0				4.2	0.0	12.6
LnGrp Delay(d),s/veh	0.0	21.2	19.0	40.5	13.9	0.0				19.5	0.0	27.8
LnGrp LOS		C	B	D	B					B		C
Approach Vol, veh/h		1409			1447						1030	
Approach Delay, s/veh		20.9			16.1						23.8	
Approach LOS		C			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	10.9	38.0		37.2		48.9		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	16.6	44.7		64.7		64.7		
Max Q Clear Time (g_c+I1), s	7.1	17.8		30.0		16.6		
Green Ext Time (p_c), s	0.1	14.8		1.9		19.1		

Intersection Summary	
HCM 2010 Ctrl Delay	19.9
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	184	189	277	172	161	119	712	180	149	942	61
Future Volume (veh/h)	122	184	189	277	172	161	119	712	180	149	942	61
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	134	202	186	304	189	159	131	782	185	164	1035	64
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	374	222	205	336	212	179	165	834	197	223	1103	68
Arrive On Green	0.21	0.25	0.24	0.19	0.23	0.22	0.09	0.29	0.29	0.12	0.32	0.32
Sat Flow, veh/h	1792	896	825	1774	925	778	1792	2866	678	1792	3413	211
Grp Volume(v), veh/h	134	0	388	304	0	348	131	488	479	164	542	557
Grp Sat Flow(s),veh/h/ln	1792	0	1721	1774	0	1704	1792	1787	1757	1792	1787	1837
Q Serve(g_s), s	7.2	0.0	24.8	19.0	0.0	22.4	8.1	30.1	30.1	10.0	33.3	33.4
Cycle Q Clear(g_c), s	7.2	0.0	24.8	19.0	0.0	22.4	8.1	30.1	30.1	10.0	33.3	33.4
Prop In Lane	1.00		0.48	1.00		0.46	1.00		0.39	1.00		0.11
Lane Grp Cap(c), veh/h	374	0	427	336	0	391	165	520	511	223	577	594
V/C Ratio(X)	0.36	0.00	0.91	0.90	0.00	0.89	0.79	0.94	0.94	0.74	0.94	0.94
Avail Cap(c_a), veh/h	374	0	518	337	0	588	166	526	517	229	589	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.3	0.0	41.4	44.9	0.0	42.4	50.3	39.1	39.2	47.8	37.2	37.2
Incr Delay (d2), s/veh	0.2	0.0	16.1	25.8	0.0	8.0	20.8	24.2	24.5	9.9	22.4	22.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	13.7	11.7	0.0	11.4	5.0	18.4	18.1	5.6	20.0	20.5
LnGrp Delay(d),s/veh	38.5	0.0	57.5	70.6	0.0	50.4	71.1	63.3	63.7	57.6	59.6	59.3
LnGrp LOS	D		E	E		D	E	E	E	E	E	E
Approach Vol, veh/h		522			652			1098			1263	
Approach Delay, s/veh		52.6			59.8			64.4			59.2	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	32.9	13.9	41.4	27.1	30.8	17.6	37.7
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	21.0	33.6	10.0	36.8	16.0	38.6	14.0	32.8
Max Q Clear Time (g_c+I1), s	11.0	26.8	10.1	35.4	9.2	24.4	12.0	32.1
Green Ext Time (p_c), s	0.0	0.8	0.0	0.7	0.4	1.1	0.1	0.3

Intersection Summary		
HCM 2010 Ctrl Delay	60.0	
HCM 2010 LOS	E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	0	32	8	0	59	9	834	43	319	1061	53
Future Volume (veh/h)	158	0	32	8	0	59	9	834	43	319	1061	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1880	1900
Adj Flow Rate, veh/h	172	0	35	9	0	8	10	959	20	367	1220	58
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.87	0.92	0.87	0.92	0.87	0.87	0.87	0.87	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	170	0	147	33	0	13	22	1365	595	423	1983	94
Arrive On Green	0.10	0.00	0.09	0.02	0.00	0.02	0.01	0.38	0.38	0.24	0.57	0.56
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1557	1792	3473	165
Grp Volume(v), veh/h	172	0	35	9	0	8	10	959	20	367	627	651
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1557	1792	1786	1851
Q Serve(g_s), s	7.0	0.0	1.5	0.4	0.0	0.4	0.4	16.6	0.6	14.4	16.9	17.0
Cycle Q Clear(g_c), s	7.0	0.0	1.5	0.4	0.0	0.4	0.4	16.6	0.6	14.4	16.9	17.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	170	0	147	33	0	13	22	1365	595	423	1020	1057
V/C Ratio(X)	1.01	0.00	0.24	0.27	0.00	0.60	0.45	0.70	0.03	0.87	0.61	0.62
Avail Cap(c_a), veh/h	170	0	737	136	0	752	121	1723	751	626	1301	1349
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.0	0.0	30.7	35.4	0.0	35.8	35.8	19.1	14.1	26.8	10.3	10.4
Incr Delay (d2), s/veh	72.0	0.0	0.8	4.3	0.0	15.3	13.4	0.6	0.0	6.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.0	0.7	0.2	0.0	0.2	0.3	8.2	0.3	7.7	8.3	8.6
LnGrp Delay(d),s/veh	105.1	0.0	31.6	39.7	0.0	51.1	49.3	19.6	14.1	32.9	10.6	10.6
LnGrp LOS	F		C	D		D	D	B	B	C	B	B
Approach Vol, veh/h		207			17			989			1645	
Approach Delay, s/veh		92.7			45.1			19.8			15.6	
Approach LOS		F			D			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	20.7	32.7	6.8	12.8	6.9	46.5	13.0	6.6
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	25.0	34.7	5.0	34.0	5.0	52.7	7.0	* 34
Max Q Clear Time (g_c+I1), s	16.4	18.6	2.4	3.5	2.4	19.0	9.0	2.4
Green Ext Time (p_c), s	0.4	8.8	0.0	0.2	0.0	12.3	0.0	0.2

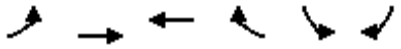
Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	0	48	29	0	314	24	465	44	366	483	54
Future Volume (veh/h)	112	0	48	29	0	314	24	465	44	366	483	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)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	138	0	59	36	0	53	30	574	54	452	596	67
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	191	0	185	82	0	88	62	888	83	520	1695	190
Arrive On Green	0.11	0.00	0.11	0.05	0.00	0.06	0.03	0.27	0.26	0.29	0.52	0.51
Sat Flow, veh/h	1810	0	1610	1792	0	1592	1810	3329	312	1792	3241	364
Grp Volume(v), veh/h	138	0	59	36	0	53	30	311	317	452	328	335
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1792	0	1592	1810	1805	1837	1792	1787	1817
Q Serve(g_s), s	4.5	0.0	2.1	1.2	0.0	2.0	1.0	9.3	9.4	14.7	6.6	6.6
Cycle Q Clear(g_c), s	4.5	0.0	2.1	1.2	0.0	2.0	1.0	9.3	9.4	14.7	6.6	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		0.20
Lane Grp Cap(c), veh/h	191	0	185	82	0	88	62	482	490	520	935	950
V/C Ratio(X)	0.72	0.00	0.32	0.44	0.00	0.60	0.48	0.64	0.65	0.87	0.35	0.35
Avail Cap(c_a), veh/h	280	0	933	278	0	922	162	771	785	921	1522	1547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	0.0	25.2	28.5	0.0	28.3	29.1	19.9	20.0	20.6	8.5	8.6
Incr Delay (d2), s/veh	5.1	0.0	0.4	3.7	0.0	2.5	2.2	0.5	0.5	1.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.9	0.7	0.0	0.9	0.5	4.7	4.8	7.4	3.2	3.3
LnGrp Delay(d),s/veh	31.6	0.0	25.5	32.2	0.0	30.8	31.2	20.4	20.5	22.4	8.6	8.7
LnGrp LOS	C		C	C		C	C	C	C	C	A	A
Approach Vol, veh/h		197			89			658			1115	
Approach Delay, s/veh		29.8			31.4			21.0			14.2	
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	21.3	21.2	8.3	10.6	5.6	36.9	12.0	6.9
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	31.0	25.7	9.0	35.0	5.0	51.7	9.0	35.0
Max Q Clear Time (g_c+I1), s	16.7	11.4	3.2	4.1	3.0	8.6	6.5	4.0
Green Ext Time (p_c), s	0.6	4.5	0.0	0.4	0.0	5.5	0.1	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	221	402	158	139	970	32
Future Volume (veh/h)	221	402	158	139	970	32
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	260	473	186	164	1141	38
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	328	2295	623	292	1328	598
Arrive On Green	0.18	0.45	0.18	0.18	0.38	0.37
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	260	473	186	164	1141	38
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	8.5	3.4	2.8	5.7	18.3	0.9
Cycle Q Clear(g_c), s	8.5	3.4	2.8	5.7	18.3	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	328	2295	623	292	1328	598
V/C Ratio(X)	0.79	0.21	0.30	0.56	0.86	0.06
Avail Cap(c_a), veh/h	482	5875	2806	1268	2280	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	10.1	21.7	22.5	17.2	12.2
Incr Delay (d2), s/veh	5.5	0.0	0.1	0.6	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	1.6	1.4	2.6	8.8	0.4
LnGrp Delay(d),s/veh	29.1	10.1	21.8	23.2	17.9	12.2
LnGrp LOS	C	B	C	C	B	B
Approach Vol, veh/h		733	350		1179	
Approach Delay, s/veh		16.8	22.5		17.7	
Approach LOS		B	C		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		32.7			16.7	16.0		28.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		70.1			16.0	48.1		39.3
Max Q Clear Time (g_c+I1), s		5.4			10.5	7.7		20.3
Green Ext Time (p_c), s		3.0			0.3	3.0		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	78

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	104	476	46	39	446	126
Future Vol, veh/h	104	476	46	39	446	126
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	111	506	49	41	474	134

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1153	70	0	0	90	0
Stage 1	70	-	-	-	-	-
Stage 2	1083	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	220	998	-	-	1518	-
Stage 1	958	-	-	-	-	-
Stage 2	328	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	146	998	-	-	1518	-
Mov Cap-2 Maneuver	146	-	-	-	-	-
Stage 1	958	-	-	-	-	-
Stage 2	217	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	159.8	0	6.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	488	1518	-
HCM Lane V/C Ratio	-	-	1.264	0.313	-
HCM Control Delay (s)	-	-	159.8	8.4	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	25.3	1.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	327	0	1476	0	0	0	0	1386	440	488	1161	0
Future Volume (veh/h)	327	0	1476	0	0	0	0	1386	440	488	1161	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	20				0	20	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	372	0	1393				0	1575	500	555	1319	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88				0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1162	0	1202				0	1936	334	621	3042	0
Arrive On Green	0.11	0.00	0.11				0.00	0.13	0.13	0.06	0.20	0.00
Sat Flow, veh/h	3442	0	3610				0	4509	1194	3343	5103	0
Grp Volume(v), veh/h	372	0	1393				0	1403	672	555	1319	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1605	1672	1647	0
Q Serve(g_s), s	17.1	0.0	57.2				0.0	69.0	69.0	28.3	40.1	0.0
Cycle Q Clear(g_c), s	17.1	0.0	57.2				0.0	69.0	69.0	28.3	40.1	0.0
Prop In Lane	1.00		1.00				0.00		0.74	1.00		0.00
Lane Grp Cap(c), veh/h	1162	0	1202				0	1347	676	621	3042	0
V/C Ratio(X)	0.32	0.00	1.16				0.00	1.04	0.99	0.89	0.43	0.00
Avail Cap(c_a), veh/h	1162	0	1202				0	1347	645	798	3042	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.2	0.0	76.5				0.0	74.5	74.6	79.0	42.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	81.2				0.0	36.1	33.2	9.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	50.0				0.0	37.6	23.9	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	0.0	34.8				0.0	30.9	42.9	13.9	18.3	0.0
LnGrp Delay(d),s/veh	58.2	0.0	207.6				0.0	148.3	131.6	88.0	42.3	0.0
LnGrp LOS	E		F					F	F	F	D	
Approach Vol, veh/h		1765						2075			1874	
Approach Delay, s/veh		176.1						142.9			55.8	
Approach LOS		F						F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	36.8	73.0		62.0		109.8		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	41.0	* 68		56.7		60.1		
Max Q Clear Time (g_c+I1), s	30.3	71.0		59.2		42.1		
Green Ext Time (p_c), s	1.6	0.0		0.0		7.0		

Intersection Summary	
HCM 2010 Ctrl Delay	124.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	47	60	166	33	127	58	941	144	201	1259	25
Future Volume (veh/h)	57	47	60	166	33	127	58	941	144	201	1259	25
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	53	48	189	38	-93	66	1069	159	228	1431	27
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	2	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	1	1	1	2	2	2	2	2	2
Cap, veh/h	105	85	163	238	250	213	85	1553	231	305	1929	36
Arrive On Green	0.11	0.11	0.11	0.13	0.13	0.00	0.05	0.50	0.50	0.09	0.54	0.54
Sat Flow, veh/h	989	806	1546	1792	1881	1599	1774	3091	459	3442	3552	67
Grp Volume(v), veh/h	118	0	48	189	38	-93	66	611	617	228	712	746
Grp Sat Flow(s),veh/h/ln	1795	0	1546	1792	1881	1599	1774	1770	1780	1721	1770	1849
Q Serve(g_s), s	5.9	0.0	2.7	9.6	1.7	0.0	3.5	24.7	24.8	6.1	28.9	29.0
Cycle Q Clear(g_c), s	5.9	0.0	2.7	9.6	1.7	0.0	3.5	24.7	24.8	6.1	28.9	29.0
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.26	1.00		0.04
Lane Grp Cap(c), veh/h	190	0	163	238	250	213	85	889	895	305	961	1004
V/C Ratio(X)	0.62	0.00	0.29	0.79	0.15	-0.44	0.77	0.69	0.69	0.75	0.74	0.74
Avail Cap(c_a), veh/h	668	0	575	724	760	646	302	1412	1420	586	1412	1475
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	0.0	38.8	39.5	36.1	0.0	44.3	17.8	17.9	41.8	16.4	16.5
Incr Delay (d2), s/veh	1.2	0.0	0.4	2.3	0.1	0.0	5.5	0.4	0.4	1.4	0.5	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	3.0	0.0	1.2	4.9	0.9	0.0	1.8	12.0	12.3	2.9	14.2	14.8
LnGrp Delay(d),s/veh	41.5	0.0	39.2	41.8	36.2	0.0	49.8	18.1	18.2	43.2	16.9	16.9
LnGrp LOS	D		D	D	D		D	B	B	D	B	B
Approach Vol, veh/h		166			134			1294			1686	
Approach Delay, s/veh		40.8			69.2			19.8			20.5	
Approach LOS		D			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.3	51.3		13.9	8.5	55.1		16.5
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	16.6	74.4		35.0	16.0	74.4		37.4
Max Q Clear Time (g_c+I1), s	11.1	26.8		7.9	5.5	31.0		11.6
Green Ext Time (p_c), s	0.3	19.8		0.4	0.0	19.2		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	1324	295	109	927	40	220	56	87	49	32	80
Future Volume (veh/h)	107	1324	295	109	927	40	220	56	87	49	32	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		0.99	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	123	1522	250	125	1066	-7	253	64	-45	56	37	77
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	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, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	150	1740	767	152	1744	780	317	462	392	73	103	215
Arrive On Green	0.08	0.49	0.49	0.08	0.49	0.00	0.09	0.25	0.00	0.04	0.19	0.18
Sat Flow, veh/h	1792	3574	1575	1792	3574	1599	3476	1881	1599	1810	532	1107
Grp Volume(v), veh/h	123	1522	250	125	1066	-7	253	64	-45	56	0	114
Grp Sat Flow(s),veh/h/ln	1792	1787	1575	1792	1787	1599	1738	1881	1599	1810	0	1639
Q Serve(g_s), s	7.6	42.7	10.8	7.7	24.4	0.0	8.0	3.0	0.0	3.4	0.0	6.8
Cycle Q Clear(g_c), s	7.6	42.7	10.8	7.7	24.4	0.0	8.0	3.0	0.0	3.4	0.0	6.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.68
Lane Grp Cap(c), veh/h	150	1740	767	152	1744	780	317	462	392	73	0	319
V/C Ratio(X)	0.82	0.87	0.33	0.82	0.61	-0.01	0.80	0.14	-0.11	0.77	0.00	0.36
Avail Cap(c_a), veh/h	208	1850	815	176	1786	799	496	772	656	145	0	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.5	25.7	17.5	50.5	20.9	0.0	49.9	33.0	0.0	53.3	0.0	39.5
Incr Delay (d2), s/veh	11.8	4.5	0.1	20.4	0.4	0.0	2.2	0.1	0.0	6.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	22.0	4.7	4.7	12.1	0.0	3.9	1.6	0.0	1.9	0.0	3.1
LnGrp Delay(d),s/veh	62.3	30.2	17.6	70.9	21.4	0.0	52.1	33.1	0.0	59.6	0.0	39.8
LnGrp LOS	E	C	B	E	C		D	C		E		D
Approach Vol, veh/h		1895			1184			272			170	
Approach Delay, s/veh		30.6			26.7			56.2			46.3	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	31.5	13.5	58.6	14.2	25.8	13.4	58.7
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	9.6	44.7	11.0	* 58	16.0	37.7	13.0	* 56
Max Q Clear Time (g_c+I1), s	5.4	5.0	9.7	44.7	10.0	8.8	9.6	26.4
Green Ext Time (p_c), s	0.0	0.6	0.0	9.7	0.2	0.6	0.0	16.7

Intersection Summary	
HCM 2010 Ctrl Delay	32.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	876	434	347	715	234	306	369	288	352	353	53
Future Volume (veh/h)	77	876	434	347	715	234	306	369	288	352	353	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	90	1019	274	403	831	108	356	429	316	409	410	60
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	113	1295	348	457	1242	161	415	539	394	469	911	132
Arrive On Green	0.06	0.33	0.33	0.13	0.39	0.39	0.12	0.28	0.27	0.13	0.29	0.28
Sat Flow, veh/h	1792	3985	1070	3442	3145	409	3476	1950	1425	3476	3120	453
Grp Volume(v), veh/h	90	875	418	403	468	471	356	393	352	409	234	236
Grp Sat Flow(s),veh/h/ln	1792	1712	1631	1721	1770	1784	1738	1787	1589	1738	1787	1785
Q Serve(g_s), s	6.1	28.4	28.5	14.1	26.6	26.6	12.3	25.0	25.3	14.1	13.0	13.3
Cycle Q Clear(g_c), s	6.1	28.4	28.5	14.1	26.6	26.6	12.3	25.0	25.3	14.1	13.0	13.3
Prop In Lane	1.00		0.66	1.00		0.23	1.00		0.90	1.00		0.25
Lane Grp Cap(c), veh/h	113	1113	530	457	699	704	415	494	439	469	522	521
V/C Ratio(X)	0.80	0.79	0.79	0.88	0.67	0.67	0.86	0.79	0.80	0.87	0.45	0.45
Avail Cap(c_a), veh/h	161	1286	613	506	766	772	539	569	506	596	598	598
HCM Platoon Ratio	1.00	1.00	1.00	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	56.6	37.5	37.5	52.1	30.5	30.5	52.9	41.1	41.7	51.9	35.3	35.5
Incr Delay (d2), s/veh	10.6	2.4	5.0	14.4	1.5	1.5	8.6	5.7	6.8	9.5	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	13.7	13.5	7.6	13.3	13.4	6.4	13.1	11.9	7.4	6.5	6.6
LnGrp Delay(d),s/veh	67.3	39.9	42.5	66.6	31.9	31.9	61.5	46.8	48.5	61.5	35.5	35.7
LnGrp LOS	E	D	D	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1383			1342			1101			879	
Approach Delay, s/veh		42.4			42.3			52.1			47.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.5	37.9	20.3	43.8	18.6	39.8	11.7	52.4
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	21.6	37.7	18.0	44.7	19.0	39.7	11.0	51.7
Max Q Clear Time (g_c+I1), s	16.1	27.3	16.1	30.5	14.3	15.3	8.1	28.6
Green Ext Time (p_c), s	0.4	3.5	0.2	8.0	0.3	4.6	0.0	10.4

Intersection Summary	
HCM 2010 Ctrl Delay	45.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	914	180	143	1113	264	147	83	37	487	140	177
Future Volume (veh/h)	215	914	180	143	1113	264	147	83	37	487	140	177
Number	7	4	14	3	8	18	5	2	12	1	6	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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	242	1027	191	161	1251	179	165	93	17	547	157	0
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	277	1882	349	195	1993	618	201	292	52	622	583	261
Arrive On Green	0.16	0.44	0.44	0.11	0.39	0.39	0.11	0.10	0.08	0.18	0.16	0.00
Sat Flow, veh/h	1774	4300	798	1774	5085	1577	1792	3030	541	3476	3574	1599
Grp Volume(v), veh/h	242	809	409	161	1251	179	165	54	56	547	157	0
Grp Sat Flow(s),veh/h/ln	1774	1695	1708	1774	1695	1577	1792	1787	1783	1738	1787	1599
Q Serve(g_s), s	12.1	15.9	16.0	8.0	17.9	7.0	8.1	2.5	2.7	13.9	3.5	0.0
Cycle Q Clear(g_c), s	12.1	15.9	16.0	8.0	17.9	7.0	8.1	2.5	2.7	13.9	3.5	0.0
Prop In Lane	1.00		0.47	1.00		1.00	1.00		0.30	1.00		1.00
Lane Grp Cap(c), veh/h	277	1484	748	195	1993	618	201	172	172	622	583	261
V/C Ratio(X)	0.88	0.55	0.55	0.82	0.63	0.29	0.82	0.31	0.33	0.88	0.27	0.00
Avail Cap(c_a), veh/h	314	1736	875	314	2604	808	416	864	862	692	1609	720
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00
Uniform Delay (d), s/veh	37.3	18.8	18.8	39.4	22.2	18.9	39.3	38.1	38.3	36.2	33.1	0.0
Incr Delay (d2), s/veh	19.6	0.1	0.2	4.3	0.1	0.1	3.2	0.4	0.4	10.8	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	7.4	7.4	7.5	4.2	8.4	3.0	4.2	1.3	1.3	7.5	1.7	0.0
LnGrp Delay(d),s/veh	56.8	18.9	19.0	43.6	22.3	18.9	42.5	38.4	38.7	47.0	33.2	0.0
LnGrp LOS	E	B	B	D	C	B	D	D	D	D	C	
Approach Vol, veh/h		1460			1591			275			704	
Approach Delay, s/veh		25.2			24.1			40.9			43.9	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.2	12.7	13.9	43.6	14.1	18.8	18.1	39.4
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.2	42.4	16.0	45.0	21.0	39.4	16.0	45.0
Max Q Clear Time (g_c+I1), s	15.9	4.7	10.0	18.0	10.1	5.5	14.1	19.9
Green Ext Time (p_c), s	0.3	0.9	0.1	14.0	0.1	0.9	0.1	13.5

Intersection Summary		
HCM 2010 Ctrl Delay	29.1	
HCM 2010 LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1629	509	213	1802	0	0	0	0	741	7	857
Future Volume (veh/h)	0	1629	509	213	1802	0	0	0	0	741	7	857
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1771	218	232	1959	0				811	0	903
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1669	519	213	2397	0				1656	0	739
Arrive On Green	0.00	0.32	0.32	0.11	0.47	0.00				0.47	0.00	0.47
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1771	218	232	1959	0				811	0	903
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	39.0	12.8	13.0	39.5	0.0				19.0	0.0	56.0
Cycle Q Clear(g_c), s	0.0	39.0	12.8	13.0	39.5	0.0				19.0	0.0	56.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1669	519	213	2397	0				1656	0	739
V/C Ratio(X)	0.00	1.06	0.42	1.09	0.82	0.00				0.49	0.00	1.22
Avail Cap(c_a), veh/h	0	1669	519	213	2397	0				1656	0	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	40.5	31.7	53.5	27.6	0.0				22.1	0.0	32.0
Incr Delay (d2), s/veh	0.0	40.3	0.2	86.6	2.2	0.0				0.1	0.0	111.9
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	0.0	24.6	5.7	6.1	19.0	0.0				9.3	0.0	47.4
LnGrp Delay(d),s/veh	0.0	80.8	31.9	140.1	29.8	0.0				22.2	0.0	143.9
LnGrp LOS		F	C	F	C					C		F
Approach Vol, veh/h		1989			2191						1714	
Approach Delay, s/veh		75.4			41.4						86.3	
Approach LOS		E			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	17.0	43.0		60.0		60.0		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	13.0	37.7		54.7		54.7		
Max Q Clear Time (g_c+I1), s	15.0	41.0		58.0		41.5		
Green Ext Time (p_c), s	0.0	0.0		0.0		11.9		

Intersection Summary	
HCM 2010 Ctrl Delay	66.0
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	122	98	81	105	106	142	645	232	313	713	90
Future Volume (veh/h)	67	122	98	81	105	106	142	645	232	313	713	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		0.98	1.00		0.97	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	134	86	89	115	98	156	709	242	344	784	96
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	95	180	115	114	165	141	194	909	310	388	1458	178
Arrive On Green	0.05	0.17	0.17	0.06	0.18	0.18	0.11	0.35	0.33	0.22	0.46	0.44
Sat Flow, veh/h	1792	1064	683	1774	918	782	1792	2614	892	1792	3197	391
Grp Volume(v), veh/h	74	0	220	89	0	213	156	485	466	344	438	442
Grp Sat Flow(s),veh/h/ln	1792	0	1747	1774	0	1700	1792	1787	1719	1792	1787	1801
Q Serve(g_s), s	3.2	0.0	9.5	3.9	0.0	9.3	6.7	19.2	19.3	14.7	14.0	14.0
Cycle Q Clear(g_c), s	3.2	0.0	9.5	3.9	0.0	9.3	6.7	19.2	19.3	14.7	14.0	14.0
Prop In Lane	1.00		0.39	1.00		0.46	1.00		0.52	1.00		0.22
Lane Grp Cap(c), veh/h	95	0	295	114	0	306	194	622	598	388	815	821
V/C Ratio(X)	0.78	0.00	0.74	0.78	0.00	0.70	0.80	0.78	0.78	0.89	0.54	0.54
Avail Cap(c_a), veh/h	181	0	751	179	0	731	408	723	696	680	994	1002
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	0.0	31.2	36.4	0.0	30.4	34.4	23.1	23.4	30.0	15.5	15.6
Incr Delay (d2), s/veh	5.0	0.0	1.4	4.3	0.0	1.1	3.0	3.9	4.0	3.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	4.7	2.0	0.0	4.5	3.5	10.1	9.8	7.6	6.9	6.9
LnGrp Delay(d),s/veh	42.0	0.0	32.6	40.8	0.0	31.5	37.4	27.0	27.4	33.2	15.7	15.8
LnGrp LOS	D		C	D		C	D	C	C	C	B	B
Approach Vol, veh/h		294			302			1107			1224	
Approach Delay, s/veh		35.0			34.2			28.6			20.7	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.1	31.5	9.1	17.4	12.6	40.1	8.2	18.2
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	30.6	30.7	8.0	34.0	18.0	42.7	8.0	34.0
Max Q Clear Time (g_c+I1), s	16.7	21.3	5.9	11.5	8.7	16.0	5.2	11.3
Green Ext Time (p_c), s	0.4	4.9	0.0	1.5	0.1	7.9	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	26.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	0	21	39	0	256	29	726	18	67	642	176
Future Volume (veh/h)	110	0	21	39	0	256	29	726	18	67	642	176
Number	7	4	14	3	8	18	5	2	12	1	6	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	1900	1900	1900	1863	1881	1881	1881	1877	1900
Adj Flow Rate, veh/h	120	0	23	45	0	234	32	834	-8	77	738	191
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.87	0.92	0.87	0.92	0.87	0.87	0.87	0.87	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	201	0	399	76	0	291	92	1402	627	99	1083	280
Arrive On Green	0.11	0.00	0.22	0.04	0.00	0.18	0.05	0.39	0.00	0.06	0.39	0.37
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1599	1792	2806	726
Grp Volume(v), veh/h	120	0	23	45	0	234	32	834	-8	77	469	460
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1599	1792	1783	1749
Q Serve(g_s), s	4.5	0.0	0.8	1.7	0.0	9.7	1.2	12.9	0.0	3.0	15.2	15.3
Cycle Q Clear(g_c), s	4.5	0.0	0.8	1.7	0.0	9.7	1.2	12.9	0.0	3.0	15.2	15.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	201	0	399	76	0	291	92	1402	627	99	688	675
V/C Ratio(X)	0.60	0.00	0.06	0.60	0.00	0.80	0.35	0.59	-0.01	0.77	0.68	0.68
Avail Cap(c_a), veh/h	281	0	774	312	0	859	212	2261	1011	309	1205	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	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	20.5	32.8	0.0	27.4	31.8	16.8	0.0	32.4	17.8	18.0
Incr Delay (d2), s/veh	2.8	0.0	0.1	7.3	0.0	2.0	2.2	0.2	0.0	4.8	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.4	1.0	0.0	4.5	0.7	6.3	0.0	1.6	7.5	7.4
LnGrp Delay(d),s/veh	32.1	0.0	20.6	40.0	0.0	29.4	34.1	16.9	0.0	37.2	18.2	18.5
LnGrp LOS	C		C	D		C	C	B		D	B	B
Approach Vol, veh/h		143			279			858			1006	
Approach Delay, s/veh		30.3			31.1			17.7			19.8	
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	7.9	31.3	8.9	21.5	8.3	30.8	11.9	18.5
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	12.0	42.7	12.0	32.0	7.0	45.7	9.0	* 37
Max Q Clear Time (g_c+I1), s	5.0	14.9	3.7	2.8	3.2	17.3	6.5	11.7
Green Ext Time (p_c), s	0.0	8.2	0.0	1.0	0.0	8.2	0.1	1.0

