Traffic Committee Agenda

Thursday, September 18, 2025, 5:30 PM
COMMUNITY ROOM A - 2ND FLOOR
1 Civic Center Circle
Brea, CA 92821

Scott Fujioka, Chair **Darlene Chandler,** Vice Chair

Albert Garcia, Committee Member **Rachel Hickenbottom,** Committee Member **Erik Zambon,** Committee Member

This agenda contains a brief general description of each item the Committee will consider. The City Clerk has on file copies of written documentation relating to each item of business on this Agenda available for public inspection. Contact the City Clerk's Office at (714) 990-7756 or view the Agenda and related materials on the City's website at www.cityofbrea.gov. Materials related to an item on this agenda submitted to the commission after distribution of the agenda packet are available for public inspection in the City Clerk's Office at 1 Civic Center Circle, Brea, CA during normal business hours. Such documents may also be available on the City's website subject to staff's ability to post documents before the meeting.

Procedures for Addressing the Committee

The Committee encourages free expression of all points of view. For record keeping purposes, if you wish to make a statement regarding any item on the agenda, please complete the form located on the podium and deposit it with the secretary. To allow all persons the opportunity to speak, please keep your remarks limited to five (5) minutes. If others have already expressed your position, you may simply indicate that you agree with a previous speaker. If appropriate, a spokesperson may present the views of your entire group. Committee rules prohibit clapping, booing or shouts of approval or disagreement from the audience. PLEASE SILENCE ALL PAGERS, CELL PHONES AND OTHER ELECTRONIC EQUIPMENT WHILE COMMISSION IS IN SESSION.

Special Accommodations

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Public Works Department at (714) 990-7667. Notification 48 hours prior to the meeting will enable City staff to make reasonable arrangements to ensure accessibility. (28 CFR 35.102.35.104 ADA Title II)

1. Call to Order/Introductions

2. Approval of Minutes

2.A. Approval of Minutes of the Regular Meeting of August 21, 2025

3. Matters from the Audience

4. Traffic Collision and Citations Report

5. Discussion Items

5.A. Laurel Elementary School Circulation Draft Study

6. Project Updates

7. Committee Member Comments

8. Adjourn/Next Scheduled Meeting

The next regularly scheduled Traffic Committee meeting will be held on October 16, 2025.

Date Posted: September 15, 2025

CITY of BREA

Communication
September 18, 2025
Item No. 2A.

Approval of Minutes of the Regular Meeting of August 21, 2025

TO	PREPARED BY
Chair and Members of the Traffic Committee	Yvonne Lopez, Executive Assistant
DEPARTMENT HEAD APPROVAL	**CITY MANAGER APPROVAL**
Michael Ho, Public Works Director	Kristin Griffith, City Manager

RECOMMENDATION

BACKGROUND/DISCUSSION

FISCAL IMPACT/SUMMARY

Attachments

08-21-2025 Traffic Committee Minutes - Draft.pdf

BREA
Public Works

CITY OF BREA

PUBLIC WORKS DEPARTMENT MEMORANDUM

TRAFFIC COMMITTEE MINUTES – August 21, 2025

TIME: **5:30 P.M.**

LOCATION: **Executive Conference Room**

ATTENDEES: **Committee Members:** Chair Scott Fujioka, Vice Chair Darlene Chandler, Rachel Hickenbottom, Erik Zambon
Absent: Albert Garcia

Staff Representatives: City Engineer Ryan Chapman, City Traffic Engineer David Roseman, Sergeant Omar Brioso, Fire Prevention Specialist Kevin Haines, Executive Assistant Yvonne Lopez

1. **Call to Order/Introductions** - The meeting was called to order at 5:31 P.M. by Committee Chair Fujioka.

2. **Approve Minutes of the June 19, 2025 Regular Meeting** – A motion was made to approve the minutes by Committee Member Chandler, seconded by Chair Fujioka. Motion was unanimously approved.

3. **Matters from the Audience** – None.

4. **Traffic Collision and Citations Update** – Sergeant Brioso provided the following updates:
   - 51 collisions occurred in July; 22 collisions thus far in August.
   - DUI checkpoint scheduled for Friday, August 29, at corner of Brea & Date.
   - Brea PD has partnered with the BOUSD to conduct and e-bike safety education and awareness program and increase enforcement. The focus is on safe riding and educating parents as well. Enforcement is generally an administrative citation or attending an e-bike safety class.
   - Hired two Parking Control Officers for enforcement of street sweeping and 2-6am parking violations.
   - Awarded CHP Cannabis grant which be used to convert a vacant Traffic Officer position into a DUI enforcement vehicle.

   Committee Member Zambon inquired if the intersections with the highest collision rates can be identified in future reports. Sgt. Brioso will investigate if expanded collision data reports can be provided to the Committee moving forward.

5. **Discussion Item 5A** – **Police Department Parking Requests:**

   City Traffic Engineer Roseman provided background on a number of issues over the past several months brought forth by Brea PD. Engineer Roseman and Corporal Nguyen met in the field and identified a number of signage issues with conflicting information, thus hampering enforcement efforts. Work orders for a number of minor signage corrections have already been issued, which should be completed by City crews in the next few weeks. Engineer Roseman also provided a PowerPoint presentation outlining commercial semi-truck parking issues and recommended actions at the following two locations:

DRAFT

- Pioneer Street between Puente & Lambert – request for no commercial parking on south/west side of street.
- Oak Place south of Lambert Road – request for No Commercial Parking on both sides of the roadway to improve parking availability and access.

Recommendation: Concur with Police Department requests and request City Traffic Engineer to notify adjacent businesses of the pending parking changes before they are installed. Committee Member Zambon motioned to approve, seconded by Committee Member Hickenbottom. Motion was approved.

6. **Project Updates:**
   - City Engineer Chapman provided updates on various CIP projects, RFQs/RFPs currently out to bid.
   - Birch Street Paving Improvements – final cap is completed with temporary striping.
   - Water Project: Birch & Kraemer anticipated completion in next several weeks.
   - Engineer Roseman has received multiple speed complaints mainly concerning the southern area of the City (Elm, Alder, Cherry). Speed Hump Requirement packets (requiring 30% petition) have been sent out with no responses thus far.

7. **Committee Member Comments**:
   - Committee Member Zambon questioned any possible consequences from the proposed commercial parking changes with Oak Street & Pioneer with trucks moving to another street creating the same issue. Engineer Roseman does not think this will be an issue because there isn't anywhere else close for those vehicles to park.
   - Committee Member Hickenbottom – daylighting law (20' from crosswalk) at Sycamore & Imperial cars parked too close to stop sign and requested red curb painting at intersection.

8. **Adjourn / Next Scheduled Meeting** – The meeting was adjourned at 6:35 p.m. The next scheduled meeting is September 18, 2025.

DRAFT

CITY of BREA

Communication
September 18, 2025
Item No. 5A.

Laurel Elementary School Circulation Draft Study

TO	PREPARED BY
Chair and Members of the Traffic Committee	Yvonne Lopez, Executive Assistant
DEPARTMENT HEAD APPROVAL	**CITY MANAGER APPROVAL**
Michael Ho, Public Works Director	Kristin Griffith, City Manager

RECOMMENDATION

BACKGROUND/DISCUSSION

FISCAL IMPACT/SUMMARY

Attachments

2025.08.26_Laurel Circulation and Safety Assessment.pdf

FEHR PEERS

Memorandum

Date: August 25, 2025

To: City of Brea, Public Works Department

From: Fehr & Peers

Subject: Laurel Elementary School Circulation and Safety Assessment

OC23-1011

Fehr and Peers completed an operational and safety assessment (Assessment) of mobility and circulation adjacent to Laurel Elementary Magnet School (School) in Brea, California. The objective of the study is to understand challenges and opportunities related to student dop-off and pick-up during peak periods of school traffic. This memorandum documents the findings from review of existing conditions, relevant standards and plans, intersection operation analysis, and in-person field observations. This assessment presents findings of the safety analysis and evaluation of potential improvement alternatives.

Executive Summary

The Assessment identifies key traffic and safety challenges including queue spillbacks, pedestrian conflicts, and unsafe turning movements, which contribute to increased collision risks. Review of collision records found speeding and turning conflicts as the primary contributing factors. Three potential improvement alternatives were evaluated, while all alternatives offer varying degrees of benefit, **Alternative 3 (Cul-de-Sac)** provides the highest long-term safety and operational improvements but at higher cost and greater complexity. **Alternative 2 (Right-in-right-out)** and **Alternative 4 (One-Way Conversion)** offer more immediate, lower-cost solutions with notable safety gains and less disruption. Final selection of the improvement alternative should consider funding availability, stakeholder priorities, and coordination with Caltrans. A conceptual design and public engagement process is recommended before selection of a final preferred alternative.

Introduction

Laurel Elementary Magnet School (School) is bound by Imperial Highway (State Route 90) (SR-90) to the south, South Flower Avenue to the west, East Birch Street to the north, and an alley separating the School from the residential development to the east. Access to the School's front entrance is facilitated by two full access driveways along South Flower Avenue entering and exiting a surface parking lot with approximately 37 spaces. Along the alley, gated entrances for pedestrian access to the School are located immediately south of East Birch Street adjacent to nine parking spaces and approximately 350 feet south of East Birch Street.

Study Area

The study area was selected based on distribution of school related trips. **Figure 1** shows the study area. Fehr & Peers analyzed the operations of the following eight study intersections:

1. South Brea Boulevard & East Birch Street (Signalized)
2. South Orange Avenue & East Birch Street (Side-Street Stop Control)
3. South Flower Avenue & East Birch Street (Signalized)
4. Alley & East Birch Street (Side-Street Stop Control)
5. South Brea Boulevard & Imperial Highway (Signalized)
6. South Orange Avenue and Imperial Highway (Side-Street Stop Control)
7. South Flower Avenue & Imperial Highway (Side-Street Stop Control)
8. Sycamore Avenue & Imperial Highway (Side-Street Stop Control)

Existing Roadway Network

The existing condition and classification[1] of the roadways surrounding Laurel Elementary School are summarized below.

- South Brea Boulevard (south of East Birch Street) – Classified as a Major Arterial within the study area, where it is a six-lane divided roadway. Outside the study area, it transitions to a Primary Arterial, constructed as a four-lane divided roadway.

- Imperial Highway (SR-90) – Classified as a Smart Street Arterial with enhanced traffic capacity and designated as part of the Orange County Congestion Management Program Highway System (CMPHS), owned and operated by Caltrans. Within the study area, it is a six-lane divided roadway with a raised center median.

[1] Circulation Element of the City of Brea General Plan (2003)

Legend

Study Intersections

Laurel Elementary School

Figure 1

Study Area

- East Birch Street – Classified as a Secondary Arterial, typically ranging from two to four lanes. Within the study area, it is a four-lane roadway with a two-way left-turn lane (TWLTL) separating eastbound and westbound travel lanes.

- South Flower Avenue and South Orange Avenue – Both are classified as Local Roadways, each constructed as a two-lane undivided roadway.

In addition to the General Plan roadways, some roadways within the City of Brea are under State or Regional jurisdiction, including SR-57 and SR-90. The Orange County Congestion Management Program (CMP) provides a list of roadways and intersections designated for monitoring. Although SR-90 is classified as a CMP roadway, none of the studied intersections are managed by OCTA as CMP intersections.

Existing Plans and Previous Studies

Brea Olinda Unified School District (BOUSD) created a series of master plans[2] to outline future improvements for each of the schools in its jurisdiction. The Master Plan for Laurel Elementary **(Appendix A)** includes a variety of planned improvements ranging from modernization of existing classroom buildings, construction of new classrooms, the creation of new parking lots along the school's frontage on Imperial Highway, and a new bus drop-off area along the alley east of the school. Laurel Elementary School has also published Drop Off and Pick Up Procedures[3] to provide directions for parent drivers during peak periods of school traffic. These procedures include specific instructions to access the Alley from East Birch Street and exit the Alley onto Imperial Highway, reminders to not leave vehicles parked or unattended, and directions to avoid blocking the alley.

In addition to existing plans and procedures, relevant traffic studies were reviewed to better understand on-going development and past recommendations near Laurel Elementary School, including the Traffic Impact Analysis for the Gaslight Square development project (Urban Crossroad, 2023) and the Laurel Elementary School Circulation and Parking Study (Kittleson, 2023).

Prompted by the proposal of the Gaslight Square project, a traffic analysis was conducted (Urban Crossroads, 2023) as part of the environmental review procedure. The analysis identified existing deficient[4] operations at the unsignalized intersection of South Flower Avenue and Imperial Highway and extensive queuing at the intersection of South Brea Boulevard and Imperial Highway. The study recommended and conceptually analyzed two alternative scenarios, one where the north leg of the intersection of Imperial Highway and South Flower Avenue would be

[2] https://www.bousdplan.org/schools/laurel#SchoolMasterPlan
[3] https://laurel.bousd.us/apps/pages/index.jsp?uREC_ID=1179685&type=d&pREC_ID=2352997
[4] Worse than Level of Service (LOS) D per City of Brea TIA Guidelines

modified to become right-in-right-out only **(Alternative 2)**, and another with complete closure of South Flower Avenue as a cul-de-sac **(Alternative 3)**.

The Circulation and Parking Plan (Kittelson, 2023) recommended improvements to install high visibility crosswalks and restrict northbound right turns at the intersection of South Flower Avenue and East Birch Street when a crossing guard is on active duty. These improvements were implemented to reduce conflicts between drivers and pedestrians and were observed to be effective during the recent field visit.

Data Collection

Traffic Counts

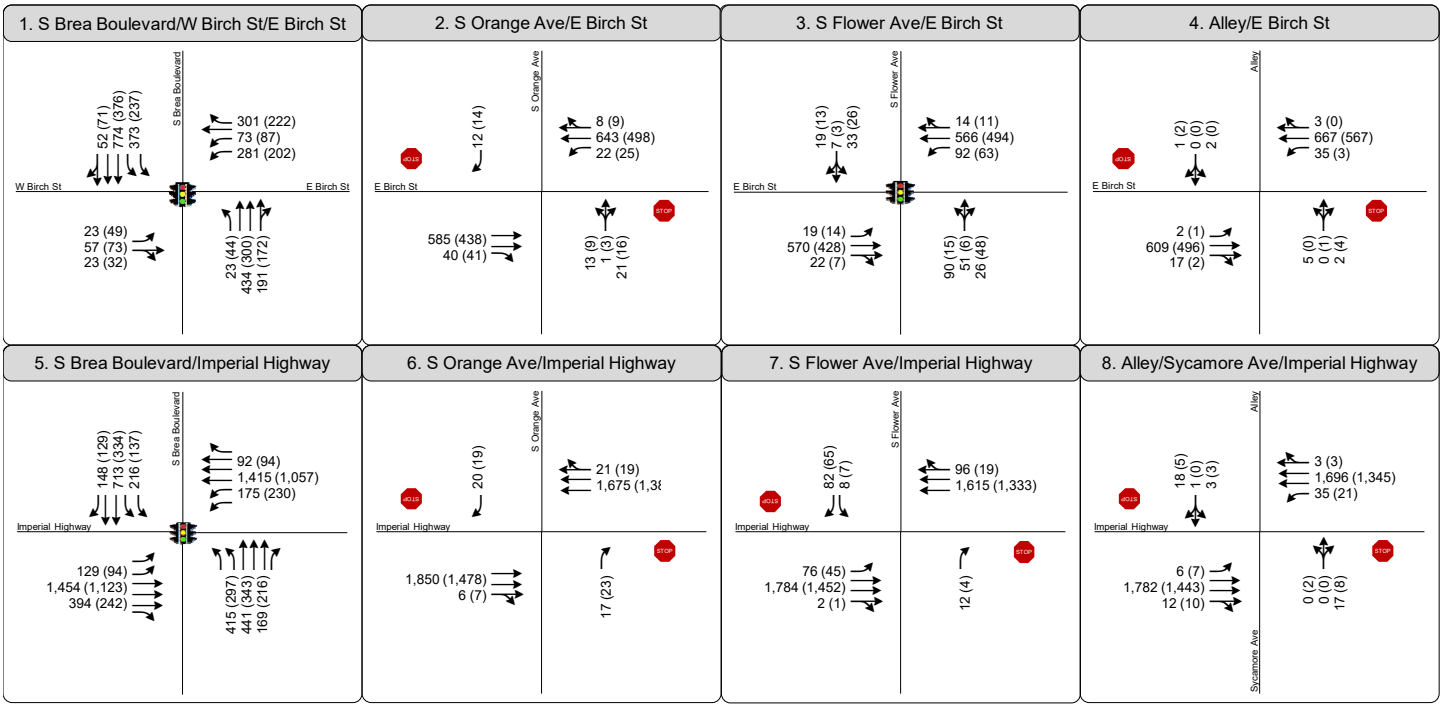
Based on the school schedule for Laurel Elementary (**Table 1**), intersection turning movement counts were conducted in October of 2023 during the following periods to capture all student related traffic at the study intersections.

1. 7:00 AM to 9:00 AM
2. 9:45 AM to 12:00 PM
3. 1:00 PM to 3:00 PM
4. 4:00 PM to 6:00 PM

Table 1 – Laurel Elementary School Schedule

Grade Level	Monday, Tuesday, Thursday, & Friday		Wednesday	
	Let In	Let Out	Let In	Let Out
Grade 1-6	8:00 AM	2:10 PM	8:00 AM	1:25 PM
AM TK/Kindergarten	8:00 AM	11:30 AM	8:00 AM	11:15 AM
PM TK/Kindergarten	10:20 AM	2:10 PM	9:50 AM	1:25 PM

Counts were collected during fair weather, while school was in session, and during a typical (non-holiday) Thursday (October 2023). The turning movement counts are provided in **Appendix B.** Existing (2023) traffic volumes are provided in **Figure 2A & 2B** along with existing lane configurations and intersection control **(Figure 3)**.



Legend

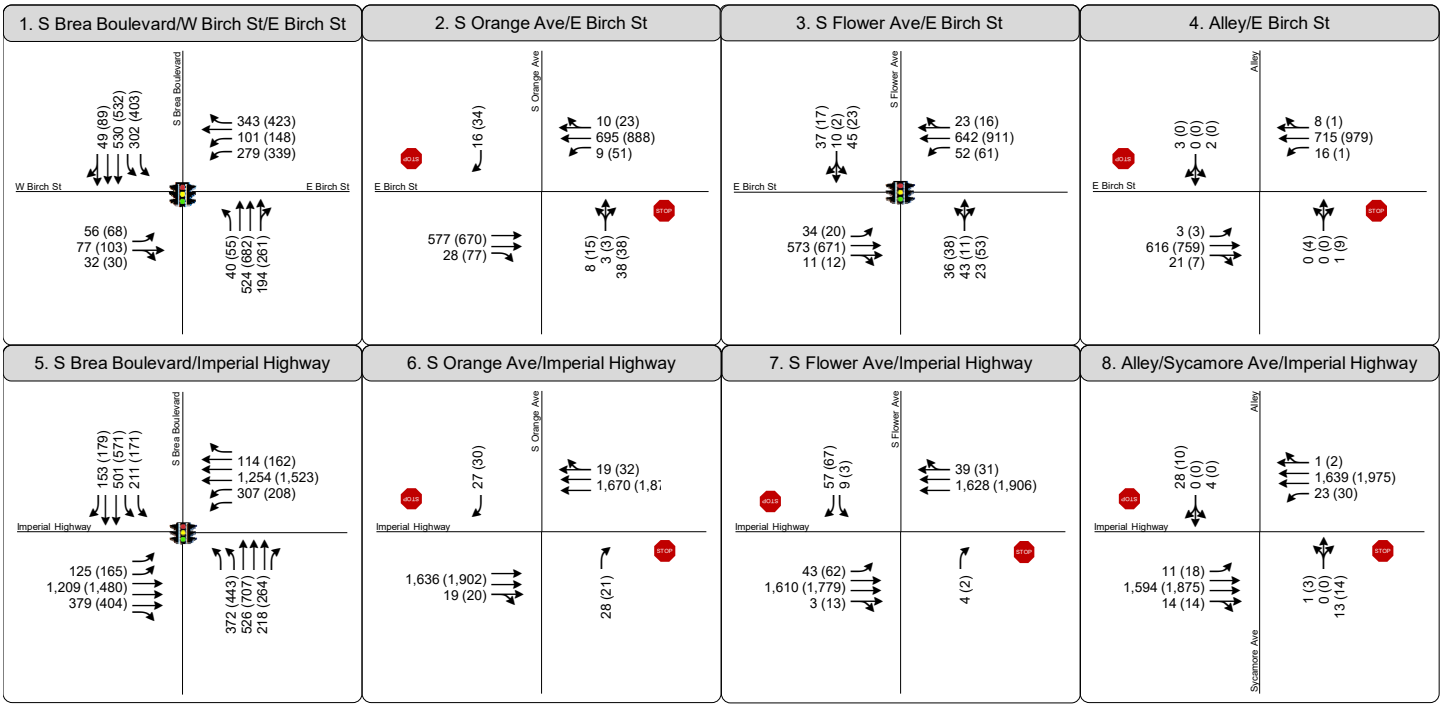
xx (xx) - AM 1 Peak Hour (AM 2 Peak Hour)

Study Intersection Laurel Elementary School

Figure 2A

AM Peak Hour Traffic Volumes

Existing (2023) Conditions



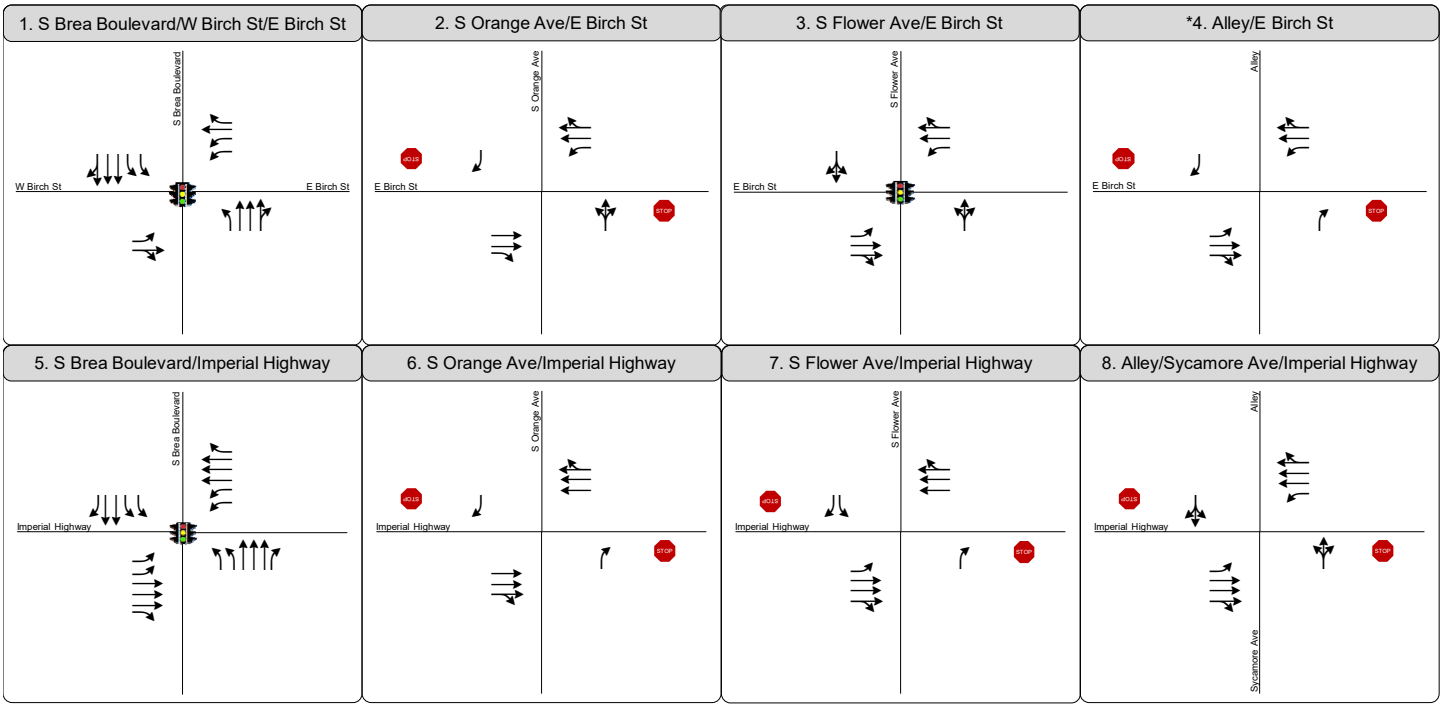
Legend

xx (xx) - PM 1 Peak Hour (PM 2 Peak Hour)

Study Intersection Laurel Elementary School

Figure 2B

PM Peak Hour Traffic Volumes
Existing (2023) Conditions



Legend

* EBL/WBL share a center left turn lane.

Study Intersection Brea Laurel Elementary

Figure 3

Lane Configuration and Intersection Control

The data collected was within 10% when compared to those collected for previous traffic studies. This difference is within the typical range of day-to-day fluctuations of observed traffic volume. Although a significant portion of students walk and bike to and from Laurel Elementary School, younger students are expected to be more dependent on parent drivers. Therefore, the division of the TK/Kindergarten student group into AM and PM attendance improves the distribution of vehicle trips related to student drop-off and pick-up.

Field Observations

In addition to the collection of traffic volume data, observations were made by two staff members (Fehr & Peers) on foot throughout the day on October 26 during the morning (7:00 am to 9:00 am, and 9:45 am to noon) peak periods. Field staff made notes of existing signage and pavement delineation, then performed stationary observations of driver and pedestrian behaviors at the front of the school. Key observations made during the morning period are as follows,

- As parents gradually arrived by car, many parked in the private parking lot north of Imperial Highway between South Flower Avenue and South Orange Avenue.
- Parents and students then made their way across South Flower Avenue mid-block to reach Laurel Elementary.
- Due to the relatively low and consistent vehicular volume, pedestrians were able to find gaps in traffic to complete the uncontrolled crossing. However, without a designated crosswalk, pedestrians crossed S. Flower Avenue in a dispersed and unpredictable manner, navigating through traffic at various points along the roadway.
- Travel speeds were generally within limits and drivers were generally not aggressive.

During the afternoon (1:00 pm to 3:00 pm), school-related traffic was observed to be more concentrated and aggressive than in the morning. Approximately 30 minutes prior to school let out, parents were queued along the Alley in the southbound direction, and along South Flower Avenue in both directions. Key observations made during the afternoon peak period are as follows,

Along the Alley and East Birch Street

- Queueing along the Alley began approximately 150 feet north of Imperial Highway, with widely spaced gaps between queued vehicles, resulting in a loosely formed line.
- A mix of carpool/rideshare and parents were observed within the queue.
- Unoccupied vehicles were observed despite posted signs prohibiting parking, affecting the progression of the queue.
- The queue of vehicles occupies more than half of the width of the alley, particularly south of the gated pedestrian access adjacent to the classrooms, making maneuvers within the alley difficult.
- The end of the queue eventually reached East Birch Street and began spilling back onto East Birch Street. Eastbound traffic along E. Birch Street was observed to abruptly stop or

merge into adjacent lanes to avoid stopped vehicles. Several drivers queued to enter the Alley were observed to unexpectedly exit the queue to continue eastbound along E. Birch Street, causing near misses with the eastbound through traffic.

Along South Flower Avenue and Imperial Highway

- Along South Flower Avenue, all unrestricted curb space was utilized as parking.
- Drivers utilized the parking lot on the west side of S. Flower Avenue, resulting in mid-block crossings along South Flower Avenue when parents cross the street to access the School, and then accompany students when making their way back to the car. Some students were observed to make this crossing unaccompanied.
- An attendant at the front of the school directed drivers and effectively kept spacing between queued vehicles tight. However, the northbound queue eventually spilled back onto Imperial Highway, where drivers illegally stopped along the westbound curb adjacent lane, which was not sufficiently wide for right turn queuing and simultaneous through traffic, drivers were observed to abruptly stop or merge to avoid stopped vehicles.

It should be noted that more parking enforcement at the future commercial development may lead to an increase of queuing along South Flower Avenue (or elsewhere within the study area), though they are still allowed to park freely within the Public Downtown Brea Parking Structure located on South Orange Avenue roughly 200 feet away.

Intersection Operations Analysis

Operations Analysis Methodology

Per the City of Brea Transportation Impact Analysis (TIA) Guidelines, the latest Transportation Research Board (TRB) Highway Capacity Manual (HCM) is required to conduct the Level of Service (LOS) analysis. The HCM methodology estimates a quantitative delay at intersections. After the quantitative delay estimates are complete, the methodology assigns a qualitative letter grade that represents the operations of the intersection. These grades range from LOS A (minimal delay) to LOS F (excessive congestion). LOS E represents at-capacity operations. Descriptions of the LOS letter grades for signalized and unsignalized intersections are provided in **Table 2** per the latest HCM. The HCM methodology was used to analyze all study intersections using the Synchro 11 software package to facilitate the calculations.

Table 2: Level of Service for Signalized Intersections

Level of Service (LOS)	Signalized Delay (Seconds)	Unsignalized Delay (Seconds)	Description
A	0 – 10.0	≤ 10.0	Operations with very low delay occurring with favorable progression and/or short cycle length
B	> 10.0 to 20.0	> 10.0 to 15.0	Operations with low delay occurring with good progression and/or short cycle lengths
C	> 20.0 to 35.0	> 15.0 to 25.0	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear
D	> 35.0 to 55.0	> 25.0 to 35.0	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable
E	> 55.0 to 80.0	> 35.0 to 50.0	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences
F	> 80.00	> 50.0	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths

Source: Highway Capacity Manual 7th Edition (Transportation Research Board, 2022).

It should be noted that the Orange County Transportation Authority (OCTA) CMP designates all state highways and principal arterials within its jurisdiction as part of the CMPHS, which includes Imperial Highway near the study area. Peak period operating conditions are required to be evaluated using the *Intersection Capacity Utilization* (ICU) methodology for designated CMP

intersections. None of the study intersections are identified as designated CMP intersections and the latest HCM methodology was utilized for the intersection operations analysis.

Level of Service (LOS) Standards

Per the City's TIA Guidelines, LOS D is the minimum acceptable standard for City-maintained intersections, aligning with Orange County CMP requirements for designated CMP intersections. Within Brea, the designated CMP intersections include State College Boulevard at Imperial Highway, Valencia Avenue at Imperial Highway, and the SR-57 northbound and southbound ramps at Imperial Highway[5].

Existing (2023) Intersection Operations

Existing lane configurations and traffic volumes were used to evaluate operations at the study intersections under peak hour conditions. Signal timing was obtained for signalized intersections from the appropriate jurisdictions. The LOS results are summarized in **Table 3** and detailed LOS worksheets are provided in **Appendix C.** As shown in **Table 3**, the only signalized intersection operating at less than acceptable level of service is South Brea Boulevard & Imperial Highway during the AM peak period. Although the unsignalized intersections of South Flower Avenue at Imperial Highway and Sycamore Avenue at Imperial Highway both operate at acceptable levels of service, delays at the worst approach (southbound) were found to be deficient (over 35 seconds of delay) during most studied peak periods at each location.

Table 3: Existing (2023) Intersection Level of Service

Intersection		Control	Peak Period	Existing (2023)	
				LOS / Average Delay	LOS / Worst Movement
1	S. Brea Blvd & E. Birch St	Signalized	7 – 9 AM	D / 36.4	-
			10 AM -	D / 36.7	-
			1 – 3 PM	D / 44.9	-
			4 – 6 PM	D / 37.2	-
2	S. Orange Ave & E. Birch St	TWSC	7 – 9 AM	0.8	C / 19.4 (NB)
			10 AM -	0.8	C / 15.6 (NB)
			1 – 3 PM	0.8	C / 16.9 (NB)
			4 – 6 PM	1.5	D / 31.1 (NB)
3	S. Flower Ave & E. Birch St	Signalized	7 – 9 AM	B / 10.4	-
			10 AM -	A / 4.3	-
			1 – 3 PM	B / 11.9	-
			4 – 6 PM	A / 4.2	-

[5] Figure 4: 2023 CMP Level of Service Chart, OCTA CMP page 16

Intersection		Control	Peak Period	Existing (2023)	
				LOS / Average Delay	LOS / Worst Movement
4	Alley & E. Birch St	TWSC	7 – 9 AM	0.5	D / 31.7 (NB)
			10 AM -	0.1	B / 13.6 (NB)
			1 – 3 PM	0.2	C / 18.2 (SB)
			4 – 6 PM	0.2	C / 20.6 (NB)
5	S. Brea Blvd & Imperial Hwy	Signalized	7 – 9 AM	**E / 55.4**	-
			10 AM -	D / 39. 9	-
			1 – 3 PM	D / 43.7	-
			4 – 6 PM	D / 50.7	-
6	S. Orange Ave & Imperial Hwy	TWSC	7 – 9 AM	0.4	D / 29.6 (NB)
			10 AM -	0.3	C / 17.9 (NB)
			1 – 3 PM	0.4	C / 21.6 (SB)
			4 – 6 PM	0.4	D / 26.6 (SB)
7	S. Flower Ave & Imperial Hwy	TWSC	7 – 9 AM	37.5	**F / >200 (SB)**
			10 AM -	1.2	D / 30.3 (SB)
			1 – 3 PM	1.7	**F / 60.6 (SB)**
			4 – 6 PM	3.2	**F / 98.0 (SB)**
8	Sycamore Ave & Imperial Hwy	TWSC	7 – 9 AM	2.4	**F / >200 (SB)**
			10 AM -	0.5	**E / 44.5 (SB)**
			1 – 3 PM	0.9	**E / 46.4 (SB)**
			4 – 6 PM	1.1	**F / 120.1 (NB)**

Notes:

1. Whole intersection weighted average stopped delay expressed in seconds per vehicle for signalized intersections. Worst lane delay reported for two-way-stop-controlled (TWSC) intersections.
2. Two-Way Stop-Controlled (TWSC) intersections do not have an overall LOS grade because their operational performance is evaluated based on the delays experienced by individual minor approaches or movements that must yield to major road traffic. Elevated minor street delay may indicate difficulty identifying gaps for turning movements.
3. Delays at TWSC intersections can be amplified by methodology, but with few side-street vehicles counted, delays over 200 seconds likely exaggerates stop conditions under high major road volumes.
4. Delay operations were calculated using HCM 7th methodologies.
5. **Bold** symbolizes LOS E or worse

Source: Fehr & Peers, 2024.

Summary of LOS Findings

Existing signalized operations at most study intersections were found to perform at acceptable LOS during peak periods. Some individual approaches at the unsignalized intersections of South Flower Avenue at Imperial Highway and Sycamore Avenue at Imperial Highway experience delays for the southbound left turn movement. Due to the staggered schedule for the School's youngest students, the concentration of drop-off and pick-up related traffic during the peak periods was less pronounced. However, field observations of queue spillback onto Imperial Highway (westbound) and East Birch Street (eastbound) during the PM peak period demonstrate the opportunity for circulation and safety improvements. Additional analysis, documented within the Improvement Alternatives Chapter, was conducted to evaluate the viability of circulation changes to South Flower Avenue at the intersection of Imperial Highway (as conceptualized in past studies), and the effects of these alternatives on the surrounding roadway network.

Safety Assessment

This safety assessment systematically analyzes collision records near Laurel Elementary School to identify trends and safety concerns that may be mitigated through intersection or roadway improvements. This evaluation combines data of past crashes with field observations to develop recommendations that align with the Safe System Roadway Design Hierarchy.[6]

Data Collection

Collision data was collected for East Birch Street (between Brea Boulevard and Poplar Avenue) and E. Imperial Highway (between Brea Boulevard and Poplar Avenue) over a five-year study period (January 2019 – December 2023[7]). To ensure comprehensive data coverage, records were obtained from the City of Brea Police Department and cross-referenced with the Statewide Integrated Traffic Records System (SWITRS), resulting in a database of 94 reported collisions near the study area, 47 of which (50%) were related to the study intersections, while the remaining 47 (50%) occurred midblock or at intersections outside the study area. A summary of collisions related to the eight study intersections, and the associated severity is provided in **Table 4.**

Table 4: Summary of Collision at Study Intersections

Intersection	Intersection Related[8] Collisions (5 years)	Injury Collisions (5 years)	Fatal Collisions (5 years)
S. Brea Blvd & E. Birch St	10	4	0
S. Orange Ave & E. Birch St	0	0	0
S. Flower Ave & E. Birch St	6	1	0
Alley & E. Birch St	0	0	0
S. Brea Blvd & Imperial Hwy	22	6	0
S. Orange Ave & Imperial Hwy	4	2	0
S. Flower Ave & Imperial Hwy	3	2	0
Sycamore Ave & Imperial Hwy	2	0	0
Total Intersection Collisions	**47**	**15**	**0**

Additionally, in-person field observations conducted on a typical school day, as documented earlier in this report, provided insights beyond collision data alone, capturing near-miss incidents and traffic stress experienced by pedestrians and bicyclists. A heatmap of all analyzed collisions is presented in **Figure 4**.

[6] Federal Highway Administration (FHWA), 2024
[7] 2024 SWITRS data was provisional at the time of this assessment
[8] Less than 50 feet from intersection

Brea Laurel Elementary

Sparse

Dense

Figure 4

Collision Density (2019 - 2023)

Methodology

Guided by the Safe System approach, this assessment identifies key safety concerns by analyzing collision data, evaluating the associated risk factors, and identifying measures to address underlying conditions. The Safe System approach acknowledges that human mistakes are inevitable and focuses on designing roadways, speeds, vehicles, and behaviors to minimize crash severity and prevent serious injuries or fatalities.

The assessment begins with comprehensive collision data catalogue, capturing details such as crash type, severity, contributing factors, and roadway characteristics. Then the data was analyzed to identify patterns of treatable crashes. Given the school's location and the presence of frequent vulnerable users, special attention was given to school activity periods, trends involving pedestrians and bicyclists, and high-severity crash factors.

Collisions by Time

Over the past five years, there was an observable decrease in total collisions in the years 2020 and 2021, which was likely attributed by decrease in travel due to stay-at-home mandates during the height of the COVID-19 pandemic. Nationally, a decrease in overall travel was observed[9] for the same period, but collisions were associated with more severe outcomes[10], corresponding to an increase in the rate of speed-related fatalities. As demonstrated in **Figure 5**, collisions at study intersections demonstrate similar trends of collisions more frequently related to unsafe speed in 2021, however there were no collisions resulting in fatalities or serious injuries within the study period.

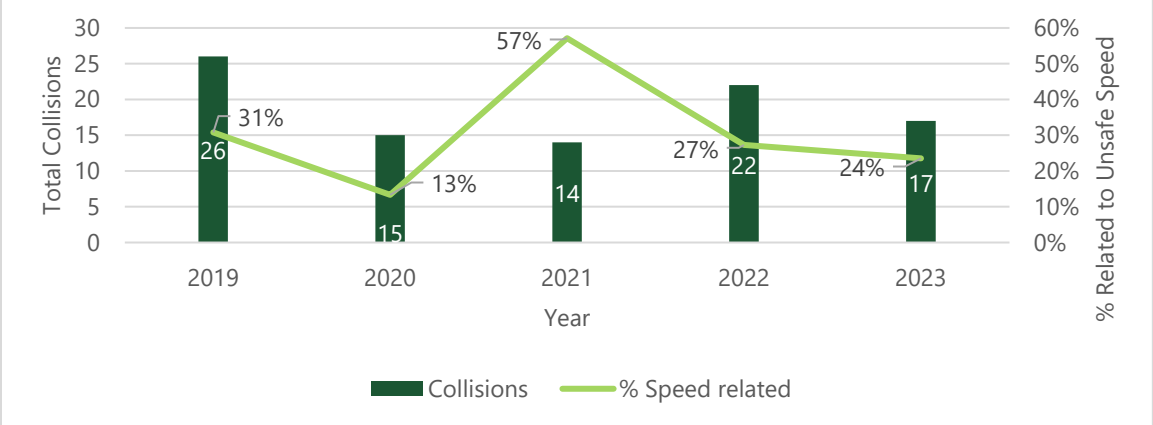


Figure 5: Collision by Year

[9] Monthly VMT data (FHWA), USDOT
[10] National Highway Traffic Safety Administration (NHTSA) Overview of Motor Vehicle Traffic Crashes in 2021

When grouped by months **(Figure 6)**, collision data reveals a higher frequency of crashes between August and March, compared to the spring and summer months, which experienced fewer incidents on average. Notably, despite the absence of school days in June, a high number of collisions were recorded within the study area.

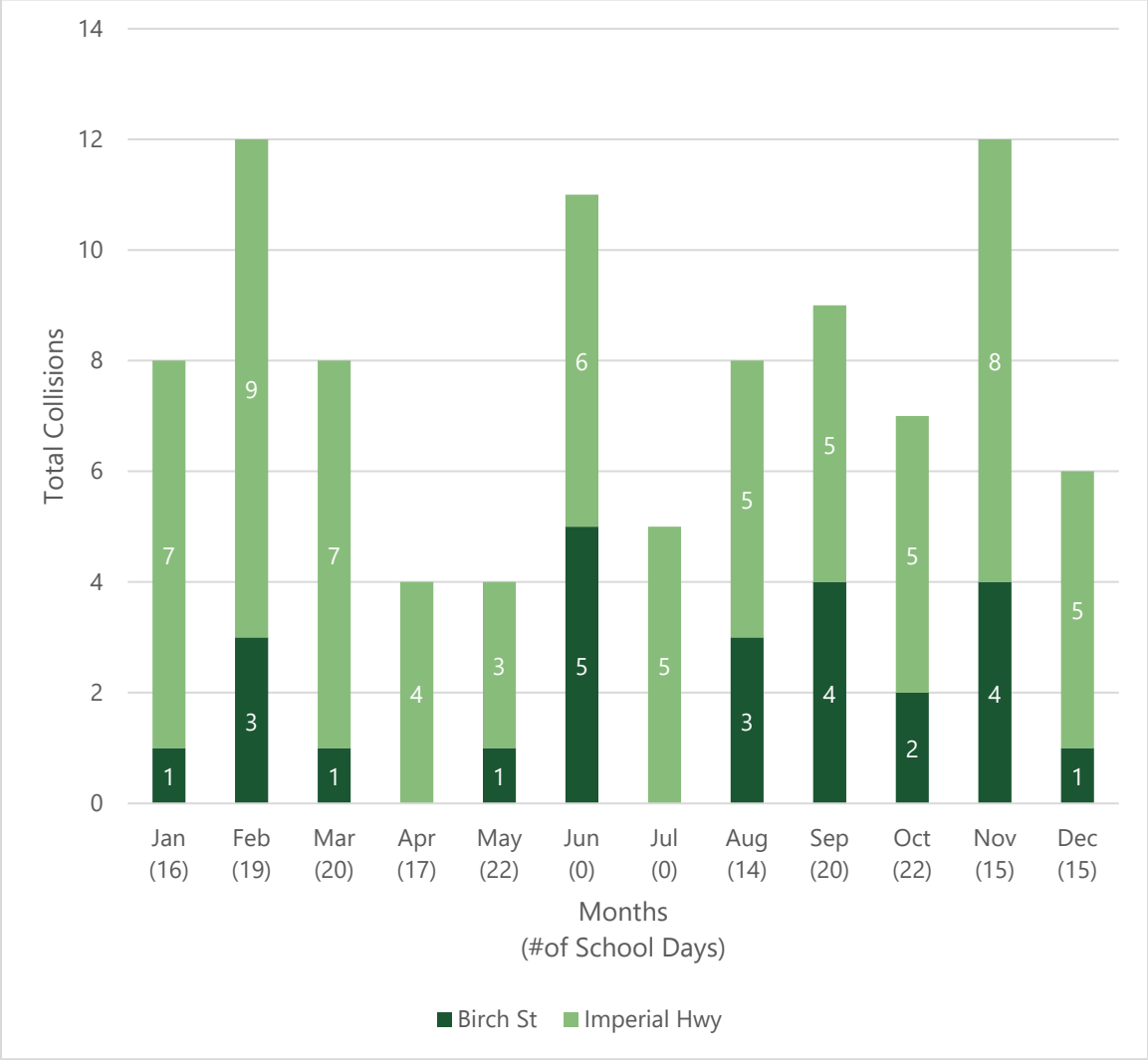


Figure 6: Collision by Month

As shown in **Figure 7**, 27% of all collisions along Imperial Highway occurred on Wednesdays, followed by 19% on Saturdays. Mondays, Tuesdays, and Thursdays experienced similar but below-average collision frequencies, while Fridays and Sundays recorded the fewest incidents. Along East Birch Street, collisions were most frequent on Saturdays, Thursdays, and Fridays.

During the school months (August through May), the rate of weekday collisions along Imperial Highway increased, suggesting a potential correlation with school-related traffic activity.

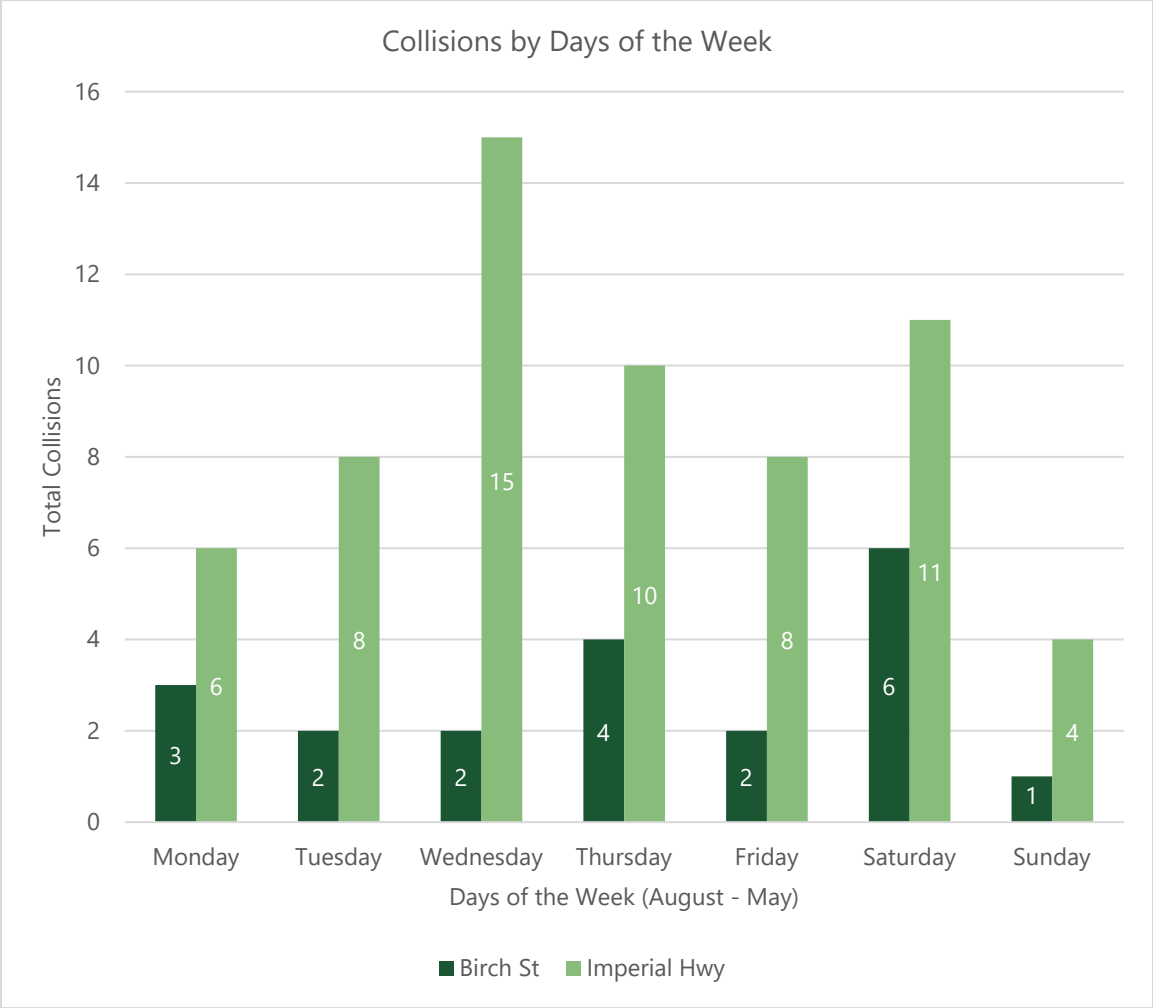


Figure 7: Collision by Days of the Week

Figure 8 represents a breakdown of collisions by time of day. On average, more collisions occurred during the hours between 11:00 am and 5:00 pm, with a similar peak at 7:00 am. This pattern generally aligns with typical morning peak hours of travel from 7:00 am to 9:00 am and afternoon peak hours of travel from 4:00 pm to 6:00 pm. However, the hours between 1:00 pm and 3:00 pm were associated with the highest rate of collisions, which typically aligned with school-related traffic during afternoon student let-out.

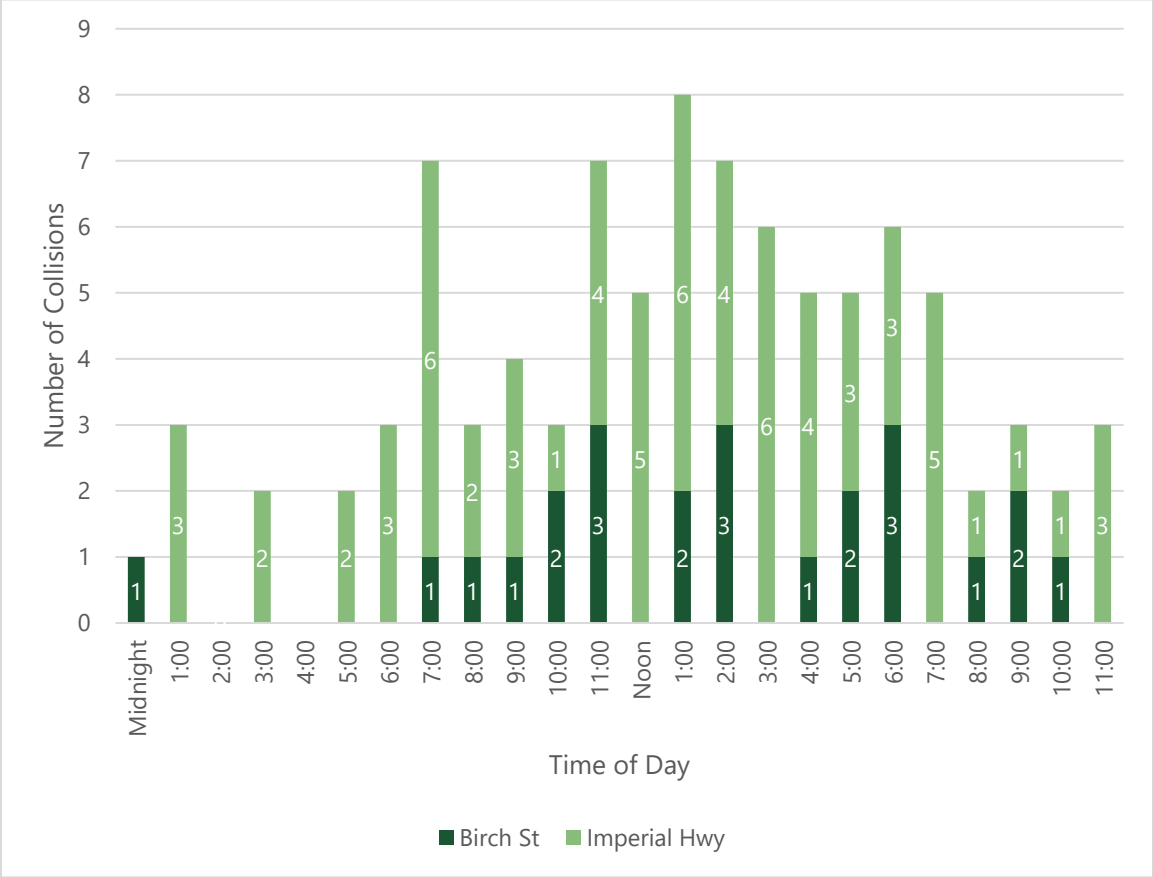


Figure 8: Collision by Time of Day

Collisions by Type and Location

Collisions involving pedestrians or cyclists are statistically more likely to result in serious injuries. Of the collisions analyzed by type **(Figure 9)**, only 5% involved either a pedestrian or a bicyclist, but these collisions contributed to 12% of all injuries, at nearly 2.5 times the likelihood of injury when compared to collisions between motor vehicles. Although a small percentage of all collisions involved pedestrians or cyclists, there may also be near misses which do not result in a collision, or high levels of traffic stress experienced during travel by these modes; both nuances should be considered in the evaluation of safety. These considerations were captured during in-person observations and discussed in the summary of findings.

Of all collisions, 39% were rear-end collisions, which are commonly associated with situations where drivers are unable to react to slowing or stopped vehicles. This type of collision is often associated with unexpected or sudden changes to roadway conditions where a driver has little time to react.

21% of all collisions were represented by broadside collisions, which can occur when drivers fail to negotiate the proper right-of-way when entering an intersection, execute improper turning movements, or fail to react when another driver unexpectedly enters the driver's path of travel. Opportunity and severity for these types of collisions is further exacerbated when drivers travel at high speeds.

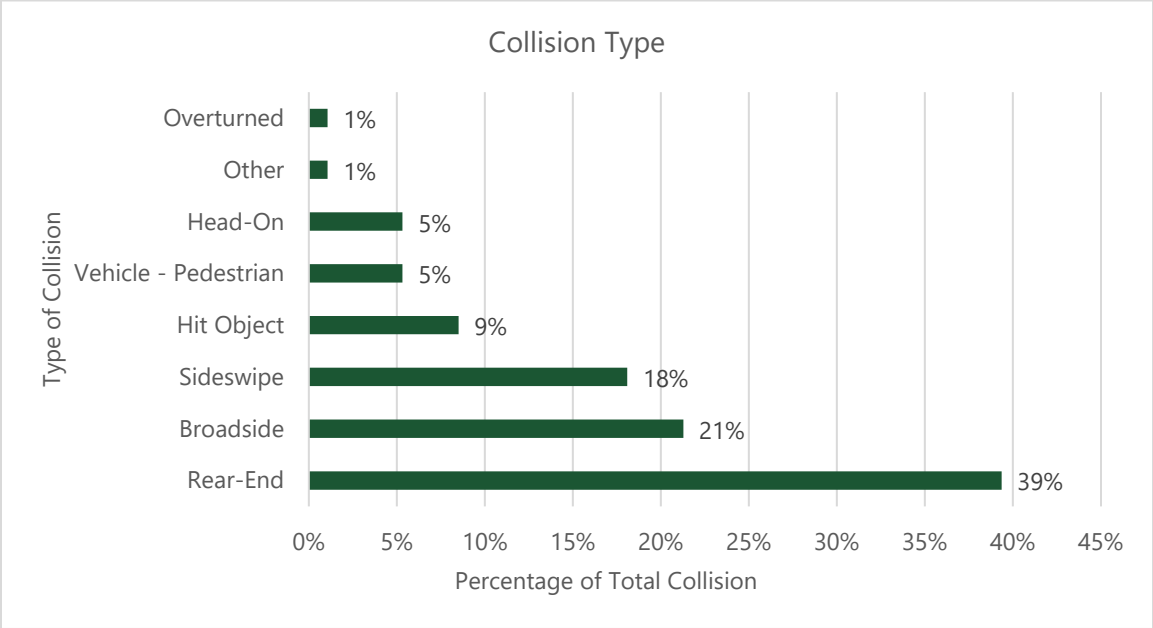


Figure 9: Collision by Type

Throughout the study period, 75% of all collisions occurred along Imperial Highway, where 80% of all pedestrian and bicyclist involved collisions occur, and where 65% of all collisions were rear-end or broadside collisions.

Collisions by Primary Collision Factor

Primary Collision Factor (PCF) refers to the largest contributing factors to a collision, which includes specific action, environment, vehicle, or roadway condition, or driver behavior that most directly resulted in the crash. Identifying the PCF is essential for understanding the root cause of crashes and for developing strategies to prevent similar incidents in the future.

Overall, speed related collisions represent roughly 30% of all reported collisions. 16% of all collisions were related to violation of auto right-of-way, while driving under the influence, unsafe lane change, and claims of inadequate, inconsistent, or confusing signage contributes to roughly

33% in total **(Figure 10)**. Nearly 96% of all collisions related to unsafe speeds occurred along Imperial Highway, where approximately 40% of all collisions involved unsafe speed as a PCF.

