Traffic and Parking Analysis

HUMC/Mountainside Hospital Redevelopment Plan

in Glen Ridge Borough and Montclair Township

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This report details traffic and parking analysis for the HUMC/Mountainside Hospital Redevelopment Plan. This report provides an analysis of current roadway and parking operations, and an assessment of potential future conditions based on conceptual plans provided by Hampshire Real Estate Companies Properties for a medical office building and new/reconfigured parking areas within the Redevelopment Area.

TRAFFIC ANALYSIS

I. Existing Conditions

A. Traffic Roadway Network

In the Redevelopment Area, Bay Avenue (CR-654) is an east/west roadway that ends at its intersection with Walnut Crescent to the west. It has one travel lane in each direction, and curbside parking is not permitted. Aside from an actuated pedestrian signal located at the front of the Mountainside Hospital, through traffic on this corridor has the right of way at driveways and intersections.

Claremont Avenue is an east/west roadway with its eastern extent terminating at the intersection with Walnut Crescent. It is one travel lane in each direction with limited on-street parking located along the south curb for residential units. Within the study area, thru traffic has the right of way except at a pedestrian crossing at the intersection with Pine Street and at a grade crossing (NJ Transit line) just west of that intersection.

Walnut Crescent is primarily a north-south roadway from Oxford Street to the signalized intersection with George Street. It carries one travel lane in each direction with curbside parking north of Roswell Terrace. The corridor is characterized by a number of stop-controlled intersections, with a traffic signal located at George Street.

Highland Avenue is a north-south roadway, which transitions into Walnut Crescent to the north at the signalized intersection with George Street, and into Baldwin Street to the south. It generally consists of one travel lane in each direction with limited permit parking allowed. There are two locations with pedestrian crossings. One is at the signalized intersection with George Street and the other is at the unsignalized intersection with Bay Street.

George Street is primarily a north-south roadway that begins at the signalized intersection with Highland Avenue and ends at a stop-controlled intersection with Claremont Avenue. From the intersection with Highland Avenue to its intersection with Sherwood Street, George Street is one lane in each direction. From its intersection with Sherwood Street to Claremont Avenue, George Street is one-way to the north, with parking permitted on the right side of the street.

Sherwood Street is a short two-way street with an east-west orientation from its intersection with George Street to the gate controlled access for hospital parking. On Sherwood Street, there are two residential homes, one of which is now a hospital-owned property.

B. Traffic Volumes

Vehicular turning movement counts were conducted by video on Tuesday, November 17, 2015, and on Tuesday November 24, 2015 between 7 AM and 9 AM between 4 PM and 6 PM. On Saturday, November 14, 2015 and Saturday, November 21, 2015, turning movement counts were conducted from 11:00 to 2:00pm. These times reflect the standard periods for AM, PM, and SAT peak periods. Video cameras were placed at the following locations:

1) Claremont Avenue and Pine Street
2) Claremont Avenue and George Street
3) Claremont Avenue and Walnut Crescent
4) Bay Avenue and Walnut Crescent
5) Bay Avenue and Child Care Center Driveway
6) Bay Avenue and Hospital Main Entrance Driveway
7) Bay Avenue and Sherman Avenue
8) Walnut Crescent and Roswell Terrace/Walnut Street
9) Walnut Crescent and Dental Office Driveway
10) Walnut Crescent and Hospital Emergency Department Driveway
11) Walnut Crescent/Highland Avenue and George Street
12) Highland Avenue and Bay Street
13) Highland Avenue and Laurel Place

In addition to turning movement counts, automatic traffic recorders (ATRs) were used to collect 24-hour traffic volume data along Walnut Crescent/Highland Avenue and along Bay Avenue for a duration of two weeks. This information was collected to calibrate total volumes through the area for the Synchro model and more definitively identify the peak time periods for Bay Avenue and Walnut Crescent/Highland Avenue.

Based on the results of the analysis, the following times of day were identified as the morning, evening and Saturday peak hours:

- AM: 7:45am-8:45am
- PM: 2:45pm-3:45pm
- Saturday: 12:00pm-1:00pm

C. Synchro Analysis

The analyses in this section were conducted using Synchro 8 software in accordance with Highway Capacity Manual (HCM) 2000 methodologies to determine the Levels of Service (LOS) based on intersection delays and volume-to-capacity ratios.

Level of Service Methodology

Analyses of traffic conditions in urban areas are based on critical conditions at intersections and are defined in terms of levels of service. According to the *HCM 2000*, levels of service (LOS) at signalized intersections are defined in terms of a vehicle's control delay at the intersection, as follows:

LOS A – operations with very low delays, i.e., 10.0 seconds or less per vehicle.

- This occurs when signal progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all.

LOS B describes operations with delays in excess of 10.0 seconds up to 20.0 seconds per vehicle.

- This generally occurs with good progression and/or short cycle lengths. Again, most vehicles do not stop at the intersection.

LOS C describes operations with delays in excess of 20.0 seconds up to 35.0 seconds per vehicle.

- These higher delays may result from fair progression and/or longer cycle lengths. The number of vehicles stopping is noticeable at this level, although many still pass through the intersection without stopping.

LOS D describes operations with delays in excess of 35.0 seconds up to 55.0 seconds per vehicle.

- At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity (v/c) ratios. Many vehicles stop, and the proportion of vehicles not stopping declines.

LOS E describes operations with delays in excess of 55.0 seconds up to 80.0 seconds per vehicle.

- These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios.

LOS F describes operations with delays in excess of 80.0 seconds per vehicle.

- This is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios with cycle failures. Poor progression and long cycle lengths may also contribute to such delays. Often, vehicles do not pass through the intersection in one signal cycle.

For unsignalized intersections, delay is defined as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line:

LOS A describes operations with very low delay, i.e., 10.0 seconds or less per vehicle

LOS B describes operations with delays in excess of 10.0 seconds up to 15.0 seconds

LOS C has delays in excess of 15.0 seconds up to 25.0 seconds

LOS D, excess of 25.0 seconds up to 5.0 seconds per vehicle

LOS E, excess of 35.0 seconds up to 50.0 seconds per vehicle

- This is considered to be the limit of acceptable delay.

LOS F describes operation with delays in excess of 50.0 seconds per vehicle,

- This LOS is considered unacceptable to most drivers. This condition exists when there are insufficient gaps of suitable size in a major vehicular traffic stream to allow side street traffic to cross safely.

2. No Build Condition

The proposed Medical Office Building (MOB) is anticipated to be completed by 2018, with minimal additional "background traffic" growth from other future developments. For analysis purposes, the 2015 existing volumes within the study area were increased using a 1% growth rate per year in accordance with NJDOT's growth factor for urban minor arterials in order to obtain the future No Build traffic volumes. These results served as the baseline volume conditions for comparison purposes in this traffic impact analysis.

Table 1 displays the range of volumes per hour during the peak periods by direction along each of the roads that were measured using ATRs.

Table 1 – Peak Hour Volumes by Direction

Roadway	Claremont Avenue		Bay Avenue		Walnut Crescent	
Direction	Eastbound	Westbound	Eastbound	Westbound	Northbound	Southbound
AM peak	350-375	420-450	365-380	620-650	115-160	100-295
PM peak	420-445	350-375	500-545	440-480	140-245	165-240
SAT peak	370-385	340-360	415-435	410-430	55-90	75-145

In the No Build scenario, the intersection of Walnut Crescent and Bay Avenue would operate as it does today, unsignalized with the stop control for the northbound approach on Walnut Crescent. Based on the analysis, the intersection would operate at overall LOS A during the weekday AM and Saturday peaks, and overall LOS D during the weekday PM peak. The stop-controlled northbound approach would operate at LOS F during the weekday AM and PM peaks, and LOS C during the Saturday peak. Synchro results for No Build Condition can be found in **Appendix A**.

3. Build Condition

A. Trip Generation

Traffic projections were based on the October 2, 2015 Traffic Impact Analysis (TIA) report (No. 24GA27957900) by Atlantic Traffic+Design. The report referenced ITE Land Use Code 720: Medical-Dental Office Building for the 60,000-square foot development expected to generate the following trips, shown in ***Table 2.*** Volume maps are also provided in **Appendix B.** Synchro results for Build Condition can be found in **Appendix C.**

Table 2 - Peak Hour Traffic Increments

Peak Hour	In	Out	Total
Weekday AM	113	30	143
Weekday PM	60	154	214
Saturday Midday	124	94	218

B. Traffic Assignments

Project-related traffic was assigned throughout the network consistent with the methodology in the 2015 TIA report. These trips were distributed between two locations:

1) The medical office building driveway that would be located at the intersection of Bay Avenue and Walnut Crescent, with the proposed driveway aligning to the north opposite Walnut Crescent

2) The off-site parking facility entrance that would be located at Highland Avenue and what is the existing intersection with George Street

In the proposed redevelopment George Street would be reconfigured into a cul-de-sac, with ingress and egress provided from Claremont Avenue. There would no longer be access from Highland Avenue. Approximately two-thirds of the peak hour inbound and outbound trips would be utilizing the main entrance to the site, while the remaining one-third would be utilizing the off-street parking facility. This split would represent the distribution between visitors and employees.

In addition to project-generated increments, trips associated with the valet parking would have to be reassigned throughout the network. In the existing conditions, visitors using valet parking would enter the parking lot from Walnut Crescent between Claremont Avenue and Roswell Terrace. Attendants would then drive the vehicles into the parking lot located on the west side of Highland Avenue, near George Street. In the future build condition, these trips would no longer be entering/exiting this driveway due to the relocation of the valet parking drop-off. Instead, these trips would enter the off-site parking lot and the valet parking would be contained within the off-site parking lot, eliminating the necessity for valet attendants to drive through the local roadways. This would result in a slight decrease in traffic (approximately 4, 16, and 25 vph during the AM, PM, and Saturday peaks, respectively).

C. Analysis of Build Scenario without Improvements

The future Build traffic volumes were obtained by adding the project-generated volumes to the future No Build traffic volumes. This Build condition would reflect the effects of the project-related traffic increments on the study area. The comparison between the No-Build and Build conditions reflects the impact of the additional site-generated traffic on the street network. This impact is assessed when a traffic movement experiences a significant increase in intersection delays and deteriorations in level of service.

The proposed 60,000 SF medical office building would increase peak hour traffic by 143, 214, and 218 vehicles per hour during the weekday AM, weekday PM, and Saturday peak hours, respectively. Peak hour

traffic volumes along Bay Avenue would increase by approximately 10 to 55 vehicles per hour (vph) in the eastbound direction and 20 to 45 vph in the westbound direction. Along Claremont Avenue, traffic volumes would increase by approximately 20 to 45 vph in the eastbound direction and 10 to 60 vph in the westbound direction. Peak hour traffic volumes along Walnut Crescent/Highland Avenue, south of Bay Avenue would increase by 5 to 45 vph in the northbound direction and 5 to 40 vph in the southbound direction.

For nearly all the intersection approaches in the study area, the levels of service remain relatively unchanged by the addition of project-related traffic increments. The exceptions are the northbound approach at Bay Avenue and Walnut Crescent, and the eastbound approach at Claremont Avenue and Walnut Crescent. The southbound approach at Bay Avenue and Walnut Crescent would be a new condition as the MOB driveway. ***Table 3*** shows the comparison of the No Build and Build conditions for these two locations indicating the delay in seconds and the LOS.

Table 3 - Bay Avenue and Walnut Crescent Intersection No Build vs Build

	AM		PM		SAT	
	No Build	**Build**	**No Build**	**Build**	**No Build**	**Build**
Eastbound	0.0 / A	1.1 / A	0.0 / A	0.5 / A	0.0 / A	1.1 / A
Westbound	3.5 / A	3.8 / A	2.9 / A	3.1 / A	1.6 / A	1.9 / A
Northbound	69.9 / F	225.8 / F	137.4 / F	465.7 / F	22.8 / C	54.6 / F
Southbound	-	51.0 / F	-	89.7 / F	-	29.7 / D
Overall	**8.2 / A**	**24.1 / C**	**27.8 / D**	**99.8 / F**	**2.8 / A**	**8.5 / A**

As shown in the table above, the intersection of Walnut Crescent and Bay Avenue would experience a deterioration in level of service from LOS A to LOS C in the AM peak and from LOS D to LOS F in the PM peak. Although the overall LOS would remain the same during the Saturday peak, the northbound movement would deteriorate from LOS C to LOS F. The northbound approach would experience the greatest increase in delays, ranging between approximately 33 to 330 seconds.

Table 4 - Claremont Avenue and Walnut Crescent No Build vs Build

	AM		PM		SAT	
	No Build	**Build**	**No Build**	**Build**	**No Build**	**Build**
Eastbound	0.5 / A	0.3 / A	0.3 / A	0.2 / A	0.4 / A	0.4 / A
Westbound	0.0 / A	0.0 / A	0.0 / A	0.0 / A	0.0 / A	0.0 / A
Southbound	30.5 / D	37.8 / E	28.1 / D	33.1 / E	21.5 / C	26.4 / D
Overall	**4.0 / A**	**5.6 / A**	**4.0 / A**	**4.1 / A**	**3.1 / A**	**3.6 / A**

As shown in ***Table 4***, the adjacent intersection of Claremont Avenue and Walnut Crescent would not deteriorate significantly in overall LOS but the southbound movement would deteriorate from LOS D to LOS E in the AM peak, and from LOS C to LOS D in the Saturday peak. Delays for the stop-controlled southbound movement are expected to increase by approximately 7 to 10 seconds.

D. Analysis of Proposed Traffic Improvements

To mitigate traffic impacts at the intersection of Walnut Crescent and Bay Avenue, traffic improvements are proposed as part of the conceptual development plan for the MOB, created by Bohler Engineering. These improvements would include the following:

- Installation of a semi-actuated traffic signal with a 60-second cycle.
- Restriping the eastbound approach of Claremont Avenue to have an exclusive left turn lane and a shared through-right lane (the centerline would be shifted to the north).
- Restriping the westbound approach of Bay Avenue to have an exclusive left turn lane and a shared through-right lane (the centerline would be shifted to the south).
- Restriping the northbound approach of Walnut Crescent to have an exclusive left turn lane and a shared through-right lane (the centerline would be shifted to the west).

Table 5 - Bay Avenue and Walnut Crescent Build without Signal vs Proposed Improvements

	AM		PM		SAT	
	Build Without Signal	**Proposed Improvements**	**Build Without Signal**	**Proposed Improvements**	**Build Without Signal**	**Proposed Improvements**
Eastbound	1.1 / A	4.8 / A	0.5 / A	8.0 / A	1.1 / A	4.6 / A
Westbound	3.8 / A	4.9 / A	3.1 / A	6.2 / A	1.9 / A	4.1 / A
Northbound	225.8 / F	23.4 / C	465.7 / F	21.0 / C	54.6 / F	22.7 / C
Southbound	51.0 / F	22.0 / C	89.7 / F	19.5 / B	29.7 / D	22.1 / C
Overall	**24.1 / C**	**6.9 / A**	**99.8 / F**	**10.8 / B**	**8.5 / A**	**7.2 / A**

Note: Signalized and unsignalized conditions use different LOS criteria

As shown in ***Table 5,*** the proposed improvements at Bay Avenue and Walnut Crescent would improve the overall Build condition LOS for the intersection in the AM and PM peak periods from LOS D to LOS A and LOS F to LOS B, respectively. The Saturday peak would be remain unchanged at LOS A. The greatest benefits from these improvements would be experienced at the minor approaches to the intersection: the southbound approach from the MOB driveway and the northbound approach from Walnut Crescent/Highland Avenue. Some additional minor delays would be experienced on the eastbound and westbound approaches to the intersection, but they would still operate at an LOS A.

Table 6 – Claremont Avenue and Walnut Crescent No Build vs Build with Proposed Improvements

	AM		PM		SAT	
	No Build	**Proposed Improvements**	**No Build**	**Proposed Improvements**	**No Build**	**Proposed Improvements**
Eastbound	0.5 / A	0.3/ A	0.3 / A	0.2 / A	0.4 / A	0.4/ A
Westbound	0.0 / A	0.0/ A	0.0 / A	0.0 / A	0.0 / A	0.0/ A
Southbound	30.5 / D	37.8/ E	28.1 / D	34.6/ D	21.5 / C	26.3/ D
Overall	**4.0 / A**	**5.1 / A**	**4.0 / A**	**4.3 / A**	**3.1 / A**	**3.6 / A**

As ***Table 6*** shows, this analysis of the proposed improvements indicate they would have a deleterious effect on the southbound Walnut Crescent approach. The eastbound and westbound approaches would remain generally unchanged as LOS A and the overall LOS would operate as an A. However, the southbound approach for Walnut Crescent would decline from LOS D to LOS E in the AM peak, from LOS D to LOS E in the PM peak, and from LOS C to LOS D during the Saturday peak with the development of the MOB and the associated proposed improvements.

At this intersection, this analysis differs from the results provided in Atlantic's TIS, which reported a LOS B in the AM peak, a LOS A in the PM peak, and an LOS A in the SAT peak under No-Build conditions. Atlantic's analysis indicates that all peak periods would operate at an LOS A with the proposed improvements.

The reason for the difference in LOS between the analyses of Atlantic Design and VHB is due to the configuration used at this intersection. The Atlantic Design analysis identifies the southbound Walnut Crescent as a through-right movement, as oppose to VHB's analysis which depicts it as a shared left-right movement. In the calculations for delay, there is a delay assigned to turning vehicles in terms of finding gap time in conflicting movements, unlike vehicles making the through movement. The geometry of the intersection features curvature in the roadway, and to be more conservative, VHB's analysis depicts it as a left-turn. However, since the southbound left is not exactly a 90 degree turn one would find at a standard intersection, the critical gap was reduced in order to not fully penalize the southbound movement.

E. Analysis of Additional/Alternative Improvements

As part of this traffic analysis, several alternatives to the conceptual plan's proposed improvements were analyzed to measure the potential for greater improvements to LOS at the two key intersections. Synchro results can be found in **Appendix D**.

1. Additional Traffic Signal at Claremont Avenue and Walnut Crescent

In addition to the new signal at the intersection of Walnut Crescent and Bay Avenue, there are other improvements to consider which would improve the flow of traffic in the area.

The adjacent intersection of Claremont Avenue and Walnut Crescent could be signalized to improve conditions, particularly for the southbound approach of Walnut Crescent, which is currently stop-controlled. In this scenario, the southbound movement would operate at a LOS D the AM and PM peak hours as an unsignalized intersection, but improve to LOS B or C with signalization, with decreases in delay as high as 18 seconds.

Two scenarios were analyzed – one where both signals would operate as fully actuated signals (***Table 7)***, and one where both signals would be coordinated ***(Table 8).*** In general, the fully-actuated signals would provide better delays for the minor approaches (northbound-southbound), while the coordinated signals would provide slightly better delays for the major approaches (eastbound-westbound) which would be assigned longer green phases due to the higher traffic volumes on these approaches. Both scenarios would result in lower delays for the southbound approach and slightly higher delays for the major eastbound and westbound movements, but those major approaches would still operate at LOS A.

Table 7 - Claremont Avenue and Walnut Crescent Build without Additional Signal vs Build with Additional Signal (Fully Actuated)

	AM		PM		SAT	
	Proposed Improvements	**Additional Signal**	**Proposed Improvements**	**Additional Signal**	**Proposed Improvements**	**Additional Signal**
Eastbound	0.3 / A	4.7 / A	0.2 / A	5.1 / A	0.4 / A	5.0 / A
Westbound	0.0 / A	5.8 / A	0.0 / A	5.6 / A	0.0 / A	5.1 / A
Southbound	37.8 / E	24.5 / B	34.6 / D	16.6 / B	26.3 / D	15.2 / B
Overall	**5.1 / A**	**7.9 / A**	**4.3 / A**	**6.7 / A**	**3.6 / A**	**6.4 / A**

Note: Signalized and unsignalized conditions use different LOS criteria

Table 8 - Claremont Avenue and Walnut Crescent Build without Additional Signal vs Build with Additional Signal (Coordinated)

	AM		PM		SAT	
	Proposed Improvements	**Coordinated Signal**	**Proposed Improvements**	**Coordinated Signal**	**Proposed Improvements**	**Coordinated Signal**
Eastbound	0.3 / A	4.6 / A	0.2 / A	4.8 / A	0.4 / A	4.4 / A
Westbound	0.0 / A	3.6 / A	0.0 / A	4.4 / A	0.0 / A	3.4 / A
Southbound	37.8 / E	25.8 / C	34.6 / D	25.6 / C	26.3 / D	25.6 / C
Overall	**5.1 / A**	**6.9 / A**	**4.3 / A**	**7.1 / A**	**3.6 / A**	**6.7 / A**

Note: Signalized and unsignalized conditions use different LOS criteria

2. Reconfigured eastbound approach at Bay Avenue and Walnut Crescent

As previously discussed, the conceptual plan proposes the following improvements to lane configurations sin the Redevelopment Area:

- Restriping the eastbound approach of Claremont Avenue to have an exclusive left turn lane and a shared thru-right lane (the centerline would be shifted to the north).
- Restriping the westbound approach of Bay Avenue to have an exclusive left turn lane and a shared thru-right lane (the centerline would be shifted to the south).
- Restriping the northbound approach of Walnut Crescent to have an exclusive left turn lane and a shared thru-right lane (the centerline would be shifted to the west).

Based on the analysis, the eastbound left turn volume would be approximately 40 vehicles or less during the peak hours and should not warrant an exclusive left turn lane. Given the short cycle length, the 95th percentile queues for the eastbound shared left-through lane would not exceed 125 feet (5 car lengths).

Alternatively, it would be recommended to restripe the proposed eastbound approach of Claremont Avenue to have a shared left-through lane and an exclusive right turn lane.

Parking Analysis

1. Existing Conditions

There are currently approximately 1045 parking spaces for the hospital in the Redevelopment Area. They are located in a number of facilities, shown in ***Table 9*** with their designation and parking capacity.

Table 9: Existing Parking Facilities in the Redevelopment Area

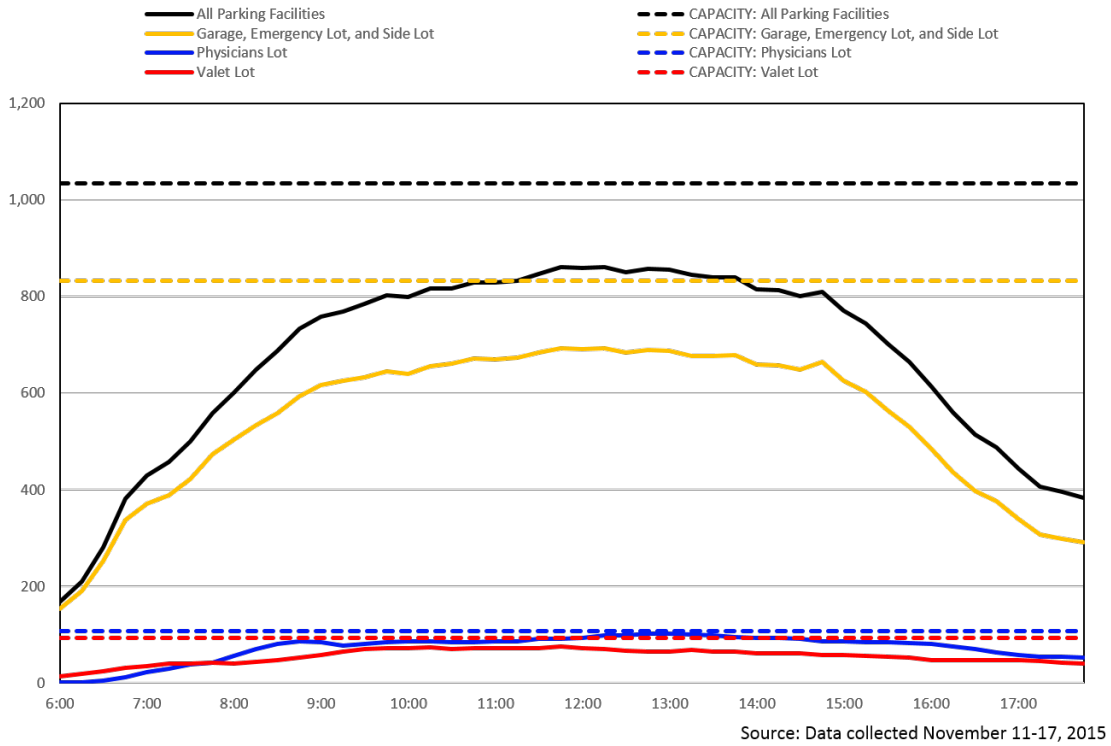
Facility	Capacity
Garage	680
Emergency Lot	39
Side Surface Lot	114
Physician Lot	107
Radiology	12
Valet	93
Total	**1045**

There are also 44 spaces in a lot on Sherman Street in Montclair. These spaces are outside the Redevelopment Area and are located more than one-quarter mile from the hospital's main entry. Additionally, utilization rates for the Radiology lot were not measured. This is a non-gated and relatively isolated lot designated strictly for Radiology and Oncology visits. Overall, the employees and visitors to the hospital are unlikely to use that lot.

Parking utilization counts were taken at approximately 7:00am and 9:00am during the weekday to create establish baseline parking demand. This information was supplemented by 12 hours of video data (6:00am to 6:00pm) to record vehicles entering and exiting the parking facilities.

The 7:00am count was conducted prior to that the hospital's administrative staff and nursing shifts to determine utilization at its approximate lowest level. This information was supplemented by 12 hours of video data (6:00am to 6:00pm) to record vehicles entering and exiting the parking facilities. **Figure 1** shows parking utilization through the 12 hour period.

Figure 1: Existing Parking Utilization



Source: Data collected November 11-17, 2015

Peak utilization for all lots in the Redevelopment Area took place at the 12:15 to 12:30pm 15-minute increment. The lots were 83.35% filled during that time. This means that about 172 spaces in the area were available at the time of peak utilization. Peak utilization for the measured lots and the total parking are shown in the figure below. Because the parking garage, emergency lot, and side surface lot are managed at the same entry and exit points, these counts were combined into one location. Utilization percentages during the peak period are shown in ***Table 10***.

Table 10: Parking Utilization by Facility in the Peak Period

Facility	Percent Utilized
Garage, Emergency Lot, and Side Lot	83.19%
Physicians Lot	91.59%
Valet Lot	75.27%
All Parking Facilities	**83.35%**

Although the Physician's lot reached 91.59% at 12:15pm, parking constraints in the future are not a concern. The lot is dedicated parking for hospital physicians, and is likely managed to ensure that there is one spot for each parking access card. The peak utilization for this lot actually reached 96.26% at 1:00pm.

There is on-street parking with a two-hour time limit on streets in Montclair around the Redevelopment Area. Parking in the Hospital Zone in Glen Ridge is regulated by permit only. A weekday on-street parking count was conducted between 12:30 and 1:00pm to identify possible hospital-oriented parking during the facilities' peak period. Thirty-six (36) vehicles were counted around the Redevelopment Area. It is probable that not all of these cars were parked to avoid using the parking facilities documented in this report. These cars were located on residential side streets or next to other uses. It is also probable that at least some were parked to avoid using the designated facilities. George Street had the highest number of vehicles parked on-street (17). Allocating all of the on-street parking into the facilities would not greatly impact existing hospital parking availability. Overall, the existing parking supply meets the existing parking demand with adequate capacity to spare.

2. Future Demand

Future demand was calculated based on the development of the proposed MOB. While the last conceptual plan (Revision 2, dated January 4, 2016) for the proposed development segmented parking into multiple facilities, the Redevelopment Area served by the parking facilities consists of two principal uses: the MOB and the existing hospital. ***Table 11*** shows the capacities for these two uses in the redevelopment area. In some cases, the parking capacity proposed from the conceptual plan differs from the existing count taken by VHB (for example, the parking garage). These discrepancies are minor, representing less than a one percent difference between the two numbers. To maintaining consistency in this study, VHB has deferred to the concept plan for proposed parking figures.

Table 11: Proposed Parking Capacities

Facility	Proposed
Proposed MOB Parking	
On-site	198
Off-site	102
MOB Subtotal	**300**
Hospital Parking	
Radiology/Oncology Lot	27
ER Lot	141
Parking Garage	677
Doctor/Outpatient Lot	220
Sherman Street Lot	65
Hospital Subtotal	**1130**
TOTAL	**1430**

The plan for the approximately 60,000 square foot MOB proposes 300 parking spaces split between two lots: on-site with the development, and off-site with an entrance from Highland Avenue. While the physical location of the lots may have an effect on traffic generation in the area, they do not affect parking demand

for the proposed MOB. The Institute of Traffic Engineers (ITE) *Parking Generation Manual: 4th Edition* was used to determine parking demand for the MOB. Medical Office Buildings are categorized under Land Use Code 720. The formula for calculating weekday peak period parking demand is as follows:

$$P=3.40x - 13$$

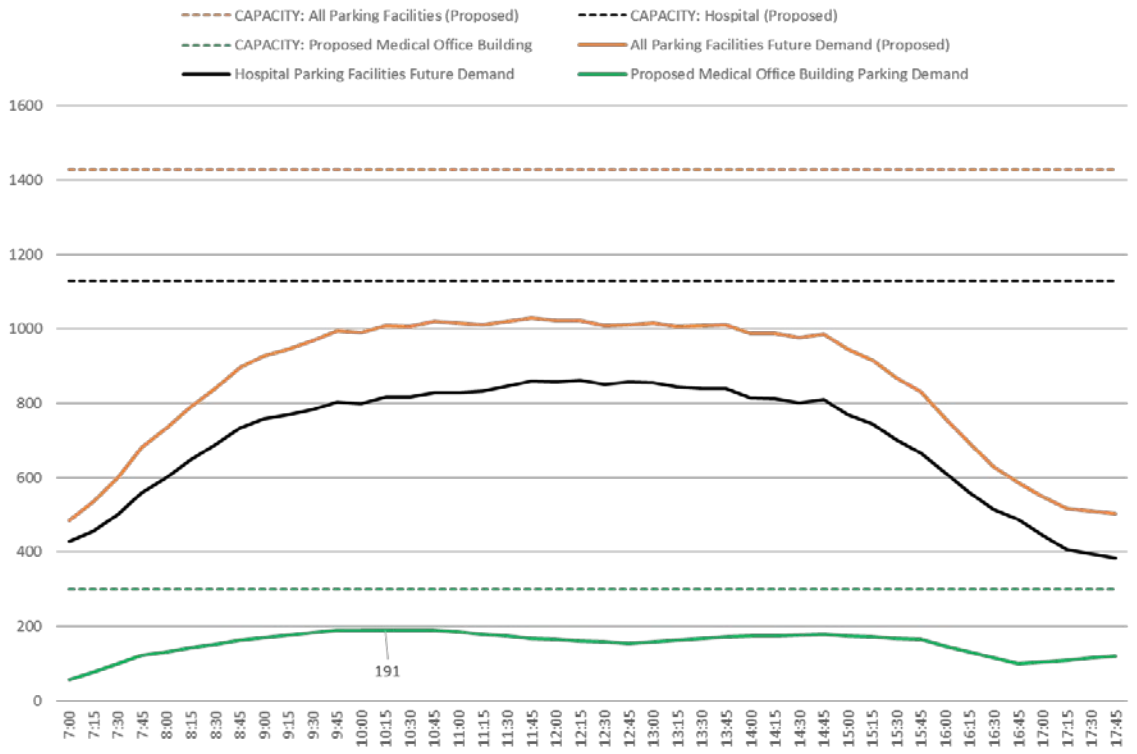
P – Parking Demand
X – 1,000 square feet Gross Floor Area

Based on the calculations, the peaking parking demand (between 10:00am and 12:00pm) for a 60,000 square foot Medical Office Building is 191

$$191 = 3.40(60) - 13$$

The hospital parking demand can be determined by the current parking utilization, assessed as part of the existing conditions. Since the uses at the hospital are not changing under the proposed MOB, there is no change expected in the current level of demand for hospital parking. Additionally, 85 new spaces are proposed through a parking reconfiguration and the construction of an additional surface lot adjacent to Highland Avenue, which add to the available capacity. ***Figure 2*** shows the future proposed parking capacity and demand for the MOB, the hospital, and both uses combined.

Figure 2: Future Proposed Parking Demand and Capacity



As ***Figure 2*** shows, there is adequate parking capacity to meet existing and future demand for the proposed MOB development and current hospital operations.

The current proposed parking capacities would also satisfy a reasonable increase in future demand. There is a peak parking demand of 861 spaces under existing conditions. An increase of that peak demand by 30% would result in a demand for 1,119 spaces at the peak, which would still be slightly less than the parking capacity currently proposed by the hospital.

The proposed MOB site provides even more capacity for future growth. While this demand is based on other parking studies of a similar use, the 300 proposed MOB spaces would be able to accommodate a 50% increase in peak parking demand.

3. Conclusions

A. Traffic

Based on the results of the analysis, the proposed redevelopment would primarily affect two intersections within the Redevelopment Area: Bay Avenue/Walnut Crescent and Claremont Avenue/Walnut Crescent. The improvements provided in the conceptual plan do provide some benefits to delay associated with the proposed MOB, but would also have some negative effects on delay – primarily on the southbound approach at the Claremont Avenue/Walnut Crescent intersection. The following changes to the proposed conceptual plan are recommended:

1) The analysis shows that a Level of Service B is achievable for the southbound approach at the intersection of Walnut Crescent and Claremont Avenue. As such, it is recommended the applicants show that off-site improvements associated with the proposed development provide no worse than a Level of Service B for all approaches at the intersection.

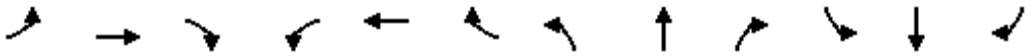
2) Reconfiguration of lanes of the eastbound approach at the Bay Avenue/Walnut Crescent intersection from an exclusive left turn lane with a right-through lane to a left-through lane with an exclusive right turn lane. The volumes from the west into the proposed MOB site do not warrant a dedicated left turn lane, while the recommended lane configuration would better balance traffic volumes at the intersection.

B. Parking

Currently, parking demand for Parking demand at Mountainside Hospital is adequately met by the existing parking supply. This parking supply also includes 93 spaces for valet parking at the proposed MOB site, which would be removed for the MOB development. The conceptual parking plan for the redevelopment area proposes a net gain of 85 spaces, bringing the total parking capacity for the hospital to 1130. This would meet existing peak parking demand of 861 spaces and future growth of up to 30%.

The proposed MOB site proposes 300 parking spaces, equivalent to 5 spaces per 1,000 square feet gross floor area. The proposed supply of spaces provide enough capacity for the projected peak period demand of 191 spaces based on the formula derived from the ITE's Parking Generation Manual: 4th Edition. This capacity is able to meet an increase in future demand of up to 50%.