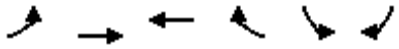
Intersection Summary	
HCM 2010 Ctrl Delay	21.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	0	45	49	0	65	73	373	27	126	411	171
Future Volume (veh/h)	126	0	45	49	0	65	73	373	27	126	411	171
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	156	0	56	60	0	-255	90	460	33	156	507	211
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	288	0	75	199	0	493	114	1118	80	205	935	387
Arrive On Green	0.16	0.00	0.05	0.11	0.00	0.00	0.06	0.33	0.30	0.11	0.38	0.35
Sat Flow, veh/h	1810	0	1610	1792	1881	0	1810	3412	244	1792	2466	1022
Grp Volume(v), veh/h	156	0	56	60	-255	-255	90	243	250	156	367	351
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1792	1881	1599	1810	1805	1851	1792	1787	1701
Q Serve(g_s), s	3.2	0.0	1.4	1.2	0.0	0.0	2.0	4.2	4.2	3.4	6.4	6.6
Cycle Q Clear(g_c), s	3.2	0.0	1.4	1.2	0.0	0.0	2.0	4.2	4.2	3.4	6.4	6.6
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.13	1.00		0.60
Lane Grp Cap(c), veh/h	288	0	75	199	0	0	114	592	607	205	678	645
V/C Ratio(X)	0.54	0.00	0.75	0.30	0.00	0.00	0.79	0.41	0.41	0.76	0.54	0.54
Avail Cap(c_a), veh/h	498	0	1451	538	0	0	408	1355	1389	1166	2102	2001
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	18.8	16.3	0.0	0.0	18.5	10.4	10.5	17.2	9.7	10.0
Incr Delay (d2), s/veh	1.6	0.0	5.6	0.8	0.0	0.0	4.4	0.2	0.2	2.2	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.7	0.6	0.0	0.0	1.1	2.0	2.1	1.8	3.2	3.1
LnGrp Delay(d),s/veh	17.0	0.0	24.4	17.2	0.0	0.0	22.9	10.6	10.7	19.3	9.9	10.3
LnGrp LOS	B		C	B			C	B	B	B	A	B
Approach Vol, veh/h		212			-450			583			874	
Approach Delay, s/veh		19.0			-2.3			12.5			11.8	
Approach LOS		B			A			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	8.6	17.1	8.4	5.9	6.5	19.1	10.4	3.9
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	26.0	28.7	10.0	36.0	9.0	45.7	9.0	37.0
Max Q Clear Time (g_c+I1), s	5.4	6.2	3.2	3.4	4.0	8.6	5.2	0.0
Green Ext Time (p_c), s	0.2	4.9	0.0	0.2	0.0	5.3	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	179	367	403	137	1623	79
Future Volume (veh/h)	179	367	403	137	1623	79
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	211	432	474	161	1909	93
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	220	1803	672	301	2002	921
Arrive On Green	0.12	0.35	0.19	0.19	0.58	0.58
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	211	432	474	161	1909	93
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	13.6	6.9	14.5	10.6	59.6	3.0
Cycle Q Clear(g_c), s	13.6	6.9	14.5	10.6	59.6	3.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	220	1803	672	301	2002	921
V/C Ratio(X)	0.96	0.24	0.71	0.54	0.95	0.10
Avail Cap(c_a), veh/h	220	3130	1595	714	2139	984
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	50.2	26.3	43.7	42.1	23.0	11.0
Incr Delay (d2), s/veh	49.1	0.0	0.5	0.6	10.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	3.2	7.1	4.7	31.1	1.3
LnGrp Delay(d),s/veh	99.4	26.3	44.2	42.7	33.0	11.0
LnGrp LOS	F	C	D	D	C	B
Approach Vol, veh/h		643	635		2002	
Approach Delay, s/veh		50.3	43.8		32.0	
Approach LOS		D	D		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		44.9			19.0	25.9		70.5
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		69.7			13.0	50.7		69.7
Max Q Clear Time (g_c+I1), s		8.9			15.6	16.5		61.6
Green Ext Time (p_c), s		4.2			0.0	4.1		3.6

Intersection Summary	
HCM 2010 Ctrl Delay	37.8
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	10

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	367	113	100	397	82
Future Vol, veh/h	26	367	113	100	397	82
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	28	390	120	106	422	87

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1105	173	0	0	227	0
Stage 1	173	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	235	876	-	-	1353	-
Stage 1	862	-	-	-	-	-
Stage 2	386	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	158	876	-	-	1353	-
Mov Cap-2 Maneuver	158	-	-	-	-	-
Stage 1	862	-	-	-	-	-
Stage 2	259	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.7	0	7.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	674	1353	-
HCM Lane V/C Ratio	-	-	0.62	0.312	-
HCM Control Delay (s)	-	-	18.7	8.9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	4.3	1.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	0	1131	0	0	0	0	1830	416	210	972	0
Future Volume (veh/h)	230	0	1131	0	0	0	0	1830	416	210	972	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	60				0	60	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	250	0	957				0	1989	452	228	1057	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	772	0	805				0	2591	403	311	3411	0
Arrive On Green	0.07	0.00	0.07				0.00	0.18	0.18	0.03	0.23	0.00
Sat Flow, veh/h	3442	0	3610				0	4840	925	3343	5103	0
Grp Volume(v), veh/h	250	0	957				0	1627	814	228	1057	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1667	1672	1647	0
Q Serve(g_s), s	7.4	0.0	24.2				0.0	50.4	50.8	7.2	19.0	0.0
Cycle Q Clear(g_c), s	7.4	0.0	24.2				0.0	50.4	50.8	7.2	19.0	0.0
Prop In Lane	1.00		1.00				0.00		0.56	1.00		0.00
Lane Grp Cap(c), veh/h	772	0	805				0	1868	948	311	3411	0
V/C Ratio(X)	0.32	0.00	1.19				0.00	0.87	0.86	0.73	0.31	0.00
Avail Cap(c_a), veh/h	780	0	818				0	1903	946	391	3394	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.2	0.0	50.2				0.0	43.1	41.6	51.0	20.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	97.0				0.0	4.4	7.7	3.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	192.1				0.0	32.4	12.8	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	35.3				0.0	24.3	31.0	3.5	8.8	0.0
LnGrp Delay(d),s/veh	42.3	0.0	339.4				0.0	80.0	62.1	54.6	20.3	0.0
LnGrp LOS	D		F					E	E	D	C	
Approach Vol, veh/h		1207						2441			1285	
Approach Delay, s/veh		277.8						74.0			26.4	
Approach LOS		F						E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.4	63.4		29.0		77.8		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	12.0	* 60		23.7		50.1		
Max Q Clear Time (g_c+I1), s	9.2	52.8		26.2		21.0		
Green Ext Time (p_c), s	0.3	5.7		0.0		5.4		

Intersection Summary	
HCM 2010 Ctrl Delay	111.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	30	30	200	40	250	40	1889	200	190	874	30
Future Volume (veh/h)	40	30	30	200	40	250	40	1889	200	190	874	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		0.98	1.00		1.00	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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	33	13	217	43	45	43	2053	213	207	950	32
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	78	60	113	254	267	226	62	1977	202	212	2222	75
Arrive On Green	0.08	0.08	0.07	0.14	0.14	0.14	0.03	0.61	0.61	0.06	0.64	0.63
Sat Flow, veh/h	1015	779	1536	1792	1881	1596	1774	3242	331	3442	3491	118
Grp Volume(v), veh/h	76	0	13	217	43	45	43	1104	1162	207	482	500
Grp Sat Flow(s),veh/h/ln	1794	0	1536	1792	1881	1596	1774	1770	1803	1721	1770	1839
Q Serve(g_s), s	5.6	0.0	1.1	16.4	2.8	3.4	3.3	84.3	84.3	8.3	18.8	18.8
Cycle Q Clear(g_c), s	5.6	0.0	1.1	16.4	2.8	3.4	3.3	84.3	84.3	8.3	18.8	18.8
Prop In Lane	0.57		1.00	1.00		1.00	1.00		0.18	1.00		0.06
Lane Grp Cap(c), veh/h	138	0	113	254	267	226	62	1079	1099	212	1126	1170
V/C Ratio(X)	0.55	0.00	0.12	0.85	0.16	0.20	0.70	1.02	1.06	0.98	0.43	0.43
Avail Cap(c_a), veh/h	461	0	389	473	497	421	122	1079	1099	212	1126	1170
HCM Platoon Ratio	1.00	1.00	1.00	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	61.5	0.0	59.9	57.9	52.1	52.4	66.0	27.0	27.0	64.8	12.6	12.6
Incr Delay (d2), s/veh	1.3	0.0	0.2	3.2	0.1	0.2	5.2	33.4	43.5	55.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.5	8.3	1.5	1.5	1.7	50.8	54.8	5.6	9.1	9.5
LnGrp Delay(d),s/veh	62.8	0.0	60.0	61.1	52.2	52.5	71.2	60.4	70.5	120.1	12.7	12.7
LnGrp LOS	E		E	E	D	D	E	F	F	F	B	B
Approach Vol, veh/h		89			305			2309			1189	
Approach Delay, s/veh		62.4			58.6			65.7			31.4	
Approach LOS		E			E			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	88.4		14.2	8.3	92.1		23.7
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	8.0	83.8		35.0	9.0	82.8		36.0
Max Q Clear Time (g_c+I1), s	10.3	86.3		7.6	5.3	20.8		18.4
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	34.7		0.4

Intersection Summary		
HCM 2010 Ctrl Delay	54.6	
HCM 2010 LOS	D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	994	200	200	1382	80	350	150	180	70	180	120
Future Volume (veh/h)	50	994	200	200	1382	80	350	150	180	70	180	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		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	54	1080	133	217	1502	37	380	163	59	76	196	116
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	65	1313	578	248	1680	735	452	588	480	104	264	156
Arrive On Green	0.04	0.37	0.37	0.14	0.47	0.47	0.13	0.31	0.31	0.06	0.24	0.24
Sat Flow, veh/h	1792	3574	1574	1792	3574	1563	3476	1881	1557	1810	1101	652
Grp Volume(v), veh/h	54	1080	133	217	1502	37	380	163	59	76	0	312
Grp Sat Flow(s),veh/h/ln	1792	1787	1574	1792	1787	1563	1738	1881	1557	1810	0	1753
Q Serve(g_s), s	3.7	34.2	7.3	14.8	48.0	1.6	13.3	8.1	3.4	5.2	0.0	20.6
Cycle Q Clear(g_c), s	3.7	34.2	7.3	14.8	48.0	1.6	13.3	8.1	3.4	5.2	0.0	20.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	65	1313	578	248	1680	735	452	588	480	104	0	421
V/C Ratio(X)	0.84	0.82	0.23	0.87	0.89	0.05	0.84	0.28	0.12	0.73	0.00	0.74
Avail Cap(c_a), veh/h	65	1382	609	251	1754	767	598	711	582	167	0	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.8	35.8	27.3	52.7	30.3	18.0	53.1	32.3	31.0	57.9	0.0	44.0
Incr Delay (d2), s/veh	56.4	3.6	0.1	25.8	5.9	0.0	6.4	0.1	0.0	3.7	0.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	17.5	3.2	9.1	25.0	0.7	6.8	4.2	1.5	2.7	0.0	10.3
LnGrp Delay(d),s/veh	116.3	39.4	27.4	78.5	36.2	18.0	59.5	32.4	31.1	61.6	0.0	47.1
LnGrp LOS	F	D	C	E	D	B	E	C	C	E		D
Approach Vol, veh/h		1267			1756			602			388	
Approach Delay, s/veh		41.5			41.0			49.4			49.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	43.8	20.8	49.6	19.7	34.8	8.0	62.4
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	11.0	46.7	17.0	* 48	21.0	36.7	4.0	* 61
Max Q Clear Time (g_c+I1), s	7.2	10.1	16.8	36.2	15.3	22.6	5.7	50.0
Green Ext Time (p_c), s	0.0	1.7	0.0	8.7	0.4	1.5	0.0	8.2

Intersection Summary	
HCM 2010 Ctrl Delay	43.3
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	740	308	310	950	300	472	402	144	340	559	20
Future Volume (veh/h)	40	740	308	310	950	300	472	402	144	340	559	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	804	119	337	1033	173	513	437	140	370	608	20
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	63	1452	213	412	1236	207	580	762	242	445	876	29
Arrive On Green	0.04	0.32	0.32	0.12	0.41	0.41	0.17	0.29	0.28	0.13	0.25	0.24
Sat Flow, veh/h	1792	4491	659	3442	3028	506	3476	2655	842	3476	3527	116
Grp Volume(v), veh/h	43	611	312	337	603	603	513	293	284	370	308	320
Grp Sat Flow(s),veh/h/ln	1792	1712	1727	1721	1770	1765	1738	1787	1709	1738	1787	1856
Q Serve(g_s), s	2.8	17.2	17.5	11.2	35.8	36.0	16.9	16.4	16.7	12.2	18.3	18.4
Cycle Q Clear(g_c), s	2.8	17.2	17.5	11.2	35.8	36.0	16.9	16.4	16.7	12.2	18.3	18.4
Prop In Lane	1.00		0.38	1.00		0.29	1.00		0.49	1.00		0.06
Lane Grp Cap(c), veh/h	63	1107	558	412	722	720	580	513	491	445	444	461
V/C Ratio(X)	0.69	0.55	0.56	0.82	0.83	0.84	0.88	0.57	0.58	0.83	0.69	0.69
Avail Cap(c_a), veh/h	69	1298	655	573	897	895	608	610	584	579	595	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.9	32.7	32.7	50.3	31.1	31.2	47.7	35.6	35.8	49.8	40.0	40.0
Incr Delay (d2), s/veh	17.3	0.2	0.3	4.5	4.7	4.8	13.4	0.4	0.4	6.2	1.0	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	1.7	8.2	8.4	5.6	18.4	18.4	9.2	8.1	7.9	6.2	9.2	9.6
LnGrp Delay(d),s/veh	73.1	32.8	33.1	54.8	35.8	36.0	61.1	36.0	36.2	56.0	41.0	41.0
LnGrp LOS	E	C	C	D	D	D	E	D	D	E	D	D
Approach Vol, veh/h		966			1543			1090			998	
Approach Delay, s/veh		34.7			40.0			47.8			46.6	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	38.4	17.5	42.7	23.1	33.9	7.6	52.6
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	14.5	39.5	19.0	43.9	20.0	38.5	4.0	58.9
Max Q Clear Time (g_c+I1), s	14.2	18.7	13.2	19.5	18.9	20.4	4.8	38.0
Green Ext Time (p_c), s	0.3	4.2	0.3	9.9	0.2	4.1	0.0	9.3

Intersection Summary	
HCM 2010 Ctrl Delay	42.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	651	60	100	1090	310	290	450	240	360	202	313
Future Volume (veh/h)	306	651	60	100	1090	310	290	450	240	360	202	313
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	333	708	54	109	1185	223	315	489	237	391	220	148
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	362	2073	157	122	1500	465	345	583	281	460	674	295
Arrive On Green	0.20	0.43	0.43	0.07	0.29	0.29	0.19	0.25	0.25	0.13	0.19	0.19
Sat Flow, veh/h	1774	4817	365	1774	5085	1575	1792	2340	1128	3476	3574	1567
Grp Volume(v), veh/h	333	497	265	109	1185	223	315	373	353	391	220	148
Grp Sat Flow(s),veh/h/ln	1774	1695	1792	1774	1695	1575	1792	1787	1681	1738	1787	1567
Q Serve(g_s), s	25.5	13.6	13.7	8.5	29.7	16.1	23.9	27.5	27.7	15.3	7.4	11.7
Cycle Q Clear(g_c), s	25.5	13.6	13.7	8.5	29.7	16.1	23.9	27.5	27.7	15.3	7.4	11.7
Prop In Lane	1.00		0.20	1.00		1.00	1.00		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	362	1459	771	122	1500	465	345	445	418	460	674	295
V/C Ratio(X)	0.92	0.34	0.34	0.90	0.79	0.48	0.91	0.84	0.84	0.85	0.33	0.50
Avail Cap(c_a), veh/h	441	1789	946	122	1767	547	510	634	596	789	1062	465
HCM Platoon Ratio	1.00	1.00	1.00	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	54.1	26.4	26.4	64.1	44.9	40.2	54.8	49.4	49.7	58.8	48.7	50.4
Incr Delay (d2), s/veh	20.1	0.1	0.1	50.2	1.7	0.3	12.2	4.8	5.4	1.7	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	6.4	6.8	5.8	14.2	7.0	13.0	14.2	13.5	7.4	3.6	5.1
LnGrp Delay(d),s/veh	74.2	26.4	26.5	114.3	46.7	40.4	67.0	54.2	55.1	60.5	48.8	50.9
LnGrp LOS	E	C	C	F	D	D	E	D	E	E	D	D
Approach Vol, veh/h		1095			1517			1041			759	
Approach Delay, s/veh		41.0			50.6			58.4			55.3	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.9	39.3	13.0	64.5	30.2	31.0	31.8	45.7
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	17.9	48.7	9.0	72.7	39.0	40.7	34.0	47.7
Max Q Clear Time (g_c+I1), s	17.3	29.7	10.5	15.7	25.9	13.7	27.5	31.7
Green Ext Time (p_c), s	0.6	3.7	0.0	12.1	0.4	3.9	0.3	8.2

Intersection Summary	
HCM 2010 Ctrl Delay	50.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1205	550	90	1482	0	0	0	0	460	10	770
Future Volume (veh/h)	0	1205	550	90	1482	0	0	0	0	460	10	770
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1310	263	98	1611	0				508	0	808
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1608	500	114	2043	0				1875	0	837
Arrive On Green	0.00	0.31	0.31	0.06	0.40	0.00				0.53	0.00	0.53
Sat Flow, veh/h	0	5305	1597	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1310	263	98	1611	0				508	0	808
Grp Sat Flow(s),veh/h/ln	0	1712	1597	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	30.6	17.6	6.4	35.8	0.0				10.2	0.0	63.9
Cycle Q Clear(g_c), s	0.0	30.6	17.6	6.4	35.8	0.0				10.2	0.0	63.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1608	500	114	2043	0				1875	0	837
V/C Ratio(X)	0.00	0.81	0.53	0.86	0.79	0.00				0.27	0.00	0.97
Avail Cap(c_a), veh/h	0	1667	518	114	2101	0				2106	0	940
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	41.2	36.7	60.8	34.4	0.0				16.9	0.0	29.5
Incr Delay (d2), s/veh	0.0	2.9	0.4	43.5	1.8	0.0				0.0	0.0	19.7
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	0.0	14.9	7.8	2.4	17.2	0.0				5.0	0.0	32.4
LnGrp Delay(d),s/veh	0.0	44.1	37.1	104.2	36.2	0.0				16.9	0.0	49.3
LnGrp LOS		D	D	F	D					B		D
Approach Vol, veh/h		1573			1709						1316	
Approach Delay, s/veh		42.9			40.1						36.8	
Approach LOS		D			D						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	11.0	45.5		73.5		56.5		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	7.0	41.7		76.7		52.7		
Max Q Clear Time (g_c+I1), s	19.4	32.6		65.9		37.8		
Green Ext Time (p_c), s	0.0	7.6		2.3		11.6		

Intersection Summary	
HCM 2010 Ctrl Delay	40.1
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	200	203	260	190	150	180	872	200	110	1110	80
Future Volume (veh/h)	140	200	203	260	190	150	180	872	200	110	1110	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		0.99	1.00		0.98	1.00		1.00	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	152	217	199	283	207	146	196	948	204	120	1207	84
Adj No. of Lanes	1	1	0	1	1	0	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	186	240	220	281	325	229	131	1083	233	131	1253	87
Arrive On Green	0.10	0.27	0.26	0.16	0.32	0.32	0.07	0.37	0.37	0.07	0.37	0.37
Sat Flow, veh/h	1792	898	823	1774	1009	711	1792	2926	629	1792	3385	235
Grp Volume(v), veh/h	152	0	416	283	0	353	196	579	573	120	637	654
Grp Sat Flow(s),veh/h/ln	1792	0	1721	1774	0	1720	1792	1787	1767	1792	1787	1833
Q Serve(g_s), s	9.7	0.0	27.3	18.5	0.0	20.5	8.5	35.2	35.3	7.8	40.6	40.8
Cycle Q Clear(g_c), s	9.7	0.0	27.3	18.5	0.0	20.5	8.5	35.2	35.3	7.8	40.6	40.8
Prop In Lane	1.00		0.48	1.00		0.41	1.00		0.36	1.00		0.13
Lane Grp Cap(c), veh/h	186	0	460	281	0	554	131	662	654	131	662	678
V/C Ratio(X)	0.82	0.00	0.90	1.01	0.00	0.64	1.50	0.87	0.88	0.92	0.96	0.96
Avail Cap(c_a), veh/h	207	0	509	281	0	582	131	662	654	131	662	678
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	0.0	41.4	49.1	0.0	33.9	54.1	34.2	34.3	53.7	35.9	36.0
Incr Delay (d2), s/veh	17.9	0.0	17.5	55.2	0.0	1.6	261.4	12.0	12.3	53.9	25.6	25.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	15.2	13.3	0.0	10.0	13.6	19.6	19.4	5.8	24.7	25.4
LnGrp Delay(d),s/veh	69.1	0.0	58.9	104.3	0.0	35.4	315.5	46.2	46.7	107.7	61.6	61.8
LnGrp LOS	E		E	F		D	F	D	D	F	E	E
Approach Vol, veh/h		568			636			1348			1411	
Approach Delay, s/veh		61.6			66.1			85.6			65.6	
Approach LOS		E			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	48.0	22.0	34.7	12.0	48.0	15.6	41.0
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	8.0	42.7	18.0	34.0	8.0	42.7	13.0	39.0
Max Q Clear Time (g_c+I1), s	10.8	37.3	20.5	29.3	10.5	42.8	11.7	22.5
Green Ext Time (p_c), s	0.0	4.1	0.0	1.4	0.0	0.0	0.0	2.7

Intersection Summary		
HCM 2010 Ctrl Delay		71.9
HCM 2010 LOS		E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	0	6	20	0	160	4	959	70	380	1197	36
Future Volume (veh/h)	63	0	6	20	0	160	4	959	70	380	1197	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	68	0	7	22	0	117	4	1042	49	413	1301	39
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	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, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	87	0	187	55	0	151	9	1374	599	404	2034	61
Arrive On Green	0.05	0.00	0.12	0.03	0.00	0.10	0.01	0.38	0.38	0.23	0.57	0.57
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1557	1792	3542	106
Grp Volume(v), veh/h	68	0	7	22	0	117	4	1042	49	413	656	684
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1557	1792	1787	1862
Q Serve(g_s), s	3.1	0.0	0.3	1.0	0.0	5.8	0.2	20.8	1.6	18.5	20.2	20.3
Cycle Q Clear(g_c), s	3.1	0.0	0.3	1.0	0.0	5.8	0.2	20.8	1.6	18.5	20.2	20.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	87	0	187	55	0	151	9	1374	599	404	1026	1069
V/C Ratio(X)	0.78	0.00	0.04	0.40	0.00	0.78	0.42	0.76	0.08	1.02	0.64	0.64
Avail Cap(c_a), veh/h	108	0	657	121	0	709	108	1578	688	404	1029	1072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	0.0	32.0	39.0	0.0	36.1	40.6	21.9	16.0	31.7	11.7	11.8
Incr Delay (d2), s/veh	24.7	0.0	0.1	4.7	0.0	3.2	27.5	1.5	0.0	50.3	1.0	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	2.1	0.0	0.1	0.6	0.0	2.7	0.2	10.4	0.7	14.7	10.1	10.6
LnGrp Delay(d),s/veh	63.2	0.0	32.1	43.8	0.0	39.3	68.2	23.5	16.1	82.1	12.8	12.8
LnGrp LOS	E		C	D		D	E	C	B	F	B	B
Approach Vol, veh/h		75			139			1095			1753	
Approach Delay, s/veh		60.3			40.0			23.3			29.1	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	36.3	8.0	15.7	6.4	51.9	10.0	13.6
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	18.0	35.7	5.0	34.0	5.0	46.7	5.0	* 36
Max Q Clear Time (g_c+I1), s	20.5	22.8	3.0	2.3	2.2	22.3	5.1	7.8
Green Ext Time (p_c), s	0.0	8.2	0.0	0.4	0.0	12.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

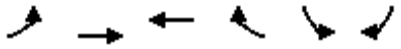
Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	90	19	80	45	452	11	441	50	540	696	27
Future Volume (veh/h)	59	90	19	80	45	452	11	441	50	540	696	27
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	64	98	21	87	49	196	12	479	54	587	757	29
Adj No. of Lanes	1	1	0	1	2	0	1	2	0	2	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, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	110	256	55	126	320	285	36	801	90	748	1546	59
Arrive On Green	0.06	0.17	0.16	0.07	0.18	0.18	0.02	0.25	0.24	0.22	0.44	0.43
Sat Flow, veh/h	1810	1517	325	1792	1787	1596	1810	3268	367	3476	3510	134
Grp Volume(v), veh/h	64	0	119	87	49	196	12	264	269	587	385	401
Grp Sat Flow(s),veh/h/ln	1810	0	1842	1792	1787	1596	1810	1805	1830	1738	1787	1857
Q Serve(g_s), s	2.2	0.0	3.7	3.1	1.5	7.4	0.4	8.3	8.4	10.3	9.9	9.9
Cycle Q Clear(g_c), s	2.2	0.0	3.7	3.1	1.5	7.4	0.4	8.3	8.4	10.3	9.9	9.9
Prop In Lane	1.00		0.18	1.00		1.00	1.00		0.20	1.00		0.07
Lane Grp Cap(c), veh/h	110	0	311	126	320	285	36	442	448	748	787	818
V/C Ratio(X)	0.58	0.00	0.38	0.69	0.15	0.69	0.34	0.60	0.60	0.79	0.49	0.49
Avail Cap(c_a), veh/h	155	0	1017	293	1181	1055	127	764	774	1487	1395	1450
HCM Platoon Ratio	1.00	1.00	1.00	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	29.4	0.0	23.8	29.2	22.3	24.7	31.1	21.5	21.5	23.8	12.8	12.8
Incr Delay (d2), s/veh	4.8	0.0	0.8	6.5	0.1	1.1	2.0	0.5	0.5	0.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	2.0	1.7	0.7	3.4	0.2	4.2	4.3	5.0	4.9	5.0
LnGrp Delay(d),s/veh	34.2	0.0	24.5	35.7	22.4	25.8	33.1	21.9	22.0	24.5	13.0	13.0
LnGrp LOS	C		C	D	C	C	C	C	C	C	B	B
Approach Vol, veh/h		183			332			545			1373	
Approach Delay, s/veh		27.9			27.9			22.2			17.9	
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	17.3	20.6	10.0	16.4	4.8	33.1	9.4	17.0
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	4.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	27.0	26.7	10.0	35.0	4.0	49.7	5.0	* 42
Max Q Clear Time (g_c+I1), s	12.3	10.4	5.1	5.7	2.4	11.9	4.2	9.4
Green Ext Time (p_c), s	1.1	4.9	0.1	1.5	0.0	5.8	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	21.0
HCM 2010 LOS	C