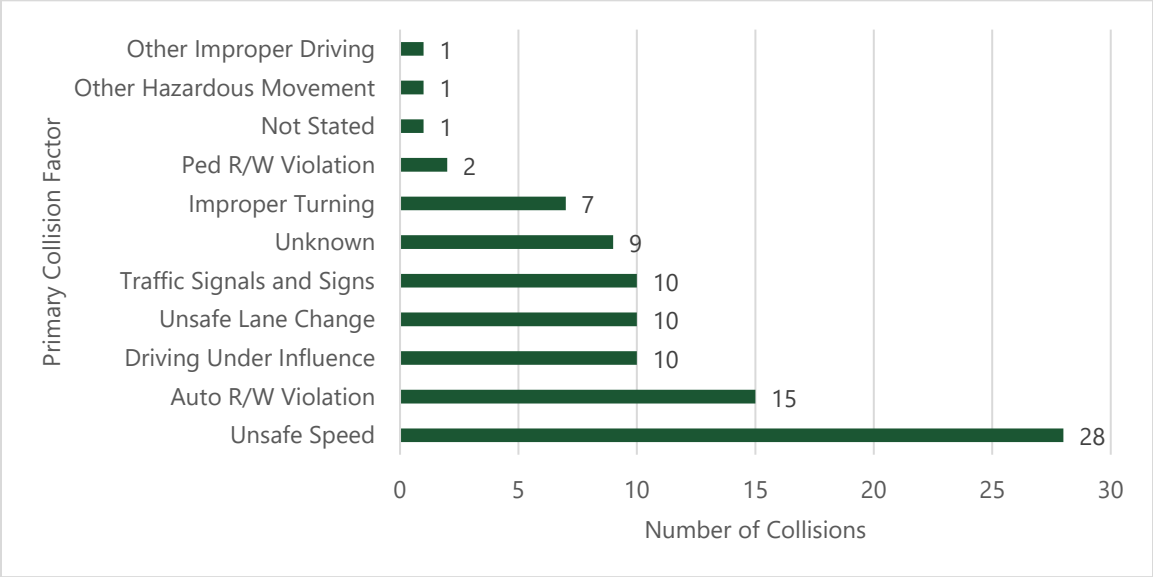


Figure 10: Collision by Primary Collision Factor

It should be considered that although only 30% of all collisions were associated with unsafe speeds as the primary factor, many of the other collision factors could be mitigated by reducing vehicle speeds, as drivers would have more time to react during potentially dangerous situations.

Summary of Findings

Analysis of the collision data confirms a general relationship between school related traffic and higher rates of collisions. More collisions occurred during the school months, similar to patterns exhibited throughout the weekdays, and reflected in hourly patterns over the course of a typical day. Collisions were found to occur more frequently along Imperial Highway when compared to East Birch Street, proportional to the traffic volumes on each roadway. The majority of crashes were attributed to drivers traveling at unsafe speeds as the primary collision factor, which also limits the ability of drivers to react to sudden and unexpected changes to roadway conditions and contribute as a secondary factor to many other collisions.

Additionally, queue spillbacks from South Flower Avenue (northbound) onto Imperial Highway (westbound) and from the school alley (southbound) onto East Birch Street (eastbound) were observed during afternoon school let out. As drivers stop within the intersections, along curb returns, and often blocking travel lanes, oncoming traffic was forced to abruptly stop or change lanes to avoid collisions, increasing risks of rear-end and sideswipe collisions.

Improvement Alternatives

Based on the operation and safety review of intersections and roadways surrounding Laurel Elementary Magnet School, the following alternatives have been evaluated as potential improvements. These recommendations are intended to improve safety by reducing conflicts and managing vehicle speeds without creating excessive vehicle delays. Conceptual design for each of the construction alternatives are provided in **Appendix D**. Descriptions and key features of each evaluated improvement alternative are summarized below.

Alternative 1: No Change to Existing Circulation

- Intersection geometry and vehicle movements at intersections would remain as existing
- Consider countermeasures with a focus on speed management, education for drivers and other road users to increase attentiveness and awareness

Alternative 2: Right-In-Right-Out at South Flower Avenue & Imperial Highway

- Restrict southbound movements on South Flower Avenue at Imperial Highway to right-turn only, reducing conflict points at the intersection
- Prohibit eastbound left turns from Imperial Highway onto South Flower Avenue, minimizing intersection delays and potential crash risk
- Maintain existing operations at all other study intersections while rerouting restricted movements to adjacent intersections
- Enhance driver attentiveness and awareness through clear signage, pavement markings, and educational outreach, ensuring smooth adaptation to the modified circulation pattern

Alternative 3: Cul-de-Sac South Flower Avenue & Imperial Highway

- Convert the southbound approach at South Flower Avenue & Imperial Highway into a cul-de-sac, eliminating direct vehicle access to Imperial Highway and reducing intersection conflict points
- Two variants of Alternative 3 were evaluated, 3A and 3B.
    - 3A – Conceptually designed to meet the minimum cul-de-sac radius for fire access at dead-end access roadways (40 ft).
    - 3B – Conceptually designed with reduced cul-de-sac radius (35 ft) and mountable curb to maintain fire access from Imperial Highway, to consider how reduced radius would affect additional right of way required.
- Redesign the pick-up/drop-off queue along both sides of Flower Avenue and around the cul-de-sac. Alternative 3 would eliminate queue spillback onto Imperial Highway that is currently observed.

- Maintain existing operations at all other study intersections while rerouting restricted movements to adjacent intersections, maintaining local access
- Enhance driver attentiveness and awareness through clear signage, wayfinding, and public outreach, guiding motorists to adjusted circulation patterns
- Improve pedestrian and bicyclist safety by reducing vehicle volumes and potential conflict points at the intersection, creating a more predictable and controlled traffic environment
- Eliminates cut-through traffic on South Flower Avenue, promoting a safer and quieter residential corridor

Alternative 4: South Flower Avenue Southbound One-Way Conversion

- Convert South Flower Avenue to southbound one-way between East Birch Street and Imperial Highway, with updated signage and striping
- Restrict southbound movements on South Flower Avenue at Imperial Highway to right-turn only, reducing conflict points at the intersection and midblock
- Remove the inbound movement from Imperial highway to eliminate queue spillback onto Imperial Highway during school drop-off and pick-up
- Implementation of traffic calming measures (e.g., speed tables or raised crosswalks) to support slower speeds and enhance safety for pedestrians, especially students
- Improve traffic predictability and safety near the school
- Reroute northbound local traffic, requiring public outreach and driver education
- Maintains neighborhood access southbound to Imperial Highway with limited disruption
- Low cost with minimal impact on drainage, emergency access, or Caltrans facilities

Evaluation of Alternatives

This section discusses the operational and safety analysis conducted for each improvement alternative. Each alternative was analyzed based on traffic volume adjustments, intersection delay (LOS), and potential conflict reduction, with particular attention to queue spillbacks, turning movement restrictions, and rerouted traffic patterns. Additionally, the assessment considers safety benefits associated with each modification, ensuring that proposed changes align with the Safe System approach and effectively balance mobility and safety improvements.

Safety Considerations

Physical changes to the roadway system are more effective than changes that rely on road users alone to make safe decisions. The design of safe roads should prioritize eliminating severe conflicts, then consider strategies to reduce vehicle speed and manage conflicts that are unavoidable. By restricting southbound and eastbound left turns at the intersection of South Flower Avenue and Imperial Highway, implementation of **Alternative 2** would eliminate left turn conflicts at the intersection and reduce the likelihood of rear-end, broadside, and pedestrian

related collisions[11]. Implementation of **Alternative 3** would further reduce conflicts between turning vehicles at the intersection in addition to preventing queue spillback onto Imperial Highway, therefore reducing the potential for rear-end and sideswipe collisions due to abrupt stopping and lane changes. **Alternative 4**, one way conversion of S. Flower Avenue, was contemplated to balance safety benefits and feasibility for implementation, which would achieve the desired safety objectives at a low cost, without impacting existing right of way, while maintaining southbound access to Imperial Highway (also northbound emergency access could be maintained if designed with mountable curbs).

Traffic Volume Adjustments

Based upon intersection turning movement data collected for the existing conditions analysis (October 2023), intersection volumes were developed for analysis of each considered improvement alternative according to anticipated rerouting of traffic from circulation changes. For each analysis, the volume and direction of travel were conserved. It was estimated that eastbound left turn volumes at South Flower Avenue and Imperial Highway originate from three routes: 40% from the northbound right turn at South Brea Boulevard and Imperial Highway, 40% from the eastbound through movement at South Brea Boulevard and Imperial Highway and the remaining 20% from elsewhere (i.e. South Orange Street or driveways entering Imperial Highway). These estimates provide a conservative approach considering traffic volume counts collected.

Alternative 2 Rerouting

Eastbound Left Turns – South Flower Avenue & Imperial Highway

- 40% of eastbound left turning vehicles at South Flower Avenue & Imperial Highway were estimated to originate from northbound right turns at South Brea Boulevard and Imperial Highway. These vehicles were expected to instead continue northbound through South Brea Boulevard and Imperial Highway and turn right at South Brea Boulevard and East Birch Street, then proceed straight through South Orange Avenue and East Birch Street and make a right turn at South Flower Avenue and East Birch Street to reach the original destination. **(Figure 11)**
- 40% of eastbound left turning vehicles at South Flower Avenue & Imperial Highway were estimated to originate from the eastbound through movement at South Brea Boulevard and Imperial Highway, which would reroute to make an eastbound left turn at South Brea Boulevard and Imperial Highway, then turn right at South Flower Avenue and East Birch Street to reach the original destination.
- 20% of eastbound left turning vehicles at South Flower Avenue & Imperial Highway were estimated from elsewhere (i.e. South Orange St or driveways entering Imperial Hwy), which would continue eastbound on Imperial Highway through the intersection and make

[11] SI 13 and 15 – Local Roadway Safety Manual (LRSM) – Caltrans, FHWA, SafeTrec, 2024

a U-turn at Sycamore Avenue and Imperial Highway, then make a westbound right at South Flower Avenue & Imperial Highway.

Southbound Left Turns – South Flower Avenue & Imperial Highway

- 100% of traffic would reroute to make a northbound right turn at South Flower Avenue and East Birch Street and continue eastbound through Alley and East Birch Street.

Alternative 3 Rerouting

In addition to rerouting per **Alternative 2**, turning movements (southbound and westbound right turns) at South Flower Avenue & Imperial Highway would also be restricted. **(Figure 12)**

Southbound Right Turn – South Flower Avenue & Imperial Highway

- Traffic would reroute to turn left at South Flower Avenue and East Birch Street, proceed straight through South Orange Avenue and East Birch Street, turn left at South Brea Boulevard and East Birch Street, and either proceed straight or turn right at South Brea Boulevard and Imperial Highway to reach the original destination.

Westbound Right Turn – South Flower Avenue & Imperial Highway

- Westbound right turn volumes at South Flower Avenue & Imperial Highway would instead proceed straight, then making a right turn at South Orange Avenue and Imperial Highway, right turn again at South Orange Avenue and East Birch Street, then right turn at South Flower Avenue and East Birch Street to reach the original destination.

Alternative 4 Rerouting

Under this alternative, South Flower Avenue would operate one-way in the southbound direction between East Birch Street and Imperial Highway. All northbound vehicle movements in this segment would be prohibited. **(Figure 13)**

Inbound vehicle movements, including eastbound left turn and westbound right turns at South Flower Avenue & Imperial Highway, would be rerouted as described by **Alternative 3**.

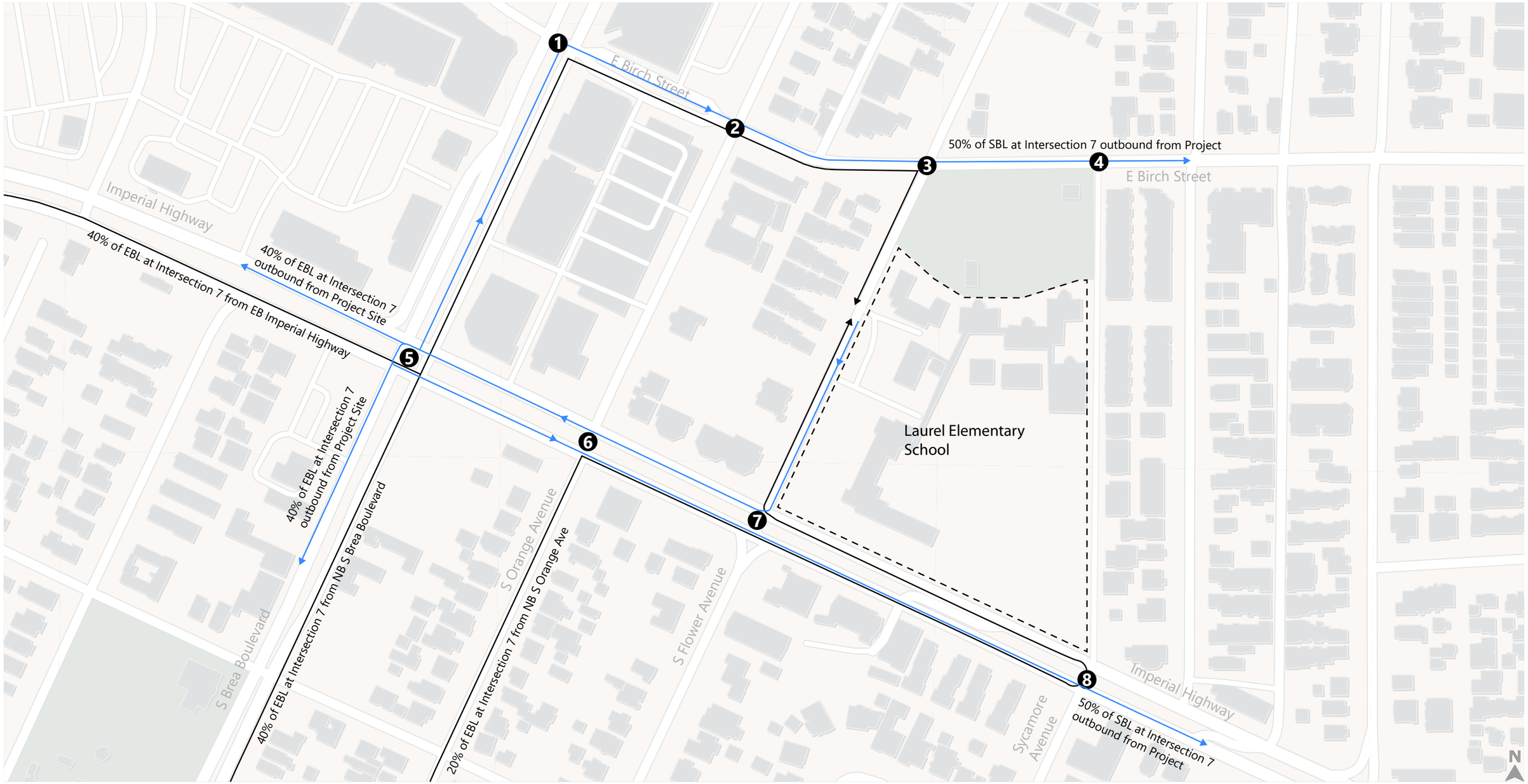


Figure 11

Alternative 2 (Right-In Right-Out) Rerouting

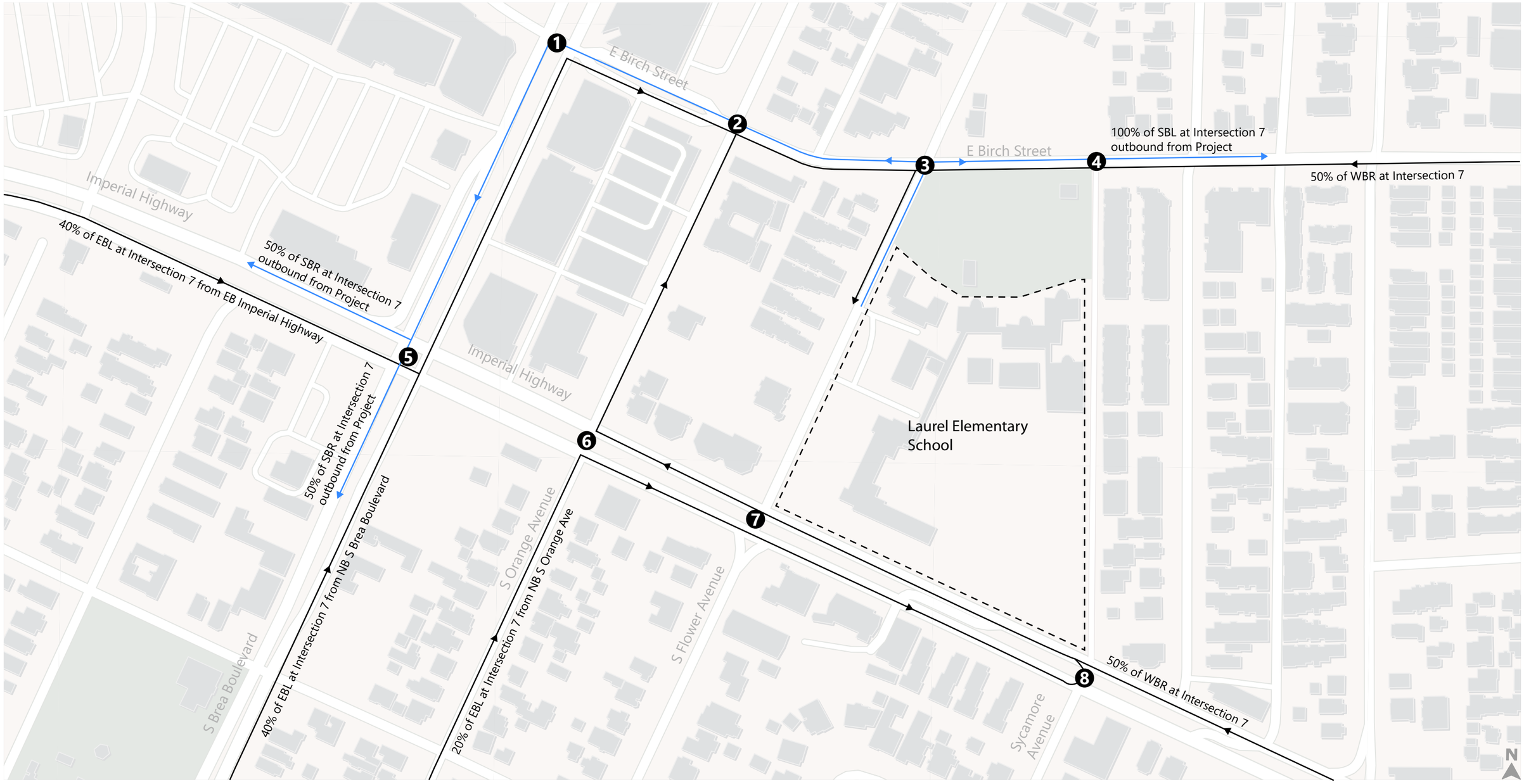


Figure 12

Alternative 3 (Cul-de-sac) Rerouting

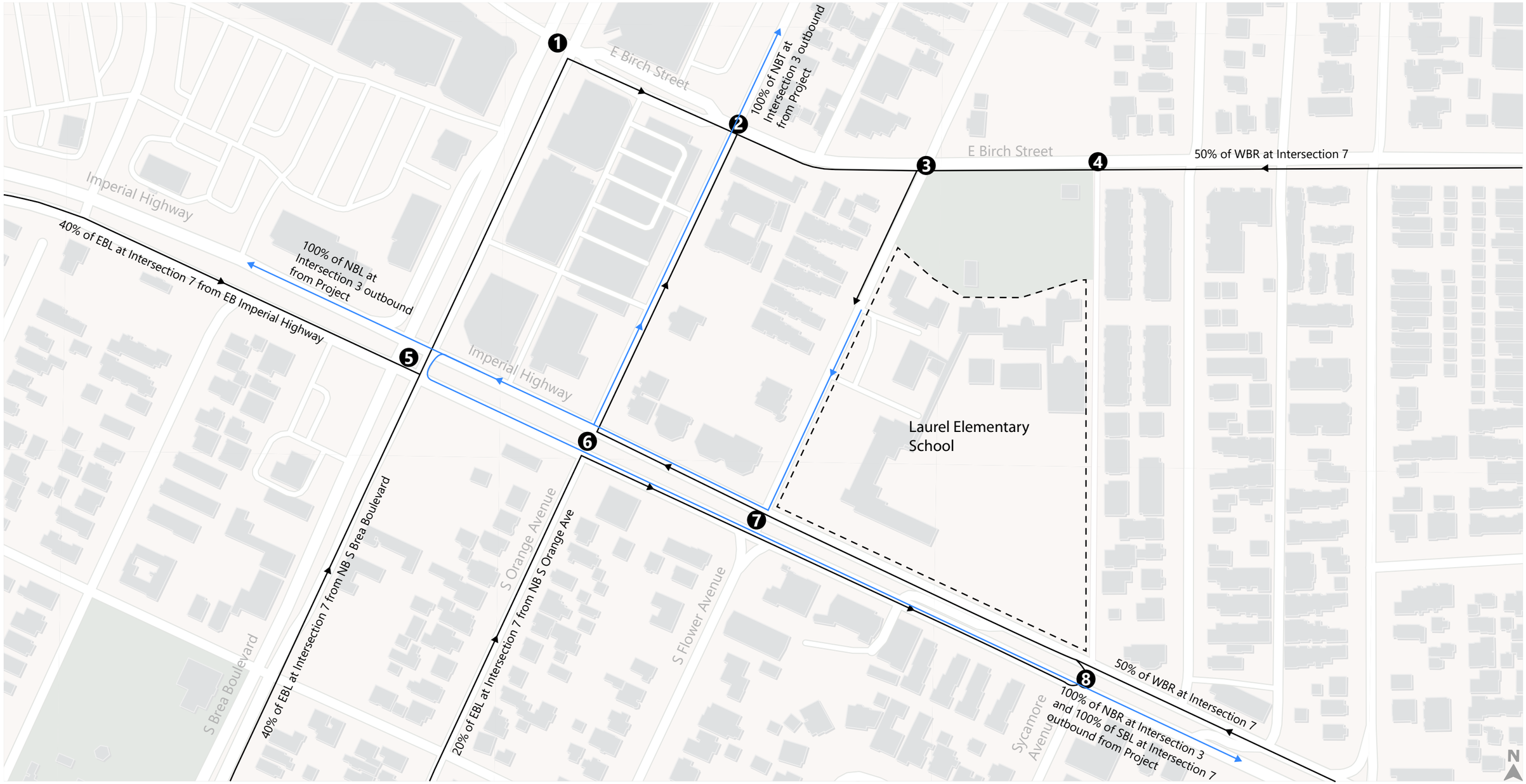


Figure 13

Alternative 4 (Southbound One-Way Conversion) Rerouting

Intersection Operations

Based on existing traffic volumes and change in circulation proposed by each alternative, vehicle delays were evaluated to determine the LOS for each study intersection with implementation of each improvement alternative. **Alternative 1** proposes no change to circulation and therefore study intersections would operate at existing LOS as shown in **Table 3**.

Alternative 2 LOS

Intersection LOS results for the implementation of **Alternative 2** are summarized in **Table 5,** and detailed LOS worksheets are provided in **Appendix E.** As shown in **Table 5**, operations at intersections 1 and 5 would marginally improve, while all other signalized intersections would operate similar to existing LOS.

The unsignalized intersection at South Flower Avenue and Imperial Highway would have improved operations with reduced side street delay, while the intersection of Sycamore Avenue and Imperial Highway would experience marginally increased delays for the southbound approach during peak periods.

Table 5: Alternative 2 Intersection Level of Service

Intersection		Control	Peak Hour	Existing (2023)		Alternative 2	
				LOS / Average Delay	Worst Delay	LOS / Average Delay	Worst Delay
1	S. Brea Blvd & E. Birch St	Signal	7-9 AM	D / 36.4	-	C / 33.7	-
			10 AM - Noon	D / 36.7	-	D / 35.4	-
			1-3 PM	D / 44.9	-	D / 44.9	-
			4-6 PM	D / 37.2	-	D / 36.1	-
2	S. Orange Ave & E. Birch St	TWSC	7-9 AM	0.8	C / 19.4 (NB)	0.9	C / 20.6 (NB)
			10 AM - Noon	0.8	C / 15.6 (NB)	0.8	C / 16.1 (NB)
			1-3 PM	0.8	C / 16.9 (NB)	0.8	C / 17.8 (NB)
			4-6 PM	1.5	D / 31.1 (NB)	1.6	D / 34.4 (NB)
3	S. Flower Ave & E. Birch St	Signal	7-9 AM	B / 10.4	-	A / 9.8	-
			10 AM - Noon	A / 4.3	-	A / 4.3	-
			1-3 PM	B / 11.9	-	B / 12.1	-
			4-6 PM	A / 4.2	-	A / 4.2	-
4	Alley & E. Birch St	TWSC	7-9 AM	0.5	D / 31.7 (NB)	0.5	D / 32.1 (NB)
			10 AM - Noon	0.1	B / 13.6 (NB)	0.1	B / 13.6 (NB)
			1-3 PM	0.2	C / 18.2 (SB)	0.2	C / 18.2 (SB)
			4-6 PM	0.2	C / 20.6 (NB)	0.2	C / 20.6 (NB)
5	S. Brea Blvd & Imperial Hwy	Signal	7-9 AM	**E / 55.4**	-	D / 54.6	**-**
			10 AM - Noon	D / 39. 9	-	D / 40.0	-
			1-3 PM	D / 43.7	-	D / 43.8	-
			4-6 PM	D / 50.7	-	D / 49.9	-

Intersection		Control	Peak Hour	Existing (2023)		Alternative 2	
				LOS / Average Delay	Worst Delay	LOS / Average Delay	Worst Delay
6	S. Orange Ave & Imperial Hwy	TWSC	7-9 AM	0.4	D / 29.6 (NB)	0.5	D / 32.5 (SB)
			10 AM - Noon	0.3	C / 17.9 (NB)	0.3	C / 17.8 (SB)
			1-3 PM	0.4	C / 21.6 (SB)	0.4	C / 22.3 (SB)
			4-6 PM	0.4	D / 26.6 (SB)	0.4	D / 28.0 (SB)
7	S. Flower Ave & Imperial Hwy	TWSC	7-9 AM	37.5	**F / >200 (SB)**	5.6	**F / 122.9 (SB)**
			10 AM - Noon	1.2	D / 30.3 (SB)	0.9	C / 23.4 (SB)
			1-3 PM	1.7	**F / 60.6 (SB)**	1	D / 30.6 (SB)
			4-6 PM	3.2	**F / 98.0 (SB)**	1.8	**F / 54.1** (SB)
8	Sycamore Ave & Imperial Hwy	TWSC	7-9 AM	2.4	**F / >200 (SB)**	3.2	**F / >200 (SB)**
			10 AM - Noon	0.5	**E / 44.5 (SB)**	0.6	**E / 47.2 (SB)**
			1-3 PM	0.9	**E / 46.4 (SB)**	1	**E / 49.3 (SB)**
			4-6 PM	1.1	**F / 120.1 (NB)**	1.4	**F / 152.6 (NB)**

Notes:

1. Whole intersection weighted average stopped delay expressed in seconds per vehicle for signalized intersections. Worst lane delay reported for two-way-stop-controlled (TWSC) intersections.
2. Delay operations were calculated using HCM 7th methodologies.
3. Two-Way Stop-Controlled (TWSC) intersections do not have an overall HCM Level of Service (LOS) grades because their operational performance is evaluated based on the delays experienced by individual minor approaches or movements that must yield to major road traffic.
4. Delays at TWSC intersections can be amplified by methodology, but with few side-street vehicles counted, delays over 200 seconds are likely exaggerative of stop conditions under high major road volumes.
5. **Bold** symbolizes LOS E or worse

Source: Fehr & Peers, 2024.

Alternative 3 LOS

The LOS results with the implementation of **Alternative 3** are summarized in **Table 6** and detailed LOS worksheets are provided in **Appendix F.** As shown in **Table 6**, all intersections would operate at existing or better LOS with the implementation of **Alternative 3** with exception to the signalized intersection at South Brea Boulevard and Imperial Highway, and the unsignalized intersection of Sycamore Avenue and Imperial Highway, where side street vehicle delays marginally worsen during peak periods. With the implementation of **Alternative 3,** operation of the intersection at South Brea Boulevard and Imperial Highway would improve marginally in the AM peak period but worse during the PM peak period.

Per the City of Brea TIA Guidelines (2020), "An effect on traffic operations occurs if the project causes one or more study intersections to operate at LOS D or better to degrade to LOS E or F; for intersections already operating at LOS E a change in control delay of 4 seconds and for intersections operating at LOS F a change in control delay of 2 seconds shall be considered unacceptable and cause an effect on traffic operations." Since the signalized intersection of South

Brea Blvd and Imperial Highway currently operates at LOS D during the PM peak period, improvements (such as signal timing updates) may be required to offset the effects on traffic operations during the afternoon peak (4-6 PM). It should be noted the number of peak periods intersection 5 operates at LOS E would not increase.

Table 6: Alternative 3 Intersection Level of Service

Intersection		Control	Peak Hour	Existing (2023)		Alternative 3	
				LOS / Average Delay	Worst Delay	LOS / Average Delay	Worst Delay
1	S. Brea Blvd & E. Birch St	Signal	7-9 AM	D / 36.4	-	D / 38.7	-
			10 AM - Noon	D / 36.7	-	D / 35.6	-
			1-3 PM	D / 44.9	-	D / 35.1	-
			4-6 PM	D / 37.2	-	D / 41.9	-
2	S. Orange Ave & E. Birch St	TWSC	7-9 AM	0.8	C / 19.4 (NB)	1.4	C / 17.5 (NB)
			10 AM - Noon	0.8	C / 15.6 (NB)	0.9	B / 13.9 (NB)
			1-3 PM	0.8	C / 16.9 (NB)	1	C / 15 (NB)
			4-6 PM	1.5	D / 31.1 (NB)	1.8	D / 27.7 (NB)
3	S. Flower Ave & E. Birch St	Signal	7-9 AM	B / 10.4	-	A / 9.0	-
			10 AM - Noon	A / 4.3	-	A / 5.7	-
			1-3 PM	B / 11.9	-	A / 6.6	-
			4-6 PM	A / 4.2	-	A / 6.9	-
4	Alley & E. Birch St	TWSC	7-9 AM	0.5	D / 31.7 (NB)	0.5	D / 34 (NB)
			10 AM - Noon	0.1	B / 13.6 (NB)	0.1	B / 14.2 (NB)
			1-3 PM	0.2	C / 18.2 (SB)	0.2	C / 23 (SB)
			4-6 PM	0.2	C / 20.6 (NB)	0.2	D / 27.1 (NB)
5	S. Brea Blvd & Imperial Hwy	Signal	7-9 AM	**E / 55.4**	-	D / 54.1	-
			10 AM - Noon	D / 39. 9	-	D / 41.7	-
			1-3 PM	D / 43.7	-	D / 46.2	-
			4-6 PM	D / 50.7	-	**E / 55.6**	-
6	S. Orange Ave & Imperial Hwy	TWSC	7-9 AM	0.4	D / 29.6 (NB)	0.1	D / 27.9 (NB)
			10 AM - Noon	0.3	C / 17.9 (NB)	0.2	C / 21.4 (NB)
			1-3 PM	0.4	C / 21.6 (SB)	0.2	C / 25.5 (NB)
			4-6 PM	0.4	D / 26.6 (SB)	0.2	D / 30.8 (NB)
7	S. Flower Ave & Imperial Hwy	TWSC	7-9 AM	37.5	**F / >200 (SB)**	0.1	D / 26.0 (NB)
			10 AM - Noon	1.2	D / 30.3 (SB)	0	C / 19.5 (NB)
			1-3 PM	1.7	**F / 60.6 (SB)**	0	C / 21.9 (NB)
			4-6 PM	3.2	**F / 98.0 (SB)**	0	C / 24.8 (NB)
8	Sycamore Ave & Imperial Hwy	TWSC	7-9 AM	2.4	**F / >200 (SB)**	2.8	**F / >200 (SB)**
			10 AM - Noon	0.5	**E / 44.5 (SB)**	0.6	**F / 51.5 (SB)**
			1-3 PM	0.9	**E / 46.4 (SB)**	1.1	**F / 58.2 (SB)**
			4-6 PM	1.1	**F / 120.1 (NB)**	1.8	**F / >200 (NB)**

Notes:

1. Whole intersection weighted average stopped delay expressed in seconds per vehicle for signalized intersections. Worst lane delay reported for two-way-stop-controlled (TWSC) intersections.
2. Delay operations were calculated using HCM 7th methodologies.

3. Two-Way Stop-Controlled (TWSC) intersections do not have an overall HCM Level of Service (LOS) grades because their operational performance is evaluated based on the delays experienced by individual minor approaches or movements that must yield to major road traffic.
4. Delays at TWSC intersections can be amplified by methodology, but with few side-street vehicles counted, delays over 200 seconds are likely exaggerative of stop conditions under high major road volumes.
5. **Bold** symbolizes LOS E or worse

Source: Fehr & Peers, 2024.

Alternative 4 LOS

The LOS results with the implementation of **Alternative 4** are summarized in **Table 6** and detailed LOS worksheets are provided in **Appendix G.** Implementation of **Alternative 4** would have similar effects on traffic operations as **Alternative 3** – the signalized intersection of South Brea Blvd and Imperial Highway would experience increase in vehicle delay during the AM (fewer than 2 seconds, which is considered to be within acceptable margins per the City of Brea Guidelines) and PM peak hours (improvements such as signal timing updates may be required), with reduced delays at all other signalized intersections.

Table 6: Alternative 4 Intersection Level of Service

Intersection		Control	Peak Hour	Existing (2023)		Alternative 4	
				LOS / Average Delay	Worst Delay	LOS / Average Delay	Worst Delay
1	S. Brea Blvd & E. Birch St	Signal	7-9 AM	D / 36.4	-	C / 33.5	-
			10 AM - Noon	D / 36.7	-	C / 33.4	-
			1-3 PM	D / 44.9	-	C / 32.5	-
			4-6 PM	D / 37.2	-	D / 35.3	-
2	S. Orange Ave & E. Birch St	TWSC	7-9 AM	0.8	C / 19.4 (NB)	4.5	**E / 38.4 (NB)**
			10 AM - Noon	0.8	C / 15.6 (NB)	1.1	B / 15 (NB)
			1-3 PM	0.8	C / 16.9 (NB)	2.9	D / 32.3 (NB)
			4-6 PM	1.5	D / 31.1 (NB)	2.6	**E / 39.3 (NB)**
3	S. Flower Ave & E. Birch St	Signal	7-9 AM	B / 10.4	-	A / 3.5	-
			10 AM - Noon	A / 4.3	-	A / 2.9	-
			1-3 PM	B / 11.9	-	A / 4.0	-
			4-6 PM	A / 4.2	-	A / 3.3	-
4	Alley & E. Birch St	TWSC	7-9 AM	0.5	D / 31.7 (NB)	0.5	D / 31.2 (SB)
			10 AM - Noon	0.1	B / 13.6 (NB)	0.1	B / 14.1 (NB)
			1-3 PM	0.2	C / 18.2 (SB)	0.2	C / 22.8 (SB)
			4-6 PM	0.2	C / 20.6 (NB)	0.2	D / 25.2 (NB)
5	S. Brea Blvd & Imperial Hwy	Signal	7-9 AM	**E / 55.4**	-	**E / 56.7**	-
			10 AM - Noon	D / 39. 9	-	D / 41.2	-
			1-3 PM	D / 43.7	-	D / 46.4	-
			4-6 PM	D / 50.7	-	**E / 56.9**	-
6	S. Orange Ave & Imperial Hwy	TWSC	7-9 AM	0.4	D / 29.6 (NB)	0.5	**E / 39.5 (SB)**
			10 AM - Noon	0.3	C / 17.9 (NB)	0.3	C / 22.9 (SB)
			1-3 PM	0.4	C / 21.6 (SB)	0.5	D / 32.7 (SB)
			4-6 PM	0.4	D / 26.6 (SB)	0.6	**E / 43.8 (SB)**

Intersection		Control	Peak Hour	Existing (2023)		Alternative 4	
				LOS / Average Delay	Worst Delay	LOS / Average Delay	Worst Delay
7	S. Flower Ave & Imperial Hwy	TWSC	7-9 AM	37.5	**F / >200 (SB)**	24	**F / >200 (SB)**
			10 AM - Noon	1.2	D / 30.3 (SB)	1.8	**E / 36.9 (SB)**
			1-3 PM	1.7	**F / 60.6 (SB)**	5	**F / 101.6 (SB)**
			4-6 PM	3.2	**F / 98.0 (SB)**	10.2	**F / >200 (SB)**
8	Sycamore Ave & Imperial Hwy	TWSC	7-9 AM	2.4	**F / >200 (SB)**	3.2	**F / >200 (SB)**
			10 AM - Noon	0.5	**E / 44.5 (SB)**	0.6	**F / 53.4 (SB)**
			1-3 PM	0.9	**E / 46.4 (SB)**	1.1	**F / 60 (SB)**
			4-6 PM	1.1	**F / 120.1 (NB)**	2.1	**F / >200 (NB)**

Notes:
1. Whole intersection weighted average stopped delay expressed in seconds per vehicle for signalized intersections. Worst lane delay reported for two-way-stop-controlled (TWSC) intersections.
2. Delay operations were calculated using HCM 7th methodologies.
3. Two-Way Stop-Controlled (TWSC) intersections do not have an overall HCM Level of Service (LOS) grades because their operational performance is evaluated based on the delays experienced by individual minor approaches or movements that must yield to major road traffic.
4. Delays at TWSC intersections can be amplified by methodology, but with few side-street vehicles counted, delays over 200 seconds are likely exaggerative of stop conditions under high major road volumes.
5. **Bold** symbolizes LOS E or worse

Source: Fehr & Peers, 2024.

Public Engagement

In June 2025, the City organized a public engagement event at the Public Works Yard. 450 mailers were sent to nearby residents, businesses, and other stakeholders as notification. Project alternatives evaluated in this study were exhibited for a 2-hour period to engage with attendees and solicit feedback. Below is a summary of the comments received during the event, and photos of the direct comments and the event are provided as **Appendix H**.

Alternative 1 – Existing

- Respondents notice significant queueing on Imperial Highway during peak periods and accidents or near-misses at the S. Flower Ave intersection
- On street parking north of the existing commercial driveway along S. Flower Ave leads to sight-distance concerns

Alternative 2 – Right-in-right-out

- Respondents are generally supportive of raised median closure along Imperial Highway
- Respondents recognize that queueing for the westbound right turn would likely still occur along Imperial Highway during peak periods
- Respondents suggest that westbound right turns (from Imperial Highway to S. Flower Ave) could be channelized into a turning lane to facilitate turning movement

- Change in circulation would require public education for potential changes to pick-up and drop-off traffic patterns
- Other improvements should be considered to increase awareness and foster safe behaviors
- Respondents were slightly concerned of additional traffic along E. Birch St. due to recirculation of traffic

Alternative 3A/3B – Cul-de-sac

- With S. Flower Ave reconfigured into a cul-de-sac in this alternative, respondents had concerns about drivers potentially stopping illegally along Imperial Highway at the existing intersection for convenience
- The cul-de-sac should be designed to limit congestion at the street terminus and to accommodate large vehicles including emergency response and school buses
- The new sidewalk component of the cul-de-sac should be designed to retain the aesthetics of the school frontage
- Other improvements should be considered to increase awareness and foster safe behaviors
- Respondents were slightly concerned of additional traffic along E. Birch St. due to recirculation of traffic

Alternative 4 – One way conversion

- Respondents are supportive of how this alternative would eliminate the northbound right turn (from S. Flower Ave to E. Birch St)
- Other improvements should be considered to increase awareness and foster safety (i.e. raised crosswalk at S. Flower Ave & Imperial Hwy)
- Improvement should be paired with public education and engagement

Conclusion

The implementation of **Alternatives 2** and **3** would both reduce vehicle conflicts, with **Alternative 3** offering additional benefits by also improving LOS at the intersections of South Brea Boulevard & Imperial Highway and at South Flower Avenue & Imperial Highway. While all alternatives reduce turning conflicts, **Alternatives 3** and **4** eliminate queue spillback of the westbound right-turning vehicles onto Imperial Highway during peak traffic, reducing the risk of rear-end and sideswipe collisions. Prior to implementation, a feasibility study should be conducted to assess right-of-way constraints and the impacts on utilities required to support roadway reconfiguration. Engineering documents for the preferred alternative should be developed after stakeholder discussions to advance funding opportunities. The table below summarizes the benefits and tradeoffs between the evaluated alternatives.

Alternative	Benefits	Tradeoffs
1. No Build (No Change)	- No cost or implementation time - Maintains current access and circulation patterns	- No improvement to existing conditions (e.g., pedestrian conflicts, queue spillback)
2. Right-In, Right-Out (RIRO) (3–6 months, low cost)	- Removes high-risk turning conflicts - Reduces queueing and intersection delay - Enhances pedestrian safety - Minimal drainage and lighting impacts - Supports median continuity along Imperial Hwy	- Alters circulation patterns; requires rerouting and more circuitous paths - Caltrans encroachment permit may be needed - Mountable design required for emergency access
3. Cul-de-Sac (18-36 months, high cost)	- Removes all turning conflicts at S. Flower Ave & Imperial Hwy - Eliminates queue spillback onto Imperial Hwy - Promotes walkability and supports downtown design goals - Aligns with long-term circulation plans	- High cost and design complexity - Right-of-way and utility impacts - Disrupts local vehicle access - requires rerouting and more circuitous paths - May increase travel speeds on Imperial Hwy adjacent to school due to reduced friction - Impact to Caltrans right-of-way, require Caltrans encroachment permit
4. One-Way Southbound (6-12 months, low cost)	- Removes high-risk turning conflicts - Eliminates queue spillback on onto Imperial Hwy - Improves pedestrian safety with midblock calming - Reduces cut-through traffic - Enhances predictability and local access - Minimal impact to Caltrans facilities	- Changes neighborhood circulation; requires rerouting and more circuitous paths - Requires substantial public outreach and driver education - Semi-permanent; future reversals may require redesign - May require Caltrans encroachment permit

Attachments

Appendix A – Brea Olinda Unified School District (BOUSD) Masterplan for Improvements

Appendix B – Traffic Count Data

Appendix C – Intersection Level of Service Worksheets (Existing)

Appendix D – Improvement Alternatives

Appendix E, F, G – Improvement Alternatives Level of Service Worksheets

Appendix H – Feedback from Public Engagement

Appendix A

BOUSD Masterplan for Improvements

SITE WORK	
S1	Create new bus drop-off
S2	Create new staff and guest parking lot
S3	Fencing - Chain link
S4	Fencing - Decorative
S6	Create new Kindergarten playground
S8	Create gathering space
S11	Create new Walkway
S12	Expand hard court playground
S13	Replace utilities
NEW CONSTRUCTION	
N1	Classroom and media center building
RECONFIGURATION	
R1	Redesign admininstration for security
R2	Convert classrooms to kindergartens

SELECTIVE DEMOLITION	
D1	Demolition of Relocatables
MODERNIZATION	
M1.1	Classroom building
M1.2	Classroom building
M1.3	Classroom building
M1.4	Classroom building
M1.5	Classroom building
M1.6	Classroom building
M1.7	Classroom building
M2	Multi-purpose

Appendix B

Traffic Count Data

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: S Brea Blvd
EAST & WEST: E Birch St

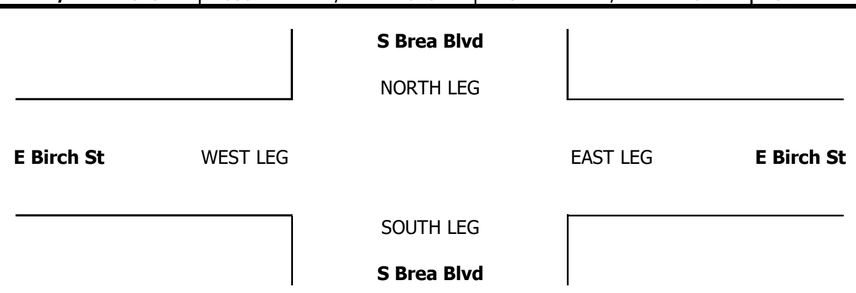
PROJECT #: SC4283
LOCATION #: 7
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

◄ W E ►
▲ N S ▼

		NORTHBOUND S Brea Blvd			SOUTHBOUND S Brea Blvd			EASTBOUND E Birch St			WESTBOUND E Birch St				U-TURNS				
	LANES:	NL 1	NT 3	NR 0	SL 2	ST 3	SR 0	EL 1	ET 0.5	ER 0.5	WL 2	WT 1	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	1	45	16	25	146	5	4	5	2	36	2	25	312	0	0	0	0	0
	7:15 AM	3	55	27	39	181	9	2	7	1	38	7	21	390	1	0	0	0	1
	7:30 AM	0	75	30	48	188	5	10	8	5	64	16	51	500	1	0	0	0	1
	7:45 AM	8	131	49	92	204	10	6	13	7	83	27	99	729	4	0	0	0	4
	8:00 AM	8	127	62	124	210	16	7	21	2	89	17	95	778	1	0	0	0	1
	8:15 AM	2	90	44	91	180	15	3	14	7	50	19	56	571	1	0	0	0	1
	8:30 AM	5	86	36	66	180	11	7	9	7	59	10	51	527	0	0	0	0	0
	8:45 AM	6	65	54	53	159	9	8	9	6	59	14	29	471	2	0	0	0	2
	VOLUMES	33	674	318	538	1,448	80	47	86	37	478	112	427	4,288	10	0	0	0	10
	APPROACH %	3%	65%	31%	26%	70%	4%	28%	51%	22%	47%	11%	42%						
	APP/DEPART	1,035	/	1,148	2,066	/	1,973	170	/	942	1,017	/	225	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	23	434	191	373	774	52	23	57	23	281	73	301	2,611					
	APPROACH %	4%	66%	29%	31%	65%	4%	22%	55%	22%	43%	11%	46%						
	PEAK HR FACTOR		0.826			0.856			0.858			0.783		0.838					
	APP/DEPART	654	/	758	1,199	/	1,084	103	/	621	655	/	148	0					
MD	09:45 AM	3	55	33	41	124	18	10	10	6	36	18	44	398	3	0	0	0	3
	10:00 AM	7	75	40	51	90	11	14	8	7	30	9	38	380	4	0	0	0	4
	10:15 AM	6	67	39	59	91	14	12	20	9	55	12	52	436	5	0	0	0	5
	10:30 AM	7	80	32	53	96	13	13	13	6	38	14	59	424	0	0	0	0	0
	10:45 AM	7	74	36	68	91	10	6	13	5	51	22	53	436	0	0	0	0	0
	11:00 AM	10	72	32	57	91	16	13	15	9	44	15	46	420	1	0	0	0	1
	11:15 AM	15	54	44	52	92	14	6	14	9	53	14	51	418	3	1	0	0	4
	11:30 AM	9	76	51	56	100	22	13	22	5	66	29	57	506	1	0	0	0	1
	11:45 AM	10	98	45	72	93	19	17	22	9	39	29	68	521	1	1	0	0	2
	VOLUMES	74	651	352	509	868	137	104	137	65	412	162	468	3,959	18	2	0	0	20
	APPROACH %	7%	59%	32%	34%	57%	9%	34%	45%	21%	40%	16%	45%						
	APP/DEPART	1,095	/	1,225	1,516	/	1,363	306	/	998	1,042	/	373	0					
	BEGIN PEAK HR		11:00 AM																
	VOLUMES	44	300	172	237	376	71	49	73	32	202	87	222	1,873					
	APPROACH %	8%	57%	33%	35%	55%	10%	32%	47%	21%	40%	17%	43%						
	PEAK HR FACTOR		0.847			0.927			0.802			0.840		0.895					
	APP/DEPART	522	/	573	686	/	616	154	/	482	511	/	202	0					



		ALL PED + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSING					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
AM	7:00 AM	2	0	1	2	5	1	0	1	1	3	1	0	0	1	2	0	0	0	0	0
	7:15 AM	0	1	2	1	4	0	1	0	0	1	0	0	2	1	3	0	0	0	0	0
	7:30 AM	3	4	0	2	9	2	3	0	1	6	1	0	0	1	2	0	1	0	0	1
	7:45 AM	2	3	5	1	11	1	2	1	1	5	0	0	2	0	2	1	1	2	0	4
	8:00 AM	2	6	4	2	14	2	6	1	1	10	0	0	2	1	3	0	0	1	0	1
	8:15 AM	1	0	0	3	4	1	0	0	0	1	0	0	0	3	3	0	0	0	0	0
	8:30 AM	1	5	5	1	12	1	5	5	1	12	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	2	0	1	3	0	2	0	1	3	0	0	0	0	0	0	0	0	0	0
	TOTAL	11	21	17	13	62	8	19	8	6	41	2	0	6	7	15	1	2	3	0	6
MD	9:45 AM	5	3	2	4	14	4	2	2	4	12	0	1	0	0	1	1	0	0	0	1
	10:00 AM	1	1	1	1	4	1	1	1	1	4	0	0	0	0	0	0	0	0	0	0
	10:15 AM	0	1	1	8	10	0	1	0	7	8	0	0	1	1	2	0	0	0	0	0
	10:30 AM	1	0	0	2	3	1	0	0	2	3	0	0	0	0	0	0	0	0	0	0
	10:45 AM	5	7	2	6	20	4	3	2	5	14	1	0	0	1	2	0	4	0	0	4
	11:00 AM	0	5	5	3	13	0	2	2	2	6	0	0	1	1	2	0	3	2	0	5
	11:15 AM	4	1	2	3	10	3	1	2	2	8	0	0	0	0	0	1	0	0	1	2
	11:30 AM	0	1	4	0	5	0	0	3	0	3	0	1	0	0	1	0	0	1	0	1
	11:45 AM	5	11	7	1	24	5	8	6	1	20	0	1	1	0	2	0	2	0	0	2
	TOTAL	21	30	24	28	103	18	18	18	24	78	1	3	3	3	10	2	9	3	1	15
	7:45 AM	6	14	14	7	41	5	13	7	3	28	0	0	4	4	8	1	1	3	0	5
	11:00 AM	9	18	18	7	52	8	11	13	5	37	0	2	2	1	5	1	5	3	1	10

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: S Brea Blvd
EAST & WEST: E Birch St

PROJECT #: SC4283
LOCATION #: 7
CONTROL: SIGNAL

NOTES:

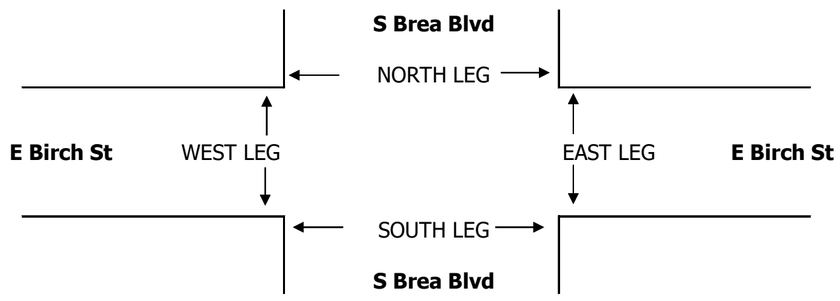
AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND S Brea Blvd			SOUTHBOUND S Brea Blvd			EASTBOUND E Birch St			WESTBOUND E Birch St			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	2	3	0	1	0.5	0.5	2	1	1	
1:00 PM	6	129	58	58	106	21	15	17	6	65	18	73	572
1:15 PM	11	93	48	72	108	12	18	25	8	66	27	75	563
1:30 PM	13	93	61	69	103	16	16	29	6	52	27	73	558
1:45 PM	11	113	67	83	136	7	16	28	7	57	26	91	642
2:00 PM	6	109	51	73	133	14	12	18	9	64	17	63	569
2:15 PM	17	126	45	79	123	13	10	26	10	81	29	105	664
2:30 PM	8	129	35	75	143	16	18	19	7	80	23	89	642
2:45 PM	9	160	63	75	131	6	16	14	6	54	32	86	652
MD VOLUMES	81	952	428	584	983	105	121	176	59	519	199	655	4,885
MD APPROACH %	5%	64%	29%	35%	59%	6%	34%	49%	17%	38%	14%	48%	
MD APP/DEPART	1,482	/	1,730	1,674	/	1,582	356	/	1,188	1,373	/	385	0
MD BEGIN PEAK HR	2:00 PM												
MD VOLUMES	40	524	194	302	530	49	56	77	32	279	101	343	2,542
MD APPROACH %	5%	68%	25%	34%	60%	6%	34%	47%	19%	39%	14%	47%	
MD PEAK HR FACTOR		0.814			0.938			0.897			0.841		0.950
MD APP/DEPART	772	/	924	882	/	855	165	/	573	723	/	190	0
4:00 PM	14	178	57	89	134	15	11	30	10	74	31	112	755
4:15 PM	10	154	74	100	137	23	15	26	6	78	24	94	741
4:30 PM	7	155	66	94	129	20	18	28	8	69	35	99	728
4:45 PM	15	171	60	97	151	24	15	20	5	88	33	94	773
5:00 PM	18	182	71	94	125	29	20	21	6	82	40	104	792
5:15 PM	14	169	66	128	134	15	17	32	11	84	46	106	822
5:30 PM	8	160	64	84	122	21	16	30	8	85	29	119	746
5:45 PM	22	131	61	83	140	22	18	20	11	88	44	97	737
PM VOLUMES	108	1,300	519	769	1,072	169	130	207	65	648	282	825	6,115
PM APPROACH %	6%	67%	27%	38%	53%	8%	32%	51%	16%	37%	16%	47%	
PM APP/DEPART	1,946	/	2,257	2,012	/	1,804	402	/	1,495	1,755	/	559	0
PM BEGIN PEAK HR	4:45 PM												
PM VOLUMES	55	682	261	403	532	89	68	103	30	339	148	423	3,144
PM APPROACH %	5%	68%	26%	39%	52%	9%	34%	51%	15%	37%	16%	46%	
PM PEAK HR FACTOR		0.930			0.922			0.838			0.964		0.952
PM APP/DEPART	1,008	/	1,174	1,025	/	911	201	/	767	910	/	292	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	
3	1	0	0	4
1	0	0	0	1
2	0	0	0	2
1	0	0	0	1
2	0	0	0	2
5	0	0	0	5
2	1	0	0	3
5	0	0	0	5
21	2	0	0	23
1	0	0	0	1
0	1	0	0	1
5	0	0	0	5
2	0	0	0	2
0	0	0	0	0
3	1	0	0	4
5	0	0	0	5
3	0	0	0	3
19	2	0	0	21



		ALL PEDS + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
MD	1:00 PM	1	8	1	3	13	0	6	1	3	10	0	1	0	0	1	1	1	0	0	2
MD	1:15 PM	1	9	4	1	15	1	5	3	1	10	0	3	1	0	4	0	1	0	0	1
MD	1:30 PM	1	4	3	5	13	1	4	3	3	11	0	0	0	2	2	0	0	0	0	0
MD	1:45 PM	1	3	7	5	16	1	3	7	4	15	0	0	0	0	0	0	0	0	1	1
MD	2:00 PM	3	5	3	2	13	3	5	3	2	13	0	0	0	0	0	0	0	0	0	0
MD	2:15 PM	0	6	0	2	8	0	5	0	2	7	0	1	0	0	1	0	0	0	0	0
MD	2:30 PM	0	8	2	7	17	0	6	2	4	12	0	2	0	3	5	0	0	0	0	0
MD	2:45 PM	6	3	0	2	11	6	3	0	2	11	0	0	0	0	0	0	0	0	0	0
MD	TOTAL	13	46	20	27	106	12	37	19	21	89	0	7	1	5	13	1	2	0	1	4
	BEGIN PEAK HR	2:00 PM					9	19	5	10	43										
PM	4:00 PM	3	4	4	0	11	2	4	2	0	8	1	0	2	0	3	0	0	0	0	0
PM	4:15 PM	6	8	12	8	34	5	6	12	5	28	1	1	0	3	5	0	1	0	0	1
PM	4:30 PM	4	6	18	2	30	4	6	17	2	29	0	0	1	0	1	0	0	0	0	0
PM	4:45 PM	15	9	13	12	49	15	8	12	12	47	0	0	1	0	1	0	1	0	0	1
PM	5:00 PM	25	7	14	9	55	23	5	13	7	48	0	1	1	2	4	2	1	0	0	3
PM	5:15 PM	14	11	23	17	65	13	10	23	17	63	0	1	0	0	1	1	0	0	0	1
PM	5:30 PM	16	8	13	5	42	16	8	13	5	42	0	0	0	0	0	0	0	0	0	0
PM	5:45 PM	7	19	22	23	71	7	19	22	23	71	0	0	0	0	0	0	0	0	0	0
PM	TOTAL	90	72	119	76	357	85	66	114	71	336	2	3	5	5	15	3	3	0	0	6
	BEGIN PEAK HR	4:45 PM					67	31	61	41	200										
	2:00 PM	9	22	5	13	49	9	19	5	10	43	0	3	0	3	6	0	0	0	0	0
	4:45 PM	70	35	63	43	211	67	31	61	41	200	0	2	2	2	6	3	2	0	0	5