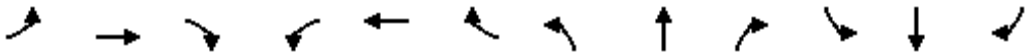
Appendix A
No Build Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	10	71	4	11	1	115	20	2	1	56	40
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	14	11	77	4	12	1	125	22	2	1	61	43
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	365	361	83	442	381	25	104			26		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	365	361	83	442	381	25	104			26		
tC, single (s)	7.1	6.5	6.3	7.6	6.6	6.2	4.2			5.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.4	4.0	4.1	3.3	2.3			3.1		
p0 queue free %	97	98	92	99	98	100	91			100		
cM capacity (veh/h)	544	519	966	381	492	1055	1444			1130		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	102	17	149	105
Volume Left	14	4	125	1
Volume Right	77	1	2	43
cSH	806	474	1444	1130
Volume to Capacity	0.13	0.04	0.09	0.00
Queue Length 95th (ft)	11	3	7	0
Control Delay (s)	10.1	12.9	6.6	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	10.1	12.9	6.6	0.1
Approach LOS	B	B		

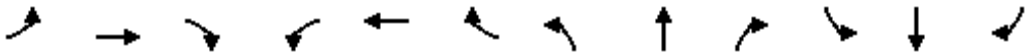
Intersection Summary				
Average Delay	6.0			
Intersection Capacity Utilization	27.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	341	15	35	606	8	3	31	40	8	32	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	12	371	16	38	659	9	3	34	43	9	35	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		568										
pX, platoon unblocked				0.99			0.99	0.99	0.99	0.99	0.99	
vC, conflicting volume	667			387			1168	1146	379	1202	1150	663
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	667			374			1164	1142	366	1199	1146	663
tC, single (s)	4.1			4.1			7.4	6.8	6.2	7.2	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.8	4.2	3.3	3.6	4.0	3.3
p0 queue free %	99			97			97	80	94	93	82	98
cM capacity (veh/h)	932			1165			120	170	676	117	190	465

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	399	705	80	52
Volume Left	12	38	3	9
Volume Right	16	9	43	9
cSH	932	1165	278	189
Volume to Capacity	0.01	0.03	0.29	0.28
Queue Length 95th (ft)	1	3	29	27
Control Delay (s)	0.4	0.9	23.2	31.2
Lane LOS	A	A	C	D
Approach Delay (s)	0.4	0.9	23.2	31.2
Approach LOS			C	D

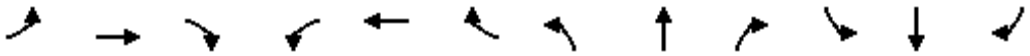
Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	4	15	0	0	0	13	118	6	15	92	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	40	4	16	0	0	0	14	128	7	16	100	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	307	310	114	325	321	132	128			135		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	307	310	114	325	321	132	128			135		
tC, single (s)	7.2	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	99	98	100	100	100	99			99		
cM capacity (veh/h)	628	595	944	608	587	923	1470			1462		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	61	149	145
Volume Left	40	14	16
Volume Right	16	7	28
cSH	687	1470	1462
Volume to Capacity	0.09	0.01	0.01
Queue Length 95th (ft)	7	1	1
Control Delay (s)	10.7	0.8	0.9
Lane LOS	B	A	A
Approach Delay (s)	10.7	0.8	0.9
Approach LOS	B		

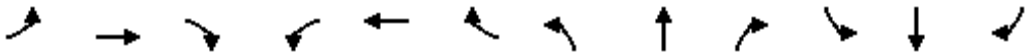
Intersection Summary				
Average Delay	2.6			
Intersection Capacity Utilization	20.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	0	8	0	0	0	76	86	2	8	114	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.95						1.00			0.92	
Flt Protected		0.97						0.98			1.00	
Satd. Flow (prot)		1746						1816			1727	
Flt Permitted		0.97						0.78			0.99	
Satd. Flow (perm)		1746						1444			1719	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	0	9	0	0	0	83	93	2	9	124	189
RTOR Reduction (vph)	0	23	0	0	0	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	178	0	0	290	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	3%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		1.1						40.3			40.3	
Effective Green, g (s)		1.1						40.3			40.3	
Actuated g/C Ratio		0.02						0.78			0.78	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		37						1132			1347	
v/s Ratio Prot												
v/s Ratio Perm		0.00						0.12			c0.17	
v/c Ratio		0.01						0.16			0.22	
Uniform Delay, d1		24.6						1.4			1.4	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.1						0.3			0.4	
Delay (s)		24.8						1.7			1.8	
Level of Service		C						A			A	
Approach Delay (s)		24.8			0.0			1.7			1.8	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	2.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	51.4	Sum of lost time (s)	10.0
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		

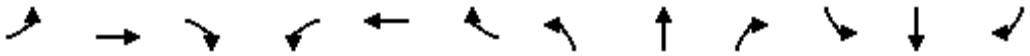
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	327	161	136	484	0	63	0	50	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	355	175	148	526	0	68	0	54	0	0	0
Pedestrians								10				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								1				
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					151							
pX, platoon unblocked	0.76						0.76	0.76		0.76	0.76	0.76
vC, conflicting volume	526			540			1275	1275	453	1319	1362	526
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	211			540			1202	1202	453	1260	1318	211
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			86			36	100	91	100	100	100
cM capacity (veh/h)	1036			1030			106	120	602	90	102	630

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	530	674	123
Volume Left	0	148	68
Volume Right	175	0	54
cSH	1700	1030	167
Volume to Capacity	0.31	0.14	0.73
Queue Length 95th (ft)	0	13	114
Control Delay (s)	0.0	3.5	69.9
Lane LOS		A	F
Approach Delay (s)	0.0	3.5	69.9
Approach LOS			F

Intersection Summary				
Average Delay	8.2			
Intersection Capacity Utilization	76.9%	ICU Level of Service	D	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	363	0	0	415	135	0	0	0	124	0	11
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	14	395	0	0	451	147	0	0	0	135	0	12
Pedestrians											6	
Lane Width (ft)											12.0	
Walking Speed (ft/s)											4.0	
Percent Blockage											1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					307							
pX, platoon unblocked	0.81						0.81	0.81		0.81	0.81	0.81
vC, conflicting volume	604			395			959	1027	395	953	953	530
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	398			395			835	918	395	828	828	308
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.5
p0 queue free %	99			100			100	100	100	41	100	98
cM capacity (veh/h)	948			1164			225	216	655	230	244	548

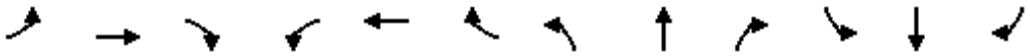
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	409	598	147
Volume Left	14	0	135
Volume Right	0	147	12
cSH	948	1700	241
Volume to Capacity	0.01	0.35	0.61
Queue Length 95th (ft)	1	0	90
Control Delay (s)	0.5	0.0	40.7
Lane LOS	A		E
Approach Delay (s)	0.5	0.0	40.7
Approach LOS			E

Intersection Summary				
Average Delay	5.4			
Intersection Capacity Utilization	44.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	360	0	0	420	21	14
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	391	0	0	457	23	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				629		
pX, platoon unblocked						
vC, conflicting volume			391		848	391
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			391		848	391
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		93	98
cM capacity (veh/h)			1178		335	662

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	391	457	38
Volume Left	0	0	23
Volume Right	0	0	15
cSH	1700	1700	417
Volume to Capacity	0.23	0.27	0.09
Queue Length 95th (ft)	0	0	7
Control Delay (s)	0.0	0.0	14.5
Lane LOS			B
Approach Delay (s)	0.0	0.0	14.5
Approach LOS			B

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization		32.1%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	5	310	33	44	401	8	18	71	40	6	55	18
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
Hourly flow rate (vph)	5	337	36	48	436	9	20	77	43	7	60	20

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	378	492	140	86
Volume Left (vph)	5	48	20	7
Volume Right (vph)	36	9	43	20
Hadj (s)	-0.02	0.05	-0.09	0.06
Departure Headway (s)	5.4	5.3	6.3	6.6
Degree Utilization, x	0.56	0.72	0.25	0.16
Capacity (veh/h)	637	662	500	466
Control Delay (s)	15.1	20.8	11.3	10.8
Approach Delay (s)	15.1	20.8	11.3	10.8
Approach LOS	C	C	B	B

Intersection Summary				
Delay	16.8			
Level of Service	C			
Intersection Capacity Utilization	64.1%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	4	5	108	0	0	297
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	5	117	0	0	323
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			
pX, platoon unblocked						
vC, conflicting volume	440	117			117	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	440	117			117	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	578	940			1484	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	10	117	323
Volume Left	4	0	0
Volume Right	5	0	0
cSH	735	1700	1700
Volume to Capacity	0.01	0.07	0.19
Queue Length 95th (ft)	1	0	0
Control Delay (s)	10.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	10.0	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	4	144	7	4	95
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	4	157	8	4	103
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	272	160			164	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272	160			164	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			100	
cM capacity (veh/h)	719	890			1427	

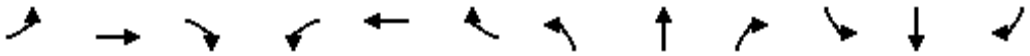
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	12	164	108
Volume Left	8	0	4
Volume Right	4	8	0
cSH	773	1700	1427
Volume to Capacity	0.02	0.10	0.00
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.7	0.0	0.3
Lane LOS	A		A
Approach Delay (s)	9.7	0.0	0.3
Approach LOS	A		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	18.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	4	0	137	11	1	130
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	0	149	12	1	141
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	298	155			161	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	298	155			161	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			100	
cM capacity (veh/h)	697	896			1430	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	4	161	142
Volume Left	4	0	1
Volume Right	0	12	0
cSH	697	1700	1430
Volume to Capacity	0.01	0.09	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	10.2	0.0	0.1
Lane LOS	B		A
Approach Delay (s)	10.2	0.0	0.1
Approach LOS	B		

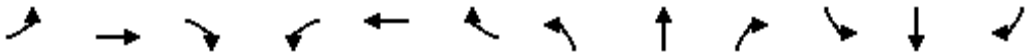
Intersection Summary			
Average Delay		0.2	
Intersection Capacity Utilization		17.9%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	364	0	23	620	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	15	12	12	15	12	12	16	12	12	16	12
Total Lost time (s)		5.0			5.0							
Lane Util. Factor		1.00			1.00							
Frpb, ped/bikes		1.00			1.00							
Flpb, ped/bikes		1.00			1.00							
Frt		1.00			1.00							
Flt Protected		1.00			1.00							
Satd. Flow (prot)		2047			2043							
Flt Permitted		0.97			0.98							
Satd. Flow (perm)		1997			2005							
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	396	0	25	674	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	410	0	0	699	0	0	0	0	0	0	0
Confl. Peds. (#/hr)												15
Heavy Vehicles (%)	0%	2%	0%	5%	2%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA							
Protected Phases		8			8							
Permitted Phases	8			8								
Actuated Green, G (s)		22.1			22.1							
Effective Green, g (s)		22.1			22.1							
Actuated g/C Ratio		0.58			0.58							
Clearance Time (s)		5.0			5.0							
Vehicle Extension (s)		3.0			3.0							
Lane Grp Cap (vph)		1167			1172							
v/s Ratio Prot												
v/s Ratio Perm		0.21			c0.35							
v/c Ratio		0.35			0.60							
Uniform Delay, d1		4.1			5.0							
Progression Factor		1.00			1.00							
Incremental Delay, d2		0.2			0.8							
Delay (s)		4.3			5.8							
Level of Service		A			A							
Approach Delay (s)		4.3			5.8			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	37.8	Sum of lost time (s)	10.0
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		

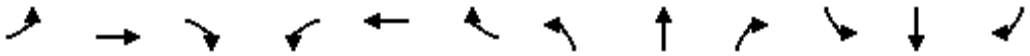
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	364	0	0	627	0	15	0	18	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	396	0	0	682	0	16	0	20	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		94										
pX, platoon unblocked				0.89			0.89	0.89	0.89	0.89	0.89	
vC, conflicting volume	682			396			1077	1077	396	1097	1077	682
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	682			258			1025	1025	258	1047	1025	682
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			91	100	97	100	100	100
cM capacity (veh/h)	921			1172			186	211	698	180	211	454

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	396	682	36
Volume Left	0	0	16
Volume Right	0	0	20
cSH	1700	1700	310
Volume to Capacity	0.23	0.40	0.12
Queue Length 95th (ft)	0	0	10
Control Delay (s)	0.0	0.0	18.1
Lane LOS			C
Approach Delay (s)	0.0	0.0	18.1
Approach LOS			C

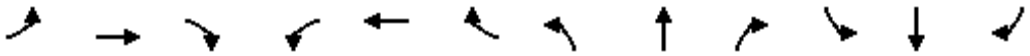
Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	43.0%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	375	6	4	623	0	4	0	5	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	408	7	4	677	0	4	0	5	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		281										
pX, platoon unblocked				0.90			0.90	0.90	0.90	0.90	0.90	
vC, conflicting volume	677			414			1097	1097	411	1102	1100	677
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	677			296			1053	1053	293	1059	1057	677
tC, single (s)	4.1			4.3			7.1	6.5	6.4	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.4			3.5	4.0	3.5	3.5	4.0	3.3
p0 queue free %	100			100			98	100	99	100	100	100
cM capacity (veh/h)	924			1033			185	205	637	182	204	456

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	414	682	10	0
Volume Left	0	4	4	0
Volume Right	7	0	5	0
cSH	924	1033	306	1700
Volume to Capacity	0.00	0.00	0.03	0.00
Queue Length 95th (ft)	0	0	2	0
Control Delay (s)	0.0	0.1	17.2	0.0
Lane LOS		A	C	A
Approach Delay (s)	0.0	0.1	17.2	0.0
Approach LOS			C	A

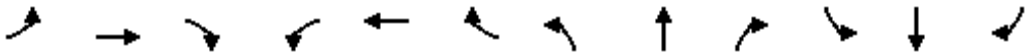
Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	46.0%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	19	95	1	3	0	106	34	3	0	35	29
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	22	21	103	1	3	0	115	37	3	0	38	32
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	324	326	54	438	341	41	70			42		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	324	326	54	438	341	41	70			42		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	96	90	100	99	100	92			100		
cM capacity (veh/h)	583	549	1005	436	539	1034	1525			1577		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	146	4	155	70
Volume Left	22	1	115	0
Volume Right	103	0	3	32
cSH	820	509	1525	1577
Volume to Capacity	0.18	0.01	0.08	0.00
Queue Length 95th (ft)	16	1	6	0
Control Delay (s)	10.3	12.1	5.8	0.0
Lane LOS	B	B	A	
Approach Delay (s)	10.3	12.1	5.8	0.0
Approach LOS	B	B		

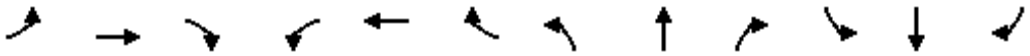
Intersection Summary				
Average Delay	6.5			
Intersection Capacity Utilization	30.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	504	16	30	435	5	4	14	42	5	11	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	12	548	17	33	473	5	4	15	46	5	12	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		568										
pX, platoon unblocked				0.86			0.86	0.86	0.86	0.86	0.86	
vC, conflicting volume	478			565			1132	1124	557	1174	1130	476
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	478			410			1070	1061	399	1120	1068	476
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.6	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.1	3.3
p0 queue free %	99			97			97	92	92	96	93	99
cM capacity (veh/h)	1095			995			156	185	561	132	177	593

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	577	511	65	22
Volume Left	12	33	4	5
Volume Right	17	5	46	4
cSH	1095	995	341	187
Volume to Capacity	0.01	0.03	0.19	0.12
Queue Length 95th (ft)	1	3	17	10
Control Delay (s)	0.3	0.9	18.0	26.7
Lane LOS	A	A	C	D
Approach Delay (s)	0.3	0.9	18.0	26.7
Approach LOS			C	D

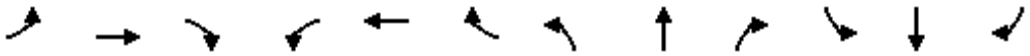
Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	49.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	88	10	43	0	0	0	16	136	5	14	120	33
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	96	11	47	0	0	0	17	148	5	15	130	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	364	367	148	416	382	151	166			153		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	364	367	148	416	382	151	166			153		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	84	98	95	100	100	100	99			99		
cM capacity (veh/h)	583	552	904	505	542	901	1424			1440		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	153	171	182
Volume Left	96	17	15
Volume Right	47	5	36
cSH	651	1424	1440
Volume to Capacity	0.24	0.01	0.01
Queue Length 95th (ft)	23	1	1
Control Delay (s)	12.2	0.9	0.7
Lane LOS	B	A	A
Approach Delay (s)	12.2	0.9	0.7
Approach LOS	B		

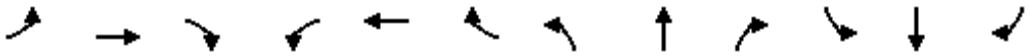
Intersection Summary				
Average Delay	4.3			
Intersection Capacity Utilization	26.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	0	19	0	0	0	52	181	6	15	141	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.96						1.00			0.95	
Flt Protected		0.97						0.99			1.00	
Satd. Flow (prot)		1762						1859			1774	
Flt Permitted		0.97						0.90			0.98	
Satd. Flow (perm)		1762						1693			1744	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	0	21	0	0	0	57	197	7	16	153	89
RTOR Reduction (vph)	0	33	0	0	0	0	0	1	0	0	15	0
Lane Group Flow (vph)	0	38	0	0	0	0	0	260	0	0	243	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	3%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		4.3						37.1			37.1	
Effective Green, g (s)		4.3						37.1			37.1	
Actuated g/C Ratio		0.08						0.72			0.72	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		147						1221			1258	
v/s Ratio Prot												
v/s Ratio Perm		0.02						c0.15			0.14	
v/c Ratio		0.26						0.21			0.19	
Uniform Delay, d1		22.1						2.4			2.3	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.9						0.4			0.3	
Delay (s)		23.0						2.7			2.7	
Level of Service		C						A			A	
Approach Delay (s)		23.0			0.0			2.7			2.7	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	51.4	Sum of lost time (s)	10.0
Intersection Capacity Utilization	39.7%	ICU Level of Service	A
Analysis Period (min)	15		

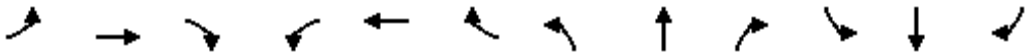
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	421	142	92	363	0	120	0	126	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	458	154	100	395	0	130	0	137	0	0	0
Pedestrians								10				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								1				
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					151							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	395			622			1139	1139	545	1266	1217	395
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	187			622			1072	1072	545	1223	1163	187
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			90			14	100	74	100	100	100
cM capacity (veh/h)	1178			956			151	166	536	90	147	724

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	612	495	267
Volume Left	0	100	130
Volume Right	154	0	137
cSH	1700	956	239
Volume to Capacity	0.36	0.10	1.12
Queue Length 95th (ft)	0	9	298
Control Delay (s)	0.0	2.9	137.4
Lane LOS		A	F
Approach Delay (s)	0.0	2.9	137.4
Approach LOS			F

Intersection Summary				
Average Delay	27.8			
Intersection Capacity Utilization	79.6%	ICU Level of Service	D	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	433	0	0	335	139	0	0	0	123	0	23
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	11	471	0	0	364	151	0	0	0	134	0	25
Pedestrians											6	
Lane Width (ft)											12.0	
Walking Speed (ft/s)											4.0	
Percent Blockage											1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					307							
pX, platoon unblocked	0.91						0.91	0.91		0.91	0.91	0.91
vC, conflicting volume	521			471			957	1014	471	938	938	446
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	422			471			902	964	471	881	881	339
tC, single (s)	4.2			4.1			7.1	6.5	6.2	7.1	6.5	6.3
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.4
p0 queue free %	99			100			100	100	100	44	100	96
cM capacity (veh/h)	990			1091			223	228	593	237	255	621

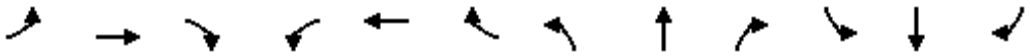
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	482	515	159
Volume Left	11	0	134
Volume Right	0	151	25
cSH	990	1700	263
Volume to Capacity	0.01	0.30	0.60
Queue Length 95th (ft)	1	0	89
Control Delay (s)	0.3	0.0	37.5
Lane LOS	A		E
Approach Delay (s)	0.3	0.0	37.5
Approach LOS			E

Intersection Summary				
Average Delay	5.3			
Intersection Capacity Utilization	45.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	420	0	0	348	31	24
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	457	0	0	378	34	26
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				629		
pX, platoon unblocked						
vC, conflicting volume			457		835	457
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			457		835	457
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		90	96
cM capacity (veh/h)			1115		340	608

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	457	378	60
Volume Left	0	0	34
Volume Right	0	0	26
cSH	1700	1700	421
Volume to Capacity	0.27	0.22	0.14
Queue Length 95th (ft)	0	0	12
Control Delay (s)	0.0	0.0	14.9
Lane LOS			B
Approach Delay (s)	0.0	0.0	14.9
Approach LOS			B

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	373	52	54	308	15	23	57	30	18	38	12
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
Hourly flow rate (vph)	9	405	57	59	335	16	25	62	33	20	41	13

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	471	410	120	74
Volume Left (vph)	9	59	25	20
Volume Right (vph)	57	16	33	13
Hadj (s)	-0.03	0.02	-0.09	0.05
Departure Headway (s)	5.1	5.2	6.2	6.5
Degree Utilization, x	0.67	0.59	0.21	0.13
Capacity (veh/h)	471	660	494	467
Control Delay (s)	17.6	15.6	10.8	10.5
Approach Delay (s)	17.6	15.6	10.8	10.5
Approach LOS	C	C	B	B

Intersection Summary				
Delay	15.6			
Level of Service	C			
Intersection Capacity Utilization	60.9%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	6	10	235	0	0	234
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	11	255	0	0	254
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			
pX, platoon unblocked						
vC, conflicting volume	510	255			255	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	510	255			255	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	527	788			1321	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	17	255	254
Volume Left	7	0	0
Volume Right	11	0	0
cSH	665	1700	1700
Volume to Capacity	0.03	0.15	0.15
Queue Length 95th (ft)	2	0	0
Control Delay (s)	10.6	0.0	0.0
Lane LOS	B		
Approach Delay (s)	10.6	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	5	123	15	13	174
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	5	134	16	14	189
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	359	142			150	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	359	142			150	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			99	
cM capacity (veh/h)	637	911			1444	

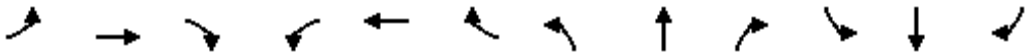
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	13	150	203
Volume Left	8	0	14
Volume Right	5	16	0
cSH	728	1700	1444
Volume to Capacity	0.02	0.09	0.01
Queue Length 95th (ft)	1	0	1
Control Delay (s)	10.0	0.0	0.6
Lane LOS	B		A
Approach Delay (s)	10.0	0.0	0.6
Approach LOS	B		

Intersection Summary			
Average Delay		0.7	
Intersection Capacity Utilization		29.9%	ICU Level of Service A
Analysis Period (min)		15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	14	2	141	11	0	131
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	2	153	12	0	142
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	302	159			165	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	302	159			165	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	100			100	
cM capacity (veh/h)	694	891			1425	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	17	165	142
Volume Left	15	0	0
Volume Right	2	12	0
cSH	714	1700	1425
Volume to Capacity	0.02	0.10	0.00
Queue Length 95th (ft)	2	0	0
Control Delay (s)	10.2	0.0	0.0
Lane LOS	B		
Approach Delay (s)	10.2	0.0	0.0
Approach LOS	B		

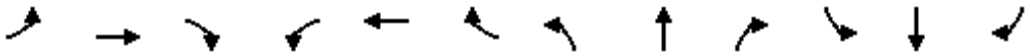
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	18.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	501	0	25	454	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	15	12	12	15	12	12	16	12	12	16	12
Total Lost time (s)		5.0			5.0							
Lane Util. Factor		1.00			1.00							
Frpb, ped/bikes		1.00			1.00							
Flpb, ped/bikes		1.00			1.00							
Frt		1.00			1.00							
Flt Protected		1.00			1.00							
Satd. Flow (prot)		2056			2065							
Flt Permitted		0.93			0.96							
Satd. Flow (perm)		1924			1986							
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	545	0	27	493	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	595	0	0	520	0	0	0	0	0	0	0
Confl. Peds. (#/hr)												15
Heavy Vehicles (%)	4%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA							
Protected Phases		8			8							
Permitted Phases	8			8								
Actuated Green, G (s)		20.8			20.8							
Effective Green, g (s)		20.8			20.8							
Actuated g/C Ratio		0.57			0.57							
Clearance Time (s)		5.0			5.0							
Vehicle Extension (s)		3.0			3.0							
Lane Grp Cap (vph)		1096			1131							
v/s Ratio Prot												
v/s Ratio Perm		c0.31			0.26							
v/c Ratio		0.54			0.46							
Uniform Delay, d1		4.9			4.6							
Progression Factor		1.00			1.00							
Incremental Delay, d2		0.6			0.3							
Delay (s)		5.4			4.9							
Level of Service		A			A							
Approach Delay (s)		5.4			4.9			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	36.5	Sum of lost time (s)	10.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

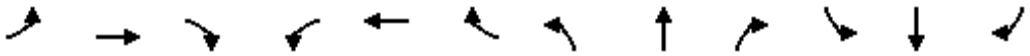
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	501	0	0	439	0	40	0	40	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	545	0	0	477	0	43	0	43	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		94										
pX, platoon unblocked				0.81			0.81	0.81	0.81	0.81	0.81	
vC, conflicting volume	477			545			1022	1022	545	1065	1022	477
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	477			327			913	913	327	966	913	477
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			79	100	93	100	100	100
cM capacity (veh/h)	1096			1013			206	224	580	178	224	592

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	545	477	87
Volume Left	0	0	43
Volume Right	0	0	43
cSH	1700	1700	304
Volume to Capacity	0.32	0.28	0.29
Queue Length 95th (ft)	0	0	29
Control Delay (s)	0.0	0.0	21.5
Lane LOS			C
Approach Delay (s)	0.0	0.0	21.5
Approach LOS			C

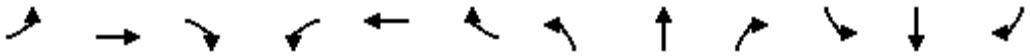
Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	37.7%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	537	4	6	433	0	6	0	3	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	584	4	7	471	0	7	0	3	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		281										
pX, platoon unblocked				0.81			0.81	0.81	0.81	0.81	0.81	
vC, conflicting volume	471			588			1070	1070	586	1073	1072	471
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	471			376			969	969	373	973	972	471
tC, single (s)	4.1			4.3			7.3	6.5	6.9	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.4			3.7	4.0	3.9	3.5	4.0	3.3
p0 queue free %	100			99			96	100	99	100	100	100
cM capacity (veh/h)	1102			896			176	206	446	187	205	597

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	588	477	10	0
Volume Left	0	7	7	0
Volume Right	4	0	3	0
cSH	1102	896	221	1700
Volume to Capacity	0.00	0.01	0.04	0.00
Queue Length 95th (ft)	0	1	3	0
Control Delay (s)	0.0	0.2	22.1	0.0
Lane LOS		A	C	A
Approach Delay (s)	0.0	0.2	22.1	0.0
Approach LOS			C	A

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	38.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	12	88	0	5	1	90	29	1	0	21	25
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	24	13	96	0	5	1	98	32	1	0	23	27
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	268	267	36	368	280	34	50			35		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	268	267	36	368	280	34	50			35		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	98	91	100	99	100	94			100		
cM capacity (veh/h)	650	601	1042	502	591	1043	1570			1587		

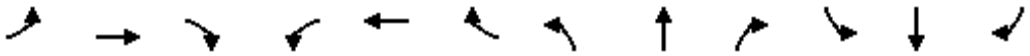
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	133	7	130	50
Volume Left	24	0	98	0
Volume Right	96	1	1	27
cSH	882	637	1570	1587
Volume to Capacity	0.15	0.01	0.06	0.00
Queue Length 95th (ft)	13	1	5	0
Control Delay (s)	9.8	10.7	5.7	0.0
Lane LOS	A	B	A	
Approach Delay (s)	9.8	10.7	5.7	0.0
Approach LOS	A	B		

Intersection Summary				
Average Delay	6.6			
Intersection Capacity Utilization	33.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	413	11	12	416	3	6	5	11	6	8	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	8	449	12	13	452	3	7	5	12	7	9	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		568										
pX, platoon unblocked				0.91			0.91	0.91	0.91	0.91	0.91	
vC, conflicting volume	455			461			958	952	455	965	956	454
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	455			362			906	900	356	914	904	454
tC, single (s)	4.2			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			97	98	98	97	97	99
cM capacity (veh/h)	1045			1103			226	251	633	222	250	610

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	468	468	24	18
Volume Left	8	13	7	7
Volume Right	12	3	12	3
cSH	1045	1103	345	266
Volume to Capacity	0.01	0.01	0.07	0.07
Queue Length 95th (ft)	1	1	6	6
Control Delay (s)	0.2	0.4	16.2	19.5
Lane LOS	A	A	C	C
Approach Delay (s)	0.2	0.4	16.2	19.5
Approach LOS			C	C

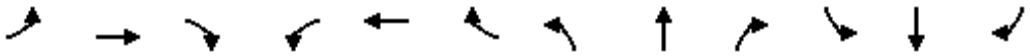
Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	38.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	1	5	0	0	0	7	46	3	2	77	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	40	1	5	0	0	0	8	50	3	2	84	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	169	171	98	175	183	52	112			53		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	169	171	98	175	183	52	112			53		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	100	99	100	100	100	99			100		
cM capacity (veh/h)	795	721	964	783	710	1022	1490			1565		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	47	61	114
Volume Left	40	8	2
Volume Right	5	3	28
cSH	810	1490	1565
Volume to Capacity	0.06	0.01	0.00
Queue Length 95th (ft)	5	0	0
Control Delay (s)	9.7	1.0	0.1
Lane LOS	A	A	A
Approach Delay (s)	9.7	1.0	0.1
Approach LOS	A		

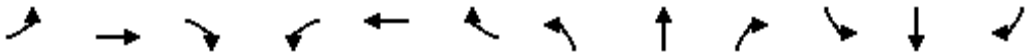
Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	16.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	0	3	0	0	0	14	71	2	4	98	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.97						1.00			0.96	
Flt Protected		0.96						0.99			1.00	
Satd. Flow (prot)		1780						1834			1821	
Flt Permitted		0.96						0.96			1.00	
Satd. Flow (perm)		1780						1782			1818	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	0	3	0	0	0	15	77	2	4	107	47
RTOR Reduction (vph)	0	16	0	0	0	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	94	0	0	149	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		1.0						40.3			40.3	
Effective Green, g (s)		1.0						40.3			40.3	
Actuated g/C Ratio		0.02						0.79			0.79	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		34						1399			1428	
v/s Ratio Prot												
v/s Ratio Perm		0.00						0.05			c0.08	
v/c Ratio		0.01						0.07			0.10	
Uniform Delay, d1		24.7						1.2			1.3	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.1						0.1			0.1	
Delay (s)		24.8						1.3			1.4	
Level of Service		C						A			A	
Approach Delay (s)		24.8			0.0			1.3			1.4	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	2.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.10		
Actuated Cycle Length (s)	51.3	Sum of lost time (s)	10.0
Intersection Capacity Utilization	22.5%	ICU Level of Service	A
Analysis Period (min)	15		

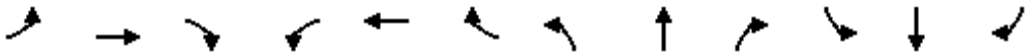
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	390	92	52	366	0	47	0	44	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	424	100	57	398	0	51	0	48	0	0	0
Pedestrians								10				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								1				
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					151							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	398			534			995	995	484	1033	1045	398
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	194			534			901	901	484	946	960	194
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			75	100	92	100	100	100
cM capacity (veh/h)	1174			1035			206	221	578	179	204	720

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	524	454	99
Volume Left	0	57	51
Volume Right	100	0	48
cSH	1700	1035	299
Volume to Capacity	0.31	0.05	0.33
Queue Length 95th (ft)	0	4	35
Control Delay (s)	0.0	1.6	22.8
Lane LOS		A	C
Approach Delay (s)	0.0	1.6	22.8
Approach LOS			C

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	375	0	0	322	99	0	0	0	109	0	19
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	13	408	0	0	350	108	0	0	0	118	0	21
Pedestrians											6	
Lane Width (ft)											12.0	
Walking Speed (ft/s)											4.0	
Percent Blockage											1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					307							
pX, platoon unblocked	0.89						0.89	0.89		0.89	0.89	0.89
vC, conflicting volume	464			408			858	897	408	844	844	410
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	331			408			776	820	408	760	760	271
tC, single (s)	4.2			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	58	100	97
cM capacity (veh/h)	1055			1151			267	270	644	283	293	682

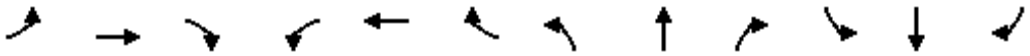
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	421	458	139
Volume Left	13	0	118
Volume Right	0	108	21
cSH	1055	1700	310
Volume to Capacity	0.01	0.27	0.45
Queue Length 95th (ft)	1	0	55
Control Delay (s)	0.4	0.0	25.7
Lane LOS	A		D
Approach Delay (s)	0.4	0.0	25.7
Approach LOS			D

Intersection Summary			
Average Delay	3.7		
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	376	0	0	338	16	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	409	0	0	367	17	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				629		
pX, platoon unblocked						
vC, conflicting volume			409		776	409
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			409		776	409
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	98
cM capacity (veh/h)			1161		369	647

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	409	367	30
Volume Left	0	0	17
Volume Right	0	0	13
cSH	1700	1700	452
Volume to Capacity	0.24	0.22	0.07
Queue Length 95th (ft)	0	0	5
Control Delay (s)	0.0	0.0	13.5
Lane LOS			B
Approach Delay (s)	0.0	0.0	13.5
Approach LOS			B

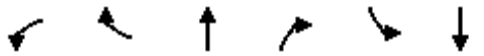
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	29.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	12	321	35	36	311	14	24	46	39	19	38	10
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
Hourly flow rate (vph)	13	349	38	39	338	15	26	50	42	21	41	11

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	400	392	118	73
Volume Left (vph)	13	39	26	21
Volume Right (vph)	38	15	42	11
Hadj (s)	-0.05	0.01	-0.15	-0.03
Departure Headway (s)	5.0	5.1	5.9	6.1
Degree Utilization, x	0.55	0.55	0.19	0.12
Capacity (veh/h)	691	686	528	496
Control Delay (s)	14.0	14.1	10.3	10.0
Approach Delay (s)	14.0	14.1	10.3	10.0
Approach LOS	B	B	B	A