Notes



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	329	577	862	570	960	97
Future Volume (veh/h)	329	577	862	570	960	97
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	358	627	937	620	1043	105
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	304	3162	1432	647	1022	463
Arrive On Green	0.17	0.62	0.40	0.41	0.29	0.29
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	358	627	937	620	1043	105
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	20.5	6.4	25.7	45.6	35.2	6.0
Cycle Q Clear(g_c), s	20.5	6.4	25.7	45.6	35.2	6.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	304	3162	1432	647	1022	463
V/C Ratio(X)	1.18	0.20	0.65	0.96	1.02	0.23
Avail Cap(c_a), veh/h	304	3172	1439	650	1022	463
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	49.6	9.8	28.9	34.4	42.3	32.3
Incr Delay (d2), s/veh	109.3	0.0	0.8	24.9	33.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.2	3.0	12.7	24.3	21.5	2.7
LnGrp Delay(d),s/veh	158.9	9.8	29.7	59.3	75.9	32.4
LnGrp LOS	F	A	C	E	F	C
Approach Vol, veh/h		985	1557		1148	
Approach Delay, s/veh		64.0	41.5		71.9	
Approach LOS		E	D		E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		79.8			26.0	53.8		40.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		74.7			20.0	48.7		34.7
Max Q Clear Time (g_c+I1), s		8.4			22.5	47.6		37.2
Green Ext Time (p_c), s		10.8			0.0	0.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	57.0
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	290.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	200	489	43	70	439	165
Future Vol, veh/h	200	489	43	70	439	165
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, %	0	0	0	0	0	0
Mvmt Flow	217	532	47	76	477	179

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1219	85	0	0	123	0
Stage 1	85	-	-	-	-	-
Stage 2	1134	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	~ 201	980	-	-	1477	-
Stage 1	943	-	-	-	-	-
Stage 2	310	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 129	980	-	-	1477	-
Mov Cap-2 Maneuver	~ 129	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	~ 199	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 587.5	0	6.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	336	1477	-
HCM Lane V/C Ratio	-	-	2.229	0.323	-
HCM Control Delay (s)	-	-	$ 587.5	8.6	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	56.6	1.4	-

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)	550	0	2532	0	0	0	0	1830	444	620	847	0
Future Volume (veh/h)	550	0	2532	0	0	0	0	1830	444	620	847	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	20				0	20	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	598	0	2480				0	1989	483	674	921	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1099	0	1132				0	2023	132	569	3082	0
Arrive On Green	0.11	0.00	0.10				0.00	0.14	0.14	0.06	0.21	0.00
Sat Flow, veh/h	3442	0	3610				0	4779	973	3343	5103	0
Grp Volume(v), veh/h	598	0	2480				0	1651	821	674	921	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1654	1672	1647	0
Q Serve(g_s), s	23.2	0.0	44.2				0.0	59.0	59.0	24.0	22.2	0.0
Cycle Q Clear(g_c), s	23.2	0.0	44.2				0.0	59.0	59.0	24.0	22.2	0.0
Prop In Lane	1.00		1.00				0.00		0.59	1.00		0.00
Lane Grp Cap(c), veh/h	1099	0	1132				0	1404	752	569	3082	0
V/C Ratio(X)	0.54	0.00	2.19				0.00	1.18	1.09	1.18	0.30	0.00
Avail Cap(c_a), veh/h	1099	0	1132				0	1404	692	569	3082	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.3	0.0	63.2				0.0	60.7	60.7	66.5	29.9	0.0
Incr Delay (d2), s/veh	0.3	0.0	538.4				0.0	87.0	60.9	99.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	28.0				0.0	32.0	21.6	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	77.8				0.0	34.5	47.0	19.0	10.2	0.0
LnGrp Delay(d),s/veh	53.6	0.0	629.5				0.0	179.7	143.3	166.0	29.9	0.0
LnGrp LOS	D		F					F	F	F	C	
Approach Vol, veh/h		3078						2472			1595	
Approach Delay, s/veh		517.7						167.6			87.4	
Approach LOS		F						F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	28.9	63.0		49.0		91.9		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	24.0	* 58		43.7		32.9		
Max Q Clear Time (g_c+I1), s	26.0	61.0		46.2		24.2		
Green Ext Time (p_c), s	0.0	0.0		0.0		3.8		

Intersection Summary	
HCM 2010 Ctrl Delay	300.5
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	50	70	160	40	150	80	1022	140	260	1213	40
Future Volume (veh/h)	60	50	70	160	40	150	80	1022	140	260	1213	40
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	54	56	174	43	-64	87	1111	148	283	1318	42
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	104	87	164	226	237	202	111	1555	207	362	1881	60
Arrive On Green	0.11	0.11	0.11	0.13	0.13	0.00	0.06	0.50	0.49	0.11	0.54	0.53
Sat Flow, veh/h	981	815	1546	1792	1881	1599	1774	3140	417	3442	3499	111
Grp Volume(v), veh/h	119	0	56	174	43	-64	87	625	634	283	666	694
Grp Sat Flow(s),veh/h/ln	1796	0	1546	1792	1881	1599	1774	1770	1788	1721	1770	1840
Q Serve(g_s), s	6.1	0.0	3.2	9.0	2.0	0.0	4.6	26.4	26.5	7.7	26.7	26.8
Cycle Q Clear(g_c), s	6.1	0.0	3.2	9.0	2.0	0.0	4.6	26.4	26.5	7.7	26.7	26.8
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.23	1.00		0.06
Lane Grp Cap(c), veh/h	191	0	164	226	237	202	111	876	885	362	951	989
V/C Ratio(X)	0.62	0.00	0.34	0.77	0.18	-0.32	0.78	0.71	0.72	0.78	0.70	0.70
Avail Cap(c_a), veh/h	658	0	566	694	728	619	241	1352	1366	684	1463	1521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	40.9	0.0	39.6	40.4	37.3	0.0	44.1	18.8	18.9	41.7	16.4	16.4
Incr Delay (d2), s/veh	1.2	0.0	0.5	2.1	0.1	0.0	4.4	0.4	0.4	1.4	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.4	4.6	1.0	0.0	2.4	13.0	13.1	3.7	13.0	13.6
LnGrp Delay(d),s/veh	42.1	0.0	40.1	42.5	37.5	0.0	48.6	19.2	19.3	43.1	16.7	16.8
LnGrp LOS	D		D	D	D		D	B	B	D	B	B
Approach Vol, veh/h		175			153			1346			1643	
Approach Delay, s/veh		41.5			58.9			21.2			21.3	
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	14.0	51.3		14.1	10.0	55.4		16.0
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	10.0	72.4		35.0	13.0	78.4		36.4
Max Q Clear Time (g_c+I1), s	10.7	28.5		8.1	6.6	28.8		11.0
Green Ext Time (p_c), s	0.4	18.2		0.4	0.0	18.9		0.3

Intersection Summary		
HCM 2010 Ctrl Delay	24.0	
HCM 2010 LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1273	270	110	1043	50	223	60	80	50	40	90
Future Volume (veh/h)	110	1273	270	110	1043	50	223	60	80	50	40	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		0.98	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	120	1384	209	120	1134	4	242	65	-50	54	43	84
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	147	1787	788	147	1787	781	304	458	389	70	108	212
Arrive On Green	0.08	0.50	0.50	0.08	0.50	0.50	0.09	0.24	0.00	0.04	0.19	0.18
Sat Flow, veh/h	1792	3574	1576	1792	3574	1563	3476	1881	1599	1810	557	1088
Grp Volume(v), veh/h	120	1384	209	120	1134	4	242	65	-50	54	0	127
Grp Sat Flow(s),veh/h/ln	1792	1787	1576	1792	1787	1563	1738	1881	1599	1810	0	1644
Q Serve(g_s), s	7.8	37.2	9.0	7.8	27.3	0.2	8.0	3.2	0.0	3.5	0.0	8.0
Cycle Q Clear(g_c), s	7.8	37.2	9.0	7.8	27.3	0.2	8.0	3.2	0.0	3.5	0.0	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.66
Lane Grp Cap(c), veh/h	147	1787	788	147	1787	781	304	458	389	70	0	320
V/C Ratio(X)	0.82	0.77	0.27	0.82	0.63	0.01	0.80	0.14	-0.13	0.77	0.00	0.40
Avail Cap(c_a), veh/h	305	2613	1152	305	2613	1143	532	752	639	169	0	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.1	24.0	17.0	53.1	21.5	14.7	52.6	34.9	0.0	56.0	0.0	41.7
Incr Delay (d2), s/veh	4.2	0.5	0.1	4.2	0.1	0.0	1.8	0.1	0.0	6.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	18.4	3.9	4.0	13.4	0.1	3.9	1.7	0.0	1.9	0.0	3.6
LnGrp Delay(d),s/veh	57.3	24.5	17.0	57.3	21.7	14.7	54.5	34.9	0.0	62.5	0.0	42.0
LnGrp LOS	E	C	B	E	C	B	D	C		E		D
Approach Vol, veh/h		1713			1258			257			181	
Approach Delay, s/veh		25.9			25.1			60.1			48.2	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	32.6	13.6	62.8	14.3	26.9	13.6	62.8
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	4.6	45.7	20.0	* 86	18.0	38.7	20.0	* 86
Max Q Clear Time (g_c+I1), s	5.5	5.2	9.8	39.2	10.0	10.0	9.8	29.3
Green Ext Time (p_c), s	0.0	0.7	0.1	19.4	0.3	0.6	0.1	20.6

Intersection Summary	
HCM 2010 Ctrl Delay	29.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	870	406	262	870	270	313	407	239	360	383	30
Future Volume (veh/h)	80	870	406	262	870	270	313	407	239	360	383	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		0.96	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	87	946	225	285	946	140	340	442	243	391	416	31
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	110	1483	351	348	1237	183	405	599	326	458	962	71
Arrive On Green	0.06	0.36	0.36	0.10	0.40	0.40	0.12	0.27	0.26	0.13	0.29	0.27
Sat Flow, veh/h	1792	4108	973	3442	3087	457	3476	2214	1206	3476	3366	250
Grp Volume(v), veh/h	87	788	383	285	542	544	340	356	329	391	220	227
Grp Sat Flow(s),veh/h/ln	1792	1712	1658	1721	1770	1775	1738	1787	1633	1738	1787	1828
Q Serve(g_s), s	5.6	22.5	22.6	9.6	31.2	31.2	11.3	21.4	21.8	13.0	11.8	12.0
Cycle Q Clear(g_c), s	5.6	22.5	22.6	9.6	31.2	31.2	11.3	21.4	21.8	13.0	11.8	12.0
Prop In Lane	1.00		0.59	1.00		0.26	1.00		0.74	1.00		0.14
Lane Grp Cap(c), veh/h	110	1236	599	348	709	711	405	483	442	458	511	523
V/C Ratio(X)	0.79	0.64	0.64	0.82	0.76	0.77	0.84	0.74	0.75	0.85	0.43	0.43
Avail Cap(c_a), veh/h	213	2033	984	584	1141	1144	649	728	665	766	788	806
HCM Platoon Ratio	1.00	1.00	1.00	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	54.6	31.3	31.3	51.9	30.5	30.5	51.0	39.2	39.8	50.1	34.3	34.4
Incr Delay (d2), s/veh	4.7	0.2	0.4	1.9	0.7	0.7	2.8	0.8	0.9	2.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	10.6	10.4	4.6	15.3	15.4	5.6	10.7	9.9	6.4	5.8	6.1
LnGrp Delay(d),s/veh	59.3	31.5	31.7	53.8	31.2	31.2	53.8	40.0	40.7	52.3	34.5	34.6
LnGrp LOS	E	C	C	D	C	C	D	D	D	D	C	C
Approach Vol, veh/h		1258			1371			1025			838	
Approach Delay, s/veh		33.5			35.9			44.8			42.8	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	35.9	15.9	46.6	17.7	37.7	11.2	51.2
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	15.5	46.7	20.0	68.7	22.0	50.7	14.0	74.7
Max Q Clear Time (g_c+I1), s	15.3	23.8	11.6	24.6	13.3	14.0	7.6	33.2
Green Ext Time (p_c), s	0.6	4.1	0.3	12.9	0.4	4.3	0.0	12.7

Intersection Summary	
HCM 2010 Ctrl Delay	38.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	313	1221	140	210	1320	320	250	440	220	520	205	189
Future Volume (veh/h)	313	1221	140	210	1320	320	250	440	220	520	205	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		0.98	1.00		1.00	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	1863	1863	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	340	1327	141	228	1435	234	272	478	215	565	223	13
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	271	1646	175	252	1741	540	260	589	263	478	849	373
Arrive On Green	0.15	0.35	0.35	0.14	0.34	0.34	0.15	0.25	0.24	0.14	0.24	0.24
Sat Flow, veh/h	1774	4661	495	1774	5085	1576	1792	2403	1074	3476	3574	1569
Grp Volume(v), veh/h	340	965	503	228	1435	234	272	355	338	565	223	13
Grp Sat Flow(s),veh/h/ln	1774	1695	1766	1774	1695	1576	1792	1787	1690	1738	1787	1569
Q Serve(g_s), s	20.0	33.7	33.7	16.6	33.9	15.0	19.0	24.5	24.8	18.0	6.6	0.8
Cycle Q Clear(g_c), s	20.0	33.7	33.7	16.6	33.9	15.0	19.0	24.5	24.8	18.0	6.6	0.8
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	271	1197	624	252	1741	540	260	438	414	478	849	373
V/C Ratio(X)	1.25	0.81	0.81	0.91	0.82	0.43	1.05	0.81	0.82	1.18	0.26	0.03
Avail Cap(c_a), veh/h	271	1225	638	257	1798	558	260	610	577	478	1193	524
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	38.3	38.3	55.3	39.4	33.3	56.0	46.5	47.0	56.5	40.6	38.4
Incr Delay (d2), s/veh	141.1	3.7	6.8	31.2	2.9	0.2	68.4	3.8	4.4	101.7	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	20.4	16.4	17.7	10.3	16.3	6.5	14.3	12.6	12.1	15.4	3.3	0.4
LnGrp Delay(d),s/veh	196.6	41.9	45.1	86.5	42.4	33.5	124.3	50.4	51.4	158.2	40.6	38.4
LnGrp LOS	F	D	D	F	D	C	F	D	D	F	D	D
Approach Vol, veh/h		1808			1897			965			801	
Approach Delay, s/veh		71.9			46.6			71.6			123.5	
Approach LOS		E			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	36.1	22.6	50.2	23.0	35.1	24.0	48.8
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	18.0	43.4	19.0	46.0	19.0	42.4	20.0	45.0
Max Q Clear Time (g_c+I1), s	20.0	26.8	18.6	35.7	21.0	8.6	22.0	35.9
Green Ext Time (p_c), s	0.0	3.2	0.0	8.3	0.0	3.5	0.0	7.5

Intersection Summary	
HCM 2010 Ctrl Delay	70.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2103	860	220	2115	0	0	0	0	710	10	910
Future Volume (veh/h)	0	2103	860	220	2115	0	0	0	0	710	10	910
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	2286	600	239	2299	0				780	0	960
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2260	703	158	2876	0				1277	0	570
Arrive On Green	0.00	0.44	0.44	0.08	0.56	0.00				0.36	0.00	0.36
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	2286	600	239	2299	0				780	0	960
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	44.0	33.7	8.0	35.7	0.0				18.0	0.0	36.0
Cycle Q Clear(g_c), s	0.0	44.0	33.7	8.0	35.7	0.0				18.0	0.0	36.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2260	703	158	2876	0				1277	0	570
V/C Ratio(X)	0.00	1.01	0.85	1.52	0.80	0.00				0.61	0.00	1.68
Avail Cap(c_a), veh/h	0	2260	703	158	2876	0				1277	0	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	28.0	25.1	46.0	17.5	0.0				26.3	0.0	32.0
Incr Delay (d2), s/veh	0.0	21.8	9.5	261.9	1.5	0.0				0.6	0.0	315.5
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	0.0	25.3	16.7	7.9	17.0	0.0				8.9	0.0	65.6
LnGrp Delay(d),s/veh	0.0	49.8	34.6	307.9	19.1	0.0				26.9	0.0	347.5
LnGrp LOS		F	C	F	B					C		F
Approach Vol, veh/h		2886			2538						1740	
Approach Delay, s/veh		46.7			46.3						203.8	
Approach LOS		D			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	12.0	48.0		40.0		60.0		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	8.0	42.7		34.7		54.7		
Max Q Clear Time (g_c+I1), s	10.0	46.0		38.0		37.7		
Green Ext Time (p_c), s	0.0	0.0		0.0		16.4		

Intersection Summary	
HCM 2010 Ctrl Delay	84.7
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	80	90	60	100	90	203	957	140	110	821	90
Future Volume (veh/h)	110	80	90	60	100	90	203	957	140	110	821	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		0.98	1.00		0.97	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	120	87	76	65	109	81	221	1040	139	120	892	95
Adj No. of Lanes	1	1	0	1	1	0	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	152	186	162	83	161	120	264	1468	196	154	1307	139
Arrive On Green	0.08	0.20	0.20	0.05	0.16	0.16	0.15	0.46	0.45	0.09	0.40	0.39
Sat Flow, veh/h	1792	920	804	1774	981	729	1792	3169	423	1792	3251	346
Grp Volume(v), veh/h	120	0	163	65	0	190	221	586	593	120	490	497
Grp Sat Flow(s),veh/h/ln	1792	0	1724	1774	0	1710	1792	1787	1805	1792	1787	1810
Q Serve(g_s), s	5.2	0.0	6.6	2.9	0.0	8.3	9.5	20.8	20.9	5.2	17.9	18.0
Cycle Q Clear(g_c), s	5.2	0.0	6.6	2.9	0.0	8.3	9.5	20.8	20.9	5.2	17.9	18.0
Prop In Lane	1.00		0.47	1.00		0.43	1.00		0.23	1.00		0.19
Lane Grp Cap(c), veh/h	152	0	348	83	0	281	264	828	836	154	718	727
V/C Ratio(X)	0.79	0.00	0.47	0.78	0.00	0.68	0.84	0.71	0.71	0.78	0.68	0.68
Avail Cap(c_a), veh/h	249	0	740	246	0	734	588	1037	1048	746	1195	1210
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	0.0	27.9	37.4	0.0	31.2	32.9	17.0	17.1	35.5	19.5	19.6
Incr Delay (d2), s/veh	3.4	0.0	0.4	5.8	0.0	1.1	2.7	1.0	1.1	3.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	3.2	1.5	0.0	4.0	4.9	10.3	10.6	2.7	8.8	8.9
LnGrp Delay(d),s/veh	39.0	0.0	28.2	43.1	0.0	32.2	35.6	18.0	18.2	38.7	20.0	20.1
LnGrp LOS	D		C	D		C	D	B	B	D	B	C
Approach Vol, veh/h		283			255			1400			1107	
Approach Delay, s/veh		32.8			35.0			20.9			22.0	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	40.7	7.7	20.0	15.7	35.9	10.7	17.0
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	33.6	44.7	11.0	34.0	26.0	51.7	11.0	34.0
Max Q Clear Time (g_c+I1), s	7.2	22.9	4.9	8.6	11.5	20.0	7.2	10.3
Green Ext Time (p_c), s	0.1	9.3	0.0	1.2	0.2	10.6	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	23.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	0	4	150	0	330	12	770	40	60	701	120
Future Volume (veh/h)	49	0	4	150	0	330	12	770	40	60	701	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		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1878	1900
Adj Flow Rate, veh/h	53	0	4	163	0	302	13	837	16	65	762	130
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	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, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	138	0	297	210	0	365	64	1340	584	83	1143	195
Arrive On Green	0.08	0.00	0.19	0.12	0.00	0.23	0.04	0.38	0.38	0.05	0.37	0.35
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1557	1792	3051	520
Grp Volume(v), veh/h	53	0	4	163	0	302	13	837	16	65	446	446
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1557	1792	1785	1787
Q Serve(g_s), s	1.9	0.0	0.1	5.7	0.0	11.7	0.5	12.5	0.4	2.4	13.6	13.7
Cycle Q Clear(g_c), s	1.9	0.0	0.1	5.7	0.0	11.7	0.5	12.5	0.4	2.4	13.6	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	138	0	297	210	0	365	64	1340	584	83	669	669
V/C Ratio(X)	0.38	0.00	0.01	0.78	0.00	0.83	0.20	0.62	0.03	0.78	0.67	0.67
Avail Cap(c_a), veh/h	190	0	870	525	0	1232	171	2073	903	246	1089	1091
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	0.0	21.7	28.1	0.0	24.1	30.7	16.7	12.9	30.9	17.1	17.3
Incr Delay (d2), s/veh	1.7	0.0	0.0	6.0	0.0	1.8	1.6	0.2	0.0	6.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.1	3.2	0.0	5.4	0.3	6.2	0.2	1.3	6.8	6.8
LnGrp Delay(d),s/veh	30.5	0.0	21.7	34.2	0.0	26.0	32.2	16.9	12.9	36.9	17.5	17.7
LnGrp LOS	C		C	C		C	C	B	B	D	B	B
Approach Vol, veh/h		57			465			866			957	
Approach Delay, s/veh		29.9			28.8			17.0			18.9	
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	7.0	28.6	13.6	16.3	7.1	28.6	9.1	20.8
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	9.0	36.7	19.0	34.0	5.0	38.7	5.0	* 50
Max Q Clear Time (g_c+I1), s	4.4	14.5	7.7	2.1	2.5	15.7	3.9	13.7
Green Ext Time (p_c), s	0.0	7.5	0.3	1.2	0.0	7.6	0.0	1.2

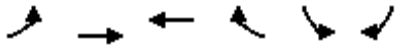
Intersection Summary	
HCM 2010 Ctrl Delay	20.5
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	87	18	110	141	458	39	595	60	400	354	51
Future Volume (veh/h)	70	87	18	110	141	458	39	595	60	400	354	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		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	76	95	20	120	153	203	42	647	65	435	385	55
Adj No. of Lanes	1	1	0	1	2	0	1	2	0	2	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, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	166	236	50	213	325	290	60	993	100	574	1357	193
Arrive On Green	0.09	0.15	0.15	0.12	0.18	0.18	0.03	0.30	0.28	0.17	0.43	0.41
Sat Flow, veh/h	1810	1522	320	1792	1787	1596	1810	3309	332	3476	3144	446
Grp Volume(v), veh/h	76	0	115	120	153	203	42	353	359	435	218	222
Grp Sat Flow(s),veh/h/ln	1810	0	1843	1792	1787	1596	1810	1805	1836	1738	1787	1802
Q Serve(g_s), s	2.4	0.0	3.4	3.9	4.7	7.3	1.4	10.4	10.5	7.3	4.8	4.9
Cycle Q Clear(g_c), s	2.4	0.0	3.4	3.9	4.7	7.3	1.4	10.4	10.5	7.3	4.8	4.9
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.18	1.00		0.25
Lane Grp Cap(c), veh/h	166	0	285	213	325	290	60	541	551	574	772	778
V/C Ratio(X)	0.46	0.00	0.40	0.56	0.47	0.70	0.70	0.65	0.65	0.76	0.28	0.29
Avail Cap(c_a), veh/h	207	0	1053	585	1400	1251	118	1444	1469	1702	2188	2206
HCM Platoon Ratio	1.00	1.00	1.00	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	26.4	0.0	23.3	25.5	22.4	23.5	29.3	18.7	18.8	24.4	11.3	11.4
Incr Delay (d2), s/veh	2.0	0.0	0.3	2.3	0.4	1.1	5.3	0.5	0.5	0.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.8	2.0	2.3	3.3	0.8	5.3	5.4	3.6	2.4	2.4
LnGrp Delay(d),s/veh	28.3	0.0	23.7	27.8	22.8	24.6	34.6	19.2	19.3	25.2	11.3	11.5
LnGrp LOS	C		C	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		191			476			754			875	
Approach Delay, s/veh		25.5			24.9			20.1			18.3	
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	14.1	22.4	11.3	13.5	6.0	30.5	9.6	15.1
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	10.0	47.7	18.0	35.0	4.0	73.7	5.0	48.0
Max Q Clear Time (g_c+I1), s	9.3	12.5	5.9	5.4	3.4	6.9	4.4	9.3
Green Ext Time (p_c), s	0.8	4.6	0.2	1.6	0.0	4.7	0.0	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	20.8
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	522	909	1048	280	1560	552
Future Volume (veh/h)	522	909	1048	280	1560	552
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	567	988	1139	304	1696	600
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	375	3069	1268	567	1178	542
Arrive On Green	0.21	0.60	0.36	0.36	0.34	0.34
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	567	988	1139	304	1696	600
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	29.3	13.3	42.2	21.1	47.0	47.0
Cycle Q Clear(g_c), s	29.3	13.3	42.2	21.1	47.0	47.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	375	3069	1268	567	1178	542
V/C Ratio(X)	1.51	0.32	0.90	0.54	1.44	1.11
Avail Cap(c_a), veh/h	375	3116	1301	582	1178	542
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	54.7	13.5	42.1	35.3	45.9	45.9
Incr Delay (d2), s/veh	244.3	0.0	8.2	0.4	202.9	71.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	39.7	6.2	22.0	9.3	55.6	31.4
LnGrp Delay(d),s/veh	299.0	13.6	50.3	35.8	248.8	117.3
LnGrp LOS	F	B	D	D	F	F
Approach Vol, veh/h		1555	1443		2296	
Approach Delay, s/veh		117.6	47.2		214.4	
Approach LOS		F	D		F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		87.7			34.0	53.7		51.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		83.7			28.0	49.7		45.7
Max Q Clear Time (g_c+I1), s		15.3			31.3	44.2		49.0
Green Ext Time (p_c), s		15.7			0.0	4.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	140.4
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	45.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	407	127	180	437	85
Future Vol, veh/h	60	407	127	180	437	85
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, %	0	0	0	0	0	0
Mvmt Flow	65	442	138	196	475	92