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: S Orange Ave
EAST & WEST: E Birch St

PROJECT #: SC4283
LOCATION #: 4
CONTROL: STOP N/S

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W
E ►
S ▼

	NORTHBOUND S Orange Ave			SOUTHBOUND S Orange Ave			EASTBOUND E Birch St			WESTBOUND E Birch St				U-TURNS				
LANES:	NL 0	NT 1	NR 0	SL X	ST X	SR 1	EL 0	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM 7:00 AM	0	0	5	0	0	4	0	46	0	3	59	1	118	0	0	0	0	0
7:15 AM	2	1	2	0	0	5	0	72	3	4	57	1	147	0	0	0	0	0
7:30 AM	3	0	2	0	0	8	0	74	10	5	123	1	226	0	0	0	0	0
7:45 AM	2	1	6	0	0	3	0	140	13	7	222	1	395	0	0	0	0	0
8:00 AM	6	0	7	0	0	3	0	194	14	8	175	3	410	0	0	0	0	0
8:15 AM	4	0	5	0	0	2	1	137	10	1	127	2	289	1	0	0	0	1
8:30 AM	1	0	3	0	0	4	0	114	3	6	119	2	252	0	0	1	0	1
8:45 AM	5	0	3	0	0	4	0	115	5	6	98	2	238	0	0	0	0	0
VOLUMES	23	2	33	0	0	33	1	892	58	40	980	13	2,077	1	0	1	0	2
APPROACH %	39%	3%	56%	0%	0%	100%	0%	94%	6%	4%	95%	1%						
APP/DEPART	59	/	16	33	/	99	952	/	925	1,033	/	1,037	0					
BEGIN PEAK HR		7:45 AM																
VOLUMES	13	1	21	0	0	12	1	585	40	22	643	8	1,348					
APPROACH %	36%	3%	58%	0%	0%	100%	0%	93%	6%	3%	96%	1%						
PEAK HR FACTOR		0.692			0.750			0.754			0.732		0.822					
APP/DEPART	36	/	10	12	/	63	627	/	606	673	/	669	0					
MD 09:45 AM	1	0	5	0	0	4	0	82	2	5	99	2	200	0	0	0	0	0
10:00 AM	1	1	9	0	0	3	1	93	2	3	77	0	190	0	0	1	0	1
10:15 AM	2	0	2	0	0	2	0	112	5	0	119	0	242	0	0	0	0	0
10:30 AM	2	0	5	0	0	7	0	91	5	2	104	1	217	0	0	0	0	0
10:45 AM	1	0	5	0	0	7	0	111	8	4	118	0	254	0	0	0	0	0
11:00 AM	1	1	2	0	0	5	0	100	5	6	101	3	224	0	0	0	0	0
11:15 AM	2	0	4	0	0	1	0	97	10	7	114	2	237	0	0	0	0	0
11:30 AM	5	1	6	0	0	1	0	113	15	5	148	2	296	0	0	0	0	0
11:45 AM	1	1	4	0	0	7	2	128	11	7	135	2	298	0	0	0	0	0
VOLUMES	16	4	42	0	0	37	3	927	63	39	1,015	12	2,159	0	0	1	0	1
APPROACH %	26%	6%	68%	0%	0%	100%	0%	93%	6%	4%	95%	1%						
APP/DEPART	62	/	19	37	/	102	994	/	969	1,066	/	1,069	0					
BEGIN PEAK HR		11:00 AM																
VOLUMES	9	3	16	0	0	14	2	438	41	25	498	9	1,055					
APPROACH %	32%	11%	57%	0%	0%	100%	0%	91%	9%	5%	94%	2%						
PEAK HR FACTOR		0.583			0.500			0.853			0.858		0.885					
APP/DEPART	28	/	14	14	/	66	481	/	454	532	/	521	0					

S Orange Ave
NORTH LEG
E Birch St WEST LEG EAST LEG E Birch St
SOUTH LEG
S Orange Ave

		ALL PED + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSING					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
AM	7:00 AM	3	2	0	1	6	2	2	0	1	5	1	0	0	0	1	0	0	0	0	0
	7:15 AM	2	2	0	0	4	0	2	0	0	2	0	0	0	0	0	2	0	0	0	2
	7:30 AM	8	3	0	1	12	2	3	0	0	5	4	0	0	1	5	2	0	0	0	2
	7:45 AM	2	2	1	0	5	2	1	1	0	4	0	0	0	0	0	0	1	0	0	1
	8:00 AM	1	5	1	0	7	1	5	0	0	6	0	0	1	0	1	0	0	0	0	0
	8:15 AM	2	0	0	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	3	0	0	3	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	4	1	1	6	0	3	0	1	4	0	1	1	0	2	0	0	0	0	0
	TOTAL	18	21	3	3	45	9	19	1	2	31	5	1	2	1	9	4	1	0	0	5
MD	9:45 AM	0	2	1	1	4	0	1	0	1	2	0	1	1	0	2	0	0	0	0	0
	10:00 AM	2	1	0	0	3	1	1	0	0	2	0	0	0	0	0	1	0	0	0	1
	10:15 AM	1	1	1	1	4	1	1	1	1	4	0	0	0	0	0	0	0	0	0	0
	10:30 AM	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
	10:45 AM	3	2	0	0	5	3	2	0	0	5	0	0	0	0	0	0	0	0	0	0
	11:00 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	11:15 AM	0	5	0	0	5	0	3	0	0	3	0	2	0	0	2	0	0	0	0	0
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	0	4	0	0	4	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0
	TOTAL	8	16	2	2	28	7	11	1	2	21	0	5	1	0	6	1	0	0	0	1
	7:45 AM	5	10	2	0	17	5	9	1	0	15	0	0	1	0	1	0	1	0	0	1
	11:00 AM	1	9	0	0	10	1	5	0	0	6	0	4	0	0	4	0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: S Orange Ave
EAST & WEST: E Birch St

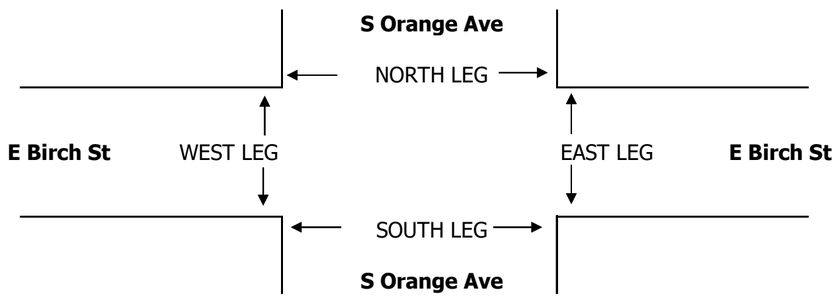
PROJECT #: SC4283
LOCATION #: 4
CONTROL: STOP N/S

NOTES:
Queue WB PM

AM
PM
MD
OTHER
OTHER

▲ N
◄ W
E ►
S ▼

		NORTHBOUND S Orange Ave			SOUTHBOUND S Orange Ave			EASTBOUND E Birch St			WESTBOUND E Birch St				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL X	ST X	SR 1	EL 0	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
MD	1:00 PM	3	1	5	0	0	4	0	130	2	1	158	1	305	0	0	1	0	1
	1:15 PM	2	0	6	0	0	1	0	134	5	2	160	2	312	0	0	0	0	0
	1:30 PM	0	0	6	0	0	2	0	151	9	0	147	1	316	0	0	0	0	0
	1:45 PM	3	1	9	0	0	2	1	170	7	3	160	3	359	0	0	0	0	0
	2:00 PM	2	2	9	0	0	2	0	137	8	1	146	1	308	0	0	0	1	1
	2:15 PM	0	0	13	0	0	4	0	141	11	3	221	2	395	0	0	0	1	1
	2:30 PM	3	0	7	0	0	8	1	129	2	2	168	4	324	0	0	0	0	0
	2:45 PM	2	0	7	0	0	3	1	150	4	4	154	2	327	0	0	0	0	0
	VOLUMES	15	4	62	0	0	26	3	1,142	48	16	1,314	16	2,649	0	0	1	2	3
	APPROACH %	19%	5%	77%	0%	0%	100%	0%	96%	4%	1%	97%	1%						
	APP/DEPART	81	/	23	26	/	64	1,194	/	1,206	1,348	/	1,356	0					
	BEGIN PEAK HR		1:45 PM																
	VOLUMES	8	3	38	0	0	16	2	577	28	9	695	10	1,388					
	APPROACH %	16%	6%	78%	0%	0%	100%	0%	95%	5%	1%	97%	1%						
	PEAK HR FACTOR		0.942			0.500			0.853			0.789		0.876					
	APP/DEPART	49	/	15	16	/	37	607	/	617	716	/	719	0					
PM	4:00 PM	4	1	5	0	0	6	2	167	7	2	218	3	415	0	0	0	0	0
	4:15 PM	1	3	6	0	0	14	3	187	11	5	178	7	415	0	0	0	0	0
	4:30 PM	0	1	5	0	0	7	1	181	11	5	208	3	422	0	0	0	0	0
	4:45 PM	1	2	8	0	0	7	2	157	14	11	198	3	403	0	0	1	0	1
	5:00 PM	2	0	14	0	0	8	2	167	19	14	215	6	447	0	0	0	0	0
	5:15 PM	3	0	7	0	0	14	4	198	18	7	235	6	492	0	0	0	0	0
	5:30 PM	7	2	6	0	0	4	1	163	15	14	228	4	444	0	0	0	1	1
	5:45 PM	3	1	11	0	0	8	0	142	25	16	210	7	423	0	0	0	0	0
	VOLUMES	21	10	62	0	0	68	15	1,362	120	74	1,690	39	3,463	0	0	1	1	2
	APPROACH %	23%	11%	67%	0%	0%	100%	1%	91%	8%	4%	94%	2%						
	APP/DEPART	93	/	64	68	/	194	1,498	/	1,425	1,804	/	1,780	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	15	3	38	0	0	34	7	670	77	51	888	23	1,807					
	APPROACH %	27%	5%	68%	0%	0%	100%	1%	89%	10%	5%	92%	2%						
	PEAK HR FACTOR		0.875			0.607			0.857			0.971		0.918					
	APP/DEPART	56	/	33	34	/	128	754	/	709	963	/	937	0					



		ALL PEDS + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
MD	1:00 PM	2	2	0	0	4	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	3	0	0	3	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0
	1:30 PM	2	2	0	0	4	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0
	1:45 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
	2:00 PM	2	4	0	0	6	1	4	0	0	5	1	0	0	0	1	0	0	0	0	0
	2:15 PM	0	3	0	0	3	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0
	2:30 PM	0	5	1	0	6	0	3	0	0	3	0	2	1	0	3	0	0	0	0	0
	2:45 PM	1	2	0	0	3	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0
	TOTAL	7	22	1	0	30	6	15	0	0	21	1	7	1	0	9	0	0	0	0	0
	BEGIN PEAK HR			1:45 PM			1	10	0	0	11										
PM	4:00 PM	1	5	1	0	7	0	4	0	0	4	1	1	1	0	3	0	0	0	0	0
	4:15 PM	3	1	0	0	4	2	1	0	0	3	1	0	0	0	1	0	0	0	0	0
	4:30 PM	0	2	1	0	3	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	3	0	0	3	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1
	5:00 PM	1	2	0	0	3	0	1	0	0	1	1	1	0	0	2	0	0	0	0	0
	5:15 PM	0	5	0	3	8	0	4	0	3	7	0	1	0	0	1	0	0	0	0	0
	5:30 PM	2	0	0	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0
	5:45 PM	2	3	0	0	5	2	3	0	0	5	0	0	0	0	0	0	0	0	0	0
	TOTAL	9	21	2	3	35	6	17	1	3	27	3	3	1	0	7	0	1	0	0	1
	BEGIN PEAK HR			5:00 PM			4	8	0	3	15										

1:45 PM	2	13	1	0	16	1	10	0	0	11	1	3	1	0	5	0	0	0	0	0
5:00 PM	5	10	0	3	18	4	8	0	3	15	1	2	0	0	3	0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

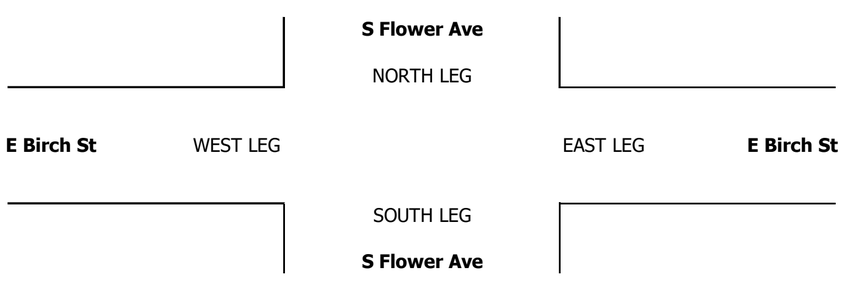
LOCATION: Brea
NORTH & SOUTH: S Flower Ave
EAST & WEST: E Birch St

PROJECT #: SC4283
LOCATION #: 6
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND S Flower Ave			SOUTHBOUND S Flower Ave			EASTBOUND E Birch St			WESTBOUND E Birch St				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	4	1	6	7	3	1	1	47	3	18	60	0	151	0	0	0	0	0
	7:15 AM	4	2	7	4	1	1	3	60	6	24	59	1	172	0	0	0	0	0
	7:30 AM	9	6	2	10	1	3	5	69	3	19	98	3	228	0	0	0	0	0
	7:45 AM	55	21	1	7	2	6	8	131	13	24	144	3	415	0	0	0	0	0
	8:00 AM	31	21	2	14	2	8	6	181	3	15	177	3	463	0	0	0	0	0
	8:15 AM	2	5	12	8	1	1	1	154	5	32	122	4	347	0	0	0	0	0
	8:30 AM	2	4	11	4	2	4	4	104	1	21	123	4	284	0	0	0	0	0
	8:45 AM	2	7	8	10	3	1	11	114	2	22	104	5	289	0	0	0	0	0
	VOLUMES	109	67	49	64	15	25	39	860	36	175	887	23	2,349	0	0	0	0	0
	APPROACH %	48%	30%	22%	62%	14%	24%	4%	92%	4%	16%	82%	2%						
	APP/DEPART	225	/	129	104	/	226	935	/	973	1,085	/	1,021	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	90	51	26	33	7	19	19	570	22	92	566	14	1,509					
	APPROACH %	54%	31%	16%	56%	12%	32%	3%	93%	4%	14%	84%	2%						
	PEAK HR FACTOR		0.542			0.615			0.804			0.862		0.815					
	APP/DEPART	167	/	84	59	/	121	611	/	629	672	/	675	0					
MD	09:45 AM	2	2	8	5	1	1	0	85	0	14	103	2	223	0	0	0	0	0
	10:00 AM	0	0	9	2	3	5	5	103	2	13	73	2	217	0	0	0	0	0
	10:15 AM	10	4	10	5	3	4	3	106	4	15	93	2	259	0	0	0	0	0
	10:30 AM	4	2	12	6	0	2	2	100	4	16	105	2	255	0	0	0	0	0
	10:45 AM	3	3	11	3	1	2	1	94	2	12	119	3	254	0	0	0	0	0
	11:00 AM	1	3	8	3	1	3	1	108	2	13	101	3	247	0	0	0	0	0
	11:15 AM	4	2	15	9	1	5	4	90	0	12	113	2	257	0	0	0	0	0
	11:30 AM	7	1	21	13	0	4	4	128	5	19	134	4	340	0	0	1	0	1
	11:45 AM	3	0	4	1	1	1	5	102	0	19	146	2	284	0	0	0	0	0
	VOLUMES	34	17	98	47	11	27	25	916	19	133	987	22	2,337	0	0	1	0	1
	APPROACH %	23%	11%	66%	55%	13%	32%	3%	95%	2%	12%	86%	2%						
	APP/DEPART	149	/	64	85	/	163	961	/	1,061	1,142	/	1,049	0					
	BEGIN PEAK HR		11:00 AM																
	VOLUMES	15	6	48	26	3	13	14	428	7	63	494	11	1,129					
	APPROACH %	22%	9%	70%	62%	7%	31%	3%	95%	2%	11%	87%	2%						
	PEAK HR FACTOR		0.595			0.618			0.815			0.850		0.828					
	APP/DEPART	69	/	31	42	/	73	450	/	502	568	/	523	0					



		ALL PED + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSING					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
AM	7:00 AM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
	7:15 AM	2	2	1	0	5	2	2	1	0	5	0	0	0	0	0	0	0	0	0	0
	7:30 AM	5	3	19	0	27	2	3	12	0	17	1	0	0	0	1	2	0	7	0	9
	7:45 AM	5	5	48	1	59	2	2	22	1	27	3	0	2	0	5	0	3	24	0	27
	8:00 AM	2	8	25	0	35	1	8	22	0	31	1	0	0	0	1	0	0	3	0	3
	8:15 AM	2	0	8	0	10	2	0	8	0	10	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	6	0	6	0	0	6	0	6	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	5	6	0	11	0	5	6	0	11	0	0	0	0	0	0	0	0	0	0
	TOTAL	17	23	113	1	154	9	20	77	1	107	6	0	2	0	8	2	3	34	0	39
MD	9:45 AM	2	1	0	1	4	0	1	0	1	2	2	0	0	0	2	0	0	0	0	0
	10:00 AM	1	1	6	0	8	1	1	5	0	7	0	0	0	0	0	0	0	1	0	1
	10:15 AM	1	0	16	0	17	1	0	14	0	15	0	0	0	0	0	0	0	2	0	2
	10:30 AM	1	1	3	0	5	1	1	3	0	5	0	0	0	0	0	0	0	0	0	0
	10:45 AM	1	2	1	0	4	1	2	1	0	4	0	0	0	0	0	0	0	0	0	0
	11:00 AM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
	11:15 AM	1	1	8	0	10	1	1	8	0	10	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	1	10	0	11	0	0	10	0	10	0	1	0	0	1	0	0	0	0	0
	11:45 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0
	TOTAL	7	9	45	1	62	5	6	42	1	54	2	3	0	0	5	0	0	3	0	3
	7:45 AM	9	13	87	1	110	5	10	58	1	74	4	0	2	0	6	0	3	27	0	30
	11:00 AM	1	4	19	0	24	1	1	19	0	21	0	3	0	0	3	0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: S Flower Ave
EAST & WEST: E Birch St

PROJECT #: SC4283
LOCATION #: 6
CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER

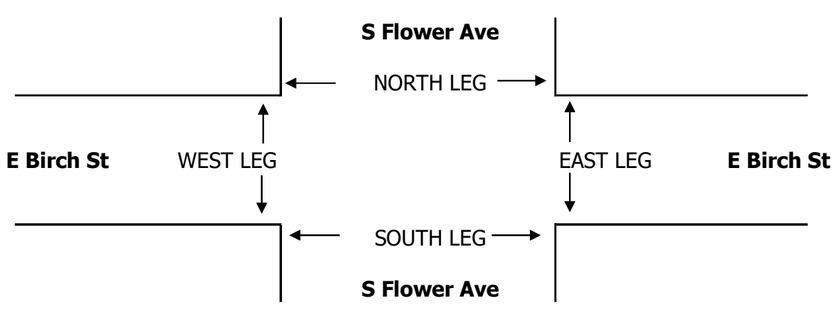
▲ N
◄ W
E ►
S ▼

		NORTHBOUND S Flower Ave			SOUTHBOUND S Flower Ave			EASTBOUND E Birch St			WESTBOUND E Birch St			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
MD	1:00 PM	5	3	11	2	0	0	5	128	3	15	150	2	324
	1:15 PM	3	6	9	3	1	5	4	148	1	8	169	1	358
	1:30 PM	0	4	14	6	1	1	5	140	0	9	147	1	328
	1:45 PM	4	10	8	7	1	0	7	164	2	14	152	8	377
	2:00 PM	5	6	0	14	4	10	16	141	6	13	144	10	369
	2:15 PM	22	25	4	18	3	15	5	144	2	8	176	3	425
	2:30 PM	5	2	11	6	2	12	6	124	1	17	170	2	358
	2:45 PM	3	2	18	3	2	3	2	155	1	12	158	3	362
	VOLUMES	47	58	75	59	14	46	50	1,144	16	96	1,266	30	2,907
	APPROACH %	26%	32%	42%	50%	12%	39%	4%	94%	1%	7%	91%	2%	
	APP/DEPART	180	/	138	119	/	126	1,216	/	1,278	1,392	/	1,365	0
	BEGIN PEAK HR		1:45 PM											
	VOLUMES	36	43	23	45	10	37	34	573	11	52	642	23	1,532
	APPROACH %	35%	42%	23%	49%	11%	40%	5%	92%	2%	7%	90%	3%	
	PEAK HR FACTOR		0.500			0.639			0.897			0.948		0.899
	APP/DEPART	102	/	100	92	/	73	621	/	641	717	/	718	0
PM	4:00 PM	5	1	13	4	0	2	4	162	1	17	216	5	430
	4:15 PM	8	2	11	5	0	5	3	180	4	9	187	6	420
	4:30 PM	3	1	9	4	2	4	7	172	2	13	192	3	412
	4:45 PM	3	1	11	9	0	3	6	165	2	22	212	5	439
	5:00 PM	9	3	6	2	1	5	4	155	1	22	224	6	438
	5:15 PM	9	5	17	8	1	3	7	196	4	16	213	2	481
	5:30 PM	5	1	18	6	0	3	4	176	2	9	244	5	473
	5:45 PM	15	2	12	7	0	6	5	144	5	14	230	3	443
	VOLUMES	57	16	97	45	4	31	40	1,350	21	122	1,718	35	3,544
	APPROACH %	34%	9%	57%	56%	5%	39%	3%	95%	1%	7%	92%	2%	
	APP/DEPART	170	/	91	80	/	147	1,418	/	1,493	1,876	/	1,813	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	38	11	53	23	2	17	20	671	12	61	911	16	1,838
	APPROACH %	37%	11%	52%	55%	5%	40%	3%	95%	2%	6%	92%	2%	
	PEAK HR FACTOR		0.823			0.808			0.851			0.958		0.953
	APP/DEPART	102	/	47	42	/	75	705	/	748	989	/	968	0

U-TURNS

MD	NB	SB	EB	WB	TTL
1:00 PM	0	0	3	0	3
1:15 PM	0	0	0	0	0
1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	0	0
2:00 PM	0	0	1	0	1
2:15 PM	0	0	1	0	1
2:30 PM	0	0	1	0	1
2:45 PM	0	0	0	0	0
	0	0	6	0	6

PM	NB	SB	EB	WB	TTL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	1	0	1
4:30 PM	0	0	1	0	1
4:45 PM	0	0	3	0	3
5:00 PM	0	0	1	0	1
5:15 PM	0	0	0	1	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	1	0	1
	0	0	7	1	8



		ALL PEDS + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
MD	1:00 PM	0	1	1	0	2	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0
	1:15 PM	3	3	0	0	6	3	2	0	0	5	0	1	0	0	1	0	0	0	0	0
	1:30 PM	1	2	1	0	4	1	0	1	0	2	0	2	0	0	2	0	0	0	0	0
	1:45 PM	3	2	3	0	8	3	1	3	0	7	0	1	0	0	1	0	0	0	0	0
	2:00 PM	2	2	26	0	30	1	2	23	0	26	1	0	0	0	1	0	0	3	0	3
	2:15 PM	0	7	88	0	95	0	5	55	0	60	0	1	1	0	2	0	1	32	0	33
	2:30 PM	1	4	2	0	7	0	3	2	0	5	1	1	0	0	2	0	0	0	0	0
	2:45 PM	1	2	0	0	3	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0
	TOTAL	11	23	121	0	155	9	16	85	0	110	2	6	1	0	9	0	1	35	0	36
	BEGIN PEAK HR			1:45 PM			4	11	83	0	98										
PM	4:00 PM	2	2	0	0	4	0	2	0	0	2	2	0	0	0	2	0	0	0	0	0
	4:15 PM	2	3	1	0	6	1	2	1	0	4	1	1	0	0	2	0	0	0	0	0
	4:30 PM	1	3	1	0	5	1	3	1	0	5	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	2	0	1	3	0	2	0	1	3	0	0	0	0	0	0	0	0	0	0
	5:00 PM	1	0	3	1	5	1	0	3	1	5	0	0	0	0	0	0	0	0	0	0
	5:15 PM	1	5	1	0	7	1	2	1	0	4	0	3	0	0	3	0	0	0	0	0
	5:30 PM	2	0	2	0	4	2	0	2	0	4	0	0	0	0	0	0	0	0	0	0
	5:45 PM	2	1	0	0	3	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0
	TOTAL	11	16	8	2	37	8	12	8	2	30	3	4	0	0	7	0	0	0	0	0
	BEGIN PEAK HR			5:00 PM			6	3	6	1	16										
	1:45 PM	6	15	119	0	140	4	11	83	0	98	2	3	1	0	6	0	1	35	0	36
	5:00 PM	6	6	6	1	19	6	3	6	1	16	0	3	0	0	3	0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE:				
Thu, Oct 26, 23	LOCATION:	Brea	PROJECT #:	SC4283
	NORTH & SOUTH:	DWY	LOCATION #:	5
	EAST & WEST:	E Birch St	CONTROL:	STOP N/S

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W
E ►
S ▼

	NORTHBOUND DWY			SOUTHBOUND DWY			EASTBOUND E Birch St			WESTBOUND E Birch St				U-TURNS				
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 2	ER 0	WL 0	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
7:00 AM	0	0	1	0	0	0	0	60	0	0	78	1	140	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	71	0	0	84	0	155	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	75	6	8	120	0	210	0	0	0	0	0
7:45 AM	2	0	0	0	0	0	0	128	11	28	169	2	340	0	0	0	0	0
8:00 AM	2	0	1	2	0	1	0	190	6	7	192	0	401	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	1	173	0	0	157	0	332	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	1	118	0	0	149	1	270	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	131	0	0	131	3	265	0	0	0	0	0
VOLUMES	5	0	3	2	0	2	2	946	23	43	1,080	7	2,113	0	0	0	0	0
APPROACH %	63%	0%	38%	50%	0%	50%	0%	97%	2%	4%	96%	1%						
APP/DEPART	8	/	9	4	/	66	971	/	951	1,130	/	1,087	0					
BEGIN PEAK HR		7:45 AM																
VOLUMES	5	0	2	2	0	1	2	609	17	35	667	3	1,343					
APPROACH %	71%	0%	29%	67%	0%	33%	0%	97%	3%	5%	95%	0%						
PEAK HR FACTOR		0.583			0.250			0.801			0.886		0.837					
APP/DEPART	7	/	5	3	/	52	628	/	613	705	/	673	0					
09:45 AM	0	0	1	1	1	0	0	98	0	0	119	0	220	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	114	0	0	88	1	203	0	0	0	0	0
10:15 AM	1	0	1	0	0	0	0	119	1	1	110	0	233	0	0	0	0	0
10:30 AM	1	0	0	0	0	0	0	117	1	0	122	1	242	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	1	106	1	2	134	0	244	0	0	0	0	0
11:00 AM	0	0	1	0	0	1	1	117	0	0	116	0	236	0	0	1	0	1
11:15 AM	0	0	2	0	0	0	0	112	2	3	128	0	247	0	0	0	0	0
11:30 AM	0	0	0	0	0	1	0	160	0	0	156	0	317	0	0	0	0	0
11:45 AM	0	1	1	0	0	0	0	107	0	0	167	0	276	0	0	0	0	0
VOLUMES	2	1	6	1	1	2	2	1,050	5	6	1,140	2	2,219	0	0	1	0	1
APPROACH %	22%	11%	67%	25%	25%	50%	0%	99%	0%	1%	99%	0%						
APP/DEPART	9	/	5	4	/	12	1,058	/	1,057	1,148	/	1,145	0					
BEGIN PEAK HR		11:00 AM																
VOLUMES	0	1	4	0	0	2	1	496	2	3	567	0	1,077					
APPROACH %	0%	20%	80%	0%	0%	100%	0%	99%	0%	1%	99%	0%						
PEAK HR FACTOR		0.625			0.500			0.781			0.853		0.849					
APP/DEPART	5	/	2	2	/	5	500	/	500	570	/	570	0					

DWY
NORTH LEG
E Birch St — WEST LEG — EAST LEG — E Birch St
SOUTH LEG
DWY

		ALL PED + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSING					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
AM	7:00 AM	1	2	0	0	3	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0
	7:15 AM	2	1	0	0	3	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0
	7:30 AM	3	4	0	0	7	0	2	0	0	2	2	0	0	0	2	1	2	0	0	3
	7:45 AM	7	19	0	0	26	5	10	0	0	15	0	0	0	0	0	2	9	0	0	11
	8:00 AM	2	2	0	0	4	1	2	0	0	3	1	0	0	0	1	0	0	0	0	0
	8:15 AM	3	1	0	0	4	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0
	8:30 AM	1	4	0	0	5	1	3	0	0	4	0	0	0	0	0	0	1	0	0	1
	8:45 AM	1	1	0	0	2	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0
	TOTAL	20	34	0	0	54	12	22	0	0	34	5	0	0	0	5	3	12	0	0	15
MD	9:45 AM	1	1	0	0	2	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0
	10:00 AM	1	3	0	0	4	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1
	10:15 AM	1	4	0	0	5	1	3	0	0	4	0	0	0	0	0	0	1	0	0	1
	10:30 AM	1	3	0	0	4	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0
	10:45 AM	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
	11:00 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	11:15 AM	1	2	0	0	3	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0
	11:30 AM	2	0	0	0	2	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
	11:45 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0
	TOTAL	9	16	0	0	25	7	11	0	0	18	1	3	0	0	4	1	2	0	0	3
	7:45 AM	13	26	0	0	39	10	16	0	0	26	1	0	0	0	1	2	10	0	0	12
	11:00 AM	4	4	0	0	8	3	1	0	0	4	0	3	0	0	3	1	0	0	0	1

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

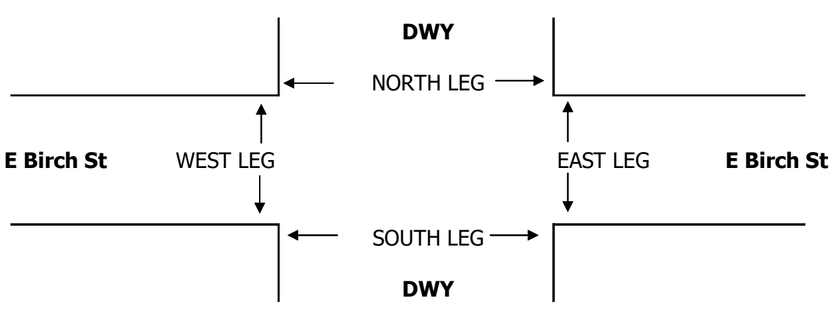
LOCATION: Brea
NORTH & SOUTH: DWY
EAST & WEST: E Birch St

PROJECT #: SC4283
LOCATION #: 5
CONTROL: STOP N/S

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND DWY			SOUTHBOUND DWY			EASTBOUND E Birch St			WESTBOUND E Birch St				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 2	ER 0	WL 0	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
MD	1:00 PM	0	0	0	0	0	0	0	141	0	0	167	0	308	0	0	0	0	0
	1:15 PM	2	0	1	0	0	1	0	158	2	0	175	0	339	0	0	0	0	0
	1:30 PM	0	0	1	0	0	0	0	155	4	3	159	0	322	0	0	0	0	0
	1:45 PM	0	0	0	0	0	0	0	169	10	7	174	3	363	0	0	0	1	1
	2:00 PM	0	0	1	0	0	3	2	149	4	0	164	3	326	0	0	0	1	1
	2:15 PM	0	0	0	1	0	0	0	158	7	9	187	2	364	0	0	0	0	0
	2:30 PM	0	0	0	1	0	0	1	140	0	0	190	0	332	0	0	0	0	0
	2:45 PM	0	0	1	0	0	0	0	175	0	0	173	0	349	0	0	1	0	1
	VOLUMES	2	0	4	2	0	4	3	1,245	27	19	1,389	8	2,706	0	0	1	2	3
	APPROACH %	33%	0%	67%	33%	0%	67%	0%	98%	2%	1%	98%	1%						
	APP/DEPART	6	/	11	6	/	46	1,276	/	1,253	1,418	/	1,396	0					
	BEGIN PEAK HR		1:45 PM																
	VOLUMES	0	0	1	2	0	3	3	616	21	16	715	8	1,387					
	APPROACH %	0%	0%	100%	40%	0%	60%	0%	96%	3%	2%	96%	1%						
	PEAK HR FACTOR		0.250			0.417			0.894			0.936		0.953					
	APP/DEPART	1	/	11	5	/	37	640	/	621	741	/	718	0					
PM	4:00 PM	0	0	0	0	0	0	3	174	2	2	238	0	419	0	0	0	0	0
	4:15 PM	2	0	1	2	0	0	0	193	1	0	200	0	399	0	0	0	0	0
	4:30 PM	0	0	1	0	0	1	0	184	1	1	209	1	398	0	0	0	0	0
	4:45 PM	1	0	3	0	0	0	0	184	1	0	238	0	427	0	0	0	0	0
	5:00 PM	0	0	1	0	0	0	0	162	1	1	252	0	417	0	0	0	0	0
	5:15 PM	3	0	3	0	0	0	3	218	0	0	229	0	456	0	0	0	0	0
	5:30 PM	0	0	2	0	0	0	0	195	5	0	260	1	463	0	0	0	0	0
	5:45 PM	0	0	1	0	0	0	0	162	1	0	247	1	412	0	0	0	0	0
	VOLUMES	6	0	12	2	0	1	6	1,472	12	4	1,873	3	3,391	0	0	0	0	0
	APPROACH %	33%	0%	67%	67%	0%	33%	0%	99%	1%	0%	100%	0%						
	APP/DEPART	18	/	9	3	/	16	1,490	/	1,486	1,880	/	1,880	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	4	0	9	0	0	0	3	759	7	1	979	1	1,763					
	APPROACH %	31%	0%	69%	0%	0%	0%	0%	99%	1%	0%	100%	0%						
	PEAK HR FACTOR		0.542			0.000			0.870			0.940		0.952					
	APP/DEPART	13	/	4	0	/	8	769	/	768	981	/	983	0					



		ALL PEDS + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
MD	1:00 PM	0	3	0	0	3	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0
	1:15 PM	3	3	0	0	6	3	1	0	0	4	0	1	0	0	1	0	1	0	0	1
	1:30 PM	2	3	0	0	5	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0
	1:45 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
	2:00 PM	4	10	0	0	14	3	10	0	0	13	1	0	0	0	1	0	0	0	0	0
	2:15 PM	2	67	0	0	69	0	16	0	0	16	0	1	0	0	1	2	50	0	0	52
	2:30 PM	1	8	0	0	9	0	6	0	0	6	1	2	0	0	3	0	0	0	0	0
	2:45 PM	1	3	0	0	4	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0
	TOTAL	13	98	0	0	111	9	39	0	0	48	2	8	0	0	10	2	51	0	0	53
	BEGIN PEAK HR			1:45 PM			3	33	0	0	36										
PM	4:00 PM	3	2	0	0	5	1	2	0	0	3	2	0	0	0	2	0	0	0	0	0
	4:15 PM	3	2	0	0	5	2	1	0	0	3	1	1	0	0	2	0	0	0	0	0
	4:30 PM	2	2	0	0	4	2	1	0	0	3	0	0	0	0	0	0	1	0	0	1
	4:45 PM	0	4	0	0	4	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2
	5:00 PM	4	2	0	0	6	3	2	0	0	5	1	0	0	0	1	0	0	0	0	0
	5:15 PM	0	9	0	0	9	0	4	0	0	4	0	4	0	0	4	0	1	0	0	1
	5:30 PM	3	6	0	0	9	3	4	0	0	7	0	2	0	0	2	0	0	0	0	0
	5:45 PM	2	9	0	0	11	2	6	0	0	8	0	3	0	0	3	0	0	0	0	0
	TOTAL	17	36	0	0	53	13	22	0	0	35	4	10	0	0	14	0	4	0	0	4
	BEGIN PEAK HR			4:45 PM			6	12	0	0	18										
	1:45 PM	7	86	0	0	93	3	33	0	0	36	2	3	0	0	5	2	50	0	0	52
	4:45 PM	7	21	0	0	28	6	12	0	0	18	1	6	0	0	7	0	3	0	0	3

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: S Brea Blvd
EAST & WEST: Imperial Hwy

PROJECT #: SC4283
LOCATION #: 8
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W
E ►
S ▼

		NORTHBOUND S Brea Blvd			SOUTHBOUND S Brea Blvd			EASTBOUND Imperial Hwy			WESTBOUND Imperial Hwy				U-TURNS				
	LANES:	NL 2	NT 3	NR 1	SL 2	ST 2	SR 1	EL 2	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	58	36	34	21	133	29	9	332	44	29	281	14	1,020	0	1	0	2	3
	7:15 AM	61	51	21	29	162	36	17	384	47	30	311	10	1,159	1	1	1	0	3
	7:30 AM	79	81	25	36	186	34	18	390	93	39	338	11	1,330	2	2	3	1	8
	7:45 AM	134	153	55	46	193	44	29	350	130	40	382	18	1,574	0	1	1	2	4
	8:00 AM	112	124	40	51	201	42	45	337	90	37	375	37	1,491	0	1	0	2	3
	8:15 AM	91	77	36	69	163	31	33	362	90	35	352	19	1,358	1	3	1	5	10
	8:30 AM	78	87	38	50	156	31	22	405	84	63	306	18	1,338	1	2	0	2	5
	8:45 AM	78	98	45	40	154	26	18	302	97	54	306	16	1,234	0	1	0	3	4
	VOLUMES	691	707	294	342	1,348	273	191	2,862	675	327	2,651	143	10,544	5	12	6	17	40
	APPROACH %	41%	42%	17%	17%	68%	14%	5%	77%	18%	10%	84%	5%						
	APP/DEPART	1,697	/	1,053	1,975	/	2,355	3,734	/	3,515	3,138	/	3,621	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	415	441	169	216	713	148	129	1,454	394	175	1,415	92	5,783					
	APPROACH %	40%	43%	16%	20%	66%	14%	7%	73%	20%	10%	84%	5%						
	PEAK HR FACTOR		0.751			0.919			0.968			0.938		0.916					
	APP/DEPART	1,027	/	669	1,084	/	1,284	1,979	/	1,850	1,693	/	1,980	0					
MD	09:45 AM	65	67	37	31	119	33	23	289	64	56	257	11	1,052	4	1	2	3	10
	10:00 AM	72	76	44	34	90	28	29	249	65	56	251	19	1,013	2	3	1	3	9
	10:15 AM	66	73	47	28	82	19	14	268	62	53	226	23	961	2	1	2	4	9
	10:30 AM	68	83	44	36	74	25	19	282	58	41	261	27	1,018	1	4	1	1	7
	10:45 AM	67	77	50	35	85	23	19	282	56	45	235	25	999	1	2	3	6	12
	11:00 AM	60	84	51	47	70	34	15	268	53	48	268	13	1,011	3	8	0	5	16
	11:15 AM	70	63	53	36	84	29	28	256	59	61	247	31	1,017	4	4	1	5	14
	11:30 AM	68	81	51	32	87	32	26	314	68	60	259	30	1,108	3	7	2	1	13
	11:45 AM	99	115	61	22	93	34	25	285	62	61	283	20	1,160	1	5	1	3	10
	VOLUMES	635	719	438	301	784	257	198	2,493	547	481	2,287	199	9,439	21	35	13	31	100
	APPROACH %	35%	40%	24%	22%	57%	19%	6%	77%	17%	16%	76%	7%						
	APP/DEPART	1,813	/	1,151	1,377	/	1,833	3,251	/	3,263	2,998	/	3,192	0					
	BEGIN PEAK HR		11:00 AM																
	VOLUMES	297	343	216	137	334	129	94	1,123	242	230	1,057	94	4,349					
	APPROACH %	34%	40%	25%	22%	54%	21%	6%	77%	17%	16%	76%	7%						
	PEAK HR FACTOR		0.785			0.981			0.892			0.950		0.929					
	APP/DEPART	867	/	555	624	/	817	1,463	/	1,490	1,395	/	1,487	0					

S Brea Blvd
NORTH LEG

Imperial Hwy WEST LEG EAST LEG **Imperial Hwy**

SOUTH LEG
S Brea Blvd

		ALL PED + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSING					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
AM	7:00 AM	0	2	1	1	4	0	0	0	0	0	0	1	1	1	3	0	1	0	0	1
	7:15 AM	1	0	2	1	4	0	0	0	0	0	0	0	2	1	3	1	0	0	0	1
	7:30 AM	4	0	2	3	9	1	0	0	0	1	1	0	1	0	2	2	0	1	3	6
	7:45 AM	4	5	8	2	19	1	1	1	2	5	0	0	2	0	2	3	4	5	0	12
	8:00 AM	0	4	11	2	17	0	4	3	1	8	0	0	3	1	4	0	0	5	0	5
	8:15 AM	1	1	0	5	7	0	0	0	1	1	0	1	0	3	4	1	0	0	1	2
	8:30 AM	0	2	0	6	8	0	2	0	3	5	0	0	0	3	3	0	0	0	0	0
	8:45 AM	1	1	4	3	9	0	0	0	2	2	1	1	0	1	3	0	0	4	0	4
	TOTAL	11	15	28	23	77	2	7	4	9	22	2	3	9	10	24	7	5	15	4	31
MD	9:45 AM	0	0	1	2	3	0	0	0	0	0	0	0	0	1	1	0	0	1	1	2
	10:00 AM	3	0	6	2	11	2	0	1	0	3	0	0	0	1	1	1	0	5	1	7
	10:15 AM	2	0	2	1	5	2	0	0	0	2	0	0	1	1	2	0	0	1	0	1
	10:30 AM	1	0	0	1	2	1	0	0	0	1	0	0	0	0	0	0	0	0	1	1
	10:45 AM	0	0	0	2	2	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
	11:00 AM	3	0	1	1	5	2	0	0	1	3	0	0	0	0	0	1	0	1	0	2
	11:15 AM	2	0	1	4	7	1	0	0	2	3	0	0	0	0	0	1	0	1	2	4
	11:30 AM	1	1	1	0	3	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0
	11:45 AM	1	0	5	2	8	1	0	1	1	3	0	0	1	1	2	0	0	3	0	3
	TOTAL	13	1	17	15	46	10	0	2	5	17	0	1	3	4	8	3	0	12	6	21
	7:45 AM	5	12	19	15	51	1	7	4	7	19	0	1	5	7	13	4	4	10	1	19
	11:00 AM	7	1	8	7	23	5	0	1	4	10	0	1	2	1	4	2	0	5	2	9

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: S Brea Blvd
EAST & WEST: Imperial Hwy

PROJECT #: SC4283
LOCATION #: 8
CONTROL: SIGNAL

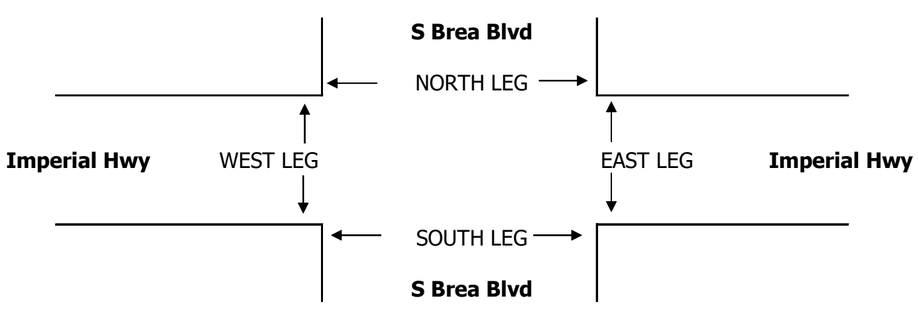
NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND S Brea Blvd			SOUTHBOUND S Brea Blvd			EASTBOUND Imperial Hwy			WESTBOUND Imperial Hwy			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	3	1	2	2	1	2	3	1	2	3	1	
MD 1:00 PM	93	124	54	29	92	28	39	246	73	68	310	29	1,185
1:15 PM	109	105	62	34	97	35	22	276	60	75	311	26	1,212
1:30 PM	72	112	51	40	116	38	23	291	65	59	327	24	1,218
1:45 PM	106	124	58	59	111	37	31	296	74	53	299	32	1,280
2:00 PM	96	114	59	46	138	33	32	298	71	69	282	22	1,260
2:15 PM	78	124	51	64	119	38	32	310	103	67	289	32	1,307
2:30 PM	89	126	63	54	136	32	25	305	119	97	329	28	1,403
2:45 PM	109	162	45	47	108	50	36	296	86	74	354	32	1,399
VOLUMES	752	991	443	373	917	291	240	2,318	651	562	2,501	225	10,378
APPROACH %	34%	45%	20%	23%	56%	18%	7%	72%	20%	17%	75%	7%	
APP/DEPART	2,205	/	1,503	1,628	/	2,149	3,223	/	3,168	3,322	/	3,558	0
BEGIN PEAK HR		2:00 PM											
VOLUMES	372	526	218	211	501	153	125	1,209	379	307	1,254	114	5,418
APPROACH %	33%	47%	19%	24%	57%	17%	7%	70%	22%	18%	74%	7%	
PEAK HR FACTOR		0.885			0.965			0.957			0.913		0.959
APP/DEPART	1,122	/	784	884	/	1,193	1,718	/	1,657	1,694	/	1,784	0
PM 4:00 PM	112	169	47	42	153	37	37	320	101	48	359	41	1,466
4:15 PM	108	152	50	45	144	49	40	316	71	65	372	39	1,451
4:30 PM	99	148	53	49	116	46	55	318	104	53	394	39	1,474
4:45 PM	109	183	57	37	157	58	30	370	93	52	335	32	1,513
5:00 PM	110	190	77	35	128	36	40	357	103	54	424	37	1,591
5:15 PM	100	182	59	57	144	46	50	411	112	59	394	47	1,661
5:30 PM	124	152	71	42	142	39	45	342	96	43	370	46	1,512
5:45 PM	102	143	47	40	130	48	41	277	90	64	396	42	1,420
VOLUMES	864	1,319	461	347	1,114	359	338	2,711	770	438	3,044	323	12,186
APPROACH %	33%	50%	17%	19%	60%	19%	9%	71%	20%	11%	80%	8%	
APP/DEPART	2,657	/	2,028	1,868	/	2,335	3,838	/	3,537	3,823	/	4,286	0
BEGIN PEAK HR		4:45 PM											
VOLUMES	443	707	264	171	571	179	165	1,480	404	208	1,523	162	6,327
APPROACH %	31%	50%	19%	18%	60%	19%	8%	72%	20%	11%	80%	9%	
PEAK HR FACTOR		0.940			0.916			0.897			0.923		0.948
APP/DEPART	1,421	/	1,058	945	/	1,190	2,056	/	1,927	1,905	/	2,152	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	
3	3	0	1	7
2	7	4	8	21
3	8	3	4	18
5	10	2	2	19
2	3	3	5	13
2	3	1	9	15
1	7	0	1	9
1	6	1	4	12
19	47	14	34	114
1	3	5	0	9
2	7	2	1	12
1	4	3	3	11
3	6	1	7	17
1	7	3	1	12
1	5	0	2	8
2	6	3	2	13
2	10	2	2	16
13	48	19	18	98



		ALL PEDS + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
MD	1:00 PM	3	2	1	2	8	2	2	1	2	7	0	0	0	0	0	1	0	0	0	1
	1:15 PM	3	0	3	1	7	1	0	2	1	4	0	0	0	0	0	2	0	1	0	3
	1:30 PM	0	0	3	2	5	0	0	1	1	2	0	0	2	1	3	0	0	0	0	0
	1:45 PM	2	1	0	3	6	1	1	0	2	4	0	0	0	1	1	1	0	0	0	1
	2:00 PM	5	1	2	2	10	1	1	1	2	5	0	0	1	0	1	4	0	0	0	4
	2:15 PM	8	3	6	3	20	3	1	3	1	8	1	0	0	1	2	4	2	3	1	10
	2:30 PM	3	3	4	7	17	1	3	1	4	9	0	0	1	2	3	2	0	2	1	5
	2:45 PM	2	1	1	2	6	1	1	1	2	5	0	0	0	0	0	1	0	0	0	1
	TOTAL	26	11	20	22	79	10	9	10	15	44	1	0	4	5	10	15	2	6	2	25
	BEGIN PEAK HR	2:00 PM					6	6	6	9	27										
PM	4:00 PM	5	0	5	3	13	2	0	0	1	3	0	0	2	2	4	3	0	3	0	6
	4:15 PM	1	2	3	4	10	0	1	3	0	4	1	1	0	2	4	0	0	0	2	2
	4:30 PM	2	0	0	5	7	1	0	0	2	3	0	0	0	1	1	1	0	0	2	3
	4:45 PM	2	3	2	5	12	2	0	0	2	4	0	2	1	0	3	0	1	1	3	5
	5:00 PM	0	1	4	2	7	0	0	1	0	1	0	1	2	1	4	0	0	1	1	2
	5:15 PM	2	4	0	6	12	1	1	0	1	3	0	0	0	0	0	1	3	0	5	9
	5:30 PM	1	1	2	2	6	1	0	1	1	3	0	0	0	0	0	0	1	1	1	3
	5:45 PM	0	1	1	3	5	0	1	0	2	3	0	0	0	1	1	0	0	1	0	1
	TOTAL	13	12	17	30	72	7	3	5	9	24	1	4	5	7	17	5	5	7	14	31
	BEGIN PEAK HR	4:45 PM					4	1	2	4	11										

2:00 PM	18	8	13	14	53	6	6	6	9	27	1	0	2	3	6	11	2	5	2	20
4:45 PM	5	9	8	15	37	4	1	2	4	11	0	3	3	1	7	1	5	3	10	19

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: S Orange Ave
EAST & WEST: Imperial Hwy

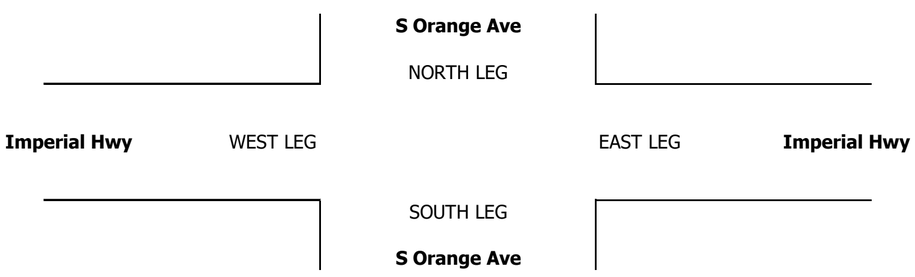
PROJECT #: SC4283
LOCATION #: 3
CONTROL: STOP N/S

NOTES:

AM
PM
MD
OTHER
OTHER

◄ W E ► ▲ N S ▼

		NORTHBOUND S Orange Ave			SOUTHBOUND S Orange Ave			EASTBOUND Imperial Hwy			WESTBOUND Imperial Hwy				U-TURNS				
	LANES:	NL X	NT X	NR 1	SL X	ST X	SR 1	EL X	ET 3	ER 0	WL X	WT 3	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	0	6	0	0	3	0	384	1	0	319	3	716	0	0	0	0	0
	7:15 AM	0	0	9	0	0	3	0	425	1	0	349	2	789	0	0	0	0	0
	7:30 AM	0	0	13	0	0	4	0	444	1	0	385	4	851	0	0	0	0	0
	7:45 AM	0	0	5	0	0	3	0	455	1	0	444	5	913	0	1	0	0	1
	8:00 AM	0	0	3	0	0	9	0	439	1	0	449	5	906	0	0	0	0	0
	8:15 AM	0	0	8	0	0	2	0	462	3	0	393	8	876	0	0	0	0	0
	8:30 AM	0	0	1	0	0	6	0	494	1	0	389	3	894	0	0	0	0	0
	8:45 AM	0	0	9	0	0	5	0	411	1	0	386	6	818	0	0	0	0	0
	VOLUMES	0	0	54	0	0	35	0	3,514	10	0	3,114	36	6,764	0	1	0	0	1
	APPROACH %	0%	0%	100%	0%	0%	97%	0%	100%	0%	0%	99%	1%						
	APP/DEPART	54	/	37	36	/	10	3,524	/	3,568	3,150	/	3,149	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	0	17	0	0	20	0	1,850	6	0	1,675	21	3,590					
	APPROACH %	0%	0%	100%	0%	0%	95%	0%	100%	0%	0%	99%	1%						
	PEAK HR FACTOR		0.531			0.583			0.937			0.934		0.982					
	APP/DEPART	17	/	22	21	/	6	1,856	/	1,867	1,696	/	1,695	0					
MD	09:45 AM	0	0	7	0	0	6	0	347	0	0	312	3	675	0	0	0	0	0
	10:00 AM	0	0	3	0	0	2	0	339	0	0	320	5	669	0	0	0	0	0
	10:15 AM	0	0	7	0	0	7	0	343	0	0	311	3	671	0	0	0	0	0
	10:30 AM	0	0	4	0	0	3	0	350	3	0	331	3	694	0	0	0	0	0
	10:45 AM	0	0	2	0	0	5	0	373	5	0	310	2	697	0	0	0	0	0
	11:00 AM	0	0	4	0	0	2	0	376	4	0	331	2	719	0	0	0	0	0
	11:15 AM	0	0	7	0	0	5	0	365	1	0	348	10	736	0	0	0	0	0
	11:30 AM	0	0	2	0	0	7	0	369	1	0	350	5	734	0	0	0	0	0
	11:45 AM	0	0	10	0	0	5	0	368	1	0	351	2	737	0	0	0	0	0
	VOLUMES	0	0	46	0	0	42	0	3,230	15	0	2,964	35	6,332	0	0	0	0	0
	APPROACH %	0%	0%	100%	0%	0%	100%	0%	100%	0%	0%	99%	1%						
	APP/DEPART	46	/	35	42	/	15	3,245	/	3,276	2,999	/	3,006	0					
	BEGIN PEAK HR		11:00 AM																
	VOLUMES	0	0	23	0	0	19	0	1,478	7	0	1,380	19	2,926					
	APPROACH %	0%	0%	100%	0%	0%	100%	0%	100%	0%	0%	99%	1%						
	PEAK HR FACTOR		0.575			0.679			0.977			0.977		0.993					
	APP/DEPART	23	/	19	19	/	7	1,485	/	1,501	1,399	/	1,399	0					



		ALL PED + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSING					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
AM	7:00 AM	2	0	0	0	2	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	7:15 AM	4	1	0	0	5	2	1	0	0	3	2	0	0	0	2	0	0	0	0	0
	7:30 AM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
	7:45 AM	7	2	0	0	9	4	1	0	0	5	0	1	0	0	1	3	0	0	0	3
	8:00 AM	4	1	0	0	5	4	1	0	0	5	0	0	0	0	0	0	0	0	0	0
	8:15 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	1	4	0	0	5	0	3	0	0	3	1	1	0	0	2	0	0	0	0	0
	TOTAL	19	8	1	0	28	12	6	1	0	19	4	2	0	0	6	3	0	0	0	3
MD	9:45 AM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
	10:00 AM	2	0	0	0	2	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
	10:15 AM	1	1	0	0	2	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:00 AM	3	0	0	0	3	2	0	0	0	2	1	0	0	0	1	0	0	0	0	0
	11:15 AM	3	1	0	0	4	3	0	0	0	3	0	1	0	0	1	0	0	0	0	0
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	4	0	0	0	4	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0
	TOTAL	13	3	0	0	16	11	1	0	0	12	1	2	0	0	3	1	0	0	0	1
	7:45	12	3	0	0	15	9	2	0	0	11	0	1	0	0	1	3	0	0	0	3
	11:00 AM	10	1	0	0	11	9	0	0	0	9	1	1	0	0	2	0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: S Orange Ave
EAST & WEST: Imperial Hwy

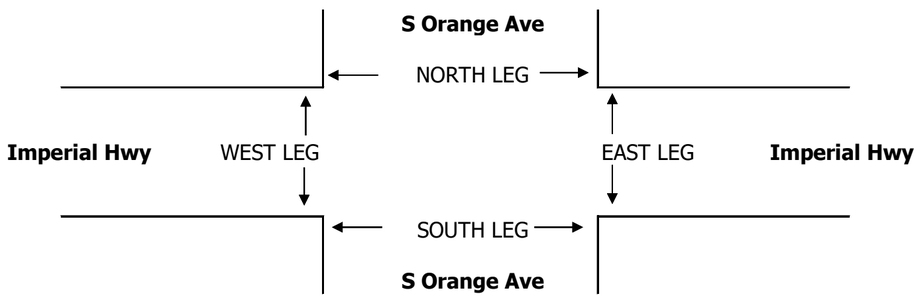
PROJECT #: SC4283
LOCATION #: 3
CONTROL: STOP N/S