Intersection Summary				
Delay	13.3			
Level of Service	B			
Intersection Capacity Utilization	47.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	3	4	88	0	0	143
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	4	96	0	0	155
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			
pX, platoon unblocked						
vC, conflicting volume	251	96			96	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	251	96			96	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	742	966			1511	

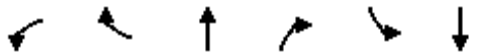
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	8	96	155
Volume Left	3	0	0
Volume Right	4	0	0
cSH	855	1700	1700
Volume to Capacity	0.01	0.06	0.09
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.2	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.2	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	1	0	58	6	8	99
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	0	63	7	9	108
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	191	66			70	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	191	66			70	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	798	1003			1544	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	1	70	116
Volume Left	1	0	9
Volume Right	0	7	0
cSH	798	1700	1544
Volume to Capacity	0.00	0.04	0.01
Queue Length 95th (ft)	0	0	0
Control Delay (s)	9.5	0.0	0.6
Lane LOS	A		A
Approach Delay (s)	9.5	0.0	0.6
Approach LOS	A		

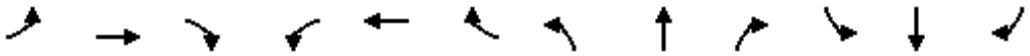
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	21.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	14	11	108	3	0	108
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	12	117	3	0	117
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	236	119			121	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	236	119			121	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	99			100	
cM capacity (veh/h)	756	938			1480	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	27	121	117
Volume Left	15	0	0
Volume Right	12	3	0
cSH	827	1700	1480
Volume to Capacity	0.03	0.07	0.00
Queue Length 95th (ft)	3	0	0
Control Delay (s)	9.5	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.5	0.0	0.0
Approach LOS	A		

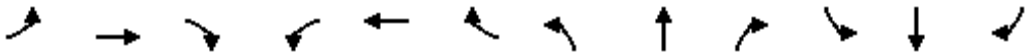
Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	15.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	416	0	11	417	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	15	12	12	15	12	12	16	12	12	16	12
Total Lost time (s)		5.0			5.0							
Lane Util. Factor		1.00			1.00							
Frpb, ped/bikes		1.00			1.00							
Flpb, ped/bikes		1.00			1.00							
Frt		1.00			1.00							
Flt Protected		1.00			1.00							
Satd. Flow (prot)		2080			2087							
Flt Permitted		0.97			0.98							
Satd. Flow (perm)		2024			2058							
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	452	0	12	453	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	473	0	0	465	0	0	0	0	0	0	0
Confl. Peds. (#/hr)												15
Heavy Vehicles (%)	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA							
Protected Phases		8			8							
Permitted Phases	8			8								
Actuated Green, G (s)		16.2			16.2							
Effective Green, g (s)		16.2			16.2							
Actuated g/C Ratio		0.51			0.51							
Clearance Time (s)		5.0			5.0							
Vehicle Extension (s)		3.0			3.0							
Lane Grp Cap (vph)		1027			1045							
v/s Ratio Prot												
v/s Ratio Perm		c0.23			0.23							
v/c Ratio		0.46			0.44							
Uniform Delay, d1		5.0			5.0							
Progression Factor		1.00			1.00							
Incremental Delay, d2		0.3			0.3							
Delay (s)		5.4			5.3							
Level of Service		A			A							
Approach Delay (s)		5.4			5.3			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	31.9	Sum of lost time (s)	10.0
Intersection Capacity Utilization	35.0%	ICU Level of Service	A
Analysis Period (min)	15		

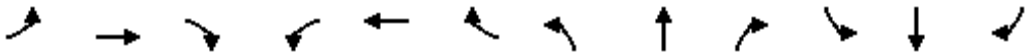
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	416	0	0	411	0	18	0	15	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	452	0	0	447	0	20	0	16	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		94										
pX, platoon unblocked				0.84			0.84	0.84	0.84	0.84	0.84	
vC, conflicting volume	447			452			899	899	452	915	899	447
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	447			258			788	788	258	807	788	447
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			100			93	100	97	100	100	100
cM capacity (veh/h)	1124			1112			263	275	648	249	275	616

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	452	447	36
Volume Left	0	0	20
Volume Right	0	0	16
cSH	1700	1700	360
Volume to Capacity	0.27	0.26	0.10
Queue Length 95th (ft)	0	0	8
Control Delay (s)	0.0	0.0	16.1
Lane LOS			C
Approach Delay (s)	0.0	0.0	16.1
Approach LOS			C

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	31.9%	ICU Level of Service	A	
Analysis Period (min)	15			

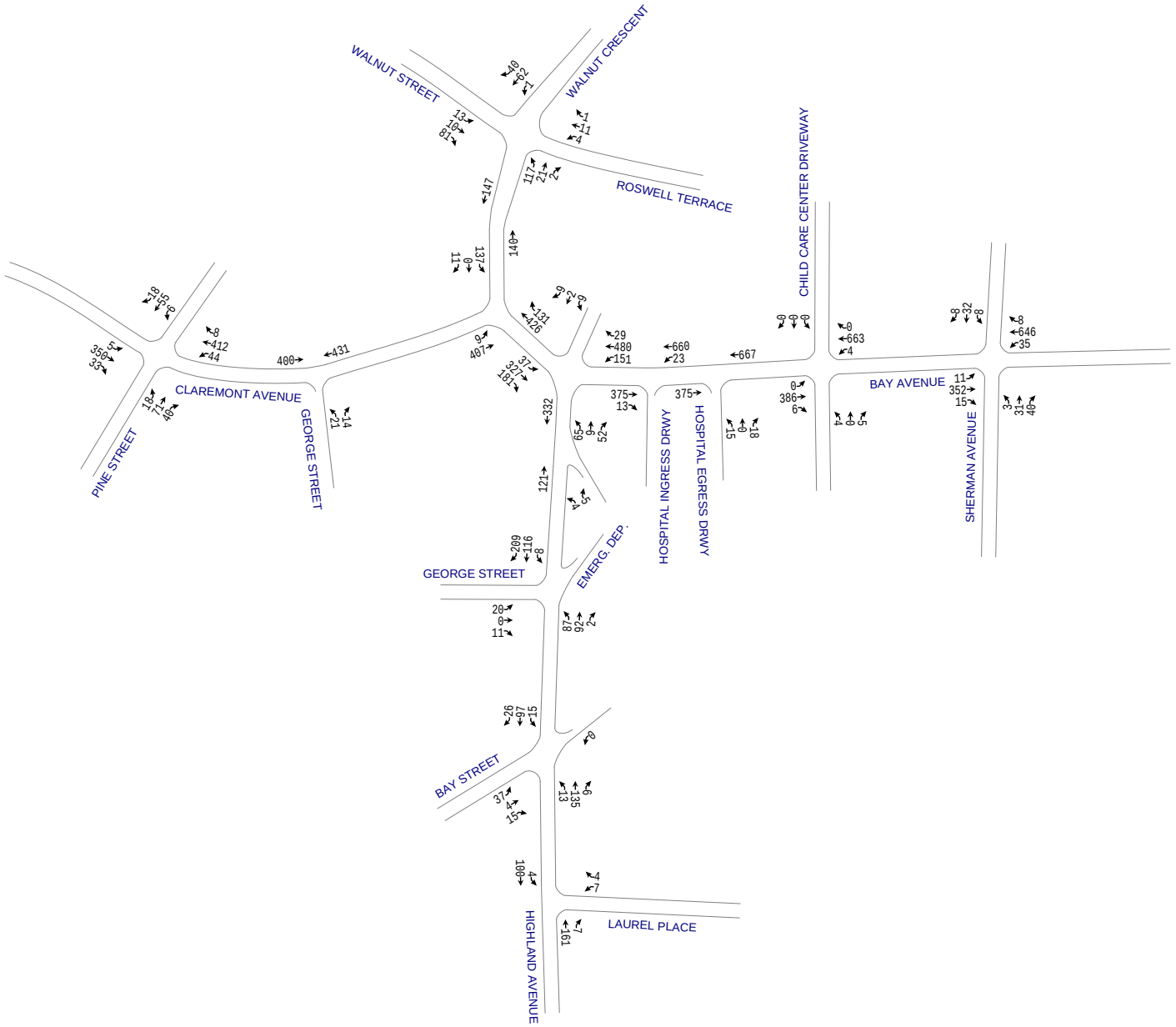


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	431	1	1	411	0	0	0	1	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	468	1	1	447	0	0	0	1	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		281										
pX, platoon unblocked				0.85			0.85	0.85	0.85	0.85	0.85	
vC, conflicting volume	447			470			918	918	469	919	918	447
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	447			287			815	815	286	816	815	447
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1124			1093			253	267	644	253	266	616

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	470	448	1	0
Volume Left	0	1	0	0
Volume Right	1	0	1	0
cSH	1124	1093	644	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	10.6	0.0
Lane LOS		A	B	A
Approach Delay (s)	0.0	0.0	10.6	0.0
Approach LOS			B	A

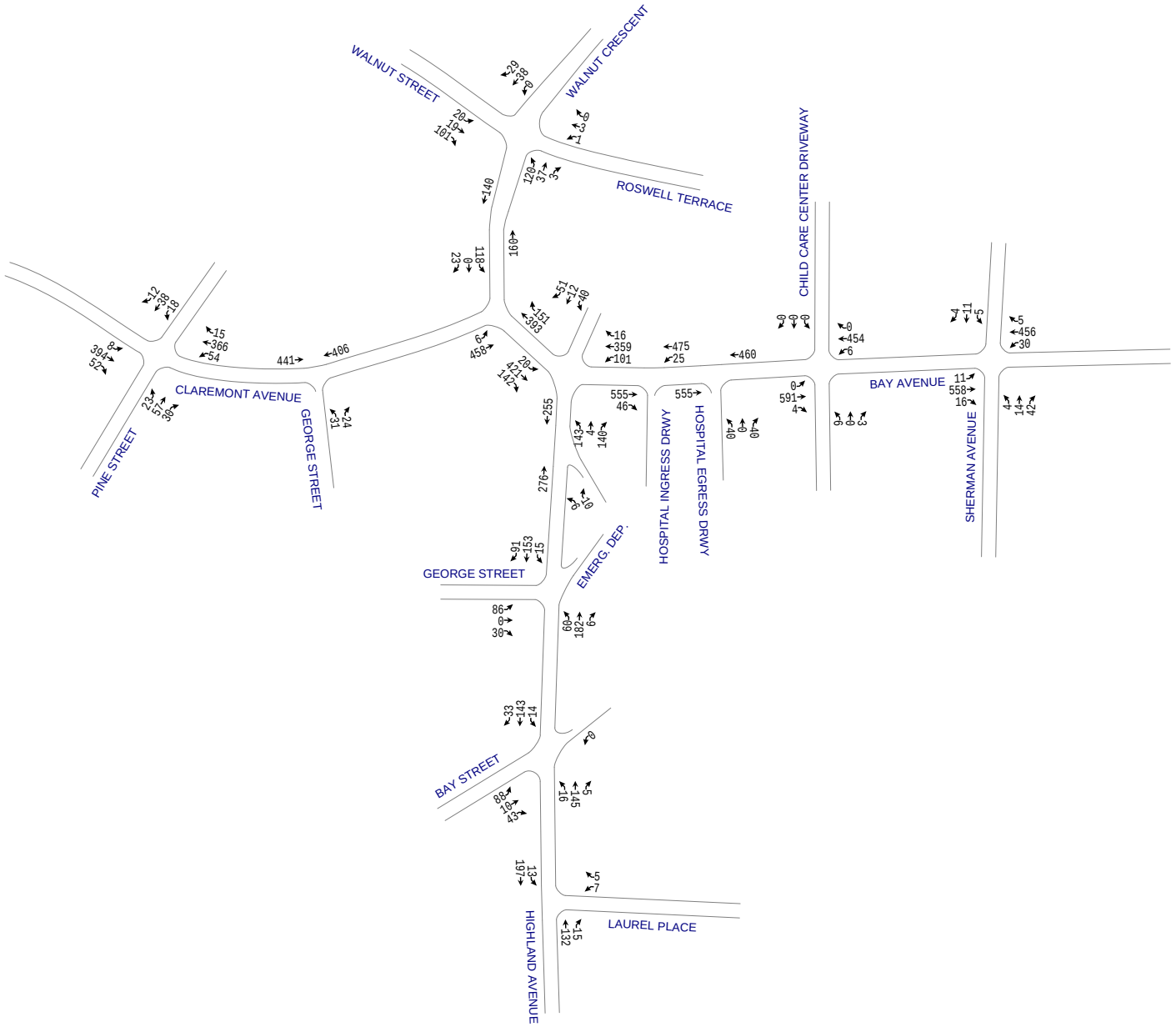
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)	15		

Appendix B
Build Volume Maps



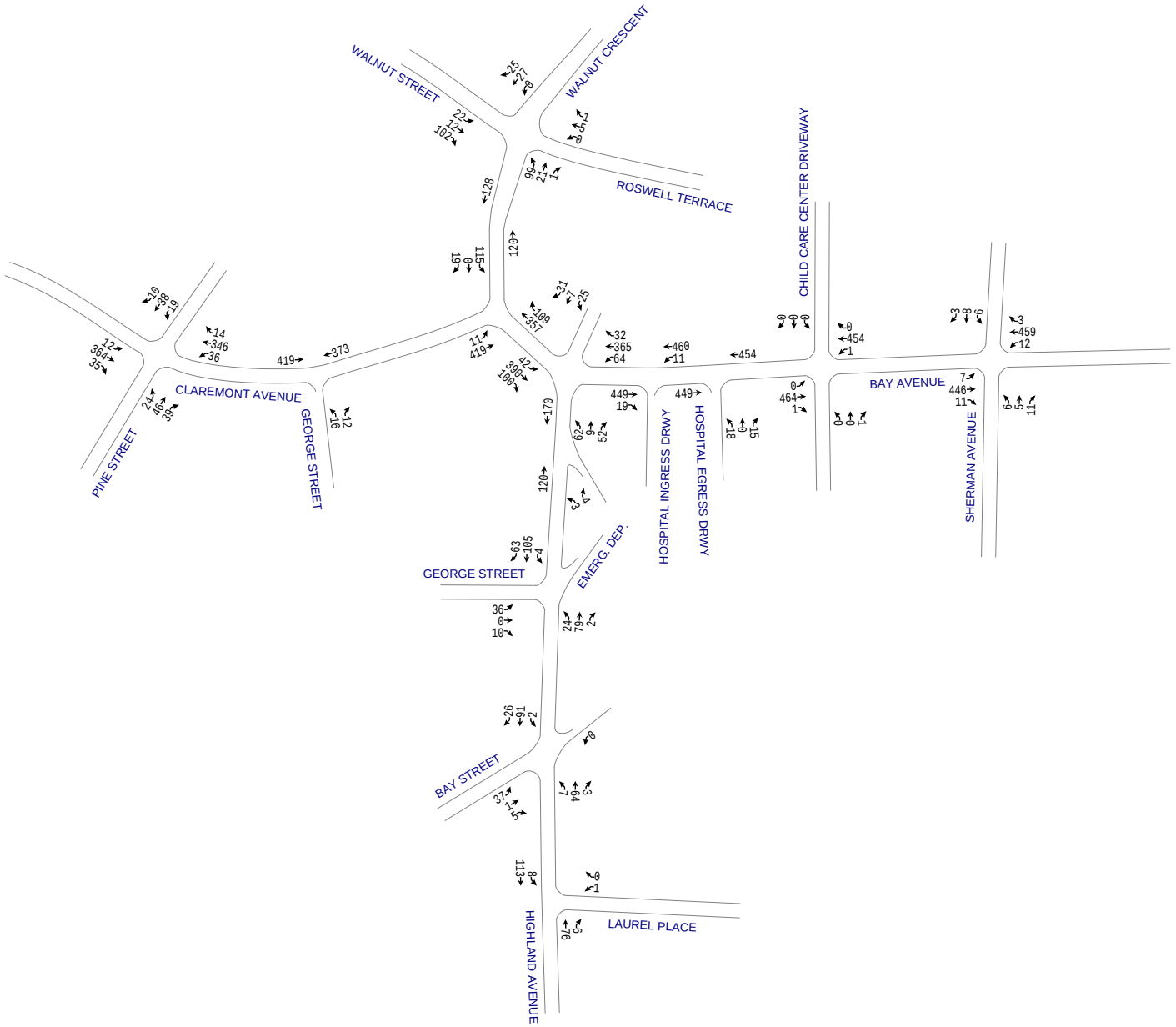
Mountainside Redevelopment
2018 Build

Peak Hour Traffic Volumes
Weekday AM



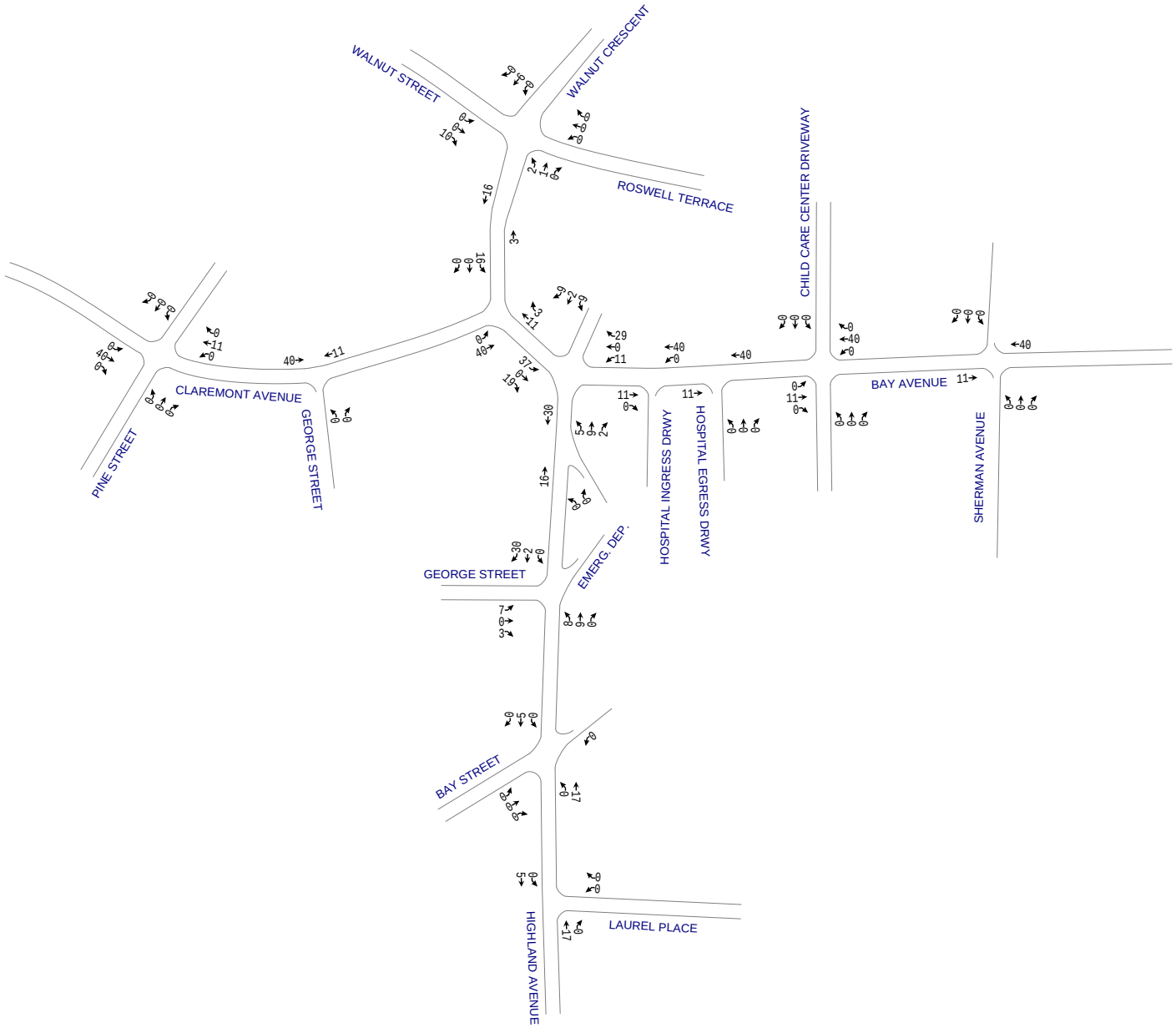
Mountainside Redevelopment
2018 Build

Peak Hour Traffic Volumes
Weekday PM



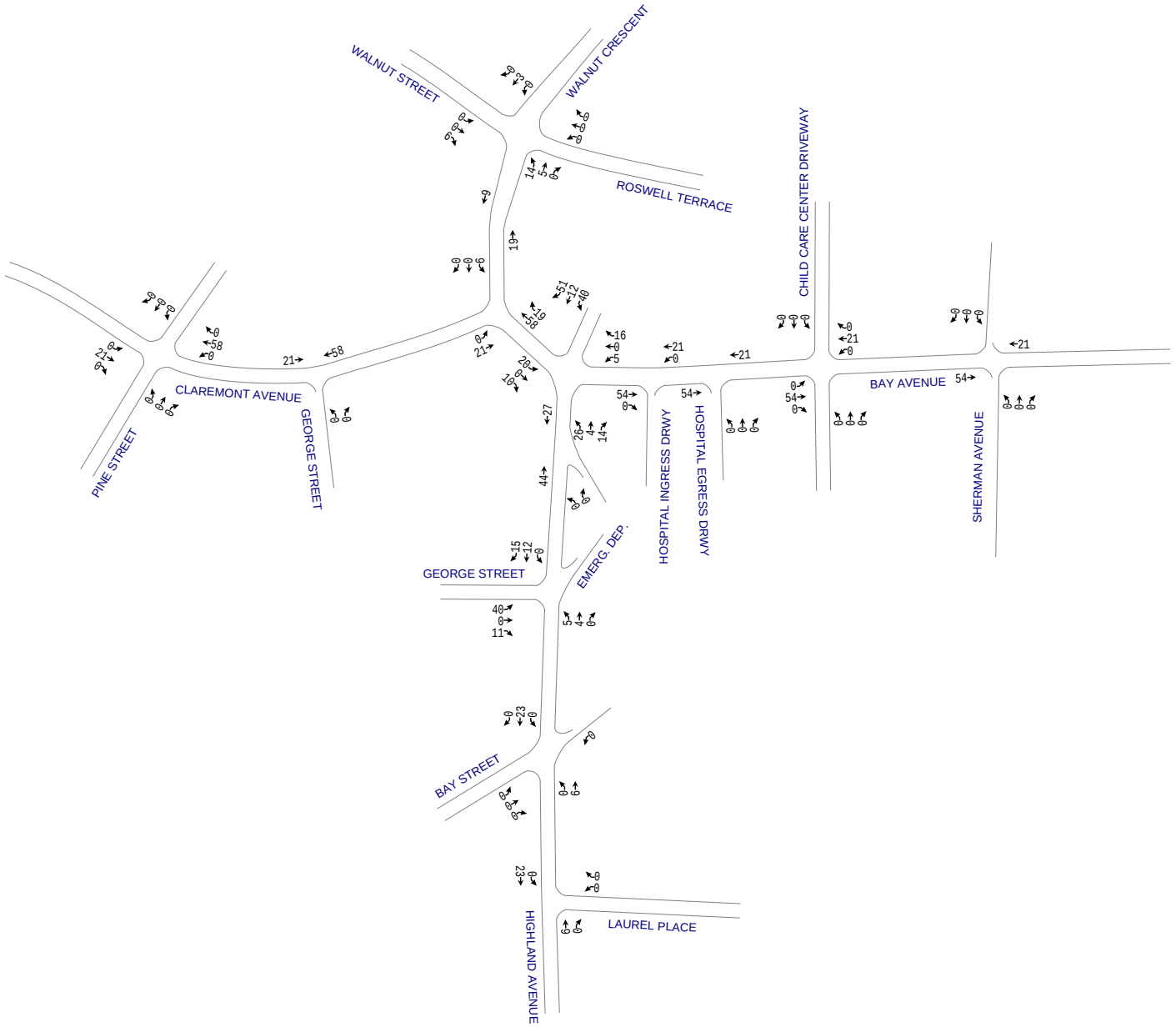
Mountainside Redevelopment
2018 Build

Peak Hour Traffic Volumes
Saturday Midday



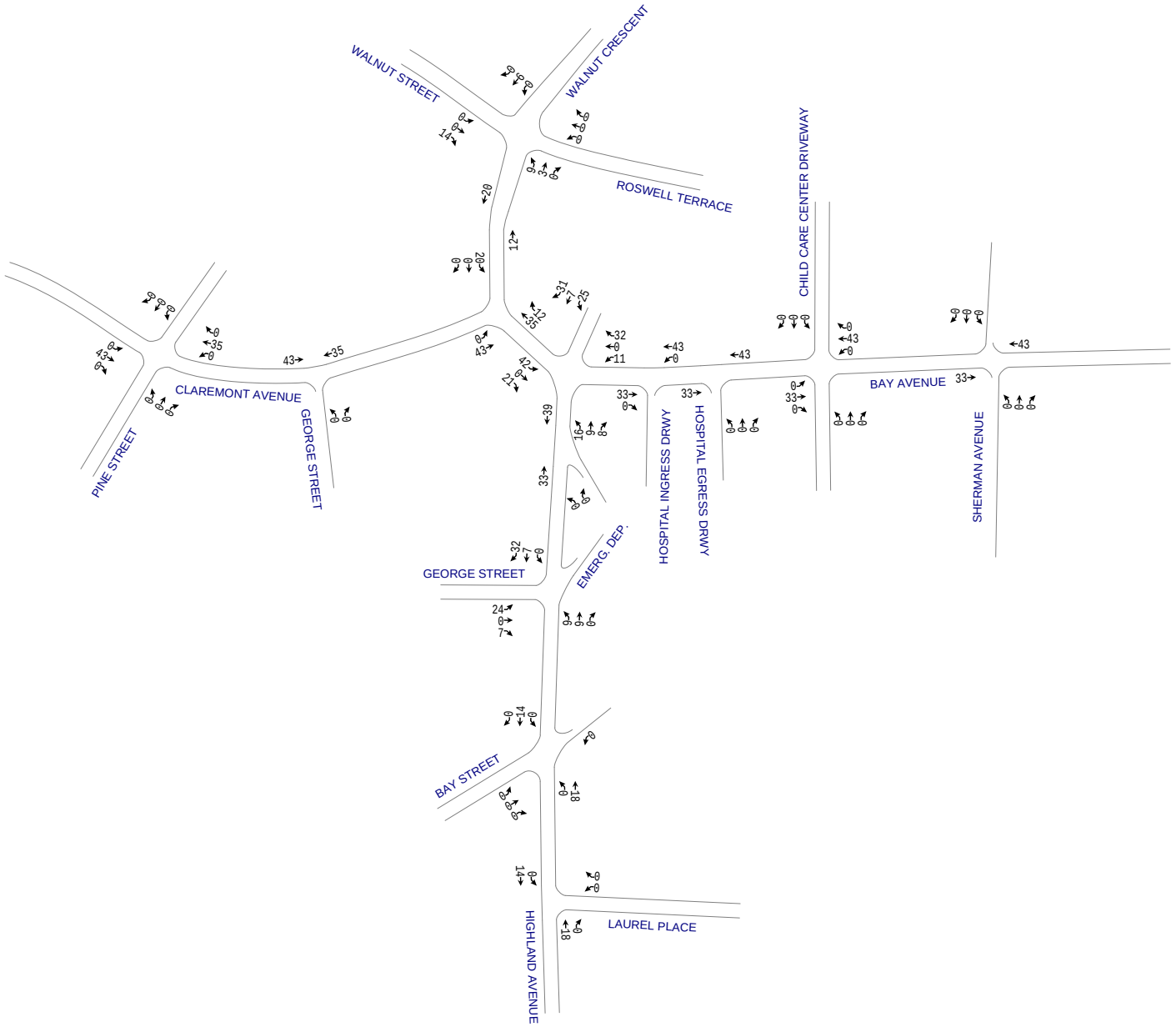
Mountainside Redevelopment
2018 Build

Peak Hour Project Increments
Weekday AM



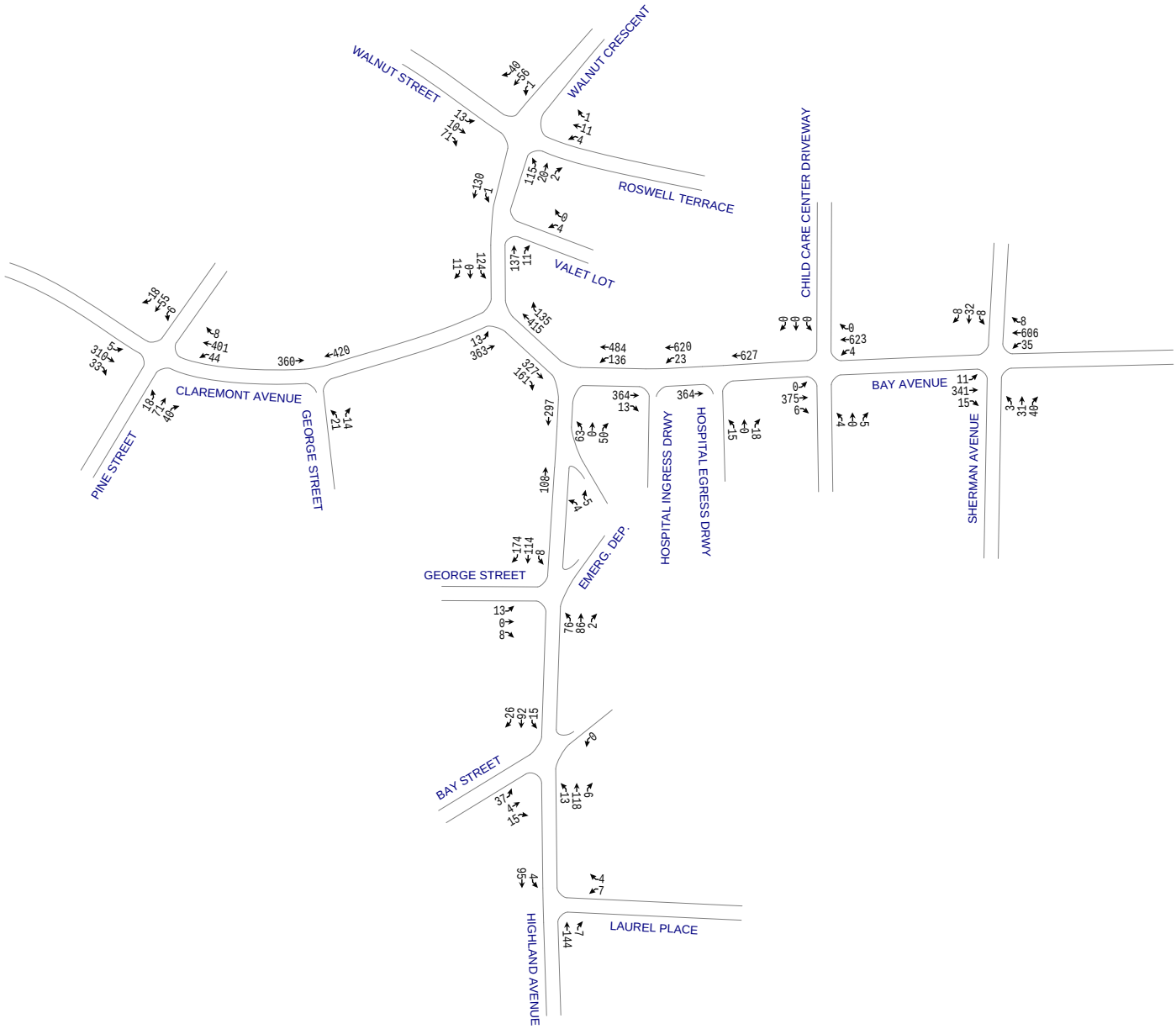
Mountainside Redevelopment
2018 Build

Peak Hour Project Increments
Weekday PM



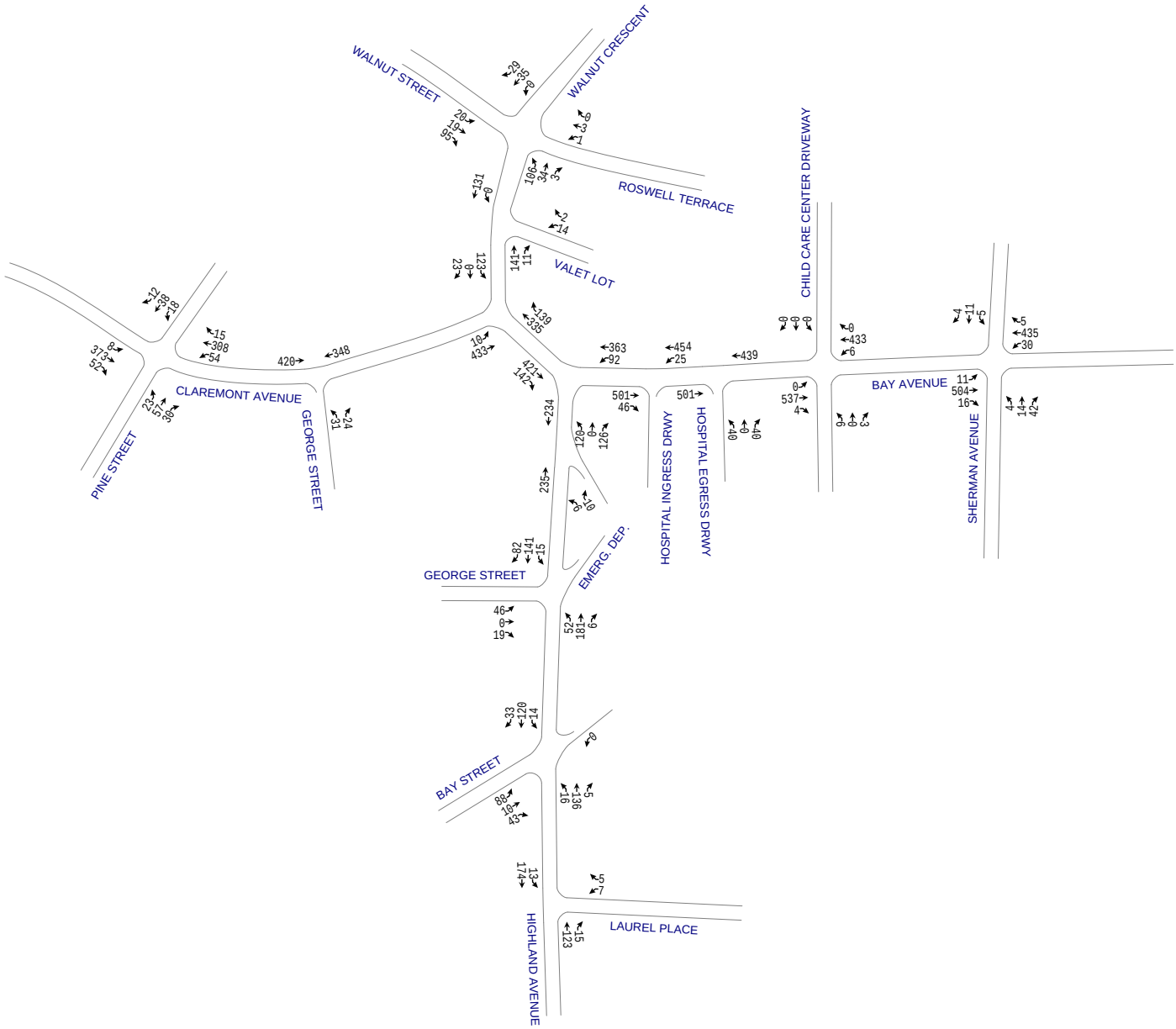
Mountainside Redevelopment
2018 Build

Peak Hour Project Increments
Saturday Midday



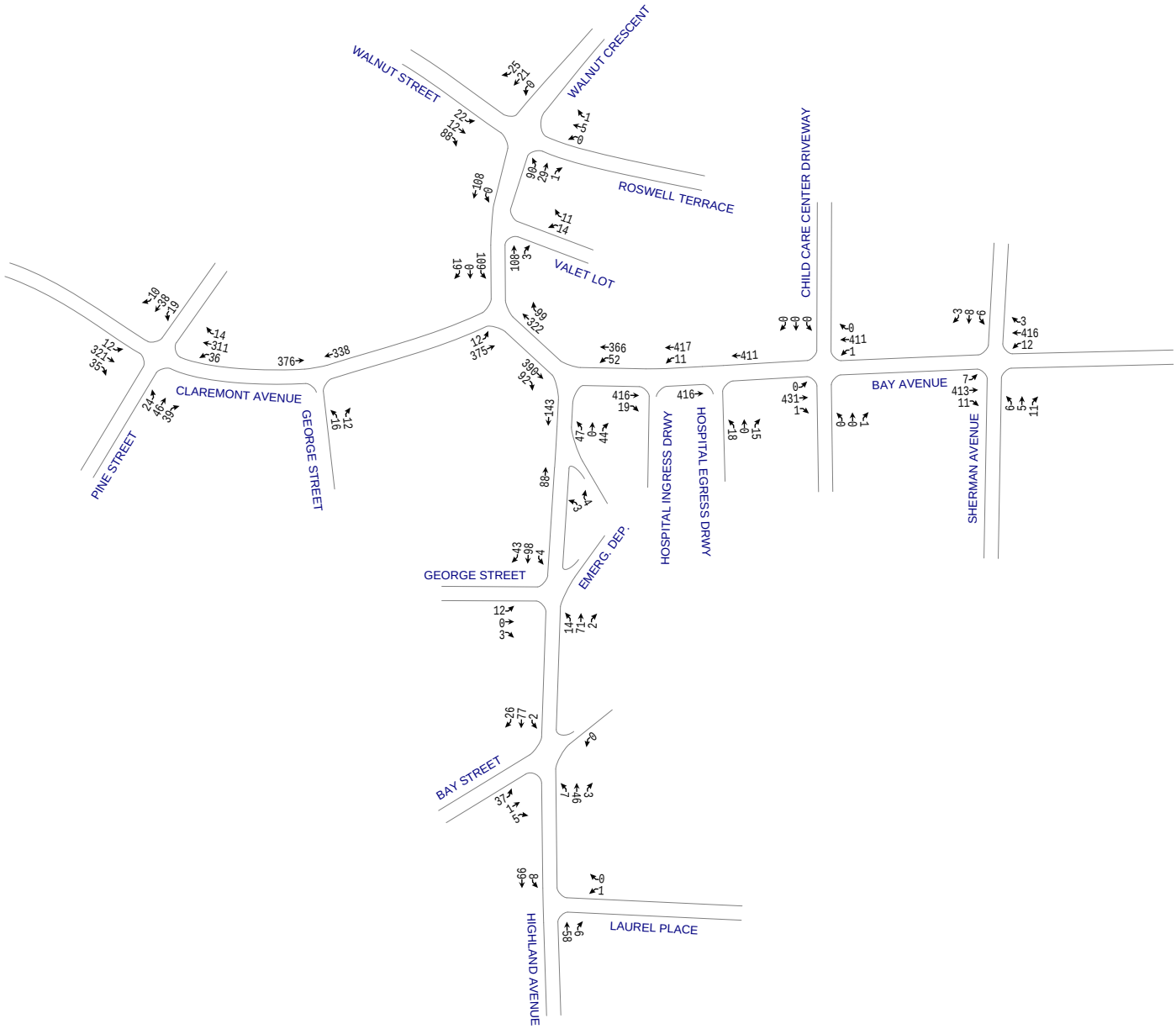
Mountainside Redevelopment
2018 No Build