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1278	236	0	0	334	0
Stage 1	236	-	-	-	-	-
Stage 2	1042	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	185	808	-	-	1237	-
Stage 1	808	-	-	-	-	-
Stage 2	343	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	110	808	-	-	1237	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	808	-	-	-	-	-
Stage 2	204	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	116.5	0	8.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	445	1237	-
HCM Lane V/C Ratio	-	-	1.141	0.384	-
HCM Control Delay (s)	-	-	116.5	9.7	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	18.3	1.8	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	0	1141	0	0	0	0	1830	419	210	973	0
Future Volume (veh/h)	230	0	1141	0	0	0	0	1830	419	210	973	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	60				0	60	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	250	0	968				0	1989	455	228	1058	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	772	0	805				0	2592	405	311	3411	0
Arrive On Green	0.07	0.00	0.07				0.00	0.18	0.18	0.03	0.23	0.00
Sat Flow, veh/h	3442	0	3610				0	4834	930	3343	5103	0
Grp Volume(v), veh/h	250	0	968				0	1629	815	228	1058	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1666	1672	1647	0
Q Serve(g_s), s	7.4	0.0	24.2				0.0	50.5	50.9	7.2	19.0	0.0
Cycle Q Clear(g_c), s	7.4	0.0	24.2				0.0	50.5	50.9	7.2	19.0	0.0
Prop In Lane	1.00		1.00				0.00		0.56	1.00		0.00
Lane Grp Cap(c), veh/h	772	0	805				0	1868	948	311	3411	0
V/C Ratio(X)	0.32	0.00	1.20				0.00	0.87	0.86	0.73	0.31	0.00
Avail Cap(c_a), veh/h	780	0	818				0	1903	945	391	3395	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.2	0.0	50.2				0.0	43.2	41.6	51.0	20.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	102.6				0.0	4.5	7.8	3.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	189.9				0.0	32.7	12.9	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	35.7				0.0	24.4	31.1	3.5	8.8	0.0
LnGrp Delay(d),s/veh	42.3	0.0	342.8				0.0	80.3	62.3	54.6	20.3	0.0
LnGrp LOS	D		F					F	E	D	C	
Approach Vol, veh/h		1218						2444			1286	
Approach Delay, s/veh		281.1						74.3			26.4	
Approach LOS		F						E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.4	63.4		29.0		77.8		
Change Period (Y+Rc), s	4.9	* 4.9		5.3		4.9		
Max Green Setting (Gmax), s	12.0	* 60		23.7		50.1		
Max Q Clear Time (g_c+I1), s	9.2	52.9		26.2		21.0		
Green Ext Time (p_c), s	0.3	5.6		0.0		5.4		

Intersection Summary	
HCM 2010 Ctrl Delay	112.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	30	30	200	40	250	40	1921	200	190	876	30
Future Volume (veh/h)	40	30	30	200	40	250	40	1921	200	190	876	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		0.98	1.00		1.00	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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	33	13	217	43	45	43	2088	213	207	952	32
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	78	60	113	254	267	226	62	1980	199	212	2222	75
Arrive On Green	0.08	0.08	0.07	0.14	0.14	0.14	0.03	0.61	0.61	0.06	0.64	0.63
Sat Flow, veh/h	1015	779	1536	1792	1881	1596	1774	3248	326	3442	3491	117
Grp Volume(v), veh/h	76	0	13	217	43	45	43	1121	1180	207	483	501
Grp Sat Flow(s),veh/h/ln	1794	0	1536	1792	1881	1596	1774	1770	1804	1721	1770	1839
Q Serve(g_s), s	5.6	0.0	1.1	16.4	2.8	3.4	3.3	84.3	84.3	8.3	18.8	18.9
Cycle Q Clear(g_c), s	5.6	0.0	1.1	16.4	2.8	3.4	3.3	84.3	84.3	8.3	18.8	18.9
Prop In Lane	0.57		1.00	1.00		1.00	1.00		0.18	1.00		0.06
Lane Grp Cap(c), veh/h	138	0	113	254	267	226	62	1079	1100	212	1126	1170
V/C Ratio(X)	0.55	0.00	0.12	0.85	0.16	0.20	0.70	1.04	1.07	0.98	0.43	0.43
Avail Cap(c_a), veh/h	461	0	389	473	497	421	122	1079	1100	212	1126	1170
HCM Platoon Ratio	1.00	1.00	1.00	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	61.5	0.0	59.9	57.9	52.1	52.4	66.0	27.0	27.0	64.8	12.6	12.6
Incr Delay (d2), s/veh	1.3	0.0	0.2	3.2	0.1	0.2	5.2	38.1	48.9	55.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.5	8.3	1.5	1.5	1.7	52.2	56.5	5.6	9.1	9.5
LnGrp Delay(d),s/veh	62.8	0.0	60.0	61.1	52.2	52.5	71.2	65.1	75.9	120.1	12.7	12.7
LnGrp LOS	E		E	E	D	D	E	F	F	F	B	B
Approach Vol, veh/h		89			305			2344			1191	
Approach Delay, s/veh		62.4			58.6			70.6			31.3	
Approach LOS		E			E			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	88.4		14.2	8.3	92.1		23.7
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	8.0	83.8		35.0	9.0	82.8		36.0
Max Q Clear Time (g_c+I1), s	10.3	86.3		7.6	5.3	20.9		18.4
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	35.6		0.4

Intersection Summary		
HCM 2010 Ctrl Delay	57.6	
HCM 2010 LOS	E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	996	200	200	1409	80	361	150	180	70	180	120
Future Volume (veh/h)	50	996	200	200	1409	80	361	150	180	70	180	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		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	54	1083	133	217	1532	37	392	163	59	76	196	116
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	76	1336	589	248	1680	735	454	583	477	103	261	154
Arrive On Green	0.04	0.37	0.37	0.14	0.47	0.47	0.13	0.31	0.31	0.06	0.24	0.23
Sat Flow, veh/h	1792	3574	1574	1792	3574	1563	3476	1881	1557	1810	1101	652
Grp Volume(v), veh/h	54	1083	133	217	1532	37	392	163	59	76	0	312
Grp Sat Flow(s),veh/h/ln	1792	1787	1574	1792	1787	1563	1738	1881	1557	1810	0	1753
Q Serve(g_s), s	3.8	35.1	7.4	15.3	51.2	1.7	14.2	8.4	3.5	5.3	0.0	21.3
Cycle Q Clear(g_c), s	3.8	35.1	7.4	15.3	51.2	1.7	14.2	8.4	3.5	5.3	0.0	21.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	76	1336	589	248	1680	735	454	583	477	103	0	415
V/C Ratio(X)	0.71	0.81	0.23	0.87	0.91	0.05	0.86	0.28	0.12	0.74	0.00	0.75
Avail Cap(c_a), veh/h	90	1340	590	285	1728	756	472	645	528	161	0	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	0.00	1.00
Uniform Delay (d), s/veh	60.9	36.2	27.6	54.4	31.7	18.5	54.9	33.6	32.2	59.8	0.0	45.8
Incr Delay (d2), s/veh	13.4	3.6	0.1	20.6	7.4	0.0	14.1	0.1	0.0	3.8	0.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	18.0	3.3	9.0	26.8	0.7	7.7	4.4	1.5	2.8	0.0	10.7
LnGrp Delay(d),s/veh	74.3	39.8	27.7	75.0	39.1	18.6	69.0	33.7	32.3	63.6	0.0	49.2
LnGrp LOS	E	D	C	E	D	B	E	C	C	E		D
Approach Vol, veh/h		1270			1786			614			388	
Approach Delay, s/veh		40.0			43.0			56.1			52.0	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	44.8	21.4	51.9	20.3	35.3	9.0	64.3
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	11.0	43.7	20.0	* 48	17.0	37.7	6.0	* 62
Max Q Clear Time (g_c+I1), s	7.3	10.4	17.3	37.1	16.2	23.3	5.8	53.2
Green Ext Time (p_c), s	0.0	1.7	0.1	8.2	0.1	1.5	0.0	6.8

Intersection Summary	
HCM 2010 Ctrl Delay	44.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	740	312	313	950	300	499	407	155	340	570	20
Future Volume (veh/h)	40	740	312	313	950	300	499	407	155	340	570	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	804	123	340	1033	173	542	442	151	370	620	20
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	63	1433	217	413	1229	205	596	763	258	443	878	28
Arrive On Green	0.03	0.32	0.32	0.12	0.41	0.41	0.17	0.29	0.29	0.13	0.25	0.24
Sat Flow, veh/h	1792	4468	678	3442	3028	506	3476	2607	882	3476	3530	114
Grp Volume(v), veh/h	43	614	313	340	603	603	542	302	291	370	314	326
Grp Sat Flow(s),veh/h/ln	1792	1712	1722	1721	1770	1765	1738	1787	1701	1738	1787	1857
Q Serve(g_s), s	2.8	17.8	18.0	11.5	36.7	36.9	18.3	17.2	17.5	12.4	19.1	19.1
Cycle Q Clear(g_c), s	2.8	17.8	18.0	11.5	36.7	36.9	18.3	17.2	17.5	12.4	19.1	19.1
Prop In Lane	1.00		0.39	1.00		0.29	1.00		0.52	1.00		0.06
Lane Grp Cap(c), veh/h	63	1098	552	413	718	716	596	523	498	443	445	462
V/C Ratio(X)	0.69	0.56	0.57	0.82	0.84	0.84	0.91	0.58	0.59	0.83	0.71	0.71
Avail Cap(c_a), veh/h	67	1272	640	562	880	877	596	598	569	567	583	606
HCM Platoon Ratio	1.00	1.00	1.00	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	57.0	33.6	33.7	51.3	32.0	32.0	48.6	36.0	36.2	50.9	40.9	40.9
Incr Delay (d2), s/veh	18.6	0.2	0.3	5.2	5.2	5.3	17.6	0.4	0.5	6.8	1.4	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	1.7	8.4	8.6	5.8	18.9	19.0	10.3	8.5	8.3	6.4	9.6	10.0
LnGrp Delay(d),s/veh	75.6	33.8	34.0	56.5	37.1	37.3	66.1	36.4	36.7	57.6	42.3	42.3
LnGrp LOS	E	C	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		970			1546			1135			1010	
Approach Delay, s/veh		35.7			41.5			50.7			47.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	39.8	17.9	43.1	24.0	34.5	7.7	53.3
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	14.6	39.5	19.0	43.9	20.0	38.5	4.0	58.9
Max Q Clear Time (g_c+I1), s	11.4	19.5	13.5	20.0	20.3	21.1	4.8	38.9
Green Ext Time (p_c), s	0.3	4.3	0.3	9.9	0.0	4.2	0.0	9.1

Intersection Summary	
HCM 2010 Ctrl Delay	43.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	308	652	60	100	1090	310	290	450	240	360	202	313
Future Volume (veh/h)	308	652	60	100	1090	310	290	450	240	360	202	313
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	335	709	54	109	1185	223	315	489	237	391	220	148
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	364	2078	157	121	1498	464	345	582	281	460	673	295
Arrive On Green	0.21	0.43	0.43	0.07	0.29	0.29	0.19	0.25	0.25	0.13	0.19	0.19
Sat Flow, veh/h	1774	4818	365	1774	5085	1575	1792	2340	1128	3476	3574	1567
Grp Volume(v), veh/h	335	498	265	109	1185	223	315	373	353	391	220	148
Grp Sat Flow(s),veh/h/ln	1774	1695	1792	1774	1695	1575	1792	1787	1681	1738	1787	1567
Q Serve(g_s), s	25.8	13.6	13.8	8.5	29.8	16.2	24.0	27.6	27.8	15.3	7.4	11.8
Cycle Q Clear(g_c), s	25.8	13.6	13.8	8.5	29.8	16.2	24.0	27.6	27.8	15.3	7.4	11.8
Prop In Lane	1.00		0.20	1.00		1.00	1.00		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	364	1462	773	121	1498	464	345	445	418	460	673	295
V/C Ratio(X)	0.92	0.34	0.34	0.90	0.79	0.48	0.91	0.84	0.84	0.85	0.33	0.50
Avail Cap(c_a), veh/h	440	1783	943	121	1762	546	509	632	594	787	1058	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	54.2	26.4	26.4	64.4	45.1	40.3	55.0	49.6	49.9	59.0	48.8	50.6
Incr Delay (d2), s/veh	20.5	0.1	0.1	51.1	1.8	0.3	12.4	4.9	5.5	1.7	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.7	6.4	6.8	5.9	14.2	7.1	13.1	14.2	13.6	7.4	3.7	5.1
LnGrp Delay(d),s/veh	74.7	26.4	26.5	115.4	46.9	40.6	67.4	54.5	55.4	60.8	48.9	51.1
LnGrp LOS	E	C	C	F	D	D	E	D	E	E	D	D
Approach Vol, veh/h		1098			1517			1041			759	
Approach Delay, s/veh		41.2			50.9			58.7			55.4	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.9	39.4	13.0	64.8	30.3	31.0	32.0	45.8
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	17.9	48.7	9.0	72.7	39.0	40.7	34.0	47.7
Max Q Clear Time (g_c+I1), s	17.3	29.8	10.5	15.8	26.0	13.8	27.8	31.8
Green Ext Time (p_c), s	0.6	3.7	0.0	12.1	0.4	3.9	0.3	8.2

Intersection Summary	
HCM 2010 Ctrl Delay	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1207	550	90	1482	0	0	0	0	460	10	770
Future Volume (veh/h)	0	1207	550	90	1482	0	0	0	0	460	10	770
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1312	263	98	1611	0				508	0	808
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	1609	500	114	2043	0				1875	0	837
Arrive On Green	0.00	0.31	0.31	0.06	0.40	0.00				0.53	0.00	0.53
Sat Flow, veh/h	0	5305	1597	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	1312	263	98	1611	0				508	0	808
Grp Sat Flow(s),veh/h/ln	0	1712	1597	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	30.7	17.6	6.4	35.8	0.0				10.3	0.0	63.9
Cycle Q Clear(g_c), s	0.0	30.7	17.6	6.4	35.8	0.0				10.3	0.0	63.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1609	500	114	2043	0				1875	0	837
V/C Ratio(X)	0.00	0.82	0.53	0.86	0.79	0.00				0.27	0.00	0.97
Avail Cap(c_a), veh/h	0	1666	518	114	2100	0				2106	0	940
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	41.2	36.7	60.8	34.4	0.0				16.9	0.0	29.5
Incr Delay (d2), s/veh	0.0	2.9	0.4	43.6	1.8	0.0				0.0	0.0	19.7
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	0.0	14.9	7.8	2.4	17.2	0.0				5.0	0.0	32.4
LnGrp Delay(d),s/veh	0.0	44.1	37.1	104.3	36.2	0.0				16.9	0.0	49.3
LnGrp LOS		D	D	F	D					B		D
Approach Vol, veh/h		1575			1709						1316	
Approach Delay, s/veh		42.9			40.1						36.8	
Approach LOS		D			D						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	11.0	45.5		73.5		56.5		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	7.0	41.7		76.7		52.7		
Max Q Clear Time (g_c+I1), s	12.4	32.7		65.9		37.8		
Green Ext Time (p_c), s	0.0	7.6		2.3		11.6		

Intersection Summary	
HCM 2010 Ctrl Delay	40.1
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	200	203	260	190	150	191	921	200	110	1129	80
Future Volume (veh/h)	140	200	203	260	190	150	191	921	200	110	1129	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		0.99	1.00		0.98	1.00		1.00	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	152	217	199	283	207	146	208	1001	204	120	1227	84
Adj No. of Lanes	1	1	0	1	1	0	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	187	240	220	281	324	229	131	1120	228	115	1255	86
Arrive On Green	0.10	0.27	0.26	0.16	0.32	0.32	0.07	0.38	0.37	0.06	0.37	0.37
Sat Flow, veh/h	1792	898	823	1774	1009	711	1792	2958	602	1792	3389	232
Grp Volume(v), veh/h	152	0	416	283	0	353	208	604	601	120	646	665
Grp Sat Flow(s),veh/h/ln	1792	0	1721	1774	0	1720	1792	1787	1772	1792	1787	1833
Q Serve(g_s), s	9.7	0.0	27.3	18.5	0.0	20.5	8.5	37.0	37.2	7.5	41.6	41.8
Cycle Q Clear(g_c), s	9.7	0.0	27.3	18.5	0.0	20.5	8.5	37.0	37.2	7.5	41.6	41.8
Prop In Lane	1.00		0.48	1.00		0.41	1.00		0.34	1.00		0.13
Lane Grp Cap(c), veh/h	187	0	460	281	0	553	131	677	671	115	662	679
V/C Ratio(X)	0.81	0.00	0.90	1.01	0.00	0.64	1.59	0.89	0.90	1.04	0.98	0.98
Avail Cap(c_a), veh/h	223	0	509	281	0	568	131	677	671	115	662	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	0.0	41.4	49.1	0.0	33.9	54.1	34.0	34.1	54.6	36.2	36.3
Incr Delay (d2), s/veh	15.0	0.0	17.5	55.2	0.0	1.7	300.1	13.8	14.2	95.6	28.9	29.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	15.2	13.3	0.0	10.0	15.0	20.9	20.9	6.7	25.8	26.6
LnGrp Delay(d),s/veh	66.2	0.0	58.9	104.3	0.0	35.6	354.2	47.8	48.4	150.8	65.2	65.6
LnGrp LOS	E		E	F		D	F	D	D	F	E	E
Approach Vol, veh/h		568			636			1413			1431	
Approach Delay, s/veh		60.8			66.2			93.1			72.5	
Approach LOS		E			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	49.0	22.0	34.7	12.0	48.0	15.6	41.0
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.7	18.0	34.0	8.0	42.7	14.0	38.0
Max Q Clear Time (g_c+I1), s	9.5	39.2	20.5	29.3	10.5	43.8	11.7	22.5
Green Ext Time (p_c), s	0.0	3.6	0.0	1.4	0.0	0.0	0.0	2.6

Intersection Summary		
HCM 2010 Ctrl Delay	77.1	
HCM 2010 LOS	E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	0	9	20	0	160	6	987	70	380	1198	53
Future Volume (veh/h)	95	0	9	20	0	160	6	987	70	380	1198	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1880	1900
Adj Flow Rate, veh/h	103	0	10	22	0	117	7	1073	49	413	1302	58
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	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, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	130	0	226	53	0	150	16	1231	536	454	1951	87
Arrive On Green	0.07	0.00	0.14	0.03	0.00	0.10	0.01	0.34	0.34	0.25	0.56	0.55
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1556	1792	3484	155
Grp Volume(v), veh/h	103	0	10	22	0	117	7	1073	49	413	667	693
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1556	1792	1786	1853
Q Serve(g_s), s	4.9	0.0	0.5	1.0	0.0	6.1	0.3	24.2	1.8	19.3	22.6	22.7
Cycle Q Clear(g_c), s	4.9	0.0	0.5	1.0	0.0	6.1	0.3	24.2	1.8	19.3	22.6	22.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	130	0	226	53	0	150	16	1231	536	454	1000	1037
V/C Ratio(X)	0.79	0.00	0.04	0.41	0.00	0.78	0.44	0.87	0.09	0.91	0.67	0.67
Avail Cap(c_a), veh/h	144	0	625	116	0	638	103	1336	582	468	1000	1037
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	0.0	31.8	41.0	0.0	37.9	42.5	26.4	19.1	31.2	13.3	13.3
Incr Delay (d2), s/veh	23.0	0.0	0.1	5.0	0.0	3.3	18.0	5.8	0.0	20.7	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	0.2	0.6	0.0	2.9	0.2	12.9	0.8	12.1	11.5	11.9
LnGrp Delay(d),s/veh	62.3	0.0	31.9	46.0	0.0	41.2	60.5	32.2	19.1	51.9	14.7	14.7
LnGrp LOS	E		C	D		D	E	C	B	D	B	B
Approach Vol, veh/h		113			139			1129			1773	
Approach Delay, s/veh		59.6			42.0			31.8			23.4	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	34.5	8.0	18.3	6.8	53.0	12.3	14.0
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	22.0	31.7	5.0	34.0	5.0	46.7	7.0	* 34
Max Q Clear Time (g_c+I1), s	11.3	26.2	3.0	2.5	2.3	24.7	6.9	8.1
Green Ext Time (p_c), s	0.1	2.9	0.0	0.5	0.0	11.7	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	28.5
HCM 2010 LOS	C

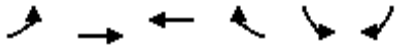
Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	133	27	80	57	454	13	442	50	540	699	28
Future Volume (veh/h)	87	133	27	80	57	454	13	442	50	540	699	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	95	145	29	87	62	198	14	480	54	587	760	30
Adj No. of Lanes	1	1	0	1	2	0	1	2	0	2	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, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	137	289	58	126	326	291	38	784	88	741	1514	60
Arrive On Green	0.08	0.19	0.18	0.07	0.18	0.18	0.02	0.24	0.23	0.21	0.43	0.42
Sat Flow, veh/h	1810	1538	308	1792	1787	1596	1810	3269	366	3476	3506	138
Grp Volume(v), veh/h	95	0	174	87	62	198	14	264	270	587	387	403
Grp Sat Flow(s),veh/h/ln	1810	0	1845	1792	1787	1596	1810	1805	1830	1738	1787	1857
Q Serve(g_s), s	3.4	0.0	5.7	3.2	2.0	7.7	0.5	8.7	8.8	10.7	10.5	10.5
Cycle Q Clear(g_c), s	3.4	0.0	5.7	3.2	2.0	7.7	0.5	8.7	8.8	10.7	10.5	10.5
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.20	1.00		0.07
Lane Grp Cap(c), veh/h	137	0	347	126	326	291	38	433	439	741	772	802
V/C Ratio(X)	0.69	0.00	0.50	0.69	0.19	0.68	0.37	0.61	0.62	0.79	0.50	0.50
Avail Cap(c_a), veh/h	365	0	979	308	949	847	149	707	717	1429	1288	1338
HCM Platoon Ratio	1.00	1.00	1.00	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	30.1	0.0	24.4	30.4	23.2	25.5	32.3	22.6	22.7	24.9	13.8	13.8
Incr Delay (d2), s/veh	6.1	0.0	1.1	6.6	0.1	1.0	2.2	0.5	0.5	0.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	3.0	1.8	1.0	3.5	0.3	4.4	4.5	5.2	5.2	5.4
LnGrp Delay(d),s/veh	36.2	0.0	25.5	36.9	23.3	26.6	34.4	23.2	23.2	25.6	14.0	14.0
LnGrp LOS	D		C	D	C	C	C	C	C	C	B	B
Approach Vol, veh/h		269			347			548			1377	
Approach Delay, s/veh		29.3			28.6			23.5			19.0	
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	17.8	20.8	10.2	18.1	4.9	33.7	10.6	17.7
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	4.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	27.8	25.7	11.0	35.0	5.0	47.7	13.0	* 35
Max Q Clear Time (g_c+I1), s	12.7	10.8	5.2	7.7	2.5	12.5	5.4	9.7
Green Ext Time (p_c), s	1.1	4.7	0.1	1.9	0.0	5.8	0.1	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	22.3
HCM 2010 LOS	C

Notes



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	343	600	870	570	960	100
Future Volume (veh/h)	343	600	870	570	960	100
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	373	652	946	620	1043	109
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	304	3162	1432	647	1021	463
Arrive On Green	0.17	0.62	0.40	0.41	0.29	0.29
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	373	652	946	620	1043	109
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	20.5	6.7	26.0	45.6	35.2	6.2
Cycle Q Clear(g_c), s	20.5	6.7	26.0	45.6	35.2	6.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	304	3162	1432	647	1021	463
V/C Ratio(X)	1.23	0.21	0.66	0.96	1.02	0.24
Avail Cap(c_a), veh/h	304	3172	1439	650	1021	463
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	49.6	9.8	29.0	34.4	42.3	32.4
Incr Delay (d2), s/veh	128.3	0.0	0.9	24.9	33.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.8	3.1	12.8	24.3	21.5	2.8
LnGrp Delay(d),s/veh	178.0	9.8	29.9	59.3	75.9	32.5
LnGrp LOS	F	A	C	E	F	C
Approach Vol, veh/h		1025	1566		1152	
Approach Delay, s/veh		71.0	41.5		71.8	
Approach LOS		E	D		E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		79.8			26.0	53.8		40.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		74.7			20.0	48.7		34.7
Max Q Clear Time (g_c+I1), s		8.7			22.5	47.6		37.2
Green Ext Time (p_c), s		11.1			0.0	0.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	58.9
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	307.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	200	492	43	70	449	167
Future Vol, veh/h	200	492	43	70	449	167
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, %	0	0	0	0	0	0
Mvmt Flow	217	535	47	76	488	182

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1243	85	0	0	123	0
Stage 1	85	-	-	-	-	-
Stage 2	1158	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	~ 194	980	-	-	1477	-
Stage 1	943	-	-	-	-	-
Stage 2	302	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 123	980	-	-	1477	-
Mov Cap-2 Maneuver	~ 123	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	~ 191	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 626.4	0	6.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	325	1477	-
HCM Lane V/C Ratio	-	-	2.314	0.33	-
HCM Control Delay (s)	-	-	$ 626.4	8.6	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	58.2	1.5	-

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)	550	0	2564	0	0	0	0	1830	446	620	850	0
Future Volume (veh/h)	550	0	2564	0	0	0	0	1830	446	620	850	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	20				0	20	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1900	1810	1810	0
Adj Flow Rate, veh/h	598	0	2515				0	1989	485	674	924	0
Adj No. of Lanes	2	0	3				0	4	0	2	3	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	5	5	0
Cap, veh/h	1131	0	1166				0	1898	125	645	3035	0
Arrive On Green	0.11	0.00	0.11				0.00	0.13	0.13	0.06	0.20	0.00
Sat Flow, veh/h	3442	0	3610				0	4774	976	3343	5103	0
Grp Volume(v), veh/h	598	0	2515				0	1653	821	674	924	0
Grp Sat Flow(s),veh/h/ln	1721	0	1203				0	1118	1652	1672	1647	0
Q Serve(g_s), s	23.0	0.0	45.2				0.0	55.0	55.0	27.0	22.3	0.0
Cycle Q Clear(g_c), s	23.0	0.0	45.2				0.0	55.0	55.0	27.0	22.3	0.0
Prop In Lane	1.00		1.00				0.00		0.59	1.00		0.00
Lane Grp Cap(c), veh/h	1131	0	1166				0	1317	705	645	3035	0
V/C Ratio(X)	0.53	0.00	2.16				0.00	1.25	1.17	1.05	0.30	0.00
Avail Cap(c_a), veh/h	1131	0	1166				0	1317	649	645	3035	0
HCM Platoon Ratio	0.33	1.00	0.33				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.2	0.0	62.5				0.0	60.9	61.0	65.5	30.4	0.0
Incr Delay (d2), s/veh	0.2	0.0	523.9				0.0	121.0	89.3	47.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	27.6				0.0	31.9	21.6	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	0.0	78.3				0.0	36.8	49.8	16.8	10.2	0.0
LnGrp Delay(d),s/veh	52.4	0.0	614.1				0.0	213.9	171.8	113.4	30.4	0.0
LnGrp LOS	D		F					F	F	F	C	
Approach Vol, veh/h		3113						2474			1598	
Approach Delay, s/veh		506.2						199.9			65.4	
Approach LOS		F						F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	31.0	59.0		50.0		90.0		
Change Period (Y+Rc), s	4.0	4.9		5.3		4.9		
Max Green Setting (Gmax), s	27.0	54.1		44.7		31.1		
Max Q Clear Time (g_c+I1), s	29.0	57.0		47.2		24.3		
Green Ext Time (p_c), s	0.0	0.0		0.0		6.2		