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND S Orange Ave			SOUTHBOUND S Orange Ave			EASTBOUND Imperial Hwy			WESTBOUND Imperial Hwy				U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL
LANES:	X	X	1	X	X	1	X	3	0	X	3	0		0	0	0	0	
MD 1:00 PM	0	0	4	0	0	8	0	342	9	0	418	5	786	0	0	0	0	0
1:15 PM	0	0	8	0	0	15	0	366	2	0	376	3	770	0	0	0	0	0
1:30 PM	0	0	7	0	0	15	0	370	4	0	419	3	818	0	0	0	0	0
1:45 PM	0	0	2	0	0	4	0	403	2	0	375	7	793	0	0	0	0	0
2:00 PM	0	0	5	0	0	4	0	399	3	0	398	12	821	0	0	0	0	0
2:15 PM	0	0	4	0	0	10	0	419	5	0	422	3	863	0	0	0	0	0
2:30 PM	0	0	5	0	0	7	0	437	4	0	394	3	850	0	0	0	0	0
2:45 PM	0	0	14	0	0	6	0	381	7	0	456	1	865	0	0	0	0	0
VOLUMES	0	0	49	0	0	69	0	3,117	36	0	3,258	37	6,566	0	0	0	0	0
APPROACH %	0%	0%	100%	0%	0%	100%	0%	99%	1%	0%	99%	1%						
APP/DEPART	49	/	37	69	/	36	3,153	/	3,166	3,295	/	3,327	0					
BEGIN PEAK HR	2:00 PM																	
VOLUMES	0	0	28	0	0	27	0	1,636	19	0	1,670	19	3,399					
APPROACH %	0%	0%	100%	0%	0%	100%	0%	99%	1%	0%	99%	1%						
PEAK HR FACTOR	0.500			0.675			0.938			0.924			0.982					
APP/DEPART	28	/	19	27	/	19	1,655	/	1,664	1,689	/	1,697	0					
PM 4:00 PM	0	0	7	0	0	2	0	410	3	0	465	5	892	0	0	0	0	0
4:15 PM	0	0	3	0	0	4	0	411	3	0	467	6	894	0	0	0	0	0
4:30 PM	0	0	0	0	0	5	0	410	3	0	478	10	906	0	0	0	0	0
4:45 PM	0	0	3	0	0	6	0	459	3	0	424	12	907	0	0	0	0	0
5:00 PM	0	0	6	0	0	9	0	482	2	0	496	6	1,001	0	0	0	0	0
5:15 PM	0	0	4	0	0	5	0	514	10	0	481	8	1,022	0	0	0	0	0
5:30 PM	0	0	8	0	0	10	0	447	5	0	476	6	952	0	0	0	0	0
5:45 PM	0	0	8	0	0	5	0	358	6	0	494	4	875	0	0	0	0	0
VOLUMES	0	0	39	0	0	46	0	3,491	35	0	3,781	57	7,449	0	0	0	0	0
APPROACH %	0%	0%	100%	0%	0%	100%	0%	99%	1%	0%	99%	1%						
APP/DEPART	39	/	57	46	/	35	3,526	/	3,530	3,838	/	3,827	0					
BEGIN PEAK HR	4:45 PM																	
VOLUMES	0	0	21	0	0	30	0	1,902	20	0	1,877	32	3,882					
APPROACH %	0%	0%	100%	0%	0%	100%	0%	99%	1%	0%	98%	2%						
PEAK HR FACTOR	0.656			0.750			0.917			0.951			0.950					
APP/DEPART	21	/	32	30	/	20	1,922	/	1,923	1,909	/	1,907	0					



		ALL PEDS + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
MD	1:00 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
	1:30 PM	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:00 PM	4	1	0	0	5	3	1	0	0	4	1	0	0	0	1	0	0	0	0	0
	2:15 PM	4	0	0	0	4	3	0	0	0	3	1	0	0	0	1	0	0	0	0	0
	2:30 PM	3	2	0	0	5	2	2	0	0	4	1	0	0	0	1	0	0	0	0	0
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	12	6	0	0	18	9	6	0	0	15	3	0	0	0	3	0	0	0	0	0
	BEGIN PEAK HR	2:00 PM					8	3	0	0	11										
PM	4:00 PM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	4:15 PM	1	2	0	0	3	0	1	0	0	1	1	1	0	0	2	0	0	0	0	0
	4:30 PM	3	0	0	0	3	1	0	0	0	1	2	0	0	0	2	0	0	0	0	0
	4:45 PM	0	3	0	0	3	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0
	5:00 PM	1	1	0	0	2	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0
	5:15 PM	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1
	5:30 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
	5:45 PM	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
	TOTAL	8	9	0	0	17	3	6	0	0	9	4	3	0	0	7	1	0	0	0	1
	BEGIN PEAK HR	4:45 PM					0	4	0	0	4										
	2:00 PM	11	3	0	0	14	8	3	0	0	11	3	0	0	0	3	0	0	0	0	0
	4:45 PM	2	6	0	0	8	0	4	0	0	4	1	2	0	0	3	1	0	0	0	1

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: S Flower Ave
EAST & WEST: Imperial Hwy

PROJECT #: SC4283
LOCATION #: 2
CONTROL: STOP N/S

NOTES:

Queue WB AM

AM
PM
MD
OTHER
OTHER

▲ N
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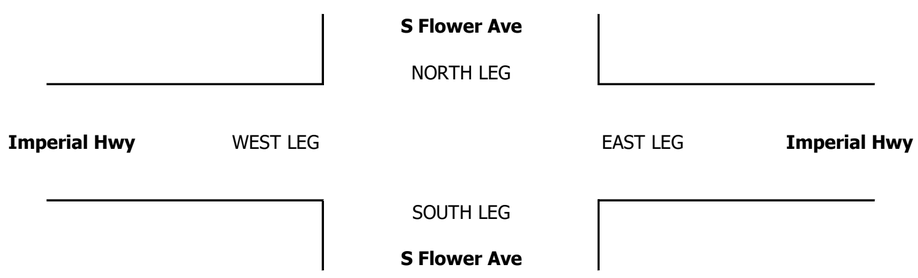
		NORTHBOUND S Flower Ave			SOUTHBOUND S Flower Ave			EASTBOUND Imperial Hwy			WESTBOUND Imperial Hwy				U-TURNS				
	LANES:	NL X	NT X	NR 1	SL 1	ST X	SR 1	EL 1	ET 3	ER 0	WL X	WT 3	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	0	2	2	0	18	7	382	2	0	312	5	730	0	0	0	0	0
	7:15 AM	0	0	2	0	0	21	13	429	1	0	319	8	793	0	1	1	0	2
	7:30 AM	0	0	1	1	0	17	14	436	0	0	352	13	834	0	0	0	0	0
	7:45 AM	0	0	3	1	0	18	30	422	0	0	424	38	936	0	1	1	0	2
	8:00 AM	0	0	5	2	0	15	19	432	0	0	436	45	954	0	0	1	0	1
	8:15 AM	0	0	2	4	0	18	12	449	0	0	382	5	872	0	0	0	0	0
	8:30 AM	0	0	2	1	0	31	15	481	2	0	373	8	913	0	0	0	0	0
	8:45 AM	0	0	1	5	0	27	8	399	1	0	389	7	837	0	0	0	0	0
	VOLUMES	0	0	18	16	0	165	118	3,430	6	0	2,987	129	6,874	0	2	3	0	5
	APPROACH %	0%	0%	100%	9%	0%	90%	3%	96%	0%	0%	96%	4%						
	APP/DEPART	18	/	249	183	/	6	3,557	/	3,464	3,116	/	3,155	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	0	12	8	0	82	76	1,784	2	0	1,615	96	3,678					
	APPROACH %	0%	0%	100%	9%	0%	90%	4%	96%	0%	0%	94%	6%						
	PEAK HR FACTOR		0.600			0.711			0.936			0.889		0.963					
	APP/DEPART	12	/	173	91	/	2	1,864	/	1,804	1,711	/	1,699	0					
MD	09:45 AM	0	0	1	0	0	18	10	358	0	0	305	5	697	0	0	0	0	0
	10:00 AM	0	0	1	0	0	12	8	328	0	0	317	3	669	0	0	0	0	0
	10:15 AM	0	0	0	5	0	15	11	333	0	0	297	14	675	0	0	0	0	0
	10:30 AM	0	0	0	1	0	10	10	341	4	0	299	7	672	0	0	0	0	0
	10:45 AM	0	0	1	2	0	19	7	358	2	0	309	5	703	0	0	0	0	0
	11:00 AM	0	0	1	2	0	9	12	366	0	0	315	4	709	0	0	0	0	0
	11:15 AM	0	0	1	1	0	13	11	335	0	0	315	8	684	0	0	2	0	2
	11:30 AM	0	0	0	0	0	22	14	384	1	0	344	6	771	0	0	0	0	0
	11:45 AM	0	0	2	4	0	21	8	367	0	0	359	1	762	0	0	0	0	0
	VOLUMES	0	0	7	15	0	139	91	3,170	7	0	2,860	53	6,344	0	0	2	0	2
	APPROACH %	0%	0%	100%	10%	0%	90%	3%	97%	0%	0%	98%	2%						
	APP/DEPART	7	/	144	154	/	7	3,270	/	3,192	2,913	/	3,001	0					
	BEGIN PEAK HR		11:00 AM																
	VOLUMES	0	0	4	7	0	65	45	1,452	1	0	1,333	19	2,928					
	APPROACH %	0%	0%	100%	10%	0%	90%	3%	97%	0%	0%	99%	1%						
	PEAK HR FACTOR		0.500			0.720			0.940			0.939		0.949					
	APP/DEPART	4	/	64	72	/	1	1,500	/	1,463	1,352	/	1,400	0					



		ALL PED + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSING					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
AM	7:00 AM	2	0	0	0	2	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	7:15 AM	4	1	0	0	5	1	1	0	0	2	2	0	0	0	2	1	0	0	0	1
	7:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
	7:45 AM	4	0	0	0	4	1	0	0	0	1	0	0	0	0	0	3	0	0	0	3
	8:00 AM	2	0	0	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	1	1	0	0	2	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0
	TOTAL	13	3	0	0	16	5	2	0	0	7	4	1	0	0	5	4	0	0	0	4
MD	9:45 AM	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0
	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:15 AM	2	0	0	0	2	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:00 AM	2	0	0	0	2	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0
	11:15 AM	3	0	0	0	3	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	4	0	0	0	4	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0
	TOTAL	11	2	0	0	13	8	1	0	0	9	3	1	0	0	4	0	0	0	0	0
	7:45	6	0	0	0	6	3	0	0	0	3	0	0	0	0	0	3	0	0	0	3
	11:00	9	0	0	0	9	7	0	0	0	7	2	0	0	0	2	0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: S Flower Ave
EAST & WEST: Imperial Hwy

PROJECT #: SC4283
LOCATION #: 2
CONTROL: STOP N/S

NOTES:
Queue WB PM

AM / PM / MD / OTHER / OTHER

▲ N
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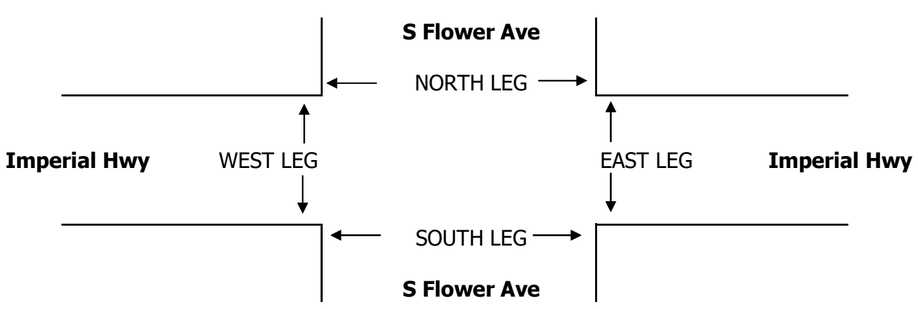
S ▼

		NORTHBOUND S Flower Ave			SOUTHBOUND S Flower Ave			EASTBOUND Imperial Hwy			WESTBOUND Imperial Hwy				U-TURNS				
	LANES:	NL X	NT X	NR 1	SL 1	ST X	SR 1	EL 1	ET 3	ER 0	WL X	WT 3	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
MD	1:00 PM	0	0	1	2	0	14	12	341	1	0	406	10	787	0	0	3	0	3
	1:15 PM	0	0	0	2	0	8	15	351	2	0	370	7	755	0	0	1	0	1
	1:30 PM	0	0	1	0	0	7	18	365	0	0	416	4	811	0	0	0	0	0
	1:45 PM	0	0	1	2	0	15	13	380	0	0	367	13	791	0	0	0	0	0
	2:00 PM	0	0	1	1	0	8	12	388	1	0	398	15	824	0	0	4	0	4
	2:15 PM	0	0	0	4	0	15	12	405	1	0	411	8	856	0	0	1	0	1
	2:30 PM	0	0	1	1	0	19	11	420	0	0	378	7	837	0	0	0	0	0
	2:45 PM	0	0	2	3	0	15	8	397	1	0	441	9	876	0	0	1	0	1
	VOLUMES	0	0	7	15	0	101	101	3,047	6	0	3,187	73	6,547	0	0	10	0	10
	APPROACH %	0%	0%	100%	13%	0%	87%	3%	96%	0%	0%	98%	2%						
	APP/DEPART	7	/	174	116	/	6	3,164	/	3,069	3,260	/	3,298	0					
	BEGIN PEAK HR		2:00 PM																
	VOLUMES	0	0	4	9	0	57	43	1,610	3	0	1,628	39	3,399					
	APPROACH %	0%	0%	100%	14%	0%	86%	3%	97%	0%	0%	98%	2%						
	PEAK HR FACTOR		0.500			0.825			0.964			0.926		0.969					
	APP/DEPART	4	/	82	66	/	3	1,662	/	1,623	1,667	/	1,691	0					
PM	4:00 PM	0	0	0	0	0	13	10	389	3	0	457	3	875	0	0	0	0	0
	4:15 PM	0	0	1	1	0	10	7	400	4	0	463	9	895	0	0	0	0	0
	4:30 PM	0	0	0	1	0	17	8	399	2	0	472	5	904	0	0	1	0	1
	4:45 PM	0	0	2	1	0	20	9	444	2	0	416	2	896	0	0	0	0	0
	5:00 PM	0	0	0	1	0	23	11	465	4	0	479	7	990	0	0	0	0	0
	5:15 PM	0	0	0	1	0	19	17	482	4	0	472	11	1,006	0	1	0	0	1
	5:30 PM	0	0	2	0	0	11	18	455	4	0	471	5	966	0	0	0	0	0
	5:45 PM	0	0	0	1	0	14	16	377	1	0	484	8	901	0	0	0	0	0
	VOLUMES	0	0	5	6	0	127	96	3,411	24	0	3,714	50	7,435	0	1	1	0	2
	APPROACH %	0%	0%	100%	4%	0%	95%	3%	97%	1%	0%	99%	1%						
	APP/DEPART	5	/	147	134	/	24	3,532	/	3,422	3,764	/	3,842	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	0	0	2	3	0	67	62	1,779	13	0	1,906	31	3,864					
	APPROACH %	0%	0%	100%	4%	0%	94%	3%	96%	1%	0%	98%	2%						
	PEAK HR FACTOR		0.250			0.740			0.921			0.984		0.959					
	APP/DEPART	2	/	94	71	/	13	1,854	/	1,784	1,937	/	1,973	0					



		ALL PEDS + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
MD	1:00 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
	1:30 PM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:00 PM	4	1	0	0	5	3	1	0	0	4	1	0	0	0	1	0	0	0	0	0
	2:15 PM	7	0	0	0	7	3	0	0	0	3	0	0	0	0	0	4	0	0	0	4
	2:30 PM	4	1	0	0	5	3	0	0	0	3	1	0	0	0	1	0	1	0	0	1
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	16	4	0	0	20	10	3	0	0	13	2	0	0	0	2	4	1	0	0	5
	BEGIN PEAK HR			2:00 PM			9	1	0	0	10										
PM	4:00 PM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	4:15 PM	1	4	0	0	5	0	3	0	0	3	1	1	0	0	2	0	0	0	0	0
	4:30 PM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	4:45 PM	1	3	0	0	4	0	1	0	0	1	1	2	0	0	3	0	0	0	0	0
	5:00 PM	2	1	0	0	3	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0
	5:15 PM	1	1	0	0	2	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0
	5:30 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	7	10	0	0	17	3	5	0	0	8	4	5	0	0	9	0	0	0	0	0
	BEGIN PEAK HR			5:00 PM			1	1	0	0	2										

2:00 PM	15	2	0	0	17	9	1	0	0	10	2	0	0	0	2	4	1	0	0	5
5:00 PM	3	3	0	0	6	1	1	0	0	2	2	2	0	0	4	0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: Sycamore Ave
EAST & WEST: Imperial Hwy

PROJECT #: SC4283
LOCATION #: 1
CONTROL: STOP N/S

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W
E ►
S ▼

		NORTHBOUND Sycamore Ave			SOUTHBOUND Sycamore Ave			EASTBOUND Imperial Hwy			WESTBOUND Imperial Hwy				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	0	4	0	0	0	2	385	2	1	308	0	702	0	0	0	2	2
	7:15 AM	1	0	5	0	0	0	0	403	3	7	328	1	748	0	0	0	2	2
	7:30 AM	1	0	6	1	0	3	1	450	3	5	371	0	841	0	0	0	1	1
	7:45 AM	0	0	5	2	1	10	2	409	6	12	540	3	990	0	0	2	1	3
	8:00 AM	0	0	3	1	0	8	3	447	4	10	392	0	868	0	0	0	2	2
	8:15 AM	0	0	6	0	0	0	0	450	1	8	382	0	847	0	0	0	0	0
	8:30 AM	0	0	3	0	0	0	1	476	1	5	382	0	868	0	0	0	2	2
	8:45 AM	0	0	2	0	0	0	0	393	3	2	395	0	795	0	0	2	0	2
	VOLUMES	2	0	34	4	1	21	9	3,413	23	50	3,098	4	6,673	0	0	4	10	14
	APPROACH %	6%	0%	94%	15%	4%	81%	0%	99%	1%	2%	98%	0%						
	APP/DEPART	36	/	13	26	/	74	3,449	/	3,461	3,162	/	3,125	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	0	17	3	1	18	6	1,782	12	35	1,696	3	3,580					
	APPROACH %	0%	0%	100%	14%	5%	82%	0%	99%	1%	2%	98%	0%						
	PEAK HR FACTOR		0.708			0.423			0.942			0.782		0.901					
	APP/DEPART	17	/	9	22	/	48	1,802	/	1,807	1,739	/	1,716	0					
MD	09:45 AM	1	0	5	0	0	2	5	333	3	2	302	1	654	0	0	0	2	2
	10:00 AM	0	0	1	0	0	2	0	325	2	8	308	1	647	0	0	1	0	1
	10:15 AM	0	0	1	0	0	1	1	342	6	3	306	1	661	0	0	1	2	3
	10:30 AM	0	0	3	0	0	1	0	348	5	5	354	0	716	0	0	1	1	2
	10:45 AM	1	0	2	1	0	4	3	367	2	3	281	0	664	0	0	0	0	0
	11:00 AM	0	0	2	0	0	0	2	358	3	6	339	0	710	0	0	1	0	1
	11:15 AM	1	0	4	1	0	1	4	344	2	3	343	0	703	0	0	0	1	1
	11:30 AM	1	0	1	1	0	4	1	376	2	6	355	0	747	0	0	1	2	3
	11:45 AM	0	0	1	1	0	0	0	365	3	6	308	3	687	0	0	0	4	4
	VOLUMES	4	0	20	4	0	15	16	3,158	28	42	2,896	6	6,206	0	0	5	12	17
	APPROACH %	17%	0%	83%	21%	0%	79%	0%	98%	1%	1%	98%	0%						
	APP/DEPART	24	/	22	19	/	70	3,207	/	3,194	2,956	/	2,920	0					
	BEGIN PEAK HR		11:00 AM																
	VOLUMES	2	0	8	3	0	5	7	1,443	10	21	1,345	3	2,856					
	APPROACH %	20%	0%	80%	38%	0%	63%	0%	99%	1%	2%	98%	0%						
	PEAK HR FACTOR		0.500			0.400			0.962			0.948		0.952					
	APP/DEPART	10	/	10	8	/	31	1,462	/	1,461	1,376	/	1,354	0					

Sycamore Ave

NORTH LEG

Imperial Hwy WEST LEG EAST LEG **Imperial Hwy**

SOUTH LEG

Sycamore Ave

		ALL PED + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSING					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
AM	7:00 AM	3	1	0	0	4	1	1	0	0	2	1	0	0	0	1	1	0	0	0	1
	7:15 AM	3	2	0	0	5	1	1	0	0	2	2	1	0	0	3	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	3	1	0	0	4	0	1	0	0	1	0	0	0	0	0	3	0	0	0	3
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	3	3	0	0	6	2	2	0	0	4	1	1	0	0	2	0	0	0	0	0
	TOTAL	12	7	0	0	19	4	5	0	0	9	4	2	0	0	6	4	0	0	0	4
MD	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:00 AM	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0
	10:15 AM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
	10:30 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:00 AM	1	1	0	0	2	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0
	11:15 AM	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
	11:30 AM	4	0	0	0	4	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0
	11:45 AM	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
	TOTAL	9	5	0	0	14	8	3	0	0	11	1	2	0	0	3	0	0	0	0	0
	7:45 AM	3	1	0	0	4	0	1	0	0	1	0	0	0	0	0	3	0	0	0	3
	11:00 AM	7	3	0	0	10	7	2	0	0	9	0	1	0	0	1	0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

T101823

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

DATE: Thu, Oct 26, 23

LOCATION: Brea
NORTH & SOUTH: Sycamore Ave
EAST & WEST: Imperial Hwy

PROJECT #: SC4283
LOCATION #: 1
CONTROL: STOP N/S

NOTES:

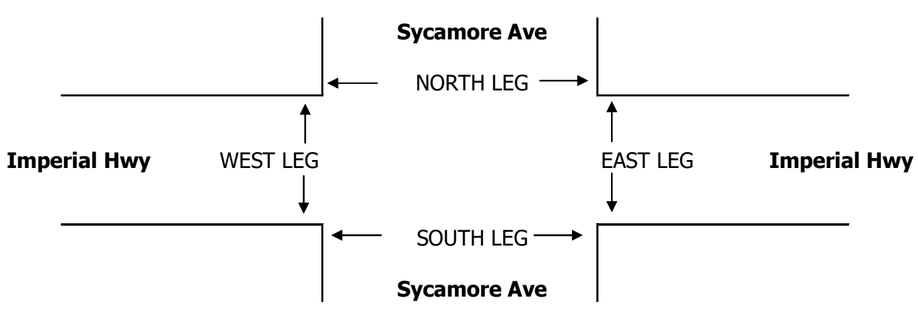
AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Sycamore Ave			SOUTHBOUND DWY			EASTBOUND Imperial Hwy			WESTBOUND Imperial Hwy			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
MD	1:00 PM	0	0	4	0	0	1	1	328	2	10	411	0	757
	1:15 PM	0	0	4	0	0	0	3	352	4	9	380	0	752
	1:30 PM	1	0	2	1	0	2	2	367	1	10	400	0	786
	1:45 PM	1	0	3	0	0	1	3	377	3	2	397	0	787
	2:00 PM	0	0	3	0	0	8	6	394	3	6	414	0	834
	2:15 PM	0	0	0	3	0	15	1	424	6	5	418	0	872
	2:30 PM	1	0	8	1	0	4	2	414	2	4	392	1	829
	2:45 PM	0	0	2	0	0	1	2	362	3	8	415	0	793
	VOLUMES	3	0	26	5	0	32	20	3,018	24	54	3,227	1	6,420
	APPROACH %	10%	0%	90%	14%	0%	86%	1%	98%	1%	2%	98%	0%	
	APP/DEPART	29	/	21	37	/	78	3,065	/	3,056	3,289	/	3,265	0
	BEGIN PEAK HR		2:00 PM											
	VOLUMES	1	0	13	4	0	28	11	1,594	14	23	1,639	1	3,332
	APPROACH %	7%	0%	93%	13%	0%	88%	1%	98%	1%	1%	98%	0%	
	PEAK HR FACTOR		0.389			0.444			0.940			0.984		0.955
	APP/DEPART	14	/	12	32	/	37	1,621	/	1,613	1,665	/	1,670	0
PM	4:00 PM	0	0	2	1	0	1	0	411	1	6	491	0	913
	4:15 PM	1	0	4	1	0	0	7	390	3	9	446	0	861
	4:30 PM	0	0	11	1	0	0	3	417	10	11	437	0	890
	4:45 PM	0	0	2	0	0	2	4	468	2	8	472	0	958
	5:00 PM	0	0	5	0	0	1	7	478	2	8	523	1	1,025
	5:15 PM	2	0	2	0	0	4	3	487	9	10	458	1	976
	5:30 PM	1	0	5	0	0	3	4	442	1	4	522	0	982
	5:45 PM	0	0	5	0	0	1	2	336	2	6	499	0	851
	VOLUMES	4	0	36	3	0	12	30	3,429	30	62	3,848	2	7,471
	APPROACH %	10%	0%	90%	20%	0%	80%	1%	98%	1%	2%	98%	0%	
	APP/DEPART	40	/	32	15	/	92	3,490	/	3,482	3,926	/	3,865	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	3	0	14	0	0	10	18	1,875	14	30	1,975	2	3,948
	APPROACH %	18%	0%	82%	0%	0%	100%	1%	98%	1%	1%	98%	0%	
	PEAK HR FACTOR		0.708			0.625			0.955			0.946		0.963
	APP/DEPART	17	/	20	10	/	44	1,907	/	1,896	2,014	/	1,988	0

U-TURNS

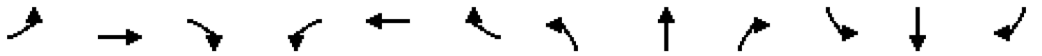
NB	SB	EB	WB	TTL
0	0	0	0	
0	0	0	2	2
0	0	0	2	2
0	0	0	0	0
0	0	1	1	2
0	0	2	2	4
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	3	7	10
0	0	1	2	3
0	0	0	4	4
0	0	0	1	1
0	0	0	2	2
0	0	0	0	0
0	0	0	2	2
0	0	0	3	3
0	0	0	0	0
0	0	1	14	15



		ALL PEDS + BIKE & SCOOTER					ADULT PEDESTRIAN CROSSINGS					BICYCLE & SCOOTER CROSSINGS					SCHOOL AGE PEDESTRIANS				
		N LEG	S LEG	E LEG	W LEG	TOTAL	N LEG	S LEG	E LEG	W LEG	TOTAL	NL	SL	EL	WL	TOTAL	NL	SL	EL	WL	TOTAL
MD	1:00 PM	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
	1:30 PM	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
	1:45 PM	2	0	0	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0
	2:00 PM	2	3	1	0	6	1	2	0	0	3	1	1	1	0	3	0	0	0	0	0
	2:15 PM	2	0	0	0	2	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	2:30 PM	2	0	0	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	9	7	1	0	17	7	6	0	0	13	2	1	1	0	4	0	0	0	0	0
	BEGIN PEAK HR			2:00 PM			4	2	0	0	6										
PM	4:00 PM	2	0	0	0	2	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	4:15 PM	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0
	4:30 PM	3	2	0	0	5	1	0	0	0	1	2	2	0	0	4	0	0	0	0	0
	4:45 PM	1	1	0	0	2	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0
	5:00 PM	3	2	0	0	5	0	0	0	0	0	1	2	0	0	3	2	0	0	0	2
	5:15 PM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
	5:30 PM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
	5:45 PM	4	0	0	0	4	2	0	0	0	2	2	0	0	0	2	0	0	0	0	0
	TOTAL	15	7	0	0	22	4	1	0	0	5	9	6	0	0	15	2	0	0	0	2
	BEGIN PEAK HR			4:45 PM			0	0	0	0	0										
	2:00 PM	6	3	1	0	10	4	2	0	0	6	2	1	1	0	4	0	0	0	0	0
	4:45 PM	6	3	0	0	9	0	0	0	0	0	4	3	0	0	7	2	0	0	0	2

Appendix C

Intersection Level of Service Worksheets (Existing)

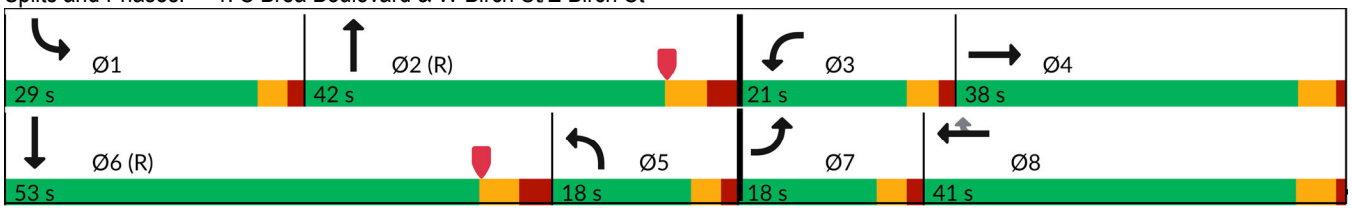


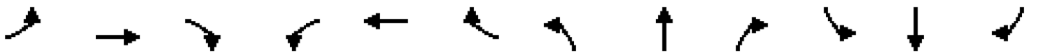
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	62	23	281	79	301	23	434	191	373	774	52
Future Volume (vph)	23	62	23	281	79	301	23	434	191	373	774	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.99			1.00	
Frt		0.959				0.850		0.954			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1773	0	3433	1863	1583	1770	4804	0	3433	5029	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1773	0	3433	1863	1554	1770	4804	0	3433	5029	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14				334		84			9	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			14			6			10			3
Confl. Bikes (#/hr)									4			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	26	69	26	312	88	334	26	482	212	414	860	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	95	0	312	88	334	26	694	0	414	918	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	18.0	38.0		21.0	41.0	41.0	18.0	42.0		29.0	53.0	
Total Split (%)	13.8%	29.2%		16.2%	31.5%	31.5%	13.8%	32.3%		22.3%	40.8%	
Maximum Green (s)	13.5	33.4		16.5	36.1	36.1	13.5	35.1		24.5	46.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		7			3	3		0			0	
Act Effct Green (s)	8.2	14.0		15.0	25.6	25.6	11.3	60.6		19.9	74.1	
Actuated g/C Ratio	0.06	0.11		0.12	0.20	0.20	0.09	0.47		0.15	0.57	
v/c Ratio	0.24	0.47		0.79	0.24	0.58	0.17	0.30		0.79	0.32	
Control Delay (s/veh)	63.3	51.0		70.5	44.4	8.2	94.1	49.4		64.2	18.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	63.3	51.0		70.5	44.4	8.2	94.1	49.4		64.2	18.2	
LOS	E	D		E	D	A	F	D		E	B	
Approach Delay (s/veh)		53.6			39.0			51.0			32.5	
Approach LOS		D			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 71 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 39.6		Intersection LOS: D	
Intersection Capacity Utilization 60.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





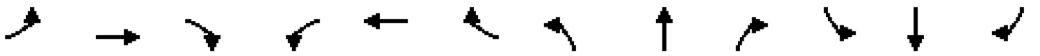
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	62	23	281	79	301	23	434	191	373	774	52
Future Volume (veh/h)	23	62	23	281	79	301	23	434	191	373	774	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	69	14	312	88	65	26	482	166	414	860	55
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	153	31	365	319	267	461	1867	619	473	1736	111
Arrive On Green	0.04	0.10	0.10	0.11	0.17	0.17	0.52	0.99	0.99	0.14	0.35	0.35
Sat Flow, veh/h	1781	1497	304	3456	1870	1568	1781	3771	1249	3456	4896	312
Grp Volume(v), veh/h	26	0	83	312	88	65	26	433	215	414	597	318
Grp Sat Flow(s),veh/h/ln	1781	0	1800	1728	1870	1568	1781	1702	1616	1728	1702	1803
Q Serve(g_s), s	1.9	0.0	5.6	11.5	5.3	4.7	0.9	0.2	0.2	15.3	17.8	18.0
Cycle Q Clear(g_c), s	1.9	0.0	5.6	11.5	5.3	4.7	0.9	0.2	0.2	15.3	17.8	18.0
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.77	1.00		0.17
Lane Grp Cap(c), veh/h	67	0	184	365	319	267	461	1685	800	473	1207	640
V/C Ratio(X)	0.39	0.00	0.45	0.85	0.28	0.24	0.06	0.26	0.27	0.88	0.49	0.50
Avail Cap(c_a), veh/h	185	0	463	439	519	436	461	1685	800	651	1207	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	0.0	54.9	57.2	46.9	46.7	23.5	0.3	0.3	55.0	32.8	32.9
Incr Delay (d2), s/veh	1.4	0.0	0.6	11.6	0.2	0.2	0.0	0.3	0.8	7.7	1.5	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.6	5.6	2.5	1.8	0.4	0.1	0.2	7.1	7.5	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.5	0.0	55.5	68.7	47.1	46.8	23.5	0.7	1.1	62.7	34.3	35.6
LnGrp LOS	E		E	E	D	D	C	A	A	E	C	D
Approach Vol, veh/h		109			465			674			1329	
Approach Delay, s/veh		57.2			61.6			1.7			43.5	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.3	71.3	18.2	18.2	40.6	53.0	9.4	27.1
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	24.5	35.1	16.5	* 33	13.5	* 46	13.5	36.1
Max Q Clear Time (g_c+I1), s	17.3	2.2	13.5	7.6	2.9	20.0	3.9	7.3
Green Ext Time (p_c), s	0.5	2.9	0.2	0.3	0.0	4.1	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	36.4
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	585	45	22	643	8	19	1	21	0	0	12
Future Volume (vph)	1	585	45	22	643	8	19	1	21	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.931				0.865
Flt Protected				0.950				0.977				
Satd. Flow (prot)	0	3539	1583	1770	3532	0	0	1694	0	0	0	1611
Flt Permitted				0.950				0.977				
Satd. Flow (perm)	0	3539	1583	1770	3532	0	0	1694	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			10			5						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1	609	47	23	670	8	20	1	22	0	0	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	610	47	23	678	0	0	43	0	0	0	13
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.7%		ICU Level of Service A	
Analysis Period (min) 15			

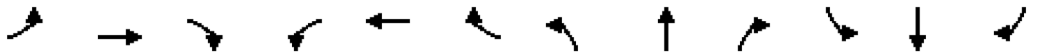
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	585	45	22	643	8	19	1	21	0	0	12
Future Vol, veh/h	1	585	45	22	643	8	19	1	21	0	0	12
Conflicting Peds, #/hr	0	0	10	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	609	47	23	670	8	20	1	22	0	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	683	0	0	666	0	0	1002	1350	315	-	-	344
Stage 1	-	-	-	-	-	-	621	621	-	-	-	-
Stage 2	-	-	-	-	-	-	381	729	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	906	-	-	919	-	-	197	149	681	0	0	652
Stage 1	-	-	-	-	-	-	441	477	-	0	0	-
Stage 2	-	-	-	-	-	-	613	426	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	902	-	-	910	-	-	186	143	675	-	-	649
Mov Cap-2 Maneuver	-	-	-	-	-	-	186	143	-	-	-	-
Stage 1	-	-	-	-	-	-	436	472	-	-	-	-
Stage 2	-	-	-	-	-	-	586	414	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.01	0.3	19.41	10.66
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	292	902	-	-	910	-	-	649
HCM Lane V/C Ratio	0.146	0.001	-	-	0.025	-	-	0.019
HCM Control Delay (s/veh)	19.4	9	-	-	9.1	-	-	10.7
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	0.1

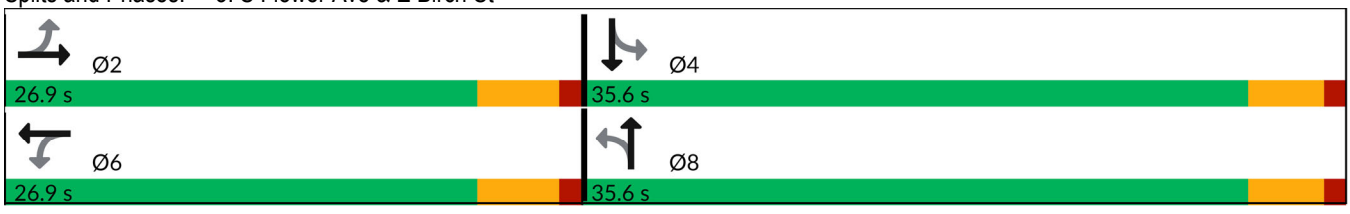


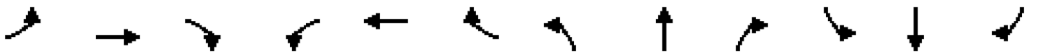
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	570	22	99	566	14	90	51	37	33	7	19
Future Volume (vph)	19	570	22	99	566	14	90	51	37	33	7	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			1.00	
Frt		0.995			0.996			0.972			0.957	
Flt Protected	0.950			0.950				0.975			0.972	
Satd. Flow (prot)	1770	3517	0	1770	3522	0	0	1742	0	0	1726	0
Flt Permitted	0.415			0.408				0.826			0.811	
Satd. Flow (perm)	773	3517	0	760	3522	0	0	1476	0	0	1440	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			4			30			19	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		364			329			750			397	
Travel Time (s)		7.1			6.4			20.5			10.8	
Confl. Peds. (#/hr)			13			5			85			1
Confl. Bikes (#/hr)						4			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	19	582	22	101	578	14	92	52	38	34	7	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	604	0	101	592	0	0	182	0	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (%)	43.0%	43.0%		43.0%	43.0%		57.0%	57.0%		57.0%	57.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		31.0	31.0		31.0	31.0	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9			4.6			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0		24.0	24.0		24.0	24.0	
Pedestrian Calls (#/hr)	6	6		2	2		50	50		1	1	
Act Effct Green (s)	28.5	28.5		28.5	28.5			19.2			19.1	
Actuated g/C Ratio	0.53	0.53		0.53	0.53			0.36			0.35	
v/c Ratio	0.05	0.32		0.25	0.32			0.33			0.12	
Control Delay (s/veh)	14.2	13.0		16.8	13.1			10.0			6.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	14.2	13.0		16.8	13.1			10.0			6.8	
LOS	B	B		B	B			B			A	
Approach Delay (s/veh)		13.1			13.6			10.0			6.8	
Approach LOS		B			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 62.5			
Actuated Cycle Length: 53.9			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay (s/veh): 12.7		Intersection LOS: B	
Intersection Capacity Utilization 63.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: S Flower Ave & E Birch St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	570	22	99	566	14	90	51	37	33	7	19
Future Volume (veh/h)	19	570	22	99	566	14	90	51	37	33	7	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.97	1.00		0.92	0.94		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	582	19	101	578	13	92	52	25	34	7	7
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	433	1588	52	427	1606	36	378	202	81	463	96	74
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	824	3510	114	814	3550	80	749	573	230	956	272	210
Grp Volume(v), veh/h	19	294	307	101	289	302	169	0	0	48	0	0
Grp Sat Flow(s),veh/h/ln	824	1777	1848	814	1777	1853	1551	0	0	1437	0	0
Q Serve(g_s), s	0.8	5.3	5.3	4.5	5.2	5.2	1.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.9	5.3	5.3	9.8	5.2	5.2	3.6	0.0	0.0	0.9	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.04	0.54		0.15	0.71		0.15
Lane Grp Cap(c), veh/h	433	804	836	427	804	838	661	0	0	633	0	0
V/C Ratio(X)	0.04	0.37	0.37	0.24	0.36	0.36	0.26	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	433	804	836	427	804	838	1096	0	0	1019	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.7	8.7	8.7	12.0	8.7	8.7	11.3	0.0	0.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	1.3	1.2	1.3	1.3	1.2	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.8	1.9	0.8	1.8	1.8	1.1	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.8	10.0	10.0	13.3	10.0	9.9	11.4	0.0	0.0	10.5	0.0	0.0
LnGrp LOS	B	B	A	B	A	A	B			B		
Approach Vol, veh/h		620			692			169			48	
Approach Delay, s/veh		10.0			10.4			11.4			10.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.9		21.7		26.9		21.7				
Change Period (Y+Rc), s		4.9		4.6		4.9		4.6				
Max Green Setting (Gmax), s		22.0		31.0		22.0		31.0				
Max Q Clear Time (g_c+I1), s		7.9		2.9		11.8		5.6				
Green Ext Time (p_c), s		1.1		0.1		1.2		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	10.4
HCM 7th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	620	17	35	674	3	5	0	2	2	0	1
Future Volume (vph)	2	620	17	35	674	3	5	0	2	2	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.996			0.999			0.966			0.955	
Flt Protected	0.950			0.950				0.964			0.968	
Satd. Flow (prot)	1770	3525	0	1770	3536	0	0	1735	0	0	1722	0
Flt Permitted	0.950			0.950				0.964			0.968	
Satd. Flow (perm)	1770	3525	0	1770	3536	0	0	1735	0	0	1722	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			26			12						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	2	756	21	43	822	4	6	0	2	2	0	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	777	0	43	826	0	0	8	0	0	3	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.4%		ICU Level of Service A	
Analysis Period (min) 15			

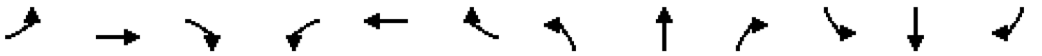
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	620	17	35	674	3	5	0	2	2	0	1
Future Vol, veh/h	2	620	17	35	674	3	5	0	2	2	0	1
Conflicting Peds, #/hr	0	0	26	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	756	21	43	822	4	6	0	2	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	838	0	0	803	0	0	1294	1720	414	1304	1729	425
Stage 1	-	-	-	-	-	-	797	797	-	921	921	-
Stage 2	-	-	-	-	-	-	496	923	-	383	808	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	792	-	-	817	-	-	120	89	587	118	87	578
Stage 1	-	-	-	-	-	-	346	397	-	291	347	-
Stage 2	-	-	-	-	-	-	524	347	-	612	392	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	783	-	-	796	-	-	110	81	572	109	80	571
Mov Cap-2 Maneuver	-	-	-	-	-	-	110	81	-	109	80	-
Stage 1	-	-	-	-	-	-	336	386	-	272	325	-
Stage 2	-	-	-	-	-	-	495	324	-	607	381	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.48	31.73	29.62
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	143	783	-	-	796	-	-	150
HCM Lane V/C Ratio	0.06	0.003	-	-	0.054	-	-	0.024
HCM Control Delay (s/veh)	31.7	9.6	-	-	9.8	-	-	29.6
HCM Lane LOS	D	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0.2	-	-	0.1

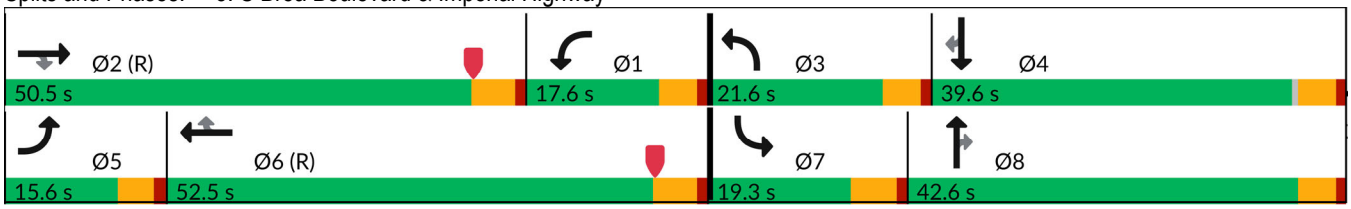


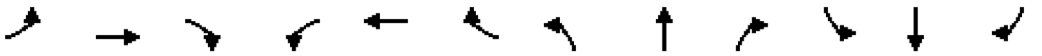
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	1461	394	181	1428	92	415	441	172	216	713	148
Future Volume (vph)	129	1461	394	181	1428	92	415	441	172	216	713	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.98			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1545	3433	5085	1556	3433	5085	1536	3433	3539	1542
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			231			97			205			165
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			11			5			14			8
Confl. Bikes (#/hr)			1						5			7
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	154	1739	469	215	1700	110	494	525	205	257	849	176
Shared Lane Traffic (%)												
Lane Group Flow (vph)	154	1739	469	215	1700	110	494	525	205	257	849	176
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	15.6	50.5	50.5	17.6	52.5	52.5	21.6	42.6	42.6	19.3	39.6	39.6
Total Split (%)	12.0%	38.8%	38.8%	13.5%	40.4%	40.4%	16.6%	32.8%	32.8%	14.8%	30.5%	30.5%
Maximum Green (s)	11.0	45.2	45.2	13.0	47.2	47.2	17.0	38.0	38.0	14.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		5	5		2	2		7	7		4	4
Act Effct Green (s)	10.4	47.3	47.3	12.1	49.0	49.0	17.0	37.8	37.8	12.9	34.4	34.4
Actuated g/C Ratio	0.08	0.36	0.36	0.09	0.38	0.38	0.13	0.29	0.29	0.10	0.26	0.26
v/c Ratio	0.56	0.94	0.66	0.67	0.89	0.17	1.10	0.35	0.35	0.76	0.91	0.33
Control Delay (s/veh)	65.7	51.2	22.3	67.7	44.8	7.4	124.7	37.4	6.3	64.0	62.3	16.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	65.7	51.2	22.3	67.7	44.8	7.4	124.7	37.4	6.3	64.0	62.3	16.2
LOS	E	D	C	E	D	A	F	D	A	E	E	B
Approach Delay (s/veh)		46.4			45.2			67.4			56.3	
Approach LOS		D			D			E			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay (s/veh): 51.6		Intersection LOS: D	
Intersection Capacity Utilization 88.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway





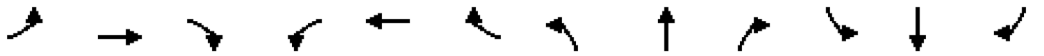
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	1461	394	181	1428	92	415	441	172	216	713	148
Future Volume (veh/h)	129	1461	394	181	1428	92	415	441	172	216	713	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	154	1739	323	215	1700	50	494	525	62	257	849	56
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	1775	539	365	1951	603	452	1529	461	309	937	407
Arrive On Green	0.08	0.35	0.35	0.11	0.38	0.38	0.13	0.30	0.30	0.09	0.26	0.26
Sat Flow, veh/h	3456	5106	1550	3456	5106	1579	3456	5106	1539	3456	3554	1543
Grp Volume(v), veh/h	154	1739	323	215	1700	50	494	525	62	257	849	56
Grp Sat Flow(s),veh/h/ln	1728	1702	1550	1728	1702	1579	1728	1702	1539	1728	1777	1543
Q Serve(g_s), s	5.6	43.8	15.2	7.7	40.1	2.6	17.0	10.4	2.8	9.5	30.0	3.6
Cycle Q Clear(g_c), s	5.6	43.8	15.2	7.7	40.1	2.6	17.0	10.4	2.8	9.5	30.0	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	1775	539	365	1951	603	452	1529	461	309	937	407
V/C Ratio(X)	0.58	0.98	0.60	0.59	0.87	0.08	1.09	0.34	0.13	0.83	0.91	0.14
Avail Cap(c_a), veh/h	292	1775	539	365	1951	603	452	1529	461	372	957	415
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	58.0	41.9	16.3	55.5	37.2	25.6	56.5	35.5	18.2	58.2	46.3	36.6
Incr Delay (d2), s/veh	1.2	17.0	4.9	1.7	5.7	0.3	69.9	0.3	0.3	9.8	11.5	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	20.5	6.0	3.4	17.2	1.0	11.7	4.4	1.4	4.6	14.6	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.2	59.0	21.1	57.2	42.9	25.9	126.4	35.8	18.5	68.0	57.8	36.9
LnGrp LOS	E	E	C	E	D	C	F	D	B	E	E	D
Approach Vol, veh/h		2216			1965			1081			1162	
Approach Delay, s/veh		53.5			44.0			76.2			59.1	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	50.5	21.6	38.9	14.6	55.0	16.9	43.5
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	13.0	* 45	17.0	35.0	11.0	47.2	14.0	38.0
Max Q Clear Time (g_c+I1), s	9.7	45.8	19.0	32.0	7.6	42.1	11.5	12.4
Green Ext Time (p_c), s	0.1	0.0	0.0	2.1	0.1	4.7	0.1	7.0

Intersection Summary	
HCM 7th Control Delay, s/veh	55.4
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1860	6	0	1677	28	0	0	17	0	0	37
Future Volume (vph)	0	1860	6	0	1677	28	0	0	17	0	0	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.998				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5085	0	0	5075	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5085	0	0	5075	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			2			12						
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	0	2268	7	0	2045	34	0	0	21	0	0	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2275	0	0	2079	0	0	0	21	0	0	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		

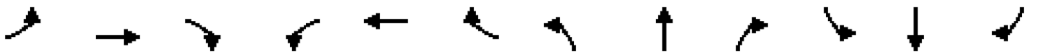
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1860	6	0	1677	28	0	0	17	0	0	37
Future Vol, veh/h	0	1860	6	0	1677	28	0	0	17	0	0	37
Conflicting Peds, #/hr	0	0	2	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2268	7	0	2045	34	0	0	21	0	0	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1140	-	-	1052
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	167	0	0	192
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	167	-	-	189
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	29.61	29.85
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	167	-	-	-	-	189
HCM Lane V/C Ratio	0.124	-	-	-	-	0.238
HCM Control Delay (s/veh)	29.6	-	-	-	-	29.9
HCM Lane LOS	D	-	-	-	-	D
HCM 95th %tile Q(veh)	0.4	-	-	-	-	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	1784	2	0	1622	101	0	0	12	14	0	84
Future Volume (vph)	86	1784	2	0	1622	101	0	0	12	14	0	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	0		0	0		0	0		100
Storage Lanes	1		0	0		0	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.991				0.865			0.850
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	5085	0	0	5040	0	0	0	1611	1770	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	5085	0	0	5040	0	0	0	1611	1770	0	1583
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		366			681			1312			750	
Travel Time (s)		6.2			11.6			35.8			20.5	
Confl. Peds. (#/hr)						6						
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	102	2124	2	0	1931	120	0	0	14	17	0	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	102	2126	0	0	2051	0	0	0	14	17	0	100
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	37.5

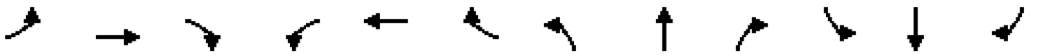
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	86	1784	2	0	1622	101	0	0	12	14	0	84
Future Vol, veh/h	86	1784	2	0	1622	101	0	0	12	14	0	84
Conflicting Peds, #/hr	0	0	0	0	0	6	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	130	-	-	-	-	-	-	-	0	0	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	102	2124	2	0	1931	120	0	0	14	17	0	100

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2057	0	0	-	-	0	-	-	1063	3051	-	1032
Stage 1	-	-	-	-	-	-	-	-	-	1997	-	-
Stage 2	-	-	-	-	-	-	-	-	-	1054	-	-
Critical Hdwy	5.34	-	-	-	-	-	-	-	7.14	6.44	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	7.34	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	6.74	-	-
Follow-up Hdwy	3.12	-	-	-	-	-	-	-	3.92	3.82	-	3.92
Pot Cap-1 Maneuver	117	-	-	0	-	-	0	0	188	~ 14	0	198
Stage 1	-	-	-	0	-	-	0	0	-	39	0	-
Stage 2	-	-	-	0	-	-	0	0	-	218	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	116	-	-	-	-	-	-	-	188	~ 1	-	196
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	~ 1	-	-
Stage 1	-	-	-	-	-	-	-	-	-	38	-	-
Stage 2	-	-	-	-	-	-	-	-	-	24	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	5.65	0	25.69	$ 1308.45
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	188	116	-	-	-	-	1	196
HCM Lane V/C Ratio	0.076	0.88	-	-	-	-	11.219	0.509
HCM Control Delay (s/veh)	25.7	123	-	-	-	-	$ 8913.6	40.9
HCM Lane LOS	D	F	-	-	-	-	F	E
HCM 95th %tile Q(veh)	0.2	5.4	-	-	-	-	3.6	2.6

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	1788	12	35	1708	3	0	0	17	3	1	18
Future Volume (vph)	6	1788	12	35	1708	3	0	0	17	3	1	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.865			0.887	
Flt Protected	0.950			0.950							0.994	
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1611	0	0	1642	0
Flt Permitted	0.950			0.950							0.994	
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1611	0	0	1642	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			1			3						
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
Adj. Flow (vph)	7	1943	13	38	1857	3	0	0	18	3	1	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1956	0	38	1860	0	0	18	0	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.4

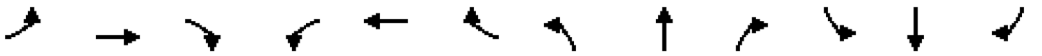
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	1788	12	35	1708	3	0	0	17	3	1	18
Future Vol, veh/h	6	1788	12	35	1708	3	0	0	17	3	1	18
Conflicting Peds, #/hr	0	0	1	0	0	3	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	1943	13	38	1857	3	0	0	18	3	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1863	0	0	1958	0	0	2783	3903	979	2728	3908	933
Stage 1	-	-	-	-	-	-	1964	1964	-	1937	1937	-
Stage 2	-	-	-	-	-	-	819	1939	-	790	1971	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	147	-	-	131	-	-	20	3	214	22	3	230
Stage 1	-	-	-	-	-	-	41	108	-	43	111	-
Stage 2	-	-	-	-	-	-	304	111	-	317	107	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	146	-	-	131	-	-	8	2	214	14	2	229
Mov Cap-2 Maneuver	-	-	-	-	-	-	8	2	-	14	2	-
Stage 1	-	-	-	-	-	-	39	103	-	30	79	-
Stage 2	-	-	-	-	-	-	195	78	-	277	102	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.87	23.41	$ 303.8
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	214	146	-	-	131	-	-	29
HCM Lane V/C Ratio	0.086	0.045	-	-	0.29	-	-	0.818
HCM Control Delay (s/veh)	23.4	30.7	-	-	43.2	-	-	$ 303.8
HCM Lane LOS	C	D	-	-	E	-	-	F
HCM 95th %tile Q(veh)	0.3	0.1	-	-	1.1	-	-	2.7

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

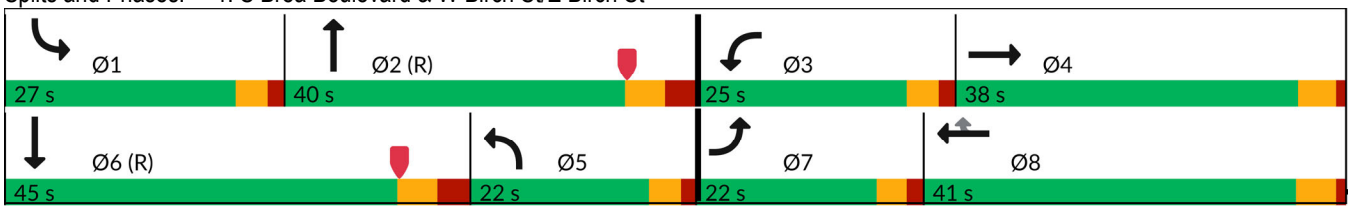


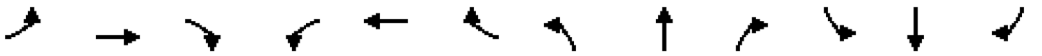
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	75	32	202	88	222	44	300	172	237	376	71
Future Volume (vph)	49	75	32	202	88	222	44	300	172	237	376	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.99			0.99	
Frt		0.955				0.850		0.945			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1762	0	3433	1863	1583	1770	4735	0	3433	4932	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1762	0	3433	1863	1549	1770	4735	0	3433	4932	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16				247		108			30	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			16			9			16			6
Confl. Bikes (#/hr)			2						2			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	54	83	36	224	98	247	49	333	191	263	418	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	119	0	224	98	247	49	524	0	263	497	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	22.0	38.0		25.0	41.0	41.0	22.0	40.0		27.0	45.0	
Total Split (%)	16.9%	29.2%		19.2%	31.5%	31.5%	16.9%	30.8%		20.8%	34.6%	
Maximum Green (s)	17.5	33.4		20.5	36.1	36.1	17.5	33.1		22.5	38.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		8			4	4		8			2	
Act Effct Green (s)	9.2	15.2		12.8	21.0	21.0	15.6	67.2		14.3	68.4	
Actuated g/C Ratio	0.07	0.12		0.10	0.16	0.16	0.12	0.52		0.11	0.53	
v/c Ratio	0.43	0.54		0.66	0.33	0.54	0.23	0.21		0.70	0.19	
Control Delay (s/veh)	68.2	53.6		69.1	47.1	11.6	43.8	18.4		65.6	18.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	68.2	53.6		69.1	47.1	11.6	43.8	18.4		65.6	18.7	
LOS	E	D		E	D	B	D	B		E	B	
Approach Delay (s/veh)		58.2			40.3			20.6			34.9	
Approach LOS		E			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 99 (76%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 34.4		Intersection LOS: C	
Intersection Capacity Utilization 57.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