Peak Hour Traffic Volumes
Weekday AM



Mountainside Redevelopment
2018 No Build

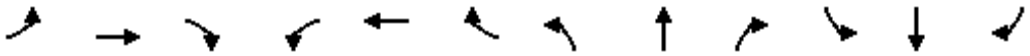
Peak Hour Traffic Volumes
Weekday PM



Mountainside Redevelopment
2018 No Build

Peak Hour Traffic Volumes
Saturday Midday

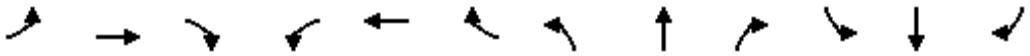
Appendix C
Build Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	10	81	4	11	1	117	21	2	1	62	40
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	14	11	88	4	12	1	127	23	2	1	67	43
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	377	373	89	465	393	26	111			27		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	377	373	89	465	393	26	111			27		
tC, single (s)	7.1	6.5	6.3	7.6	6.6	6.2	4.2			5.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.4	4.0	4.1	3.3	2.3			3.1		
p0 queue free %	97	98	91	99	98	100	91			100		
cM capacity (veh/h)	533	510	958	362	484	1054	1436			1129		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	113	17	152	112
Volume Left	14	4	127	1
Volume Right	88	1	2	43
cSH	809	460	1436	1129
Volume to Capacity	0.14	0.04	0.09	0.00
Queue Length 95th (ft)	12	3	7	0
Control Delay (s)	10.2	13.1	6.6	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	10.2	13.1	6.6	0.1
Approach LOS	B	B		

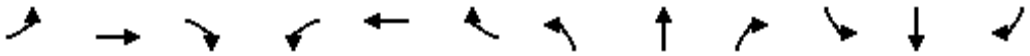
Intersection Summary				
Average Delay	6.1			
Intersection Capacity Utilization	28.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	352	15	35	646	8	3	31	40	8	32	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	12	383	16	38	702	9	3	34	43	9	35	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		568										
pX, platoon unblocked				0.98			0.98	0.98	0.98	0.98	0.98	
vC, conflicting volume	711			399			1223	1202	391	1258	1205	707
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	711			376			1218	1195	368	1253	1199	707
tC, single (s)	4.1			4.1			7.4	6.8	6.2	7.2	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.8	4.2	3.3	3.6	4.0	3.3
p0 queue free %	99			97			97	78	93	92	80	98
cM capacity (veh/h)	898			1153			107	156	668	105	175	439

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	411	749	80	52
Volume Left	12	38	3	9
Volume Right	16	9	43	9
cSH	898	1153	258	173
Volume to Capacity	0.01	0.03	0.31	0.30
Queue Length 95th (ft)	1	3	32	30
Control Delay (s)	0.4	0.9	25.1	34.6
Lane LOS	A	A	D	D
Approach Delay (s)	0.4	0.9	25.1	34.6
Approach LOS			D	D

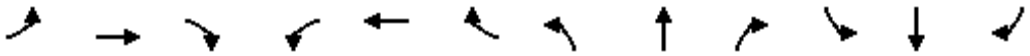
Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	4	15	0	0	0	13	135	6	15	97	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	40	4	16	0	0	0	14	147	7	16	105	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	330	334	120	349	345	150	134			153		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	330	334	120	349	345	150	134			153		
tC, single (s)	7.2	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	93	99	98	100	100	100	99			99		
cM capacity (veh/h)	605	577	937	586	569	902	1463			1440		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	61	167	150
Volume Left	40	14	16
Volume Right	16	7	28
cSH	666	1463	1440
Volume to Capacity	0.09	0.01	0.01
Queue Length 95th (ft)	8	1	1
Control Delay (s)	10.9	0.7	0.9
Lane LOS	B	A	A
Approach Delay (s)	10.9	0.7	0.9
Approach LOS	B		

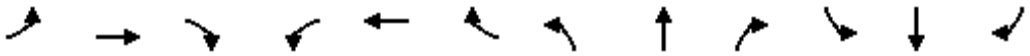
Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	20.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	0	11	0	0	0	87	92	2	8	116	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.95						1.00			0.92	
Flt Protected		0.97						0.98			1.00	
Satd. Flow (prot)		1753						1816			1719	
Flt Permitted		0.97						0.75			0.99	
Satd. Flow (perm)		1753						1392			1711	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	0	12	0	0	0	95	100	2	9	126	227
RTOR Reduction (vph)	0	33	0	0	0	0	0	0	0	0	38	0
Lane Group Flow (vph)	0	1	0	0	0	0	0	197	0	0	324	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	3%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		1.2						40.2			40.2	
Effective Green, g (s)		1.2						40.2			40.2	
Actuated g/C Ratio		0.02						0.78			0.78	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		40						1088			1338	
v/s Ratio Prot												
v/s Ratio Perm		0.00						0.14			c0.19	
v/c Ratio		0.02						0.18			0.24	
Uniform Delay, d1		24.5						1.4			1.5	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.2						0.4			0.4	
Delay (s)		24.7						1.8			1.9	
Level of Service		C						A			A	
Approach Delay (s)		24.7			0.0			1.8			1.9	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	51.4	Sum of lost time (s)	10.0
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		

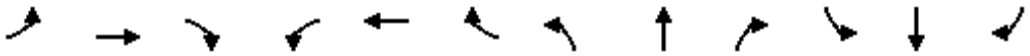
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	327	181	151	480	29	65	9	52	9	2	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	40	355	197	164	522	32	71	10	57	10	2	10
Pedestrians								10				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								1				
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					151							
pX, platoon unblocked	0.74						0.74	0.74		0.74	0.74	0.74
vC, conflicting volume	553			562			1421	1426	464	1461	1508	538
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	217			562			1393	1399	464	1448	1511	196
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			84			0	88	90	83	97	98
cM capacity (veh/h)	1007			1011			71	83	593	57	71	628

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	592	717	137	22
Volume Left	40	164	71	10
Volume Right	197	32	57	10
cSH	1007	1011	113	100
Volume to Capacity	0.04	0.16	1.21	0.22
Queue Length 95th (ft)	3	14	221	19
Control Delay (s)	1.1	3.8	225.8	51.0
Lane LOS	A	A	F	F
Approach Delay (s)	1.1	3.8	225.8	51.0
Approach LOS			F	F

Intersection Summary			
Average Delay	24.1		
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	407	0	0	426	131	0	0	0	137	0	11
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	10	442	0	0	463	142	0	0	0	149	0	12
Pedestrians											6	
Lane Width (ft)											12.0	
Walking Speed (ft/s)											4.0	
Percent Blockage											1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					307							
pX, platoon unblocked	0.82						0.82	0.82		0.82	0.82	0.82
vC, conflicting volume	611			442			1008	1073	442	1002	1002	540
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	411			442			897	977	442	890	890	324
tC, single (s)	4.1			4.1			7.1	6.5	6.2	*6.4	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.5
p0 queue free %	99			100			100	100	100	41	100	98
cM capacity (veh/h)	941			1118			205	201	615	252	227	538

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	452	605	161
Volume Left	10	0	149
Volume Right	0	142	12
cSH	941	1700	262
Volume to Capacity	0.01	0.36	0.61
Queue Length 95th (ft)	1	0	92
Control Delay (s)	0.3	0.0	38.3
Lane LOS	A		E
Approach Delay (s)	0.3	0.0	38.3
Approach LOS			E

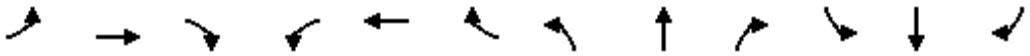
Intersection Summary			
Average Delay	5.2		
Intersection Capacity Utilization	45.3%	ICU Level of Service	A
Analysis Period (min)	15		

* User Entered Value

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	400	0	0	431	21	14
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	435	0	0	468	23	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				629		
pX, platoon unblocked						
vC, conflicting volume			435		903	435
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			435		903	435
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		93	98
cM capacity (veh/h)			1136		310	626

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	435	468	38
Volume Left	0	0	23
Volume Right	0	0	15
cSH	1700	1700	389
Volume to Capacity	0.26	0.28	0.10
Queue Length 95th (ft)	0	0	8
Control Delay (s)	0.0	0.0	15.3
Lane LOS			C
Approach Delay (s)	0.0	0.0	15.3
Approach LOS			C

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	350	33	44	412	8	18	71	40	6	55	18
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	5	380	36	48	448	9	20	77	43	7	60	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					902							
pX, platoon unblocked												
vC, conflicting volume	457			416			1007	961	398	1039	975	452
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	457			416			1007	961	398	1039	975	452
tC, single (s)	4.5			4.2			7.1	6.6	6.2	7.1	6.6	6.3
tC, 2 stage (s)												
tF (s)	2.6			2.3			3.5	4.1	3.3	3.5	4.1	3.4
p0 queue free %	99			96			88	68	93	95	74	97
cM capacity (veh/h)	931			1116			165	240	649	142	231	587

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	422	504	140	86
Volume Left	5	48	20	7
Volume Right	36	9	43	20
cSH	931	1116	277	254
Volume to Capacity	0.01	0.04	0.51	0.34
Queue Length 95th (ft)	0	3	67	36
Control Delay (s)	0.2	1.2	30.7	26.2
Lane LOS	A	A	D	D
Approach Delay (s)	0.2	1.2	30.7	26.2
Approach LOS			D	D

Intersection Summary			
Average Delay	6.3		
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	4	5	121	0	0	332
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	5	132	0	0	361
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			
pX, platoon unblocked						
vC, conflicting volume	492	132			132	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	492	132			132	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	539	923			1466	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	10	132	361
Volume Left	4	0	0
Volume Right	5	0	0
cSH	701	1700	1700
Volume to Capacity	0.01	0.08	0.21
Queue Length 95th (ft)	1	0	0
Control Delay (s)	10.2	0.0	0.0
Lane LOS	B		
Approach Delay (s)	10.2	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	27.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	4	161	7	4	100
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	4	175	8	4	109
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	296	179			183	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	296	179			183	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	697	869			1405	

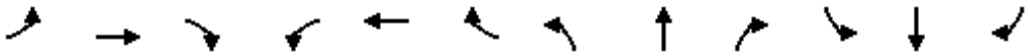
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	12	183	113
Volume Left	8	0	4
Volume Right	4	8	0
cSH	751	1700	1405
Volume to Capacity	0.02	0.11	0.00
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.9	0.0	0.3
Lane LOS	A		A
Approach Delay (s)	9.9	0.0	0.3
Approach LOS	A		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	18.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	140	0	0	147
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	152	0	0	160
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	312	152			152	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	312	152			152	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	685	899			1441	

Direction, Lane #	NB 1	SB 1
Volume Total	152	160
Volume Left	0	0
Volume Right	0	0
cSH	1700	1700
Volume to Capacity	0.09	0.09
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

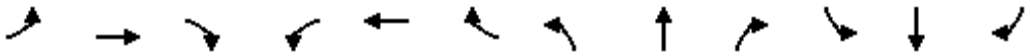
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	11.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	375	13	23	660	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	15	12	12	15	12	12	16	12	12	16	12
Total Lost time (s)		5.0			5.0							
Lane Util. Factor		1.00			1.00							
Frpb, ped/bikes		1.00			1.00							
Flpb, ped/bikes		1.00			1.00							
Frt		1.00			1.00							
Flt Protected		1.00			1.00							
Satd. Flow (prot)		2041			2044							
Flt Permitted		1.00			0.98							
Satd. Flow (perm)		2041			2007							
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	408	14	25	717	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	420	0	0	742	0	0	0	0	0	0	0
Confl. Peds. (#/hr)												15
Heavy Vehicles (%)	0%	2%	0%	5%	2%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA		Perm	NA							
Protected Phases		8			8							
Permitted Phases				8								
Actuated Green, G (s)		23.3			23.3							
Effective Green, g (s)		23.3			23.3							
Actuated g/C Ratio		0.60			0.60							
Clearance Time (s)		5.0			5.0							
Vehicle Extension (s)		3.0			3.0							
Lane Grp Cap (vph)		1219			1199							
v/s Ratio Prot		0.21										
v/s Ratio Perm					c0.37							
v/c Ratio		0.34			0.62							
Uniform Delay, d1		4.0			5.0							
Progression Factor		1.00			1.00							
Incremental Delay, d2		0.2			1.0							
Delay (s)		4.1			6.0							
Level of Service		A			A							
Approach Delay (s)		4.1			6.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	39.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		

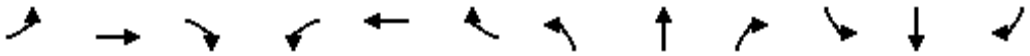
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	375	0	0	667	0	15	0	18	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	408	0	0	725	0	16	0	20	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		94										
pX, platoon unblocked				0.89			0.89	0.89	0.89	0.89	0.89	
vC, conflicting volume	725			408			1133	1133	408	1152	1133	725
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	725			270			1086	1086	270	1108	1086	725
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			90	100	97	100	100	100
cM capacity (veh/h)	887			1159			168	194	687	163	194	428

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	408	725	36
Volume Left	0	0	16
Volume Right	0	0	20
cSH	1700	1700	286
Volume to Capacity	0.24	0.43	0.13
Queue Length 95th (ft)	0	0	11
Control Delay (s)	0.0	0.0	19.4
Lane LOS			C
Approach Delay (s)	0.0	0.0	19.4
Approach LOS			C

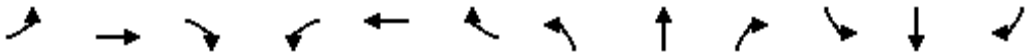
Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	45.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	386	6	4	663	0	4	0	5	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	420	7	4	721	0	4	0	5	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		281										
pX, platoon unblocked				0.90			0.90	0.90	0.90	0.90	0.90	
vC, conflicting volume	721			426			1152	1152	423	1158	1155	721
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	721			306			1113	1113	302	1119	1117	721
tC, single (s)	4.1			4.3			7.1	6.5	6.4	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.4			3.5	4.0	3.5	3.5	4.0	3.3
p0 queue free %	100			100			97	100	99	100	100	100
cM capacity (veh/h)	890			1021			168	188	627	165	187	431

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	426	725	10	0
Volume Left	0	4	4	0
Volume Right	7	0	5	0
cSH	890	1021	283	1700
Volume to Capacity	0.00	0.00	0.03	0.00
Queue Length 95th (ft)	0	0	3	0
Control Delay (s)	0.0	0.1	18.2	0.0
Lane LOS		A	C	A
Approach Delay (s)	0.0	0.1	18.2	0.0
Approach LOS			C	A

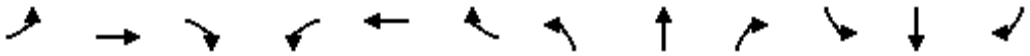
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	48.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	19	101	1	3	0	120	37	3	0	38	29
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	22	21	110	1	3	0	130	40	3	0	41	32
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	361	363	57	482	378	44	73			45		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	361	363	57	482	378	44	73			45		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	96	89	100	99	100	91			100		
cM capacity (veh/h)	547	518	1001	401	509	1030	1521			1573		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	152	4	174	73
Volume Left	22	1	130	0
Volume Right	110	0	3	32
cSH	804	476	1521	1573
Volume to Capacity	0.19	0.01	0.09	0.00
Queue Length 95th (ft)	17	1	7	0
Control Delay (s)	10.5	12.6	5.9	0.0
Lane LOS	B	B	A	
Approach Delay (s)	10.5	12.6	5.9	0.0
Approach LOS	B	B		

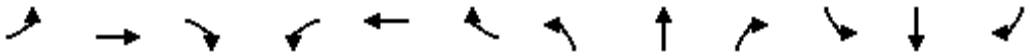
Intersection Summary				
Average Delay	6.6			
Intersection Capacity Utilization	31.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	558	16	30	456	5	4	14	42	5	11	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	12	607	17	33	496	5	4	15	46	5	12	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		568										
pX, platoon unblocked				0.84			0.84	0.84	0.84	0.84	0.84	
vC, conflicting volume	501			624			1213	1205	615	1256	1211	498
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	501			453			1157	1148	442	1208	1155	498
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.6	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.1	3.3
p0 queue free %	99			97			97	90	91	95	92	99
cM capacity (veh/h)	1074			936			132	160	518	110	152	576

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	636	534	65	22
Volume Left	12	33	4	5
Volume Right	17	5	46	4
cSH	1074	936	302	161
Volume to Capacity	0.01	0.03	0.22	0.14
Queue Length 95th (ft)	1	3	20	11
Control Delay (s)	0.3	1.0	20.2	30.9
Lane LOS	A	A	C	D
Approach Delay (s)	0.3	1.0	20.2	30.9
Approach LOS			C	D

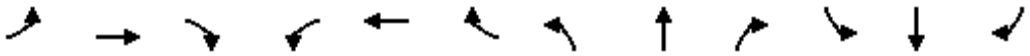
Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	50.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	88	10	43	0	0	0	16	145	5	14	143	33
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	96	11	47	0	0	0	17	158	5	15	155	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	399	402	173	451	417	160	191			163		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	399	402	173	451	417	160	191			163		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	83	98	95	100	100	100	99			99		
cM capacity (veh/h)	553	528	875	478	518	890	1394			1428		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	153	180	207
Volume Left	96	17	15
Volume Right	47	5	36
cSH	621	1394	1428
Volume to Capacity	0.25	0.01	0.01
Queue Length 95th (ft)	24	1	1
Control Delay (s)	12.7	0.8	0.6
Lane LOS	B	A	A
Approach Delay (s)	12.7	0.8	0.6
Approach LOS	B		

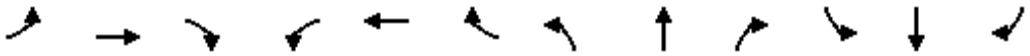
Intersection Summary				
Average Delay	4.1			
Intersection Capacity Utilization	27.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	0	30	0	0	0	60	182	6	15	153	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.96						1.00			0.95	
Flt Protected		0.96						0.99			1.00	
Satd. Flow (prot)		1768						1857			1773	
Flt Permitted		0.96						0.89			0.98	
Satd. Flow (perm)		1768						1668			1746	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	93	0	33	0	0	0	65	198	7	16	166	99
RTOR Reduction (vph)	0	28	0	0	0	0	0	1	0	0	18	0
Lane Group Flow (vph)	0	98	0	0	0	0	0	269	0	0	263	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	3%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		6.8						34.1			34.1	
Effective Green, g (s)		6.8						34.1			34.1	
Actuated g/C Ratio		0.14						0.70			0.70	
Clearance Time (s)		4.0						4.0			4.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		245						1163			1217	
v/s Ratio Prot												
v/s Ratio Perm		0.06						c0.16			0.15	
v/c Ratio		0.40						0.23			0.22	
Uniform Delay, d1		19.2						2.7			2.6	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		1.1						0.5			0.4	
Delay (s)		20.3						3.1			3.0	
Level of Service		C						A			A	
Approach Delay (s)		20.3			0.0			3.1			3.0	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	48.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

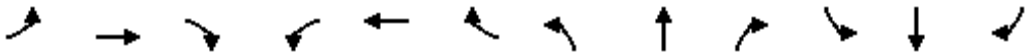
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	421	142	101	359	16	143	4	140	40	12	51
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	22	458	154	110	390	17	155	4	152	43	13	55
Pedestrians								10				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								1				
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					151							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	408			622			1269	1215	545	1351	1284	399
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	207			622			1226	1163	545	1324	1244	197
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			89			0	97	72	39	90	92
cM capacity (veh/h)	1163			956			99	143	536	71	128	718

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	634	517	312	112
Volume Left	22	110	155	43
Volume Right	154	17	152	55
cSH	1163	956	166	141
Volume to Capacity	0.02	0.11	1.88	0.79
Queue Length 95th (ft)	1	10	583	122
Control Delay (s)	0.5	3.1	465.7	89.7
Lane LOS	A	A	F	F
Approach Delay (s)	0.5	3.1	465.7	89.7
Approach LOS			F	F

Intersection Summary				
Average Delay	99.8			
Intersection Capacity Utilization	91.0%	ICU Level of Service	E	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	458	0	0	393	151	0	0	0	118	0	23
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	7	498	0	0	427	164	0	0	0	128	0	25
Pedestrians											6	
Lane Width (ft)											12.0	
Walking Speed (ft/s)											4.0	
Percent Blockage											1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					307							
pX, platoon unblocked	0.93						0.93	0.93		0.93	0.93	0.93
vC, conflicting volume	597			498			1045	1108	498	1026	1026	515
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	531			498			1012	1079	498	991	991	443
tC, single (s)	4.2			4.1			7.1	6.5	6.2	*6.4	6.5	6.3
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.4
p0 queue free %	99			100			100	100	100	49	100	96
cM capacity (veh/h)	924			1066			192	201	572	252	226	556

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	504	591	153
Volume Left	7	0	128
Volume Right	0	164	25
cSH	924	1700	276
Volume to Capacity	0.01	0.35	0.55
Queue Length 95th (ft)	1	0	78
Control Delay (s)	0.2	0.0	33.1
Lane LOS	A		D
Approach Delay (s)	0.2	0.0	33.1
Approach LOS			D

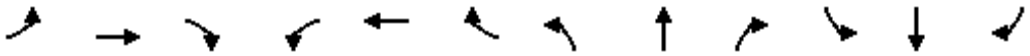
Intersection Summary			
Average Delay	4.1		
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

* User Entered Value

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	441	0	0	406	31	24
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	479	0	0	441	34	26
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				629		
pX, platoon unblocked						
vC, conflicting volume			479		921	479
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			479		921	479
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		89	96
cM capacity (veh/h)			1094		303	590

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	479	441	60
Volume Left	0	0	34
Volume Right	0	0	26
cSH	1700	1700	385
Volume to Capacity	0.28	0.26	0.16
Queue Length 95th (ft)	0	0	14
Control Delay (s)	0.0	0.0	16.1
Lane LOS			C
Approach Delay (s)	0.0	0.0	16.1
Approach LOS			C

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	33.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	394	52	54	366	15	23	57	30	18	38	12
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	9	428	57	59	398	16	25	62	33	20	41	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					902							
pX, platoon unblocked												
vC, conflicting volume	414			485			1031	1005	457	1061	1026	406
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	414			485			1031	1005	457	1061	1026	406
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.2	6.6	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.6	4.1	3.3
p0 queue free %	99			95			85	72	95	86	81	98
cM capacity (veh/h)	1156			1078			170	225	608	141	215	649

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	493	473	120	74
Volume Left	9	59	25	20
Volume Right	57	16	33	13
cSH	1156	1078	251	211
Volume to Capacity	0.01	0.05	0.48	0.35
Queue Length 95th (ft)	1	4	60	37
Control Delay (s)	0.2	1.6	31.8	31.1
Lane LOS	A	A	D	D
Approach Delay (s)	0.2	1.6	31.8	31.1
Approach LOS			D	D

Intersection Summary			
Average Delay	6.0		
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	6	10	276	0	0	255
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	11	300	0	0	277
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			
pX, platoon unblocked						
vC, conflicting volume	577	300			300	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	577	300			300	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	482	744			1273	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	17	300	277
Volume Left	7	0	0
Volume Right	11	0	0
cSH	618	1700	1700
Volume to Capacity	0.03	0.18	0.16
Queue Length 95th (ft)	2	0	0
Control Delay (s)	11.0	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.0	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	24.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	5	132	15	13	197
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	5	143	16	14	214
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	394	152			160	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	394	152			160	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			99	
cM capacity (veh/h)	608	900			1432	

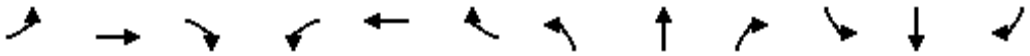
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	13	160	228
Volume Left	8	0	14
Volume Right	5	16	0
cSH	703	1700	1432
Volume to Capacity	0.02	0.09	0.01
Queue Length 95th (ft)	1	0	1
Control Delay (s)	10.2	0.0	0.5
Lane LOS	B		A
Approach Delay (s)	10.2	0.0	0.5
Approach LOS	B		

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization		31.0%	ICU Level of Service A
Analysis Period (min)		15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑			↑
Volume (veh/h)	0	0	160	0	0	140
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	174	0	0	152
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	326	174			174	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	326	174			174	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	672	875			1415	

Direction, Lane #	NB 1	SB 1
Volume Total	174	152
Volume Left	0	0
Volume Right	0	0
cSH	1700	1700
Volume to Capacity	0.10	0.09
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

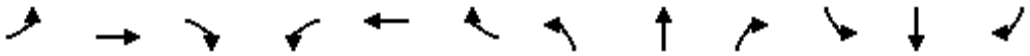
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	11.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	555	46	25	475	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	15	12	12	15	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0							
Lane Util. Factor		1.00			1.00							
Frpb, ped/bikes		1.00			1.00							
Flpb, ped/bikes		1.00			1.00							
Frt		0.99			1.00							
Flt Protected		1.00			1.00							
Satd. Flow (prot)		2043			2065							
Flt Permitted		1.00			0.96							
Satd. Flow (perm)		2043			1991							
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	603	50	27	516	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	648	0	0	543	0	0	0	0	0	0	0
Confl. Peds. (#/hr)												15
Heavy Vehicles (%)	0%	1%	4%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA		Perm	NA							
Protected Phases		8			8							
Permitted Phases				8								
Actuated Green, G (s)		21.2			21.2							
Effective Green, g (s)		21.2			21.2							
Actuated g/C Ratio		0.61			0.61							
Clearance Time (s)		4.0			4.0							
Vehicle Extension (s)		3.0			3.0							
Lane Grp Cap (vph)		1237			1205							
v/s Ratio Prot		c0.32										
v/s Ratio Perm					0.27							
v/c Ratio		0.52			0.45							
Uniform Delay, d1		4.0			3.7							
Progression Factor		1.00			1.00							
Incremental Delay, d2		0.4			0.3							
Delay (s)		4.4			4.0							
Level of Service		A			A							
Approach Delay (s)		4.4			4.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	4.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	35.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

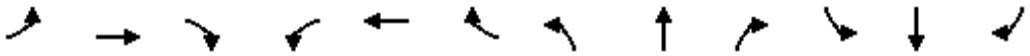
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	555	0	0	460	0	40	0	40	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	603	0	0	500	0	43	0	43	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		94										
pX, platoon unblocked				0.80			0.80	0.80	0.80	0.80	0.80	
vC, conflicting volume	500			603			1103	1103	603	1147	1103	500
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	500			381			1005	1005	381	1059	1005	500
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			75	100	92	100	100	100
cM capacity (veh/h)	1075			952			176	195	532	150	195	575

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	603	500	87
Volume Left	0	0	43
Volume Right	0	0	43
cSH	1700	1700	264
Volume to Capacity	0.35	0.29	0.33
Queue Length 95th (ft)	0	0	35
Control Delay (s)	0.0	0.0	25.2
Lane LOS			D
Approach Delay (s)	0.0	0.0	25.2
Approach LOS			D

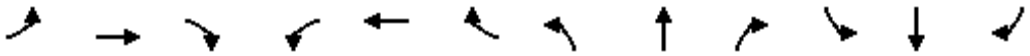
Intersection Summary				
Average Delay	1.8			
Intersection Capacity Utilization	40.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	591	4	6	454	0	6	0	3	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	642	4	7	493	0	7	0	3	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		281										
pX, platoon unblocked				0.79			0.79	0.79	0.79	0.79	0.79	
vC, conflicting volume	493			647			1151	1151	645	1154	1153	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			425			1060	1060	422	1064	1063	493
tC, single (s)	4.1			4.3			7.3	6.5	6.9	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.4			3.7	4.0	3.9	3.5	4.0	3.3
p0 queue free %	100			99			96	100	99	100	100	100
cM capacity (veh/h)	1081			840			149	178	408	158	177	580

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	647	500	10	0
Volume Left	0	7	7	0
Volume Right	4	0	3	0
cSH	1081	840	189	1700
Volume to Capacity	0.00	0.01	0.05	0.00
Queue Length 95th (ft)	0	1	4	0
Control Delay (s)	0.0	0.2	25.1	0.0
Lane LOS		A	D	A
Approach Delay (s)	0.0	0.2	25.1	0.0
Approach LOS			D	A

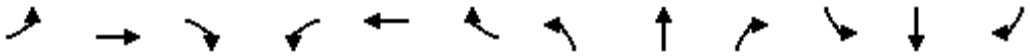
Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	41.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	12	102	0	5	1	99	21	1	0	27	25
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	24	13	111	0	5	1	108	23	1	0	29	27
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	285	284	43	401	297	25	57			26		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	285	284	43	401	297	25	57			26		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	98	89	100	99	100	93			100		
cM capacity (veh/h)	630	584	1033	467	574	1055	1561			1598		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	148	7	132	57
Volume Left	24	0	108	0
Volume Right	111	1	1	27
cSH	882	622	1561	1598
Volume to Capacity	0.17	0.01	0.07	0.00
Queue Length 95th (ft)	15	1	6	0
Control Delay (s)	9.9	10.9	6.2	0.0
Lane LOS	A	B	A	
Approach Delay (s)	9.9	10.9	6.2	0.0
Approach LOS	A	B		

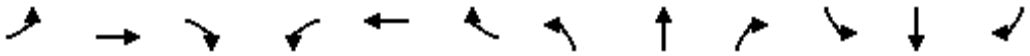
Intersection Summary				
Average Delay	6.9			
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	446	11	12	459	3	6	5	11	6	8	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	8	485	12	13	499	3	7	5	12	7	9	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		568										
pX, platoon unblocked				0.89			0.89	0.89	0.89	0.89	0.89	
vC, conflicting volume	502			497			1040	1034	491	1047	1039	501
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	502			367			981	974	360	989	979	501
tC, single (s)	4.2			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			97	98	98	97	96	99
cM capacity (veh/h)	1003			1065			194	220	610	191	219	574