Intersection Summary	
HCM 2010 Ctrl Delay	302.7
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	50	70	160	40	150	80	1042	140	260	1220	40
Future Volume (veh/h)	60	50	70	160	40	150	80	1042	140	260	1220	40
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1845	1845	1881	1881	1881	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	54	56	174	43	-64	87	1133	148	283	1326	42
Adj No. of Lanes	0	1	1	1	1	1	1	2	0	2	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, %	3	3	3	1	1	1	2	2	2	2	2	2
Cap, veh/h	104	86	164	225	236	201	111	1572	205	360	1894	60
Arrive On Green	0.11	0.11	0.11	0.13	0.13	0.00	0.06	0.50	0.49	0.10	0.54	0.54
Sat Flow, veh/h	981	815	1546	1792	1881	1599	1774	3148	410	3442	3499	111
Grp Volume(v), veh/h	119	0	56	174	43	-64	87	636	645	283	670	698
Grp Sat Flow(s),veh/h/ln	1796	0	1546	1792	1881	1599	1774	1770	1789	1721	1770	1840
Q Serve(g_s), s	6.2	0.0	3.3	9.1	2.0	0.0	4.7	27.3	27.5	7.8	27.2	27.3
Cycle Q Clear(g_c), s	6.2	0.0	3.3	9.1	2.0	0.0	4.7	27.3	27.5	7.8	27.2	27.3
Prop In Lane	0.55		1.00	1.00		1.00	1.00		0.23	1.00		0.06
Lane Grp Cap(c), veh/h	190	0	164	225	236	201	111	883	893	360	958	996
V/C Ratio(X)	0.63	0.00	0.34	0.77	0.18	-0.32	0.78	0.72	0.72	0.79	0.70	0.70
Avail Cap(c_a), veh/h	647	0	557	682	716	609	237	1329	1344	673	1438	1496
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.6	0.0	40.3	41.1	38.0	0.0	44.9	19.0	19.1	42.5	16.5	16.5
Incr Delay (d2), s/veh	1.3	0.0	0.5	2.1	0.1	0.0	4.5	0.4	0.4	1.5	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.4	4.7	1.0	0.0	2.4	13.3	13.6	3.8	13.3	13.9
LnGrp Delay(d),s/veh	42.9	0.0	40.8	43.3	38.2	0.0	49.4	19.4	19.5	43.9	16.8	16.8
LnGrp LOS	D		D	D	D		D	B	B	D	B	B
Approach Vol, veh/h		175			153			1368			1651	
Approach Delay, s/veh		42.2			59.9			21.4			21.5	
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	14.2	52.5		14.3	10.1	56.6		16.2
Change Period (Y+Rc), s	4.0	4.6		4.0	4.0	4.6		4.6
Max Green Setting (Gmax), s	10.2	72.4		35.0	13.0	78.4		36.4
Max Q Clear Time (g_c+I1), s	9.8	29.5		8.2	6.7	29.3		11.1
Green Ext Time (p_c), s	0.4	18.4		0.4	0.0	19.3		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1280	270	110	1060	50	229	60	80	50	40	90
Future Volume (veh/h)	110	1280	270	110	1060	50	229	60	80	50	40	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		0.98	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900	1900	1900
Adj Flow Rate, veh/h	120	1391	209	120	1152	4	249	65	-50	54	43	84
Adj No. of Lanes	1	2	1	1	2	1	2	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	147	1791	790	147	1791	783	310	459	390	70	108	210
Arrive On Green	0.08	0.50	0.50	0.08	0.50	0.50	0.09	0.24	0.00	0.04	0.19	0.18
Sat Flow, veh/h	1792	3574	1576	1792	3574	1563	3476	1881	1599	1810	557	1087
Grp Volume(v), veh/h	120	1391	209	120	1152	4	249	65	-50	54	0	127
Grp Sat Flow(s),veh/h/ln	1792	1787	1576	1792	1787	1563	1738	1881	1599	1810	0	1644
Q Serve(g_s), s	7.9	37.9	9.1	7.9	28.3	0.2	8.4	3.2	0.0	3.5	0.0	8.1
Cycle Q Clear(g_c), s	7.9	37.9	9.1	7.9	28.3	0.2	8.4	3.2	0.0	3.5	0.0	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.66
Lane Grp Cap(c), veh/h	147	1791	790	147	1791	783	310	459	390	70	0	318
V/C Ratio(X)	0.82	0.78	0.26	0.82	0.64	0.01	0.80	0.14	-0.13	0.77	0.00	0.40
Avail Cap(c_a), veh/h	301	2578	1137	301	2578	1128	525	742	630	167	0	552
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.9	24.3	17.1	53.9	21.9	14.9	53.3	35.3	0.0	56.8	0.0	42.4
Incr Delay (d2), s/veh	4.2	0.5	0.1	4.2	0.1	0.0	1.9	0.1	0.0	6.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	18.7	3.9	4.1	14.0	0.1	4.1	1.7	0.0	1.9	0.0	3.7
LnGrp Delay(d),s/veh	58.1	24.8	17.2	58.1	22.0	14.9	55.1	35.3	0.0	63.3	0.0	42.7
LnGrp LOS	E	C	B	E	C	B	E	D		E		D
Approach Vol, veh/h		1720			1276			264			181	
Approach Delay, s/veh		26.2			25.4			60.7			48.9	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	33.1	13.8	63.7	14.6	27.1	13.8	63.7
Change Period (Y+Rc), s	4.0	5.3	4.0	* 4.2	4.0	5.3	4.0	* 4.2
Max Green Setting (Gmax), s	11.6	45.7	20.0	* 86	18.0	38.7	20.0	* 86
Max Q Clear Time (g_c+I1), s	5.5	5.2	9.9	39.9	10.4	10.1	9.9	30.3
Green Ext Time (p_c), s	0.0	0.7	0.1	19.7	0.3	0.6	0.1	20.9

Intersection Summary	
HCM 2010 Ctrl Delay	29.7
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	870	420	273	870	270	330	410	246	360	421	30
Future Volume (veh/h)	80	870	420	273	870	270	330	410	246	360	421	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		0.96	1.00		0.99	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	87	946	241	297	946	140	359	446	250	391	458	31
Adj No. of Lanes	1	3	0	2	2	0	2	2	0	2	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	110	1446	367	359	1237	183	423	598	332	457	957	65
Arrive On Green	0.06	0.36	0.36	0.10	0.40	0.40	0.12	0.27	0.26	0.13	0.28	0.27
Sat Flow, veh/h	1792	4043	1026	3442	3087	457	3476	2197	1221	3476	3391	229
Grp Volume(v), veh/h	87	801	386	297	542	544	359	362	334	391	241	248
Grp Sat Flow(s),veh/h/ln	1792	1712	1645	1721	1770	1775	1738	1787	1630	1738	1787	1833
Q Serve(g_s), s	5.7	23.4	23.5	10.1	31.6	31.6	12.1	22.0	22.4	13.1	13.3	13.4
Cycle Q Clear(g_c), s	5.7	23.4	23.5	10.1	31.6	31.6	12.1	22.0	22.4	13.1	13.3	13.4
Prop In Lane	1.00		0.62	1.00		0.26	1.00		0.75	1.00		0.12
Lane Grp Cap(c), veh/h	110	1224	588	359	709	711	423	487	444	457	504	517
V/C Ratio(X)	0.79	0.65	0.66	0.83	0.76	0.77	0.85	0.74	0.75	0.86	0.48	0.48
Avail Cap(c_a), veh/h	210	2010	966	577	1128	1131	641	719	656	758	779	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	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	55.2	32.1	32.2	52.3	30.9	30.9	51.3	39.6	40.2	50.7	35.5	35.6
Incr Delay (d2), s/veh	4.7	0.2	0.5	2.5	0.7	0.7	4.3	0.9	1.2	2.4	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	11.0	10.7	4.9	15.5	15.5	6.0	11.0	10.2	6.5	6.6	6.8
LnGrp Delay(d),s/veh	59.9	32.3	32.6	54.8	31.5	31.6	55.6	40.5	41.3	53.1	35.7	35.9
LnGrp LOS	E	C	C	D	C	C	E	D	D	D	D	D
Approach Vol, veh/h		1274			1383			1055			880	
Approach Delay, s/veh		34.3			36.5			45.9			43.5	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.7	36.5	16.4	46.6	18.5	37.7	11.3	51.8
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	26.3	46.7	20.0	68.7	22.0	50.7	14.0	74.7
Max Q Clear Time (g_c+I1), s	15.1	24.4	12.1	25.5	14.1	15.4	7.7	33.6
Green Ext Time (p_c), s	0.6	4.3	0.3	13.0	0.4	4.6	0.0	12.9

Intersection Summary	
HCM 2010 Ctrl Delay	39.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	314	1221	140	210	1320	320	250	440	220	520	205	192
Future Volume (veh/h)	314	1221	140	210	1320	320	250	440	220	520	205	192
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.98
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	1900	1863	1863	1863	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	341	1327	141	228	1435	234	272	478	215	565	223	17
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	271	1646	175	252	1741	540	260	589	263	478	849	373
Arrive On Green	0.15	0.35	0.35	0.14	0.34	0.34	0.15	0.25	0.24	0.14	0.24	0.24
Sat Flow, veh/h	1774	4661	495	1774	5085	1576	1792	2403	1074	3476	3574	1569
Grp Volume(v), veh/h	341	965	503	228	1435	234	272	355	338	565	223	17
Grp Sat Flow(s),veh/h/ln	1774	1695	1766	1774	1695	1576	1792	1787	1690	1738	1787	1569
Q Serve(g_s), s	20.0	33.7	33.7	16.6	33.9	15.0	19.0	24.5	24.8	18.0	6.6	1.1
Cycle Q Clear(g_c), s	20.0	33.7	33.7	16.6	33.9	15.0	19.0	24.5	24.8	18.0	6.6	1.1
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	271	1197	624	252	1741	540	260	438	415	478	849	373
V/C Ratio(X)	1.26	0.81	0.81	0.91	0.82	0.43	1.05	0.81	0.82	1.18	0.26	0.05
Avail Cap(c_a), veh/h	271	1225	638	257	1798	557	260	610	577	478	1193	524
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	38.3	38.3	55.3	39.5	33.3	56.0	46.5	47.0	56.5	40.6	38.5
Incr Delay (d2), s/veh	142.6	3.7	6.8	31.2	2.9	0.2	68.4	3.8	4.4	101.8	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	20.5	16.4	17.7	10.3	16.3	6.5	14.3	12.6	12.1	15.4	3.3	0.5
LnGrp Delay(d),s/veh	198.1	42.0	45.1	86.5	42.4	33.5	124.4	50.4	51.4	158.2	40.6	38.5
LnGrp LOS	F	D	D	F	D	C	F	D	D	F	D	D
Approach Vol, veh/h		1809			1897			965			805	
Approach Delay, s/veh		72.3			46.6			71.6			123.1	
Approach LOS		E			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	36.1	22.6	50.2	23.0	35.1	24.0	48.8
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	18.0	43.4	19.0	46.0	19.0	42.4	20.0	45.0
Max Q Clear Time (g_c+I1), s	20.0	26.8	18.6	35.7	21.0	8.6	22.0	35.9
Green Ext Time (p_c), s	0.0	3.2	0.0	8.3	0.0	3.5	0.0	7.5

Intersection Summary	
HCM 2010 Ctrl Delay	70.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2105	860	220	2118	0	0	0	0	710	10	910
Future Volume (veh/h)	0	2105	860	220	2118	0	0	0	0	710	10	910
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0				1863	1863	1863
Adj Flow Rate, veh/h	0	2288	600	239	2302	0				780	0	960
Adj No. of Lanes	0	3	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	1	1	0				2	2	2
Cap, veh/h	0	2260	703	158	2876	0				1277	0	570
Arrive On Green	0.00	0.44	0.44	0.08	0.56	0.00				0.36	0.00	0.36
Sat Flow, veh/h	0	5305	1598	1971	5305	0				3548	0	1583
Grp Volume(v), veh/h	0	2288	600	239	2302	0				780	0	960
Grp Sat Flow(s),veh/h/ln	0	1712	1598	985	1712	0				1774	0	1583
Q Serve(g_s), s	0.0	44.0	33.7	8.0	35.7	0.0				18.0	0.0	36.0
Cycle Q Clear(g_c), s	0.0	44.0	33.7	8.0	35.7	0.0				18.0	0.0	36.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2260	703	158	2876	0				1277	0	570
V/C Ratio(X)	0.00	1.01	0.85	1.52	0.80	0.00				0.61	0.00	1.68
Avail Cap(c_a), veh/h	0	2260	703	158	2876	0				1277	0	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	28.0	25.1	46.0	17.5	0.0				26.3	0.0	32.0
Incr Delay (d2), s/veh	0.0	22.1	9.5	261.9	1.6	0.0				0.6	0.0	315.5
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	0.0	25.3	16.7	7.9	17.0	0.0				8.9	0.0	65.6
LnGrp Delay(d),s/veh	0.0	50.1	34.6	307.9	19.1	0.0				26.9	0.0	347.5
LnGrp LOS		F	C	F	B					C		F
Approach Vol, veh/h		2888			2541						1740	
Approach Delay, s/veh		46.9			46.3						203.8	
Approach LOS		D			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	12.0	48.0		40.0		60.0		
Change Period (Y+Rc), s	4.0	5.3		5.3		5.3		
Max Green Setting (Gmax), s	8.0	42.7		34.7		54.7		
Max Q Clear Time (g_c+I1), s	10.0	46.0		38.0		37.7		
Green Ext Time (p_c), s	0.0	0.0		0.0		16.3		

Intersection Summary	
HCM 2010 Ctrl Delay	84.7
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	80	90	60	100	90	209	988	140	110	884	90
Future Volume (veh/h)	110	80	90	60	100	90	209	988	140	110	884	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		0.98	1.00		0.97	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	1881	1881	1900	1863	1863	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	120	87	76	65	109	81	227	1074	139	120	961	95
Adj No. of Lanes	1	1	0	1	1	0	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, %	1	1	1	2	2	2	1	1	1	1	1	1
Cap, veh/h	151	183	160	84	159	118	267	1522	197	153	1358	134
Arrive On Green	0.08	0.20	0.20	0.05	0.16	0.16	0.15	0.48	0.46	0.09	0.41	0.40
Sat Flow, veh/h	1792	920	804	1774	981	729	1792	3183	411	1792	3278	324
Grp Volume(v), veh/h	120	0	163	65	0	190	227	602	611	120	524	532
Grp Sat Flow(s),veh/h/ln	1792	0	1724	1774	0	1710	1792	1787	1807	1792	1787	1814
Q Serve(g_s), s	5.5	0.0	7.0	3.1	0.0	8.8	10.4	22.4	22.5	5.5	20.5	20.5
Cycle Q Clear(g_c), s	5.5	0.0	7.0	3.1	0.0	8.8	10.4	22.4	22.5	5.5	20.5	20.5
Prop In Lane	1.00		0.47	1.00		0.43	1.00		0.23	1.00		0.18
Lane Grp Cap(c), veh/h	151	0	344	84	0	277	267	855	864	153	741	752
V/C Ratio(X)	0.79	0.00	0.47	0.78	0.00	0.69	0.85	0.70	0.71	0.78	0.71	0.71
Avail Cap(c_a), veh/h	234	0	696	232	0	690	553	976	986	702	1124	1141
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.8	0.0	29.8	39.7	0.0	33.3	34.9	17.3	17.5	37.8	20.4	20.5
Incr Delay (d2), s/veh	4.5	0.0	0.4	5.7	0.0	1.1	2.9	1.5	1.5	3.3	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	3.4	1.6	0.0	4.3	5.3	11.2	11.6	2.9	10.1	10.3
LnGrp Delay(d),s/veh	42.4	0.0	30.2	45.4	0.0	34.4	37.8	18.8	18.9	41.1	20.9	21.0
LnGrp LOS	D		C	D		C	D	B	B	D	C	C
Approach Vol, veh/h		283			255			1440			1176	
Approach Delay, s/veh		35.4			37.2			21.8			23.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	44.3	8.0	20.8	16.6	38.9	11.1	17.6
Change Period (Y+Rc), s	4.0	5.3	4.0	4.0	4.0	5.3	4.0	4.0
Max Green Setting (Gmax), s	33.0	44.7	11.0	34.0	26.0	51.7	11.0	34.0
Max Q Clear Time (g_c+I1), s	7.5	24.5	5.1	9.0	12.4	22.5	7.5	10.8
Green Ext Time (p_c), s	0.1	9.6	0.0	1.2	0.2	11.1	0.0	1.2

Intersection Summary		
HCM 2010 Ctrl Delay		24.7
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	0	6	150	0	330	19	787	40	60	707	178
Future Volume (veh/h)	70	0	6	150	0	330	19	787	40	60	707	178
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1900	1900	1863	1881	1881	1881	1877	1900
Adj Flow Rate, veh/h	76	0	7	163	0	302	21	855	16	65	768	193
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	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, %	2	2	2	0	2	2	2	1	1	1	1	1
Cap, veh/h	147	0	304	208	0	361	75	1402	611	83	1092	274
Arrive On Green	0.08	0.00	0.19	0.12	0.00	0.22	0.04	0.39	0.39	0.05	0.39	0.37
Sat Flow, veh/h	1774	0	1583	1810	0	1615	1774	3574	1558	1792	2826	710
Grp Volume(v), veh/h	76	0	7	163	0	302	21	855	16	65	485	476
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1810	0	1615	1774	1787	1558	1792	1784	1752
Q Serve(g_s), s	2.9	0.0	0.3	6.2	0.0	12.6	0.8	13.5	0.4	2.5	16.2	16.3
Cycle Q Clear(g_c), s	2.9	0.0	0.3	6.2	0.0	12.6	0.8	13.5	0.4	2.5	16.2	16.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	147	0	304	208	0	361	75	1402	611	83	689	677
V/C Ratio(X)	0.52	0.00	0.02	0.78	0.00	0.84	0.28	0.61	0.03	0.78	0.70	0.70
Avail Cap(c_a), veh/h	176	0	806	486	0	1142	158	1920	837	228	1009	991
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	0.0	23.2	30.4	0.0	26.2	32.8	17.2	13.2	33.4	18.3	18.5
Incr Delay (d2), s/veh	2.8	0.0	0.0	6.3	0.0	2.0	2.0	0.2	0.0	5.8	0.5	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	1.5	0.0	0.1	3.4	0.0	5.8	0.4	6.7	0.2	1.4	8.0	7.9
LnGrp Delay(d),s/veh	33.8	0.0	23.2	36.8	0.0	28.2	34.8	17.3	13.2	39.2	18.8	19.0
LnGrp LOS	C		C	D		C	C	B	B	D	B	B
Approach Vol, veh/h		83			465			892			1026	
Approach Delay, s/veh		32.9			31.2			17.7			20.2	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	31.7	14.1	17.6	7.7	31.3	9.9	21.8
Change Period (Y+Rc), s	4.0	5.3	6.0	6.0	6.0	5.3	6.0	* 6
Max Green Setting (Gmax), s	9.3	36.7	19.0	34.0	5.0	38.7	5.0	* 50
Max Q Clear Time (g_c+I1), s	4.5	15.5	8.2	2.3	2.8	18.3	4.9	14.6
Green Ext Time (p_c), s	0.0	7.9	0.3	1.2	0.0	7.8	0.0	1.2

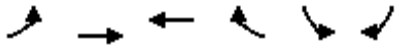
Intersection Summary	
HCM 2010 Ctrl Delay	21.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	115	24	110	183	462	50	597	60	400	356	57
Future Volume (veh/h)	87	115	24	110	183	462	50	597	60	400	356	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		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1881	1881	1900	1900	1900	1900	1881	1881	1900
Adj Flow Rate, veh/h	95	125	26	120	199	207	54	649	65	435	387	62
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	2	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, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	177	499	101	211	334	298	70	987	99	570	1308	208
Arrive On Green	0.10	0.17	0.17	0.12	0.19	0.19	0.04	0.30	0.28	0.16	0.42	0.40
Sat Flow, veh/h	1810	2990	607	1792	1787	1596	1810	3310	331	3476	3090	491
Grp Volume(v), veh/h	95	74	77	120	199	207	54	353	361	435	223	226
Grp Sat Flow(s),veh/h/ln	1810	1805	1792	1792	1787	1596	1810	1805	1837	1738	1787	1794
Q Serve(g_s), s	3.2	2.3	2.4	4.0	6.4	7.7	1.9	10.8	10.9	7.6	5.2	5.3
Cycle Q Clear(g_c), s	3.2	2.3	2.4	4.0	6.4	7.7	1.9	10.8	10.9	7.6	5.2	5.3
Prop In Lane	1.00		0.34	1.00		1.00	1.00		0.18	1.00		0.27
Lane Grp Cap(c), veh/h	177	301	299	211	334	298	70	538	547	570	756	760
V/C Ratio(X)	0.54	0.25	0.26	0.57	0.60	0.69	0.77	0.66	0.66	0.76	0.29	0.30
Avail Cap(c_a), veh/h	200	1000	992	567	1358	1213	115	1400	1424	1650	2121	2130
HCM Platoon Ratio	1.00	1.00	1.00	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	27.1	22.9	22.9	26.4	23.5	24.0	30.1	19.4	19.5	25.2	12.0	12.2
Incr Delay (d2), s/veh	2.5	0.2	0.2	2.4	0.6	1.1	6.5	0.5	0.5	0.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.1	1.2	2.1	3.2	3.4	1.1	5.4	5.6	3.7	2.6	2.6
LnGrp Delay(d),s/veh	29.6	23.0	23.1	28.7	24.1	25.1	36.6	19.9	20.0	26.1	12.1	12.2
LnGrp LOS	C	C	C	C	C	C	D	B	B	C	B	B
Approach Vol, veh/h		246			526			768			884	
Approach Delay, s/veh		25.6			25.6			21.1			19.0	
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	14.4	22.8	11.4	14.5	6.4	30.7	10.2	15.8
Change Period (Y+Rc), s	4.0	5.3	6.0	4.0	4.0	5.3	6.0	4.0
Max Green Setting (Gmax), s	30.0	47.7	18.0	35.0	4.0	73.7	5.0	48.0
Max Q Clear Time (g_c+I1), s	12.6	12.9	6.0	4.4	3.9	7.3	5.2	9.7
Green Ext Time (p_c), s	0.8	4.7	0.2	1.9	0.0	4.7	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	21.8
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	532	923	1075	280	1560	564
Future Volume (veh/h)	532	923	1075	280	1560	564
Number	5	2	6	16	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1881	1881
Adj Flow Rate, veh/h	578	1003	1168	304	1696	613
Adj No. of Lanes	1	3	2	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	1	1
Cap, veh/h	373	3077	1277	571	1173	540
Arrive On Green	0.21	0.61	0.36	0.36	0.34	0.34
Sat Flow, veh/h	1774	5253	3632	1583	3476	1599
Grp Volume(v), veh/h	578	1003	1168	304	1696	613
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1583	1738	1599
Q Serve(g_s), s	29.3	13.5	43.8	21.1	47.0	47.0
Cycle Q Clear(g_c), s	29.3	13.5	43.8	21.1	47.0	47.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	373	3077	1277	571	1173	540
V/C Ratio(X)	1.55	0.33	0.91	0.53	1.45	1.14
Avail Cap(c_a), veh/h	373	3104	1296	580	1173	540
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	55.0	13.5	42.5	35.2	46.1	46.1
Incr Delay (d2), s/veh	259.7	0.0	9.8	0.4	205.4	81.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	41.2	6.3	23.2	9.3	56.0	33.0
LnGrp Delay(d),s/veh	314.7	13.6	52.3	35.6	251.5	128.0
LnGrp LOS	F	B	D	D	F	F
Approach Vol, veh/h		1581	1472		2309	
Approach Delay, s/veh		123.6	48.8		218.7	
Approach LOS		F	D		F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		88.2			34.0	54.2		51.0
Change Period (Y+Rc), s		5.3			6.0	5.3		5.3
Max Green Setting (Gmax), s		83.7			28.0	49.7		45.7
Max Q Clear Time (g_c+I1), s		15.5			31.3	45.8		49.0
Green Ext Time (p_c), s		16.3			0.0	3.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	144.1
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	50.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	417	130	180	443	87
Future Vol, veh/h	60	417	130	180	443	87
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, %	0	0	0	0	0	0
Mvmt Flow	65	453	141	196	482	95

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1297	239	0	0	337	0
Stage 1	239	-	-	-	-	-
Stage 2	1058	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	180	805	-	-	1234	-
Stage 1	805	-	-	-	-	-
Stage 2	337	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	106	805	-	-	1234	-
Mov Cap-2 Maneuver	106	-	-	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	198	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	130.4	0	8.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	440	1234	-
HCM Lane V/C Ratio	-	-	1.178	0.39	-
HCM Control Delay (s)	-	-	130.4	9.8	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	19.7	1.9	-

Appendix C: Signal Warrant Assessment

FEHR & PEERS

Major Street	Deer Valley Road
Minor Street	Balfour Road

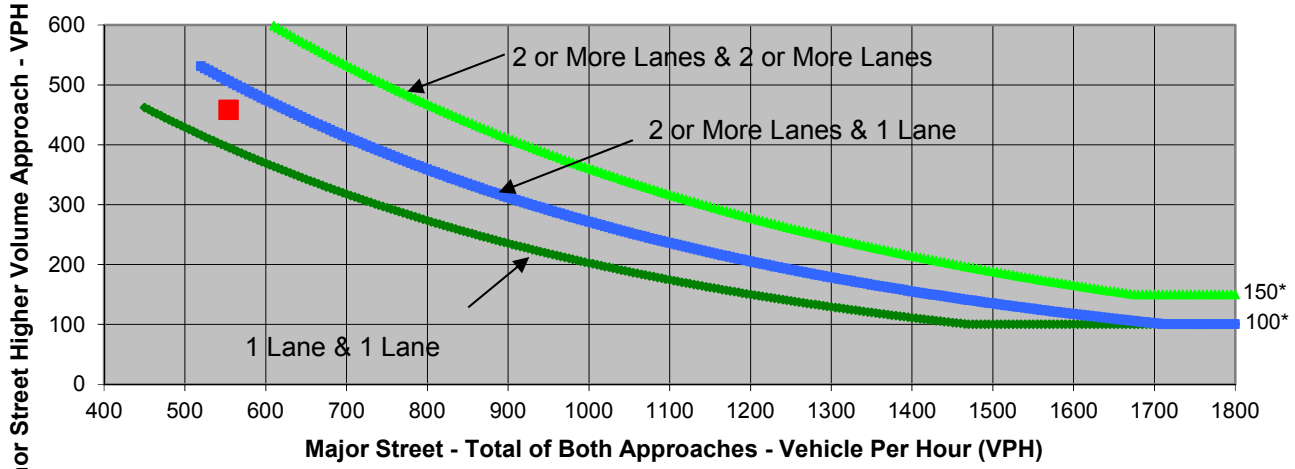
Project	The Ranch
Scenario	Existing Conditions
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	414	0	105
Through	24	77	0	0
Right	39	0	0	353
Total	63	491	0	458

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**554**	**458**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

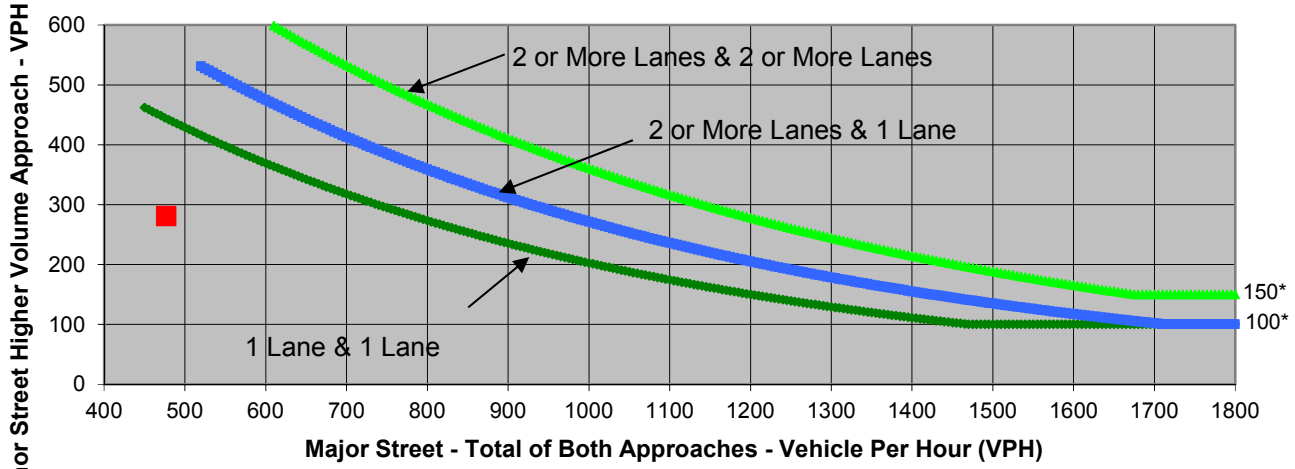
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Existing Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	322	0	25
Through	40	28	0	0
Right	87	0	0	256
Total	127	350	0	281

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**477**	**281**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