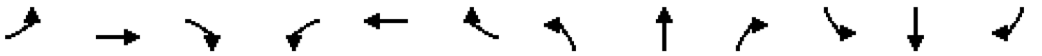
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	75	32	202	88	222	44	300	172	237	376	71
Future Volume (veh/h)	49	75	32	202	88	222	44	300	172	237	376	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	83	22	224	98	40	49	333	139	263	418	65
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	166	44	283	276	230	585	1962	764	321	1305	198
Arrive On Green	0.05	0.12	0.12	0.03	0.05	0.05	0.66	1.00	1.00	0.09	0.29	0.29
Sat Flow, veh/h	1781	1405	372	3456	1870	1556	1781	3589	1398	3456	4454	674
Grp Volume(v), veh/h	54	0	105	224	98	40	49	315	157	263	317	166
Grp Sat Flow(s),veh/h/ln	1781	0	1778	1728	1870	1556	1781	1702	1583	1728	1702	1723
Q Serve(g_s), s	3.8	0.0	7.2	8.4	6.6	3.2	1.3	0.0	0.0	9.7	9.4	9.8
Cycle Q Clear(g_c), s	3.8	0.0	7.2	8.4	6.6	3.2	1.3	0.0	0.0	9.7	9.4	9.8
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.88	1.00		0.39
Lane Grp Cap(c), veh/h	94	0	210	283	276	230	585	1861	865	321	998	505
V/C Ratio(X)	0.57	0.00	0.50	0.79	0.36	0.17	0.08	0.17	0.18	0.82	0.32	0.33
Avail Cap(c_a), veh/h	240	0	457	545	519	432	585	1861	865	598	998	505
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.1	0.0	53.7	62.1	55.9	54.2	15.2	0.0	0.0	57.9	35.8	36.0
Incr Delay (d2), s/veh	2.1	0.0	0.7	1.9	0.3	0.1	0.0	0.2	0.4	2.0	0.8	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	3.3	3.9	3.2	1.3	0.5	0.0	0.1	4.3	4.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.2	0.0	54.4	64.0	56.1	54.4	15.3	0.2	0.4	59.9	36.7	37.7
LnGrp LOS	E		D	E	E	D	B	A	A	E	D	D
Approach Vol, veh/h		159			362			521			746	
Approach Delay, s/veh		57.0			60.8			1.7			45.1	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	78.0	15.2	20.3	49.6	45.0	11.4	24.1
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	22.5	33.1	20.5	* 33	17.5	* 38	17.5	36.1
Max Q Clear Time (g_c+I1), s	11.7	2.0	10.4	9.2	3.3	11.8	5.8	8.6
Green Ext Time (p_c), s	0.4	2.0	0.3	0.4	0.0	2.0	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	36.7
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	438	43	25	498	9	10	3	16	0	0	14
Future Volume (vph)	2	438	43	25	498	9	10	3	16	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.997			0.924				0.865
Flt Protected				0.950				0.983				
Satd. Flow (prot)	0	3539	1583	1770	3529	0	0	1692	0	0	0	1611
Flt Permitted				0.950				0.983				
Satd. Flow (perm)	0	3539	1583	1770	3529	0	0	1692	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			5			1						
Confl. Bikes (#/hr)			4									
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	2	492	48	28	560	10	11	3	18	0	0	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	494	48	28	570	0	0	32	0	0	0	16
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.8%		ICU Level of Service A	
Analysis Period (min) 15			

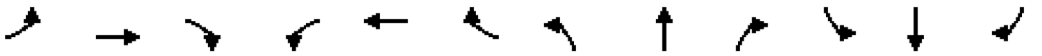
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	438	43	25	498	9	10	3	16	0	0	14
Future Vol, veh/h	2	438	43	25	498	9	10	3	16	0	0	14
Conflicting Peds, #/hr	0	0	5	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	492	48	28	560	10	11	3	18	0	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	571	0	0	545	0	0	838	1128	251	-	-	286
Stage 1	-	-	-	-	-	-	502	502	-	-	-	-
Stage 2	-	-	-	-	-	-	336	627	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	998	-	-	1020	-	-	259	203	749	0	0	711
Stage 1	-	-	-	-	-	-	520	540	-	0	0	-
Stage 2	-	-	-	-	-	-	652	475	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	997	-	-	1015	-	-	245	196	745	-	-	710
Mov Cap-2 Maneuver	-	-	-	-	-	-	245	196	-	-	-	-
Stage 1	-	-	-	-	-	-	516	536	-	-	-	-
Stage 2	-	-	-	-	-	-	620	461	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.04	0.41	15.57	10.18
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	373	997	-	-	1015	-	-	710
HCM Lane V/C Ratio	0.087	0.002	-	-	0.028	-	-	0.022
HCM Control Delay (s/veh)	15.6	8.6	-	-	8.6	-	-	10.2
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.1

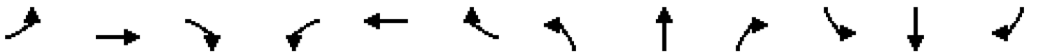


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	428	7	65	494	11	15	6	50	26	3	13
Future Volume (vph)	14	428	7	65	494	11	15	6	50	26	3	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.98				
Frt		0.998			0.997			0.905			0.958	
Flt Protected	0.950			0.950				0.990			0.971	
Satd. Flow (prot)	1770	3531	0	1770	3527	0	0	1641	0	0	1733	0
Flt Permitted	0.422			0.458				0.928			0.832	
Satd. Flow (perm)	786	3531	0	853	3527	0	0	1538	0	0	1485	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			4			60			16	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		364			329			750			397	
Travel Time (s)		7.1			6.4			20.5			10.8	
Confl. Peds. (#/hr)			1			1			19			
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	17	516	8	78	595	13	18	7	60	31	4	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	524	0	78	608	0	0	85	0	0	51	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (%)	44.6%	44.6%		44.6%	44.6%		55.4%	55.4%		55.4%	55.4%	
Maximum Green (s)	24.1	24.1		24.1	24.1		31.4	31.4		31.4	31.4	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9			4.6			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0		24.0	24.0		24.0	24.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		9	9	
Act Effct Green (s)	47.7	47.7		47.7	47.7			10.6			10.6	
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.16			0.16	
v/c Ratio	0.03	0.20		0.12	0.24			0.28			0.20	
Control Delay (s/veh)	8.1	7.6		8.0	6.1			7.4			15.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	8.1	7.6		8.0	6.1			7.4			15.9	
LOS	A	A		A	A			A			B	
Approach Delay (s/veh)		7.6			6.3			7.4			15.9	
Approach LOS		A			A			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 51 (78%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay (s/veh): 7.3		Intersection LOS: A	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

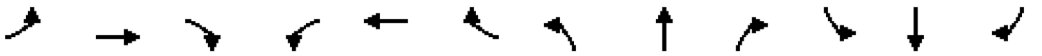
Splits and Phases: 3: S Flower Ave & E Birch St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	428	7	65	494	11	15	6	50	26	3	13
Future Volume (veh/h)	14	428	7	65	494	11	15	6	50	26	3	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.95	0.95		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	516	8	78	595	13	18	7	12	31	4	3
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	674	2667	41	727	2649	58	141	57	55	220	27	13
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	813	3580	55	878	3556	78	536	525	509	1093	249	115
Grp Volume(v), veh/h	17	256	268	78	297	311	37	0	0	38	0	0
Grp Sat Flow(s),veh/h/ln	813	1777	1859	878	1777	1856	1570	0	0	1457	0	0
Q Serve(g_s), s	0.4	2.8	2.8	1.9	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.8	2.8	2.8	4.7	3.3	3.3	1.3	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.04	0.49		0.32	0.82		0.08
Lane Grp Cap(c), veh/h	674	1324	1385	727	1324	1383	253	0	0	259	0	0
V/C Ratio(X)	0.03	0.19	0.19	0.11	0.22	0.22	0.15	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	674	1324	1385	727	1324	1383	818	0	0	779	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.1	2.5	2.5	3.2	2.5	2.5	26.4	0.0	0.0	26.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.3	0.4	0.4	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.6	0.6	0.3	0.7	0.7	0.5	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.2	2.8	2.8	3.5	2.9	2.9	26.5	0.0	0.0	26.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C			C		
Approach Vol, veh/h		541			686			37			38	
Approach Delay, s/veh		2.8			3.0			26.5			26.5	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		53.3		11.7		53.3		11.7				
Change Period (Y+Rc), s		4.9		4.6		4.9		4.6				
Max Green Setting (Gmax), s		24.1		31.4		24.1		31.4				
Max Q Clear Time (g_c+I1), s		5.8		3.3		6.7		3.3				
Green Ext Time (p_c), s		1.0		0.1		1.3		0.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			4.3									
HCM 7th LOS			A									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	498	2	3	569	0	0	1	4	0	0	2
Future Volume (vph)	1	498	2	3	569	0	0	1	4	0	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.887			0.865	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3536	0	1770	3539	0	0	1652	0	0	1611	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3536	0	1770	3539	0	0	1652	0	0	1611	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			1			4						
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	1	586	2	4	669	0	0	1	5	0	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	588	0	4	669	0	0	6	0	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.7%		ICU Level of Service A	
Analysis Period (min) 15			

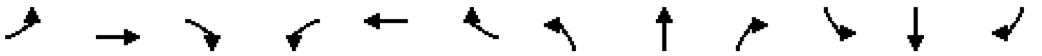
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	498	2	3	569	0	0	1	4	0	0	2
Future Vol, veh/h	1	498	2	3	569	0	0	1	4	0	0	2
Conflicting Peds, #/hr	0	0	1	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	586	2	4	669	0	0	1	5	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	673	0	0	589	0	0	932	1271	295	976	1272	339
Stage 1	-	-	-	-	-	-	590	590	-	680	680	-
Stage 2	-	-	-	-	-	-	342	680	-	296	592	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	913	-	-	982	-	-	221	167	701	205	166	657
Stage 1	-	-	-	-	-	-	461	493	-	407	449	-
Stage 2	-	-	-	-	-	-	647	449	-	688	492	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	910	-	-	981	-	-	219	165	701	201	165	655
Mov Cap-2 Maneuver	-	-	-	-	-	-	219	165	-	201	165	-
Stage 1	-	-	-	-	-	-	460	492	-	404	445	-
Stage 2	-	-	-	-	-	-	642	445	-	681	491	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.02	0.05	13.59	10.52
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	425	910	-	-	981	-	-	655
HCM Lane V/C Ratio	0.014	0.001	-	-	0.004	-	-	0.004
HCM Control Delay (s/veh)	13.6	9	-	-	8.7	-	-	10.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

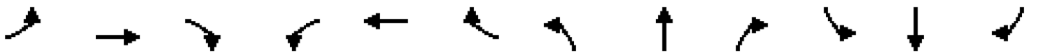


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	1125	242	231	1060	94	297	343	217	137	334	129
Future Volume (vph)	94	1125	242	231	1060	94	297	343	217	137	334	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.99			0.98			0.98			0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1563	3433	5085	1553	3433	5085	1552	3433	3539	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			174			97			233			147
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)						7			6			6
Confl. Bikes (#/hr)			1						2			1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	101	1210	260	248	1140	101	319	369	233	147	359	139
Shared Lane Traffic (%)												
Lane Group Flow (vph)	101	1210	260	248	1140	101	319	369	233	147	359	139
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	20.6	45.5	45.5	20.6	45.5	45.5	21.6	42.6	42.6	21.3	39.6	39.6
Total Split (%)	15.8%	35.0%	35.0%	15.8%	35.0%	35.0%	16.6%	32.8%	32.8%	16.4%	30.5%	30.5%
Maximum Green (s)	16.0	40.2	40.2	16.0	40.2	40.2	17.0	38.0	38.0	16.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		0	0		4	4		3	3		3	3
Act Effct Green (s)	10.2	58.9	58.9	14.3	63.1	63.1	15.4	26.1	26.1	10.8	22.3	22.3
Actuated g/C Ratio	0.08	0.45	0.45	0.11	0.49	0.49	0.12	0.20	0.20	0.08	0.17	0.17
v/c Ratio	0.38	0.53	0.32	0.66	0.46	0.13	0.79	0.36	0.47	0.51	0.59	0.36
Control Delay (s/veh)	61.1	28.1	10.3	64.2	24.3	5.5	70.0	44.6	7.8	53.4	61.8	24.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	61.1	28.1	10.3	64.2	24.3	5.5	70.0	44.6	7.8	53.4	61.8	24.4
LOS	E	C	B	E	C	A	E	D	A	D	E	C
Approach Delay (s/veh)		27.3			29.7			44.1			51.8	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 59 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 34.8		Intersection LOS: C	
Intersection Capacity Utilization 76.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway



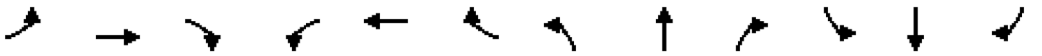
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	1125	242	231	1060	94	297	343	217	137	334	129
Future Volume (veh/h)	94	1125	242	231	1060	94	297	343	217	137	334	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	1210	164	248	1140	52	319	369	48	147	359	25
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	1500	460	1012	2640	816	372	915	277	265	545	237
Arrive On Green	0.07	0.29	0.29	0.29	0.52	0.52	0.11	0.18	0.18	0.10	0.20	0.20
Sat Flow, veh/h	3456	5106	1565	3456	5106	1579	3456	5106	1547	3456	3554	1546
Grp Volume(v), veh/h	101	1210	164	248	1140	52	319	369	48	147	359	25
Grp Sat Flow(s),veh/h/ln	1728	1702	1565	1728	1702	1579	1728	1702	1547	1728	1777	1546
Q Serve(g_s), s	3.6	28.5	8.0	7.1	18.0	2.1	11.8	8.3	1.9	5.3	12.1	1.7
Cycle Q Clear(g_c), s	3.6	28.5	8.0	7.1	18.0	2.1	11.8	8.3	1.9	5.3	12.1	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	1500	460	1012	2640	816	372	915	277	265	545	237
V/C Ratio(X)	0.39	0.81	0.36	0.25	0.43	0.06	0.86	0.40	0.17	0.56	0.66	0.11
Avail Cap(c_a), veh/h	425	1579	484	1012	2640	816	452	1493	452	425	957	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	57.3	42.5	19.8	35.0	19.5	15.7	57.0	47.2	13.7	56.3	48.6	44.5
Incr Delay (d2), s/veh	0.4	4.8	2.2	0.0	0.5	0.2	11.3	0.6	0.6	0.6	2.7	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	12.4	3.2	3.0	7.0	0.8	5.7	3.6	1.3	2.3	5.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.7	47.3	22.0	35.1	20.0	15.8	68.3	47.8	14.3	56.9	51.4	44.9
LnGrp LOS	E	D	C	D	C	B	E	D	B	E	D	D
Approach Vol, veh/h		1475			1440			736			531	
Approach Delay, s/veh		45.2			22.5			54.5			52.6	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	43.4	43.5	18.6	24.5	14.3	72.5	15.3	27.9
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	16.0	* 40	17.0	35.0	16.0	40.2	16.0	38.0
Max Q Clear Time (g_c+I1), s	9.1	30.5	13.8	14.1	5.6	20.0	7.3	10.3
Green Ext Time (p_c), s	0.3	7.7	0.2	4.1	0.1	12.7	0.1	5.0

Intersection Summary	
HCM 7th Control Delay, s/veh	39.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1482	7	0	1380	21	0	0	23	0	0	23
Future Volume (vph)	0	1482	7	0	1380	21	0	0	23	0	0	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.998				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5080	0	0	5075	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5080	0	0	5075	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)						9						
Confl. Bikes (#/hr)			1			1						
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	0	1497	7	0	1394	21	0	0	23	0	0	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1504	0	0	1415	0	0	0	23	0	0	23
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	38.8%	ICU Level of Service	A
Analysis Period (min)	15		

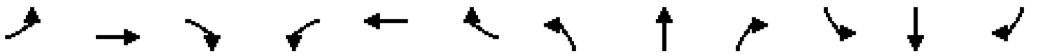
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1482	7	0	1380	21	0	0	23	0	0	23
Future Vol, veh/h	0	1482	7	0	1380	21	0	0	23	0	0	23
Conflicting Peds, #/hr	0	0	0	0	0	9	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1497	7	0	1394	21	0	0	23	0	0	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	752	-	-	717
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	303	0	0	319
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	303	-	-	317
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	17.88	17.27
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	303	-	-	-	-	317
HCM Lane V/C Ratio	0.077	-	-	-	-	0.073
HCM Control Delay (s/veh)	17.9	-	-	-	-	17.3
HCM Lane LOS	C	-	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	1452	1	0	1335	21	0	0	4	8	0	65
Future Volume (vph)	49	1452	1	0	1335	21	0	0	4	8	0	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	0		0	0		0	0		100
Storage Lanes	1		0	0		0	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.998				0.865			0.850
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	5085	0	0	5075	0	0	0	1611	1770	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	5085	0	0	5075	0	0	0	1611	1770	0	1583
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		366			681			1312			750	
Travel Time (s)		6.2			11.6			35.8			20.5	
Confl. Peds. (#/hr)						7						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	52	1528	1	0	1405	22	0	0	4	8	0	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	1529	0	0	1427	0	0	0	4	8	0	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.7%		ICU Level of Service A	
Analysis Period (min) 15			

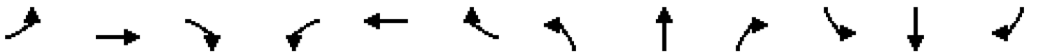
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	1452	1	0	1335	21	0	0	4	8	0	65
Future Vol, veh/h	49	1452	1	0	1335	21	0	0	4	8	0	65
Conflicting Peds, #/hr	0	0	0	0	0	7	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	130	-	-	-	-	-	-	-	0	0	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	1528	1	0	1405	22	0	0	4	8	0	68

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1434	0	0	-	-	0	-	-	765	2138	-	721
Stage 1	-	-	-	-	-	-	-	-	-	1423	-	-
Stage 2	-	-	-	-	-	-	-	-	-	715	-	-
Critical Hdwy	5.34	-	-	-	-	-	-	-	7.14	6.44	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	7.34	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	6.74	-	-
Follow-up Hdwy	3.12	-	-	-	-	-	-	-	3.92	3.82	-	3.92
Pot Cap-1 Maneuver	240	-	-	0	-	-	0	0	297	52	0	317
Stage 1	-	-	-	0	-	-	0	0	-	100	0	-
Stage 2	-	-	-	0	-	-	0	0	-	353	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	239	-	-	-	-	-	-	-	297	40	-	315
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	40	-	-
Stage 1	-	-	-	-	-	-	-	-	-	100	-	-
Stage 2	-	-	-	-	-	-	-	-	-	273	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.79	0	17.3	30.31
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	297	239	-	-	-	-	40	315
HCM Lane V/C Ratio	0.014	0.216	-	-	-	-	0.211	0.217
HCM Control Delay (s/veh)	17.3	24.2	-	-	-	-	117.7	19.6
HCM Lane LOS	C	C	-	-	-	-	F	C
HCM 95th %tile Q(veh)	0	0.8	-	-	-	-	0.7	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	1444	10	21	1349	3	2	0	8	3	0	5
Future Volume (vph)	7	1444	10	21	1349	3	2	0	8	3	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.892			0.916	
Flt Protected	0.950			0.950				0.990			0.982	
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1645	0	0	1676	0
Flt Permitted	0.950			0.950				0.990			0.982	
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1645	0	0	1676	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			2			7						
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	7	1520	11	22	1420	3	2	0	8	3	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1531	0	22	1423	0	0	10	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.1%		ICU Level of Service A	
Analysis Period (min) 15			

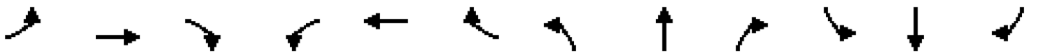
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	1444	10	21	1349	3	2	0	8	3	0	5
Future Vol, veh/h	7	1444	10	21	1349	3	2	0	8	3	0	5
Conflicting Peds, #/hr	0	0	2	0	0	7	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	1520	11	22	1420	3	2	0	8	3	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1430	0	0	1533	0	0	2154	3016	767	2096	3020	719
Stage 1	-	-	-	-	-	-	1542	1542	-	1473	1473	-
Stage 2	-	-	-	-	-	-	612	1474	-	623	1547	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	241	-	-	215	-	-	51	13	296	55	13	318
Stage 1	-	-	-	-	-	-	83	175	-	93	189	-
Stage 2	-	-	-	-	-	-	407	189	-	401	174	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	240	-	-	214	-	-	43	11	295	46	11	316
Mov Cap-2 Maneuver	-	-	-	-	-	-	43	11	-	46	11	-
Stage 1	-	-	-	-	-	-	80	169	-	82	169	-
Stage 2	-	-	-	-	-	-	359	168	-	378	168	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.36	33.54	44.52
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	137	240	-	-	214	-	-	99
HCM Lane V/C Ratio	0.077	0.031	-	-	0.103	-	-	0.085
HCM Control Delay (s/veh)	33.5	20.5	-	-	23.7	-	-	44.5
HCM Lane LOS	D	C	-	-	C	-	-	E
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.3	-	-	0.3

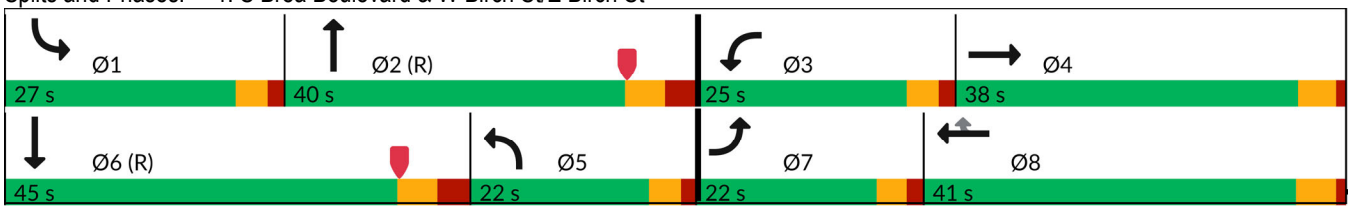


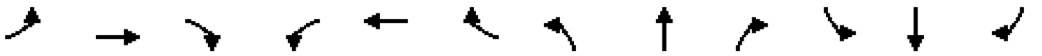
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	79	32	279	102	343	40	524	194	302	530	49
Future Volume (vph)	56	79	32	279	102	343	40	524	194	302	530	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.99			1.00	
Frt		0.956				0.850		0.960			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1762	0	3433	1863	1583	1770	4855	0	3433	4996	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1762	0	3433	1863	1549	1770	4855	0	3433	4996	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				361		69			12	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			19			9			5			10
Confl. Bikes (#/hr)			3									3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	59	83	34	294	107	361	42	552	204	318	558	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	117	0	294	107	361	42	756	0	318	610	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	22.0	38.0		25.0	41.0	41.0	22.0	40.0		27.0	45.0	
Total Split (%)	16.9%	29.2%		19.2%	31.5%	31.5%	16.9%	30.8%		20.8%	34.6%	
Maximum Green (s)	17.5	33.4		20.5	36.1	36.1	17.5	33.1		22.5	38.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		8			4	4		2			5	
Act Effct Green (s)	9.5	15.1		15.5	23.3	23.3	15.6	62.5		16.4	65.8	
Actuated g/C Ratio	0.07	0.12		0.12	0.18	0.18	0.12	0.48		0.13	0.51	
v/c Ratio	0.46	0.54		0.72	0.32	0.63	0.20	0.32		0.74	0.24	
Control Delay (s/veh)	68.8	53.7		65.3	47.5	9.0	65.1	29.6		65.0	21.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	68.8	53.7		65.3	47.5	9.0	65.1	29.6		65.0	21.5	
LOS	E	D		E	D	A	E	C		E	C	
Approach Delay (s/veh)		58.8			36.1			31.5			36.4	
Approach LOS		E			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 99 (76%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 36.3		Intersection LOS: D	
Intersection Capacity Utilization 63.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





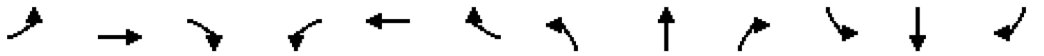
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	79	32	279	102	343	40	524	194	302	530	49
Future Volume (veh/h)	56	79	32	279	102	343	40	524	194	302	530	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.98	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	83	20	294	107	64	42	552	168	318	558	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	178	43	351	321	268	539	1972	585	376	1402	117
Arrive On Green	0.05	0.12	0.12	0.10	0.17	0.17	0.10	0.17	0.17	0.11	0.29	0.29
Sat Flow, veh/h	1781	1435	346	3456	1870	1560	1781	3904	1158	3456	4785	398
Grp Volume(v), veh/h	59	0	103	294	107	64	42	479	241	318	395	210
Grp Sat Flow(s),veh/h/ln	1781	0	1781	1728	1870	1560	1781	1702	1658	1728	1702	1779
Q Serve(g_s), s	4.2	0.0	7.0	10.9	6.5	4.6	2.8	16.0	16.5	11.7	12.1	12.3
Cycle Q Clear(g_c), s	4.2	0.0	7.0	10.9	6.5	4.6	2.8	16.0	16.5	11.7	12.1	12.3
Prop In Lane	1.00		0.19	1.00		1.00	1.00		0.70	1.00		0.22
Lane Grp Cap(c), veh/h	97	0	221	351	321	268	539	1720	837	376	998	521
V/C Ratio(X)	0.61	0.00	0.47	0.84	0.33	0.24	0.08	0.28	0.29	0.85	0.40	0.40
Avail Cap(c_a), veh/h	240	0	458	545	519	433	539	1720	837	598	998	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.1	0.0	52.9	57.3	47.3	46.5	42.1	33.5	33.7	56.8	36.7	36.8
Incr Delay (d2), s/veh	2.3	0.0	0.6	3.8	0.2	0.2	0.0	0.4	0.8	3.4	1.2	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	3.2	4.9	3.1	1.8	1.2	7.4	7.5	5.3	5.2	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.4	0.0	53.5	61.2	47.5	46.7	42.1	33.8	34.5	60.3	37.9	39.1
LnGrp LOS	E		D	E	D	D	D	C	C	E	D	D
Approach Vol, veh/h		162			465			762			923	
Approach Delay, s/veh		56.7			56.0			34.5			45.9	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	72.6	17.7	21.1	46.2	45.0	11.5	27.2
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	22.5	33.1	20.5	* 33	17.5	* 38	17.5	36.1
Max Q Clear Time (g_c+I1), s	13.7	18.5	12.9	9.0	4.8	14.3	6.2	8.5
Green Ext Time (p_c), s	0.4	2.7	0.3	0.3	0.0	2.5	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	44.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	577	30	9	695	10	9	3	38	0	0	16
Future Volume (vph)	2	577	30	9	695	10	9	3	38	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.896				0.865
Flt Protected				0.950				0.991				
Satd. Flow (prot)	0	3539	1583	1770	3532	0	0	1654	0	0	0	1611
Flt Permitted				0.950				0.991				
Satd. Flow (perm)	0	3539	1583	1770	3532	0	0	1654	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			10			1						
Confl. Bikes (#/hr)			3			1						
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	2	656	34	10	790	11	10	3	43	0	0	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	658	34	10	801	0	0	56	0	0	0	18
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.2%		ICU Level of Service A	
Analysis Period (min) 15			

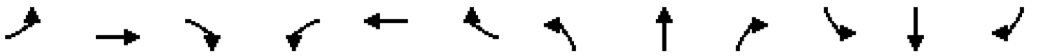
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	577	30	9	695	10	9	3	38	0	0	16
Future Vol, veh/h	2	577	30	9	695	10	9	3	38	0	0	16
Conflicting Peds, #/hr	0	0	10	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	656	34	10	790	11	10	3	43	0	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	802	0	0	700	0	0	1086	1493	338	-	-	402
Stage 1	-	-	-	-	-	-	670	670	-	-	-	-
Stage 2	-	-	-	-	-	-	415	823	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	817	-	-	893	-	-	171	122	658	0	0	598
Stage 1	-	-	-	-	-	-	413	453	-	0	0	-
Stage 2	-	-	-	-	-	-	585	386	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	816	-	-	884	-	-	162	119	652	-	-	598
Mov Cap-2 Maneuver	-	-	-	-	-	-	162	119	-	-	-	-
Stage 1	-	-	-	-	-	-	407	448	-	-	-	-
Stage 2	-	-	-	-	-	-	561	381	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.11	16.89	11.21
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	359	816	-	-	884	-	-	598
HCM Lane V/C Ratio	0.158	0.003	-	-	0.012	-	-	0.03
HCM Control Delay (s/veh)	16.9	9.4	-	-	9.1	-	-	11.2
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.1

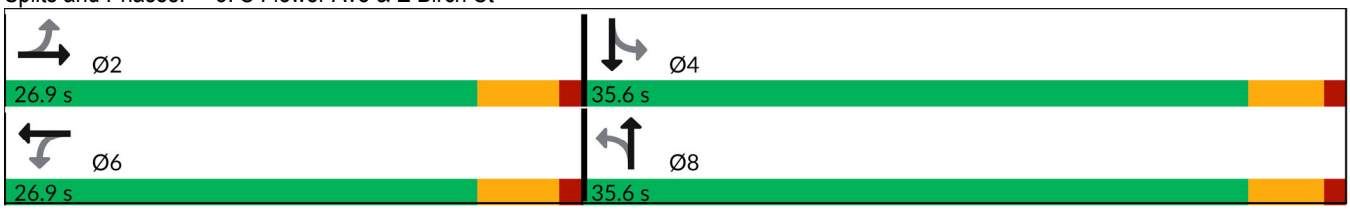


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	573	11	54	642	23	36	43	25	45	10	37
Future Volume (vph)	34	573	11	54	642	23	36	43	25	45	10	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.98				
Frt		0.997			0.995			0.967			0.946	
Flt Protected	0.950			0.950				0.983			0.976	
Satd. Flow (prot)	1770	3526	0	1770	3518	0	0	1735	0	0	1720	0
Flt Permitted	0.337			0.384				0.887			0.834	
Satd. Flow (perm)	628	3526	0	715	3518	0	0	1566	0	0	1470	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			6			28			41	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		364			329			750			397	
Travel Time (s)		7.1			6.4			20.5			10.8	
Confl. Peds. (#/hr)			12			4			118			
Confl. Bikes (#/hr)			3			2			1			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	38	637	12	60	713	26	40	48	28	50	11	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	649	0	60	739	0	0	116	0	0	102	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (%)	43.0%	43.0%		43.0%	43.0%		57.0%	57.0%		57.0%	57.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		31.0	31.0		31.0	31.0	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9			4.6			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0		24.0	24.0		24.0	24.0	
Pedestrian Calls (#/hr)	6	6		2	2		73	73		0	0	
Act Effct Green (s)	29.1	29.1		29.1	29.1			18.7			18.7	
Actuated g/C Ratio	0.54	0.54		0.54	0.54			0.35			0.35	
v/c Ratio	0.11	0.34		0.16	0.39			0.21			0.19	
Control Delay (s/veh)	15.1	13.2		15.4	13.6			8.3			6.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	15.1	13.2		15.4	13.6			8.3			6.8	
LOS	B	B		B	B			A			A	
Approach Delay (s/veh)		13.3			13.7			8.3			6.8	
Approach LOS		B			B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 62.5			
Actuated Cycle Length: 54.1			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay (s/veh): 12.8		Intersection LOS: B	
Intersection Capacity Utilization 64.3%		ICU Level of Service C	
Analysis Period (min) 15			

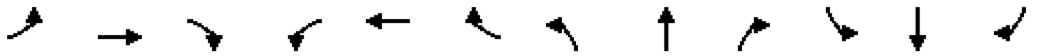
Splits and Phases: 3: S Flower Ave & E Birch St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	573	11	54	642	23	36	43	25	45	10	37
Future Volume (veh/h)	34	573	11	54	642	23	36	43	25	45	10	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.90	0.92		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	637	12	60	713	24	40	48	10	50	11	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	348	1542	29	382	1516	51	310	345	63	454	102	93
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	720	3565	67	779	3504	118	553	906	166	881	268	245
Grp Volume(v), veh/h	38	317	332	60	361	376	98	0	0	74	0	0
Grp Sat Flow(s),veh/h/ln	720	1777	1855	779	1777	1845	1625	0	0	1394	0	0
Q Serve(g_s), s	2.0	6.3	6.3	2.9	7.4	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.4	6.3	6.3	9.2	7.4	7.4	1.8	0.0	0.0	1.4	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.06	0.41		0.10	0.68		0.18
Lane Grp Cap(c), veh/h	348	768	802	382	768	798	718	0	0	649	0	0
V/C Ratio(X)	0.11	0.41	0.41	0.16	0.47	0.47	0.14	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	348	768	802	382	768	798	1083	0	0	959	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.6	10.0	10.0	13.2	10.3	10.3	10.3	0.0	0.0	10.2	0.0	0.0
Incr Delay (d2), s/veh	0.6	1.6	1.6	0.9	2.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.2	2.3	0.5	2.7	2.8	0.6	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.3	11.6	11.5	14.0	12.3	12.3	10.3	0.0	0.0	10.2	0.0	0.0
LnGrp LOS	B	B	B	B	B	B	B			B		
Approach Vol, veh/h		687			797			98			74	
Approach Delay, s/veh		11.7			12.4			10.3			10.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.9		24.0		26.9		24.0				
Change Period (Y+Rc), s		4.9		4.6		4.9		4.6				
Max Green Setting (Gmax), s		22.0		31.0		22.0		31.0				
Max Q Clear Time (g_c+I1), s		11.4		3.4		11.2		3.8				
Green Ext Time (p_c), s		1.2		0.3		1.4		0.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			11.9									
HCM 7th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	618	21	16	717	8	0	0	1	2	0	3
Future Volume (vph)	3	618	21	16	717	8	0	0	1	2	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995			0.998			0.865			0.919	
Flt Protected	0.950			0.950							0.980	
Satd. Flow (prot)	1770	3522	0	1770	3532	0	0	1611	0	0	1678	0
Flt Permitted	0.950			0.950							0.980	
Satd. Flow (perm)	1770	3522	0	1770	3532	0	0	1611	0	0	1678	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			83			5						
Confl. Bikes (#/hr)			3			2						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3	651	22	17	755	8	0	0	1	2	0	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	3	673	0	17	763	0	0	1	0	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.1%		ICU Level of Service A	
Analysis Period (min) 15			

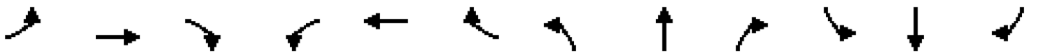
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	618	21	16	717	8	0	0	1	2	0	3
Future Vol, veh/h	3	618	21	16	717	8	0	0	1	2	0	3
Conflicting Peds, #/hr	0	0	83	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	651	22	17	755	8	0	0	1	2	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	768	0	0	756	0	0	1162	1553	419	1129	1560	387
Stage 1	-	-	-	-	-	-	751	751	-	798	798	-
Stage 2	-	-	-	-	-	-	411	802	-	332	762	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	842	-	-	851	-	-	150	112	583	159	111	612
Stage 1	-	-	-	-	-	-	369	417	-	346	396	-
Stage 2	-	-	-	-	-	-	589	395	-	656	412	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	838	-	-	784	-	-	134	100	537	154	99	609
Mov Cap-2 Maneuver	-	-	-	-	-	-	134	100	-	154	99	-
Stage 1	-	-	-	-	-	-	339	382	-	337	386	-
Stage 2	-	-	-	-	-	-	573	384	-	652	378	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.04	0.21	11.72	18.17
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	537	838	-	-	784	-	-	279
HCM Lane V/C Ratio	0.002	0.004	-	-	0.021	-	-	0.019
HCM Control Delay (s/veh)	11.7	9.3	-	-	9.7	-	-	18.2
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0.1	-	-	0.1

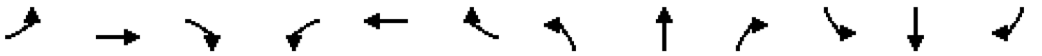


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	1211	379	308	1257	114	372	526	219	211	501	153
Future Volume (vph)	125	1211	379	308	1257	114	372	526	219	211	501	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.97			0.98			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1551	3433	5085	1536	3433	5085	1544	3433	3539	1542
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			259			97			228			159
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			8			17			11			11
Confl. Bikes (#/hr)						1			2			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	130	1261	395	321	1309	119	388	548	228	220	522	159
Shared Lane Traffic (%)												
Lane Group Flow (vph)	130	1261	395	321	1309	119	388	548	228	220	522	159
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	18.6	47.5	47.5	19.6	48.5	48.5	21.6	41.6	41.6	21.3	39.6	39.6
Total Split (%)	14.3%	36.5%	36.5%	15.1%	37.3%	37.3%	16.6%	32.0%	32.0%	16.4%	30.5%	30.5%
Maximum Green (s)	14.0	42.2	42.2	15.0	43.2	43.2	17.0	37.0	37.0	16.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		4	4		8	8		6	6		6	6
Act Effct Green (s)	10.5	52.3	52.3	14.7	56.5	56.5	16.6	30.4	30.4	12.8	27.3	27.3
Actuated g/C Ratio	0.08	0.40	0.40	0.11	0.43	0.43	0.13	0.23	0.23	0.10	0.21	0.21
v/c Ratio	0.47	0.62	0.51	0.83	0.59	0.16	0.89	0.46	0.43	0.65	0.70	0.35
Control Delay (s/veh)	62.7	33.6	13.0	74.3	30.5	8.1	78.5	43.6	7.1	82.5	57.9	19.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	62.7	33.6	13.0	74.3	30.5	8.1	78.5	43.6	7.1	82.5	57.9	19.9
LOS	E	C	B	E	C	A	E	D	A	F	E	B
Approach Delay (s/veh)		31.2			37.0			48.1			57.2	
Approach LOS		C			D			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 101 (78%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 40.7		Intersection LOS: D	
Intersection Capacity Utilization 84.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway



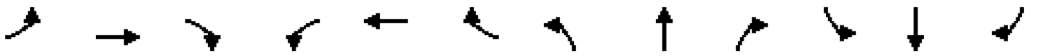
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	1211	379	308	1257	114	372	526	219	211	501	153
Future Volume (veh/h)	125	1211	379	308	1257	114	372	526	219	211	501	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	1261	241	321	1309	65	388	548	54	220	522	34
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	1579	486	695	2245	680	437	1285	388	277	749	324
Arrive On Green	0.08	0.31	0.31	0.20	0.44	0.44	0.13	0.25	0.25	0.03	0.07	0.07
Sat Flow, veh/h	3456	5106	1573	3456	5106	1547	3456	5106	1543	3456	3554	1537
Grp Volume(v), veh/h	130	1261	241	321	1309	65	388	548	54	220	522	34
Grp Sat Flow(s),veh/h/ln	1728	1702	1573	1728	1702	1547	1728	1702	1543	1728	1777	1537
Q Serve(g_s), s	4.7	29.5	11.5	10.6	25.1	3.2	14.4	11.7	2.2	8.2	18.7	2.7
Cycle Q Clear(g_c), s	4.7	29.5	11.5	10.6	25.1	3.2	14.4	11.7	2.2	8.2	18.7	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	263	1579	486	695	2245	680	437	1285	388	277	749	324
V/C Ratio(X)	0.49	0.80	0.50	0.46	0.58	0.10	0.89	0.43	0.14	0.79	0.70	0.10
Avail Cap(c_a), veh/h	372	1658	511	695	2245	680	452	1453	439	425	957	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	57.6	41.2	18.3	45.7	27.4	21.3	55.9	40.8	14.9	62.2	56.4	49.0
Incr Delay (d2), s/veh	0.5	4.3	3.6	0.2	1.1	0.3	17.9	0.5	0.3	2.5	2.5	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	12.7	4.6	4.5	10.1	1.2	7.3	4.9	1.4	3.9	9.2	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.2	45.5	21.9	45.9	28.6	21.6	73.8	41.3	15.3	64.7	59.0	49.3
LnGrp LOS	E	D	C	D	C	C	E	D	B	E	E	D
Approach Vol, veh/h		1632			1695			990			776	
Approach Delay, s/veh		43.0			31.6			52.6			60.2	
Approach LOS		D			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.5	45.5	21.0	32.0	14.5	62.5	15.7	37.3
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	15.0	* 42	17.0	35.0	14.0	43.2	16.0	37.0
Max Q Clear Time (g_c+I1), s	12.6	31.5	16.4	20.7	6.7	27.1	10.2	13.7
Green Ext Time (p_c), s	0.2	8.7	0.1	5.0	0.1	12.0	0.2	7.0

Intersection Summary	
HCM 7th Control Delay, s/veh	43.7
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1640	19	0	1670	21	0	0	28	0	0	31
Future Volume (vph)	0	1640	19	0	1670	21	0	0	28	0	0	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.998				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5075	0	0	5075	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5075	0	0	5075	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			3			11						
Confl. Bikes (#/hr)						3						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1673	19	0	1704	21	0	0	29	0	0	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1692	0	0	1725	0	0	0	29	0	0	32
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

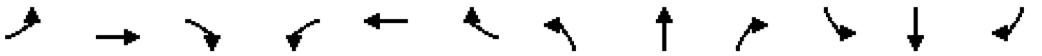
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1640	19	0	1670	21	0	0	28	0	0	31
Future Vol, veh/h	0	1640	19	0	1670	21	0	0	28	0	0	31
Conflicting Peds, #/hr	0	0	3	0	0	11	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1673	19	0	1704	21	0	0	29	0	0	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	849	-	-	874
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	261	0	0	252
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	260	-	-	249
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	20.52	21.55
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	260	-	-	-	-	249
HCM Lane V/C Ratio	0.11	-	-	-	-	0.127
HCM Control Delay (s/veh)	20.5	-	-	-	-	21.6
HCM Lane LOS	C	-	-	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	1610	3	0	1630	41	0	0	4	10	0	57
Future Volume (vph)	47	1610	3	0	1630	41	0	0	4	10	0	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	0		0	0		0	0		100
Storage Lanes	1		0	0		0	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.996				0.865			0.850
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	5085	0	0	5065	0	0	0	1611	1770	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	5085	0	0	5065	0	0	0	1611	1770	0	1583
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		366			681			1312			750	
Travel Time (s)		6.2			11.6			35.8			20.5	
Confl. Peds. (#/hr)			2			13						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	48	1660	3	0	1680	42	0	0	4	10	0	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	1663	0	0	1722	0	0	0	4	10	0	59
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

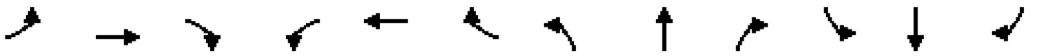
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	1610	3	0	1630	41	0	0	4	10	0	57
Future Vol, veh/h	47	1610	3	0	1630	41	0	0	4	10	0	57
Conflicting Peds, #/hr	0	0	2	0	0	13	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	130	-	-	-	-	-	-	-	0	0	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	1660	3	0	1680	42	0	0	4	10	0	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1736	0	0	-	-	0	-	-	833	2475	-	874
Stage 1	-	-	-	-	-	-	-	-	-	1715	-	-
Stage 2	-	-	-	-	-	-	-	-	-	761	-	-
Critical Hdwy	5.34	-	-	-	-	-	-	-	7.14	6.44	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	7.34	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	6.74	-	-
Follow-up Hdwy	3.12	-	-	-	-	-	-	-	3.92	3.82	-	3.92
Pot Cap-1 Maneuver	170	-	-	0	-	-	0	0	268	32	0	251
Stage 1	-	-	-	0	-	-	0	0	-	62	0	-
Stage 2	-	-	-	0	-	-	0	0	-	331	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	168	-	-	-	-	-	-	-	267	22	-	248
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	22	-	-
Stage 1	-	-	-	-	-	-	-	-	-	61	-	-
Stage 2	-	-	-	-	-	-	-	-	-	232	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.99	0	18.69	60.58
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	267	168	-	-	-	-	22	248
HCM Lane V/C Ratio	0.015	0.289	-	-	-	-	0.468	0.237
HCM Control Delay (s/veh)	18.7	34.9	-	-	-	-	269.4	23.9
HCM Lane LOS	C	D	-	-	-	-	F	C
HCM 95th %tile Q(veh)	0	1.1	-	-	-	-	1.4	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1595	14	23	1643	1	1	0	13	4	0	28
Future Volume (vph)	11	1595	14	23	1643	1	1	0	13	4	0	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.874			0.881	
Flt Protected	0.950			0.950				0.997			0.994	
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1623	0	0	1631	0
Flt Permitted	0.950			0.950				0.997			0.994	
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1623	0	0	1631	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			2			4						
Confl. Bikes (#/hr)			1			2			1			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	11	1661	15	24	1711	1	1	0	14	4	0	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1676	0	24	1712	0	0	15	0	0	33	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.8%		ICU Level of Service A	
Analysis Period (min) 15			

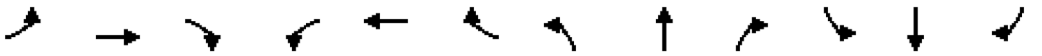
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	1595	14	23	1643	1	1	0	13	4	0	28
Future Vol, veh/h	11	1595	14	23	1643	1	1	0	13	4	0	28
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	1661	15	24	1711	1	1	0	14	4	0	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1717	0	0	1678	0	0	2426	3458	840	2451	3465	860
Stage 1	-	-	-	-	-	-	1694	1694	-	1764	1764	-
Stage 2	-	-	-	-	-	-	733	1764	-	688	1701	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	174	-	-	182	-	-	34	7	265	33	7	257
Stage 1	-	-	-	-	-	-	64	147	-	57	136	-
Stage 2	-	-	-	-	-	-	344	136	-	366	146	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	173	-	-	181	-	-	25	5	264	25	5	256
Mov Cap-2 Maneuver	-	-	-	-	-	-	25	5	-	25	5	-
Stage 1	-	-	-	-	-	-	60	137	-	49	117	-
Stage 2	-	-	-	-	-	-	265	117	-	325	136	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.19	0.38	30.5	46.37
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	156	173	-	-	181	-	-	120
HCM Lane V/C Ratio	0.094	0.066	-	-	0.132	-	-	0.279
HCM Control Delay (s/veh)	30.5	27.3	-	-	27.9	-	-	46.4
HCM Lane LOS	D	D	-	-	D	-	-	E
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0.4	-	-	1.1

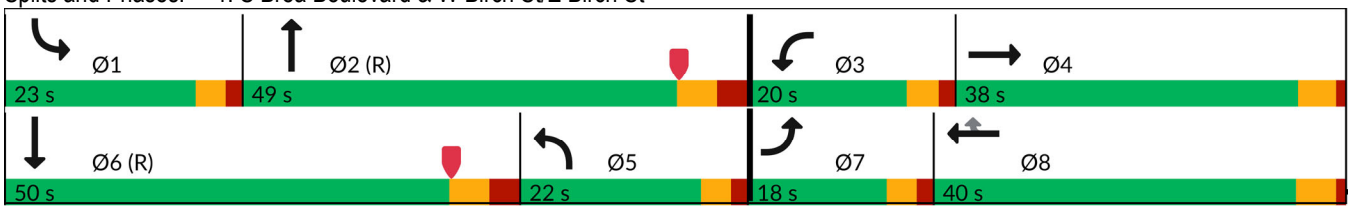


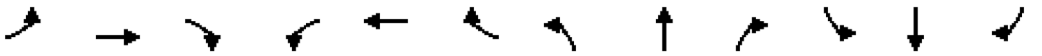
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	108	30	339	150	423	55	682	261	403	532	89
Future Volume (vph)	68	108	30	339	150	423	55	682	261	403	532	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.91		0.97			0.98	
Frt		0.967				0.850		0.958			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1781	0	3433	1863	1583	1770	4717	0	3433	4869	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1781	0	3433	1863	1443	1770	4717	0	3433	4869	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				407		79			27	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			33			70			61			41
Confl. Bikes (#/hr)			2						2			2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	72	114	32	357	158	445	58	718	275	424	560	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	72	146	0	357	158	445	58	993	0	424	654	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	18.0	38.0		20.0	40.0	40.0	22.0	49.0		23.0	50.0	
Total Split (%)	13.8%	29.2%		15.4%	30.8%	30.8%	16.9%	37.7%		17.7%	38.5%	
Maximum Green (s)	13.5	33.4		15.5	35.1	35.1	17.5	42.1		18.5	43.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		16			38	38		38			23	
Act Effct Green (s)	10.1	26.4		15.2	33.7	33.7	15.6	49.9		18.0	54.8	
Actuated g/C Ratio	0.08	0.20		0.12	0.26	0.26	0.12	0.38		0.14	0.42	
v/c Ratio	0.53	0.40		0.89	0.33	0.66	0.27	0.53		0.89	0.32	
Control Delay (s/veh)	71.0	42.8		85.2	40.1	13.1	37.8	15.2		76.8	27.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	71.0	42.8		85.2	40.1	13.1	37.8	15.2		76.8	27.6	
LOS	E	D		F	D	B	D	B		E	C	
Approach Delay (s/veh)		52.2			44.4			16.4			47.0	
Approach LOS		D			D			B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 3 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 36.9		Intersection LOS: D	
Intersection Capacity Utilization 82.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





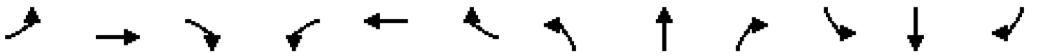
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	108	30	339	150	423	55	682	261	403	532	89
Future Volume (veh/h)	68	108	30	339	150	423	55	682	261	403	532	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.91	1.00		0.94	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	114	24	357	158	144	58	718	227	424	560	78
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	101	242	51	402	417	320	374	1608	499	473	1488	203
Arrive On Green	0.06	0.16	0.16	0.19	0.37	0.37	0.42	0.85	0.85	0.14	0.33	0.33
Sat Flow, veh/h	1781	1475	310	3456	1870	1436	1781	3800	1180	3456	4488	611
Grp Volume(v), veh/h	72	0	138	357	158	144	58	642	303	424	422	216
Grp Sat Flow(s),veh/h/ln	1781	0	1785	1728	1870	1436	1781	1702	1576	1728	1702	1695
Q Serve(g_s), s	5.2	0.0	9.1	13.1	8.0	9.8	2.6	6.1	6.3	15.7	12.3	12.7
Cycle Q Clear(g_c), s	5.2	0.0	9.1	13.1	8.0	9.8	2.6	6.1	6.3	15.7	12.3	12.7
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.75	1.00		0.36
Lane Grp Cap(c), veh/h	101	0	293	402	417	320	374	1440	667	473	1129	562
V/C Ratio(X)	0.71	0.00	0.47	0.89	0.38	0.45	0.16	0.45	0.45	0.90	0.37	0.38
Avail Cap(c_a), veh/h	185	0	459	412	505	388	374	1440	667	492	1129	562
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.85	0.85	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.2	0.0	49.3	51.6	34.2	34.8	30.6	6.2	6.3	55.2	33.2	33.3
Incr Delay (d2), s/veh	3.4	0.0	0.4	19.4	0.2	0.4	0.1	0.9	1.9	17.8	0.9	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	4.2	6.3	3.4	3.2	1.1	1.8	1.9	8.0	5.2	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.6	0.0	49.7	70.9	34.4	35.1	30.6	7.1	8.2	73.0	34.1	35.3
LnGrp LOS	E		D	E	C	D	C	A	A	E	C	D
Approach Vol, veh/h		210			659			1003			1062	
Approach Delay, s/veh		54.5			54.4			8.8			49.9	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.3	61.9	19.6	26.2	34.2	50.0	11.9	33.9
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	18.5	42.1	15.5	* 33	17.5	* 43	13.5	35.1
Max Q Clear Time (g_c+I1), s	17.7	8.3	15.1	11.1	4.6	14.7	7.2	11.8
Green Ext Time (p_c), s	0.1	4.6	0.0	0.5	0.0	2.8	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	37.2
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	670	82	51	888	23	17	3	38	0	0	34
Future Volume (vph)	7	670	82	51	888	23	17	3	38	0	0	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.996			0.911				0.865
Flt Protected		0.999		0.950				0.986				
Satd. Flow (prot)	0	3536	1583	1770	3525	0	0	1673	0	0	0	1611
Flt Permitted		0.999		0.950				0.986				
Satd. Flow (perm)	0	3536	1583	1770	3525	0	0	1673	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			8			4						
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	8	728	89	55	965	25	18	3	41	0	0	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	736	89	55	990	0	0	62	0	0	0	37
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.5%		ICU Level of Service A	
Analysis Period (min) 15			

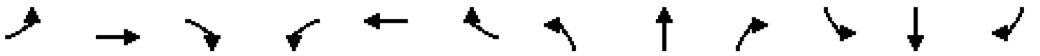
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	670	82	51	888	23	17	3	38	0	0	34
Future Vol, veh/h	7	670	82	51	888	23	17	3	38	0	0	34
Conflicting Peds, #/hr	0	0	8	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	728	89	55	965	25	18	3	41	0	0	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	994	0	0	825	0	0	1345	1857	372	-	-	499
Stage 1	-	-	-	-	-	-	751	751	-	-	-	-
Stage 2	-	-	-	-	-	-	593	1105	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	691	-	-	801	-	-	110	73	625	0	0	517
Stage 1	-	-	-	-	-	-	369	416	-	0	0	-
Stage 2	-	-	-	-	-	-	459	285	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	689	-	-	795	-	-	93	66	620	-	-	515
Mov Cap-2 Maneuver	-	-	-	-	-	-	93	66	-	-	-	-
Stage 1	-	-	-	-	-	-	361	407	-	-	-	-
Stage 2	-	-	-	-	-	-	396	264	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.52	31.05	12.53
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	200	689	-	-	795	-	-	515
HCM Lane V/C Ratio	0.315	0.011	-	-	0.07	-	-	0.072
HCM Control Delay (s/veh)	31	10.3	-	-	9.9	-	-	12.5
HCM Lane LOS	D	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.3	0	-	-	0.2	-	-	0.2

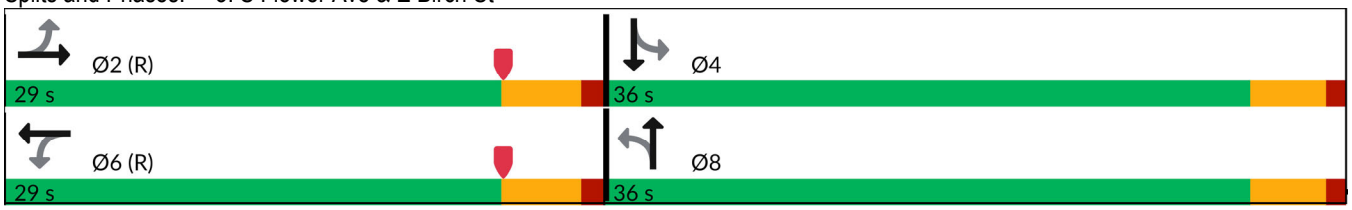


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	671	12	67	911	16	38	11	57	23	2	17
Future Volume (vph)	20	671	12	67	911	16	38	11	57	23	2	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.997			0.997			0.928			0.945	
Flt Protected	0.950			0.950				0.982			0.973	
Satd. Flow (prot)	1770	3527	0	1770	3527	0	0	1683	0	0	1704	0
Flt Permitted	0.274			0.375				0.870			0.857	
Satd. Flow (perm)	510	3527	0	699	3527	0	0	1491	0	0	1501	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			3			60			18	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		364			329			750			397	
Travel Time (s)		7.1			6.4			20.5			10.8	
Confl. Peds. (#/hr)			3			6			6			1
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	706	13	71	959	17	40	12	60	24	2	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	719	0	71	976	0	0	112	0	0	44	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (%)	44.6%	44.6%		44.6%	44.6%		55.4%	55.4%		55.4%	55.4%	
Maximum Green (s)	24.1	24.1		24.1	24.1		31.4	31.4		31.4	31.4	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9			4.6			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0		24.0	24.0		24.0	24.0	
Pedestrian Calls (#/hr)	2	2		3	3		3	3		1	1	
Act Effct Green (s)	47.2	47.2		47.2	47.2			11.1			11.1	
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.17			0.17	
v/c Ratio	0.06	0.28		0.14	0.38			0.37			0.16	
Control Delay (s/veh)	6.3	4.9		8.7	7.3			15.2			13.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	6.3	4.9		8.7	7.3			15.2			13.2	
LOS	A	A		A	A			B			B	
Approach Delay (s/veh)		4.9			7.4			15.2			13.2	
Approach LOS		A			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 18 (28%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay (s/veh): 7.0		Intersection LOS: A	
Intersection Capacity Utilization 56.5%		ICU Level of Service B	
Analysis Period (min) 15			