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	504	515	24	18
Volume Left	8	13	7	7
Volume Right	12	3	12	3
cSH	1003	1065	307	232
Volume to Capacity	0.01	0.01	0.08	0.08
Queue Length 95th (ft)	1	1	6	6
Control Delay (s)	0.2	0.4	17.7	21.8
Lane LOS	A	A	C	C
Approach Delay (s)	0.2	0.4	17.7	21.8
Approach LOS			C	C

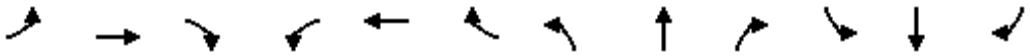
Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	1	5	0	0	0	7	64	3	2	91	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	40	1	5	0	0	0	8	70	3	2	99	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	204	205	113	210	218	71	127			73		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	204	205	113	210	218	71	127			73		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	100	99	100	100	100	99			100		
cM capacity (veh/h)	755	690	945	743	679	997	1471			1540		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	47	80	129
Volume Left	40	8	2
Volume Right	5	3	28
cSH	771	1471	1540
Volume to Capacity	0.06	0.01	0.00
Queue Length 95th (ft)	5	0	0
Control Delay (s)	10.0	0.7	0.1
Lane LOS	A	A	A
Approach Delay (s)	10.0	0.7	0.1
Approach LOS	A		

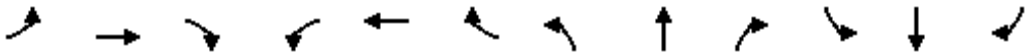
Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	17.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	0	10	0	0	0	24	79	2	4	105	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.97						1.00			0.95	
Flt Protected		0.96						0.99			1.00	
Satd. Flow (prot)		1774						1833			1804	
Flt Permitted		0.96						0.93			1.00	
Satd. Flow (perm)		1774						1730			1801	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	0	11	0	0	0	26	86	2	4	114	68
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	14	0
Lane Group Flow (vph)	0	16	0	0	0	0	0	114	0	0	172	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		2.7						39.0			39.0	
Effective Green, g (s)		2.7						39.0			39.0	
Actuated g/C Ratio		0.05						0.75			0.75	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		92						1305			1358	
v/s Ratio Prot												
v/s Ratio Perm		0.01						0.07			c0.10	
v/c Ratio		0.17						0.09			0.13	
Uniform Delay, d1		23.4						1.7			1.7	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.9						0.1			0.2	
Delay (s)		24.3						1.8			1.9	
Level of Service		C						A			A	
Approach Delay (s)		24.3			0.0			1.8			1.9	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.13		
Actuated Cycle Length (s)	51.7	Sum of lost time (s)	10.0
Intersection Capacity Utilization	29.3%	ICU Level of Service	A
Analysis Period (min)	15		

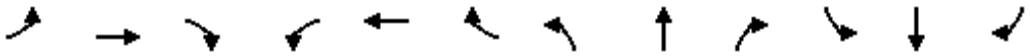
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	42	390	100	64	365	32	62	9	52	25	7	31
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	46	424	109	70	397	35	67	10	57	27	8	34
Pedestrians								10				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								1				
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					151							
pX, platoon unblocked	0.83						0.83	0.83		0.83	0.83	0.83
vC, conflicting volume	432			543			1170	1150	488	1184	1187	414
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	209			543			1102	1077	488	1119	1122	188
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			93			48	94	90	78	95	95
cM capacity (veh/h)	1137			1028			130	162	575	121	153	711

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	578	501	134	68
Volume Left	46	70	67	27
Volume Right	109	35	57	34
cSH	1137	1028	198	213
Volume to Capacity	0.04	0.07	0.68	0.32
Queue Length 95th (ft)	3	5	103	33
Control Delay (s)	1.1	1.9	54.6	29.7
Lane LOS	A	A	F	D
Approach Delay (s)	1.1	1.9	54.6	29.7
Approach LOS			F	D

Intersection Summary			
Average Delay	8.5		
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	419	0	0	357	109	0	0	0	115	0	19
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	12	455	0	0	388	118	0	0	0	125	0	21
Pedestrians											6	
Lane Width (ft)											12.0	
Walking Speed (ft/s)											4.0	
Percent Blockage											1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					307							
pX, platoon unblocked	0.89						0.89	0.89		0.89	0.89	0.89
vC, conflicting volume	513			455			947	992	455	933	933	453
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	393			455			880	930	455	864	864	326
tC, single (s)	4.2			4.1			7.1	6.5	6.2	*6.4	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	56	100	97
cM capacity (veh/h)	1006			1105			228	234	605	287	256	638

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	467	507	146
Volume Left	12	0	125
Volume Right	0	118	21
cSH	1006	1700	311
Volume to Capacity	0.01	0.30	0.47
Queue Length 95th (ft)	1	0	59
Control Delay (s)	0.4	0.0	26.4
Lane LOS	A		D
Approach Delay (s)	0.4	0.0	26.4
Approach LOS			D

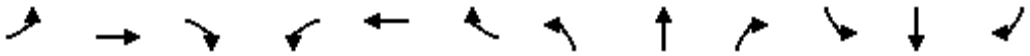
Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

* User Entered Value

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	419	0	0	373	16	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	455	0	0	405	17	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				629		
pX, platoon unblocked						
vC, conflicting volume			455		861	455
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			455		861	455
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	98
cM capacity (veh/h)			1116		329	609

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	455	405	30
Volume Left	0	0	17
Volume Right	0	0	13
cSH	1700	1700	409
Volume to Capacity	0.27	0.24	0.07
Queue Length 95th (ft)	0	0	6
Control Delay (s)	0.0	0.0	14.5
Lane LOS			B
Approach Delay (s)	0.0	0.0	14.5
Approach LOS			B

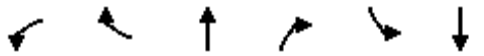
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	364	35	36	346	14	24	46	39	19	38	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	13	396	38	39	376	15	26	50	42	21	41	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					902							
pX, platoon unblocked												
vC, conflicting volume	391			434			934	910	415	970	922	384
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	391			434			934	910	415	970	922	384
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			97			87	81	93	89	84	98
cM capacity (veh/h)	1178			1137			207	264	636	181	260	668

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	447	430	118	73
Volume Left	13	39	26	21
Volume Right	38	15	42	11
cSH	1178	1137	310	252
Volume to Capacity	0.01	0.03	0.38	0.29
Queue Length 95th (ft)	1	3	43	29
Control Delay (s)	0.4	1.1	23.6	25.0
Lane LOS	A	A	C	D
Approach Delay (s)	0.4	1.1	23.6	25.0
Approach LOS			C	D

Intersection Summary			
Average Delay	4.9		
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	3	4	120	0	0	170
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	4	130	0	0	185
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			
pX, platoon unblocked						
vC, conflicting volume	315	130			130	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	315	130			130	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	682	925			1467	

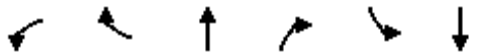
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	8	130	185
Volume Left	3	0	0
Volume Right	4	0	0
cSH	802	1700	1700
Volume to Capacity	0.01	0.08	0.11
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.5	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.5	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	18.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	1	0	76	6	8	113
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	0	83	7	9	123
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	226	86			89	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	226	86			89	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	762	978			1519	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	1	89	132
Volume Left	1	0	9
Volume Right	0	7	0
cSH	762	1700	1519
Volume to Capacity	0.00	0.05	0.01
Queue Length 95th (ft)	0	0	0
Control Delay (s)	9.7	0.0	0.5
Lane LOS	A		A
Approach Delay (s)	9.7	0.0	0.5
Approach LOS	A		

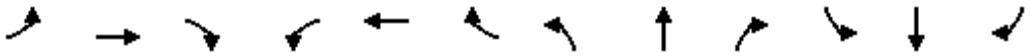
Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		22.5%	ICU Level of Service A
Analysis Period (min)		15	



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	120	0	0	128
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	130	0	0	139
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	270	130			130	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	270	130			130	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	724	925			1467	

Direction, Lane #	NB 1	SB 1
Volume Total	130	139
Volume Left	0	0
Volume Right	0	0
cSH	1700	1700
Volume to Capacity	0.08	0.08
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

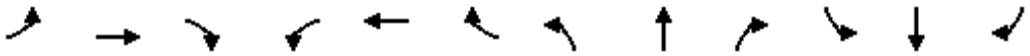
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	10.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	449	19	11	460	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	15	12	12	15	12	12	16	12	12	16	12
Total Lost time (s)		5.0			5.0							
Lane Util. Factor		1.00			1.00							
Frpb, ped/bikes		1.00			1.00							
Flpb, ped/bikes		1.00			1.00							
Frt		0.99			1.00							
Flt Protected		1.00			1.00							
Satd. Flow (prot)		2073			2088							
Flt Permitted		1.00			0.99							
Satd. Flow (perm)		2073			2060							
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	488	21	12	500	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	506	0	0	512	0	0	0	0	0	0	0
Confl. Peds. (#/hr)												15
Heavy Vehicles (%)	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA		Perm	NA							
Protected Phases		8			8							
Permitted Phases				8								
Actuated Green, G (s)		17.6			17.6							
Effective Green, g (s)		17.6			17.6							
Actuated g/C Ratio		0.53			0.53							
Clearance Time (s)		5.0			5.0							
Vehicle Extension (s)		3.0			3.0							
Lane Grp Cap (vph)		1095			1088							
v/s Ratio Prot		0.24										
v/s Ratio Perm					c0.25							
v/c Ratio		0.46			0.47							
Uniform Delay, d1		4.9			4.9							
Progression Factor		1.00			1.00							
Incremental Delay, d2		0.3			0.3							
Delay (s)		5.2			5.2							
Level of Service		A			A							
Approach Delay (s)		5.2			5.2			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	33.3	Sum of lost time (s)	10.0
Intersection Capacity Utilization	37.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	449	0	0	454	0	18	0	15	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	488	0	0	493	0	20	0	16	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		94										
pX, platoon unblocked				0.83			0.83	0.83	0.83	0.83	0.83	
vC, conflicting volume	493			488			982	982	488	998	982	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			286			878	878	286	898	878	493
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			100			91	100	97	100	100	100
cM capacity (veh/h)	1081			1073			226	241	618	213	241	580

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	488	493	36
Volume Left	0	0	20
Volume Right	0	0	16
cSH	1700	1700	317
Volume to Capacity	0.29	0.29	0.11
Queue Length 95th (ft)	0	0	9
Control Delay (s)	0.0	0.0	17.8
Lane LOS			C
Approach Delay (s)	0.0	0.0	17.8
Approach LOS			C

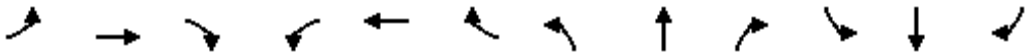
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	464	1	1	454	0	0	0	1	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	504	1	1	493	0	0	0	1	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		281										
pX, platoon unblocked				0.83			0.83	0.83	0.83	0.83	0.83	
vC, conflicting volume	493			505			1001	1001	505	1002	1001	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			307			901	901	307	902	902	493
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1081			1055			218	233	615	217	233	580

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	505	495	1	0
Volume Left	0	1	0	0
Volume Right	1	0	1	0
cSH	1081	1055	615	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	10.9	0.0
Lane LOS		A	B	A
Approach Delay (s)	0.0	0.0	10.9	0.0
Approach LOS			B	A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	34.7%	ICU Level of Service	A
Analysis Period (min)	15		

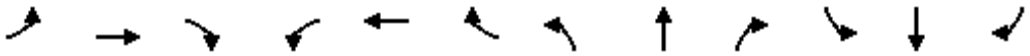
Appendix D
Build with Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	10	81	4	11	1	117	21	2	1	62	40
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	14	11	88	4	12	1	127	23	2	1	67	43
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	377	373	89	465	393	26	111			27		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	377	373	89	465	393	26	111			27		
tC, single (s)	7.1	6.5	6.3	7.6	6.6	6.2	4.2			5.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.4	4.0	4.1	3.3	2.3			3.1		
p0 queue free %	97	98	91	99	98	100	91			100		
cM capacity (veh/h)	533	510	958	362	484	1054	1436			1129		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	113	17	152	112
Volume Left	14	4	127	1
Volume Right	88	1	2	43
cSH	809	460	1436	1129
Volume to Capacity	0.14	0.04	0.09	0.00
Queue Length 95th (ft)	12	3	7	0
Control Delay (s)	10.2	13.1	6.6	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	10.2	13.1	6.6	0.1
Approach LOS	B	B		

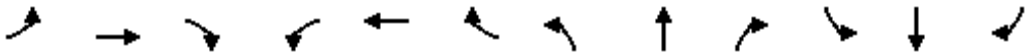
Intersection Summary				
Average Delay	6.1			
Intersection Capacity Utilization	28.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	352	15	35	646	8	3	31	40	8	32	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	12	383	16	38	702	9	3	34	43	9	35	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		719										
pX, platoon unblocked												
vC, conflicting volume	711			399			1223	1202	391	1258	1205	707
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	711			399			1223	1202	391	1258	1205	707
tC, single (s)	4.1			4.1			7.4	6.8	6.2	7.2	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.8	4.2	3.3	3.6	4.0	3.3
p0 queue free %	99			97			97	79	93	92	80	98
cM capacity (veh/h)	898			1154			109	158	662	106	177	439

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	411	749	80	52
Volume Left	12	38	3	9
Volume Right	16	9	43	9
cSH	898	1154	260	175
Volume to Capacity	0.01	0.03	0.31	0.30
Queue Length 95th (ft)	1	3	32	30
Control Delay (s)	0.4	0.9	24.9	34.1
Lane LOS	A	A	C	D
Approach Delay (s)	0.4	0.9	24.9	34.1
Approach LOS			C	D

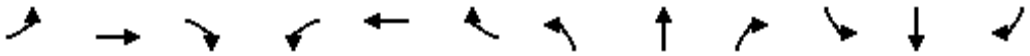
Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	4	15	0	0	0	13	135	6	15	97	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	40	4	16	0	0	0	14	147	7	16	105	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	330	334	120	349	345	150	134			153		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	330	334	120	349	345	150	134			153		
tC, single (s)	7.2	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	93	99	98	100	100	100	99			99		
cM capacity (veh/h)	605	577	937	586	569	902	1463			1440		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	61	167	150
Volume Left	40	14	16
Volume Right	16	7	28
cSH	666	1463	1440
Volume to Capacity	0.09	0.01	0.01
Queue Length 95th (ft)	8	1	1
Control Delay (s)	10.9	0.7	0.9
Lane LOS	B	A	A
Approach Delay (s)	10.9	0.7	0.9
Approach LOS	B		

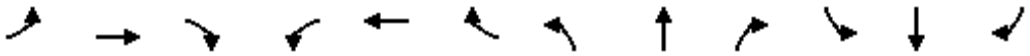
Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	20.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	0	11	0	0	0	87	92	2	8	116	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.95						1.00			0.92	
Flt Protected		0.97						0.98			1.00	
Satd. Flow (prot)		1753						1816			1719	
Flt Permitted		0.97						0.75			0.99	
Satd. Flow (perm)		1753						1392			1711	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	0	12	0	0	0	95	100	2	9	126	227
RTOR Reduction (vph)	0	33	0	0	0	0	0	0	0	0	38	0
Lane Group Flow (vph)	0	1	0	0	0	0	0	197	0	0	324	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	3%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		1.2						40.2			40.2	
Effective Green, g (s)		1.2						40.2			40.2	
Actuated g/C Ratio		0.02						0.78			0.78	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		40						1088			1338	
v/s Ratio Prot												
v/s Ratio Perm		0.00						0.14			c0.19	
v/c Ratio		0.02						0.18			0.24	
Uniform Delay, d1		24.5						1.4			1.5	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.2						0.4			0.4	
Delay (s)		24.7						1.8			1.9	
Level of Service		C						A			A	
Approach Delay (s)		24.7			0.0			1.8			1.9	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	51.4	Sum of lost time (s)	10.0
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		

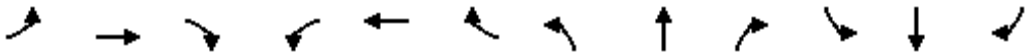
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	327	181	151	480	29	65	9	52	9	2	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	12	12	10	11	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00			1.00	
Frt	1.00	0.95		1.00	0.99		1.00	0.87			0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1685	1739		1672	1832		1636	1575			1744	
Flt Permitted	0.43	1.00		0.43	1.00		0.74	1.00			0.84	
Satd. Flow (perm)	754	1739		751	1832		1279	1575			1493	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	355	197	164	522	32	71	10	57	10	2	10
RTOR Reduction (vph)	0	23	0	0	2	0	0	50	0	0	9	0
Lane Group Flow (vph)	40	529	0	164	552	0	71	17	0	0	13	0
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	2%	2%	0%	3%	0%	3%	0%	2%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	39.7	39.7		39.7	39.7		7.4	7.4			7.4	
Effective Green, g (s)	39.7	39.7		39.7	39.7		7.4	7.4			7.4	
Actuated g/C Ratio	0.70	0.70		0.70	0.70		0.13	0.13			0.13	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	524	1209		522	1273		165	204			193	
v/s Ratio Prot		c0.30			0.30			0.01				
v/s Ratio Perm	0.05			0.22			c0.06				0.01	
v/c Ratio	0.08	0.44		0.31	0.43		0.43	0.09			0.07	
Uniform Delay, d1	2.8	3.8		3.4	3.8		22.9	21.9			21.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.3	1.2		1.6	1.1		1.8	0.2			0.2	
Delay (s)	3.1	5.0		5.0	4.9		24.7	22.1			22.0	
Level of Service	A	A		A	A		C	C			C	
Approach Delay (s)		4.8			4.9			23.4			22.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	57.1	Sum of lost time (s)	10.0
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	407	0	0	426	131	0	0	0	137	0	11
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	10	442	0	0	463	142	0	0	0	149	0	12
Pedestrians											6	
Lane Width (ft)											12.0	
Walking Speed (ft/s)											4.0	
Percent Blockage											1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					156							
pX, platoon unblocked	0.85						0.85	0.85		0.85	0.85	0.85
vC, conflicting volume	611			442			1008	1073	442	1002	1002	540
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	453			442			921	997	442	914	914	369
tC, single (s)	4.1			4.1			7.1	6.5	6.2	*6.4	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.5
p0 queue free %	99			100			100	100	100	41	100	98
cM capacity (veh/h)	944			1118			206	204	615	254	228	527

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	452	605	161
Volume Left	10	0	149
Volume Right	0	142	12
cSH	944	1700	264
Volume to Capacity	0.01	0.36	0.61
Queue Length 95th (ft)	1	0	91
Control Delay (s)	0.3	0.0	37.8
Lane LOS	A		E
Approach Delay (s)	0.3	0.0	37.8
Approach LOS			E

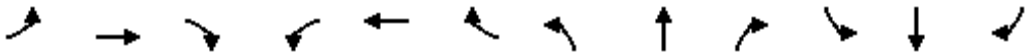
Intersection Summary			
Average Delay	5.1		
Intersection Capacity Utilization	45.3%	ICU Level of Service	A
Analysis Period (min)	15		

* User Entered Value

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	400	0	0	431	21	14
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	435	0	0	468	23	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				478		
pX, platoon unblocked					0.97	
vC, conflicting volume			435		903	435
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			435		883	435
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		93	98
cM capacity (veh/h)			1136		308	626

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	435	468	38
Volume Left	0	0	23
Volume Right	0	0	15
cSH	1700	1700	387
Volume to Capacity	0.26	0.28	0.10
Queue Length 95th (ft)	0	0	8
Control Delay (s)	0.0	0.0	15.3
Lane LOS			C
Approach Delay (s)	0.0	0.0	15.3
Approach LOS			C

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization		32.7%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	350	33	44	412	8	18	71	40	6	55	18
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	5	380	36	48	448	9	20	77	43	7	60	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					751							
pX, platoon unblocked												
vC, conflicting volume	457			416			1007	961	398	1039	975	452
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	457			416			1007	961	398	1039	975	452
tC, single (s)	4.5			4.2			7.1	6.6	6.2	7.1	6.6	6.3
tC, 2 stage (s)												
tF (s)	2.6			2.3			3.5	4.1	3.3	3.5	4.1	3.4
p0 queue free %	99			96			88	68	93	95	74	97
cM capacity (veh/h)	931			1116			165	240	649	142	231	587

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	422	504	140	86
Volume Left	5	48	20	7
Volume Right	36	9	43	20
cSH	931	1116	277	254
Volume to Capacity	0.01	0.04	0.51	0.34
Queue Length 95th (ft)	0	3	67	36
Control Delay (s)	0.2	1.2	30.7	26.2
Lane LOS	A	A	D	D
Approach Delay (s)	0.2	1.2	30.7	26.2
Approach LOS			D	D

Intersection Summary			
Average Delay	6.3		
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	4	5	121	0	0	332
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	5	132	0	0	361
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			101
pX, platoon unblocked	0.98					
vC, conflicting volume	492	132			132	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	472	132			132	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	543	923			1466	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	10	132	361
Volume Left	4	0	0
Volume Right	5	0	0
cSH	704	1700	1700
Volume to Capacity	0.01	0.08	0.21
Queue Length 95th (ft)	1	0	0
Control Delay (s)	10.2	0.0	0.0
Lane LOS	B		
Approach Delay (s)	10.2	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay		0.2	
Intersection Capacity Utilization		27.5%	ICU Level of Service A
Analysis Period (min)		15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	4	161	7	4	100
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	4	175	8	4	109
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	296	179			183	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	296	179			183	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	697	869			1405	

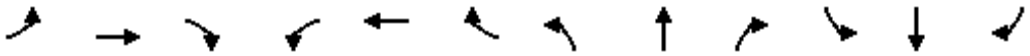
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	12	183	113
Volume Left	8	0	4
Volume Right	4	8	0
cSH	751	1700	1405
Volume to Capacity	0.02	0.11	0.00
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.9	0.0	0.3
Lane LOS	A		A
Approach Delay (s)	9.9	0.0	0.3
Approach LOS	A		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	18.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	140	0	0	147
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	152	0	0	160
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	312	152			152	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	312	152			152	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	685	899			1441	

Direction, Lane #	NB 1	SB 1
Volume Total	152	160
Volume Left	0	0
Volume Right	0	0
cSH	1700	1700
Volume to Capacity	0.09	0.09
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

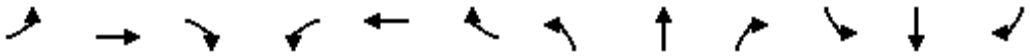
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	11.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	375	13	23	660	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	408	14	25	717	0	0	0	0	0	0	0
Pedestrians		15										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		4.0										
Percent Blockage		1										
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		151										
pX, platoon unblocked				0.92			0.92	0.92	0.92	0.92	0.92	
vC, conflicting volume	717			422			1197	1182	415	1182	1189	732
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	717			325			1170	1154	317	1154	1161	732
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	100	100	100
cM capacity (veh/h)	893			1118			153	178	668	159	177	419

Direction, Lane #	EB 1	WB 1
Volume Total	422	742
Volume Left	0	25
Volume Right	14	0
cSH	1700	1118
Volume to Capacity	0.25	0.02
Queue Length 95th (ft)	0	2
Control Delay (s)	0.0	0.6
Lane LOS		A
Approach Delay (s)	0.0	0.6
Approach LOS		

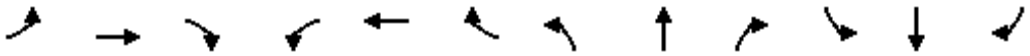
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	375	0	0	667	0	15	0	18	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	408	0	0	725	0	16	0	20	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		245										
pX, platoon unblocked				0.96			0.96	0.96	0.96	0.96	0.96	
vC, conflicting volume	725			408			1133	1133	408	1152	1133	725
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	725			366			1119	1119	366	1139	1119	725
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			91	100	97	100	100	100
cM capacity (veh/h)	887			1160			173	201	659	168	201	428

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	408	725	36
Volume Left	0	0	16
Volume Right	0	0	20
cSH	1700	1700	290
Volume to Capacity	0.24	0.43	0.12
Queue Length 95th (ft)	0	0	10
Control Delay (s)	0.0	0.0	19.2
Lane LOS			C
Approach Delay (s)	0.0	0.0	19.2
Approach LOS			C

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	45.1%	ICU Level of Service	A	
Analysis Period (min)	15			



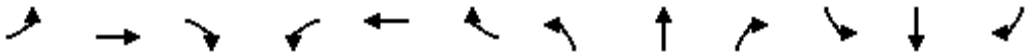
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	386	6	4	663	0	4	0	5	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	420	7	4	721	0	4	0	5	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		432										
pX, platoon unblocked												
vC, conflicting volume	721			426			1152	1152	423	1158	1155	721
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	721			426			1152	1152	423	1158	1155	721
tC, single (s)	4.1			4.3			7.1	6.5	6.4	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.4			3.5	4.0	3.5	3.5	4.0	3.3
p0 queue free %	100			100			98	100	99	100	100	100
cM capacity (veh/h)	890			1021			176	198	594	173	198	431

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	426	725	10	0
Volume Left	0	4	4	0
Volume Right	7	0	5	0
cSH	890	1021	289	1700
Volume to Capacity	0.00	0.00	0.03	0.00
Queue Length 95th (ft)	0	0	3	0
Control Delay (s)	0.0	0.1	17.9	0.0
Lane LOS		A	C	A
Approach Delay (s)	0.0	0.1	17.9	0.0
Approach LOS			C	A

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	48.1%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
1: WALNUT CRESCENT & WALNUT STREET/ROSWELL TERRACE

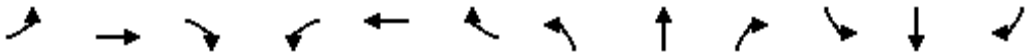
1/19/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	10	81	4	11	1	117	21	2	1	62	40
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	14	11	88	4	12	1	127	23	2	1	67	43
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								308				
pX, platoon unblocked												
vC, conflicting volume	377	373	89	465	393	26	111			27		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	377	373	89	465	393	26	111			27		
tC, single (s)	7.1	6.5	6.3	7.6	6.6	6.2	4.2			5.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.4	4.0	4.1	3.3	2.3			3.1		
p0 queue free %	97	98	91	99	98	100	91			100		
cM capacity (veh/h)	533	510	958	362	484	1054	1436			1129		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	113	17	152	112
Volume Left	14	4	127	1
Volume Right	88	1	2	43
cSH	809	460	1436	1129
Volume to Capacity	0.14	0.04	0.09	0.00
Queue Length 95th (ft)	12	3	7	0
Control Delay (s)	10.2	13.1	6.6	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	10.2	13.1	6.6	0.1
Approach LOS	B	B		

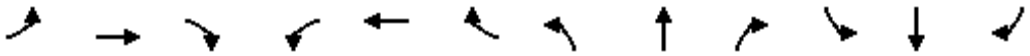
Intersection Summary				
Average Delay	6.1			
Intersection Capacity Utilization	28.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	352	15	35	646	8	3	31	40	8	32	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	12	383	16	38	702	9	3	34	43	9	35	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		719										
pX, platoon unblocked												
vC, conflicting volume	711			399			1223	1202	391	1258	1205	707
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	711			399			1223	1202	391	1258	1205	707
tC, single (s)	4.1			4.1			7.4	6.8	6.2	7.2	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.8	4.2	3.3	3.6	4.0	3.3
p0 queue free %	99			97			97	79	93	92	80	98
cM capacity (veh/h)	898			1154			109	158	662	106	177	439

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	411	749	80	52
Volume Left	12	38	3	9
Volume Right	16	9	43	9
cSH	898	1154	260	175
Volume to Capacity	0.01	0.03	0.31	0.30
Queue Length 95th (ft)	1	3	32	30
Control Delay (s)	0.4	0.9	24.9	34.1
Lane LOS	A	A	C	D
Approach Delay (s)	0.4	0.9	24.9	34.1
Approach LOS			C	D

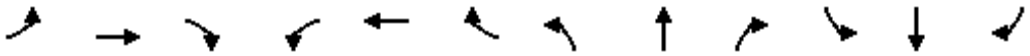
Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	4	15	0	0	0	13	135	6	15	97	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	40	4	16	0	0	0	14	147	7	16	105	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	330	334	120	349	345	150	134			153		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	330	334	120	349	345	150	134			153		
tC, single (s)	7.2	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	93	99	98	100	100	100	99			99		
cM capacity (veh/h)	605	577	937	586	569	902	1463			1440		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	61	167	150
Volume Left	40	14	16
Volume Right	16	7	28
cSH	666	1463	1440
Volume to Capacity	0.09	0.01	0.01
Queue Length 95th (ft)	8	1	1
Control Delay (s)	10.9	0.7	0.9
Lane LOS	B	A	A
Approach Delay (s)	10.9	0.7	0.9
Approach LOS	B		

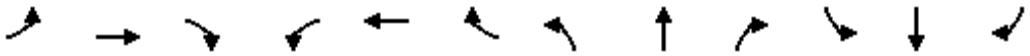
Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	20.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	0	11	0	0	0	87	92	2	8	116	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.95						1.00			0.92	
Flt Protected		0.97						0.98			1.00	
Satd. Flow (prot)		1753						1816			1719	
Flt Permitted		0.97						0.75			0.99	
Satd. Flow (perm)		1753						1392			1711	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	0	12	0	0	0	95	100	2	9	126	227
RTOR Reduction (vph)	0	33	0	0	0	0	0	0	0	0	38	0
Lane Group Flow (vph)	0	1	0	0	0	0	0	197	0	0	324	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	3%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		1.2						40.2			40.2	
Effective Green, g (s)		1.2						40.2			40.2	
Actuated g/C Ratio		0.02						0.78			0.78	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		40						1088			1338	
v/s Ratio Prot												
v/s Ratio Perm		0.00						0.14			c0.19	
v/c Ratio		0.02						0.18			0.24	
Uniform Delay, d1		24.5						1.4			1.5	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.2						0.4			0.4	
Delay (s)		24.7						1.8			1.9	
Level of Service		C						A			A	
Approach Delay (s)		24.7			0.0			1.8			1.9	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	51.4	Sum of lost time (s)	10.0
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		

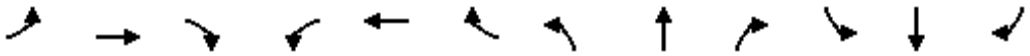
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	327	181	151	480	29	65	9	52	9	2	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	12	10	12	12	10	11	12	12	12	12
Total Lost time (s)		5.0	5.0	5.0	5.0		5.0	5.0			5.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes		1.00	0.97	1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes		1.00	1.00	0.99	1.00		1.00	1.00			1.00	
Frt		1.00	0.85	1.00	0.99		1.00	0.87			0.94	
Flt Protected		0.99	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		1795	1531	1672	1832		1636	1575			1744	
Flt Permitted		0.92	1.00	0.53	1.00		0.74	1.00			0.83	
Satd. Flow (perm)		1666	1531	931	1832		1279	1575			1472	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	355	197	164	522	32	71	10	57	10	2	10
RTOR Reduction (vph)	0	0	78	0	3	0	0	48	0	0	8	0
Lane Group Flow (vph)	0	395	119	164	551	0	71	19	0	0	14	0
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	2%	2%	0%	3%	0%	3%	0%	2%	0%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		25.2	25.2	25.2	25.2		6.4	6.4			6.4	
Effective Green, g (s)		25.2	25.2	25.2	25.2		6.4	6.4			6.4	
Actuated g/C Ratio		0.61	0.61	0.61	0.61		0.15	0.15			0.15	
Clearance Time (s)		5.0	5.0	5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1009	927	563	1109		196	242			226	
v/s Ratio Prot					c0.30			0.01				
v/s Ratio Perm		0.24	0.08	0.18			c0.06				0.01	
v/c Ratio		0.39	0.13	0.29	0.50		0.36	0.08			0.06	
Uniform Delay, d1		4.2	3.5	3.9	4.6		15.8	15.1			15.0	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.3	0.1	0.3	0.4		1.1	0.1			0.1	
Delay (s)		4.5	3.6	4.2	5.0		16.9	15.2			15.1	
Level of Service		A	A	A	A		B	B			B	
Approach Delay (s)		4.2			4.8			16.1			15.1	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	5.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	41.6	Sum of lost time (s)	10.0
Intersection Capacity Utilization	66.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	407	0	0	426	131	0	0	0	137	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	15	12	12	12	12	15	12	12	12	15	12	12
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						1.00	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		1.00			0.97						0.99	
Flt Protected		1.00			1.00						0.96	
Satd. Flow (prot)		1879			1779						1701	
Flt Permitted		0.99			1.00						0.96	
Satd. Flow (perm)		1859			1779						1701	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	442	0	0	463	142	0	0	0	149	0	12
RTOR Reduction (vph)	0	0	0	0	13	0	0	0	0	0	31	0
Lane Group Flow (vph)	0	452	0	0	592	0	0	0	0	0	130	0
Confl. Peds. (#/hr)	6											
Heavy Vehicles (%)	0%	1%	2%	2%	2%	8%	2%	2%	2%	4%	2%	27%
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4									6		
Actuated Green, G (s)		38.6			38.6						8.3	
Effective Green, g (s)		38.6			38.6						8.3	
Actuated g/C Ratio		0.68			0.68						0.15	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		1261			1206						248	
v/s Ratio Prot					c0.33							
v/s Ratio Perm		0.24									0.08	
v/c Ratio		0.36			0.49						0.53	
Uniform Delay, d1		3.9			4.4						22.5	
Progression Factor		1.00			1.00						1.00	
Incremental Delay, d2		0.8			1.4						2.0	
Delay (s)		4.7			5.8						24.5	
Level of Service		A			A						C	
Approach Delay (s)		4.7			5.8			0.0			24.5	
Approach LOS		A			A			A			C	

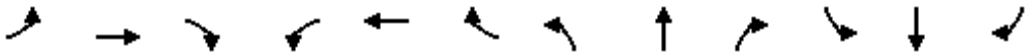
Intersection Summary			
HCM 2000 Control Delay	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	56.9	Sum of lost time (s)	10.0
Intersection Capacity Utilization	47.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	400	0	0	431	21	14
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	435	0	0	468	23	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				322		
pX, platoon unblocked					0.88	
vC, conflicting volume			435		903	435
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			435		825	435
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		93	98
cM capacity (veh/h)			1136		305	626

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	435	468	38
Volume Left	0	0	23
Volume Right	0	0	15
cSH	1700	1700	384
Volume to Capacity	0.26	0.28	0.10
Queue Length 95th (ft)	0	0	8
Control Delay (s)	0.0	0.0	15.4
Lane LOS			C
Approach Delay (s)	0.0	0.0	15.4
Approach LOS			C

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization		32.7%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	350	33	44	412	8	18	71	40	6	55	18
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	5	380	36	48	448	9	20	77	43	7	60	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					595							
pX, platoon unblocked	0.94						0.94	0.94		0.94	0.94	0.94
vC, conflicting volume	457			416			1007	961	398	1039	975	452
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	388			416			974	926	398	1009	940	383
tC, single (s)	4.5			4.2			7.1	6.6	6.2	7.1	6.6	6.3
tC, 2 stage (s)												
tF (s)	2.6			2.3			3.5	4.1	3.3	3.5	4.1	3.4
p0 queue free %	99			96			88	67	93	95	74	97
cM capacity (veh/h)	930			1116			163	236	649	139	227	603