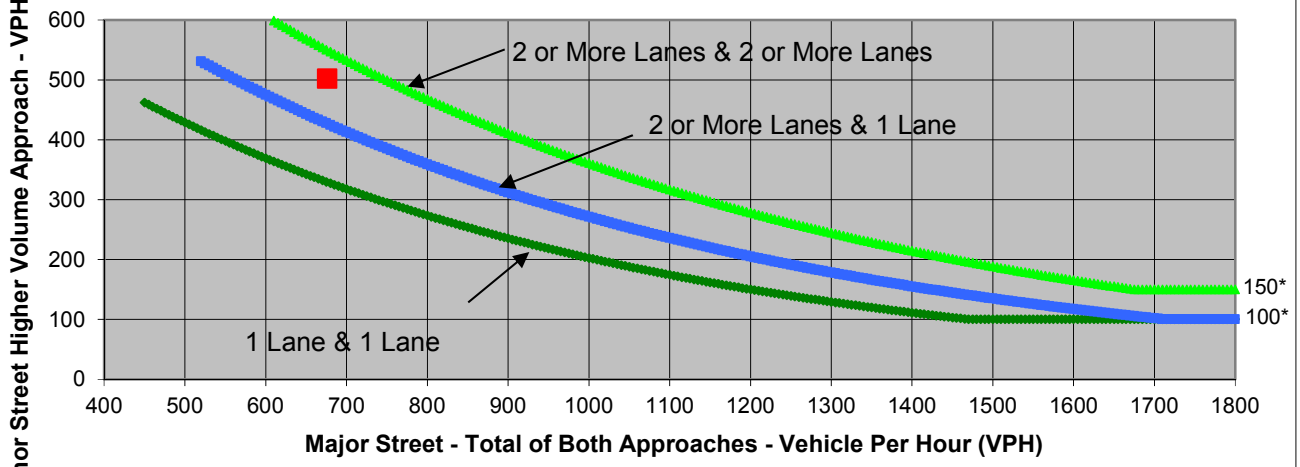
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Existing Plus Multigen Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	521	0	105
Through	29	87	0	0
Right	39	0	0	397
Total	68	608	0	502

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**676**	**502**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

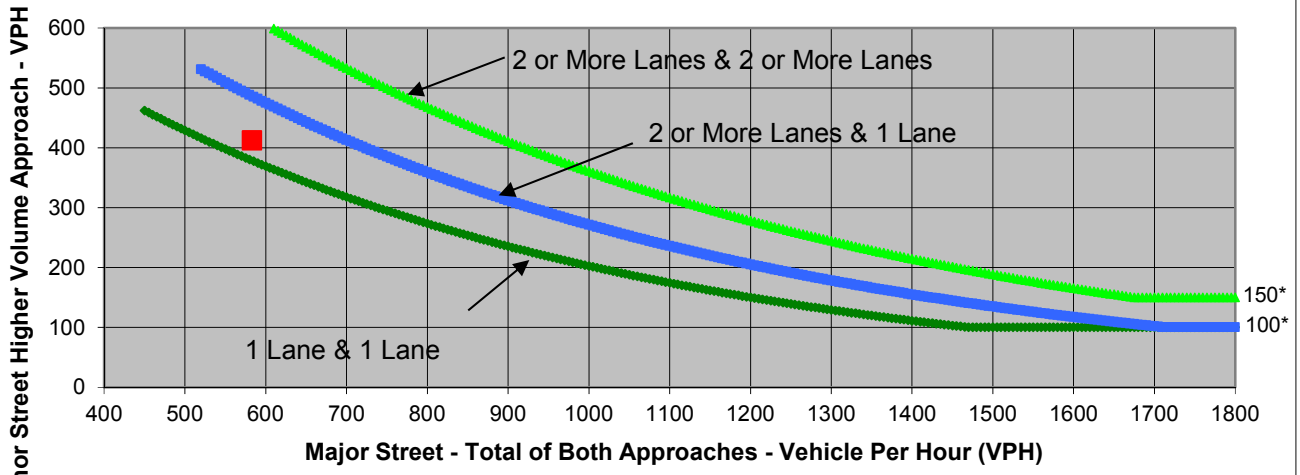
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Existing Plus Multigen Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	405	0	25
Through	54	37	0	0
Right	87	0	0	387
Total	141	442	0	412

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**583**	**412**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

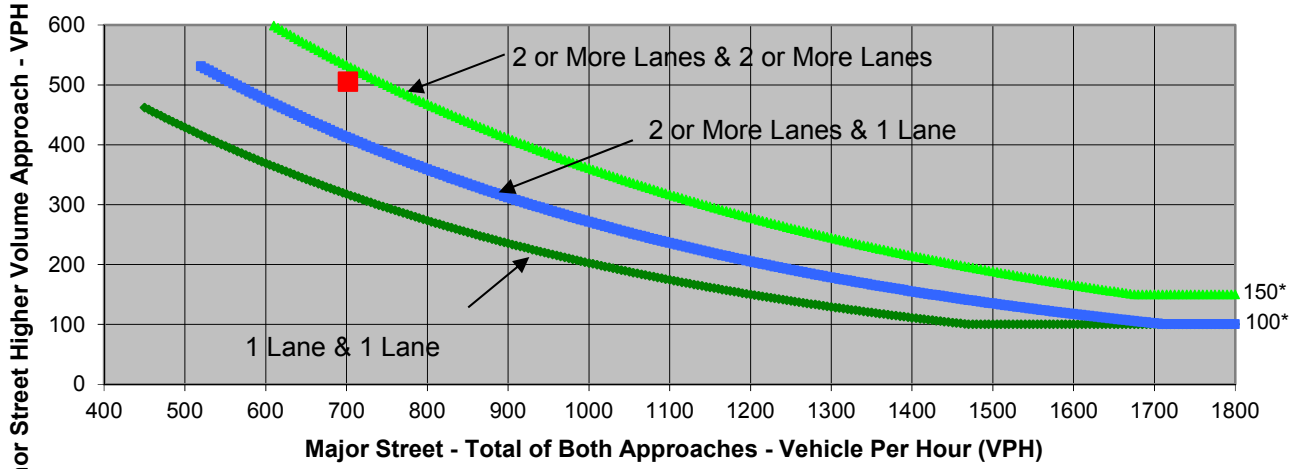
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Existing Plus Traditional Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	544	0	105
Through	29	90	0	0
Right	39	0	0	400
Total	68	634	0	505

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**702**	**505**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

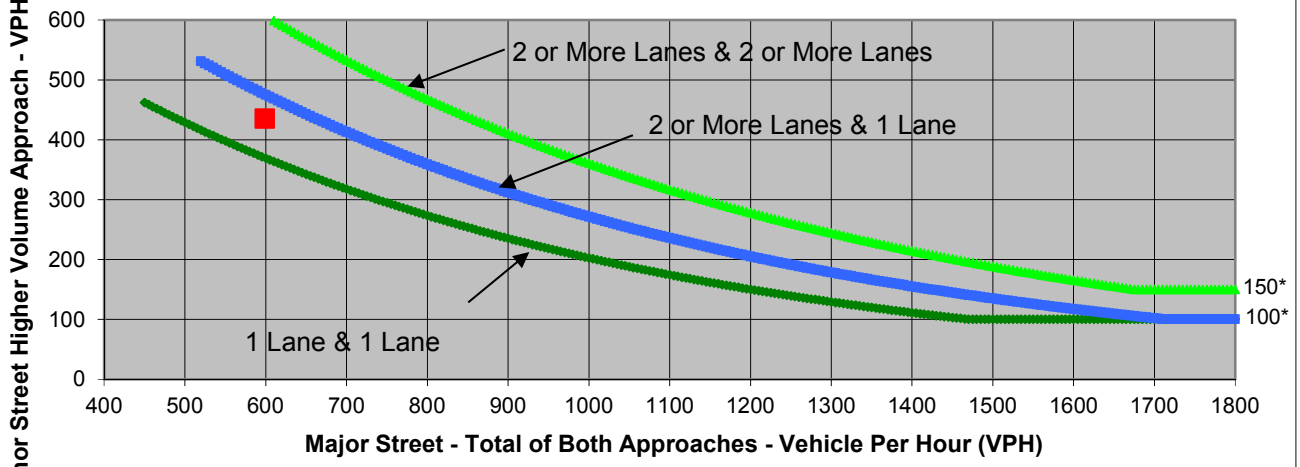
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Existing Plus Traditional Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	418	0	25
Through	56	38	0	0
Right	87	0	0	410
Total	143	456	0	435

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**599**	**435**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

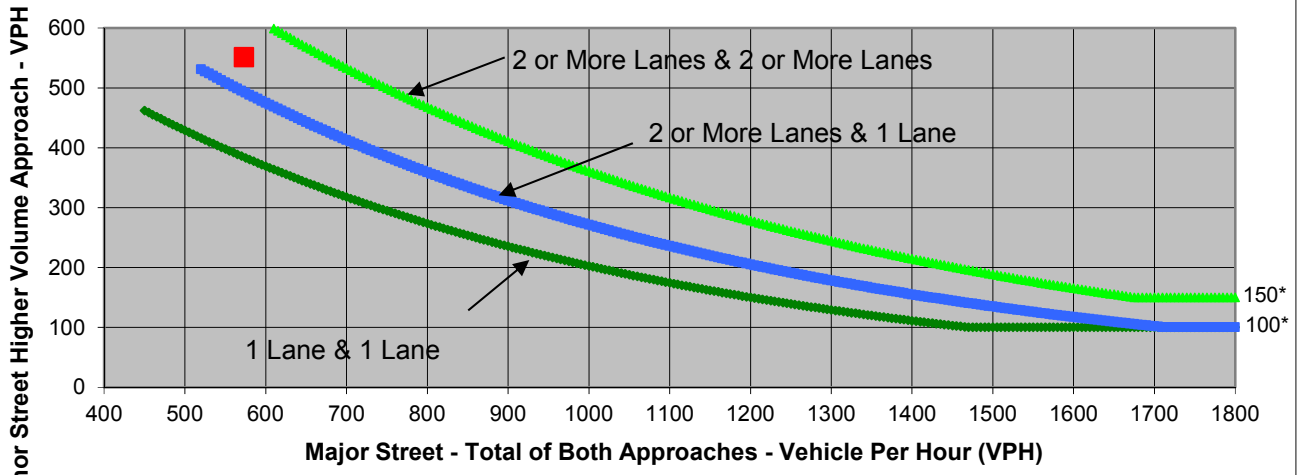
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Near Term Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	373	0	104
Through	42	119	0	0
Right	39	0	0	447
Total	81	492	0	551

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**573**	**551**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

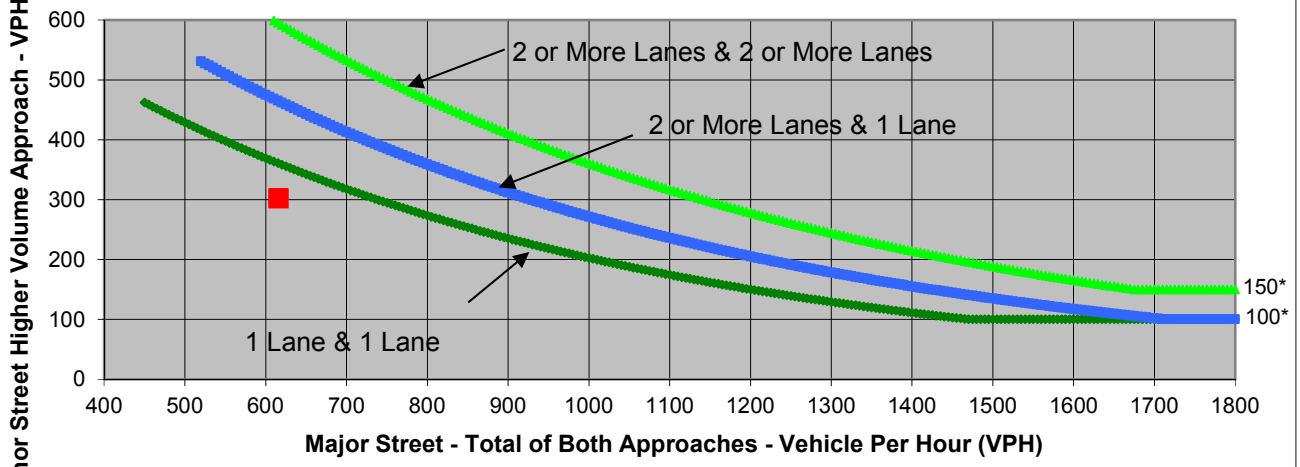
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Near Term Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	338	0	26
Through	103	75	0	0
Right	100	0	0	276
Total	203	413	0	302

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**616**	**302**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

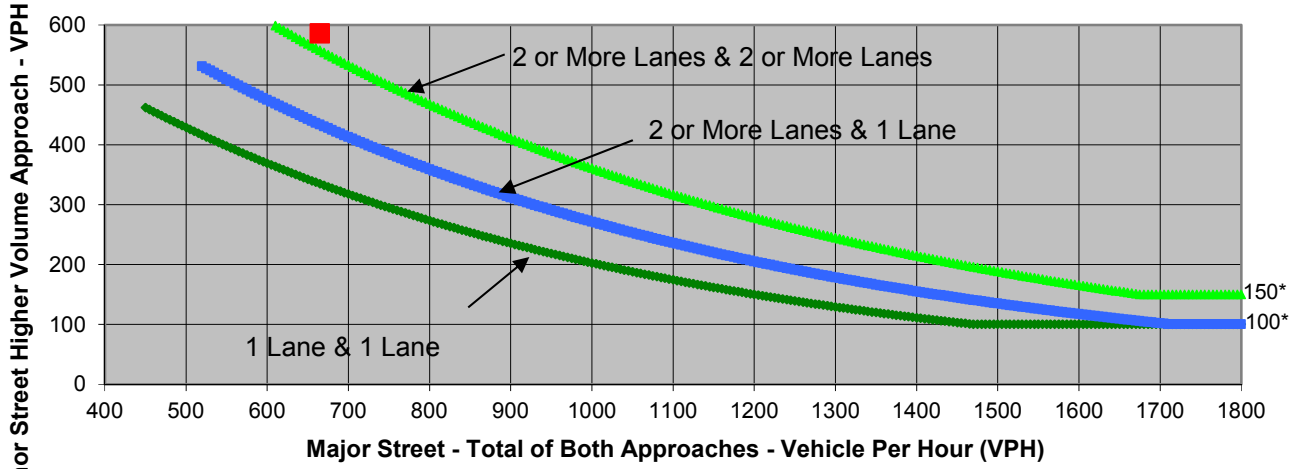
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Near Term with Multigen Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	449	0	104
Through	47	130	0	0
Right	39	0	0	482
Total	86	579	0	586

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**665**	**586**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

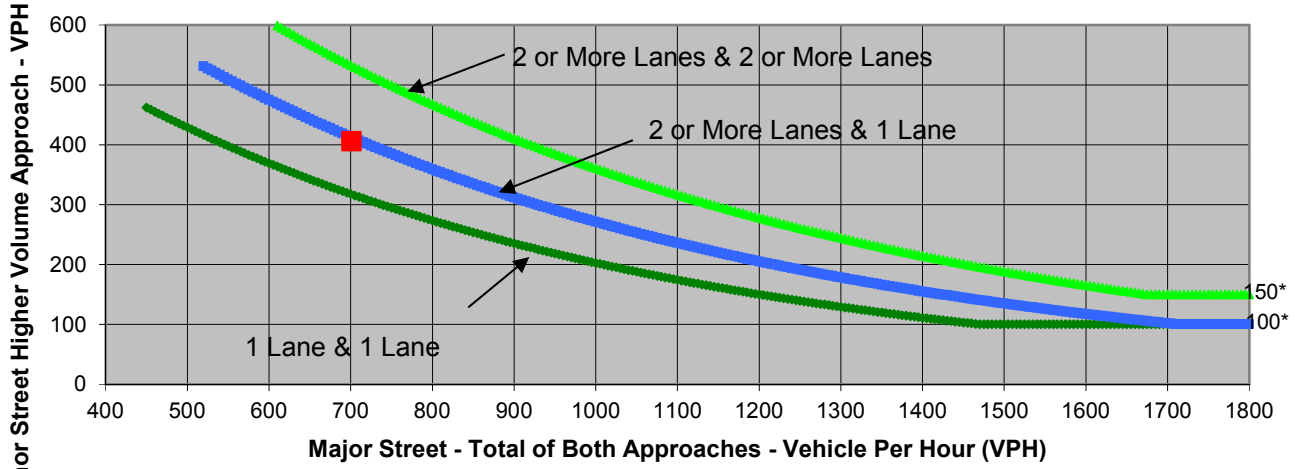
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Near Term with Multigen Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	400	0	26
Through	117	84	0	0
Right	100	0	0	380
Total	217	484	0	406

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**701**	**406**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

Major Street	Deer Valley Road
Minor Street	Balfour Road

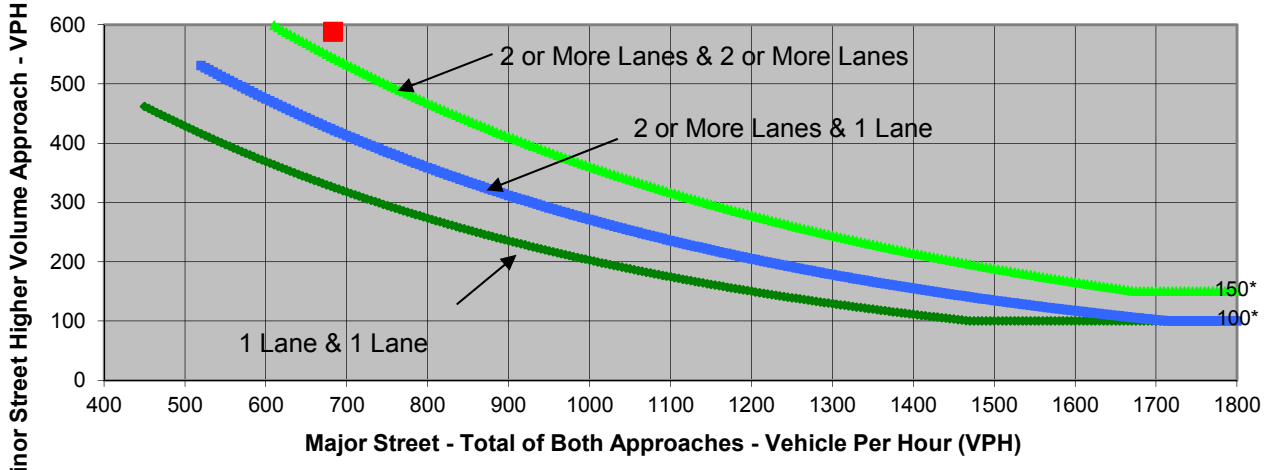
Project	The Ranch
Scenario	Near Term with Traditional Conditions
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	465	0	484
Through	47	132	0	0
Right	39	0	0	104
Total	86	597	0	588

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Deer Valley Road	Minor Street Balfour Road	Warrant Met
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**683**	**588**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

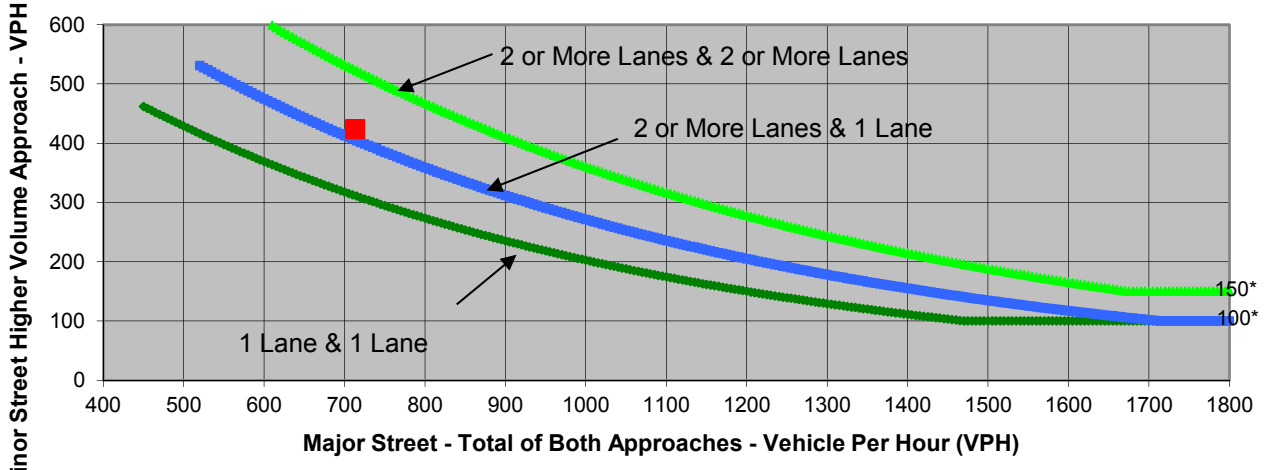
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Near Term with Traditional Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	409	0	26
Through	119	85	0	0
Right	100	0	0	398
Total	219	494	0	424

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**713**	**424**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

Major Street	Deer Valley Road
Minor Street	Balfour Road

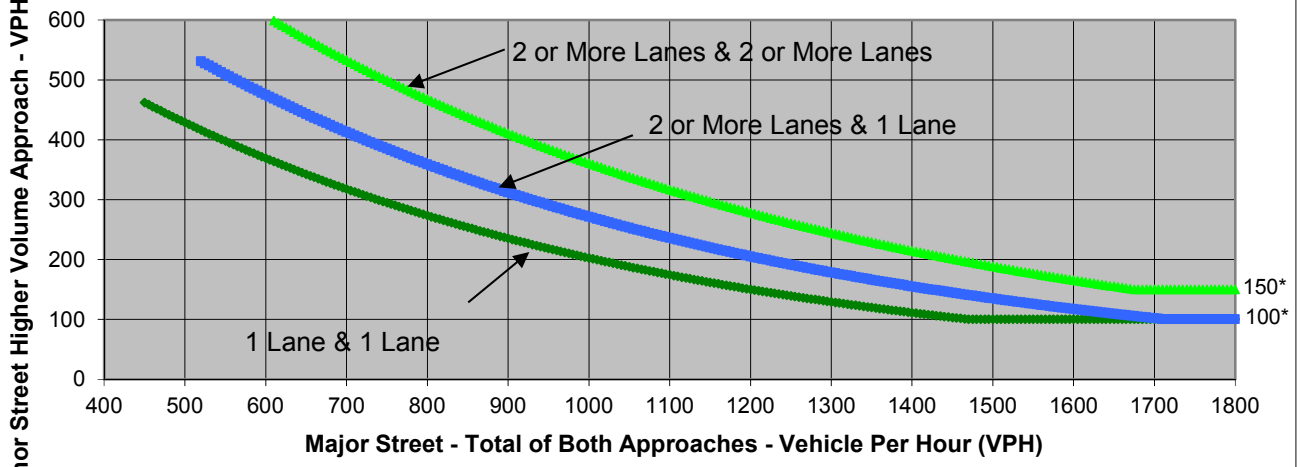
Project	The Ranch
Scenario	Cumulative Conditions
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	420	0	200
Through	40	160	0	0
Right	70	0	0	480
Total	110	580	0	680

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**690**	**680**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

Major Street	Deer Valley Road
Minor Street	Balfour Road

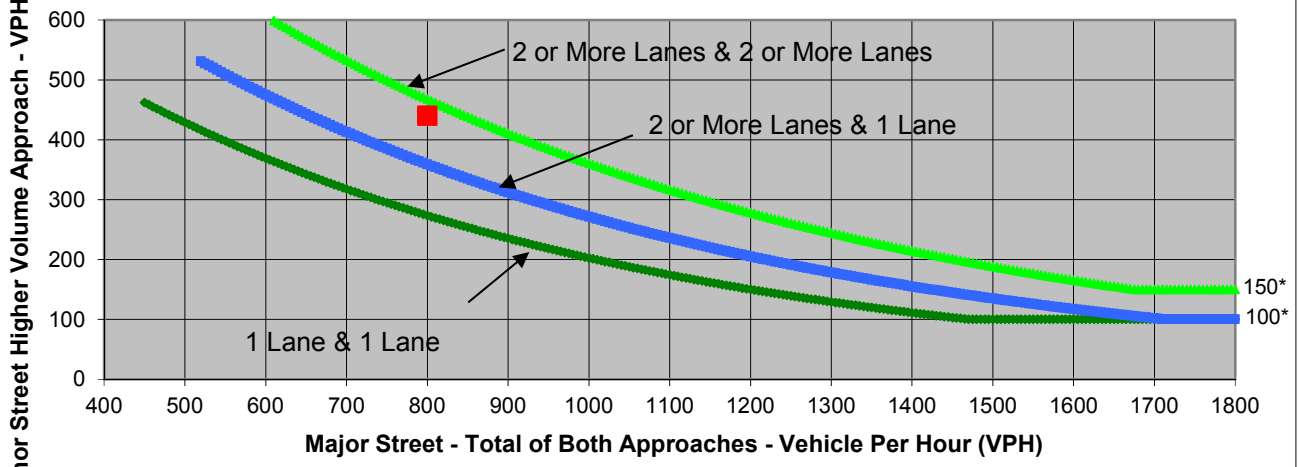
Project	The Ranch
Scenario	Cumulative Conditions
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	420	0	380
Through	120	80	0	0
Right	180	0	0	60
Total	300	500	0	440

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**800**	**440**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

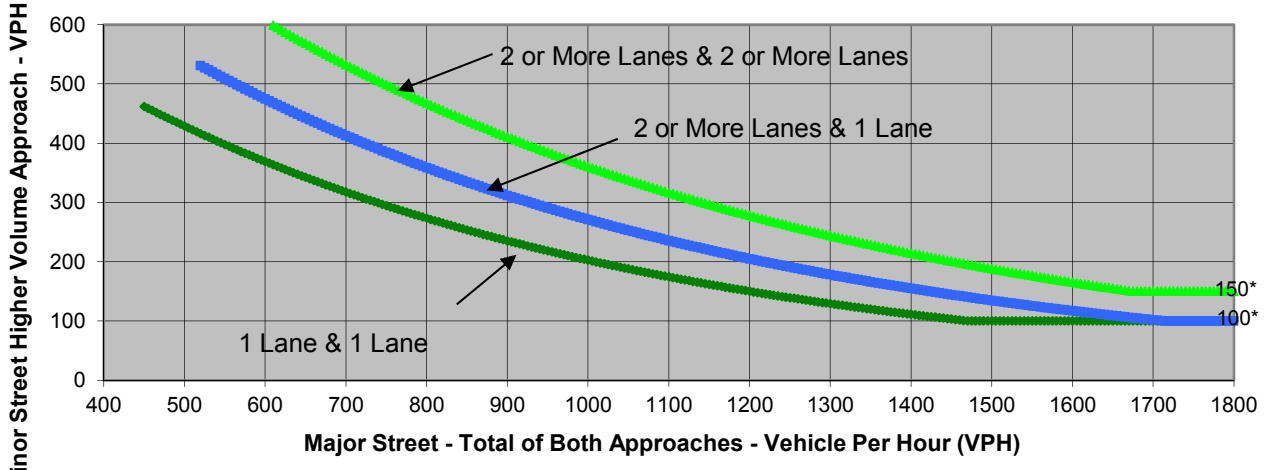
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Cumulative with Multigen Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	463	0	200
Through	45	171	0	0
Right	70	0	0	498
Total	115	634	0	698

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Deer Valley Road	Minor Street Balfour Road	Warrant Met
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**749**	**698**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Major Street	Deer Valley Road
Minor Street	Balfour Road