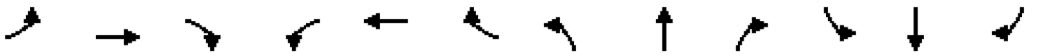
Splits and Phases: 3: S Flower Ave & E Birch St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	671	12	67	911	16	38	11	57	23	2	17
Future Volume (veh/h)	20	671	12	67	911	16	38	11	57	23	2	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	0.98		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	706	13	71	959	17	40	12	14	24	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	504	2740	50	632	2744	49	157	37	28	204	19	14
Arrive On Green	0.77	0.77	0.77	0.77	0.77	0.77	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	576	3568	66	733	3572	63	793	432	330	1194	222	163
Grp Volume(v), veh/h	21	352	367	71	477	499	66	0	0	29	0	0
Grp Sat Flow(s),veh/h/ln	576	1777	1857	733	1777	1859	1555	0	0	1579	0	0
Q Serve(g_s), s	0.8	3.7	3.7	2.0	5.5	5.5	1.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.3	3.7	3.7	5.7	5.5	5.5	2.5	0.0	0.0	1.0	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.03	0.61		0.21	0.83		0.10
Lane Grp Cap(c), veh/h	504	1365	1426	632	1365	1428	222	0	0	237	0	0
V/C Ratio(X)	0.04	0.26	0.26	0.11	0.35	0.35	0.30	0.00	0.00	0.12	0.00	0.00
Avail Cap(c_a), veh/h	504	1365	1426	632	1365	1428	820	0	0	797	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.4	2.2	2.2	3.0	2.4	2.4	28.3	0.0	0.0	27.6	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.5	0.4	0.4	0.7	0.7	0.3	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.6	0.7	0.2	1.0	1.0	1.0	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.5	2.6	2.6	3.4	3.1	3.1	28.5	0.0	0.0	27.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C			C		
Approach Vol, veh/h		740			1047			66			29	
Approach Delay, s/veh		2.7			3.1			28.5			27.7	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		54.8		10.2		54.8		10.2				
Change Period (Y+Rc), s		4.9		4.6		4.9		4.6				
Max Green Setting (Gmax), s		24.1		31.4		24.1		31.4				
Max Q Clear Time (g_c+I1), s		8.3		3.0		7.7		4.5				
Green Ext Time (p_c), s		1.4		0.1		2.2		0.2				

Intersection Summary												
HCM 7th Control Delay, s/veh			4.2									
HCM 7th LOS			A									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	763	7	1	985	1	4	0	9	0	0	0
Future Volume (vph)	3	763	7	1	985	1	4	0	9	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.907				
Flt Protected	0.950			0.950				0.985				
Satd. Flow (prot)	1770	3536	0	1770	3539	0	0	1664	0	0	1863	0
Flt Permitted	0.950			0.950				0.985				
Satd. Flow (perm)	1770	3536	0	1770	3539	0	0	1664	0	0	1863	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			15			6						
Confl. Bikes (#/hr)			6			1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3	803	7	1	1037	1	4	0	9	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	3	810	0	1	1038	0	0	13	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.3%		ICU Level of Service A	
Analysis Period (min) 15			

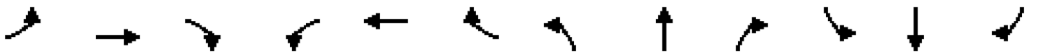
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	763	7	1	985	1	4	0	9	0	0	0
Future Vol, veh/h	3	763	7	1	985	1	4	0	9	0	0	0
Conflicting Peds, #/hr	0	0	15	0	0	6	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	803	7	1	1037	1	4	0	9	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1044	0	0	826	0	0	1349	1874	420	1453	1877	525
Stage 1	-	-	-	-	-	-	828	828	-	1045	1045	-
Stage 2	-	-	-	-	-	-	521	1046	-	408	832	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	662	-	-	801	-	-	109	71	582	91	71	497
Stage 1	-	-	-	-	-	-	331	384	-	244	304	-
Stage 2	-	-	-	-	-	-	507	304	-	591	382	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	658	-	-	789	-	-	107	69	573	89	69	494
Mov Cap-2 Maneuver	-	-	-	-	-	-	107	69	-	89	69	-
Stage 1	-	-	-	-	-	-	325	376	-	243	302	-
Stage 2	-	-	-	-	-	-	506	301	-	579	375	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.04	0.01	20.57	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	245	658	-	-	789	-	-	-
HCM Lane V/C Ratio	0.056	0.005	-	-	0.001	-	-	-
HCM Control Delay (s/veh)	20.6	10.5	-	-	9.6	-	-	0
HCM Lane LOS	C	B	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

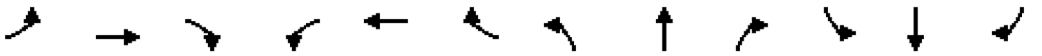


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	1486	404	210	1527	162	443	707	267	171	571	179
Future Volume (vph)	165	1486	404	210	1527	162	443	707	267	171	571	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.98			0.98			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1551	3433	5085	1556	3433	5085	1553	3433	3539	1539
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			220			98			281			188
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			6			5			5			14
Confl. Bikes (#/hr)			3						3			1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	174	1564	425	221	1607	171	466	744	281	180	601	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	174	1564	425	221	1607	171	466	744	281	180	601	188
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	20.6	45.5	45.5	20.6	45.5	45.5	21.6	42.6	42.6	21.3	39.6	39.6
Total Split (%)	15.8%	35.0%	35.0%	15.8%	35.0%	35.0%	16.6%	32.8%	32.8%	16.4%	30.5%	30.5%
Maximum Green (s)	16.0	40.2	40.2	16.0	40.2	40.2	17.0	38.0	38.0	16.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		3	3		2	2		2	2		7	7
Act Effct Green (s)	11.5	48.5	48.5	16.0	53.0	53.0	17.0	34.0	34.0	11.7	29.4	29.4
Actuated g/C Ratio	0.09	0.37	0.37	0.12	0.41	0.41	0.13	0.26	0.26	0.09	0.23	0.23
v/c Ratio	0.57	0.82	0.59	0.52	0.78	0.25	1.04	0.56	0.46	0.58	0.75	0.38
Control Delay (s/veh)	64.3	41.9	19.7	58.4	37.4	13.2	107.6	43.1	6.6	79.0	43.6	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.3	41.9	19.7	58.4	37.4	13.2	107.6	43.1	6.6	79.0	43.6	11.6
LOS	E	D	B	E	D	B	F	D	A	E	D	B
Approach Delay (s/veh)		39.4			37.7			56.3			43.9	
Approach LOS		D			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 59 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay (s/veh): 43.3		Intersection LOS: D	
Intersection Capacity Utilization 88.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway



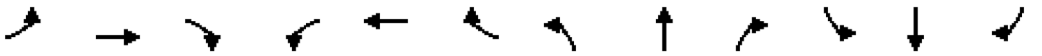
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	1486	404	210	1527	162	443	707	267	171	571	179
Future Volume (veh/h)	165	1486	404	210	1527	162	443	707	267	171	571	179
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	1564	286	221	1607	113	466	744	77	180	601	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	1579	480	634	2152	666	452	1393	424	265	797	344
Arrive On Green	0.08	0.31	0.31	0.18	0.42	0.42	0.13	0.27	0.27	0.10	0.30	0.30
Sat Flow, veh/h	3456	5106	1554	3456	5106	1579	3456	5106	1554	3456	3554	1535
Grp Volume(v), veh/h	174	1564	286	221	1607	113	466	744	77	180	601	44
Grp Sat Flow(s),veh/h/ln	1728	1702	1554	1728	1702	1579	1728	1702	1554	1728	1777	1535
Q Serve(g_s), s	6.4	39.7	14.2	7.3	34.5	5.8	17.0	16.1	3.2	6.5	19.9	2.7
Cycle Q Clear(g_c), s	6.4	39.7	14.2	7.3	34.5	5.8	17.0	16.1	3.2	6.5	19.9	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	1579	480	634	2152	666	452	1393	424	265	797	344
V/C Ratio(X)	0.66	0.99	0.60	0.35	0.75	0.17	1.03	0.53	0.18	0.68	0.75	0.13
Avail Cap(c_a), veh/h	425	1579	480	634	2152	666	452	1493	454	425	957	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84
Uniform Delay (d), s/veh	58.3	44.7	18.7	46.3	31.8	23.4	56.5	40.2	15.0	56.8	42.4	36.3
Incr Delay (d2), s/veh	1.0	20.5	5.4	0.1	2.4	0.6	50.6	0.7	0.4	1.0	3.4	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	19.2	5.7	3.1	14.2	2.3	10.5	6.8	1.9	2.8	8.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.4	65.2	24.0	46.4	34.2	24.0	107.1	40.9	15.4	57.8	45.8	36.6
LnGrp LOS	E	E	C	D	C	C	F	D	B	E	D	D
Approach Vol, veh/h		2024			1941			1287			825	
Approach Delay, s/veh		58.9			35.0			63.4			47.9	
Approach LOS		E			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.2	45.5	21.6	33.7	14.6	60.1	15.3	40.1
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	16.0	* 40	17.0	35.0	16.0	40.2	16.0	38.0
Max Q Clear Time (g_c+I1), s	9.3	41.7	19.0	21.9	8.4	36.5	8.5	18.1
Green Ext Time (p_c), s	0.2	0.0	0.0	5.5	0.2	3.4	0.2	8.9

Intersection Summary	
HCM 7th Control Delay, s/veh	50.7
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1912	20	0	1878	38	0	0	21	0	0	36
Future Volume (vph)	0	1912	20	0	1878	38	0	0	21	0	0	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.997				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5075	0	0	5070	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5075	0	0	5070	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			4			1						
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2013	21	0	1977	40	0	0	22	0	0	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2034	0	0	2017	0	0	0	22	0	0	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

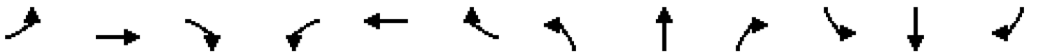
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1912	20	0	1878	38	0	0	21	0	0	36
Future Vol, veh/h	0	1912	20	0	1878	38	0	0	21	0	0	36
Conflicting Peds, #/hr	0	0	4	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2013	21	0	1977	40	0	0	22	0	0	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1021	-	-	1009
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	201	0	0	204
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	200	-	-	204
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	25.21	26.6
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	200	-	-	-	-	204
HCM Lane V/C Ratio	0.11	-	-	-	-	0.186
HCM Control Delay (s/veh)	25.2	-	-	-	-	26.6
HCM Lane LOS	D	-	-	-	-	D
HCM 95th %tile Q(veh)	0.4	-	-	-	-	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	1779	13	0	1912	36	0	0	2	5	0	68
Future Volume (vph)	72	1779	13	0	1912	36	0	0	2	5	0	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	0		0	0		0	0		100
Storage Lanes	1		0	0		0	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.997				0.865			0.850
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	5080	0	0	5070	0	0	0	1611	1770	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	5080	0	0	5070	0	0	0	1611	1770	0	1583
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		366			681			1312			750	
Travel Time (s)		6.2			11.6			35.8			20.5	
Confl. Peds. (#/hr)			1			1						
Confl. Bikes (#/hr)			2			2						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	75	1853	14	0	1992	38	0	0	2	5	0	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	75	1867	0	0	2030	0	0	0	2	5	0	71
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			

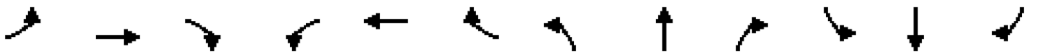
Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	72	1779	13	0	1912	36	0	0	2	5	0	68
Future Vol, veh/h	72	1779	13	0	1912	36	0	0	2	5	0	68
Conflicting Peds, #/hr	0	0	1	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	130	-	-	-	-	-	-	-	0	0	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	75	1853	14	0	1992	38	0	0	2	5	0	71

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2030	0	0	-	-	0	-	-	934	2903	-	1016
Stage 1	-	-	-	-	-	-	-	-	-	2011	-	-
Stage 2	-	-	-	-	-	-	-	-	-	891	-	-
Critical Hdwy	5.34	-	-	-	-	-	-	-	7.14	6.44	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	7.34	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	6.74	-	-
Follow-up Hdwy	3.12	-	-	-	-	-	-	-	3.92	3.82	-	3.92
Pot Cap-1 Maneuver	121	-	-	0	-	-	0	0	229	17	0	203
Stage 1	-	-	-	0	-	-	0	0	-	38	0	-
Stage 2	-	-	-	0	-	-	0	0	-	275	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	121	-	-	-	-	-	-	-	229	6	-	202
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	6	-	-
Stage 1	-	-	-	-	-	-	-	-	-	38	-	-
Stage 2	-	-	-	-	-	-	-	-	-	103	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.88	0	20.85	98.01
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	229	121	-	-	-	-	6	202
HCM Lane V/C Ratio	0.009	0.622	-	-	-	-	0.823	0.35
HCM Control Delay (s/veh)	20.9	74.7	-	-	-	-	$ 994.7	32.1
HCM Lane LOS	C	F	-	-	-	-	F	D
HCM 95th %tile Q(veh)	0	3.2	-	-	-	-	1.3	1.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	1877	14	30	1986	2	3	0	14	0	0	10
Future Volume (vph)	18	1877	14	30	1986	2	3	0	14	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.887			0.865	
Flt Protected	0.950			0.950				0.992				
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1639	0	0	1611	0
Flt Permitted	0.950			0.950				0.992				
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1639	0	0	1611	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			1			6						
Confl. Bikes (#/hr)			6			9						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	19	1955	15	31	2069	2	3	0	15	0	0	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	1970	0	31	2071	0	0	18	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	1877	14	30	1986	2	3	0	14	0	0	10
Future Vol, veh/h	18	1877	14	30	1986	2	3	0	14	0	0	10
Conflicting Peds, #/hr	0	0	1	0	0	6	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	1955	15	31	2069	2	3	0	15	0	0	10

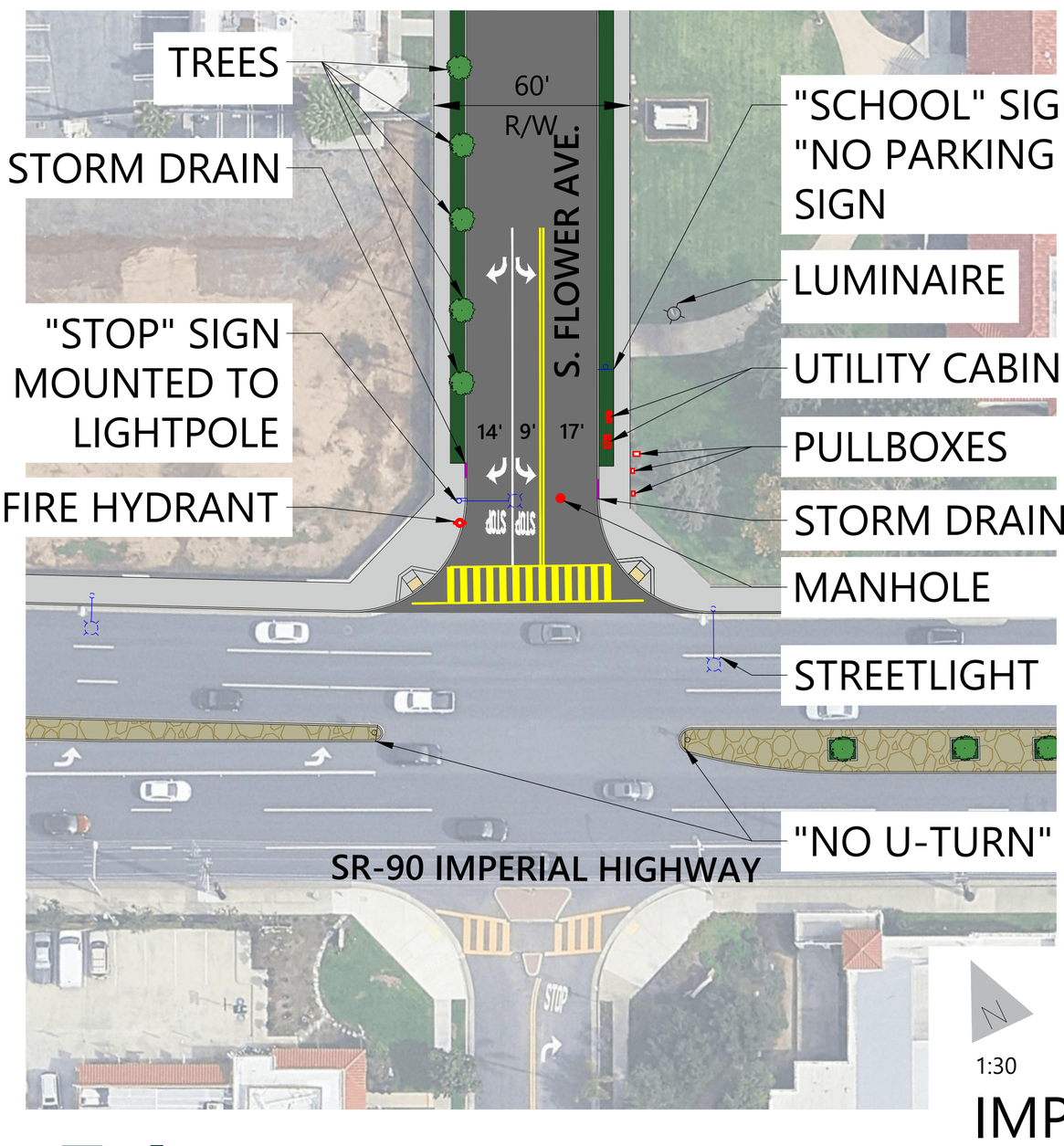
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2077	0	0	1971	0	0	2891	4140	986	2958	4147	1041
Stage 1	-	-	-	-	-	-	2001	2001	-	2138	2138	-
Stage 2	-	-	-	-	-	-	890	2139	-	820	2008	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	114	-	-	129	-	-	17	2	212	16	2	195
Stage 1	-	-	-	-	-	-	38	103	-	30	88	-
Stage 2	-	-	-	-	-	-	275	88	-	304	102	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	114	-	-	129	-	-	10	1	212	9	1	194
Mov Cap-2 Maneuver	-	-	-	-	-	-	10	1	-	9	1	-
Stage 1	-	-	-	-	-	-	32	86	-	23	66	-
Stage 2	-	-	-	-	-	-	197	66	-	236	85	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.62	120.09	24.66
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	48	114	-	-	129	-	-	194
HCM Lane V/C Ratio	0.372	0.165	-	-	0.242	-	-	0.054
HCM Control Delay (s/veh)	120.1	42.8	-	-	41.5	-	-	24.7
HCM Lane LOS	F	E	-	-	E	-	-	C
HCM 95th %tile Q(veh)	1.3	0.6	-	-	0.9	-	-	0.2

Appendix D

Improvement Alternatives



LEGEND: EXISTING CONDITIONS

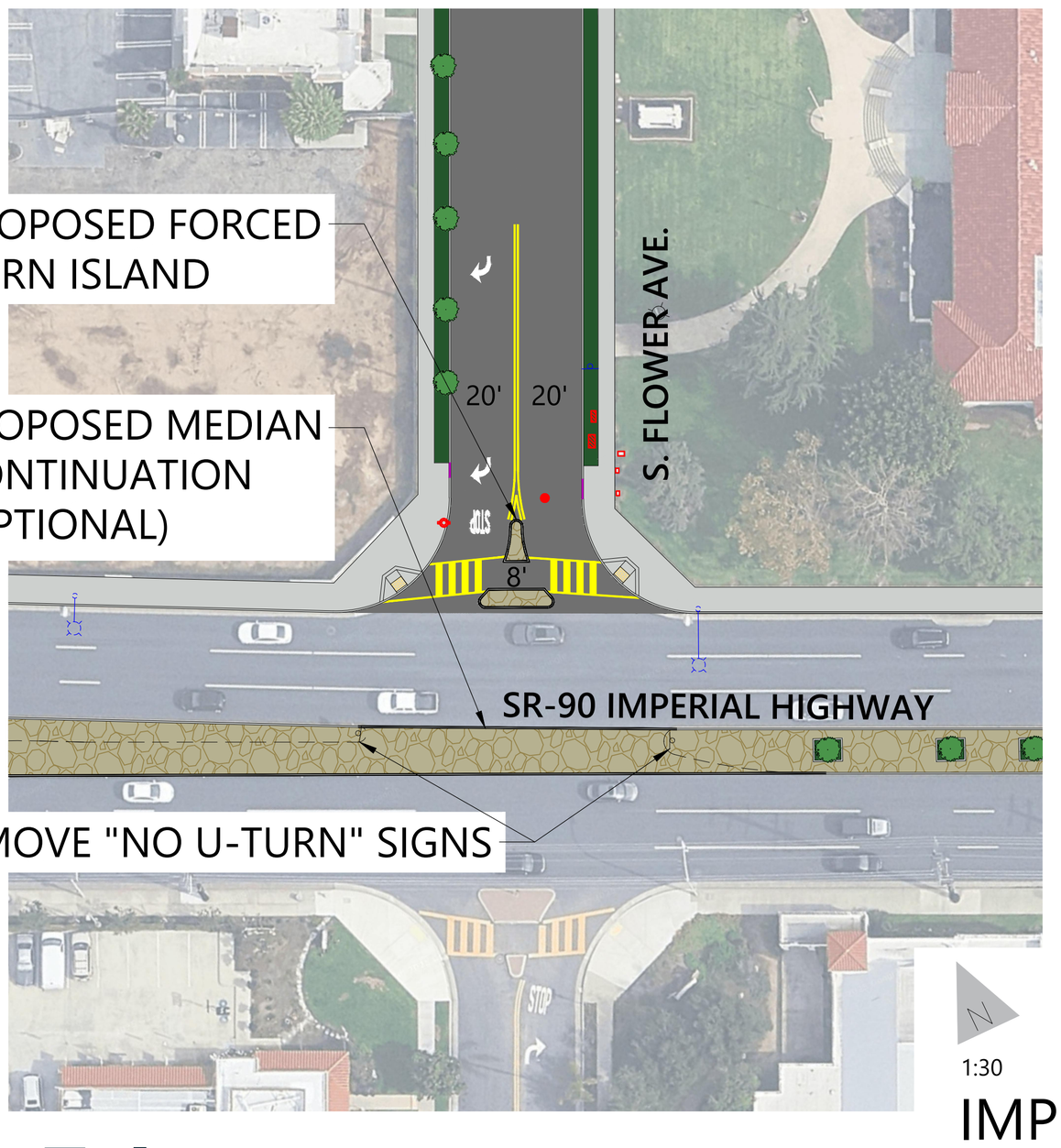
- UTILITY CABINET
- FIRE HYDRANT
- LIGHTPOLE
- SIGN
- TREE
- PULLBOX
- MANHOLE
- LUMINAIRE
- STORM DRAIN

Figure 1

IMPERIAL HIGHWAY AND S. FLOWER AVENUE ALTERNATIVE 1 - EXISTING CONDITIONS/NO BUILD

Fehr & Peers

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.



LEGEND: EXISTING CONDITIONS

- UTILITY CABINET
- PULLBOX
- FIRE HYDRANT
- MANHOLE
- LIGHTPOLE
- LUMINAIRE
- SIGN
- STORM DRAIN
- TREE

LEGEND: DEMOLITION

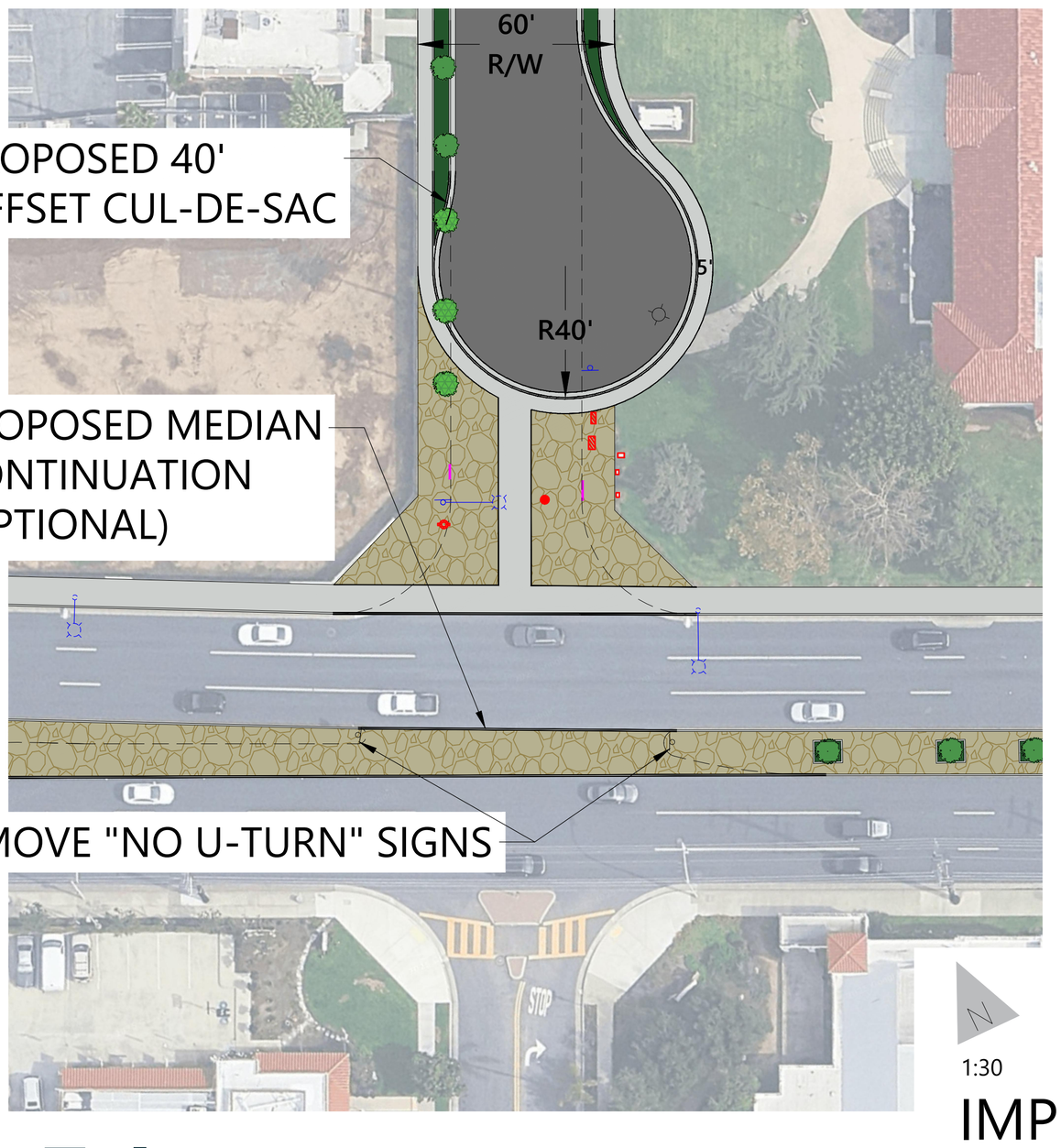
- TREE - DEMO
- CURBLINE - DEMO

Figure 2

IMPERIAL HIGHWAY AND S. FLOWER AVENUE ALTERNATIVE 2 - RIGHT IN/RIGHT OUT TURN ISLAND

Fehr & Peers

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.



LEGEND: EXISTING CONDITIONS

- UTILITY CABINET
- PULLBOX
- FIRE HYDRANT
- MANHOLE
- LIGHTPOLE
- LUMINAIRE
- SIGN
- STORM DRAIN
- TREE

LEGEND: DEMOLITION

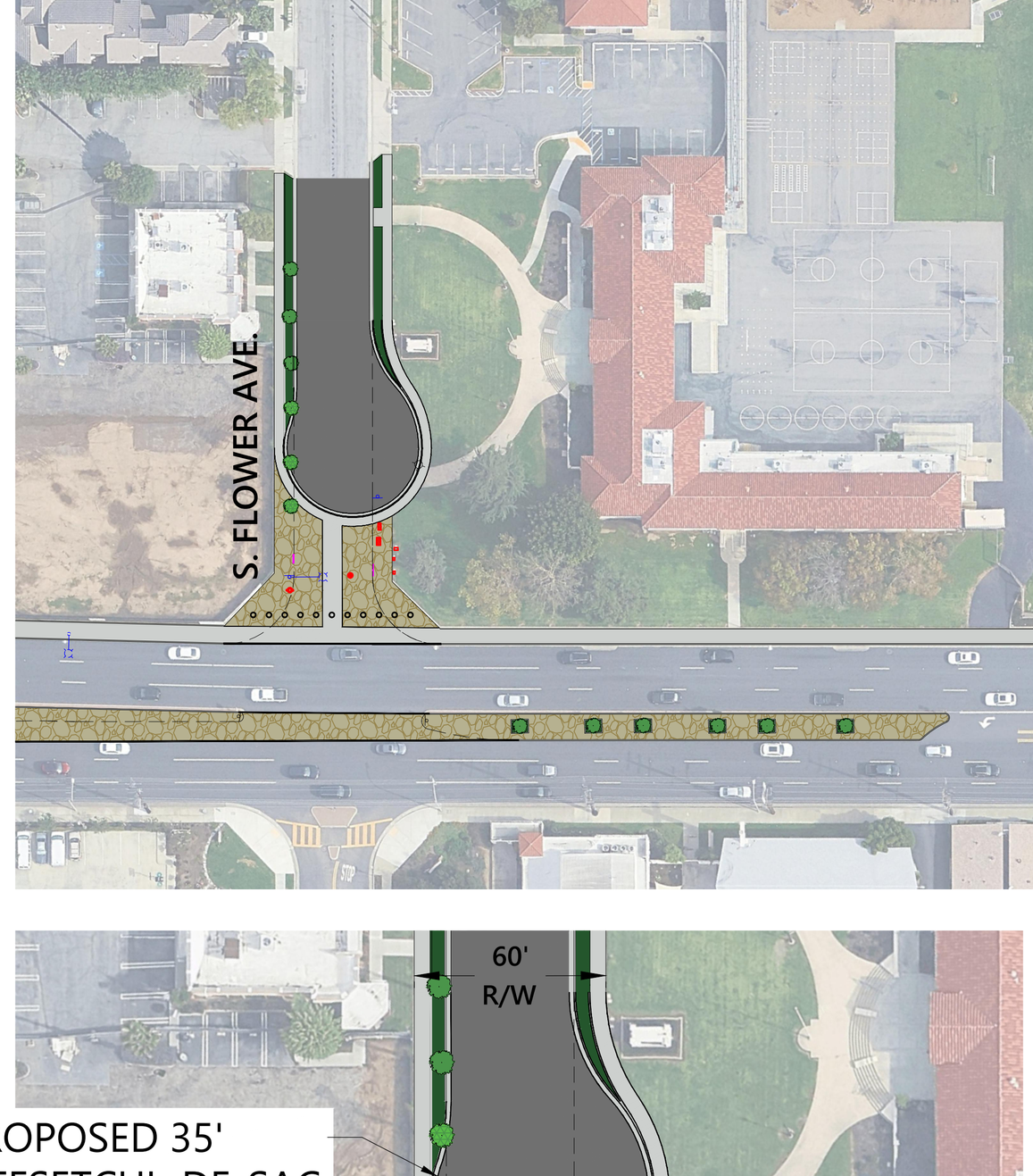
- TREE - DEMO
- CURBLINE - DEMO

Figure 3

IMPERIAL HIGHWAY AND S. FLOWER AVENUE ALTERNATIVE 3A - 40' CUL-DE-SAC

Fehr & Peers

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.



LEGEND: EXISTING CONDITIONS

- UTILITY CABINET
- PULLBOX
- FIRE HYDRANT
- MANHOLE
- LIGHTPOLE
- LUMINAIRE
- SIGN
- STORM DRAIN
- TREE

LEGEND: DEMOLITION

- TREE - DEMO
- CURBLINE - DEMO

PROPOSED

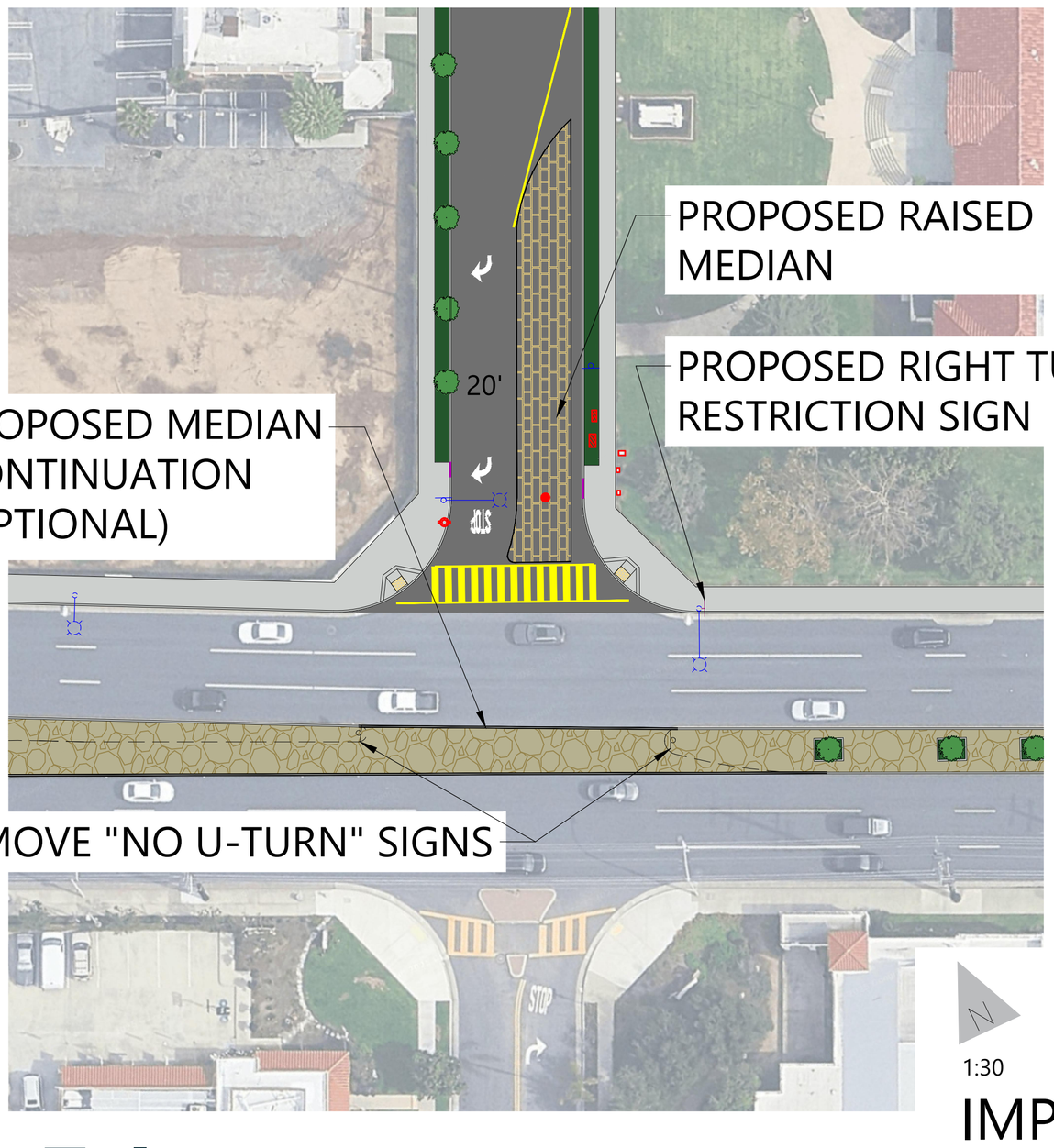
- REMOVEABLE BOLLARDS

Figure 4

IMPERIAL HIGHWAY AND S. FLOWER AVENUE ALTERNATIVE 3B - 35' CUL-DE-SAC

Fehr & Peers

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.



LEGEND: EXISTING CONDITIONS

- UTILITY CABINET
- PULLBOX
- FIRE HYDRANT
- MANHOLE
- LIGHTPOLE
- LUMINAIRE
- SIGN
- STORM DRAIN
- TREE

LEGEND: DEMOLITION

- TREE - DEMO
- CURBLINE - DEMO

Figure 5

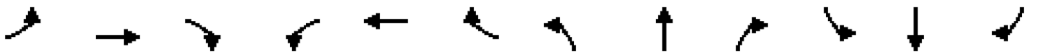
IMPERIAL HIGHWAY AND S. FLOWER AVENUE ALTERNATIVE 4 - ONE WAY CONVERSION

Fehr & Peers

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Appendix E

Intersection Level of Service Worksheets (Alternative 2)

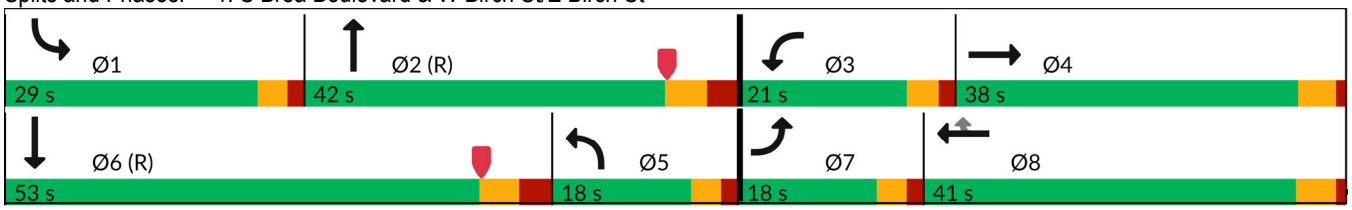


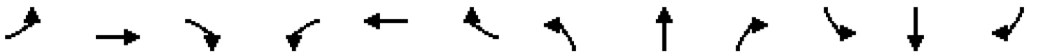
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	62	23	212	79	301	23	434	267	373	774	52
Future Volume (vph)	23	62	23	212	79	301	23	434	267	373	774	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.99			1.00	
Frt		0.959				0.850		0.943			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1773	0	3433	1863	1583	1770	4737	0	3433	5029	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1773	0	3433	1863	1554	1770	4737	0	3433	5029	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14				334		117			9	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			14			6			10			3
Confl. Bikes (#/hr)									4			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	26	69	26	236	88	334	26	482	297	414	860	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	95	0	236	88	334	26	779	0	414	918	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	18.0	38.0		21.0	41.0	41.0	18.0	42.0		29.0	53.0	
Total Split (%)	13.8%	29.2%		16.2%	31.5%	31.5%	13.8%	32.3%		22.3%	40.8%	
Maximum Green (s)	13.5	33.4		16.5	36.1	36.1	13.5	35.1		24.5	46.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		7			3	3		0			0	
Act Effct Green (s)	8.2	14.0		13.1	23.7	23.7	11.3	62.5		19.9	76.0	
Actuated g/C Ratio	0.06	0.11		0.10	0.18	0.18	0.09	0.48		0.15	0.58	
v/c Ratio	0.24	0.47		0.68	0.26	0.60	0.17	0.33		0.79	0.31	
Control Delay (s/veh)	63.3	51.0		66.4	46.0	8.8	92.9	48.2		64.2	17.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	63.3	51.0		66.4	46.0	8.8	92.9	48.2		64.2	17.4	
LOS	E	D		E	D	A	F	D		E	B	
Approach Delay (s/veh)		53.6			34.4			49.7			31.9	
Approach LOS		D			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 71 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 38.3		Intersection LOS: D	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





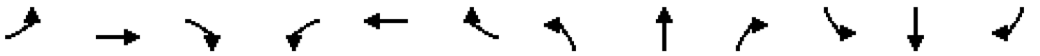
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	62	23	212	79	301	23	434	267	373	774	52
Future Volume (veh/h)	23	62	23	212	79	301	23	434	267	373	774	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	69	14	236	88	65	26	482	251	414	860	55
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	153	31	291	279	233	499	1758	803	473	1736	111
Arrive On Green	0.04	0.10	0.10	0.08	0.15	0.15	0.56	1.00	1.00	0.14	0.35	0.35
Sat Flow, veh/h	1781	1497	304	3456	1870	1566	1781	3404	1554	3456	4896	312
Grp Volume(v), veh/h	26	0	83	236	88	65	26	482	251	414	597	318
Grp Sat Flow(s),veh/h/ln	1781	0	1800	1728	1870	1566	1781	1702	1554	1728	1702	1803
Q Serve(g_s), s	1.9	0.0	5.6	8.7	5.5	4.8	0.9	0.0	0.0	15.3	17.8	18.0
Cycle Q Clear(g_c), s	1.9	0.0	5.6	8.7	5.5	4.8	0.9	0.0	0.0	15.3	17.8	18.0
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	67	0	184	291	279	233	499	1758	803	473	1207	640
V/C Ratio(X)	0.39	0.00	0.45	0.81	0.32	0.28	0.05	0.27	0.31	0.88	0.49	0.50
Avail Cap(c_a), veh/h	185	0	463	439	519	435	499	1758	803	651	1207	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	0.0	54.9	58.5	49.4	49.1	20.7	0.0	0.0	55.0	32.8	32.9
Incr Delay (d2), s/veh	1.4	0.0	0.6	3.8	0.2	0.2	0.0	0.4	0.9	7.7	1.5	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.6	4.0	2.6	1.9	0.4	0.1	0.2	7.1	7.5	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.5	0.0	55.5	62.3	49.6	49.3	20.7	0.4	0.9	62.7	34.3	35.6
LnGrp LOS	E		E	E	D	D	C	A	A	E	C	D
Approach Vol, veh/h		109			389			759			1329	
Approach Delay, s/veh		57.2			57.3			1.2			43.5	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.3	74.1	15.4	18.2	43.4	53.0	9.4	24.3
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	24.5	35.1	16.5	* 33	13.5	* 46	13.5	36.1
Max Q Clear Time (g_c+I1), s	17.3	2.0	10.7	7.6	2.9	20.0	3.9	7.5
Green Ext Time (p_c), s	0.5	3.4	0.2	0.3	0.0	4.1	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	33.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	661	45	22	574	8	19	1	21	0	0	12
Future Volume (vph)	1	661	45	22	574	8	19	1	21	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.931				0.865
Flt Protected				0.950				0.977				
Satd. Flow (prot)	0	3539	1583	1770	3532	0	0	1694	0	0	0	1611
Flt Permitted				0.950				0.977				
Satd. Flow (perm)	0	3539	1583	1770	3532	0	0	1694	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			10			5						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1	689	47	23	598	8	20	1	22	0	0	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	690	47	23	606	0	0	43	0	0	0	13
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.8%		ICU Level of Service A	
Analysis Period (min) 15			

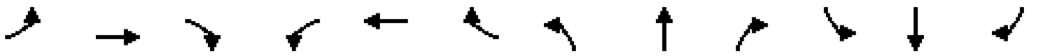
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	661	45	22	574	8	19	1	21	0	0	12
Future Vol, veh/h	1	661	45	22	574	8	19	1	21	0	0	12
Conflicting Peds, #/hr	0	0	10	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	689	47	23	598	8	20	1	22	0	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	611	0	0	745	0	0	1045	1358	354	-	-	308
Stage 1	-	-	-	-	-	-	701	701	-	-	-	-
Stage 2	-	-	-	-	-	-	345	657	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	964	-	-	858	-	-	183	148	642	0	0	688
Stage 1	-	-	-	-	-	-	396	439	-	0	0	-
Stage 2	-	-	-	-	-	-	644	460	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	959	-	-	850	-	-	173	141	636	-	-	684
Mov Cap-2 Maneuver	-	-	-	-	-	-	173	141	-	-	-	-
Stage 1	-	-	-	-	-	-	391	434	-	-	-	-
Stage 2	-	-	-	-	-	-	615	445	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.01	0.34	20.6	10.36
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	273	959	-	-	850	-	-	684
HCM Lane V/C Ratio	0.156	0.001	-	-	0.027	-	-	0.018
HCM Control Delay (s/veh)	20.6	8.8	-	-	9.4	-	-	10.4
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	0.1

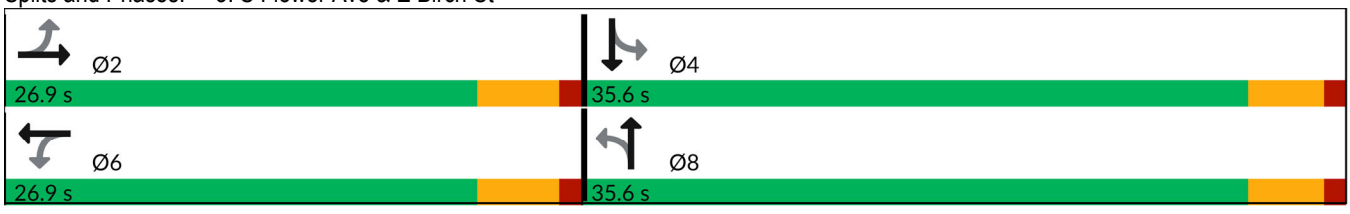


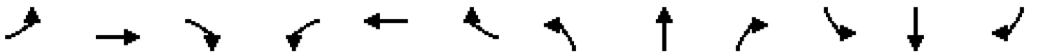
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	577	91	99	566	14	21	51	37	33	7	19
Future Volume (vph)	19	577	91	99	566	14	21	51	37	33	7	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00			0.98			1.00	
Frt		0.980			0.996			0.954			0.957	
Flt Protected	0.950			0.950				0.991			0.972	
Satd. Flow (prot)	1770	3450	0	1770	3522	0	0	1723	0	0	1726	0
Flt Permitted	0.417			0.367				0.951			0.834	
Satd. Flow (perm)	777	3450	0	684	3522	0	0	1653	0	0	1481	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			4			38			19	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		364			329			750			397	
Travel Time (s)		7.1			6.4			20.5			10.8	
Confl. Peds. (#/hr)			13			5			85			1
Confl. Bikes (#/hr)						4			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	19	589	93	101	578	14	21	52	38	34	7	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	682	0	101	592	0	0	111	0	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (%)	43.0%	43.0%		43.0%	43.0%		57.0%	57.0%		57.0%	57.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		31.0	31.0		31.0	31.0	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9			4.6			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0		24.0	24.0		24.0	24.0	
Pedestrian Calls (#/hr)	6	6		2	2		50	50		1	1	
Act Effct Green (s)	30.5	30.5		30.5	30.5			18.9			18.9	
Actuated g/C Ratio	0.55	0.55		0.55	0.55			0.34			0.34	
v/c Ratio	0.04	0.36		0.27	0.31			0.19			0.12	
Control Delay (s/veh)	14.2	12.7		17.3	12.8			7.4			7.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	14.2	12.7		17.3	12.8			7.4			7.1	
LOS	B	B		B	B			A			A	
Approach Delay (s/veh)		12.8			13.4			7.4			7.1	
Approach LOS		B			B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 62.5			
Actuated Cycle Length: 55.5			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay (s/veh): 12.5		Intersection LOS: B	
Intersection Capacity Utilization 64.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: S Flower Ave & E Birch St

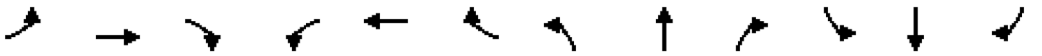




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	577	91	99	566	14	21	51	37	33	7	19
Future Volume (veh/h)	19	577	91	99	566	14	21	51	37	33	7	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.91	0.93		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	589	90	101	578	13	21	52	25	34	7	7
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	453	1442	220	412	1660	37	162	343	141	435	90	67
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	824	3085	470	757	3550	80	210	1037	427	921	272	204
Grp Volume(v), veh/h	19	339	340	101	289	302	98	0	0	48	0	0
Grp Sat Flow(s),veh/h/ln	824	1777	1778	757	1777	1853	1674	0	0	1396	0	0
Q Serve(g_s), s	0.7	5.9	5.9	4.8	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	5.9	5.9	10.7	4.9	4.9	1.9	0.0	0.0	0.9	0.0	0.0
Prop In Lane	1.00		0.26	1.00		0.04	0.21		0.26	0.71		0.15
Lane Grp Cap(c), veh/h	453	831	831	412	831	866	646	0	0	592	0	0
V/C Ratio(X)	0.04	0.41	0.41	0.25	0.35	0.35	0.15	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	453	831	831	412	831	866	1181	0	0	1034	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.7	8.2	8.3	11.8	8.0	8.0	11.2	0.0	0.0	10.8	0.0	0.0
Incr Delay (d2), s/veh	0.2	1.5	1.5	1.4	1.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.0	2.0	0.8	1.6	1.7	0.6	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.9	9.7	9.7	13.2	9.1	9.1	11.2	0.0	0.0	10.8	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B			B		
Approach Vol, veh/h		698			692			98			48	
Approach Delay, s/veh		9.7			9.7			11.2			10.8	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.9		20.2		26.9		20.2				
Change Period (Y+Rc), s		4.9		4.6		4.9		4.6				
Max Green Setting (Gmax), s		22.0		31.0		22.0		31.0				
Max Q Clear Time (g_c+I1), s		7.9		2.9		12.7		3.9				
Green Ext Time (p_c), s		1.3		0.2		1.2		0.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			9.8									
HCM 7th LOS			A									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	627	17	35	674	3	5	0	2	2	0	1
Future Volume (vph)	2	627	17	35	674	3	5	0	2	2	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.996			0.999			0.966			0.955	
Flt Protected	0.950			0.950				0.964			0.968	
Satd. Flow (prot)	1770	3525	0	1770	3536	0	0	1735	0	0	1722	0
Flt Permitted	0.950			0.950				0.964			0.968	
Satd. Flow (perm)	1770	3525	0	1770	3536	0	0	1735	0	0	1722	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			26			12						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	2	765	21	43	822	4	6	0	2	2	0	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	786	0	43	826	0	0	8	0	0	3	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.4%		ICU Level of Service A	
Analysis Period (min) 15			

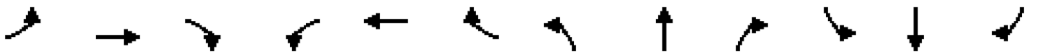
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	627	17	35	674	3	5	0	2	2	0	1
Future Vol, veh/h	2	627	17	35	674	3	5	0	2	2	0	1
Conflicting Peds, #/hr	0	0	26	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	765	21	43	822	4	6	0	2	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	838	0	0	811	0	0	1302	1729	419	1308	1737	425
Stage 1	-	-	-	-	-	-	806	806	-	921	921	-
Stage 2	-	-	-	-	-	-	496	923	-	387	816	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	792	-	-	811	-	-	118	87	583	117	86	578
Stage 1	-	-	-	-	-	-	342	393	-	291	347	-
Stage 2	-	-	-	-	-	-	524	347	-	608	389	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	783	-	-	791	-	-	109	80	569	109	79	571
Mov Cap-2 Maneuver	-	-	-	-	-	-	109	80	-	109	79	-
Stage 1	-	-	-	-	-	-	332	382	-	272	325	-
Stage 2	-	-	-	-	-	-	495	324	-	603	378	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.48	32.14	29.8
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	141	783	-	-	791	-	-	149
HCM Lane V/C Ratio	0.06	0.003	-	-	0.054	-	-	0.025
HCM Control Delay (s/veh)	32.1	9.6	-	-	9.8	-	-	29.8
HCM Lane LOS	D	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0.2	-	-	0.1

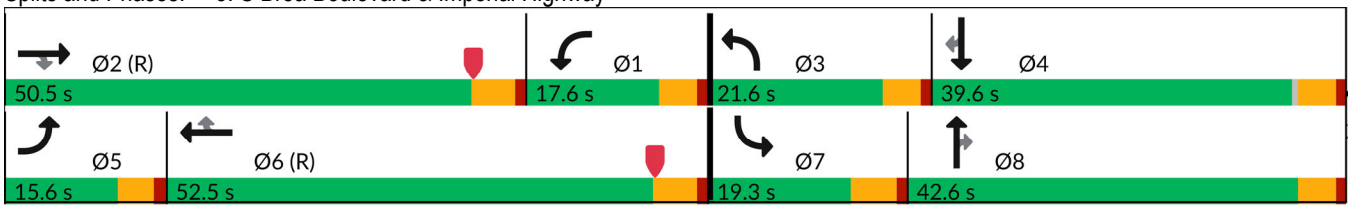


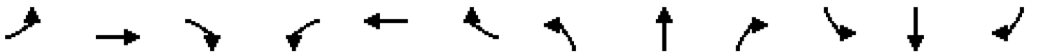
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	163	1426	394	223	1462	99	415	475	138	216	679	114
Future Volume (vph)	163	1426	394	223	1462	99	415	475	138	216	679	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.98			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1545	3433	5085	1556	3433	5085	1536	3433	3539	1542
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237			97			164			147
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			11			5			14			8
Confl. Bikes (#/hr)			1						5			7
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	194	1698	469	265	1740	118	494	565	164	257	808	136
Shared Lane Traffic (%)												
Lane Group Flow (vph)	194	1698	469	265	1740	118	494	565	164	257	808	136
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	15.6	50.5	50.5	17.6	52.5	52.5	21.6	42.6	42.6	19.3	39.6	39.6
Total Split (%)	12.0%	38.8%	38.8%	13.5%	40.4%	40.4%	16.6%	32.8%	32.8%	14.8%	30.5%	30.5%
Maximum Green (s)	11.0	45.2	45.2	13.0	47.2	47.2	17.0	38.0	38.0	14.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		5	5		2	2		7	7		4	4
Act Effct Green (s)	10.7	47.6	47.6	12.5	49.4	49.4	17.0	37.2	37.2	12.9	33.8	33.8
Actuated g/C Ratio	0.08	0.37	0.37	0.10	0.38	0.38	0.13	0.29	0.29	0.10	0.26	0.26
v/c Ratio	0.69	0.91	0.66	0.81	0.90	0.18	1.10	0.39	0.29	0.76	0.88	0.27
Control Delay (s/veh)	71.4	48.0	21.6	76.2	45.7	8.3	124.7	38.2	6.5	63.1	58.9	15.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.4	48.0	21.6	76.2	45.7	8.3	124.7	38.2	6.5	63.1	58.9	15.4
LOS	E	D	C	E	D	A	F	D	A	E	E	B
Approach Delay (s/veh)		44.7			47.4			68.9			54.9	
Approach LOS		D			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay (s/veh): 51.6		Intersection LOS: D	
Intersection Capacity Utilization 88.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway





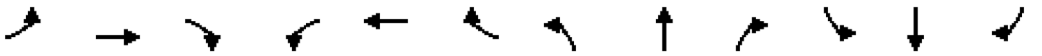
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	1426	394	223	1462	99	415	475	138	216	679	114
Future Volume (veh/h)	163	1426	394	223	1462	99	415	475	138	216	679	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	194	1698	323	265	1740	58	494	565	21	257	808	16
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1774	539	383	1976	611	452	1503	453	309	919	399
Arrive On Green	0.08	0.35	0.35	0.11	0.39	0.39	0.13	0.29	0.29	0.09	0.26	0.26
Sat Flow, veh/h	3456	5106	1550	3456	5106	1579	3456	5106	1538	3456	3554	1542
Grp Volume(v), veh/h	194	1698	323	265	1740	58	494	565	21	257	808	16
Grp Sat Flow(s),veh/h/ln	1728	1702	1550	1728	1702	1579	1728	1702	1538	1728	1777	1542
Q Serve(g_s), s	7.1	42.3	15.2	9.6	41.2	3.0	17.0	11.4	0.9	9.5	28.4	1.0
Cycle Q Clear(g_c), s	7.1	42.3	15.2	9.6	41.2	3.0	17.0	11.4	0.9	9.5	28.4	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1774	539	383	1976	611	452	1503	453	309	919	399
V/C Ratio(X)	0.73	0.96	0.60	0.69	0.88	0.09	1.09	0.38	0.05	0.83	0.88	0.04
Avail Cap(c_a), veh/h	292	1775	539	383	1976	611	452	1503	453	372	957	415
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	58.7	41.5	16.3	55.6	37.1	25.4	56.5	36.4	17.7	58.2	46.3	36.1
Incr Delay (d2), s/veh	6.6	13.4	4.9	4.4	6.0	0.3	69.9	0.3	0.1	10.1	9.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	19.4	6.0	4.4	17.7	1.2	11.7	4.8	0.5	4.6	13.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.3	54.8	21.2	60.1	43.1	25.7	126.4	36.7	17.8	68.3	55.7	36.2
LnGrp LOS	E	D	C	E	D	C	F	D	B	E	E	D
Approach Vol, veh/h		2215			2063			1080			1081	
Approach Delay, s/veh		50.8			44.8			77.4			58.4	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.7	50.5	21.6	38.2	14.6	55.6	16.9	42.9
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	13.0	* 45	17.0	35.0	11.0	47.2	14.0	38.0
Max Q Clear Time (g_c+I1), s	11.6	44.3	19.0	30.4	9.1	43.2	11.5	13.4
Green Ext Time (p_c), s	0.1	0.9	0.0	3.0	0.1	3.8	0.1	7.1