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	422	504	140	86
Volume Left	5	48	20	7
Volume Right	36	9	43	20
cSH	930	1116	273	251
Volume to Capacity	0.01	0.04	0.51	0.34
Queue Length 95th (ft)	0	3	68	36
Control Delay (s)	0.2	1.2	31.4	26.7
Lane LOS	A	A	D	D
Approach Delay (s)	0.2	1.2	31.4	26.7
Approach LOS			D	D

Intersection Summary			
Average Delay	6.4		
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	4	5	121	0	0	332
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	5	132	0	0	361
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			101
pX, platoon unblocked	0.98					
vC, conflicting volume	492	132			132	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	468	132			132	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	544	923			1466	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	10	132	361
Volume Left	4	0	0
Volume Right	5	0	0
cSH	705	1700	1700
Volume to Capacity	0.01	0.08	0.21
Queue Length 95th (ft)	1	0	0
Control Delay (s)	10.2	0.0	0.0
Lane LOS	B		
Approach Delay (s)	10.2	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	27.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	4	161	7	4	100
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	4	175	8	4	109
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	296	179			183	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	296	179			183	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	697	869			1405	

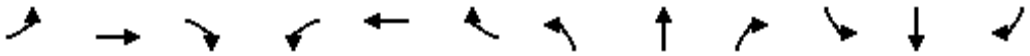
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	12	183	113
Volume Left	8	0	4
Volume Right	4	8	0
cSH	751	1700	1405
Volume to Capacity	0.02	0.11	0.00
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.9	0.0	0.3
Lane LOS	A		A
Approach Delay (s)	9.9	0.0	0.3
Approach LOS	A		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	18.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	140	0	0	147
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	152	0	0	160
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			160			
pX, platoon unblocked						
vC, conflicting volume	312	152			152	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	312	152			152	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	685	899			1441	

Direction, Lane #	NB 1	SB 1
Volume Total	152	160
Volume Left	0	0
Volume Right	0	0
cSH	1700	1700
Volume to Capacity	0.09	0.09
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

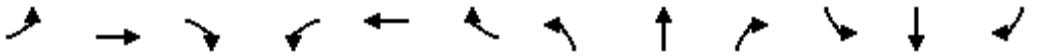
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	11.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	375	13	23	660	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	408	14	25	717	0	0	0	0	0	0	0
Pedestrians		15										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		4.0										
Percent Blockage		1										
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		151										
pX, platoon unblocked				0.90			0.90	0.90	0.90	0.90	0.90	
vC, conflicting volume	717			422			1197	1182	415	1182	1189	732
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	717			306			1165	1148	299	1148	1156	732
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	100	100	100
cM capacity (veh/h)	893			1118			152	177	674	158	175	419

Direction, Lane #	EB 1	WB 1
Volume Total	422	742
Volume Left	0	25
Volume Right	14	0
cSH	1700	1118
Volume to Capacity	0.25	0.02
Queue Length 95th (ft)	0	2
Control Delay (s)	0.0	0.6
Lane LOS		A
Approach Delay (s)	0.0	0.6
Approach LOS		

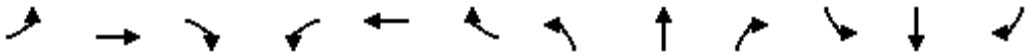
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	375	0	0	667	0	15	0	18	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	408	0	0	725	0	16	0	20	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		245										
pX, platoon unblocked				0.92			0.92	0.92	0.92	0.92	0.92	
vC, conflicting volume	725			408			1133	1133	408	1152	1133	725
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	725			317			1102	1102	317	1123	1102	725
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			90	100	97	100	100	100
cM capacity (veh/h)	887			1158			171	197	672	165	197	428

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	408	725	36
Volume Left	0	0	16
Volume Right	0	0	20
cSH	1700	1700	288
Volume to Capacity	0.24	0.43	0.12
Queue Length 95th (ft)	0	0	11
Control Delay (s)	0.0	0.0	19.3
Lane LOS			C
Approach Delay (s)	0.0	0.0	19.3
Approach LOS			C

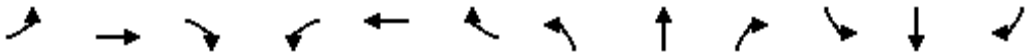
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	386	6	4	663	0	4	0	5	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	420	7	4	721	0	4	0	5	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		432										
pX, platoon unblocked				0.97			0.97	0.97	0.97	0.97	0.97	
vC, conflicting volume	721			426			1152	1152	423	1158	1155	721
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	721			396			1142	1142	392	1148	1146	721
tC, single (s)	4.1			4.3			7.1	6.5	6.4	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.4			3.5	4.0	3.5	3.5	4.0	3.3
p0 queue free %	100			100			97	100	99	100	100	100
cM capacity (veh/h)	890			1020			174	196	602	170	195	431

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	426	725	10	0
Volume Left	0	4	4	0
Volume Right	7	0	5	0
cSH	890	1020	287	1700
Volume to Capacity	0.00	0.00	0.03	0.00
Queue Length 95th (ft)	0	0	3	0
Control Delay (s)	0.0	0.1	18.0	0.0
Lane LOS		A	C	A
Approach Delay (s)	0.0	0.1	18.0	0.0
Approach LOS			C	A

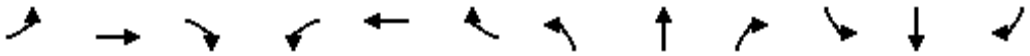
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	48.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	10	81	4	11	1	117	21	2	1	62	40
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	14	11	88	4	12	1	127	23	2	1	67	43
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								308				
pX, platoon unblocked												
vC, conflicting volume	377	373	89	465	393	26	111			27		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	377	373	89	465	393	26	111			27		
tC, single (s)	7.1	6.5	6.3	7.6	6.6	6.2	4.2			5.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.4	4.0	4.1	3.3	2.3			3.1		
p0 queue free %	97	98	91	99	98	100	91			100		
cM capacity (veh/h)	533	510	958	362	484	1054	1436			1129		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	113	17	152	112
Volume Left	14	4	127	1
Volume Right	88	1	2	43
cSH	809	460	1436	1129
Volume to Capacity	0.14	0.04	0.09	0.00
Queue Length 95th (ft)	12	3	7	0
Control Delay (s)	10.2	13.1	6.6	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	10.2	13.1	6.6	0.1
Approach LOS	B	B		

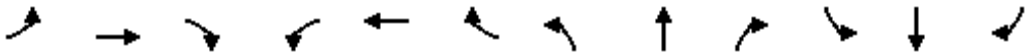
Intersection Summary				
Average Delay	6.1			
Intersection Capacity Utilization	28.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	352	15	35	646	8	3	31	40	8	32	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	12	383	16	38	702	9	3	34	43	9	35	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		719										
pX, platoon unblocked												
vC, conflicting volume	711			399			1223	1202	391	1258	1205	707
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	711			399			1223	1202	391	1258	1205	707
tC, single (s)	4.1			4.1			7.4	6.8	6.2	7.2	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.8	4.2	3.3	3.6	4.0	3.3
p0 queue free %	99			97			97	79	93	92	80	98
cM capacity (veh/h)	898			1154			109	158	662	106	177	439

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	411	749	80	52
Volume Left	12	38	3	9
Volume Right	16	9	43	9
cSH	898	1154	260	175
Volume to Capacity	0.01	0.03	0.31	0.30
Queue Length 95th (ft)	1	3	32	30
Control Delay (s)	0.4	0.9	24.9	34.1
Lane LOS	A	A	C	D
Approach Delay (s)	0.4	0.9	24.9	34.1
Approach LOS			C	D

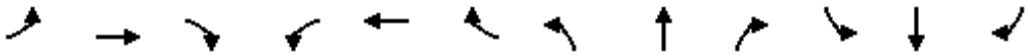
Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	4	15	0	0	0	13	135	6	15	97	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	40	4	16	0	0	0	14	147	7	16	105	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	330	334	120	349	345	150	134			153		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	330	334	120	349	345	150	134			153		
tC, single (s)	7.2	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	93	99	98	100	100	100	99			99		
cM capacity (veh/h)	605	577	937	586	569	902	1463			1440		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	61	167	150
Volume Left	40	14	16
Volume Right	16	7	28
cSH	666	1463	1440
Volume to Capacity	0.09	0.01	0.01
Queue Length 95th (ft)	8	1	1
Control Delay (s)	10.9	0.7	0.9
Lane LOS	B	A	A
Approach Delay (s)	10.9	0.7	0.9
Approach LOS	B		

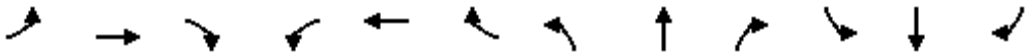
Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	20.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	0	11	0	0	0	87	92	2	8	116	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.95						1.00			0.92	
Flt Protected		0.97						0.98			1.00	
Satd. Flow (prot)		1753						1816			1719	
Flt Permitted		0.97						0.75			0.99	
Satd. Flow (perm)		1753						1392			1711	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	0	12	0	0	0	95	100	2	9	126	227
RTOR Reduction (vph)	0	33	0	0	0	0	0	0	0	0	38	0
Lane Group Flow (vph)	0	1	0	0	0	0	0	197	0	0	324	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	3%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		1.2						40.2			40.2	
Effective Green, g (s)		1.2						40.2			40.2	
Actuated g/C Ratio		0.02						0.78			0.78	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		40						1088			1338	
v/s Ratio Prot												
v/s Ratio Perm		0.00						0.14			c0.19	
v/c Ratio		0.02						0.18			0.24	
Uniform Delay, d1		24.5						1.4			1.5	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.2						0.4			0.4	
Delay (s)		24.7						1.8			1.9	
Level of Service		C						A			A	
Approach Delay (s)		24.7			0.0			1.8			1.9	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	51.4	Sum of lost time (s)	10.0
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		

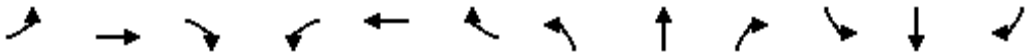
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	327	181	151	480	29	65	9	52	9	2	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	12	10	12	12	10	11	12	12	12	12
Total Lost time (s)		5.0	5.0	5.0	5.0		5.0	5.0			5.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes		1.00	0.96	1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes		1.00	1.00	0.99	1.00		1.00	1.00			1.00	
Frt		1.00	0.85	1.00	0.99		1.00	0.87			0.94	
Flt Protected		0.99	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		1795	1523	1666	1832		1636	1575			1744	
Flt Permitted		0.92	1.00	0.53	1.00		0.74	1.00			0.84	
Satd. Flow (perm)		1667	1523	928	1832		1279	1575			1500	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	355	197	164	522	32	71	10	57	10	2	10
RTOR Reduction (vph)	0	0	58	0	2	0	0	50	0	0	9	0
Lane Group Flow (vph)	0	395	139	164	552	0	71	17	0	0	13	0
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	2%	2%	0%	3%	0%	3%	0%	2%	0%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		42.3	42.3	42.3	42.3		7.7	7.7			7.7	
Effective Green, g (s)		42.3	42.3	42.3	42.3		7.7	7.7			7.7	
Actuated g/C Ratio		0.70	0.70	0.70	0.70		0.13	0.13			0.13	
Clearance Time (s)		5.0	5.0	5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1175	1073	654	1291		164	202			192	
v/s Ratio Prot					c0.30			0.01				
v/s Ratio Perm		0.24	0.09	0.18			c0.06				0.01	
v/c Ratio		0.34	0.13	0.25	0.43		0.43	0.09			0.07	
Uniform Delay, d1		3.4	2.9	3.2	3.7		24.1	23.0			23.0	
Progression Factor		0.68	0.93	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.7	0.2	0.9	1.0		1.8	0.2			0.2	
Delay (s)		3.1	2.9	4.1	4.8		26.0	23.2			23.2	
Level of Service		A	A	A	A		C	C			C	
Approach Delay (s)		3.0			4.6			24.6			23.2	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	6.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	66.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	407	0	0	426	131	0	0	0	137	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	15	12	12	12	12	15	12	12	12	15	12	12
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						1.00	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		1.00			0.97						0.99	
Flt Protected		1.00			1.00						0.96	
Satd. Flow (prot)		1879			1779						1701	
Flt Permitted		0.99			1.00						0.96	
Satd. Flow (perm)		1859			1779						1701	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	442	0	0	463	142	0	0	0	149	0	12
RTOR Reduction (vph)	0	0	0	0	13	0	0	0	0	0	31	0
Lane Group Flow (vph)	0	452	0	0	592	0	0	0	0	0	130	0
Confl. Peds. (#/hr)	6											
Heavy Vehicles (%)	0%	1%	2%	2%	2%	8%	2%	2%	2%	4%	2%	27%
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4									6		
Actuated Green, G (s)		41.3			41.3						8.7	
Effective Green, g (s)		41.3			41.3						8.7	
Actuated g/C Ratio		0.69			0.69						0.14	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		1279			1224						246	
v/s Ratio Prot					c0.33							
v/s Ratio Perm		0.24									0.08	
v/c Ratio		0.35			0.48						0.53	
Uniform Delay, d1		3.9			4.4						23.8	
Progression Factor		1.00			0.53						1.00	
Incremental Delay, d2		0.8			1.3						2.1	
Delay (s)		4.6			3.6						25.8	
Level of Service		A			A						C	
Approach Delay (s)		4.6			3.6			0.0			25.8	
Approach LOS		A			A			A			C	

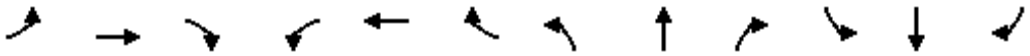
Intersection Summary			
HCM 2000 Control Delay	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	47.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	400	0	0	431	21	14
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	435	0	0	468	23	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				322		
pX, platoon unblocked					0.89	
vC, conflicting volume			435		903	435
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			435		827	435
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		93	98
cM capacity (veh/h)			1136		305	626

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	435	468	38
Volume Left	0	0	23
Volume Right	0	0	15
cSH	1700	1700	384
Volume to Capacity	0.26	0.28	0.10
Queue Length 95th (ft)	0	0	8
Control Delay (s)	0.0	0.0	15.4
Lane LOS			C
Approach Delay (s)	0.0	0.0	15.4
Approach LOS			C

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	350	33	44	412	8	18	71	40	6	55	18
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	5	380	36	48	448	9	20	77	43	7	60	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					595							
pX, platoon unblocked	0.94						0.94	0.94		0.94	0.94	0.94
vC, conflicting volume	457			416			1007	961	398	1039	975	452
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	386			416			973	925	398	1008	940	381
tC, single (s)	4.5			4.2			7.1	6.6	6.2	7.1	6.6	6.3
tC, 2 stage (s)												
tF (s)	2.6			2.3			3.5	4.1	3.3	3.5	4.1	3.4
p0 queue free %	99			96			88	67	93	95	74	97
cM capacity (veh/h)	930			1116			163	236	649	139	227	603

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	422	504	140	86
Volume Left	5	48	20	7
Volume Right	36	9	43	20
cSH	930	1116	273	251
Volume to Capacity	0.01	0.04	0.51	0.34
Queue Length 95th (ft)	0	3	68	36
Control Delay (s)	0.2	1.2	31.4	26.7
Lane LOS	A	A	D	D
Approach Delay (s)	0.2	1.2	31.4	26.7
Approach LOS			D	D

Intersection Summary			
Average Delay	6.4		
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	4	5	121	0	0	332
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	5	132	0	0	361
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			101
pX, platoon unblocked	0.98					
vC, conflicting volume	492	132			132	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	472	132			132	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	543	923			1466	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	10	132	361
Volume Left	4	0	0
Volume Right	5	0	0
cSH	704	1700	1700
Volume to Capacity	0.01	0.08	0.21
Queue Length 95th (ft)	1	0	0
Control Delay (s)	10.2	0.0	0.0
Lane LOS	B		
Approach Delay (s)	10.2	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay		0.2	
Intersection Capacity Utilization		27.5%	ICU Level of Service A
Analysis Period (min)		15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	4	161	7	4	100
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	4	175	8	4	109
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	296	179			183	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	296	179			183	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	697	869			1405	

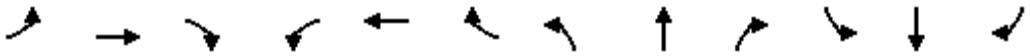
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	12	183	113
Volume Left	8	0	4
Volume Right	4	8	0
cSH	751	1700	1405
Volume to Capacity	0.02	0.11	0.00
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.9	0.0	0.3
Lane LOS	A		A
Approach Delay (s)	9.9	0.0	0.3
Approach LOS	A		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	18.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	140	0	0	147
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	152	0	0	160
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			160			
pX, platoon unblocked						
vC, conflicting volume	312	152			152	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	312	152			152	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	685	899			1441	

Direction, Lane #	NB 1	SB 1
Volume Total	152	160
Volume Left	0	0
Volume Right	0	0
cSH	1700	1700
Volume to Capacity	0.09	0.09
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

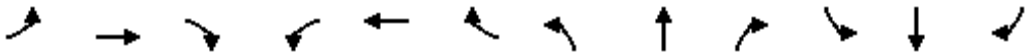
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	11.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	375	13	23	660	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	408	14	25	717	0	0	0	0	0	0	0
Pedestrians		15										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		4.0										
Percent Blockage		1										
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		151										
pX, platoon unblocked				0.93			0.93	0.93	0.93	0.93	0.93	
vC, conflicting volume	717			422			1197	1182	415	1182	1189	732
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	717			336			1173	1157	329	1157	1164	732
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	100	100	100
cM capacity (veh/h)	893			1118			153	179	665	159	178	419

Direction, Lane #	EB 1	WB 1
Volume Total	422	742
Volume Left	0	25
Volume Right	14	0
cSH	1700	1118
Volume to Capacity	0.25	0.02
Queue Length 95th (ft)	0	2
Control Delay (s)	0.0	0.6
Lane LOS		A
Approach Delay (s)	0.0	0.6
Approach LOS		

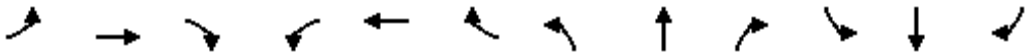
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	375	0	0	667	0	15	0	18	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	408	0	0	725	0	16	0	20	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		245										
pX, platoon unblocked				0.94			0.94	0.94	0.94	0.94	0.94	
vC, conflicting volume	725			408			1133	1133	408	1152	1133	725
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	725			338			1109	1109	338	1130	1109	725
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			91	100	97	100	100	100
cM capacity (veh/h)	887			1159			172	199	666	167	199	428

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	408	725	36
Volume Left	0	0	16
Volume Right	0	0	20
cSH	1700	1700	289
Volume to Capacity	0.24	0.43	0.12
Queue Length 95th (ft)	0	0	11
Control Delay (s)	0.0	0.0	19.2
Lane LOS			C
Approach Delay (s)	0.0	0.0	19.2
Approach LOS			C

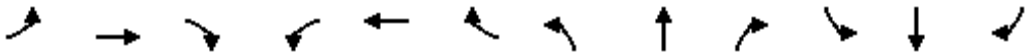
Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	45.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	386	6	4	663	0	4	0	5	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	420	7	4	721	0	4	0	5	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		432										
pX, platoon unblocked				0.97			0.97	0.97	0.97	0.97	0.97	
vC, conflicting volume	721			426			1152	1152	423	1158	1155	721
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	721			394			1142	1142	391	1147	1145	721
tC, single (s)	4.1			4.3			7.1	6.5	6.4	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.4			3.5	4.0	3.5	3.5	4.0	3.3
p0 queue free %	100			100			97	100	99	100	100	100
cM capacity (veh/h)	890			1020			173	195	602	170	195	431

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	426	725	10	0
Volume Left	0	4	4	0
Volume Right	7	0	5	0
cSH	890	1020	287	1700
Volume to Capacity	0.00	0.00	0.03	0.00
Queue Length 95th (ft)	0	0	3	0
Control Delay (s)	0.0	0.1	18.0	0.0
Lane LOS		A	C	A
Approach Delay (s)	0.0	0.1	18.0	0.0
Approach LOS			C	A

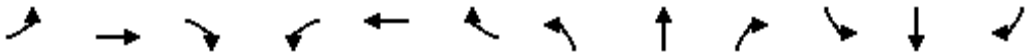
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	48.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	19	101	1	3	0	120	37	3	0	38	29
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	22	21	110	1	3	0	130	40	3	0	41	32
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	361	363	57	482	378	44	73			45		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	361	363	57	482	378	44	73			45		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	96	89	100	99	100	91			100		
cM capacity (veh/h)	547	518	1001	401	509	1030	1521			1573		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	152	4	174	73
Volume Left	22	1	130	0
Volume Right	110	0	3	32
cSH	804	476	1521	1573
Volume to Capacity	0.19	0.01	0.09	0.00
Queue Length 95th (ft)	17	1	7	0
Control Delay (s)	10.5	12.6	5.9	0.0
Lane LOS	B	B	A	
Approach Delay (s)	10.5	12.6	5.9	0.0
Approach LOS	B	B		

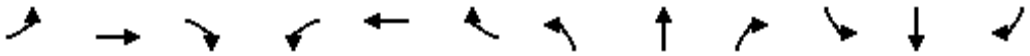
Intersection Summary				
Average Delay	6.6			
Intersection Capacity Utilization	31.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	558	16	30	456	5	4	14	42	5	11	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	12	607	17	33	496	5	4	15	46	5	12	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		719										
pX, platoon unblocked				0.99			0.99	0.99	0.99	0.99	0.99	
vC, conflicting volume	501			624			1213	1205	615	1256	1211	498
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	501			611			1209	1201	603	1252	1207	498
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.6	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.1	3.3
p0 queue free %	99			97			97	91	91	96	93	99
cM capacity (veh/h)	1074			964			144	176	496	122	167	576

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	636	534	65	22
Volume Left	12	33	4	5
Volume Right	17	5	46	4
cSH	1074	964	312	176
Volume to Capacity	0.01	0.03	0.21	0.12
Queue Length 95th (ft)	1	3	19	10
Control Delay (s)	0.3	0.9	19.6	28.4
Lane LOS	A	A	C	D
Approach Delay (s)	0.3	0.9	19.6	28.4
Approach LOS			C	D

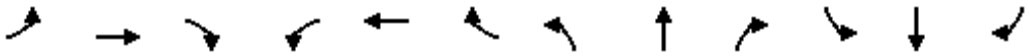
Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	50.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	88	10	43	0	0	0	16	145	5	14	143	33
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	96	11	47	0	0	0	17	158	5	15	155	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	399	402	173	451	417	160	191			163		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	399	402	173	451	417	160	191			163		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	83	98	95	100	100	100	99			99		
cM capacity (veh/h)	553	528	875	478	518	890	1394			1428		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	153	180	207
Volume Left	96	17	15
Volume Right	47	5	36
cSH	621	1394	1428
Volume to Capacity	0.25	0.01	0.01
Queue Length 95th (ft)	24	1	1
Control Delay (s)	12.7	0.8	0.6
Lane LOS	B	A	A
Approach Delay (s)	12.7	0.8	0.6
Approach LOS	B		

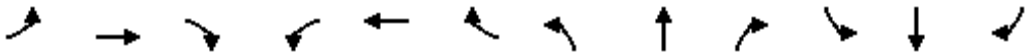
Intersection Summary				
Average Delay	4.1			
Intersection Capacity Utilization	27.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	0	30	0	0	0	60	182	6	15	153	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.96						1.00			0.95	
Flt Protected		0.96						0.99			1.00	
Satd. Flow (prot)		1768						1857			1773	
Flt Permitted		0.96						0.88			0.98	
Satd. Flow (perm)		1768						1656			1743	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	93	0	33	0	0	0	65	198	7	16	166	99
RTOR Reduction (vph)	0	31	0	0	0	0	0	1	0	0	19	0
Lane Group Flow (vph)	0	95	0	0	0	0	0	269	0	0	262	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	3%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		6.8						32.7			32.7	
Effective Green, g (s)		6.8						32.7			32.7	
Actuated g/C Ratio		0.14						0.66			0.66	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		242						1093			1151	
v/s Ratio Prot												
v/s Ratio Perm		0.05						c0.16			0.15	
v/c Ratio		0.39						0.25			0.23	
Uniform Delay, d1		19.5						3.4			3.4	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		1.1						0.5			0.5	
Delay (s)		20.5						3.9			3.8	
Level of Service		C						A			A	
Approach Delay (s)		20.5			0.0			3.9			3.8	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	49.5	Sum of lost time (s)	10.0
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

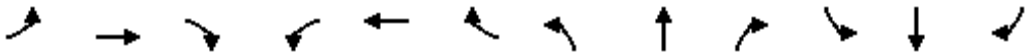
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	421	142	101	359	16	143	4	140	40	12	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	12	12	10	11	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00			1.00	
Frt	1.00	0.96		1.00	0.99		1.00	0.85			0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1685	1775		1658	1870		1652	1553			1739	
Flt Permitted	0.50	1.00		0.36	1.00		0.78	1.00			0.82	
Satd. Flow (perm)	892	1775		624	1870		1352	1553			1457	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	458	154	110	390	17	155	4	152	43	13	55
RTOR Reduction (vph)	0	17	0	0	2	0	0	121	0	0	44	0
Lane Group Flow (vph)	22	595	0	110	405	0	155	35	0	0	67	0
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	2%	2%	1%	1%	0%	2%	0%	1%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.9	35.9		35.9	35.9		11.8	11.8			11.8	
Effective Green, g (s)	35.9	35.9		35.9	35.9		11.8	11.8			11.8	
Actuated g/C Ratio	0.62	0.62		0.62	0.62		0.20	0.20			0.20	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	554	1104		388	1163		276	317			297	
v/s Ratio Prot		c0.34			0.22			0.02				
v/s Ratio Perm	0.02			0.18			c0.11				0.05	
v/c Ratio	0.04	0.54		0.28	0.35		0.56	0.11			0.23	
Uniform Delay, d1	4.2	6.2		5.0	5.3		20.6	18.7			19.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	1.9		1.8	0.8		2.6	0.2			0.4	
Delay (s)	4.4	8.1		6.8	6.1		23.2	18.8			19.5	
Level of Service	A	A		A	A		C	B			B	
Approach Delay (s)		8.0			6.2			21.0			19.5	
Approach LOS		A			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	57.7	Sum of lost time (s)	10.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	458	0	0	393	151	0	0	0	118	0	23
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	7	498	0	0	427	164	0	0	0	128	0	25
Pedestrians											6	
Lane Width (ft)											12.0	
Walking Speed (ft/s)											4.0	
Percent Blockage											1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					156							
pX, platoon unblocked	0.83						0.83	0.83		0.83	0.83	0.83
vC, conflicting volume	597			498			1045	1108	498	1026	1026	515
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	410			498			951	1027	498	928	928	311
tC, single (s)	4.2			4.1			7.1	6.5	6.2	*6.4	6.5	6.3
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.4
p0 queue free %	99			100			100	100	100	47	100	96
cM capacity (veh/h)	912			1066			188	192	572	244	219	588

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	504	591	153
Volume Left	7	0	128
Volume Right	0	164	25
cSH	912	1700	270
Volume to Capacity	0.01	0.35	0.57
Queue Length 95th (ft)	1	0	81
Control Delay (s)	0.2	0.0	34.6
Lane LOS	A		D
Approach Delay (s)	0.2	0.0	34.6
Approach LOS			D

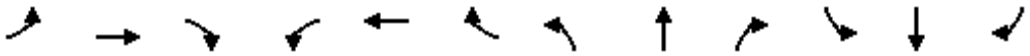
Intersection Summary			
Average Delay	4.3		
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

* User Entered Value

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	441	0	0	406	31	24
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	479	0	0	441	34	26
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				478		
pX, platoon unblocked						
vC, conflicting volume			479		921	479
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			479		921	479
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		89	96
cM capacity (veh/h)			1094		303	590

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	479	441	60
Volume Left	0	0	34
Volume Right	0	0	26
cSH	1700	1700	385
Volume to Capacity	0.28	0.26	0.16
Queue Length 95th (ft)	0	0	14
Control Delay (s)	0.0	0.0	16.1
Lane LOS			C
Approach Delay (s)	0.0	0.0	16.1
Approach LOS			C

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	33.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	394	52	54	366	15	23	57	30	18	38	12
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	9	428	57	59	398	16	25	62	33	20	41	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					751							
pX, platoon unblocked												
vC, conflicting volume	414			485			1031	1005	457	1061	1026	406
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	414			485			1031	1005	457	1061	1026	406
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.2	6.6	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.6	4.1	3.3
p0 queue free %	99			95			85	72	95	86	81	98
cM capacity (veh/h)	1156			1078			170	225	608	141	215	649

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	493	473	120	74
Volume Left	9	59	25	20
Volume Right	57	16	33	13
cSH	1156	1078	251	211
Volume to Capacity	0.01	0.05	0.48	0.35
Queue Length 95th (ft)	1	4	60	37
Control Delay (s)	0.2	1.6	31.8	31.1
Lane LOS	A	A	D	D
Approach Delay (s)	0.2	1.6	31.8	31.1
Approach LOS			D	D

Intersection Summary			
Average Delay	6.0		
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	6	10	276	0	0	255
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	11	300	0	0	277
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			101
pX, platoon unblocked	0.99					
vC, conflicting volume	577	300			300	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	567	300			300	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	483	744			1273	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	17	300	277
Volume Left	7	0	0
Volume Right	11	0	0
cSH	619	1700	1700
Volume to Capacity	0.03	0.18	0.16
Queue Length 95th (ft)	2	0	0
Control Delay (s)	11.0	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.0	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	24.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	5	132	15	13	197
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	5	143	16	14	214
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	394	152			160	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	394	152			160	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			99	
cM capacity (veh/h)	608	900			1432	

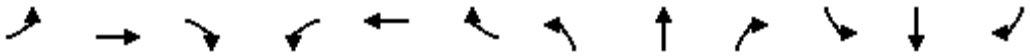
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	13	160	228
Volume Left	8	0	14
Volume Right	5	16	0
cSH	703	1700	1432
Volume to Capacity	0.02	0.09	0.01
Queue Length 95th (ft)	1	0	1
Control Delay (s)	10.2	0.0	0.5
Lane LOS	B		A
Approach Delay (s)	10.2	0.0	0.5
Approach LOS	B		

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization		31.0%	ICU Level of Service A
Analysis Period (min)		15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑			↑
Volume (veh/h)	0	0	160	0	0	140
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	174	0	0	152
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	326	174			174	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	326	174			174	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	672	875			1415	

Direction, Lane #	NB 1	SB 1
Volume Total	174	152
Volume Left	0	0
Volume Right	0	0
cSH	1700	1700
Volume to Capacity	0.10	0.09
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

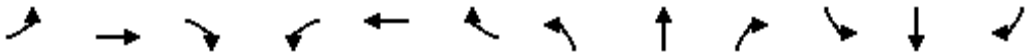
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	11.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	555	46	25	475	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	603	50	27	516	0	0	0	0	0	0	0
Pedestrians		15										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		4.0										
Percent Blockage		1										
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		151										
pX, platoon unblocked				0.83			0.83	0.83	0.83	0.83	0.83	
vC, conflicting volume	516			653			1214	1199	628	1199	1224	531
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	516			476			1154	1136	446	1136	1166	531
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	100	100	100
cM capacity (veh/h)	1060			907			140	163	510	146	157	545

Direction, Lane #	EB 1	WB 1
Volume Total	653	543
Volume Left	0	27
Volume Right	50	0
cSH	1700	907
Volume to Capacity	0.38	0.03
Queue Length 95th (ft)	0	2
Control Delay (s)	0.0	0.8
Lane LOS		A
Approach Delay (s)	0.0	0.8
Approach LOS		

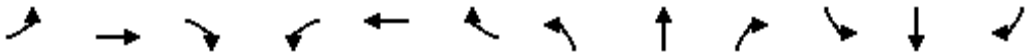
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	555	0	0	460	0	40	0	40	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	603	0	0	500	0	43	0	43	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		245										
pX, platoon unblocked				0.86			0.86	0.86	0.86	0.86	0.86	
vC, conflicting volume	500			603			1103	1103	603	1147	1103	500
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	500			454			1037	1037	454	1088	1037	500
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			76	100	92	100	100	100
cM capacity (veh/h)	1075			958			179	200	518	153	200	575

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	603	500	87
Volume Left	0	0	43
Volume Right	0	0	43
cSH	1700	1700	266
Volume to Capacity	0.35	0.29	0.33
Queue Length 95th (ft)	0	0	34
Control Delay (s)	0.0	0.0	25.0
Lane LOS			D
Approach Delay (s)	0.0	0.0	25.0
Approach LOS			D

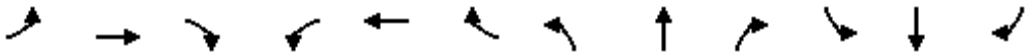
Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	40.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	591	4	6	454	0	6	0	3	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	642	4	7	493	0	7	0	3	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		432										
pX, platoon unblocked				0.90			0.90	0.90	0.90	0.90	0.90	
vC, conflicting volume	493			647			1151	1151	645	1154	1153	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			549			1111	1111	546	1115	1114	493
tC, single (s)	4.1			4.3			7.3	6.5	6.9	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.4			3.7	4.0	3.9	3.5	4.0	3.3
p0 queue free %	100			99			96	100	99	100	100	100
cM capacity (veh/h)	1081			852			155	188	387	165	187	580

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	647	500	10	0
Volume Left	0	7	7	0
Volume Right	4	0	3	0
cSH	1081	852	194	1700
Volume to Capacity	0.00	0.01	0.05	0.00
Queue Length 95th (ft)	0	1	4	0
Control Delay (s)	0.0	0.2	24.5	0.0
Lane LOS		A	C	A
Approach Delay (s)	0.0	0.2	24.5	0.0
Approach LOS			C	A

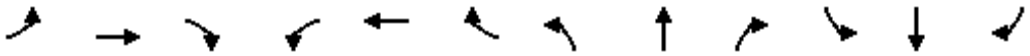
Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	41.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	19	101	1	3	0	120	37	3	0	38	29
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	22	21	110	1	3	0	130	40	3	0	41	32
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								308				
pX, platoon unblocked												
vC, conflicting volume	361	363	57	482	378	44	73			45		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	361	363	57	482	378	44	73			45		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	96	89	100	99	100	91			100		
cM capacity (veh/h)	547	518	1001	401	509	1030	1521			1573		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	152	4	174	73
Volume Left	22	1	130	0
Volume Right	110	0	3	32
cSH	804	476	1521	1573
Volume to Capacity	0.19	0.01	0.09	0.00
Queue Length 95th (ft)	17	1	7	0
Control Delay (s)	10.5	12.6	5.9	0.0
Lane LOS	B	B	A	
Approach Delay (s)	10.5	12.6	5.9	0.0
Approach LOS	B	B		