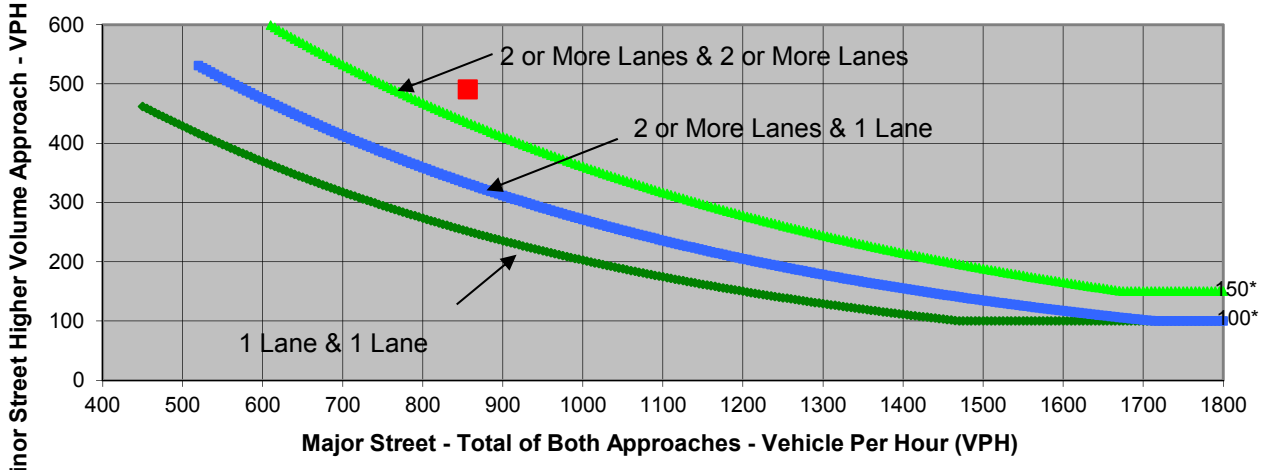
Project	The Ranch
Scenario	Cumulative with Multigen Conditions
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	453	0	60
Through	134	89	0	0
Right	180	0	0	431
Total	314	542	0	491

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**856**	**491**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

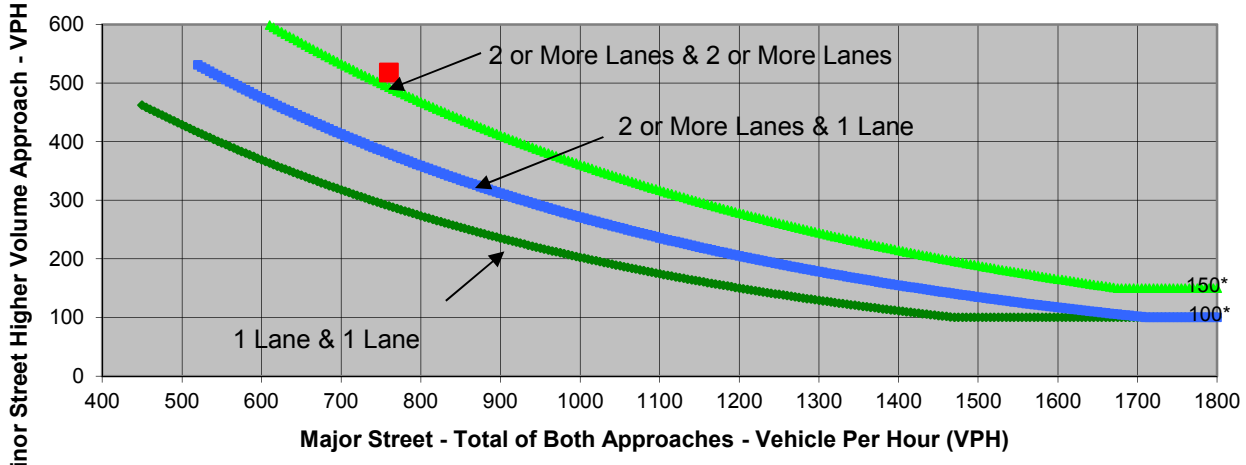
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Cumulative with Traditional Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	472	0	20
Through	45	173	0	0
Right	70	0	0	498
Total	115	645	0	518

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**760**	**518**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

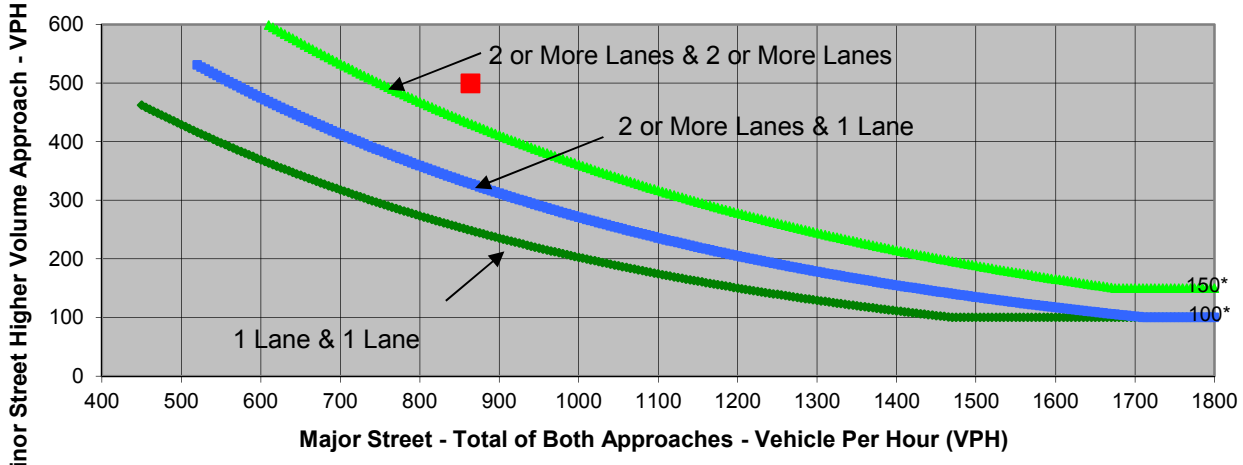
Major Street	Deer Valley Road	Project	The Ranch
Minor Street	Balfour Road	Scenario	Cumulative with Traditional Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	458	0	439
Through	136	90	0	0
Right	180	0	0	60
Total	316	548	0	499

Major Street Direction

x	North/South
	East/West



* Note: 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 approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Deer Valley Road	Balfour Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**864**	**499**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Appendix D: Vehicle Queue Summary

Int #	Intersection	Movement	Storage Length (ft)	Existing AM Average Queue (ft)	Existing AM 95th Percentile Queue (ft)	Existing PM Average Queue (ft)	Existing PM 95th Percentile Queue (ft)	Existing Plus Trad. Project AM Average Queue (ft)	Existing Plus Trad. Project AM 95th Percentile Queue (ft)	Existing Plus Trad. Project PM Average Queue (ft)	Existing Plus Trad. Project PM 95th Percentile Queue (ft)	Existing Plus Multigen. AM Average Queue (ft)	Existing Plus Multigen. AM 95th Percentile Queue (ft)	Existing Plus Multigen. PM Average Queue (ft)	Existing Plus Multigen. PM 95th Percentile Queue (ft)
1	Lone Tree Way & State Route 4 (Westbound Ramps)	WBL	325	75	125	25	75	75	125	50	75	75	125	25	100
		WBR	325	75	175	25	75	100	200	25	75	75	200	25	100
		NBL	300	175	**350**	75	175	250	**475**	100	200	250	**450**	100	225
		NBT	300	75	150	50	75	100	175	50	75	100	150	50	100
		SBT	475	100	150	50	75	125	175	50	75	125	175	50	100
2	Lone Tree Way & State Route 4 (Eastbound Ramps)	EBL	350	100	150	100	125	125	150	100	125	125	150	100	125
		EBT	850					25	25	25	25	25	25	25	25
		EBR	350	425	**600**	600	**875**	550	**700**	950	**1,275**	525	**675**	750	**1,350**
		NBT	300	325	**400**	250	**325**	475	**500**	325	**400**	450	**475**	325	**450**
		SBL	300	125	200	125	200	150	200	150	250	150	200	150	275
		SBT	300	175	275	175	250	225	275	225	275	225	275	200	275
3	Hillcrest Avenue & Sunset Drive/Slatten Ranch	EBL	600	25	50	25	75	25	50	25	75	25	50	25	75
		EBT	600	25	50	25	50	25	50	25	50	25	50	25	75
		WBL	475	50	125	50	125	50	125	50	150	50	125	50	150
		WBT	675	50	100	75	175	50	100	75	175	50	100	75	200
		NBL	475	75	175	50	150	75	175	50	150	75	175	50	175
		NBT	475	75	175	100	225	75	175	100	225	75	175	100	250
		NBR	475	25	25	25	50	25	25	25	50	25	25	25	75
		SBL	225	25	25	25	50	25	25	25	50	25	25	25	50
		SBT	450	125	300	125	250	125	300	100	250	125	300	100	275
4	Hillcrest Avenue & State Route 4 Eastbound Ramps	EBL	725	50	100	75	125	50	100	75	125	50	100	75	150
		EBR	725	100	225	200	400	100	225	225	450	100	225	200	500
		NBT	100	325	**400**	300	**375**	325	**400**	275	**350**	325	**400**	275	**450**
		SBL	375	50	75	50	100	50	75	50	100	50	75	50	100
		SBT	475	75	75	100	100	75	75	75	100	75	75	100	125
5	Lone Tree Way & Davison Drive	EBT	100	50	100	50	**150**	50	100	75	**175**	50	100	50	**175**
		EBR	100	25	25	25	50	25	25	25	50	25	25	25	50
		WBL	350	125	325	75	200	175	325	75	225	175	325	75	225
		WBT	350	25	75	25	75	50	75	25	75	25	75	25	75
		WBR	100	25	100	25	75	25	100	25	75	25	100	25	100
		NBL	100	25	75	25	**125**	25	75	50	**125**	25	75	50	**125**
		NBT	500	350	**775**	175	475	500	**1,100**	225	**575**	475	**1,050**	225	**650**
		SBL	200	75	150	50	150	75	150	75	175	75	150	50	175
		SBT	275	200	**450**	200	**525**	225	**500**	275	**675**	225	**500**	250	**750**
6	Deer Valley Road & Davison Drive & Hillcrest Avenue	EBL	200	125	**250**	125	**225**	125	**250**	125	**225**	125	**250**	125	**250**
		EBT	300	50	100	75	125	50	100	75	125	50	100	75	150
		WBL	225	50	100	50	100	50	100	50	125	50	100	50	125
		WBT	475	225	350	150	250	225	375	150	250	225	375	150	250
		WBR	475	225	400	150	275	225	425	150	275	225	425	125	300
		NBL	250	50	100	75	175	50	100	100	175	50	100	75	200
		NBT	575	300	450	300	475	300	450	325	475	300	450	300	525
		SBL	250	200	**325**	275	**500**	200	**325**	275	**525**	200	**325**	250	**575**
		SBT	675	325	475	350	525	325	500	375	575	325	500	350	625
7	Lone Tree Way & James Donlon Boulevard/Ridgerock Drive	EBL	175	100	**250**	75	**200**	100	**250**	75	**200**	100	**250**	75	**225**
		EBT	575	50	100	50	125	50	100	50	125	50	100	50	150
		EBR	575	25	75	25	75	25	75	25	75	25	75	25	150
		WBT	500	75	125	25	75	75	125	50	75	75	125	25	75
		WBR	500	25	25	25	25	25	25	25	25	25	25	25	25
		NBL	225	200	**450**	125	**300**	225	**475**	150	**350**	225	**475**	125	**375**
		NBT	350	225	**500**	150	325	325	**600**	175	**425**	300	**575**	150	**450**
		NBR	125	25	25	25	25	25	25	25	25	25	25	25	25
		SBL	175	50	125	50	125	50	150	50	125	50	150	50	125
		SBT	400	150	300	175	400	175	325	250	**500**	175	325	200	**550**
8	Dallas Ranch Road/Eagleridge Drive & Lone Tree Way	EBL	225	50	100	75	175	50	125	100	175	50	125	100	175
		EBT	350	325	**425**	350	**475**	375	**450**	375	**475**	375	**425**	350	**525**
		EBR	75	50	**125**	100	**175**	125	**225**	275	**450**	125	**200**	225	**450**
		WBL	225	175	**275**	100	175	200	**300**	100	175	200	**300**	100	200
		WBT	350	375	**450**	225	325	475	**550**	275	**375**	450	**525**	250	**400**
		WBR	75	25	25	25	25	25	25	25	25	25	25	25	25
		NBL	225	150	225	75	150	250	**300**	150	200	225	**300**	125	225
		NBT	425	100	175	50	75	100	150	50	75	100	150	50	75
		NBR	125	25	50	25	50	25	50	25	50	25	50	25	50
		SBL	400	75	125	50	100	75	125	50	100	75	125	50	100
		SBT	400	225	350	25	75	250	350	25	75	250	350	25	100
9	Deer Valley Road & Lone Tree	EBL	225	50	75	75	125	50	75	75	125	50	75	75	125

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	Way	EBT	500	300	375	300	400	325	375	350	425	325	375	325	475
		EBR	325	25	75	25	75	25	75	25	75	25	75	25	100
		WBL	525	225	300	175	250	300	450	375	**550**	300	425	325	**550**
		WBT	900	275	300	175	250	275	325	175	225	275	300	175	250
		WBR	525	25	50	25	50	25	50	25	50	25	50	25	75
		NBL	200	175	**225**	100	150	225	**300**	150	**250**	225	**300**	125	**250**
		NBT	400	150	225	150	225	225	275	225	275	200	250	200	300
		SBL	375	150	200	125	175	175	200	125	225	175	200	125	225
		SBT	375	250	325	100	150	275	325	175	225	275	325	150	225
10	Hillcrest Avenue & Lone Tree Way	EBL	625	100	375	75	275	125	400	100	325	125	400	75	350
		EBT	850	75	225	175	400	100	275	200	425	100	275	175	475
		EBR	275	25	25	25	25	25	25	25	25	25	25	25	25
		WBL	275	25	75	50	125	25	75	50	125	25	75	50	150
		WBT	425	150	300	150	300	175	325	175	350	175	325	150	375
		WBR	425	25	75	25	75	25	50	25	75	25	50	25	100
		NBL	250	25	75	25	75	25	75	25	75	25	75	25	75
		NBT	475	25	50	25	50	25	50	25	50	25	50	25	50
		SBL	625	100	300	100	325	100	300	125	350	100	300	100	375
		SBT	925	25	50	25	50	25	50	25	50	25	50	25	50
11	SR 4 Eastbound & Lone Tree Way	EBT	675	175	325	500	575	175	350	500	575	175	350	475	675
		EBR	325	25	100	50	150	25	100	50	175	25	100	50	225
		WBL	175	50	125	150	**225**	50	125	150	**225**	50	125	125	**250**
		WBT	700	175	325	400	450	175	325	425	475	175	325	400	525
		SBL	150	75	**175**	225	**300**	75	**175**	225	**300**	75	**175**	200	**350**
		SBT	150	75	**175**	225	**300**	75	**175**	225	**300**	75	**175**	200	**325**
12	SR 4 Westbound & Lone Tree Way	EBT	700	75	250	275	525	75	250	275	525	75	250	250	600
		EBR	225	25	75	50	175	25	75	50	175	25	75	50	200
		WBL	300	25	50	50	100	25	50	50	100	25	50	50	100
		WBT	600	50	175	100	225	50	175	125	225	50	175	100	250
		WBR	175	25	75	25	75	25	75	25	75	25	75	25	100
		NBL	200	50	150	175	**275**	50	175	175	**300**	50	175	175	**350**
		NBT	400	50	150	175	275	50	175	200	325	50	175	175	325
		NBR	400	25	50	25	100	25	50	25	100	25	50	25	125
13	Dallas Ranch Road & Prewett Ranch Drive/Prewett Ranch Road	EBL	100	25	75	25	75	25	75	25	75	25	75	25	75
		EBT	325	50	100	25	75	50	100	25	75	50	100	25	75
		WBL	225	25	25	25	25	25	50	25	50	25	50	25	50
		WBT	400	100	250	25	125	125	250	25	125	125	250	25	125
		NBL	175	25	25	25	25	25	25	25	50	25	25	25	50
		NBT	750	50	75	25	50	100	175	50	100	100	150	25	100
		SBL	225	100	**300**	50	200	125	**300**	75	200	125	**300**	50	225
		SBT	350	25	50	25	50	50	100	75	150	50	75	50	150
14	Deer Valley Road & Prewett Ranch Drive	EBL	175	100	175	25	100	100	175	50	100	100	175	25	125
		EBT	450	225	350	50	150	250	350	75	125	250	350	50	150
		WBL	100	150	**300**	25	75	175	**325**	25	75	175	**325**	25	100
		WBT	500	150	275	50	125	175	275	50	125	175	275	50	150
		NBL	175	75	175	50	150	75	175	75	**200**	75	175	50	175
		NBT	550	175	275	100	250	325	450	150	350	300	400	150	375
		SBL	175	75	125	50	150	75	150	50	175	75	150	50	150
		SBT	350	300	**450**	75	200	375	**500**	150	350	375	**500**	125	**375**
15	Deer Valley Road & Wellness Way	EBL	25					100	**200**	50	**125**	75	**175**	50	**100**
		EBT	25					25	25	25	25	25	25	25	25
		WBL	250	25	25	25	50	25	25	25	75	25	25	25	50
		WBT	25					25	25	25	**100**	25	25	25	**75**
		WBR	250	25	50	25	50								
		NBL	475					25	50	25	75	25	50	25	50
		NBT	475	125	200	25	100	250	300	125	225	225	275	100	200
		NBR	175	25	25	25	25	25	25	25	25	25	25	25	25
		SBL	275	100	200	25	50	175	275	25	75	175	275	25	75
		SBT	200	125	**275**	50	100	175	**275**	125	**250**	150	**250**	75	200
16	Deer Valley Road & Sand Creek Road	EBL	625					100	225	50	200	75	225	50	175
		EBT	625	25	25	25	25								
		EBR	625					25	25	25	25	25	25	25	25
		WBL	1375	25	50	25	50	25	75	25	100	25	75	25	75
		WBT	1375	25	25	25	25	25	25	25	25	25	25	25	25
		NBL	450			25	25	25	100	50	175	25	75	50	150

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		NBT	450	150	325	75	250	125	275	75	175	100	200	50	175
		SBL	525	150	500	50	125	225	475	50	175	175	500	50	150
		SBT	650	50	250	50	225	125	250	75	225	100	200	75	225
17	Hillcrest Avenue & Sand Creek Road	EBT	1450					50	75	50	75	50	75	50	75
		WBT	1225					25	50	50	100	25	50	25	50
		SBT	525					25	25	25	25	25	25	25	25
19	Sand Creek Road & State Route 4 (EB Ramps)	WBT	175	25	25	25	25	25	25	25	25	25	25	25	25
		SBL	575	50	75	100	150	50	75	100	150	50	75	100	175
20	State Route 4 (WB Ramps) & Sand Creek Road	EBL	425	25	25	25	25	25	25	25	25	25	25	25	25
		EBT	500	25	75	75	150	50	75	75	125	50	75	75	150
		WBT	925	25	25	25	25	25	25	25	25	25	25	25	25
		WBR	175	25	75	25	75	25	75	25	50	25	75	25	**525**
		NBL	650			25	25			25	25			25	25
		NBT	650	25	25	25	25	25	25	25	25	25	25	25	25
		NBR	650	25	50	25	100	25	50	25	125	25	50	25	100
21	Deer Valley Road & Balfour Road														
22	SR 4 & Balfour Road	EBL	525	300	375	225	350	300	400	225	350	300	400	175	350
		EBT	875	300	425	250	375	300	425	250	375	300	425	225	400
		EBR	400	25	75	25	50	25	75	25	75	25	75	25	100
		WBL	475	100	175	50	100	100	175	50	100	100	175	25	100
		WBT	750	525	700	225	350	525	700	225	350	525	700	200	375
		WBR	525	275	500	225	425	275	475	225	425	275	475	175	475
		NBL	525	175	300	200	450	225	400	350	**775**	200	400	250	**725**
		NBT	1025	325	425	400	600	325	425	400	600	325	425	325	625
		NBR	525	25	25	25	50	25	25	25	50	25	25	25	75
		SBL	575	175	225	225	450	175	225	225	450	175	225	175	450
		SBT	1025	400	475	250	425	400	475	250	425	400	475	225	425
24	SR 4 EB Ramps & Slatten Ranch	EBT	675	25	25	25	25	25	25	25	25	25	25	25	25
		EBR	675	25	75	25	75	25	75	25	75	25	75	25	150
		WBL	550	25	25	25	25	25	25	25	25	25	25	25	25
		WBT	550	25	25	25	50	25	25	25	50	25	25	25	75
		NBL	175	25	150	25	125	25	150	25	150	25	150	50	**300**
		NBR	175	25	25	25	25	25	25	25	25	25	25	25	25

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1	Lone Tree Way & State Route 4 (Westbound Ramps)	WBL	325	100	150	75	125	100	150	75	125	100	150	75	125
		WBT	875	25	25	25	25	25	25	25	25	25	25	25	25
		WBR	325	125	250	75	175	150	250	100	200	150	250	75	200
		NBL	300	475	**675**	275	**375**	650	**850**	350	**475**	625	**825**	350	**475**
		NBT	300	225	250	200	225	250	275	225	250	225	250	225	250
		SBT	475	200	200	150	175	200	225	175	200	200	225	150	200
2	Lone Tree Way & State Route 4 (Eastbound Ramps)	EBL	350	125	150	125	150	125	150	125	150	125	150	125	150
		EBT	850	25	25	25	25	25	25	25	25	25	25	25	25
		EBR	350	575	**775**	1,250	**1,425**	700	**900**	1,600	**1,750**	675	**900**	1,525	**1,700**
		NBT	300	500	**500**	425	**450**	550	**575**	525	**550**	550	**550**	500	**550**
		SBL	300	175	250	200	275	200	275	200	275	200	275	200	275
		SBT	300	250	300	300	**325**	250	300	300	**350**	250	300	300	**350**
3	Hillcrest Avenue & Sunset Drive/Slatten Ranch	EBL	600	25	50	50	125	25	50	50	100	25	50	50	100
		EBT	600	25	50	25	75	25	50	25	50	25	50	25	50
		WBL	475	75	175	225	450	75	175	200	**500**	75	175	200	**500**
		WBT	675	50	125	125	250	50	100	125	225	50	100	125	225
		NBL	475	75	200	100	250	75	200	75	200	75	200	75	200
		NBT	475	100	175	175	375	100	175	150	275	100	175	150	275
		NBR	475	25	25	25	25	25	25	25	25	25	25	25	25
		SBL	225	25	25	25	50	25	25	25	50	25	25	25	50
		SBT	450	150	300	200	425	150	300	175	325	150	300	175	325
4	Hillcrest Avenue & State Route 4 Eastbound Ramps	EBL	725	100	125	175	225	100	125	175	225	100	125	175	225
		EBR	725	150	200	975	**1,100**	150	225	1,050	**1,175**	150	225	1,025	**1,175**
		NBT	100	550	**850**	1,150	**1,275**	625	**875**	1,175	**1,325**	600	**875**	1,175	**1,325**
		SBL	375	75	125	325	**400**	75	125	325	**400**	75	125	325	**400**
		SBT	475	75	125	275	300	75	125	275	300	75	125	275	300
5	Lone Tree Way & Davison Drive	EBT	100	50	**125**	100	**200**	50	**125**	125	**200**	50	**125**	125	**200**
		EBR	100	25	25	25	50	25	25	25	50	25	25	25	50
		WBL	350	200	350	150	300	200	350	175	300	200	350	175	300
		WBT	350	50	75	25	75	50	75	50	75	50	75	50	75
		WBR	100	25	100	25	75	25	100	25	75	25	100	25	75
		NBL	100	25	75	50	**150**	25	75	75	**150**	25	75	75	**150**
		NBT	500	575	**1,175**	375	**700**	725	**1,475**	450	**850**	700	**1,425**	450	**825**
		SBL	200	100	175	100	200	100	175	125	200	100	175	100	200
		SBT	275	250	**525**	425	**850**	275	**575**	550	**1,125**	275	**575**	525	**1,100**
6	Deer Valley Road & Davison Drive & Hillcrest Avenue	EBL	200	150	**250**	175	**250**	150	**250**	175	**250**	150	**250**	175	**250**
		EBT	300	75	125	125	175	75	125	125	175	75	125	125	175
		WBL	225	100	200	100	225	100	200	100	225	100	200	100	225
		WBT	475	325	425	225	300	325	425	225	300	325	425	225	300
		WBR	475	350	**500**	225	350	350	**500**	225	350	350	**500**	225	350
		NBL	250	50	125	125	**300**	50	125	125	**300**	50	125	125	**300**
		NBT	575	450	**650**	450	**600**	475	**700**	475	**650**	475	**700**	475	**650**
		SBL	250	275	**375**	525	**725**	275	**375**	525	**725**	275	**375**	525	**725**
		SBT	675	425	550	575	625	450	575	575	675	450	550	575	675
7	Lone Tree Way & James Donlon Boulevard/Ridgerock Drive	EBL	175	125	**300**	100	**225**	125	**325**	125	**250**	125	**325**	125	**250**
		EBT	575	50	125	50	125	50	125	50	125	50	125	50	125
		EBR	575	25	75	25	75	25	75	25	75	25	75	25	75
		WBT	500	75	150	50	75	75	150	50	75	75	150	50	75
		WBR	500	25	25	25	25	25	25	25	25	25	25	25	25
		NBL	225	250	**500**	175	**350**	250	**525**	200	**400**	250	**525**	200	**375**
		NBT	350	325	**625**	175	**400**	400	**775**	225	**475**	375	**750**	225	**475**
		NBR	125	25	25	25	25	25	25	25	25	25	25	25	25
		SBL	175	50	150	50	125	50	175	50	125	50	175	50	125
		SBT	400	200	350	275	**525**	225	375	325	**625**	225	375	325	**600**
8	Dallas Ranch Road/Eagleridge Drive & Lone Tree Way	EBL	225	50	125	125	175	50	150	125	200	50	150	125	200
		EBT	350	425	**500**	650	**700**	425	**500**	675	**775**	425	**500**	675	**775**
		EBR	75	75	**125**	150	**225**	125	**200**	350	**475**	125	**200**	325	**425**
		WBL	225	200	**325**	125	225	200	**350**	125	**250**	200	**350**	125	**250**
		WBT	350	575	**675**	375	**450**	650	**800**	425	**475**	650	**750**	425	**475**
		WBR	75	25	25	25	25	25	25	25	25	25	25	25	25
		NBL	225	175	**250**	125	175	275	**375**	175	**275**	250	**350**	175	**250**
		NBT	425	125	175	50	100	125	175	50	100	125	175	50	100
		NBR	125	25	75	25	50	25	50	25	50	25	50	25	50
		SBL	400	75	125	75	100	75	125	75	100	75	125	75	100
		SBT	400	275	350	50	100	275	375	50	100	275	375	50	100