Intersection Summary	
HCM 7th Control Delay, s/veh	54.6
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1798	6	0	1760	28	0	0	17	0	0	37
Future Volume (vph)	0	1798	6	0	1760	28	0	0	17	0	0	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.998				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5085	0	0	5075	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5085	0	0	5075	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			2			12						
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	0	2193	7	0	2146	34	0	0	21	0	0	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2200	0	0	2180	0	0	0	21	0	0	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

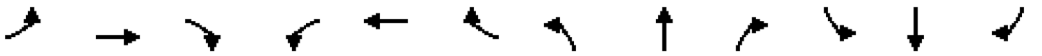
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1798	6	0	1760	28	0	0	17	0	0	37
Future Vol, veh/h	0	1798	6	0	1760	28	0	0	17	0	0	37
Conflicting Peds, #/hr	0	0	2	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2193	7	0	2146	34	0	0	21	0	0	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1102	-	-	1102
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	177	0	0	177
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	177	-	-	175
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	28.03	32.54
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	177	-	-	-	-	175
HCM Lane V/C Ratio	0.117	-	-	-	-	0.258
HCM Control Delay (s/veh)	28	-	-	-	-	32.5
HCM Lane LOS	D	-	-	-	-	D
HCM 95th %tile Q(veh)	0.4	-	-	-	-	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1808	2	0	1622	118	0	0	12	0	0	167
Future Volume (vph)	0	1808	2	0	1622	118	0	0	12	0	0	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	0		0	0		0	0		100
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.990				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5085	0	0	5034	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5085	0	0	5034	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		366			681			1312			750	
Travel Time (s)		6.2			11.6			35.8			20.5	
Confl. Peds. (#/hr)						6						
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	0	2152	2	0	1931	140	0	0	14	0	0	199
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2154	0	0	2071	0	0	0	14	0	0	199
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	51.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	5.6

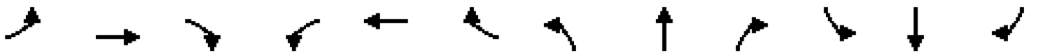
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1808	2	0	1622	118	0	0	12	0	0	167
Future Vol, veh/h	0	1808	2	0	1622	118	0	0	12	0	0	167
Conflicting Peds, #/hr	0	0	0	0	0	6	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2152	2	0	1931	140	0	0	14	0	0	199

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1077	-	-	1042
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	184	0	0	~ 195
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	184	-	-	~ 193
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	26.19	122.86
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	184	-	-	-	-	193
HCM Lane V/C Ratio	0.078	-	-	-	-	1.028
HCM Control Delay (s/veh)	26.2	-	-	-	-	122.9
HCM Lane LOS	D	-	-	-	-	F
HCM 95th %tile Q(veh)	0.2	-	-	-	-	9

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	1781	12	35	1708	3	0	0	17	3	1	18
Future Volume (vph)	23	1781	12	35	1708	3	0	0	17	3	1	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.865			0.887	
Flt Protected	0.950			0.950							0.994	
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1611	0	0	1642	0
Flt Permitted	0.950			0.950							0.994	
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1611	0	0	1642	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			1			3						
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
Adj. Flow (vph)	25	1936	13	38	1857	3	0	0	18	3	1	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	1949	0	38	1860	0	0	18	0	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	3.2

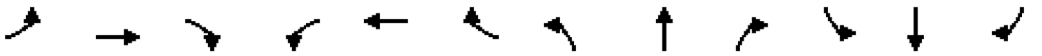
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	1781	12	35	1708	3	0	0	17	3	1	18
Future Vol, veh/h	23	1781	12	35	1708	3	0	0	17	3	1	18
Conflicting Peds, #/hr	0	0	1	0	0	3	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	1936	13	38	1857	3	0	0	18	3	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1863	0	0	1950	0	0	2813	3932	975	2762	3937	933
Stage 1	-	-	-	-	-	-	1993	1993	-	1937	1937	-
Stage 2	-	-	-	-	-	-	819	1939	-	824	2000	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	147	-	-	133	-	-	19	3	215	21	3	230
Stage 1	-	-	-	-	-	-	39	104	-	43	111	-
Stage 2	-	-	-	-	-	-	304	111	-	302	103	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	146	-	-	132	-	-	6	2	215	11	2	229
Mov Cap-2 Maneuver	-	-	-	-	-	-	6	2	-	11	2	-
Stage 1	-	-	-	-	-	-	32	86	-	30	79	-
Stage 2	-	-	-	-	-	-	196	79	-	229	85	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.44	0.86	23.3	$ 394.95
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	215	146	-	-	132	-	-	25
HCM Lane V/C Ratio	0.086	0.171	-	-	0.287	-	-	0.967
HCM Control Delay (s/veh)	23.3	34.6	-	-	42.8	-	-	$ 395
HCM Lane LOS	C	D	-	-	E	-	-	F
HCM 95th %tile Q(veh)	0.3	0.6	-	-	1.1	-	-	2.9

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

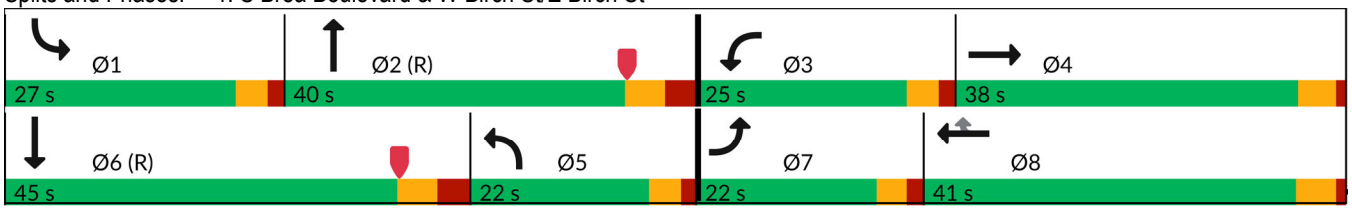


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	75	32	178	88	222	44	300	215	237	376	71
Future Volume (vph)	49	75	32	178	88	222	44	300	215	237	376	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.98			0.99	
Frt		0.955				0.850		0.937			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1762	0	3433	1863	1583	1770	4685	0	3433	4932	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1762	0	3433	1863	1549	1770	4685	0	3433	4932	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16				247		135			30	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			16			9			16			6
Confl. Bikes (#/hr)			2						2			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	54	83	36	198	98	247	49	333	239	263	418	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	119	0	198	98	247	49	572	0	263	497	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	22.0	38.0		25.0	41.0	41.0	22.0	40.0		27.0	45.0	
Total Split (%)	16.9%	29.2%		19.2%	31.5%	31.5%	16.9%	30.8%		20.8%	34.6%	
Maximum Green (s)	17.5	33.4		20.5	36.1	36.1	17.5	33.1		22.5	38.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		8			4	4		8			2	
Act Effct Green (s)	9.2	15.2		11.9	20.0	20.0	15.6	68.2		14.3	69.4	
Actuated g/C Ratio	0.07	0.12		0.09	0.15	0.15	0.12	0.52		0.11	0.53	
v/c Ratio	0.43	0.54		0.63	0.34	0.55	0.23	0.23		0.70	0.19	
Control Delay (s/veh)	68.2	53.6		68.2	49.1	12.2	45.5	18.3		65.6	18.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	68.2	53.6		68.2	49.1	12.2	45.5	18.3		65.6	18.1	
LOS	E	D		E	D	B	D	B		E	B	
Approach Delay (s/veh)		58.2			39.3			20.5			34.6	
Approach LOS		E			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 99 (76%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 33.6		Intersection LOS: C	
Intersection Capacity Utilization 57.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St



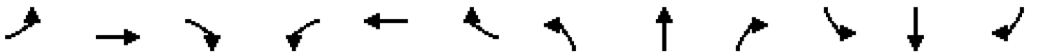
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	75	32	178	88	222	44	300	215	237	376	71
Future Volume (veh/h)	49	75	32	178	88	222	44	300	215	237	376	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	83	22	198	98	40	49	333	187	263	418	65
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	166	44	257	261	217	598	1888	860	321	1305	198
Arrive On Green	0.05	0.12	0.12	0.02	0.05	0.05	0.67	1.00	1.00	0.09	0.29	0.29
Sat Flow, veh/h	1781	1405	372	3456	1870	1554	1781	3404	1551	3456	4454	674
Grp Volume(v), veh/h	54	0	105	198	98	40	49	333	187	263	317	166
Grp Sat Flow(s),veh/h/ln	1781	0	1778	1728	1870	1554	1781	1702	1551	1728	1702	1723
Q Serve(g_s), s	3.8	0.0	7.2	7.4	6.6	3.2	1.2	0.0	0.0	9.7	9.4	9.8
Cycle Q Clear(g_c), s	3.8	0.0	7.2	7.4	6.6	3.2	1.2	0.0	0.0	9.7	9.4	9.8
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	94	0	210	257	261	217	598	1888	860	321	998	505
V/C Ratio(X)	0.57	0.00	0.50	0.77	0.37	0.18	0.08	0.18	0.22	0.82	0.32	0.33
Avail Cap(c_a), veh/h	240	0	457	545	519	432	598	1888	860	598	998	505
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.1	0.0	53.7	62.3	56.5	54.9	14.4	0.0	0.0	57.9	35.8	36.0
Incr Delay (d2), s/veh	2.1	0.0	0.7	1.9	0.3	0.1	0.0	0.2	0.5	2.0	0.8	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	3.3	3.4	3.3	1.3	0.5	0.1	0.1	4.3	4.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.2	0.0	54.4	64.2	56.8	55.0	14.4	0.2	0.5	59.9	36.7	37.7
LnGrp LOS	E		D	E	E	E	B	A	A	E	D	D
Approach Vol, veh/h		159			336			569			746	
Approach Delay, s/veh		57.0			60.9			1.5			45.1	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	79.0	14.2	20.3	50.6	45.0	11.4	23.1
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	22.5	33.1	20.5	* 33	17.5	* 38	17.5	36.1
Max Q Clear Time (g_c+I1), s	11.7	2.0	9.4	9.2	3.2	11.8	5.8	8.6
Green Ext Time (p_c), s	0.4	2.3	0.3	0.4	0.0	2.0	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	35.4
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	481	43	25	474	9	10	3	16	0	0	14
Future Volume (vph)	2	481	43	25	474	9	10	3	16	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.997			0.924				0.865
Flt Protected				0.950				0.983				
Satd. Flow (prot)	0	3539	1583	1770	3529	0	0	1692	0	0	0	1611
Flt Permitted				0.950				0.983				
Satd. Flow (perm)	0	3539	1583	1770	3529	0	0	1692	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			5			1						
Confl. Bikes (#/hr)			4									
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	2	540	48	28	533	10	11	3	18	0	0	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	542	48	28	543	0	0	32	0	0	0	16
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.8%		ICU Level of Service A	
Analysis Period (min) 15			

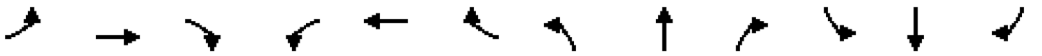
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	481	43	25	474	9	10	3	16	0	0	14
Future Vol, veh/h	2	481	43	25	474	9	10	3	16	0	0	14
Conflicting Peds, #/hr	0	0	5	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	540	48	28	533	10	11	3	18	0	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	544	0	0	594	0	0	872	1150	275	-	-	272
Stage 1	-	-	-	-	-	-	550	550	-	-	-	-
Stage 2	-	-	-	-	-	-	322	600	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	1021	-	-	978	-	-	245	197	722	0	0	725
Stage 1	-	-	-	-	-	-	487	514	-	0	0	-
Stage 2	-	-	-	-	-	-	664	488	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1020	-	-	974	-	-	231	190	719	-	-	725
Mov Cap-2 Maneuver	-	-	-	-	-	-	231	190	-	-	-	-
Stage 1	-	-	-	-	-	-	483	510	-	-	-	-
Stage 2	-	-	-	-	-	-	631	474	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.43	16.13	10.08
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	356	1020	-	-	974	-	-	725
HCM Lane V/C Ratio	0.092	0.002	-	-	0.029	-	-	0.022
HCM Control Delay (s/veh)	16.1	8.5	-	-	8.8	-	-	10.1
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.1

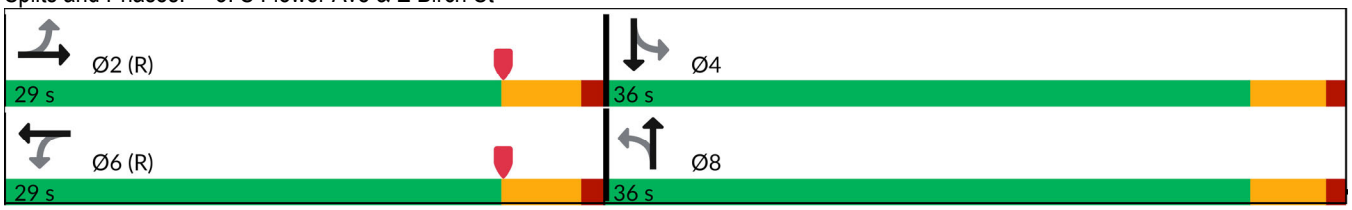


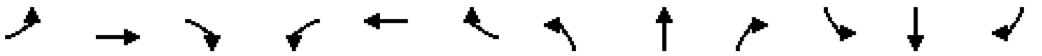
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	432	46	65	494	11	15	6	50	26	3	13
Future Volume (vph)	14	432	46	65	494	11	15	6	50	26	3	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.98				
Frt		0.986			0.997			0.905			0.958	
Flt Protected	0.950			0.950				0.990			0.971	
Satd. Flow (prot)	1770	3482	0	1770	3527	0	0	1641	0	0	1733	0
Flt Permitted	0.422			0.436				0.928			0.832	
Satd. Flow (perm)	786	3482	0	812	3527	0	0	1538	0	0	1485	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			4			60			16	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		364			329			750			397	
Travel Time (s)		7.1			6.4			20.5			10.8	
Confl. Peds. (#/hr)			1			1			19			
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	17	520	55	78	595	13	18	7	60	31	4	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	575	0	78	608	0	0	85	0	0	51	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (%)	44.6%	44.6%		44.6%	44.6%		55.4%	55.4%		55.4%	55.4%	
Maximum Green (s)	24.1	24.1		24.1	24.1		31.4	31.4		31.4	31.4	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9			4.6			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0		24.0	24.0		24.0	24.0	
Pedestrian Calls (#/hr)	1	1		1	1		0	0		9	9	
Act Effct Green (s)	47.7	47.7		47.7	47.7			10.6			10.6	
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.16			0.16	
v/c Ratio	0.03	0.22		0.13	0.24			0.28			0.20	
Control Delay (s/veh)	7.9	7.4		8.2	6.1			10.3			15.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	7.9	7.4		8.2	6.1			10.3			15.9	
LOS	A	A		A	A			B			B	
Approach Delay (s/veh)		7.4			6.4			10.3			15.9	
Approach LOS		A			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 51 (78%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay (s/veh): 7.4		Intersection LOS: A	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: S Flower Ave & E Birch St

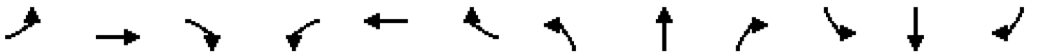




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	432	46	65	494	11	15	6	50	26	3	13
Future Volume (veh/h)	14	432	46	65	494	11	15	6	50	26	3	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.95	0.95		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	520	55	78	595	13	18	7	12	31	4	3
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	674	2410	254	694	2649	58	141	57	55	220	27	13
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	813	3236	341	838	3556	78	536	525	509	1093	249	115
Grp Volume(v), veh/h	17	285	290	78	297	311	37	0	0	38	0	0
Grp Sat Flow(s),veh/h/ln	813	1777	1800	838	1777	1856	1570	0	0	1457	0	0
Q Serve(g_s), s	0.4	3.2	3.2	2.0	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.8	3.2	3.2	5.2	3.3	3.3	1.3	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		0.19	1.00		0.04	0.49		0.32	0.82		0.08
Lane Grp Cap(c), veh/h	674	1324	1341	694	1324	1383	253	0	0	259	0	0
V/C Ratio(X)	0.03	0.22	0.22	0.11	0.22	0.22	0.15	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	674	1324	1341	694	1324	1383	818	0	0	779	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.1	2.5	2.5	3.3	2.5	2.5	26.4	0.0	0.0	26.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.4	0.4	0.3	0.4	0.4	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.6	0.7	0.3	0.7	0.7	0.5	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.2	2.9	2.9	3.6	2.9	2.9	26.5	0.0	0.0	26.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C			C		
Approach Vol, veh/h		592			686			37			38	
Approach Delay, s/veh		2.9			3.0			26.5			26.5	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		53.3		11.7		53.3		11.7				
Change Period (Y+Rc), s		4.9		4.6		4.9		4.6				
Max Green Setting (Gmax), s		24.1		31.4		24.1		31.4				
Max Q Clear Time (g_c+I1), s		5.8		3.3		7.2		3.3				
Green Ext Time (p_c), s		1.1		0.1		1.3		0.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			4.3									
HCM 7th LOS			A									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	502	2	3	569	0	0	1	4	0	0	2
Future Volume (vph)	1	502	2	3	569	0	0	1	4	0	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.887			0.865	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3536	0	1770	3539	0	0	1652	0	0	1611	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3536	0	1770	3539	0	0	1652	0	0	1611	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			1			4						
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	1	591	2	4	669	0	0	1	5	0	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	593	0	4	669	0	0	6	0	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.7%		ICU Level of Service A	
Analysis Period (min) 15			

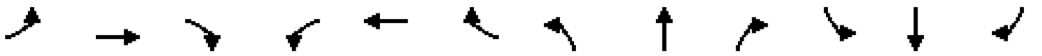
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	502	2	3	569	0	0	1	4	0	0	2
Future Vol, veh/h	1	502	2	3	569	0	0	1	4	0	0	2
Conflicting Peds, #/hr	0	0	1	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	591	2	4	669	0	0	1	5	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	673	0	0	594	0	0	937	1276	297	979	1277	339
Stage 1	-	-	-	-	-	-	595	595	-	680	680	-
Stage 2	-	-	-	-	-	-	342	680	-	298	596	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	913	-	-	978	-	-	219	166	699	205	165	657
Stage 1	-	-	-	-	-	-	458	491	-	407	449	-
Stage 2	-	-	-	-	-	-	647	449	-	686	490	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	910	-	-	977	-	-	217	164	698	200	164	655
Mov Cap-2 Maneuver	-	-	-	-	-	-	217	164	-	200	164	-
Stage 1	-	-	-	-	-	-	457	489	-	404	445	-
Stage 2	-	-	-	-	-	-	642	445	-	679	489	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.02	0.05	13.64	10.52
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	423	910	-	-	977	-	-	655
HCM Lane V/C Ratio	0.014	0.001	-	-	0.004	-	-	0.004
HCM Control Delay (s/veh)	13.6	9	-	-	8.7	-	-	10.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	1106	242	270	1079	98	297	362	198	137	325	115
Future Volume (vph)	113	1106	242	270	1079	98	297	362	198	137	325	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.99			0.98			0.98			0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1563	3433	5085	1553	3433	5085	1552	3433	3539	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			177			97			213			147
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)						7			6			6
Confl. Bikes (#/hr)			1						2			1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	122	1189	260	290	1160	105	319	389	213	147	349	124
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	1189	260	290	1160	105	319	389	213	147	349	124
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	20.6	45.5	45.5	20.6	45.5	45.5	21.6	42.6	42.6	21.3	39.6	39.6
Total Split (%)	15.8%	35.0%	35.0%	15.8%	35.0%	35.0%	16.6%	32.8%	32.8%	16.4%	30.5%	30.5%
Maximum Green (s)	16.0	40.2	40.2	16.0	40.2	40.2	17.0	38.0	38.0	16.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		0	0		4	4		3	3		3	3
Act Effct Green (s)	10.4	58.5	58.5	15.0	63.1	63.1	15.4	25.9	25.9	10.8	22.1	22.1
Actuated g/C Ratio	0.08	0.45	0.45	0.12	0.49	0.49	0.12	0.20	0.20	0.08	0.17	0.17
v/c Ratio	0.45	0.52	0.33	0.73	0.47	0.13	0.79	0.38	0.44	0.51	0.58	0.32
Control Delay (s/veh)	62.3	28.3	10.2	67.1	24.5	5.9	70.0	45.2	7.8	53.4	61.2	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	62.3	28.3	10.2	67.1	24.5	5.9	70.0	45.2	7.8	53.4	61.2	20.3
LOS	E	C	B	E	C	A	E	D	A	D	E	C
Approach Delay (s/veh)		27.9			31.2			45.1			51.2	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 59 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 35.5		Intersection LOS: D	
Intersection Capacity Utilization 76.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway

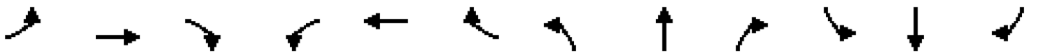
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	1106	242	270	1079	98	297	362	198	137	325	115
Future Volume (veh/h)	113	1106	242	270	1079	98	297	362	198	137	325	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	1189	164	290	1160	56	319	389	28	147	349	10
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	1490	457	1031	2653	820	372	897	272	265	532	231
Arrive On Green	0.08	0.29	0.29	0.30	0.52	0.52	0.11	0.18	0.18	0.10	0.20	0.20
Sat Flow, veh/h	3456	5106	1565	3456	5106	1579	3456	5106	1546	3456	3554	1545
Grp Volume(v), veh/h	122	1189	164	290	1160	56	319	389	28	147	349	10
Grp Sat Flow(s),veh/h/ln	1728	1702	1565	1728	1702	1579	1728	1702	1546	1728	1777	1545
Q Serve(g_s), s	4.4	27.9	8.0	8.4	18.4	2.3	11.8	8.8	1.1	5.3	11.8	0.7
Cycle Q Clear(g_c), s	4.4	27.9	8.0	8.4	18.4	2.3	11.8	8.8	1.1	5.3	11.8	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	263	1490	457	1031	2653	820	372	897	272	265	532	231
V/C Ratio(X)	0.46	0.80	0.36	0.28	0.44	0.07	0.86	0.43	0.10	0.56	0.66	0.04
Avail Cap(c_a), veh/h	425	1579	484	1031	2653	820	452	1493	452	425	957	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	57.5	42.5	20.0	34.9	19.4	15.6	57.0	47.8	13.4	56.3	49.0	44.5
Incr Delay (d2), s/veh	0.5	4.6	2.2	0.1	0.5	0.2	11.3	0.7	0.4	0.7	2.8	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	12.1	3.2	3.5	7.1	0.9	5.7	3.8	0.8	2.3	5.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.0	47.1	22.2	35.0	19.9	15.7	68.3	48.5	13.7	56.9	51.8	44.7
LnGrp LOS	E	D	C	C	B	B	E	D	B	E	D	D
Approach Vol, veh/h		1475			1506			736			506	
Approach Delay, s/veh		45.2			22.7			55.8			53.1	
Approach LOS		D			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	44.1	43.2	18.6	24.1	14.5	72.8	15.3	27.4
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	16.0	* 40	17.0	35.0	16.0	40.2	16.0	38.0
Max Q Clear Time (g_c+I1), s	10.4	29.9	13.8	13.8	6.4	20.4	7.3	10.8
Green Ext Time (p_c), s	0.3	8.0	0.2	3.9	0.1	12.8	0.1	5.0

Intersection Summary	
HCM 7th Control Delay, s/veh	40.0
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1447	7	0	1428	21	0	0	23	0	0	23
Future Volume (vph)	0	1447	7	0	1428	21	0	0	23	0	0	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.998				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5080	0	0	5075	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5080	0	0	5075	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)						9						
Confl. Bikes (#/hr)			1			1						
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	0	1462	7	0	1442	21	0	0	23	0	0	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1469	0	0	1463	0	0	0	23	0	0	23
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.1%		ICU Level of Service A	
Analysis Period (min) 15			

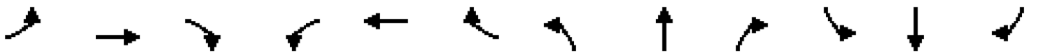
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1447	7	0	1428	21	0	0	23	0	0	23
Future Vol, veh/h	0	1447	7	0	1428	21	0	0	23	0	0	23
Conflicting Peds, #/hr	0	0	0	0	0	9	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1462	7	0	1442	21	0	0	23	0	0	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	734	-	-	741
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	311	0	0	308
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	311	-	-	305
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	17.51	17.76
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	311	-	-	-	-	305
HCM Lane V/C Ratio	0.075	-	-	-	-	0.076
HCM Control Delay (s/veh)	17.5	-	-	-	-	17.8
HCM Lane LOS	C	-	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1466	1	0	1335	31	0	0	4	0	0	113
Future Volume (vph)	0	1466	1	0	1335	31	0	0	4	0	0	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	0		0	0		0	0		100
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.997				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5085	0	0	5070	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5085	0	0	5070	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		366			681			1312			750	
Travel Time (s)		6.2			11.6			35.8			20.5	
Confl. Peds. (#/hr)						7						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1543	1	0	1405	33	0	0	4	0	0	119
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1544	0	0	1438	0	0	0	4	0	0	119
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

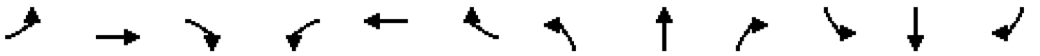
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1466	1	0	1335	31	0	0	4	0	0	113
Future Vol, veh/h	0	1466	1	0	1335	31	0	0	4	0	0	113
Conflicting Peds, #/hr	0	0	0	0	0	7	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1543	1	0	1405	33	0	0	4	0	0	119

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	772	-	-	726
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	294	0	0	315
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	294	-	-	313
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	17.44	23.4
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	294	-	-	-	-	313
HCM Lane V/C Ratio	0.014	-	-	-	-	0.38
HCM Control Delay (s/veh)	17.4	-	-	-	-	23.4
HCM Lane LOS	C	-	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	-	1.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	1440	10	21	1349	3	2	0	8	3	0	5
Future Volume (vph)	17	1440	10	21	1349	3	2	0	8	3	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.892			0.916	
Flt Protected	0.950			0.950				0.990			0.982	
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1645	0	0	1676	0
Flt Permitted	0.950			0.950				0.990			0.982	
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1645	0	0	1676	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			2			7						
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	18	1516	11	22	1420	3	2	0	8	3	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	1527	0	22	1423	0	0	10	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.0%		ICU Level of Service A	
Analysis Period (min) 15			

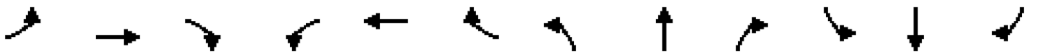
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	1440	10	21	1349	3	2	0	8	3	0	5
Future Vol, veh/h	17	1440	10	21	1349	3	2	0	8	3	0	5
Conflicting Peds, #/hr	0	0	2	0	0	7	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	1516	11	22	1420	3	2	0	8	3	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1430	0	0	1528	0	0	2171	3033	765	2115	3037	719
Stage 1	-	-	-	-	-	-	1559	1559	-	1473	1473	-
Stage 2	-	-	-	-	-	-	612	1474	-	642	1564	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	241	-	-	216	-	-	50	13	297	54	13	318
Stage 1	-	-	-	-	-	-	80	172	-	93	189	-
Stage 2	-	-	-	-	-	-	407	189	-	391	171	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	240	-	-	215	-	-	40	10	296	43	10	316
Mov Cap-2 Maneuver	-	-	-	-	-	-	40	10	-	43	10	-
Stage 1	-	-	-	-	-	-	74	159	-	82	169	-
Stage 2	-	-	-	-	-	-	359	168	-	351	158	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.25	0.36	34.92	47.18
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	131	240	-	-	215	-	-	94
HCM Lane V/C Ratio	0.08	0.075	-	-	0.103	-	-	0.09
HCM Control Delay (s/veh)	34.9	21.2	-	-	23.6	-	-	47.2
HCM Lane LOS	D	C	-	-	C	-	-	E
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0.3	-	-	0.3

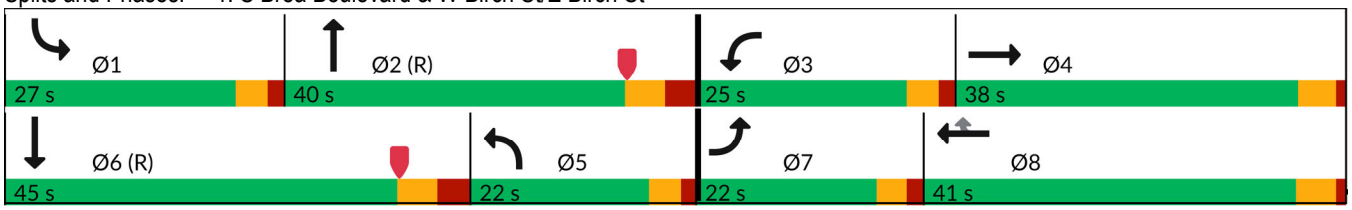


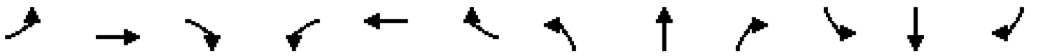
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	79	32	278	102	343	40	524	236	302	530	49
Future Volume (vph)	56	79	32	278	102	343	40	524	236	302	530	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.99			1.00	
Frt		0.956				0.850		0.953			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1762	0	3433	1863	1583	1770	4816	0	3433	4996	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1762	0	3433	1863	1549	1770	4816	0	3433	4996	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				361		84			12	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			19			9			5			10
Confl. Bikes (#/hr)			3									3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	59	83	34	293	107	361	42	552	248	318	558	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	117	0	293	107	361	42	800	0	318	610	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	22.0	38.0		25.0	41.0	41.0	22.0	40.0		27.0	45.0	
Total Split (%)	16.9%	29.2%		19.2%	31.5%	31.5%	16.9%	30.8%		20.8%	34.6%	
Maximum Green (s)	17.5	33.4		20.5	36.1	36.1	17.5	33.1		22.5	38.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		8			4	4		2			5	
Act Effct Green (s)	9.5	15.1		15.4	23.3	23.3	15.6	62.6		16.4	65.8	
Actuated g/C Ratio	0.07	0.12		0.12	0.18	0.18	0.12	0.48		0.13	0.51	
v/c Ratio	0.46	0.54		0.72	0.32	0.63	0.20	0.34		0.74	0.24	
Control Delay (s/veh)	68.8	53.7		65.3	47.5	9.0	64.5	29.2		65.0	21.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	68.8	53.7		65.3	47.5	9.0	64.5	29.2		65.0	21.4	
LOS	E	D		E	D	A	E	C		E	C	
Approach Delay (s/veh)		58.8			36.1			31.0			36.4	
Approach LOS		E			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 99 (76%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 36.1		Intersection LOS: D	
Intersection Capacity Utilization 63.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





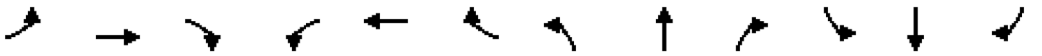
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	79	32	278	102	343	40	524	236	302	530	49
Future Volume (veh/h)	56	79	32	278	102	343	40	524	236	302	530	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.98	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	83	20	293	107	64	42	552	212	318	558	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	178	43	350	321	267	539	1849	690	376	1402	117
Arrive On Green	0.05	0.12	0.12	0.10	0.17	0.17	0.10	0.17	0.17	0.11	0.29	0.29
Sat Flow, veh/h	1781	1435	346	3456	1870	1560	1781	3659	1365	3456	4785	398
Grp Volume(v), veh/h	59	0	103	293	107	64	42	512	252	318	395	210
Grp Sat Flow(s),veh/h/ln	1781	0	1781	1728	1870	1560	1781	1702	1620	1728	1702	1779
Q Serve(g_s), s	4.2	0.0	7.0	10.8	6.5	4.6	2.8	17.2	17.7	11.7	12.1	12.3
Cycle Q Clear(g_c), s	4.2	0.0	7.0	10.8	6.5	4.6	2.8	17.2	17.7	11.7	12.1	12.3
Prop In Lane	1.00		0.19	1.00		1.00	1.00		0.84	1.00		0.22
Lane Grp Cap(c), veh/h	97	0	221	350	321	267	539	1721	819	376	998	521
V/C Ratio(X)	0.61	0.00	0.47	0.84	0.33	0.24	0.08	0.30	0.31	0.85	0.40	0.40
Avail Cap(c_a), veh/h	240	0	458	545	519	433	539	1721	819	598	998	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.1	0.0	52.9	57.4	47.3	46.5	42.0	33.9	34.2	56.8	36.7	36.8
Incr Delay (d2), s/veh	2.3	0.0	0.6	3.8	0.2	0.2	0.0	0.4	0.9	3.4	1.2	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	3.2	4.9	3.1	1.8	1.2	7.9	7.9	5.3	5.2	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.4	0.0	53.5	61.1	47.6	46.7	42.1	34.3	35.0	60.3	37.9	39.1
LnGrp LOS	E		D	E	D	D	D	C	D	E	D	D
Approach Vol, veh/h		162			464			806			923	
Approach Delay, s/veh		56.7			56.0			35.0			45.9	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	72.6	17.7	21.1	46.3	45.0	11.5	27.2
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	22.5	33.1	20.5	* 33	17.5	* 38	17.5	36.1
Max Q Clear Time (g_c+I1), s	13.7	19.7	12.8	9.0	4.8	14.3	6.2	8.5
Green Ext Time (p_c), s	0.4	2.9	0.3	0.3	0.0	2.5	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	44.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	619	30	9	694	10	9	3	38	0	0	16
Future Volume (vph)	2	619	30	9	694	10	9	3	38	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.896				0.865
Flt Protected				0.950				0.991				
Satd. Flow (prot)	0	3539	1583	1770	3532	0	0	1654	0	0	0	1611
Flt Permitted				0.950				0.991				
Satd. Flow (perm)	0	3539	1583	1770	3532	0	0	1654	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			10			1						
Confl. Bikes (#/hr)			3			1						
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	2	703	34	10	789	11	10	3	43	0	0	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	705	34	10	800	0	0	56	0	0	0	18
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.2%		ICU Level of Service A	
Analysis Period (min) 15			

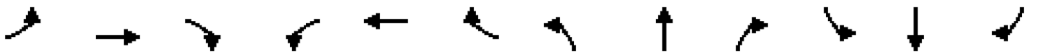
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	619	30	9	694	10	9	3	38	0	0	16
Future Vol, veh/h	2	619	30	9	694	10	9	3	38	0	0	16
Conflicting Peds, #/hr	0	0	10	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	703	34	10	789	11	10	3	43	0	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	801	0	0	748	0	0	1133	1539	362	-	-	401
Stage 1	-	-	-	-	-	-	718	718	-	-	-	-
Stage 2	-	-	-	-	-	-	415	821	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	818	-	-	857	-	-	158	114	635	0	0	599
Stage 1	-	-	-	-	-	-	386	431	-	0	0	-
Stage 2	-	-	-	-	-	-	586	386	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	817	-	-	849	-	-	149	111	629	-	-	598
Mov Cap-2 Maneuver	-	-	-	-	-	-	149	111	-	-	-	-
Stage 1	-	-	-	-	-	-	381	426	-	-	-	-
Stage 2	-	-	-	-	-	-	561	381	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.12	17.76	11.21
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	339	817	-	-	849	-	-	598
HCM Lane V/C Ratio	0.168	0.003	-	-	0.012	-	-	0.03
HCM Control Delay (s/veh)	17.8	9.4	-	-	9.3	-	-	11.2
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.1

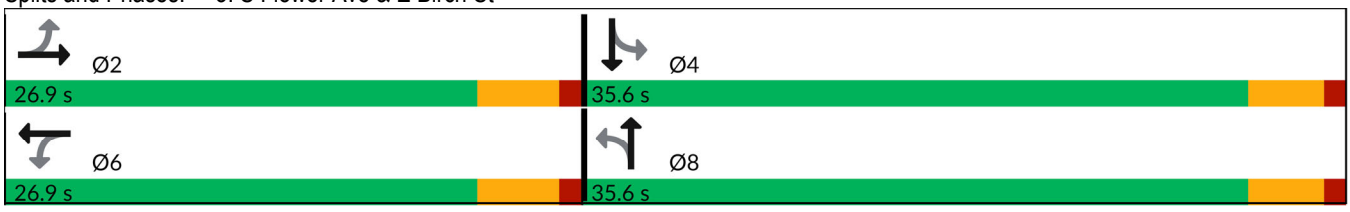


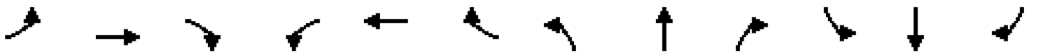
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	578	48	54	642	23	36	43	25	45	10	37
Future Volume (vph)	34	578	48	54	642	23	36	43	25	45	10	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.98				
Frt		0.989			0.995			0.967			0.946	
Flt Protected	0.950			0.950				0.983			0.976	
Satd. Flow (prot)	1770	3490	0	1770	3518	0	0	1735	0	0	1720	0
Flt Permitted	0.337			0.359				0.887			0.834	
Satd. Flow (perm)	628	3490	0	669	3518	0	0	1566	0	0	1470	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			6			28			41	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		364			329			750			397	
Travel Time (s)		7.1			6.4			20.5			10.8	
Confl. Peds. (#/hr)			12			4			118			
Confl. Bikes (#/hr)			3			2			1			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	38	642	53	60	713	26	40	48	28	50	11	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	695	0	60	739	0	0	116	0	0	102	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (%)	43.0%	43.0%		43.0%	43.0%		57.0%	57.0%		57.0%	57.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		31.0	31.0		31.0	31.0	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9			4.6			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0		24.0	24.0		24.0	24.0	
Pedestrian Calls (#/hr)	6	6		2	2		73	73		0	0	
Act Effct Green (s)	29.1	29.1		29.1	29.1			18.7			18.7	
Actuated g/C Ratio	0.54	0.54		0.54	0.54			0.35			0.35	
v/c Ratio	0.11	0.37		0.17	0.39			0.21			0.19	
Control Delay (s/veh)	15.1	13.2		15.7	13.6			8.3			6.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	15.1	13.2		15.7	13.6			8.3			6.8	
LOS	B	B		B	B			A			A	
Approach Delay (s/veh)		13.3			13.7			8.3			6.8	
Approach LOS		B			B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 62.5			
Actuated Cycle Length: 54.1			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay (s/veh): 12.8		Intersection LOS: B	
Intersection Capacity Utilization 64.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: S Flower Ave & E Birch St

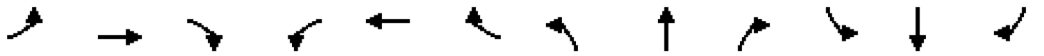




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	578	48	54	642	23	36	43	25	45	10	37
Future Volume (veh/h)	34	578	48	54	642	23	36	43	25	45	10	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.90	0.92		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	642	53	60	713	24	40	48	10	50	11	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	348	1433	118	362	1516	51	310	345	63	454	102	93
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	720	3313	273	746	3504	118	553	906	166	881	268	245
Grp Volume(v), veh/h	38	344	351	60	361	376	98	0	0	74	0	0
Grp Sat Flow(s),veh/h/ln	720	1777	1809	746	1777	1845	1625	0	0	1394	0	0
Q Serve(g_s), s	2.0	6.9	7.0	3.1	7.4	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.4	6.9	7.0	10.1	7.4	7.4	1.8	0.0	0.0	1.4	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.06	0.41		0.10	0.68		0.18
Lane Grp Cap(c), veh/h	348	768	782	362	768	798	718	0	0	649	0	0
V/C Ratio(X)	0.11	0.45	0.45	0.17	0.47	0.47	0.14	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	348	768	782	362	768	798	1083	0	0	959	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.6	10.2	10.2	13.7	10.3	10.3	10.3	0.0	0.0	10.2	0.0	0.0
Incr Delay (d2), s/veh	0.6	1.9	1.9	1.0	2.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.5	2.5	0.5	2.7	2.8	0.6	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.3	12.0	12.0	14.7	12.3	12.3	10.3	0.0	0.0	10.2	0.0	0.0
LnGrp LOS	B	B	B	B	B	B	B			B		
Approach Vol, veh/h		733			797			98			74	
Approach Delay, s/veh		12.1			12.5			10.3			10.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.9		24.0		26.9		24.0				
Change Period (Y+Rc), s		4.9		4.6		4.9		4.6				
Max Green Setting (Gmax), s		22.0		31.0		22.0		31.0				
Max Q Clear Time (g_c+I1), s		11.4		3.4		12.1		3.8				
Green Ext Time (p_c), s		1.3		0.3		1.4		0.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			12.1									
HCM 7th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	623	21	16	717	8	0	0	1	2	0	3
Future Volume (vph)	3	623	21	16	717	8	0	0	1	2	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995			0.998			0.865			0.919	
Flt Protected	0.950			0.950							0.980	
Satd. Flow (prot)	1770	3522	0	1770	3532	0	0	1611	0	0	1678	0
Flt Permitted	0.950			0.950							0.980	
Satd. Flow (perm)	1770	3522	0	1770	3532	0	0	1611	0	0	1678	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			83			5						
Confl. Bikes (#/hr)			3			2						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3	656	22	17	755	8	0	0	1	2	0	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	3	678	0	17	763	0	0	1	0	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.1%		ICU Level of Service A	
Analysis Period (min) 15			

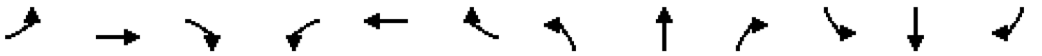
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	623	21	16	717	8	0	0	1	2	0	3
Future Vol, veh/h	3	623	21	16	717	8	0	0	1	2	0	3
Conflicting Peds, #/hr	0	0	83	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	656	22	17	755	8	0	0	1	2	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	768	0	0	761	0	0	1167	1558	422	1132	1565	387
Stage 1	-	-	-	-	-	-	756	756	-	798	798	-
Stage 2	-	-	-	-	-	-	411	802	-	334	767	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	842	-	-	847	-	-	149	111	580	158	110	612
Stage 1	-	-	-	-	-	-	366	414	-	346	396	-
Stage 2	-	-	-	-	-	-	589	395	-	653	409	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	838	-	-	780	-	-	133	100	534	153	99	609
Mov Cap-2 Maneuver	-	-	-	-	-	-	133	100	-	153	99	-
Stage 1	-	-	-	-	-	-	336	380	-	337	386	-
Stage 2	-	-	-	-	-	-	573	384	-	650	376	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.04	0.21	11.75	18.21
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	534	838	-	-	780	-	-	278
HCM Lane V/C Ratio	0.002	0.004	-	-	0.022	-	-	0.019
HCM Control Delay (s/veh)	11.7	9.3	-	-	9.7	-	-	18.2
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0.1	-	-	0.1

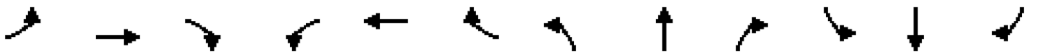


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	1193	379	348	1275	119	372	545	201	211	499	152
Future Volume (vph)	144	1193	379	348	1275	119	372	545	201	211	499	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.97			0.98			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1551	3433	5085	1536	3433	5085	1544	3433	3539	1542
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			263			97			209			158
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			8			17			11			11
Confl. Bikes (#/hr)						1			2			3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	150	1243	395	363	1328	124	388	568	209	220	520	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	150	1243	395	363	1328	124	388	568	209	220	520	158
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	18.6	47.5	47.5	19.6	48.5	48.5	21.6	41.6	41.6	21.3	39.6	39.6
Total Split (%)	14.3%	36.5%	36.5%	15.1%	37.3%	37.3%	16.6%	32.0%	32.0%	16.4%	30.5%	30.5%
Maximum Green (s)	14.0	42.2	42.2	15.0	43.2	43.2	17.0	37.0	37.0	16.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		4	4		8	8		6	6		6	6
Act Effct Green (s)	10.9	52.1	52.1	14.9	56.2	56.2	16.6	30.3	30.3	12.8	27.3	27.3
Actuated g/C Ratio	0.08	0.40	0.40	0.11	0.43	0.43	0.13	0.23	0.23	0.10	0.21	0.21
v/c Ratio	0.52	0.61	0.51	0.92	0.60	0.17	0.89	0.48	0.40	0.65	0.70	0.35
Control Delay (s/veh)	63.7	33.5	12.7	86.0	31.0	8.6	78.5	44.0	7.2	82.3	57.9	19.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.7	33.5	12.7	86.0	31.0	8.6	78.5	44.0	7.2	82.3	57.9	19.9
LOS	E	C	B	F	C	A	E	D	A	F	E	B
Approach Delay (s/veh)		31.4			40.5			48.9			57.2	
Approach LOS		C			D			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 101 (78%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay (s/veh): 42.0		Intersection LOS: D	
Intersection Capacity Utilization 85.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway



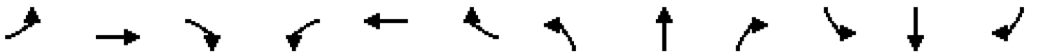
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	1193	379	348	1275	119	372	545	201	211	499	152
Future Volume (veh/h)	144	1193	379	348	1275	119	372	545	201	211	499	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	150	1243	241	362	1328	70	388	568	35	220	520	33
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	1571	484	703	2246	680	437	1282	387	277	747	323
Arrive On Green	0.08	0.31	0.31	0.20	0.44	0.44	0.13	0.25	0.25	0.03	0.07	0.07
Sat Flow, veh/h	3456	5106	1573	3456	5106	1547	3456	5106	1543	3456	3554	1537
Grp Volume(v), veh/h	150	1243	241	362	1328	70	388	568	35	220	520	33
Grp Sat Flow(s),veh/h/ln	1728	1702	1573	1728	1702	1547	1728	1702	1543	1728	1777	1537
Q Serve(g_s), s	5.4	29.0	11.5	12.1	25.6	3.5	14.4	12.2	1.4	8.2	18.6	2.6
Cycle Q Clear(g_c), s	5.4	29.0	11.5	12.1	25.6	3.5	14.4	12.2	1.4	8.2	18.6	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	1571	484	703	2246	680	437	1282	387	277	747	323
V/C Ratio(X)	0.57	0.79	0.50	0.52	0.59	0.10	0.89	0.44	0.09	0.79	0.70	0.10
Avail Cap(c_a), veh/h	372	1658	511	703	2246	680	452	1453	439	425	957	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	57.9	41.2	18.4	46.1	27.6	21.4	55.9	41.0	14.7	62.2	56.4	49.0
Incr Delay (d2), s/veh	0.7	4.2	3.6	0.3	1.2	0.3	17.9	0.5	0.2	2.5	2.5	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	12.5	4.6	5.2	10.4	1.3	7.3	5.2	0.9	3.9	9.2	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.7	45.3	22.0	46.4	28.7	21.7	73.8	41.5	14.9	64.7	59.0	49.3
LnGrp LOS	E	D	C	D	C	C	E	D	B	E	E	D
Approach Vol, veh/h		1634			1760			991			773	
Approach Delay, s/veh		43.1			32.1			53.2			60.2	
Approach LOS		D			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.7	45.3	21.0	31.9	14.6	62.5	15.7	37.2
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	15.0	* 42	17.0	35.0	14.0	43.2	16.0	37.0
Max Q Clear Time (g_c+I1), s	14.1	31.0	16.4	20.6	7.4	27.6	10.2	14.2
Green Ext Time (p_c), s	0.1	9.0	0.1	5.0	0.1	11.8	0.2	7.0

Intersection Summary	
HCM 7th Control Delay, s/veh	43.8
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1607	19	0	1718	21	0	0	28	0	0	31
Future Volume (vph)	0	1607	19	0	1718	21	0	0	28	0	0	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.998				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5075	0	0	5075	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5075	0	0	5075	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			3			11						
Confl. Bikes (#/hr)						3						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1640	19	0	1753	21	0	0	29	0	0	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1659	0	0	1774	0	0	0	29	0	0	32
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		

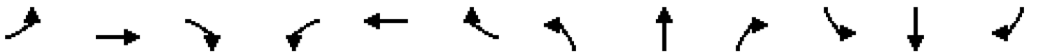
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1607	19	0	1718	21	0	0	28	0	0	31
Future Vol, veh/h	0	1607	19	0	1718	21	0	0	28	0	0	31
Conflicting Peds, #/hr	0	0	3	0	0	11	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1640	19	0	1753	21	0	0	29	0	0	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	833	-	-	898
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	268	0	0	242
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	267	-	-	240
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	20.08	22.28
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	267	-	-	-	-	240
HCM Lane V/C Ratio	0.107	-	-	-	-	0.132
HCM Control Delay (s/veh)	20.1	-	-	-	-	22.3
HCM Lane LOS	C	-	-	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1624	3	0	1630	50	0	0	4	0	0	105
Future Volume (vph)	0	1624	3	0	1630	50	0	0	4	0	0	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	0		0	0		0	0		100
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.995				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5085	0	0	5060	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5085	0	0	5060	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		366			681			1312			750	
Travel Time (s)		6.2			11.6			35.8			20.5	
Confl. Peds. (#/hr)			2			13						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1674	3	0	1680	52	0	0	4	0	0	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1677	0	0	1732	0	0	0	4	0	0	108
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		

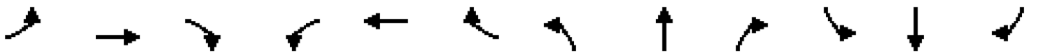
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↱			↑↑↑↱				↱			↱
Traffic Vol, veh/h	0	1624	3	0	1630	50	0	0	4	0	0	105
Future Vol, veh/h	0	1624	3	0	1630	50	0	0	4	0	0	105
Conflicting Peds, #/hr	0	0	2	0	0	13	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1674	3	0	1680	52	0	0	4	0	0	108

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	841	-	-	879
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	265	0	0	250
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	264	-	-	247
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	18.85	30.56
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	264	-	-	-	-	247
HCM Lane V/C Ratio	0.016	-	-	-	-	0.439
HCM Control Delay (s/veh)	18.8	-	-	-	-	30.6
HCM Lane LOS	C	-	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	-	2.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1590	14	23	1643	1	1	0	13	4	0	28
Future Volume (vph)	20	1590	14	23	1643	1	1	0	13	4	0	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.874			0.881	
Flt Protected	0.950			0.950				0.997			0.994	
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1623	0	0	1631	0
Flt Permitted	0.950			0.950				0.997			0.994	
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1623	0	0	1631	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			2			4						
Confl. Bikes (#/hr)			1			2			1			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	21	1656	15	24	1711	1	1	0	14	4	0	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	1671	0	24	1712	0	0	15	0	0	33	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.8%		ICU Level of Service A	
Analysis Period (min) 15			

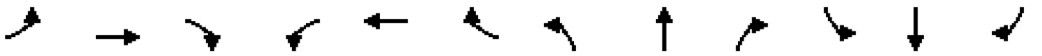
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	1590	14	23	1643	1	1	0	13	4	0	28
Future Vol, veh/h	20	1590	14	23	1643	1	1	0	13	4	0	28
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	1656	15	24	1711	1	1	0	14	4	0	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1717	0	0	1673	0	0	2440	3472	837	2468	3478	860
Stage 1	-	-	-	-	-	-	1707	1707	-	1764	1764	-
Stage 2	-	-	-	-	-	-	733	1764	-	704	1715	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	174	-	-	183	-	-	34	6	266	32	6	257
Stage 1	-	-	-	-	-	-	63	145	-	57	136	-
Stage 2	-	-	-	-	-	-	344	136	-	358	144	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	173	-	-	182	-	-	23	5	265	23	5	256
Mov Cap-2 Maneuver	-	-	-	-	-	-	23	5	-	23	5	-
Stage 1	-	-	-	-	-	-	55	127	-	49	118	-
Stage 2	-	-	-	-	-	-	265	117	-	299	126	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.35	0.38	31.49	49.29
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	150	173	-	-	182	-	-	114
HCM Lane V/C Ratio	0.097	0.12	-	-	0.131	-	-	0.293
HCM Control Delay (s/veh)	31.5	28.6	-	-	27.7	-	-	49.3
HCM Lane LOS	D	D	-	-	D	-	-	E
HCM 95th %tile Q(veh)	0.3	0.4	-	-	0.4	-	-	1.1

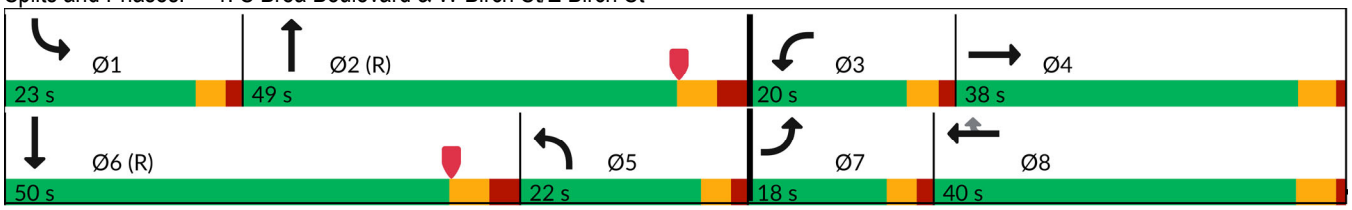


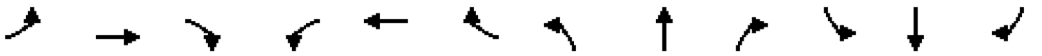
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	108	30	320	150	423	55	682	321	403	532	89
Future Volume (vph)	68	108	30	320	150	423	55	682	321	403	532	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.91		0.96			0.98	
Frt		0.967				0.850		0.952			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1781	0	3433	1863	1583	1770	4664	0	3433	4869	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1781	0	3433	1863	1443	1770	4664	0	3433	4869	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				407		97			27	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			33			70			61			41
Confl. Bikes (#/hr)			2						2			2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	72	114	32	337	158	445	58	718	338	424	560	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	72	146	0	337	158	445	58	1056	0	424	654	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	18.0	38.0		20.0	40.0	40.0	22.0	49.0		23.0	50.0	
Total Split (%)	13.8%	29.2%		15.4%	30.8%	30.8%	16.9%	37.7%		17.7%	38.5%	
Maximum Green (s)	13.5	33.4		15.5	35.1	35.1	17.5	42.1		18.5	43.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		16			38	38		38			23	
Act Effct Green (s)	10.1	26.4		15.0	33.5	33.5	15.6	50.1		18.0	55.0	
Actuated g/C Ratio	0.08	0.20		0.12	0.26	0.26	0.12	0.39		0.14	0.42	
v/c Ratio	0.53	0.40		0.85	0.33	0.66	0.27	0.57		0.89	0.32	
Control Delay (s/veh)	71.0	42.8		80.5	39.8	13.3	38.0	16.1		76.8	27.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	71.0	42.8		80.5	39.8	13.3	38.0	16.1		76.8	27.6	
LOS	E	D		F	D	B	D	B		E	C	
Approach Delay (s/veh)		52.2			41.9			17.2			47.0	
Approach LOS		D			D			B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 3 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 36.0		Intersection LOS: D	
Intersection Capacity Utilization 84.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





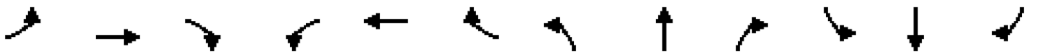
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	108	30	320	150	423	55	682	321	403	532	89
Future Volume (veh/h)	68	108	30	320	150	423	55	682	321	403	532	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.91	1.00		0.94	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	114	24	337	158	144	58	718	290	424	560	78
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	101	248	52	384	415	318	376	1496	594	473	1488	203
Arrive On Green	0.06	0.17	0.17	0.19	0.37	0.37	0.42	0.85	0.85	0.14	0.33	0.33
Sat Flow, veh/h	1781	1475	311	3456	1870	1435	1781	3526	1400	3456	4488	611
Grp Volume(v), veh/h	72	0	138	337	158	144	58	693	315	424	422	216
Grp Sat Flow(s),veh/h/ln	1781	0	1786	1728	1870	1435	1781	1702	1522	1728	1702	1695
Q Serve(g_s), s	5.2	0.0	9.1	12.3	8.0	9.9	2.6	6.8	7.0	15.7	12.3	12.7
Cycle Q Clear(g_c), s	5.2	0.0	9.1	12.3	8.0	9.9	2.6	6.8	7.0	15.7	12.3	12.7
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.92	1.00		0.36
Lane Grp Cap(c), veh/h	101	0	300	384	415	318	376	1444	646	473	1129	562
V/C Ratio(X)	0.71	0.00	0.46	0.88	0.38	0.45	0.15	0.48	0.49	0.90	0.37	0.38
Avail Cap(c_a), veh/h	185	0	459	412	505	387	376	1444	646	492	1129	562
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.2	0.0	48.8	52.1	34.4	34.9	30.4	6.2	6.2	55.2	33.2	33.3
Incr Delay (d2), s/veh	3.4	0.0	0.4	17.2	0.2	0.4	0.1	0.9	2.2	17.8	0.9	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	4.1	5.8	3.5	3.2	1.1	1.9	1.9	8.0	5.2	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.6	0.0	49.2	69.3	34.6	35.3	30.4	7.1	8.4	73.0	34.1	35.3
LnGrp LOS	E		D	E	C	D	C	A	A	E	C	D
Approach Vol, veh/h		210			639			1066			1062	
Approach Delay, s/veh		54.1			53.0			8.7			49.9	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.3	62.1	18.9	26.7	34.3	50.0	11.9	33.7
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	18.5	42.1	15.5	* 33	17.5	* 43	13.5	35.1
Max Q Clear Time (g_c+I1), s	17.7	9.0	14.3	11.1	4.6	14.7	7.2	11.9
Green Ext Time (p_c), s	0.1	5.1	0.1	0.5	0.0	2.8	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	36.1
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	730	82	51	869	23	17	3	38	0	0	34
Future Volume (vph)	7	730	82	51	869	23	17	3	38	0	0	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.996			0.911				0.865
Flt Protected				0.950				0.986				
Satd. Flow (prot)	0	3539	1583	1770	3525	0	0	1673	0	0	0	1611
Flt Permitted				0.950				0.986				
Satd. Flow (perm)	0	3539	1583	1770	3525	0	0	1673	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			8			4						
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	8	793	89	55	945	25	18	3	41	0	0	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	801	89	55	970	0	0	62	0	0	0	37
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.5%		ICU Level of Service A	
Analysis Period (min) 15			