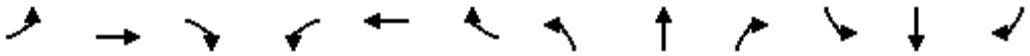
Intersection Summary				
Average Delay	6.6			
Intersection Capacity Utilization	31.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	558	16	30	456	5	4	14	42	5	11	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	12	607	17	33	496	5	4	15	46	5	12	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		719										
pX, platoon unblocked				0.99			0.99	0.99	0.99	0.99	0.99	
vC, conflicting volume	501			624			1213	1205	615	1256	1211	498
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	501			615			1210	1203	607	1254	1209	498
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.6	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.1	3.3
p0 queue free %	99			97			97	91	91	96	93	99
cM capacity (veh/h)	1074			965			144	176	495	122	168	576

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	636	534	65	22
Volume Left	12	33	4	5
Volume Right	17	5	46	4
cSH	1074	965	313	176
Volume to Capacity	0.01	0.03	0.21	0.12
Queue Length 95th (ft)	1	3	19	10
Control Delay (s)	0.3	0.9	19.5	28.3
Lane LOS	A	A	C	D
Approach Delay (s)	0.3	0.9	19.5	28.3
Approach LOS			C	D

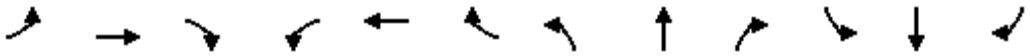
Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	50.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	88	10	43	0	0	0	16	145	5	14	143	33
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	96	11	47	0	0	0	17	158	5	15	155	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	399	402	173	451	417	160	191			163		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	399	402	173	451	417	160	191			163		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	83	98	95	100	100	100	99			99		
cM capacity (veh/h)	553	528	875	478	518	890	1394			1428		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	153	180	207
Volume Left	96	17	15
Volume Right	47	5	36
cSH	621	1394	1428
Volume to Capacity	0.25	0.01	0.01
Queue Length 95th (ft)	24	1	1
Control Delay (s)	12.7	0.8	0.6
Lane LOS	B	A	A
Approach Delay (s)	12.7	0.8	0.6
Approach LOS	B		

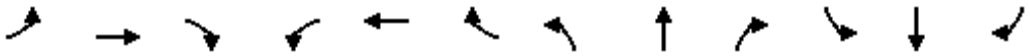
Intersection Summary				
Average Delay	4.1			
Intersection Capacity Utilization	27.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	0	30	0	0	0	60	185	6	15	153	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.96						1.00			0.95	
Flt Protected		0.96						0.99			1.00	
Satd. Flow (prot)		1768						1857			1773	
Flt Permitted		0.96						0.88			0.98	
Satd. Flow (perm)		1768						1658			1743	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	93	0	33	0	0	0	65	201	7	16	166	99
RTOR Reduction (vph)	0	31	0	0	0	0	0	1	0	0	19	0
Lane Group Flow (vph)	0	95	0	0	0	0	0	272	0	0	262	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	3%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		6.8						32.7			32.7	
Effective Green, g (s)		6.8						32.7			32.7	
Actuated g/C Ratio		0.14						0.66			0.66	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		242						1095			1151	
v/s Ratio Prot												
v/s Ratio Perm		0.05						c0.16			0.15	
v/c Ratio		0.39						0.25			0.23	
Uniform Delay, d1		19.5						3.4			3.4	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		1.1						0.5			0.5	
Delay (s)		20.5						4.0			3.8	
Level of Service		C						A			A	
Approach Delay (s)		20.5			0.0			4.0			3.8	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	49.5	Sum of lost time (s)	10.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

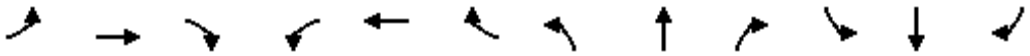
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	421	142	101	359	16	143	4	140	40	12	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	10	12	12	16	12	12	12	12	12
Total Lost time (s)		5.0	5.0	5.0	5.0		5.0	5.0			5.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes		1.00	0.97	1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes		1.00	1.00	0.99	1.00		1.00	1.00			1.00	
Frt		1.00	0.85	1.00	0.99		1.00	0.85			0.93	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		1798	1533	1658	1870		2006	1607			1739	
Flt Permitted		0.97	1.00	0.45	1.00		0.69	1.00			0.81	
Satd. Flow (perm)		1756	1533	793	1870		1447	1607			1428	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	458	154	110	390	17	155	4	152	43	13	55
RTOR Reduction (vph)	0	0	59	0	3	0	0	121	0	0	44	0
Lane Group Flow (vph)	0	480	95	110	404	0	155	35	0	0	67	0
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	2%	2%	1%	1%	0%	2%	0%	1%	0%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		20.6	20.6	20.6	20.6		7.8	7.8			7.8	
Effective Green, g (s)		20.6	20.6	20.6	20.6		7.8	7.8			7.8	
Actuated g/C Ratio		0.54	0.54	0.54	0.54		0.20	0.20			0.20	
Clearance Time (s)		5.0	5.0	5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		942	822	425	1003		293	326			290	
v/s Ratio Prot					0.22			0.02				
v/s Ratio Perm		c0.27	0.06	0.14			c0.11				0.05	
v/c Ratio		0.51	0.12	0.26	0.40		0.53	0.11			0.23	
Uniform Delay, d1		5.7	4.4	4.8	5.3		13.7	12.5			12.8	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.4	0.1	0.3	0.3		1.7	0.1			0.4	
Delay (s)		6.1	4.5	5.1	5.5		15.4	12.6			13.2	
Level of Service		A	A	A	A		B	B			B	
Approach Delay (s)		5.7			5.4			14.0			13.2	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	7.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	38.4	Sum of lost time (s)	10.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	458	0	0	393	151	0	0	0	118	0	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	15	12	12	12	12	15	12	12	12	15	12	12
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						1.00	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		1.00			0.96						0.98	
Flt Protected		1.00			1.00						0.96	
Satd. Flow (prot)		1877			1806						1715	
Flt Permitted		0.99			1.00						0.96	
Satd. Flow (perm)		1865			1806						1715	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	498	0	0	427	164	0	0	0	128	0	25
RTOR Reduction (vph)	0	0	0	0	21	0	0	0	0	0	30	0
Lane Group Flow (vph)	0	505	0	0	570	0	0	0	0	0	123	0
Confl. Peds. (#/hr)	6											
Heavy Vehicles (%)	10%	1%	2%	2%	1%	2%	2%	2%	2%	3%	2%	9%
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4									6		
Actuated Green, G (s)		24.7			24.7						7.0	
Effective Green, g (s)		24.7			24.7						7.0	
Actuated g/C Ratio		0.59			0.59						0.17	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		1104			1069						287	
v/s Ratio Prot					c0.32							
v/s Ratio Perm		0.27									0.07	
v/c Ratio		0.46			0.53						0.43	
Uniform Delay, d1		4.8			5.1						15.6	
Progression Factor		1.00			1.00						1.00	
Incremental Delay, d2		0.3			0.5						1.0	
Delay (s)		5.1			5.6						16.6	
Level of Service		A			A						B	
Approach Delay (s)		5.1			5.6			0.0			16.6	
Approach LOS		A			A			A			B	

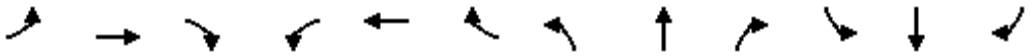
Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	41.7	Sum of lost time (s)	10.0
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	441	0	0	406	31	24
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	479	0	0	441	34	26
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				322		
pX, platoon unblocked					0.89	
vC, conflicting volume			479		921	479
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			479		850	479
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		89	96
cM capacity (veh/h)			1094		297	590

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	479	441	60
Volume Left	0	0	34
Volume Right	0	0	26
cSH	1700	1700	380
Volume to Capacity	0.28	0.26	0.16
Queue Length 95th (ft)	0	0	14
Control Delay (s)	0.0	0.0	16.3
Lane LOS			C
Approach Delay (s)	0.0	0.0	16.3
Approach LOS			C

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	33.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	394	52	54	366	15	23	57	30	18	38	12
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	9	428	57	59	398	16	25	62	33	20	41	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					595							
pX, platoon unblocked	0.99						0.99	0.99		0.99	0.99	0.99
vC, conflicting volume	414			485			1031	1005	457	1061	1026	406
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	402			485			1026	1000	457	1056	1020	394
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.2	6.6	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.6	4.1	3.3
p0 queue free %	99			95			85	72	95	86	81	98
cM capacity (veh/h)	1155			1078			169	224	608	140	214	652

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	493	473	120	74
Volume Left	9	59	25	20
Volume Right	57	16	33	13
cSH	1155	1078	250	210
Volume to Capacity	0.01	0.05	0.48	0.35
Queue Length 95th (ft)	1	4	60	37
Control Delay (s)	0.2	1.6	31.9	31.2
Lane LOS	A	A	D	D
Approach Delay (s)	0.2	1.6	31.9	31.2
Approach LOS			D	D

Intersection Summary			
Average Delay	6.0		
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	6	10	276	0	0	255
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	11	300	0	0	277
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			101
pX, platoon unblocked	0.99					
vC, conflicting volume	577	300			300	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	572	300			300	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	482	744			1273	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	17	300	277
Volume Left	7	0	0
Volume Right	11	0	0
cSH	618	1700	1700
Volume to Capacity	0.03	0.18	0.16
Queue Length 95th (ft)	2	0	0
Control Delay (s)	11.0	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.0	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	24.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	5	132	15	13	197
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	5	143	16	14	214
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	394	152			160	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	394	152			160	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			99	
cM capacity (veh/h)	608	900			1432	

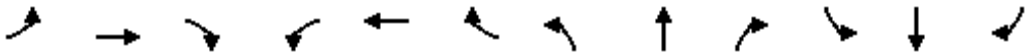
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	13	160	228
Volume Left	8	0	14
Volume Right	5	16	0
cSH	703	1700	1432
Volume to Capacity	0.02	0.09	0.01
Queue Length 95th (ft)	1	0	1
Control Delay (s)	10.2	0.0	0.5
Lane LOS	B		A
Approach Delay (s)	10.2	0.0	0.5
Approach LOS	B		

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization		31.0%	ICU Level of Service A
Analysis Period (min)		15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑			↑
Volume (veh/h)	0	0	160	0	0	140
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	174	0	0	152
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			160			
pX, platoon unblocked						
vC, conflicting volume	326	174			174	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	326	174			174	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	672	875			1415	

Direction, Lane #	NB 1	SB 1
Volume Total	174	152
Volume Left	0	0
Volume Right	0	0
cSH	1700	1700
Volume to Capacity	0.10	0.09
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

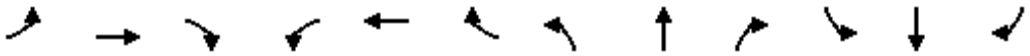
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	11.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	555	45	25	475	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	603	49	27	516	0	0	0	0	0	0	0
Pedestrians		15										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		4.0										
Percent Blockage		1										
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		151										
pX, platoon unblocked				0.83			0.83	0.83	0.83	0.83	0.83	
vC, conflicting volume	516			652			1213	1198	628	1198	1223	531
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	516			483			1156	1138	454	1138	1168	531
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	100	100	100
cM capacity (veh/h)	1060			909			141	164	509	147	158	545

Direction, Lane #	EB 1	WB 1
Volume Total	652	543
Volume Left	0	27
Volume Right	49	0
cSH	1700	909
Volume to Capacity	0.38	0.03
Queue Length 95th (ft)	0	2
Control Delay (s)	0.0	0.8
Lane LOS		A
Approach Delay (s)	0.0	0.8
Approach LOS		

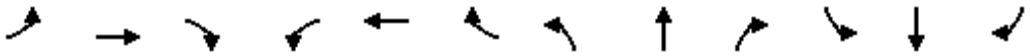
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	555	0	0	460	0	40	0	40	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	603	0	0	500	0	43	0	43	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		245										
pX, platoon unblocked				0.86			0.86	0.86	0.86	0.86	0.86	
vC, conflicting volume	500			603			1103	1103	603	1147	1103	500
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	500			452			1036	1036	452	1087	1036	500
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			76	100	92	100	100	100
cM capacity (veh/h)	1075			958			179	200	518	153	200	575

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	603	500	87
Volume Left	0	0	43
Volume Right	0	0	43
cSH	1700	1700	266
Volume to Capacity	0.35	0.29	0.33
Queue Length 95th (ft)	0	0	34
Control Delay (s)	0.0	0.0	25.0
Lane LOS			D
Approach Delay (s)	0.0	0.0	25.0
Approach LOS			D

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	40.5%	ICU Level of Service	A
Analysis Period (min)	15		



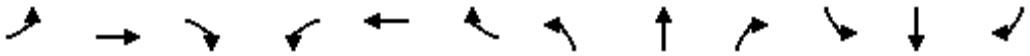
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	591	4	6	454	0	6	0	3	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	642	4	7	493	0	7	0	3	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		432										
pX, platoon unblocked				0.89			0.89	0.89	0.89	0.89	0.89	
vC, conflicting volume	493			647			1151	1151	645	1154	1153	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			542			1108	1108	539	1112	1111	493
tC, single (s)	4.1			4.3			7.3	6.5	6.9	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.4			3.7	4.0	3.9	3.5	4.0	3.3
p0 queue free %	100			99			96	100	99	100	100	100
cM capacity (veh/h)	1081			851			155	187	388	165	186	580

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	647	500	10	0
Volume Left	0	7	7	0
Volume Right	4	0	3	0
cSH	1081	851	194	1700
Volume to Capacity	0.00	0.01	0.05	0.00
Queue Length 95th (ft)	0	1	4	0
Control Delay (s)	0.0	0.2	24.6	0.0
Lane LOS		A	C	A
Approach Delay (s)	0.0	0.2	24.6	0.0
Approach LOS			C	A

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	41.3%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
1: WALNUT CRESCENT & WALNUT STREET/ROSWELL TERRACE

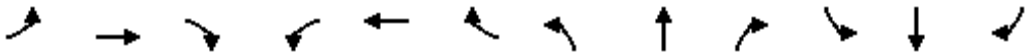
1/20/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	19	101	1	3	0	120	37	3	0	38	29
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	22	21	110	1	3	0	130	40	3	0	41	32
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								308				
pX, platoon unblocked												
vC, conflicting volume	361	363	57	482	378	44	73			45		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	361	363	57	482	378	44	73			45		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	96	89	100	99	100	91			100		
cM capacity (veh/h)	547	518	1001	401	509	1030	1521			1573		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	152	4	174	73
Volume Left	22	1	130	0
Volume Right	110	0	3	32
cSH	804	476	1521	1573
Volume to Capacity	0.19	0.01	0.09	0.00
Queue Length 95th (ft)	17	1	7	0
Control Delay (s)	10.5	12.6	5.9	0.0
Lane LOS	B	B	A	
Approach Delay (s)	10.5	12.6	5.9	0.0
Approach LOS	B	B		

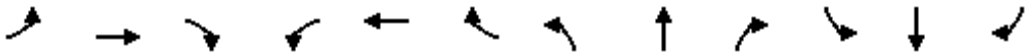
Intersection Summary				
Average Delay	6.6			
Intersection Capacity Utilization	31.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	558	16	30	456	5	4	14	42	5	11	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	12	607	17	33	496	5	4	15	46	5	12	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		719										
pX, platoon unblocked				0.96			0.96	0.96	0.96	0.96	0.96	
vC, conflicting volume	501			624			1213	1205	615	1256	1211	498
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	501			585			1200	1192	576	1245	1199	498
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.6	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.1	3.3
p0 queue free %	99			97			97	91	91	95	93	99
cM capacity (veh/h)	1074			957			142	173	499	119	164	576

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	636	534	65	22
Volume Left	12	33	4	5
Volume Right	17	5	46	4
cSH	1074	957	310	173
Volume to Capacity	0.01	0.03	0.21	0.13
Queue Length 95th (ft)	1	3	19	11
Control Delay (s)	0.3	0.9	19.7	28.8
Lane LOS	A	A	C	D
Approach Delay (s)	0.3	0.9	19.7	28.8
Approach LOS			C	D

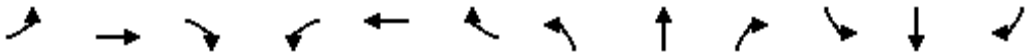
Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	50.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	88	10	43	0	0	0	16	145	5	14	143	33
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	96	11	47	0	0	0	17	158	5	15	155	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	399	402	173	451	417	160	191			163		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	399	402	173	451	417	160	191			163		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	83	98	95	100	100	100	99			99		
cM capacity (veh/h)	553	528	875	478	518	890	1394			1428		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	153	180	207
Volume Left	96	17	15
Volume Right	47	5	36
cSH	621	1394	1428
Volume to Capacity	0.25	0.01	0.01
Queue Length 95th (ft)	24	1	1
Control Delay (s)	12.7	0.8	0.6
Lane LOS	B	A	A
Approach Delay (s)	12.7	0.8	0.6
Approach LOS	B		

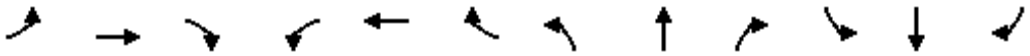
Intersection Summary				
Average Delay	4.1			
Intersection Capacity Utilization	27.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	0	30	0	0	0	60	182	6	15	153	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.96						1.00			0.95	
Flt Protected		0.96						0.99			1.00	
Satd. Flow (prot)		1768						1857			1773	
Flt Permitted		0.96						0.88			0.98	
Satd. Flow (perm)		1768						1656			1743	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	93	0	33	0	0	0	65	198	7	16	166	99
RTOR Reduction (vph)	0	31	0	0	0	0	0	1	0	0	19	0
Lane Group Flow (vph)	0	95	0	0	0	0	0	269	0	0	262	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	3%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		6.8						32.7			32.7	
Effective Green, g (s)		6.8						32.7			32.7	
Actuated g/C Ratio		0.14						0.66			0.66	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		242						1093			1151	
v/s Ratio Prot												
v/s Ratio Perm		0.05						c0.16			0.15	
v/c Ratio		0.39						0.25			0.23	
Uniform Delay, d1		19.5						3.4			3.4	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		1.1						0.5			0.5	
Delay (s)		20.5						3.9			3.8	
Level of Service		C						A			A	
Approach Delay (s)		20.5			0.0			3.9			3.8	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	49.5	Sum of lost time (s)	10.0
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

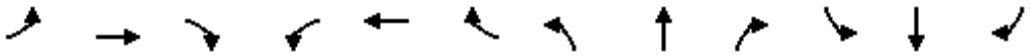
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	421	142	101	359	16	143	4	140	40	12	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	10	12	12	16	12	12	12	12	12
Total Lost time (s)		5.0	5.0	5.0	5.0		5.0	5.0			5.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes		1.00	0.96	1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes		1.00	1.00	0.99	1.00		1.00	1.00			1.00	
Frt		1.00	0.85	1.00	0.99		1.00	0.85			0.93	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		1798	1523	1653	1870		2006	1607			1739	
Flt Permitted		0.98	1.00	0.45	1.00		0.77	1.00			0.82	
Satd. Flow (perm)		1760	1523	792	1870		1623	1607			1446	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	458	154	110	390	17	155	4	152	43	13	55
RTOR Reduction (vph)	0	0	45	0	2	0	0	124	0	0	45	0
Lane Group Flow (vph)	0	480	109	110	405	0	155	32	0	0	66	0
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	2%	2%	1%	1%	0%	2%	0%	1%	0%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		38.8	38.8	38.8	38.8		11.2	11.2			11.2	
Effective Green, g (s)		38.8	38.8	38.8	38.8		11.2	11.2			11.2	
Actuated g/C Ratio		0.65	0.65	0.65	0.65		0.19	0.19			0.19	
Clearance Time (s)		5.0	5.0	5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1138	984	512	1209		302	299			269	
v/s Ratio Prot					0.22			0.02				
v/s Ratio Perm		c0.27	0.07	0.14			c0.10				0.05	
v/c Ratio		0.42	0.11	0.21	0.33		0.51	0.11			0.25	
Uniform Delay, d1		5.2	4.0	4.3	4.8		21.9	20.3			20.8	
Progression Factor		0.82	0.59	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		1.1	0.2	1.0	0.7		1.5	0.2			0.5	
Delay (s)		5.3	2.6	5.3	5.5		23.4	20.4			21.3	
Level of Service		A	A	A	A		C	C			C	
Approach Delay (s)		4.6			5.5			21.9			21.3	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	458	0	0	393	151	0	0	0	118	0	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	15	12	12	12	12	15	12	12	12	15	12	12
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						1.00	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		1.00			0.96						0.98	
Flt Protected		1.00			1.00						0.96	
Satd. Flow (prot)		1877			1806						1715	
Flt Permitted		0.99			1.00						0.96	
Satd. Flow (perm)		1866			1806						1715	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	498	0	0	427	164	0	0	0	128	0	25
RTOR Reduction (vph)	0	0	0	0	16	0	0	0	0	0	31	0
Lane Group Flow (vph)	0	505	0	0	575	0	0	0	0	0	122	0
Confl. Peds. (#/hr)	6											
Heavy Vehicles (%)	10%	1%	2%	2%	1%	2%	2%	2%	2%	3%	2%	9%
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4									6		
Actuated Green, G (s)		41.6			41.6						8.4	
Effective Green, g (s)		41.6			41.6						8.4	
Actuated g/C Ratio		0.69			0.69						0.14	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		1293			1252						240	
v/s Ratio Prot					c0.32							
v/s Ratio Perm		0.27									0.07	
v/c Ratio		0.39			0.46						0.51	
Uniform Delay, d1		3.9			4.1						23.9	
Progression Factor		1.00			0.79						1.00	
Incremental Delay, d2		0.9			1.2						1.7	
Delay (s)		4.8			4.4						25.6	
Level of Service		A			A						C	
Approach Delay (s)		4.8			4.4			0.0			25.6	
Approach LOS		A			A			A			C	

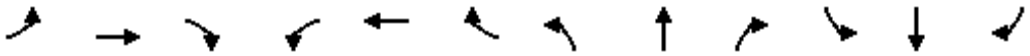
Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	441	0	0	406	31	24
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	479	0	0	441	34	26
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				322		
pX, platoon unblocked					0.91	
vC, conflicting volume			479		921	479
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			479		865	479
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		89	96
cM capacity (veh/h)			1094		298	590

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	479	441	60
Volume Left	0	0	34
Volume Right	0	0	26
cSH	1700	1700	380
Volume to Capacity	0.28	0.26	0.16
Queue Length 95th (ft)	0	0	14
Control Delay (s)	0.0	0.0	16.2
Lane LOS			C
Approach Delay (s)	0.0	0.0	16.2
Approach LOS			C

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	33.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	394	52	54	366	15	23	57	30	18	38	12
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	9	428	57	59	398	16	25	62	33	20	41	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					595							
pX, platoon unblocked	0.98						0.98	0.98		0.98	0.98	0.98
vC, conflicting volume	414			485			1031	1005	457	1061	1026	406
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	388			485			1020	994	457	1050	1014	380
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.2	6.6	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.6	4.1	3.3
p0 queue free %	99			95			85	72	95	86	81	98
cM capacity (veh/h)	1154			1078			169	223	608	140	213	656

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	493	473	120	74
Volume Left	9	59	25	20
Volume Right	57	16	33	13
cSH	1154	1078	249	209
Volume to Capacity	0.01	0.05	0.48	0.35
Queue Length 95th (ft)	1	4	60	38
Control Delay (s)	0.2	1.6	32.1	31.4
Lane LOS	A	A	D	D
Approach Delay (s)	0.2	1.6	32.1	31.4
Approach LOS			D	D

Intersection Summary			
Average Delay	6.1		
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	6	10	276	0	0	255
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	11	300	0	0	277
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			101
pX, platoon unblocked	0.99					
vC, conflicting volume	577	300			300	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	568	300			300	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	483	744			1273	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	17	300	277
Volume Left	7	0	0
Volume Right	11	0	0
cSH	619	1700	1700
Volume to Capacity	0.03	0.18	0.16
Queue Length 95th (ft)	2	0	0
Control Delay (s)	11.0	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.0	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	24.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	5	132	15	13	197
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	5	143	16	14	214
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	394	152			160	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	394	152			160	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			99	
cM capacity (veh/h)	608	900			1432	

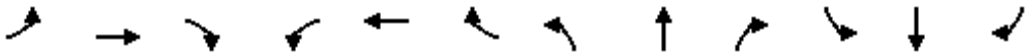
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	13	160	228
Volume Left	8	0	14
Volume Right	5	16	0
cSH	703	1700	1432
Volume to Capacity	0.02	0.09	0.01
Queue Length 95th (ft)	1	0	1
Control Delay (s)	10.2	0.0	0.5
Lane LOS	B		A
Approach Delay (s)	10.2	0.0	0.5
Approach LOS	B		

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization		31.0%	ICU Level of Service A
Analysis Period (min)		15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑			↑
Volume (veh/h)	0	0	160	0	0	140
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	174	0	0	152
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			160			
pX, platoon unblocked						
vC, conflicting volume	326	174			174	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	326	174			174	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	672	875			1415	

Direction, Lane #	NB 1	SB 1
Volume Total	174	152
Volume Left	0	0
Volume Right	0	0
cSH	1700	1700
Volume to Capacity	0.10	0.09
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

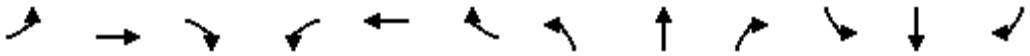
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	11.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	555	45	25	475	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	603	49	27	516	0	0	0	0	0	0	0
Pedestrians		15										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		4.0										
Percent Blockage		1										
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		151										
pX, platoon unblocked				0.87			0.87	0.87	0.87	0.87	0.87	
vC, conflicting volume	516			652			1213	1198	628	1198	1223	531
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	516			529			1172	1154	500	1154	1182	531
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	100	100	100
cM capacity (veh/h)	1060			915			144	168	501	150	162	545

Direction, Lane #	EB 1	WB 1
Volume Total	652	543
Volume Left	0	27
Volume Right	49	0
cSH	1700	915
Volume to Capacity	0.38	0.03
Queue Length 95th (ft)	0	2
Control Delay (s)	0.0	0.8
Lane LOS		A
Approach Delay (s)	0.0	0.8
Approach LOS		

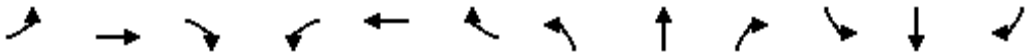
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	555	0	0	460	0	40	0	40	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	603	0	0	500	0	43	0	43	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		245										
pX, platoon unblocked				0.89			0.89	0.89	0.89	0.89	0.89	
vC, conflicting volume	500			603			1103	1103	603	1147	1103	500
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	500			487			1052	1052	487	1101	1052	500
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			76	100	92	100	100	100
cM capacity (veh/h)	1075			962			180	202	512	155	202	575

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	603	500	87
Volume Left	0	0	43
Volume Right	0	0	43
cSH	1700	1700	267
Volume to Capacity	0.35	0.29	0.33
Queue Length 95th (ft)	0	0	34
Control Delay (s)	0.0	0.0	24.9
Lane LOS			C
Approach Delay (s)	0.0	0.0	24.9
Approach LOS			C

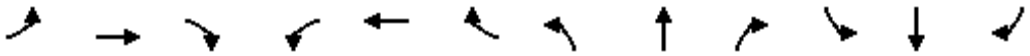
Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	40.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	591	4	6	454	0	6	0	3	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	642	4	7	493	0	7	0	3	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		432										
pX, platoon unblocked				0.90			0.90	0.90	0.90	0.90	0.90	
vC, conflicting volume	493			647			1151	1151	645	1154	1153	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			556			1114	1114	553	1117	1116	493
tC, single (s)	4.1			4.3			7.3	6.5	6.9	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.4			3.7	4.0	3.9	3.5	4.0	3.3
p0 queue free %	100			99			96	100	99	100	100	100
cM capacity (veh/h)	1081			853			156	188	386	166	188	580

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	647	500	10	0
Volume Left	0	7	7	0
Volume Right	4	0	3	0
cSH	1081	853	194	1700
Volume to Capacity	0.00	0.01	0.05	0.00
Queue Length 95th (ft)	0	1	4	0
Control Delay (s)	0.0	0.2	24.5	0.0
Lane LOS		A	C	A
Approach Delay (s)	0.0	0.2	24.5	0.0
Approach LOS			C	A

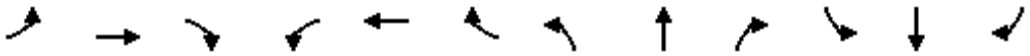
Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	41.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	12	102	0	5	1	99	21	1	0	27	25
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	24	13	111	0	5	1	108	23	1	0	29	27
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	285	284	43	401	297	25	57			26		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	285	284	43	401	297	25	57			26		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	98	89	100	99	100	93			100		
cM capacity (veh/h)	630	584	1033	467	574	1055	1561			1598		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	148	7	132	57
Volume Left	24	0	108	0
Volume Right	111	1	1	27
cSH	882	622	1561	1598
Volume to Capacity	0.17	0.01	0.07	0.00
Queue Length 95th (ft)	15	1	6	0
Control Delay (s)	9.9	10.9	6.2	0.0
Lane LOS	A	B	A	
Approach Delay (s)	9.9	10.9	6.2	0.0
Approach LOS	A	B		

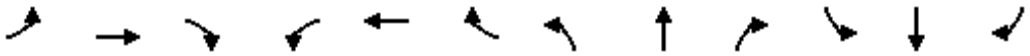
Intersection Summary				
Average Delay	6.9			
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	446	11	12	459	3	6	5	11	6	8	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	8	485	12	13	499	3	7	5	12	7	9	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		719										
pX, platoon unblocked												
vC, conflicting volume	502			497			1040	1034	491	1047	1039	501
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	502			497			1040	1034	491	1047	1039	501
tC, single (s)	4.2			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			97	98	98	97	96	99
cM capacity (veh/h)	1003			1078			200	229	582	197	228	574

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	504	515	24	18
Volume Left	8	13	7	7
Volume Right	12	3	12	3
cSH	1003	1078	311	240
Volume to Capacity	0.01	0.01	0.08	0.08
Queue Length 95th (ft)	1	1	6	6
Control Delay (s)	0.2	0.4	17.5	21.2
Lane LOS	A	A	C	C
Approach Delay (s)	0.2	0.4	17.5	21.2
Approach LOS			C	C

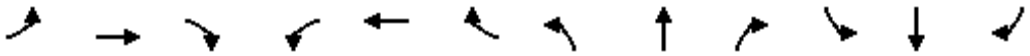
Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	1	5	0	0	0	7	64	3	2	91	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	40	1	5	0	0	0	8	70	3	2	99	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	204	205	113	210	218	71	127			73		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	204	205	113	210	218	71	127			73		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	100	99	100	100	100	99			100		
cM capacity (veh/h)	755	690	945	743	679	997	1471			1540		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	47	80	129
Volume Left	40	8	2
Volume Right	5	3	28
cSH	771	1471	1540
Volume to Capacity	0.06	0.01	0.00
Queue Length 95th (ft)	5	0	0
Control Delay (s)	10.0	0.7	0.1
Lane LOS	A	A	A
Approach Delay (s)	10.0	0.7	0.1
Approach LOS	A		

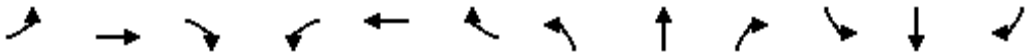
Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	17.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	0	10	0	0	0	24	79	2	4	105	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.97						1.00			0.95	
Flt Protected		0.96						0.99			1.00	
Satd. Flow (prot)		1774						1833			1804	
Flt Permitted		0.96						0.93			1.00	
Satd. Flow (perm)		1774						1730			1801	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	0	11	0	0	0	26	86	2	4	114	68
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	14	0
Lane Group Flow (vph)	0	16	0	0	0	0	0	114	0	0	172	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		2.7						39.0			39.0	
Effective Green, g (s)		2.7						39.0			39.0	
Actuated g/C Ratio		0.05						0.75			0.75	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		92						1305			1358	
v/s Ratio Prot												
v/s Ratio Perm		0.01						0.07			c0.10	
v/c Ratio		0.17						0.09			0.13	
Uniform Delay, d1		23.4						1.7			1.7	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.9						0.1			0.2	
Delay (s)		24.3						1.8			1.9	
Level of Service		C						A			A	
Approach Delay (s)		24.3			0.0			1.8			1.9	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.13		
Actuated Cycle Length (s)	51.7	Sum of lost time (s)	10.0
Intersection Capacity Utilization	29.3%	ICU Level of Service	A
Analysis Period (min)	15		

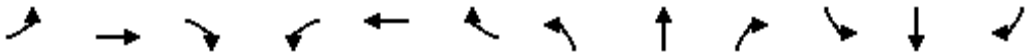
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	390	100	64	365	32	62	9	52	25	7	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	12	12	10	11	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00			1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.87			0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1685	1828		1672	1860		1652	1575			1740	
Flt Permitted	0.51	1.00		0.44	1.00		0.71	1.00			0.84	
Satd. Flow (perm)	896	1828		771	1860		1238	1575			1494	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	424	109	70	397	35	67	10	57	27	8	34
RTOR Reduction (vph)	0	11	0	0	4	0	0	50	0	0	30	0
Lane Group Flow (vph)	46	522	0	70	428	0	67	17	0	0	39	0
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	2%	0%	2%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	38.4	38.4		38.4	38.4		7.3	7.3			7.3	
Effective Green, g (s)	38.4	38.4		38.4	38.4		7.3	7.3			7.3	
Actuated g/C Ratio	0.69	0.69		0.69	0.69		0.13	0.13			0.13	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	617	1260		531	1282		162	206			195	
v/s Ratio Prot		c0.29			0.23			0.01				
v/s Ratio Perm	0.05			0.09			c0.05				0.03	
v/c Ratio	0.07	0.41		0.13	0.33		0.41	0.08			0.20	
Uniform Delay, d1	2.8	3.8		3.0	3.5		22.2	21.3			21.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.2	1.0		0.5	0.7		1.7	0.2			0.5	
Delay (s)	3.1	4.8		3.5	4.2		23.9	21.4			22.1	
Level of Service	A	A		A	A		C	C			C	
Approach Delay (s)		4.6			4.1			22.7			22.1	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	7.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	55.7	Sum of lost time (s)	10.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	419	0	0	357	109	0	0	0	115	0	19
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	12	455	0	0	388	118	0	0	0	125	0	21
Pedestrians											6	
Lane Width (ft)											12.0	
Walking Speed (ft/s)											4.0	
Percent Blockage											1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					156							
pX, platoon unblocked	0.90						0.90	0.90		0.90	0.90	0.90
vC, conflicting volume	513			455			947	992	455	933	933	453
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	400			455			884	934	455	868	868	334
tC, single (s)	4.2			4.1			7.1	6.5	6.2	*6.4	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	56	100	97
cM capacity (veh/h)	1006			1105			228	235	605	287	256	637