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9	Deer Valley Road & Lone Tree Way	EBL	225	75	150	100	150	75	150	100	150	75	150	100	150
		EBT	500	300	350	400	450	325	375	450	475	325	375	425	475
		WBL	525	150	175	125	175	150	200	175	250	150	200	175	225
		WBT	900	625	700	475	525	650	775	475	525	650	775	475	525
		NBL	200	200	**275**	125	175	250	**325**	175	200	225	**300**	150	200
		NBT	400	200	250	225	275	250	300	275	350	250	300	275	325
		SBL	375	200	275	200	250	200	250	200	250	200	250	200	250
		SBT	375	275	325	150	175	300	350	200	250	300	350	200	250
10	Hillcrest Avenue & Lone Tree Way	EBL	625	150	425	125	425	150	450	150	450	150	450	150	450
		EBT	850	125	200	200	400	125	225	225	400	125	225	225	400
		WBL	275	50	125	100	275	50	125	100	**300**	50	125	100	**300**
		WBT	425	225	375	200	400	225	375	225	400	225	375	225	400
		WBR	425	25	75	25	75	25	75	25	75	25	75	25	75
		NBL	250	150	**400**	100	**275**	150	**400**	100	225	150	**400**	100	225
		NBT	475	50	75	25	75	50	75	50	75	50	75	50	75
		SBL	625	150	350	150	425	125	350	150	425	125	350	150	425
		SBT	925	50	75	50	100	50	75	50	100	50	75	50	100
11	SR 4 Eastbound & Lone Tree Way	EBT	675	250	400	550	650	250	425	550	650	250	425	550	650
		EBR	325	25	100	50	150	25	100	50	150	25	100	50	150
		WBL	175	75	175	200	**350**	75	175	200	**350**	75	175	200	**350**
		WBT	700	200	350	450	525	225	375	475	525	225	375	475	525
		SBL	150	125	**225**	250	**350**	125	**225**	225	**325**	125	**225**	225	**325**
		SBT	150	125	**225**	250	**350**	125	**225**	250	**350**	125	**225**	250	**350**
12	SR 4 Westbound & Lone Tree Way	EBT	700	150	300	425	675	150	325	500	**725**	150	300	500	**725**
		EBR	225	25	75	100	**250**	25	75	125	**275**	25	75	125	**275**
		WBL	300	75	250	225	**450**	75	250	200	**400**	75	250	200	**400**
		WBT	600	75	175	175	300	75	175	200	300	75	175	200	275
		WBR	175	25	75	25	150	25	75	25	100	25	75	25	100
		NBL	200	125	**250**	275	**375**	125	**250**	275	**400**	125	**250**	275	**400**
		NBT	400	125	250	250	375	125	250	275	400	125	250	275	400
		NBR	400	50	125	125	250	50	125	100	200	50	125	100	200
13	Dallas Ranch Road & Prewett Ranch Drive/Prewett Ranch Road	EBL	100	25	75	25	75	25	75	25	75	25	75	25	75
		EBT	325	50	100	25	75	50	100	25	75	50	100	25	75
		WBL	225	25	25	25	25	25	50	25	50	25	50	25	50
		WBT	400	125	275	50	125	150	275	50	125	150	275	50	125
		NBL	175	25	25	25	25	25	25	25	50	25	25	25	50
		NBT	750	50	75	25	50	125	175	50	125	100	175	50	100
		SBL	225	125	**325**	75	225	150	**325**	75	225	150	**325**	75	225
		SBT	350	25	50	25	50	50	100	75	150	50	100	75	150
14	Deer Valley Road & Prewett Ranch Drive	EBL	175	100	175	50	150	100	175	50	150	100	175	50	150
		EBT	450	275	375	100	200	275	400	125	200	275	400	125	200
		WBL	100	225	**425**	50	**175**	300	**525**	250	**500**	300	**525**	200	**450**
		WBT	500	250	350	100	200	250	350	125	200	250	350	125	200
		NBL	175	75	175	75	175	100	175	100	175	100	175	100	175
		NBT	550	250	325	200	350	475	**650**	300	**600**	400	**600**	275	**575**
		SBL	175	125	**250**	175	**400**	125	**250**	200	**400**	125	**250**	200	**400**
		SBT	350	375	**525**	125	225	425	**600**	175	350	425	**600**	175	325
15	Deer Valley Road & Street A/Wellness Way	EBL	275					225	**375**	75	225	150	**325**	75	175
		EBT	275					25	25	25	25	25	25	25	25
		WBL	250	25	25			25	25	25	75	25	25	25	75
		WBT	250			25	50	25	25	50	150	25	25	50	150
		WBR	250	25	50	25	75								
		NBL	475					25	25	25	50	25	25	25	25
		NBT	475	125	225	75	125	250	325	175	275	250	300	175	275
		NBR	175	25	25	25	25	25	25	25	25	25	25	25	25
		SBL	275	125	225	25	75	200	**300**	50	100	175	**300**	50	100
		SBT	200	50	100	25	50	175	**300**	150	**325**	150	**300**	125	**275**
16	Deer Valley Road & Sand Creek Road	EBL	625	25	25	25	25	75	225	75	200	75	200	50	175
		EBR	625					25	25	25	25	25	25	25	25
		WBL	1375	25	50	25	50	25	75	25	75	25	75	25	75
		WBT	1375	25	25	25	25	25	50	25	50	25	50	25	50
		NBL	450			25	25	25	100	75	225	25	75	50	175
		NBT	450	125	325	50	175	175	275	75	200	175	275	75	200
		SBL	525	150	425	50	150	200	475	75	150	200	475	75	150
		SBT	650	50	150	25	150	100	225	125	250	100	225	125	225

Int #	Intersection	Movement	Storage Length (ft)	Near Term AM Average Queue (ft)	Near Term AM 95th Percentile Queue (ft)	Near Term PM Average Queue (ft)	Near Term PM 95th Percentile Queue (ft)	Near Term Plus Trad. Project AM Average Queue (ft)	Near Term Plus Trad. Project AM 95th Percentile Queue (ft)	Near Term Plus Trad. Project PM Average Queue (ft)	Near Term Plus Trad. Project PM 95th Percentile Queue (ft)	Near Term Plus Multigen. AM Average Queue (ft)	Near Term Plus Multigen. AM 95th Percentile Queue (ft)	Near Term Plus Multigen. PM Average Queue (ft)	Near Term Plus Multigen. PM 95th Percentile Queue (ft)
17	Sand Creek Road & Hillcrest Avenue	EBT	1450	25	25	25	25	25	25	25	25	25	25	25	25
		WBT	1225	25	25	25	50	25	25	25	50	25	25	25	50
		SBL	325	150	225	100	175	225	275	200	250	200	275	175	250
18	Sand Creek Road & Heidorn Ranch Road	EBT	275	75	100	50	75	100	125	75	100	100	125	75	100
		WBT	450	25	50	50	75	50	75	100	125	25	50	75	125
		SBL	375	100	150	75	125	100	150	75	125	100	150	75	125
19	Sand Creek Road & State Route 4 (EB Ramps)	EBL	125	125	**200**	175	**325**	150	**275**	225	**400**	150	**275**	225	**375**
		EBT	125	50	75	75	100	50	75	100	125	50	75	100	125
		WBT	175	50	75	200	**250**	75	100	250	**300**	75	100	250	**275**
		WBR	175	25	50	25	50	25	50	25	50	25	50	25	50
		SBL	575	225	275	650	**800**	225	300	725	**925**	225	300	725	**925**
20	State Route 4 (WB Ramps) & Sand Creek Road	EBL	425	50	100	50	125	50	100	50	100	50	100	50	100
		EBT	500	50	100	125	275	75	100	125	225	75	100	125	225
		WBT	925	25	50	50	75	25	50	50	75	25	50	50	75
		WBR	175	50	**650**	50	**375**	50	**650**	50	**450**	50	**650**	50	**450**
		NBL	650	25	75	75	200	25	75	75	150	25	75	75	150
		NBT	650	25	75	75	200	25	75	75	175	25	75	75	150
		NBR	650	**50**	125	**75**	225	50	125	75	175	50	125	75	175
21	Deer Valley Road & Balfour Road														
22	Balfour Road & SR 4 EB	EBL	225	75	150	50	125	75	175	75	175	75	150	75	150
		EBT	875	200	375	250	450	225	400	275	500	200	375	275	500
		WBT	825	125	250	125	200	150	275	150	250	150	250	150	250
		WBR	175	25	50	25	25	25	50	25	25	25	50	25	25
		SBL	1025	125	300	250	500	175	375	250	500	125	300	250	500
23	SR 4 WB & Balfour Road	EBT	825	200	250	225	275	200	250	225	275	200	250	225	275
		EBR	375	25	50	25	50	25	50	25	50	25	50	25	50
		WBT	425	175	200	75	100	150	200	100	125	150	200	100	125
		NBL	425	25	75	50	125	50	75	75	150	50	75	75	150
		NBR	425	25	25	25	75	25	25	25	75	25	25	25	75
24	SR 4 EB Ramps & Slatten Ranch	EBT	675	25	100	25	50	25	100	25	50	25	100	25	50
		EBR	675	25	100	50	125	25	100	50	150	25	100	50	125
		WBL	550	25	50	25	50	25	50	25	50	25	50	25	50
		WBT	550	25	75	100	175	25	75	100	175	25	75	100	175
		NBL	175	50	**200**	100	**275**	50	**225**	100	**300**	50	**225**	100	**300**
		NBR	175	25	75	25	50	25	75	25	50	25	75	25	50

Int #	Intersection	Movement	Storage Length (ft)	Cumulative AM		Cumulative PM		Cumulative Plus Trad. Project AM		Cumulative Plus Trad. Project PM		Cumulative Plus Multigen. AM		Cumulative Plus Multigen. PM	
				Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)
1	Lone Tree Way & State Route 4 (Westbound Ramps)	WBL	325	150	200	75	125	150	200	75	125	150	200	75	125
		WBT	875												
		WBR	325	275	**500**	150	300	300	**525**	175	300	300	**525**	175	300
		NBL	300	400	**700**	300	**525**	575	**875**	375	**675**	525	**850**	350	650
		NBT	300	175	275	175	**325**	200	275	200	**350**	200	275	200	350
		SBT	475	200	250	125	200	200	250	150	225	200	250	150	225
2	Lone Tree Way & State Route 4 (Eastbound Ramps)	EBL	350	150	175	125	175	125	175	125	175	125	175	125	175
		EBT	850	25	25	25	25	25	25	25	25	25	25	25	25
		EBR	350	575	**825**	925	**1175**	650	**925**	1225	**1500**	625	**925**	1175	1450
		NBT	300	475	**525**	625	**700**	550	**650**	700	**775**	525	**625**	700	775
		SBL	300	175	275	175	275	150	250	175	275	150	250	175	275
		SBT	300	350	**425**	275	**350**	375	**425**	300	**375**	350	**425**	300	375
3	Hillcrest Avenue & Sunset Drive/Slatten Ranch	EBL	600	25	75	50	150	25	75	50	150	25	75	50	150
		EBT	600	25	50	25	75	25	75	25	75	25	75	25	75
		WBL	475	75	175	125	225	75	175	125	225	75	175	125	225
		WBT	675	50	100	75	175	50	100	75	175	50	100	75	175
		NBL	475	100	300	100	250	100	300	100	250	100	300	100	250
		NBT	475	125	250	200	400	125	250	200	400	125	250	200	400
		NBR	475	25	50	25	100	25	50	25	100	25	50	25	100
		SBL	225	75	225	25	75	75	200	25	75	75	200	25	75
		SBT	450	175	375	200	400	200	375	200	400	200	375	200	400
4	Hillcrest Avenue & State Route 4 Eastbound Ramps	EBL	725	100	125	250	300	100	125	250	300	100	125	250	300
		EBT	950												
		EBR	725	350	475	1575	**1675**	375	500	1625	**1725**	375	500	1600	1700
		NBT	100	675	**850**	1225	**1325**	725	**875**	1200	**1300**	725	**875**	1200	1300
		SBL	375	100	125	400	**525**	100	125	400	**525**	100	125	400	525
		SBT	475	100	125	150	175	100	125	150	175	100	125	150	175
5	Lone Tree Way & Davison Drive	EBT	100	75	**150**	100	**200**	75	**150**	125	**200**	75	**150**	100	200
		EBR	100	25	25	25	50	25	25	25	50	25	25	25	50
		WBL	350	200	350	125	275	200	350	150	275	200	350	150	275
		WBT	350	50	100	50	100	50	100	50	100	50	100	50	100
		WBR	100	25	100	25	75	25	100	25	75	25	100	25	75
		NBL	100	50	100	75	**200**	50	100	100	**200**	50	100	75	200
		NBT	500	1175	**1925**	400	**800**	1400	**2200**	500	**1025**	1375	**2150**	475	975
		SBL	200	125	**275**	100	**250**	100	**275**	125	**250**	100	**275**	125	250
		SBT	275	250	**525**	425	**875**	275	**575**	550	**1150**	275	**575**	550	1100
6	Deer Valley Road & Davison Drive & Hillcrest Avenue	EBL	200	175	**325**	225	**400**	175	**325**	225	**400**	175	**325**	225	400
		EBT	300	100	150	150	200	75	125	150	200	75	125	150	200
		WBL	225	100	175	75	150	100	175	75	150	100	175	75	150
		WBT	475	450	**550**	300	375	450	**550**	300	375	450	**550**	300	375
		WBR	475	475	**650**	250	350	475	**650**	250	350	475	**650**	250	350
		NBL	250	75	150	150	225	100	150	150	225	100	150	150	225
		NBT	575	575	**700**	575	**725**	575	**700**	575	**725**	575	**700**	575	725
		SBL	250	325	**425**	525	**625**	325	**425**	525	**625**	325	**425**	525	625
		SBT	675	550	625	750	**800**	575	650	800	**900**	575	650	800	875
7	Lone Tree Way & James Donlon Boulevard/Ridgerock Drive	EBL	175	150	**400**	125	**250**	175	**400**	125	**250**	175	**400**	125	250
		EBT	575	50	125	75	175	50	125	75	175	50	125	75	175
		EBR	575	25	75	25	75	25	75	25	75	25	75	25	75
		WBT	500	100	150	75	125	100	150	75	125	100	150	75	125
		WBR	500	25	25	25	25	25	25	25	25	25	25	25	25
		NBL	225	350	**650**	275	**525**	375	**675**	325	**550**	375	**675**	300	550
		NBT	350	400	**725**	325	**650**	525	**1000**	375	**775**	500	**950**	350	750
		NBR	125	25	25	25	25	25	25	25	25	25	25	25	25
		SBL	175	75	**200**	100	**225**	75	**200**	75	150	75	**200**	75	150
		SBT	400	250	400	375	**700**	275	**475**	475	**875**	275	**450**	450	850
8	Dallas Ranch Road/Eagleridge Drive & Lone Tree Way	EBL	225	50	125	125	225	75	150	125	225	50	125	125	225
		EBT	350	475	**600**	625	**800**	500	**600**	675	**800**	475	**600**	675	800
		EBR	75	50	**125**	150	**225**	100	**200**	375	**525**	100	**200**	325	475
		WBL	225	200	**350**	125	225	225	**400**	150	**250**	200	**350**	150	250
		WBT	350	625	**775**	450	**575**	725	**900**	500	**625**	700	**875**	500	625
		WBR	75	25	25	25	25	25	25	25	25	25	25	25	25
		NBL	225	175	**250**	125	200	275	**375**	200	**350**	275	**400**	200	325
		NBT	425	125	175	50	125	125	175	75	125	125	175	50	125

Int #	Intersection	Movement	Storage Length (ft)	Cumulative AM		Cumulative PM		Cumulative Plus Trad. Project AM		Cumulative Plus Trad. Project PM		Cumulative Plus Multigen. AM		Cumulative Plus Multigen. PM	
				Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)
		NBR	125	25	75	25	50	25	75	25	50	25	75	25	50
		SBL	400	75	125	75	125	75	125	75	125	75	125	75	125
		SBT	400	250	375	75	175	275	375	75	175	250	375	75	175
9	Deer Valley Road & Lone Tree Way	EBL	225	50	125	100	175	50	125	100	175	50	125	100	175
		EBT	500	300	375	400	**525**	325	375	450	**550**	325	375	425	550
		WBL	525	150	200	125	200	175	225	175	300	175	225	175	275
		WBT	900	600	700	575	775	600	750	600	800	600	750	600	800
		NBL	200	225	**325**	150	**250**	300	**400**	200	**300**	275	**400**	175	300
		NBT	400	225	275	300	**425**	275	325	350	**475**	250	325	350	475
		SBL	375	175	250	200	300	175	225	200	300	175	225	200	300
		SBT	375	250	325	150	225	275	350	225	300	275	350	200	300
10	Hillcrest Avenue & Lone Tree Way	EBL	625	350	600	350	600	350	**650**	400	**650**	350	**650**	375	650
		EBT	850	200	275	425	550	200	275	425	550	200	275	425	550
		WBL	275	150	**300**	200	**400**	125	**300**	200	**400**	125	**300**	200	400
		WBT	425	425	**550**	425	**550**	425	**575**	375	**500**	425	**575**	375	500
		WBR	425	100	225	50	175	100	225	50	150	100	225	50	150
		NBL	250	325	**525**	275	**500**	325	**500**	275	**500**	325	**500**	275	500
		NBT	475	375	**500**	300	375	375	**500**	300	375	375	**500**	300	375
		SBL	625	225	300	325	475	225	300	325	475	225	300	325	475
		SBT	925	125	175	100	125	125	175	100	125	125	175	100	125
11	SR 4 Eastbound & Lone Tree Way	EBT	675	425	475	550	675	425	500	550	675	425	500	550	675
		EBR	325	25	100	50	200	25	125	50	200	25	125	50	200
		WBL	175	100	**200**	200	**350**	100	**200**	200	**350**	100	**200**	200	350
		WBT	700	500	550	425	475	500	550	425	475	500	550	425	475
		SBL	150	125	**200**	225	**350**	150	**200**	225	**350**	150	**200**	225	350
		SBT	150	125	**200**	225	**325**	150	**200**	225	**325**	150	**200**	225	325
12	SR 4 Westbound & Lone Tree Way	EBT	700	300	375	600	**800**	325	375	600	**800**	325	375	600	800
		EBR	225	50	175	325	**675**	50	200	325	**675**	50	200	325	675
		WBL	300	200	**350**	125	275	200	**350**	150	**325**	200	**350**	100	225
		WBT	600	225	275	150	200	225	275	275	375	225	275	275	375
		WBR	175	25	175	25	75	50	**200**	75	**275**	50	**200**	75	275
		NBL	200	175	**250**	350	**500**	175	**250**	350	**500**	175	**250**	350	500
		NBT	400	175	250	350	**500**	175	250	350	**500**	175	250	350	500
		NBR	400	475	**775**	125	225	500	**800**	125	225	500	**800**	175	300
13	Dallas Ranch Road & Prewett Ranch Drive/Prewett Ranch Road	EBL	100	25	75	25	75	25	75	25	75	25	75	25	75
		EBT	325	50	100	25	75	50	100	25	75	50	125	25	75
		WBL	225	25	50	25	50	75	**275**	25	150	75	175	25	150
		WBT	400	75	275	50	150	100	275	50	150	100	275	50	150
		NBL	175	25	50	25	50	25	50	25	50	25	50	25	50
		NBT	750	50	100	25	50	100	225	50	150	100	225	50	125
		SBL	225	100	**275**	75	225	125	**275**	75	225	125	**300**	75	225
		SBT	350	25	50	25	50	50	75	75	150	50	100	50	150
14	Deer Valley Road & Prewett Ranch Drive	EBL	175	125	**250**	75	**225**	125	**225**	75	175	125	**225**	75	175
		EBT	450	300	**475**	75	175	225	325	100	200	225	325	100	200
		WBL	100	250	**425**	50	**125**	200	**425**	50	**125**	200	**425**	50	125
		WBT	500	225	350	100	225	225	350	125	225	225	350	125	225
		NBL	175	200	**350**	125	**250**	100	**200**	100	**200**	100	**225**	75	150
		NBT	550	375	475	275	500	425	**675**	375	**775**	400	**625**	375	750
		SBL	175	100	**225**	75	175	100	**225**	150	**275**	100	**225**	150	275
		SBT	350	500	**650**	200	**400**	475	**725**	275	**500**	475	**700**	250	450
15	Deer Valley Road & Street A/Wellness Way	EBL	275					50	150	25	100	50	100	25	75
		EBT	275					25	25	25	25	25	25	25	25
		WBL	250	25	50			25	50	50	150	25	50	50	150
		WBT	250			50	125	25	25	75	200	25	25	75	200
		WBR	250	25	50	25	100								
		NBL	475					25	25	25	50	25	25	25	50
		NBT	475	125	200	100	175	250	350	175	300	275	350	150	275
		NBR	175	25	25	25	25	25	25	25	25	25	25	25	25
		SBL	275	125	**350**	25	75	225	**425**	50	100	225	**400**	25	75
		SBT	200	75	125	50	100	150	**300**	150	**300**	150	**300**	125	275
16	Deer Valley Road & Sand Creek Road	EBL	625					75	250	75	250	75	150	75	200
		EBT	625					100	175	75	150	100	150	75	125
		EBR	625												

Int #	Intersection	Movement	Storage Length (ft)	Cumulative AM		Cumulative PM		Cumulative Plus Trad. Project AM		Cumulative Plus Trad. Project PM		Cumulative Plus Multigen. AM		Cumulative Plus Multigen. PM	
				Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)	Average Queue (ft)	95th Percentile Queue (ft)
		WBL	1375	50	125	50	150	50	125	75	150	50	125	75	150
		WBT	1375	25	50	25	75	25	75	175	300	50	100	125	225
		NBL	450			25	50	25	50	50	200	25	50	50	175
		NBT	450	200	**525**	150	350	125	250	200	325	150	275	175	325
		SBL	525	125	325	175	450	125	225	125	200	150	300	100	200
		SBT	650	125	450	25	100	150	275	100	150	125	325	75	150
17	Sand Creek Road & Hillcrest Avenue	EBL	325	100	200	150	225	100	200	150	225	100	200	150	225
		EBT	1450	150	200	150	200	225	300	200	250	225	275	200	250
		WBL	1225	50	75	75	125	50	75	75	125	50	75	75	125
		WBT	1225	250	325	200	275	300	350	325	425	275	350	300	400
		NBL	25	125	**250**	75	**125**	125	**250**	75	**125**	125	**250**	75	125
		NBT	25	50	**75**	50	**100**	50	**75**	50	**100**	50	**75**	50	100
		SBL	325	100	175	100	175	100	175	100	175	100	175	100	175
		SBT	25	25	**50**	25	**50**	25	**50**	25	**50**	25	**50**	25	50
18	Sand Creek Road & Heidorn Ranch Road	EBL	275	50	100	100	150	75	125	100	175	75	125	100	175
		EBT	275	125	150	75	100	175	225	100	125	150	200	100	125
		WBT	450	225	325	225	300	275	350	325	450	275	350	300	425
		SBL	375	125	175	125	200	125	175	125	200	125	175	125	200
19	Sand Creek Road & State Route 4 (EB Ramps)	EBL	125	225	**450**	675	**900**	375	**625**	800	**1025**	350	**600**	775	1025
		EBT	125	75	100	150	**175**	100	100	175	**200**	100	100	175	200
		WBT	175	300	**375**	475	**575**	325	**400**	600	**750**	325	**400**	575	725
		WBR	175	25	75	50	125	25	75	75	150	25	75	75	150
		SBL	575	350	550	1075	**1225**	375	**600**	1100	**1225**	375	**600**	1100	1225
20	State Route 4 (WB Ramps) & Sand Creek Road	EBL	425	125	250	375	**525**	125	275	400	**550**	100	250	400	525
		EBT	500	125	175	375	450	125	200	400	450	125	200	375	450
		WBT	925	225	350	275	325	225	375	300	375	225	350	300	375
		WBR	175	275	**825**	750	**1050**	75	**275**	750	**1050**	75	**275**	750	1050
		NBL	650	175	275	275	400	150	300	325	475	150	300	325	450
		NBT	650	175	275	275	400	150	300	350	475	150	300	325	450
		NBR	650	100	175	350	525	75	175	350	525	75	175	350	525
21	Deer Valley Road & Balfour Road														
22	Balfour Road & SR 4 EB	EBL	225	225	**350**	150	**275**	225	**350**	150	**275**	225	**350**	150	275
		EBT	875	475	575	400	500	475	600	425	500	475	600	425	500
		WBT	825	300	350	250	300	300	350	275	325	300	350	250	300
		WBR	175	50	125	25	50	50	125	25	50	50	125	25	50
		SBL	1025	350	575	475	825	350	550	475	825	350	550	475	825
23	SR 4 WB & Balfour Road	EBT	825	375	275	425	525	375	275	425	525	375	275	425	525
		EBR	375	25	25	25	50	25	25	25	50	25	25	25	50
		WBT	425	275	200	175	200	275	200	175	200	275	200	150	200
		NBL	425	100	175	100	125	125	175	100	125	125	175	100	125
		NBR	425	25	50	150	225	25	50	150	225	25	50	150	225
24	SR 4 EB Ramps & Slatten Ranch	EBT	675	100	125	125	200	100	125	125	200	100	125	125	200
		EBR	675	250	625	50	250	250	625	50	200	250	625	50	200
		WBL	550	125	200	75	225	125	225	75	225	125	225	75	225
		WBT	550	25	50	50	150	25	50	50	150	25	50	50	125
		NBL	175	175	**275**	125	**300**	175	**275**	125	**275**	175	**250**	125	275
		NBR	175	25	100	25	75	25	75	25	75	25	75	25	75

Appendix E: Near-term Projects Trip Generation

The Ranch

Approved and Pending Residential Projects Trip Generation

1. AR-14-07 Park Ridge (Vistro Zone 40)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Single Family - Detached DU	210	525	5000	98	296	394	331	194	525

2. PDP-13-01 Heidorn Village (Vistro Zone 37)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Single Family - Detached DU	210	117	1110	22	66	88	74	43	117

3. R-16-02 Aviano (Vistro Zone 36)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Single Family - Detached DU	210	533	5070	100	300	400	336	197	533

4. GP-14-01 Vineyards at Sand Creek (Vistro Zone 35)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Single Family - Detached DU	210	641	6100	120	361	481	404	237	641

5. PDP-15-03 Laurel Ranch (Vistro Zone 41)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Single Family - Detached DU	210	187	1780	35	105	140	118	69	187

6. TSM 8982 (Alexandra Homes) Parkside Villas (Vistro Zone 39)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Single Family - Detached DU	210	37	350	7	21	28	23	14	37

7. TSM 14-004 Amber Meadows (Vistro Zone 38)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Single Family - Detached DU	210	69	660	13	39	52	43	26	69
Apartment	220	126	840	13	51	64	51	27	78
			1,500	**26**	**90**	**116**	**94**	**53**	**147**

8,9 + 10. TSM 8506 (Discovery Builders) Bridle Gate (Vistro Zones 34, 42, 43 & 53)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Single Family - Detached DU	210	265	2520	50	149	199	167	98	265
Elementary School		700	900	173	142	315	51	54	105
Apartment (Enclave)	220	258	1720	26	106	132	104	56	160
Retail	820	150	6410	89	55	144	267	290	557
Less Pass-by		-25%	-1600	-18	-18	-36	-70	-70	-140
Net-New Retail			4810	71	37	108	197	220	417

11. TSM 9360 (Brentwood CC Partners) Brentwood Country Club (Vistro Zone 33)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Single Family - Detached DU Active Adult		63	230	5	9	14	10	7	17

12. TSM 9428 (Richland Communities) Orfanos (Vistro Zone 45 shared with Project 11)

The Ranch

Approved and Pending Residential Projects Trip Generation

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Single Family - Detached DU	210	160	1520	30	90	120	101	59	160

13. TSM 9412 (Alvernaz Partners) (Vistro Zone 45 shared with Project 10)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Single Family - Detached DU	210	48	460	9	27	36	30	18	48

14. eBART Station (vistro Zone 44)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Park & Ride			1,954	430	0	430	0	430	430
Drop-Off			1,136	125	125	250	125	125	250
Transit				10	10	20	10	10	20
Total				565	135	700	135	565	700

15. Streets of Brentwood (Vistro Zone 51)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Apartment	220	320	2130	33	130	163	129	69	198
Retail	820	32	1370	19	12	31	57	62	119
Less Pass-by		-25%	-340	-4	-4	-8	-15	-15	-30
Net-New Retail			1030	15	8	23	42	47	89
			3160	48	138	186	171	116	287

16. Chick-Fil-A (Vistro Zone 54)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Grocery Store	850	31	3,170	65	40	105	150	144	294
High Turnover Resturaunt	932	5.74	730	6	1	7	34	23	57
Drive Thru	934	12.75	6,330	295	284	579	216	200	416
Automated Car Wash	948	4.33	520	22	22	44	31	31	61
			10,750	389	347	736	431	397	828
Pass by trips			(4,460)	(169)	(156)	(326)	(170)	(155)	(325)
Total Estimated Trip Gen			6,290	220	191	410	261	242	503

17. Wildflower (Vistro Zone 55)

Land Use	ITE Code	Units	Daily	AM Peak Hour (8 to 9 AM)			PM Peak Hour (5 to 6 PM)		
				In	Out	Total	In	Out	Total
Single Family - Detached DU	210	22	210	4	13	17	14	8	22
Apartment	220	98	650	10	40	50	40	21	61
Retail	820	89.4	3820	53	33	86	159	173	332
Less Pass-by		-25%	-960	-11	-11	-22	-42	-41	-83
Net-New Retail			2860	42	22	64	117	132	249
			3510	56	75	131	171	161	332