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	467	507	146
Volume Left	12	0	125
Volume Right	0	118	21
cSH	1006	1700	311
Volume to Capacity	0.01	0.30	0.47
Queue Length 95th (ft)	1	0	59
Control Delay (s)	0.4	0.0	26.3
Lane LOS	A		D
Approach Delay (s)	0.4	0.0	26.3
Approach LOS			D

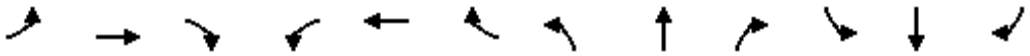
Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

* User Entered Value

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	419	0	0	373	16	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	455	0	0	405	17	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				478		
pX, platoon unblocked						
vC, conflicting volume			455		861	455
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			455		861	455
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	98
cM capacity (veh/h)			1116		329	609

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	455	405	30
Volume Left	0	0	17
Volume Right	0	0	13
cSH	1700	1700	409
Volume to Capacity	0.27	0.24	0.07
Queue Length 95th (ft)	0	0	6
Control Delay (s)	0.0	0.0	14.5
Lane LOS			B
Approach Delay (s)	0.0	0.0	14.5
Approach LOS			B

Intersection Summary			
Average Delay		0.5	
Intersection Capacity Utilization		32.1%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	364	35	36	346	14	24	46	39	19	38	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	13	396	38	39	376	15	26	50	42	21	41	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					751							
pX, platoon unblocked												
vC, conflicting volume	391			434			934	910	415	970	922	384
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	391			434			934	910	415	970	922	384
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			97			87	81	93	89	84	98
cM capacity (veh/h)	1178			1137			207	264	636	181	260	668

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	447	430	118	73
Volume Left	13	39	26	21
Volume Right	38	15	42	11
cSH	1178	1137	310	252
Volume to Capacity	0.01	0.03	0.38	0.29
Queue Length 95th (ft)	1	3	43	29
Control Delay (s)	0.4	1.1	23.6	25.0
Lane LOS	A	A	C	D
Approach Delay (s)	0.4	1.1	23.6	25.0
Approach LOS			C	D

Intersection Summary			
Average Delay	4.9		
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	3	4	120	0	0	170
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	4	130	0	0	185
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			101
pX, platoon unblocked						
vC, conflicting volume	315	130			130	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	315	130			130	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	682	925			1467	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	8	130	185
Volume Left	3	0	0
Volume Right	4	0	0
cSH	802	1700	1700
Volume to Capacity	0.01	0.08	0.11
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.5	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.5	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay		0.2	
Intersection Capacity Utilization		18.9%	ICU Level of Service A
Analysis Period (min)		15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	1	0	76	6	8	113
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	0	83	7	9	123
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	226	86			89	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	226	86			89	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	762	978			1519	

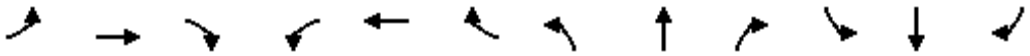
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	1	89	132
Volume Left	1	0	9
Volume Right	0	7	0
cSH	762	1700	1519
Volume to Capacity	0.00	0.05	0.01
Queue Length 95th (ft)	0	0	0
Control Delay (s)	9.7	0.0	0.5
Lane LOS	A		A
Approach Delay (s)	9.7	0.0	0.5
Approach LOS	A		

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		22.5%	ICU Level of Service A
Analysis Period (min)		15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑			↑
Volume (veh/h)	0	0	120	0	0	128
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	130	0	0	139
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	270	130			130	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	270	130			130	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	724	925			1467	

Direction, Lane #	NB 1	SB 1
Volume Total	130	139
Volume Left	0	0
Volume Right	0	0
cSH	1700	1700
Volume to Capacity	0.08	0.08
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

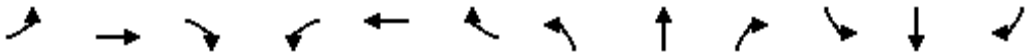
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	10.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	449	19	11	460	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	488	21	12	500	0	0	0	0	0	0	0
Pedestrians		15										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		4.0										
Percent Blockage		1										
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		151										
pX, platoon unblocked				0.89			0.89	0.89	0.89	0.89	0.89	
vC, conflicting volume	500			509			1037	1022	498	1022	1033	515
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	500			386			980	963	374	963	975	515
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	100	100	100
cM capacity (veh/h)	1075			1053			201	227	602	209	223	557

Direction, Lane #	EB 1	WB 1
Volume Total	509	512
Volume Left	0	12
Volume Right	21	0
cSH	1700	1053
Volume to Capacity	0.30	0.01
Queue Length 95th (ft)	0	1
Control Delay (s)	0.0	0.3
Lane LOS		A
Approach Delay (s)	0.0	0.3
Approach LOS		

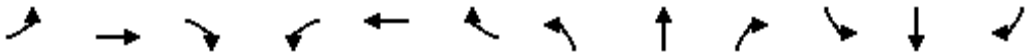
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	36.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	449	0	0	454	0	18	0	15	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	488	0	0	493	0	20	0	16	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		245										
pX, platoon unblocked				0.91			0.91	0.91	0.91	0.91	0.91	
vC, conflicting volume	493			488			982	982	488	998	982	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			385			929	929	385	947	929	493
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			100			91	100	97	100	100	100
cM capacity (veh/h)	1081			1075			227	245	592	215	245	580

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	488	493	36
Volume Left	0	0	20
Volume Right	0	0	16
cSH	1700	1700	315
Volume to Capacity	0.29	0.29	0.11
Queue Length 95th (ft)	0	0	10
Control Delay (s)	0.0	0.0	17.9
Lane LOS			C
Approach Delay (s)	0.0	0.0	17.9
Approach LOS			C

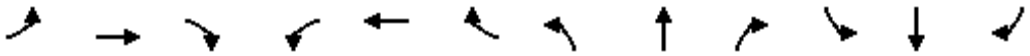
Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	33.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	464	1	1	454	0	0	0	1	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	504	1	1	493	0	0	0	1	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		432										
pX, platoon unblocked				0.94			0.94	0.94	0.94	0.94	0.94	
vC, conflicting volume	493			505			1001	1001	505	1002	1001	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			444			970	970	443	971	970	493
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1081			1061			221	240	583	220	240	580

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	505	495	1	0
Volume Left	0	1	0	0
Volume Right	1	0	1	0
cSH	1081	1061	583	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	11.2	0.0
Lane LOS		A	B	A
Approach Delay (s)	0.0	0.0	11.2	0.0
Approach LOS			B	A

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	34.7%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	12	102	0	5	1	99	21	1	0	27	25
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	24	13	111	0	5	1	108	23	1	0	29	27
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								308				
pX, platoon unblocked												
vC, conflicting volume	285	284	43	401	297	25	57			26		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	285	284	43	401	297	25	57			26		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	98	89	100	99	100	93			100		
cM capacity (veh/h)	630	584	1033	467	574	1055	1561			1598		

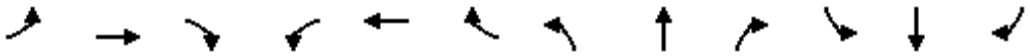
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	148	7	132	57
Volume Left	24	0	108	0
Volume Right	111	1	1	27
cSH	882	622	1561	1598
Volume to Capacity	0.17	0.01	0.07	0.00
Queue Length 95th (ft)	15	1	6	0
Control Delay (s)	9.9	10.9	6.2	0.0
Lane LOS	A	B	A	
Approach Delay (s)	9.9	10.9	6.2	0.0
Approach LOS	A	B		

Intersection Summary				
Average Delay	6.9			
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	446	11	12	459	3	6	5	11	6	8	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	8	485	12	13	499	3	7	5	12	7	9	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		719										
pX, platoon unblocked												
vC, conflicting volume	502			497			1040	1034	491	1047	1039	501
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	502			497			1040	1034	491	1047	1039	501
tC, single (s)	4.2			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			97	98	98	97	96	99
cM capacity (veh/h)	1003			1078			200	229	582	197	228	574

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	504	515	24	18
Volume Left	8	13	7	7
Volume Right	12	3	12	3
cSH	1003	1078	311	240
Volume to Capacity	0.01	0.01	0.08	0.08
Queue Length 95th (ft)	1	1	6	6
Control Delay (s)	0.2	0.4	17.5	21.2
Lane LOS	A	A	C	C
Approach Delay (s)	0.2	0.4	17.5	21.2
Approach LOS			C	C

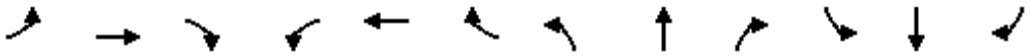
Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	1	5	0	0	0	7	64	3	2	91	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	40	1	5	0	0	0	8	70	3	2	99	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	204	205	113	210	218	71	127			73		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	204	205	113	210	218	71	127			73		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	100	99	100	100	100	99			100		
cM capacity (veh/h)	755	690	945	743	679	997	1471			1540		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	47	80	129
Volume Left	40	8	2
Volume Right	5	3	28
cSH	771	1471	1540
Volume to Capacity	0.06	0.01	0.00
Queue Length 95th (ft)	5	0	0
Control Delay (s)	10.0	0.7	0.1
Lane LOS	A	A	A
Approach Delay (s)	10.0	0.7	0.1
Approach LOS	A		

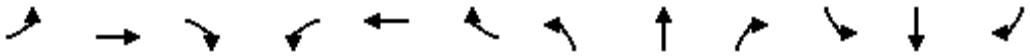
Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	17.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	0	10	0	0	0	24	79	2	4	105	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.97						1.00			0.95	
Flt Protected		0.96						0.99			1.00	
Satd. Flow (prot)		1774						1833			1804	
Flt Permitted		0.96						0.93			1.00	
Satd. Flow (perm)		1774						1730			1801	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	0	11	0	0	0	26	86	2	4	114	68
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	14	0
Lane Group Flow (vph)	0	16	0	0	0	0	0	114	0	0	172	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		2.7						39.0			39.0	
Effective Green, g (s)		2.7						39.0			39.0	
Actuated g/C Ratio		0.05						0.75			0.75	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		92						1305			1358	
v/s Ratio Prot												
v/s Ratio Perm		0.01						0.07			c0.10	
v/c Ratio		0.17						0.09			0.13	
Uniform Delay, d1		23.4						1.7			1.7	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.9						0.1			0.2	
Delay (s)		24.3						1.8			1.9	
Level of Service		C						A			A	
Approach Delay (s)		24.3			0.0			1.8			1.9	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.13		
Actuated Cycle Length (s)	51.7	Sum of lost time (s)	10.0
Intersection Capacity Utilization	29.3%	ICU Level of Service	A
Analysis Period (min)	15		

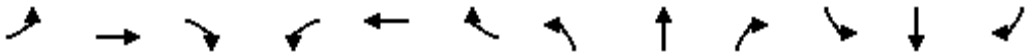
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	390	100	64	365	32	62	9	52	25	7	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	12	10	12	12	10	11	12	12	12	12
Total Lost time (s)		5.0	5.0	5.0	5.0		5.0	5.0			5.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes		1.00	0.97	1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes		1.00	1.00	0.99	1.00		1.00	1.00			1.00	
Frt		1.00	0.85	1.00	0.99		1.00	0.87			0.93	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		1828	1564	1675	1860		1652	1575			1740	
Flt Permitted		0.93	1.00	0.48	1.00		0.71	1.00			0.84	
Satd. Flow (perm)		1716	1564	839	1860		1238	1575			1494	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	424	109	70	397	35	67	10	57	27	8	34
RTOR Reduction (vph)	0	0	40	0	5	0	0	48	0	0	28	0
Lane Group Flow (vph)	0	470	69	70	427	0	67	19	0	0	41	0
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	2%	0%	2%	0%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		21.6	21.6	21.6	21.6		6.3	6.3			6.3	
Effective Green, g (s)		21.6	21.6	21.6	21.6		6.3	6.3			6.3	
Actuated g/C Ratio		0.57	0.57	0.57	0.57		0.17	0.17			0.17	
Clearance Time (s)		5.0	5.0	5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		977	891	478	1060		205	261			248	
v/s Ratio Prot					0.23			0.01				
v/s Ratio Perm		c0.27	0.04	0.08			c0.05				0.03	
v/c Ratio		0.48	0.08	0.15	0.40		0.33	0.07			0.16	
Uniform Delay, d1		4.8	3.7	3.8	4.5		13.9	13.3			13.5	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.4	0.0	0.1	0.3		0.9	0.1			0.3	
Delay (s)		5.2	3.7	4.0	4.8		14.9	13.5			13.9	
Level of Service		A	A	A	A		B	B			B	
Approach Delay (s)		4.9			4.7			14.2			13.9	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	6.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	37.9	Sum of lost time (s)	10.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	419	0	0	357	109	0	0	0	115	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	15	12	12	12	12	15	12	12	12	15	12	12
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						1.00	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		1.00			0.97						0.98	
Flt Protected		1.00			1.00						0.96	
Satd. Flow (prot)		1894			1822						1787	
Flt Permitted		0.99			1.00						0.96	
Satd. Flow (perm)		1869			1822						1787	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	455	0	0	388	118	0	0	0	125	0	21
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	0	0	30	0
Lane Group Flow (vph)	0	467	0	0	489	0	0	0	0	0	116	0
Confl. Peds. (#/hr)	6											
Heavy Vehicles (%)	8%	0%	2%	2%	1%	1%	2%	2%	2%	0%	2%	0%
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4									6		
Actuated Green, G (s)		22.2			22.2						6.5	
Effective Green, g (s)		22.2			22.2						6.5	
Actuated g/C Ratio		0.57			0.57						0.17	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		1072			1045						300	
v/s Ratio Prot					c0.27							
v/s Ratio Perm		0.25									0.06	
v/c Ratio		0.44			0.47						0.39	
Uniform Delay, d1		4.7			4.8						14.3	
Progression Factor		1.00			1.00						1.00	
Incremental Delay, d2		0.3			0.3						0.8	
Delay (s)		5.0			5.1						15.2	
Level of Service		A			A						B	
Approach Delay (s)		5.0			5.1			0.0			15.2	
Approach LOS		A			A			A			B	

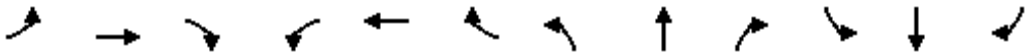
Intersection Summary			
HCM 2000 Control Delay	6.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	38.7	Sum of lost time (s)	10.0
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	419	0	0	373	16	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	455	0	0	405	17	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				322		
pX, platoon unblocked					0.91	
vC, conflicting volume			455		861	455
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			455		799	455
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	98
cM capacity (veh/h)			1116		326	609

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	455	405	30
Volume Left	0	0	17
Volume Right	0	0	13
cSH	1700	1700	407
Volume to Capacity	0.27	0.24	0.07
Queue Length 95th (ft)	0	0	6
Control Delay (s)	0.0	0.0	14.6
Lane LOS			B
Approach Delay (s)	0.0	0.0	14.6
Approach LOS			B

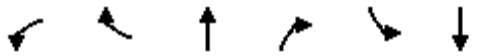
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	364	35	36	346	14	24	46	39	19	38	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	13	396	38	39	376	15	26	50	42	21	41	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					595							
pX, platoon unblocked												
vC, conflicting volume	391			434			934	910	415	970	922	384
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	391			434			934	910	415	970	922	384
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			97			87	81	93	89	84	98
cM capacity (veh/h)	1178			1137			207	264	636	181	260	668

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	447	430	118	73
Volume Left	13	39	26	21
Volume Right	38	15	42	11
cSH	1178	1137	310	252
Volume to Capacity	0.01	0.03	0.38	0.29
Queue Length 95th (ft)	1	3	43	29
Control Delay (s)	0.4	1.1	23.6	25.0
Lane LOS	A	A	C	D
Approach Delay (s)	0.4	1.1	23.6	25.0
Approach LOS			C	D

Intersection Summary			
Average Delay	4.9		
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	3	4	120	0	0	170
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	4	130	0	0	185
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			101
pX, platoon unblocked						
vC, conflicting volume	315	130			130	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	315	130			130	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	682	925			1467	

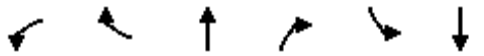
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	8	130	185
Volume Left	3	0	0
Volume Right	4	0	0
cSH	802	1700	1700
Volume to Capacity	0.01	0.08	0.11
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.5	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.5	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay		0.2	
Intersection Capacity Utilization		18.9%	ICU Level of Service A
Analysis Period (min)		15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	1	0	76	6	8	113
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	0	83	7	9	123
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	226	86			89	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	226	86			89	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	762	978			1519	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	1	89	132
Volume Left	1	0	9
Volume Right	0	7	0
cSH	762	1700	1519
Volume to Capacity	0.00	0.05	0.01
Queue Length 95th (ft)	0	0	0
Control Delay (s)	9.7	0.0	0.5
Lane LOS	A		A
Approach Delay (s)	9.7	0.0	0.5
Approach LOS	A		

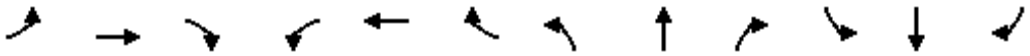
Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		22.5%	ICU Level of Service A
Analysis Period (min)		15	



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	120	0	0	128
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	130	0	0	139
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			160			
pX, platoon unblocked						
vC, conflicting volume	270	130			130	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	270	130			130	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	724	925			1467	

Direction, Lane #	NB 1	SB 1
Volume Total	130	139
Volume Left	0	0
Volume Right	0	0
cSH	1700	1700
Volume to Capacity	0.08	0.08
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

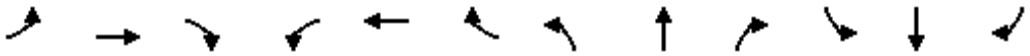
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	10.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	449	19	11	460	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	488	21	12	500	0	0	0	0	0	0	0
Pedestrians		15										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		4.0										
Percent Blockage		1										
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		151										
pX, platoon unblocked				0.86			0.86	0.86	0.86	0.86	0.86	
vC, conflicting volume	500			509			1037	1022	498	1022	1033	515
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	500			348			962	945	336	945	957	515
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	100	100	100
cM capacity (veh/h)	1075			1052			200	225	611	208	221	557

Direction, Lane #	EB 1	WB 1
Volume Total	509	512
Volume Left	0	12
Volume Right	21	0
cSH	1700	1052
Volume to Capacity	0.30	0.01
Queue Length 95th (ft)	0	1
Control Delay (s)	0.0	0.3
Lane LOS		A
Approach Delay (s)	0.0	0.3
Approach LOS		

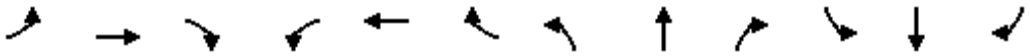
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	36.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	449	0	0	454	0	18	0	15	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	488	0	0	493	0	20	0	16	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		245										
pX, platoon unblocked				0.88			0.88	0.88	0.88	0.88	0.88	
vC, conflicting volume	493			488			982	982	488	998	982	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			349			911	911	349	929	911	493
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			100			91	100	97	100	100	100
cM capacity (veh/h)	1081			1074			226	243	600	214	243	580

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	488	493	36
Volume Left	0	0	20
Volume Right	0	0	16
cSH	1700	1700	316
Volume to Capacity	0.29	0.29	0.11
Queue Length 95th (ft)	0	0	10
Control Delay (s)	0.0	0.0	17.9
Lane LOS			C
Approach Delay (s)	0.0	0.0	17.9
Approach LOS			C

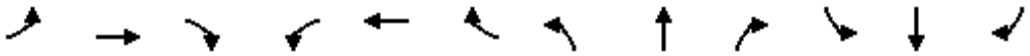
Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	33.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	464	1	1	454	0	0	0	1	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	504	1	1	493	0	0	0	1	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		432										
pX, platoon unblocked				0.92			0.92	0.92	0.92	0.92	0.92	
vC, conflicting volume	493			505			1001	1001	505	1002	1001	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			421			958	958	420	959	959	493
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1081			1059			220	239	588	219	239	580

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	505	495	1	0
Volume Left	0	1	0	0
Volume Right	1	0	1	0
cSH	1081	1059	588	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	11.1	0.0
Lane LOS		A	B	A
Approach Delay (s)	0.0	0.0	11.1	0.0
Approach LOS			B	A

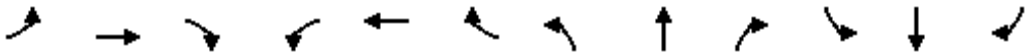
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	34.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	12	102	0	5	1	99	21	1	0	27	25
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	24	13	111	0	5	1	108	23	1	0	29	27
Pedestrians					2							
Lane Width (ft)					13.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								308				
pX, platoon unblocked												
vC, conflicting volume	285	284	43	401	297	25	57			26		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	285	284	43	401	297	25	57			26		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	98	89	100	99	100	93			100		
cM capacity (veh/h)	630	584	1033	467	574	1055	1561			1598		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	148	7	132	57
Volume Left	24	0	108	0
Volume Right	111	1	1	27
cSH	882	622	1561	1598
Volume to Capacity	0.17	0.01	0.07	0.00
Queue Length 95th (ft)	15	1	6	0
Control Delay (s)	9.9	10.9	6.2	0.0
Lane LOS	A	B	A	
Approach Delay (s)	9.9	10.9	6.2	0.0
Approach LOS	A	B		

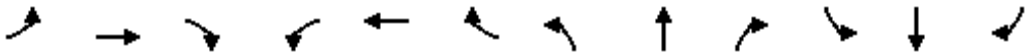
Intersection Summary			
Average Delay	6.9		
Intersection Capacity Utilization	34.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	446	11	12	459	3	6	5	11	6	8	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	8	485	12	13	499	3	7	5	12	7	9	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		719										
pX, platoon unblocked												
vC, conflicting volume	502			497			1040	1034	491	1047	1039	501
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	502			497			1040	1034	491	1047	1039	501
tC, single (s)	4.2			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			97	98	98	97	96	99
cM capacity (veh/h)	1003			1078			200	229	582	197	228	574

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	504	515	24	18
Volume Left	8	13	7	7
Volume Right	12	3	12	3
cSH	1003	1078	311	240
Volume to Capacity	0.01	0.01	0.08	0.08
Queue Length 95th (ft)	1	1	6	6
Control Delay (s)	0.2	0.4	17.5	21.2
Lane LOS	A	A	C	C
Approach Delay (s)	0.2	0.4	17.5	21.2
Approach LOS			C	C

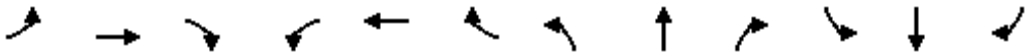
Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	1	5	0	0	0	7	64	3	2	91	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	40	1	5	0	0	0	8	70	3	2	99	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											265	
pX, platoon unblocked												
vC, conflicting volume	204	205	113	210	218	71	127			73		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	204	205	113	210	218	71	127			73		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	100	99	100	100	100	99			100		
cM capacity (veh/h)	755	690	945	743	679	997	1471			1540		

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	47	80	129
Volume Left	40	8	2
Volume Right	5	3	28
cSH	771	1471	1540
Volume to Capacity	0.06	0.01	0.00
Queue Length 95th (ft)	5	0	0
Control Delay (s)	10.0	0.7	0.1
Lane LOS	A	A	A
Approach Delay (s)	10.0	0.7	0.1
Approach LOS	A		

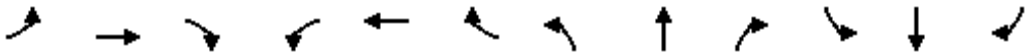
Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	17.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	0	10	0	0	0	24	79	2	4	105	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0						5.0			5.0	
Lane Util. Factor		1.00						1.00			1.00	
Frt		0.97						1.00			0.95	
Flt Protected		0.96						0.99			1.00	
Satd. Flow (prot)		1774						1833			1804	
Flt Permitted		0.96						0.93			1.00	
Satd. Flow (perm)		1774						1730			1801	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	0	11	0	0	0	26	86	2	4	114	68
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	14	0
Lane Group Flow (vph)	0	16	0	0	0	0	0	114	0	0	172	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%
Turn Type	Perm	NA					Perm	NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)		2.7						39.0			39.0	
Effective Green, g (s)		2.7						39.0			39.0	
Actuated g/C Ratio		0.05						0.75			0.75	
Clearance Time (s)		5.0						5.0			5.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		92						1305			1358	
v/s Ratio Prot												
v/s Ratio Perm		0.01						0.07			c0.10	
v/c Ratio		0.17						0.09			0.13	
Uniform Delay, d1		23.4						1.7			1.7	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.9						0.1			0.2	
Delay (s)		24.3						1.8			1.9	
Level of Service		C						A			A	
Approach Delay (s)		24.3			0.0			1.8			1.9	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.13		
Actuated Cycle Length (s)	51.7	Sum of lost time (s)	10.0
Intersection Capacity Utilization	29.3%	ICU Level of Service	A
Analysis Period (min)	15		

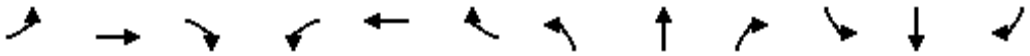
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	390	100	64	365	32	62	9	52	25	7	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	12	10	12	12	10	11	12	12	12	12
Total Lost time (s)		5.0	5.0	5.0	5.0		5.0	5.0			5.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frpb, ped/bikes		1.00	0.96	1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes		1.00	1.00	0.99	1.00		1.00	1.00			1.00	
Frt		1.00	0.85	1.00	0.99		1.00	0.87			0.93	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		1828	1553	1669	1860		1652	1575			1740	
Flt Permitted		0.94	1.00	0.48	1.00		0.71	1.00			0.84	
Satd. Flow (perm)		1719	1553	842	1860		1238	1575			1494	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	424	109	70	397	35	67	10	57	27	8	34
RTOR Reduction (vph)	0	0	27	0	4	0	0	50	0	0	30	0
Lane Group Flow (vph)	0	470	82	70	428	0	67	17	0	0	39	0
Confl. Peds. (#/hr)			10	10								
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	2%	0%	2%	0%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		42.4	42.4	42.4	42.4		7.6	7.6			7.6	
Effective Green, g (s)		42.4	42.4	42.4	42.4		7.6	7.6			7.6	
Actuated g/C Ratio		0.71	0.71	0.71	0.71		0.13	0.13			0.13	
Clearance Time (s)		5.0	5.0	5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1214	1097	595	1314		156	199			189	
v/s Ratio Prot					0.23			0.01				
v/s Ratio Perm		c0.27	0.05	0.08			c0.05				0.03	
v/c Ratio		0.39	0.07	0.12	0.33		0.43	0.09			0.21	
Uniform Delay, d1		3.6	2.7	2.8	3.4		24.2	23.1			23.5	
Progression Factor		0.62	0.60	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.9	0.1	0.4	0.7		1.9	0.2			0.5	
Delay (s)		3.1	1.8	3.2	4.0		26.1	23.3			24.0	
Level of Service		A	A	A	A		C	C			C	
Approach Delay (s)		2.8			3.9			24.7			24.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	419	0	0	357	109	0	0	0	115	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	15	12	12	12	12	15	12	12	12	15	12	12
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						1.00	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		1.00			0.97						0.98	
Flt Protected		1.00			1.00						0.96	
Satd. Flow (prot)		1893			1822						1787	
Flt Permitted		0.99			1.00						0.96	
Satd. Flow (perm)		1872			1822						1787	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	455	0	0	388	118	0	0	0	125	0	21
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	31	0
Lane Group Flow (vph)	0	467	0	0	494	0	0	0	0	0	115	0
Confl. Peds. (#/hr)	6											
Heavy Vehicles (%)	8%	0%	2%	2%	1%	1%	2%	2%	2%	0%	2%	0%
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases	4									6		
Actuated Green, G (s)		42.0			42.0						8.0	
Effective Green, g (s)		42.0			42.0						8.0	
Actuated g/C Ratio		0.70			0.70						0.13	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		1310			1275						238	
v/s Ratio Prot					c0.27							
v/s Ratio Perm		0.25									0.06	
v/c Ratio		0.36			0.39						0.48	
Uniform Delay, d1		3.6			3.7						24.1	
Progression Factor		1.00			0.68						1.00	
Incremental Delay, d2		0.8			0.9						1.5	
Delay (s)		4.4			3.4						25.6	
Level of Service		A			A						C	
Approach Delay (s)		4.4			3.4			0.0			25.6	
Approach LOS		A			A			A			C	

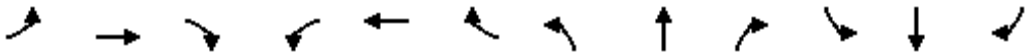
Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	419	0	0	373	16	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	455	0	0	405	17	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				322		
pX, platoon unblocked					0.93	
vC, conflicting volume			455		861	455
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			455		814	455
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	98
cM capacity (veh/h)			1116		326	609

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	455	405	30
Volume Left	0	0	17
Volume Right	0	0	13
cSH	1700	1700	407
Volume to Capacity	0.27	0.24	0.07
Queue Length 95th (ft)	0	0	6
Control Delay (s)	0.0	0.0	14.6
Lane LOS			B
Approach Delay (s)	0.0	0.0	14.6
Approach LOS			B

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	364	35	36	346	14	24	46	39	19	38	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	13	396	38	39	376	15	26	50	42	21	41	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					595							
pX, platoon unblocked	0.99						0.99	0.99		0.99	0.99	0.99
vC, conflicting volume	391			434			934	910	415	970	922	384
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	381			434			929	905	415	965	916	373
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			97			87	81	93	89	84	98
cM capacity (veh/h)	1178			1137			207	264	636	180	259	671

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	447	430	118	73
Volume Left	13	39	26	21
Volume Right	38	15	42	11
cSH	1178	1137	310	251
Volume to Capacity	0.01	0.03	0.38	0.29
Queue Length 95th (ft)	1	3	43	29
Control Delay (s)	0.4	1.1	23.7	25.1
Lane LOS	A	A	C	D
Approach Delay (s)	0.4	1.1	23.7	25.1
Approach LOS			C	D

Intersection Summary				
Average Delay	4.9			
Intersection Capacity Utilization	50.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	3	4	120	0	0	170
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	4	130	0	0	185
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			266			101
pX, platoon unblocked						
vC, conflicting volume	315	130			130	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	315	130			130	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	682	925			1467	

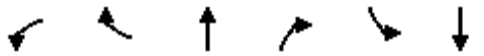
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	8	130	185
Volume Left	3	0	0
Volume Right	4	0	0
cSH	802	1700	1700
Volume to Capacity	0.01	0.08	0.11
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.5	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.5	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	18.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	1	0	76	6	8	113
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	0	83	7	9	123
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						515
pX, platoon unblocked						
vC, conflicting volume	226	86			89	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	226	86			89	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	762	978			1519	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	1	89	132
Volume Left	1	0	9
Volume Right	0	7	0
cSH	762	1700	1519
Volume to Capacity	0.00	0.05	0.01
Queue Length 95th (ft)	0	0	0
Control Delay (s)	9.7	0.0	0.5
Lane LOS	A		A
Approach Delay (s)	9.7	0.0	0.5
Approach LOS	A		

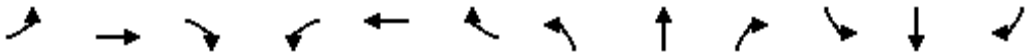
Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		22.5%	ICU Level of Service A
Analysis Period (min)		15	



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	120	0	0	128
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	130	0	0	139
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			160			
pX, platoon unblocked						
vC, conflicting volume	270	130			130	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	270	130			130	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	724	925			1467	

Direction, Lane #	NB 1	SB 1
Volume Total	130	139
Volume Left	0	0
Volume Right	0	0
cSH	1700	1700
Volume to Capacity	0.08	0.08
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

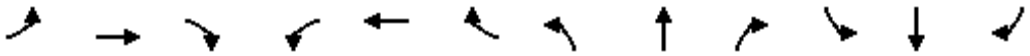
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	10.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	449	19	11	460	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	488	21	12	500	0	0	0	0	0	0	0
Pedestrians		15										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		4.0										
Percent Blockage		1										
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		151										
pX, platoon unblocked				0.90			0.90	0.90	0.90	0.90	0.90	
vC, conflicting volume	500			509			1037	1022	498	1022	1033	515
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	500			404			988	972	392	972	983	515
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	100	100	100
cM capacity (veh/h)	1075			1054			202	228	598	210	224	557

Direction, Lane #	EB 1	WB 1
Volume Total	509	512
Volume Left	0	12
Volume Right	21	0
cSH	1700	1054
Volume to Capacity	0.30	0.01
Queue Length 95th (ft)	0	1
Control Delay (s)	0.0	0.3
Lane LOS		A
Approach Delay (s)	0.0	0.3
Approach LOS		

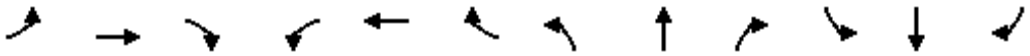
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	36.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	449	0	0	454	0	18	0	15	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	488	0	0	493	0	20	0	16	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		245										
pX, platoon unblocked				0.92			0.92	0.92	0.92	0.92	0.92	
vC, conflicting volume	493			488			982	982	488	998	982	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			395			934	934	395	951	934	493
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			100			91	100	97	100	100	100
cM capacity (veh/h)	1081			1076			227	245	589	215	245	580

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	488	493	36
Volume Left	0	0	20
Volume Right	0	0	16
cSH	1700	1700	315
Volume to Capacity	0.29	0.29	0.11
Queue Length 95th (ft)	0	0	10
Control Delay (s)	0.0	0.0	17.9
Lane LOS			C
Approach Delay (s)	0.0	0.0	17.9
Approach LOS			C

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	33.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	464	1	1	454	0	0	0	1	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	504	1	1	493	0	0	0	1	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		432										
pX, platoon unblocked				0.94			0.94	0.94	0.94	0.94	0.94	
vC, conflicting volume	493			505			1001	1001	505	1002	1001	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			442			969	969	441	970	969	493
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1081			1061			221	240	583	220	240	580

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	505	495	1	0
Volume Left	0	1	0	0
Volume Right	1	0	1	0
cSH	1081	1061	583	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	11.2	0.0
Lane LOS		A	B	A
Approach Delay (s)	0.0	0.0	11.2	0.0
Approach LOS			B	A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	34.7%	ICU Level of Service	A
Analysis Period (min)	15		