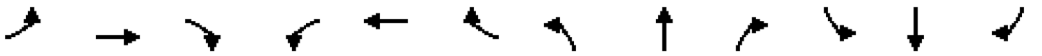
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	730	82	51	869	23	17	3	38	0	0	34
Future Vol, veh/h	7	730	82	51	869	23	17	3	38	0	0	34
Conflicting Peds, #/hr	0	0	8	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	793	89	55	945	25	18	3	41	0	0	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	974	0	0	891	0	0	1400	1901	405	-	-	489
Stage 1	-	-	-	-	-	-	817	817	-	-	-	-
Stage 2	-	-	-	-	-	-	583	1084	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	704	-	-	757	-	-	100	68	595	0	0	525
Stage 1	-	-	-	-	-	-	337	388	-	0	0	-
Stage 2	-	-	-	-	-	-	465	291	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	701	-	-	751	-	-	84	62	591	-	-	523
Mov Cap-2 Maneuver	-	-	-	-	-	-	84	62	-	-	-	-
Stage 1	-	-	-	-	-	-	329	380	-	-	-	-
Stage 2	-	-	-	-	-	-	400	269	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.55	34.38	12.41
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	184	701	-	-	751	-	-	523
HCM Lane V/C Ratio	0.342	0.011	-	-	0.074	-	-	0.071
HCM Control Delay (s/veh)	34.4	10.2	-	-	10.2	-	-	12.4
HCM Lane LOS	D	B	-	-	B	-	-	B
HCM 95th %tile Q(veh)	1.4	0	-	-	0.2	-	-	0.2

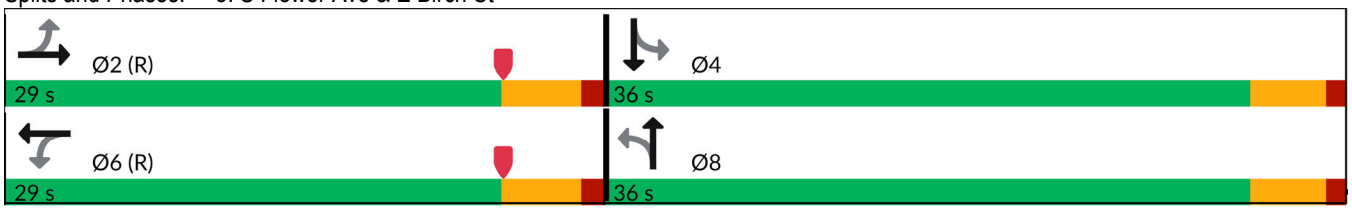


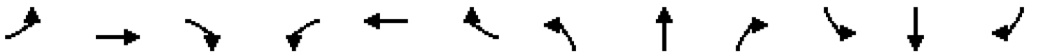
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	674	69	67	911	16	38	11	57	23	2	17
Future Volume (vph)	20	674	69	67	911	16	38	11	57	23	2	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.986			0.997			0.928			0.945	
Flt Protected	0.950			0.950				0.982			0.973	
Satd. Flow (prot)	1770	3481	0	1770	3527	0	0	1683	0	0	1704	0
Flt Permitted	0.274			0.348				0.870			0.857	
Satd. Flow (perm)	510	3481	0	648	3527	0	0	1491	0	0	1501	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			3			60			18	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		364			329			750			397	
Travel Time (s)		7.1			6.4			20.5			10.8	
Confl. Peds. (#/hr)			3			6			6			1
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	709	73	71	959	17	40	12	60	24	2	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	782	0	71	976	0	0	112	0	0	44	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		2.0	2.0		2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (%)	44.6%	44.6%		44.6%	44.6%		55.4%	55.4%		55.4%	55.4%	
Maximum Green (s)	24.1	24.1		24.1	24.1		31.4	31.4		31.4	31.4	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9			4.6			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0		24.0	24.0		24.0	24.0	
Pedestrian Calls (#/hr)	2	2		3	3		3	3		1	1	
Act Effct Green (s)	47.2	47.2		47.2	47.2			11.1			11.1	
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.17			0.17	
v/c Ratio	0.06	0.31		0.15	0.38			0.37			0.16	
Control Delay (s/veh)	6.5	5.5		9.0	7.3			13.5			13.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	6.5	5.5		9.0	7.3			13.5			13.2	
LOS	A	A		A	A			B			B	
Approach Delay (s/veh)		5.5			7.4			13.5			13.2	
Approach LOS		A			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 18 (28%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay (s/veh): 7.1		Intersection LOS: A	
Intersection Capacity Utilization 56.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: S Flower Ave & E Birch St

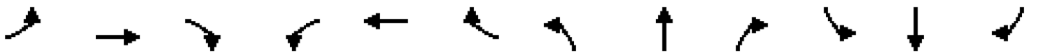




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	674	69	67	911	16	38	11	57	23	2	17
Future Volume (veh/h)	20	674	69	67	911	16	38	11	57	23	2	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	0.98		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	709	73	71	959	17	40	12	14	24	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	504	2492	256	597	2744	49	157	37	28	204	19	14
Arrive On Green	0.77	0.77	0.77	0.77	0.77	0.77	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	576	3244	334	691	3572	63	793	432	330	1194	222	163
Grp Volume(v), veh/h	21	388	394	71	477	499	66	0	0	29	0	0
Grp Sat Flow(s),veh/h/ln	576	1777	1801	691	1777	1859	1555	0	0	1579	0	0
Q Serve(g_s), s	0.8	4.2	4.2	2.2	5.5	5.5	1.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.3	4.2	4.2	6.4	5.5	5.5	2.5	0.0	0.0	1.0	0.0	0.0
Prop In Lane	1.00		0.19	1.00		0.03	0.61		0.21	0.83		0.10
Lane Grp Cap(c), veh/h	504	1365	1383	597	1365	1428	222	0	0	237	0	0
V/C Ratio(X)	0.04	0.28	0.28	0.12	0.35	0.35	0.30	0.00	0.00	0.12	0.00	0.00
Avail Cap(c_a), veh/h	504	1365	1383	597	1365	1428	820	0	0	797	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.4	2.2	2.2	3.2	2.4	2.4	28.3	0.0	0.0	27.6	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.5	0.5	0.4	0.7	0.7	0.3	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.7	0.7	0.2	1.0	1.0	1.0	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.5	2.8	2.8	3.6	3.1	3.1	28.5	0.0	0.0	27.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C			C		
Approach Vol, veh/h		803			1047			66			29	
Approach Delay, s/veh		2.8			3.1			28.5			27.7	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		54.8		10.2		54.8		10.2				
Change Period (Y+Rc), s		4.9		4.6		4.9		4.6				
Max Green Setting (Gmax), s		24.1		31.4		24.1		31.4				
Max Q Clear Time (g_c+I1), s		8.3		3.0		8.4		4.5				
Green Ext Time (p_c), s		1.6		0.1		2.2		0.2				

Intersection Summary												
HCM 7th Control Delay, s/veh			4.2									
HCM 7th LOS			A									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	765	7	1	985	1	4	0	9	0	0	0
Future Volume (vph)	3	765	7	1	985	1	4	0	9	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.907				
Flt Protected	0.950			0.950				0.985				
Satd. Flow (prot)	1770	3536	0	1770	3539	0	0	1664	0	0	1863	0
Flt Permitted	0.950			0.950				0.985				
Satd. Flow (perm)	1770	3536	0	1770	3539	0	0	1664	0	0	1863	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			15			6						
Confl. Bikes (#/hr)			6			1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3	805	7	1	1037	1	4	0	9	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	3	812	0	1	1038	0	0	13	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.3%		ICU Level of Service A	
Analysis Period (min) 15			

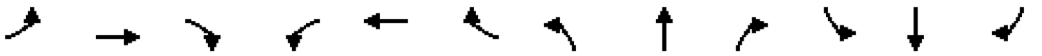
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	765	7	1	985	1	4	0	9	0	0	0
Future Vol, veh/h	3	765	7	1	985	1	4	0	9	0	0	0
Conflicting Peds, #/hr	0	0	15	0	0	6	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	805	7	1	1037	1	4	0	9	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1044	0	0	828	0	0	1351	1876	421	1454	1879	525
Stage 1	-	-	-	-	-	-	830	830	-	1045	1045	-
Stage 2	-	-	-	-	-	-	521	1046	-	409	834	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	662	-	-	799	-	-	109	71	581	91	70	497
Stage 1	-	-	-	-	-	-	330	383	-	244	304	-
Stage 2	-	-	-	-	-	-	507	304	-	590	381	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	658	-	-	788	-	-	107	69	573	89	69	494
Mov Cap-2 Maneuver	-	-	-	-	-	-	107	69	-	89	69	-
Stage 1	-	-	-	-	-	-	324	376	-	243	302	-
Stage 2	-	-	-	-	-	-	506	301	-	578	374	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.04	0.01	20.62	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	244	658	-	-	788	-	-	-
HCM Lane V/C Ratio	0.056	0.005	-	-	0.001	-	-	-
HCM Control Delay (s/veh)	20.6	10.5	-	-	9.6	-	-	0
HCM Lane LOS	C	B	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

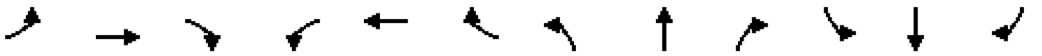


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	194	1458	404	247	1556	165	443	736	239	171	561	169
Future Volume (vph)	194	1458	404	247	1556	165	443	736	239	171	561	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.98			0.98			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1551	3433	5085	1556	3433	5085	1553	3433	3539	1539
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			224			98			252			178
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			6			5			5			14
Confl. Bikes (#/hr)			3						3			1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	204	1535	425	260	1638	174	466	775	252	180	591	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	204	1535	425	260	1638	174	466	775	252	180	591	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	20.6	45.5	45.5	20.6	45.5	45.5	21.6	42.6	42.6	21.3	39.6	39.6
Total Split (%)	15.8%	35.0%	35.0%	15.8%	35.0%	35.0%	16.6%	32.8%	32.8%	16.4%	30.5%	30.5%
Maximum Green (s)	16.0	40.2	40.2	16.0	40.2	40.2	17.0	38.0	38.0	16.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		3	3		2	2		2	2		7	7
Act Effct Green (s)	12.4	48.8	48.8	16.0	52.5	52.5	17.0	33.7	33.7	11.7	29.1	29.1
Actuated g/C Ratio	0.10	0.38	0.38	0.12	0.40	0.40	0.13	0.26	0.26	0.09	0.22	0.22
v/c Ratio	0.63	0.80	0.59	0.62	0.80	0.25	1.04	0.59	0.43	0.58	0.75	0.37
Control Delay (s/veh)	65.1	40.9	19.2	61.1	38.7	13.8	107.6	43.8	6.6	80.0	43.1	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	65.1	40.9	19.2	61.1	38.7	13.8	107.6	43.8	6.6	80.0	43.1	11.1
LOS	E	D	B	E	D	B	F	D	A	F	D	B
Approach Delay (s/veh)		38.9			39.4			57.4			44.1	
Approach LOS		D			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 59 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay (s/veh): 43.9		Intersection LOS: D	
Intersection Capacity Utilization 88.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway



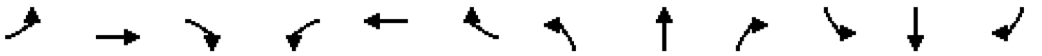
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	1458	404	247	1556	165	443	736	239	171	561	169
Future Volume (veh/h)	194	1458	404	247	1556	165	443	736	239	171	561	169
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	204	1535	286	260	1638	116	466	775	48	180	591	34
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1579	480	642	2163	669	452	1381	420	265	788	341
Arrive On Green	0.08	0.31	0.31	0.19	0.42	0.42	0.13	0.27	0.27	0.10	0.30	0.30
Sat Flow, veh/h	3456	5106	1554	3456	5106	1579	3456	5106	1554	3456	3554	1535
Grp Volume(v), veh/h	204	1535	286	260	1638	116	466	775	48	180	591	34
Grp Sat Flow(s),veh/h/ln	1728	1702	1554	1728	1702	1579	1728	1702	1554	1728	1777	1535
Q Serve(g_s), s	7.5	38.6	14.2	8.6	35.4	5.9	17.0	17.0	1.9	6.5	19.6	2.1
Cycle Q Clear(g_c), s	7.5	38.6	14.2	8.6	35.4	5.9	17.0	17.0	1.9	6.5	19.6	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1579	480	642	2163	669	452	1381	420	265	788	341
V/C Ratio(X)	0.77	0.97	0.60	0.40	0.76	0.17	1.03	0.56	0.11	0.68	0.75	0.10
Avail Cap(c_a), veh/h	425	1579	480	642	2163	669	452	1493	454	425	957	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	58.9	44.3	18.7	46.6	31.8	23.3	56.5	40.8	14.7	56.8	42.6	36.4
Incr Delay (d2), s/veh	1.8	16.9	5.4	0.2	2.5	0.6	50.6	0.8	0.3	1.0	3.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	18.3	5.7	3.7	14.6	2.3	10.5	7.2	1.2	2.8	8.5	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.6	61.3	24.0	46.7	34.3	23.9	107.1	41.6	14.9	57.8	45.9	36.6
LnGrp LOS	E	E	C	D	C	C	F	D	B	E	D	D
Approach Vol, veh/h		2025			2014			1289			805	
Approach Delay, s/veh		55.9			35.3			64.3			48.2	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.5	45.5	21.6	33.4	14.6	60.4	15.3	39.8
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	16.0	* 40	17.0	35.0	16.0	40.2	16.0	38.0
Max Q Clear Time (g_c+I1), s	10.6	40.6	19.0	21.6	9.5	37.4	8.5	19.0
Green Ext Time (p_c), s	0.2	0.0	0.0	5.5	0.2	2.6	0.2	8.8

Intersection Summary	
HCM 7th Control Delay, s/veh	49.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1857	20	0	1940	38	0	0	21	0	0	36
Future Volume (vph)	0	1857	20	0	1940	38	0	0	21	0	0	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.997				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5075	0	0	5070	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5075	0	0	5070	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			4			1						
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1955	21	0	2042	40	0	0	22	0	0	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1976	0	0	2082	0	0	0	22	0	0	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		

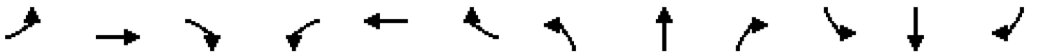
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1857	20	0	1940	38	0	0	21	0	0	36
Future Vol, veh/h	0	1857	20	0	1940	38	0	0	21	0	0	36
Conflicting Peds, #/hr	0	0	4	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1955	21	0	2042	40	0	0	22	0	0	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	992	-	-	1042
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	210	0	0	194
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	209	-	-	194
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	24.23	27.97
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	209	-	-	-	-	194
HCM Lane V/C Ratio	0.106	-	-	-	-	0.195
HCM Control Delay (s/veh)	24.2	-	-	-	-	28
HCM Lane LOS	C	-	-	-	-	D
HCM 95th %tile Q(veh)	0.3	-	-	-	-	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1796	13	0	1912	50	0	0	2	0	0	130
Future Volume (vph)	0	1796	13	0	1912	50	0	0	2	0	0	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	0		0	0		0	0		100
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.996				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5080	0	0	5065	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5080	0	0	5065	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		366			681			1312			750	
Travel Time (s)		6.2			11.6			35.8			20.5	
Confl. Peds. (#/hr)			1			1						
Confl. Bikes (#/hr)			2			2						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1871	14	0	1992	52	0	0	2	0	0	135
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1885	0	0	2044	0	0	0	2	0	0	135
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.8%		ICU Level of Service A	
Analysis Period (min) 15			

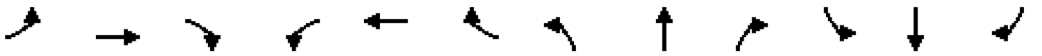
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1796	13	0	1912	50	0	0	2	0	0	130
Future Vol, veh/h	0	1796	13	0	1912	50	0	0	2	0	0	130
Conflicting Peds, #/hr	0	0	1	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1871	14	0	1992	52	0	0	2	0	0	135

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	943	-	-	1023
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	226	0	0	200
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	226	-	-	200
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	21.07	54.05
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	226	-	-	-	-	200
HCM Lane V/C Ratio	0.009	-	-	-	-	0.677
HCM Control Delay (s/veh)	21.1	-	-	-	-	54
HCM Lane LOS	C	-	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	-	4.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	1875	14	30	1986	2	3	0	14	0	0	10
Future Volume (vph)	32	1875	14	30	1986	2	3	0	14	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.887			0.865	
Flt Protected	0.950			0.950				0.992				
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1639	0	0	1611	0
Flt Permitted	0.950			0.950				0.992				
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1639	0	0	1611	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			1			6						
Confl. Bikes (#/hr)			6			9						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	33	1953	15	31	2069	2	3	0	15	0	0	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	1968	0	31	2071	0	0	18	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	1875	14	30	1986	2	3	0	14	0	0	10
Future Vol, veh/h	32	1875	14	30	1986	2	3	0	14	0	0	10
Conflicting Peds, #/hr	0	0	1	0	0	6	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	1953	15	31	2069	2	3	0	15	0	0	10

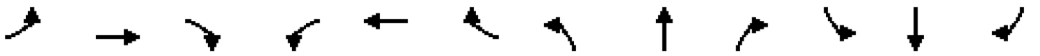
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2077	0	0	1969	0	0	2918	4167	985	2986	4174	1041
Stage 1	-	-	-	-	-	-	2028	2028	-	2138	2138	-
Stage 2	-	-	-	-	-	-	890	2139	-	848	2035	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	114	-	-	130	-	-	17	2	212	15	2	195
Stage 1	-	-	-	-	-	-	37	100	-	30	88	-
Stage 2	-	-	-	-	-	-	275	88	-	292	99	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	114	-	-	130	-	-	8	1	212	7	1	194
Mov Cap-2 Maneuver	-	-	-	-	-	-	8	1	-	7	1	-
Stage 1	-	-	-	-	-	-	26	70	-	23	66	-
Stage 2	-	-	-	-	-	-	198	66	-	192	70	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.82	0.62	152.64	24.66
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	40	114	-	-	130	-	-	194
HCM Lane V/C Ratio	0.442	0.293	-	-	0.241	-	-	0.054
HCM Control Delay (s/veh)	152.6	49.3	-	-	41.4	-	-	24.7
HCM Lane LOS	F	E	-	-	E	-	-	C
HCM 95th %tile Q(veh)	1.5	1.1	-	-	0.9	-	-	0.2

Appendix F

Intersection Level of Service Worksheets (Alternative 3)

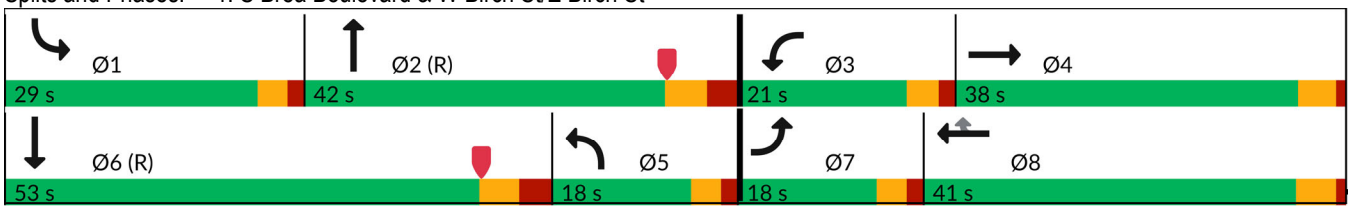


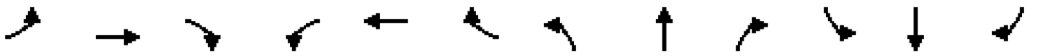
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	62	23	365	79	301	23	434	260	373	774	52
Future Volume (vph)	23	62	23	365	79	301	23	434	260	373	774	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.99			1.00	
Frt		0.959				0.850		0.944			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1773	0	3433	1863	1583	1770	4743	0	3433	5029	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1773	0	3433	1863	1554	1770	4743	0	3433	5029	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14				334		114			9	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			14			6			10			3
Confl. Bikes (#/hr)									4			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	26	69	26	406	88	334	26	482	289	414	860	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	95	0	406	88	334	26	771	0	414	918	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	18.0	38.0		21.0	41.0	41.0	18.0	42.0		29.0	53.0	
Total Split (%)	13.8%	29.2%		16.2%	31.5%	31.5%	13.8%	32.3%		22.3%	40.8%	
Maximum Green (s)	13.5	33.4		16.5	36.1	36.1	13.5	35.1		24.5	46.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		7			3	3		0			0	
Act Effct Green (s)	8.2	14.0		16.5	27.1	27.1	11.3	59.1		19.9	72.7	
Actuated g/C Ratio	0.06	0.11		0.13	0.21	0.21	0.09	0.45		0.15	0.56	
v/c Ratio	0.24	0.47		0.93	0.23	0.57	0.17	0.35		0.79	0.33	
Control Delay (s/veh)	63.3	51.0		85.5	43.7	7.9	93.3	49.3		64.2	18.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	63.3	51.0		85.5	43.7	7.9	93.3	49.3		64.2	18.6	
LOS	E	D		F	D	A	F	D		E	B	
Approach Delay (s/veh)		53.6			49.7			50.7			32.8	
Approach LOS		D			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 71 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 42.8		Intersection LOS: D	
Intersection Capacity Utilization 62.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





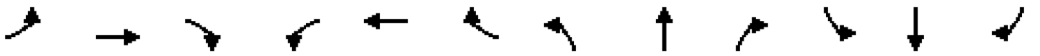
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	62	23	365	79	301	23	434	260	373	774	52
Future Volume (veh/h)	23	62	23	365	79	301	23	434	260	373	774	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	69	14	406	88	65	26	482	243	414	860	55
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	153	31	439	359	301	423	1613	736	473	1736	111
Arrive On Green	0.04	0.10	0.10	0.13	0.19	0.19	0.48	0.95	0.95	0.14	0.35	0.35
Sat Flow, veh/h	1781	1497	304	3456	1870	1570	1781	3404	1553	3456	4896	312
Grp Volume(v), veh/h	26	0	83	406	88	65	26	482	243	414	597	318
Grp Sat Flow(s),veh/h/ln	1781	0	1800	1728	1870	1570	1781	1702	1553	1728	1702	1803
Q Serve(g_s), s	1.9	0.0	5.6	15.1	5.2	4.5	1.0	1.3	1.5	15.3	17.8	18.0
Cycle Q Clear(g_c), s	1.9	0.0	5.6	15.1	5.2	4.5	1.0	1.3	1.5	15.3	17.8	18.0
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	67	0	184	439	359	301	423	1613	736	473	1207	640
V/C Ratio(X)	0.39	0.00	0.45	0.93	0.25	0.22	0.06	0.30	0.33	0.88	0.49	0.50
Avail Cap(c_a), veh/h	185	0	463	439	519	436	423	1613	736	651	1207	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	0.0	54.9	56.1	44.6	44.3	26.3	1.8	1.8	55.0	32.8	32.9
Incr Delay (d2), s/veh	1.4	0.0	0.6	25.2	0.1	0.1	0.0	0.4	1.1	7.7	1.5	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.6	8.1	2.4	1.8	0.4	0.5	0.6	7.1	7.5	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.5	0.0	55.5	81.3	44.7	44.4	26.3	2.3	2.9	62.7	34.3	35.6
LnGrp LOS	E		E	F	D	D	C	A	A	E	C	D
Approach Vol, veh/h		109			559			751			1329	
Approach Delay, s/veh		57.2			71.3			3.3			43.5	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.3	68.5	21.0	18.2	37.8	53.0	9.4	29.8
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	24.5	35.1	16.5	* 33	13.5	* 46	13.5	36.1
Max Q Clear Time (g_c+I1), s	17.3	3.5	17.1	7.6	3.0	20.0	3.9	7.2
Green Ext Time (p_c), s	0.5	3.3	0.0	0.3	0.0	4.1	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	38.7
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	654	45	22	727	8	19	1	89	0	0	12
Future Volume (vph)	1	654	45	22	727	8	19	1	89	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.890				0.865
Flt Protected				0.950				0.991				
Satd. Flow (prot)	0	3539	1583	1770	3532	0	0	1643	0	0	0	1611
Flt Permitted				0.950				0.991				
Satd. Flow (perm)	0	3539	1583	1770	3532	0	0	1643	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			10			5						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1	681	47	23	757	8	20	1	93	0	0	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	682	47	23	765	0	0	114	0	0	0	13
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.3%		ICU Level of Service A	
Analysis Period (min) 15			

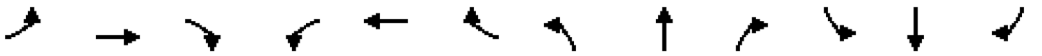
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	654	45	22	727	8	19	1	89	0	0	12
Future Vol, veh/h	1	654	45	22	727	8	19	1	89	0	0	12
Conflicting Peds, #/hr	0	0	10	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	681	47	23	757	8	20	1	93	0	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	771	0	0	738	0	0	1118	1510	351	-	-	388
Stage 1	-	-	-	-	-	-	693	693	-	-	-	-
Stage 2	-	-	-	-	-	-	424	816	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	840	-	-	864	-	-	162	119	646	0	0	611
Stage 1	-	-	-	-	-	-	400	443	-	0	0	-
Stage 2	-	-	-	-	-	-	578	389	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	836	-	-	856	-	-	152	114	639	-	-	608
Mov Cap-2 Maneuver	-	-	-	-	-	-	152	114	-	-	-	-
Stage 1	-	-	-	-	-	-	395	438	-	-	-	-
Stage 2	-	-	-	-	-	-	551	376	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.01	0.27	17.53	11.05
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	400	836	-	-	856	-	-	608
HCM Lane V/C Ratio	0.284	0.001	-	-	0.027	-	-	0.021
HCM Control Delay (s/veh)	17.5	9.3	-	-	9.3	-	-	11
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.2	0	-	-	0.1	-	-	0.1

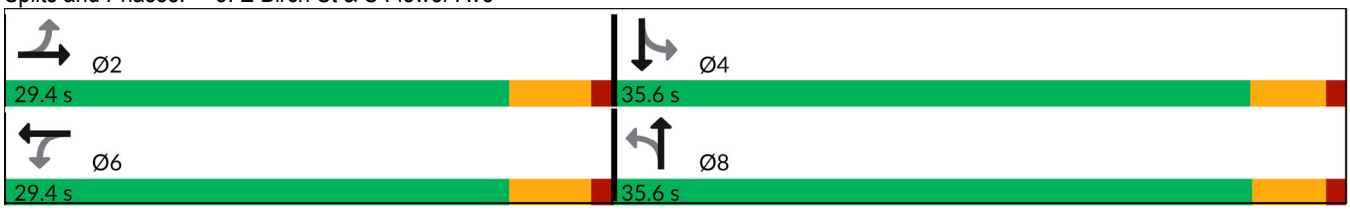


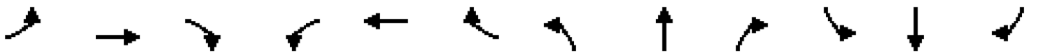
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	570	158	149	566	14	174	51	51	33	7	19
Future Volume (vph)	19	570	158	149	566	14	174	51	51	33	7	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00			0.98			1.00	
Frt		0.966			0.996			0.975			0.958	
Flt Protected	0.950			0.950				0.969			0.973	
Satd. Flow (prot)	1770	3389	0	1770	3522	0	0	1727	0	0	1730	0
Flt Permitted	0.420			0.332				0.772			0.800	
Satd. Flow (perm)	782	3389	0	618	3522	0	0	1376	0	0	1422	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		68			4			24			19	
Link Speed (mph)		35			35			30			25	
Link Distance (ft)		364			329			646			397	
Travel Time (s)		7.1			6.4			14.7			10.8	
Confl. Peds. (#/hr)			13			5			85			1
Confl. Bikes (#/hr)						4						
Peak Hour Factor	0.98	0.98	0.92	0.92	0.98	0.98	0.92	0.92	0.92	0.98	0.92	0.98
Adj. Flow (vph)	19	582	172	162	578	14	189	55	55	34	8	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	754	0	162	592	0	0	299	0	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (s)	29.4	29.4		29.4	29.4		35.6	35.6		35.6	35.6	
Total Split (%)	45.2%	45.2%		45.2%	45.2%		54.8%	54.8%		54.8%	54.8%	
Maximum Green (s)	24.5	24.5		24.5	24.5		31.1	31.1		31.0	31.0	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.5	3.5		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9			4.5			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		3.0	3.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0		11.0	11.0		24.0	24.0	
Pedestrian Calls (#/hr)	6	6		2	2		50	50		1	1	
Act Effct Green (s)	25.9	25.9		25.9	25.9			16.4			16.3	
Actuated g/C Ratio	0.50	0.50		0.50	0.50			0.32			0.31	
v/c Ratio	0.05	0.44		0.53	0.34			0.66			0.13	
Control Delay (s/veh)	10.7	10.1		21.8	10.1			20.7			8.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	10.7	10.1		21.8	10.1			20.7			8.8	
LOS	B	B		C	B			C			A	
Approach Delay (s/veh)		10.1			12.6			20.7			8.8	
Approach LOS		B			B			C			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 51.8			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 12.7		Intersection LOS: B	
Intersection Capacity Utilization 62.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: E Birch St & S Flower Ave





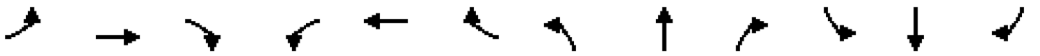
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	570	158	149	566	14	174	51	51	33	7	19
Future Volume (veh/h)	19	570	158	149	566	14	174	51	51	33	7	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.92	0.95		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	582	172	162	578	13	189	55	55	34	8	7
Peak Hour Factor	0.98	0.98	0.92	0.92	0.98	0.98	0.92	0.92	0.92	0.98	0.92	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	469	1327	391	393	1747	39	392	114	87	409	95	64
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	824	2697	795	707	3550	80	865	359	276	904	300	201
Grp Volume(v), veh/h	19	383	371	162	289	302	299	0	0	49	0	0
Grp Sat Flow(s),veh/h/ln	824	1777	1715	707	1777	1853	1499	0	0	1404	0	0
Q Serve(g_s), s	0.7	6.9	7.0	9.6	4.9	4.9	7.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	6.9	7.0	16.6	4.9	4.9	8.3	0.0	0.0	1.0	0.0	0.0
Prop In Lane	1.00		0.46	1.00		0.04	0.63		0.18	0.69		0.14
Lane Grp Cap(c), veh/h	469	875	844	393	875	912	593	0	0	568	0	0
V/C Ratio(X)	0.04	0.44	0.44	0.41	0.33	0.33	0.50	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	469	875	844	393	875	912	1048	0	0	977	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.4	8.2	8.2	13.6	7.7	7.7	14.4	0.0	0.0	11.9	0.0	0.0
Incr Delay (d2), s/veh	0.2	1.6	1.7	3.2	1.0	1.0	0.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.3	2.2	1.6	1.6	1.7	2.5	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.5	9.8	9.9	16.7	8.7	8.6	15.0	0.0	0.0	12.0	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B			B		
Approach Vol, veh/h		773			753			299			49	
Approach Delay, s/veh		9.8			10.4			15.0			12.0	
Approach LOS		A			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		29.4		20.4		29.4		20.4				
Change Period (Y+Rc), s		4.9		4.6		4.9		* 4.6				
Max Green Setting (Gmax), s		24.5		31.0		24.5		* 31				
Max Q Clear Time (g_c+I1), s		9.0		3.0		18.6		10.3				
Green Ext Time (p_c), s		1.5		0.2		1.1		1.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	10.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	634	17	35	724	3	5	0	2	2	0	1
Future Volume (vph)	2	634	17	35	724	3	5	0	2	2	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.996			0.999			0.966			0.955	
Flt Protected	0.950			0.950				0.964			0.968	
Satd. Flow (prot)	1770	3525	0	1770	3536	0	0	1735	0	0	1722	0
Flt Permitted	0.950			0.950				0.964			0.968	
Satd. Flow (perm)	1770	3525	0	1770	3536	0	0	1735	0	0	1722	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			26			12						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	2	773	21	43	883	4	6	0	2	2	0	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	794	0	43	887	0	0	8	0	0	3	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.8%		ICU Level of Service A	
Analysis Period (min) 15			

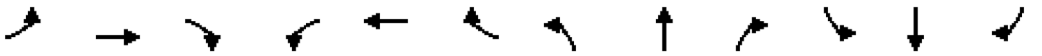
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	634	17	35	724	3	5	0	2	2	0	1
Future Vol, veh/h	2	634	17	35	724	3	5	0	2	2	0	1
Conflicting Peds, #/hr	0	0	26	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	773	21	43	883	4	6	0	2	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	899	0	0	820	0	0	1341	1798	423	1374	1807	455
Stage 1	-	-	-	-	-	-	814	814	-	982	982	-
Stage 2	-	-	-	-	-	-	527	984	-	391	825	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	752	-	-	805	-	-	111	79	579	105	78	552
Stage 1	-	-	-	-	-	-	338	389	-	267	325	-
Stage 2	-	-	-	-	-	-	503	325	-	604	385	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	743	-	-	785	-	-	101	72	565	97	71	546
Mov Cap-2 Maneuver	-	-	-	-	-	-	101	72	-	97	71	-
Stage 1	-	-	-	-	-	-	328	379	-	250	304	-
Stage 2	-	-	-	-	-	-	474	303	-	600	374	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.45	34.03	32.67
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	133	743	-	-	785	-	-	134
HCM Lane V/C Ratio	0.064	0.003	-	-	0.054	-	-	0.027
HCM Control Delay (s/veh)	34	9.9	-	-	9.9	-	-	32.7
HCM Lane LOS	D	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0.2	-	-	0.1

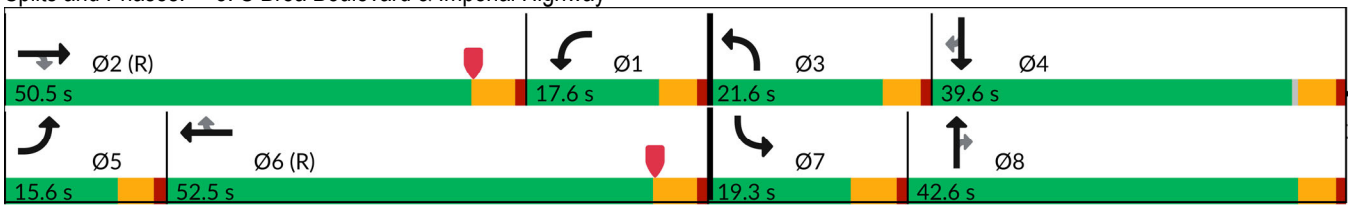


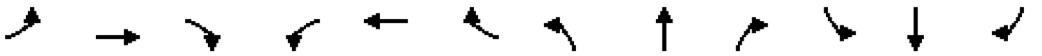
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	163	1426	394	139	1386	92	415	475	138	216	755	190
Future Volume (vph)	163	1426	394	139	1386	92	415	475	138	216	755	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.98			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1545	3433	5085	1556	3433	5085	1536	3433	3539	1542
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237			97			164			182
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			11			5			14			8
Confl. Bikes (#/hr)			1						5			7
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	194	1698	469	165	1650	110	494	565	164	257	899	226
Shared Lane Traffic (%)												
Lane Group Flow (vph)	194	1698	469	165	1650	110	494	565	164	257	899	226
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	15.6	50.5	50.5	17.6	52.5	52.5	21.6	42.6	42.6	19.3	39.6	39.6
Total Split (%)	12.0%	38.8%	38.8%	13.5%	40.4%	40.4%	16.6%	32.8%	32.8%	14.8%	30.5%	30.5%
Maximum Green (s)	11.0	45.2	45.2	13.0	47.2	47.2	17.0	38.0	38.0	14.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		5	5		2	2		7	7		4	4
Act Effct Green (s)	10.7	47.0	47.0	12.0	48.3	48.3	17.0	38.3	38.3	12.9	34.9	34.9
Actuated g/C Ratio	0.08	0.36	0.36	0.09	0.37	0.37	0.13	0.29	0.29	0.10	0.27	0.27
v/c Ratio	0.69	0.92	0.66	0.52	0.87	0.17	1.10	0.38	0.29	0.76	0.95	0.41
Control Delay (s/veh)	71.4	49.5	21.8	62.2	44.3	7.4	124.7	37.5	6.4	64.9	68.4	17.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.4	49.5	21.8	62.2	44.3	7.4	124.7	37.5	6.4	64.9	68.4	17.7
LOS	E	D	C	E	D	A	F	D	A	E	E	B
Approach Delay (s/veh)		45.8			43.7			68.6			59.5	
Approach LOS		D			D			E			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay (s/veh): 52.0		Intersection LOS: D	
Intersection Capacity Utilization 89.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway





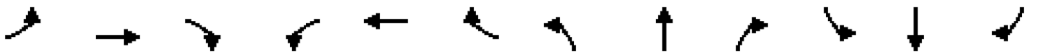
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	1426	394	139	1386	92	415	475	138	216	755	190
Future Volume (veh/h)	163	1426	394	139	1386	92	415	475	138	216	755	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	194	1698	323	165	1650	50	494	565	21	257	899	106
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1774	539	352	1929	596	452	1552	468	308	951	413
Arrive On Green	0.08	0.35	0.35	0.10	0.38	0.38	0.13	0.30	0.30	0.12	0.36	0.36
Sat Flow, veh/h	3456	5106	1550	3456	5106	1579	3456	5106	1539	3456	3554	1543
Grp Volume(v), veh/h	194	1698	323	165	1650	50	494	565	21	257	899	106
Grp Sat Flow(s),veh/h/ln	1728	1702	1550	1728	1702	1579	1728	1702	1539	1728	1777	1543
Q Serve(g_s), s	7.1	42.3	15.2	5.9	38.6	2.6	17.0	11.3	0.9	9.5	31.9	6.3
Cycle Q Clear(g_c), s	7.1	42.3	15.2	5.9	38.6	2.6	17.0	11.3	0.9	9.5	31.9	6.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1774	539	352	1929	596	452	1552	468	308	951	413
V/C Ratio(X)	0.73	0.96	0.60	0.47	0.86	0.08	1.09	0.36	0.04	0.83	0.95	0.26
Avail Cap(c_a), veh/h	292	1775	539	352	1929	596	452	1552	468	372	957	415
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85	0.85	0.85
Uniform Delay (d), s/veh	58.7	41.5	16.3	55.1	37.2	26.0	56.5	35.4	17.7	56.4	40.9	32.7
Incr Delay (d2), s/veh	6.6	13.4	4.9	0.4	5.1	0.3	69.9	0.3	0.1	9.6	15.8	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	19.4	6.0	2.5	16.5	1.0	11.7	4.7	0.5	4.4	15.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.3	54.8	21.2	55.4	42.3	26.3	126.4	35.7	17.8	65.9	56.7	33.3
LnGrp LOS	E	D	C	E	D	C	F	D	B	E	E	C
Approach Vol, veh/h		2215			1865			1080			1262	
Approach Delay, s/veh		50.8			43.0			76.9			56.6	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	50.5	21.6	39.4	14.6	54.4	16.9	44.1
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	13.0	* 45	17.0	35.0	11.0	47.2	14.0	38.0
Max Q Clear Time (g_c+I1), s	7.9	44.3	19.0	33.9	9.1	40.6	11.5	13.3
Green Ext Time (p_c), s	0.1	0.9	0.0	0.9	0.1	6.0	0.1	7.1

Intersection Summary	
HCM 7th Control Delay, s/veh	54.1
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1791	6	0	1593	146	0	0	17	0	0	37
Future Volume (vph)	0	1791	6	0	1593	146	0	0	17	0	0	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.987				0.865		0.850	
Flt Protected												
Satd. Flow (prot)	0	5085	0	0	5019	0	0	0	1611	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	5085	0	0	5019	0	0	0	1611	0	0	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			2			12						
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	0	2184	7	0	1943	178	0	0	21	0	0	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2191	0	0	2121	0	0	0	21	0	45	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1791	6	0	1593	146	0	0	17	0	0	37
Future Vol, veh/h	0	1791	6	0	1593	146	0	0	17	0	0	37
Conflicting Peds, #/hr	0	0	2	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2184	7	0	1943	178	0	0	21	0	0	45

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	-	0	0	-	-	0	-	-	1098
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	178
Stage 1	0	-	-	0	-	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	0	178
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	27.86
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR
Capacity (veh/h)	178	-	-	-	-
HCM Lane V/C Ratio	0.116	-	-	-	-
HCM Control Delay (s/veh)	27.9	-	-	-	-
HCM Lane LOS	D	-	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1801	2	0	1689	0	12
Future Volume (vph)	1801	2	0	1689	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1611
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1611
Link Speed (mph)	40			40	25	
Link Distance (ft)	366			681	1312	
Travel Time (s)	6.2			11.6	35.8	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	2144	2	0	2011	0	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2146	0	0	2011	0	14
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1801	2	0	1689	0	12
Future Vol, veh/h	1801	2	0	1689	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2144	2	0	2011	0	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1073
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	185
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	185
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	26.04
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	185	-	-	-
HCM Lane V/C Ratio	0.077	-	-	-
HCM Control Delay (s/veh)	26	-	-	-
HCM Lane LOS	D	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	1774	12	35	1657	3	0	0	17	3	1	18
Future Volume (vph)	23	1774	12	35	1657	3	0	0	17	3	1	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.865			0.887	
Flt Protected	0.950			0.950							0.994	
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1611	0	0	1642	0
Flt Permitted	0.950			0.950							0.994	
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1611	0	0	1642	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			1			3						
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
Adj. Flow (vph)	25	1928	13	38	1801	3	0	0	18	3	1	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	1941	0	38	1804	0	0	18	0	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.8

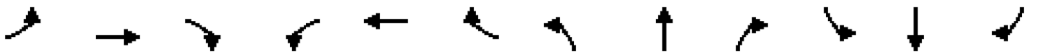
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	1774	12	35	1657	3	0	0	17	3	1	18
Future Vol, veh/h	23	1774	12	35	1657	3	0	0	17	3	1	18
Conflicting Peds, #/hr	0	0	1	0	0	3	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	1928	13	38	1801	3	0	0	18	3	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1807	0	0	1942	0	0	2783	3869	972	2703	3874	905
Stage 1	-	-	-	-	-	-	1986	1986	-	1882	1882	-
Stage 2	-	-	-	-	-	-	797	1883	-	821	1992	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	156	-	-	134	-	-	20	3	217	23	3	240
Stage 1	-	-	-	-	-	-	39	105	-	47	118	-
Stage 2	-	-	-	-	-	-	314	118	-	303	104	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	156	-	-	134	-	-	7	2	216	12	2	239
Mov Cap-2 Maneuver	-	-	-	-	-	-	7	2	-	12	2	-
Stage 1	-	-	-	-	-	-	33	88	-	33	84	-
Stage 2	-	-	-	-	-	-	204	84	-	233	87	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.41	0.87	23.18	$ 335.23
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	216	156	-	-	134	-	-	27
HCM Lane V/C Ratio	0.085	0.16	-	-	0.285	-	-	0.87
HCM Control Delay (s/veh)	23.2	32.4	-	-	42.3	-	-	$ 335.2
HCM Lane LOS	C	D	-	-	E	-	-	F
HCM 95th %tile Q(veh)	0.3	0.6	-	-	1.1	-	-	2.8

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

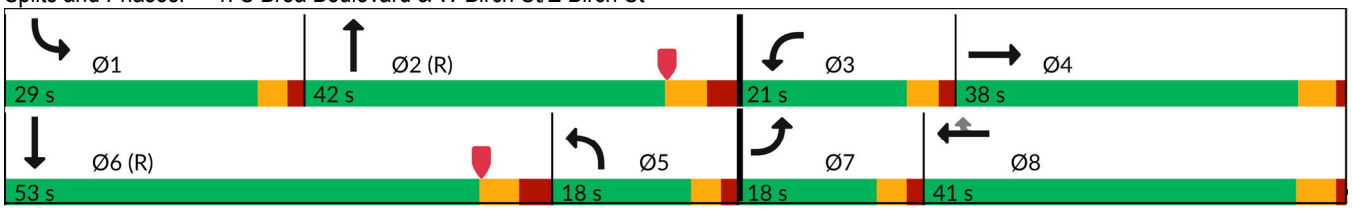


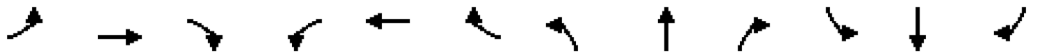
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	75	32	267	88	222	44	300	211	237	376	71
Future Volume (vph)	49	75	32	267	88	222	44	300	211	237	376	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.98			0.99	
Frt		0.955				0.850		0.938			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1762	0	3433	1863	1583	1770	4691	0	3433	4932	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1762	0	3433	1863	1549	1770	4691	0	3433	4932	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16				247		134			33	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			16			9			16			6
Confl. Bikes (#/hr)			2						2			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	54	83	36	297	98	247	49	333	234	263	418	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	119	0	297	98	247	49	567	0	263	497	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	18.0	38.0		21.0	41.0	41.0	18.0	42.0		29.0	53.0	
Total Split (%)	13.8%	29.2%		16.2%	31.5%	31.5%	13.8%	32.3%		22.3%	40.8%	
Maximum Green (s)	13.5	33.4		16.5	36.1	36.1	13.5	35.1		24.5	46.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		7			3	3		0			0	
Act Effct Green (s)	9.2	15.2		14.7	22.8	22.8	12.4	65.3		14.3	69.7	
Actuated g/C Ratio	0.07	0.12		0.11	0.18	0.18	0.10	0.50		0.11	0.54	
v/c Ratio	0.43	0.54		0.77	0.30	0.52	0.29	0.23		0.70	0.19	
Control Delay (s/veh)	68.2	53.6		69.3	47.7	8.8	76.1	33.6		65.6	17.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	68.2	53.6		69.3	47.7	8.8	76.1	33.6		65.6	17.4	
LOS	E	D		E	D	A	E	C		E	B	
Approach Delay (s/veh)		58.2			42.7			37.0			34.1	
Approach LOS		E			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 71 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 39.3		Intersection LOS: D	
Intersection Capacity Utilization 57.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





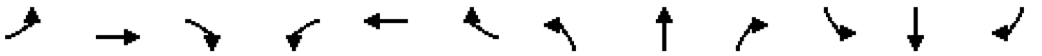
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	75	32	267	88	222	44	300	211	237	376	71
Future Volume (veh/h)	49	75	32	267	88	222	44	300	211	237	376	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	83	24	297	98	-22	49	333	188	263	418	76
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	164	47	351	314	266	438	1791	816	322	1540	272
Arrive On Green	0.05	0.12	0.12	0.10	0.17	0.00	0.49	1.00	1.00	0.09	0.35	0.35
Sat Flow, veh/h	1781	1374	397	3456	1870	1585	1781	3404	1551	3456	4343	766
Grp Volume(v), veh/h	54	0	107	297	98	-22	49	333	188	263	325	169
Grp Sat Flow(s),veh/h/ln	1781	0	1772	1728	1870	1585	1781	1702	1551	1728	1702	1705
Q Serve(g_s), s	3.8	0.0	7.4	11.0	6.0	0.0	1.9	0.0	0.0	9.7	8.8	9.2
Cycle Q Clear(g_c), s	3.8	0.0	7.4	11.0	6.0	0.0	1.9	0.0	0.0	9.7	8.8	9.2
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	94	0	211	351	314	266	438	1791	816	322	1207	605
V/C Ratio(X)	0.57	0.00	0.51	0.85	0.31	-0.08	0.11	0.19	0.23	0.82	0.27	0.28
Avail Cap(c_a), veh/h	185	0	455	439	519	440	438	1791	816	651	1207	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	0.94	0.94	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.1	0.0	53.7	57.4	47.5	0.0	25.4	0.0	0.0	57.9	29.9	30.1
Incr Delay (d2), s/veh	2.1	0.0	0.7	10.1	0.2	0.0	0.0	0.2	0.6	2.0	0.5	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	3.4	5.3	2.8	0.0	0.8	0.1	0.1	4.3	3.7	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.2	0.0	54.4	67.5	47.7	0.0	25.4	0.2	0.6	59.8	30.5	31.2
LnGrp LOS	E		D	E	D		C	A	A	E	C	C
Approach Vol, veh/h		161			373			570			757	
Approach Delay, s/veh		57.0			66.3			2.5			40.8	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	75.3	17.7	20.4	38.9	53.0	11.4	26.7
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	24.5	35.1	16.5	* 33	13.5	* 46	13.5	36.1
Max Q Clear Time (g_c+I1), s	11.7	2.0	13.0	9.4	3.9	11.2	5.8	8.0
Green Ext Time (p_c), s	0.4	2.3	0.2	0.4	0.0	2.1	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	35.6
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	477	43	25	563	9	10	3	36	0	0	14
Future Volume (vph)	2	477	43	25	563	9	10	3	36	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.899				0.865
Flt Protected				0.950				0.990				
Satd. Flow (prot)	0	3539	1583	1770	3532	0	0	1658	0	0	0	1611
Flt Permitted				0.950				0.990				
Satd. Flow (perm)	0	3539	1583	1770	3532	0	0	1658	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			5			1						
Confl. Bikes (#/hr)			4									
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	2	497	45	26	586	9	10	3	38	0	0	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	499	45	26	595	0	0	51	0	0	0	15
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	477	43	25	563	9	10	3	36	0	0	14
Future Vol, veh/h	2	477	43	25	563	9	10	3	36	0	0	14
Conflicting Peds, #/hr	0	0	5	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	497	45	26	586	9	10	3	38	0	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	597	0	0	547	0	0	851	1155	253	-	-	299
Stage 1	-	-	-	-	-	-	506	506	-	-	-	-
Stage 2	-	-	-	-	-	-	345	649	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	976	-	-	1019	-	-	253	196	746	0	0	697
Stage 1	-	-	-	-	-	-	517	538	-	0	0	-
Stage 2	-	-	-	-	-	-	644	464	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	975	-	-	1014	-	-	240	189	742	-	-	697
Mov Cap-2 Maneuver	-	-	-	-	-	-	240	189	-	-	-	-
Stage 1	-	-	-	-	-	-	513	534	-	-	-	-
Stage 2	-	-	-	-	-	-	614	451	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.36	13.76	10.28
HCM LOS			B	B

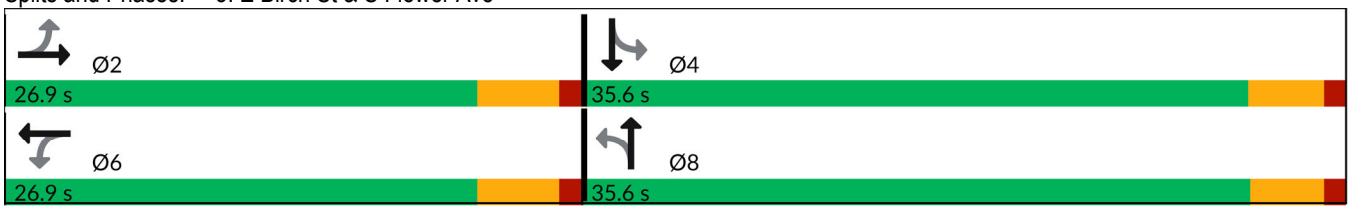
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	462	975	-	-	1014	-	-	697
HCM Lane V/C Ratio	0.11	0.002	-	-	0.026	-	-	0.021
HCM Control Delay (s/veh)	13.8	8.7	-	-	8.6	-	-	10.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.1

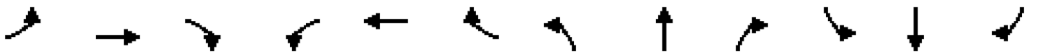
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	428	66	76	494	11	80	6	59	26	3	13
Future Volume (vph)	14	428	66	76	494	11	80	6	59	26	3	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			1.00	
Frt		0.979			0.997			0.945			0.959	
Flt Protected	0.950			0.950				0.973			0.970	
Satd. Flow (prot)	1770	3453	0	1770	3527	0	0	1691	0	0	1726	0
Flt Permitted	0.462			0.465				0.805			0.812	
Satd. Flow (perm)	861	3453	0	866	3527	0	0	1399	0	0	1445	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33			4			64			13	
Link Speed (mph)		35			35			30			25	
Link Distance (ft)		364			329			646			397	
Travel Time (s)		7.1			6.4			14.7			10.8	
Confl. Peds. (#/hr)			1			1			19			1
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.98	0.98	0.92	0.92	0.98	0.98	0.92	0.92	0.92	0.98	0.92	0.98
Adj. Flow (vph)	14	437	72	83	504	11	87	7	64	27	3	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	509	0	83	515	0	0	158	0	0	43	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (%)	43.0%	43.0%		43.0%	43.0%		57.0%	57.0%		57.0%	57.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		31.1	31.1		31.0	31.0	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.5	3.5		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9			4.5			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		3.0	3.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0		11.0	11.0		24.0	24.0	
Pedestrian Calls (#/hr)	6	6		2	2		0	0		1	1	
Act Effct Green (s)	28.2	28.2		28.2	28.2			11.1			10.8	
Actuated g/C Ratio	0.62	0.62		0.62	0.62			0.24			0.24	
v/c Ratio	0.03	0.24		0.16	0.24			0.41			0.12	
Control Delay (s/veh)	9.4	7.4		9.9	7.8			11.0			9.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	9.4	7.4		9.9	7.8			11.0			9.0	
LOS	A	A		A	A			B			A	
Approach Delay (s/veh)		7.4			8.1			11.0			9.0	
Approach LOS		A			A			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 62.5			
Actuated Cycle Length: 45.7			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay (s/veh): 8.2		Intersection LOS: A	
Intersection Capacity Utilization 51.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: E Birch St & S Flower Ave





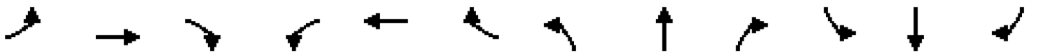
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	428	66	76	494	11	80	6	59	26	3	13
Future Volume (veh/h)	14	428	66	76	494	11	80	6	59	26	3	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	0.98		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	437	72	83	504	10	87	7	64	27	3	1
Peak Hour Factor	0.98	0.98	0.92	0.92	0.98	0.98	0.92	0.92	0.92	0.98	0.92	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	633	1745	285	633	2042	40	269	38	110	408	40	9
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	886	3046	498	890	3564	71	690	209	612	1295	221	51
Grp Volume(v), veh/h	14	254	255	83	251	263	158	0	0	31	0	0
Grp Sat Flow(s),veh/h/ln	886	1777	1767	890	1777	1858	1511	0	0	1566	0	0
Q Serve(g_s), s	0.3	2.7	2.8	2.0	2.7	2.7	2.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.0	2.7	2.8	4.7	2.7	2.7	3.6	0.0	0.0	0.5	0.0	0.0
Prop In Lane	1.00		0.28	1.00		0.04	0.55		0.41	0.87		0.03
Lane Grp Cap(c), veh/h	633	1018	1012	633	1018	1064	417	0	0	457	0	0
V/C Ratio(X)	0.02	0.25	0.25	0.13	0.25	0.25	0.38	0.00	0.00	0.07	0.00	0.00
Avail Cap(c_a), veh/h	633	1018	1012	633	1018	1064	1346	0	0	1303	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.8	4.1	4.1	5.3	4.1	4.1	14.3	0.0	0.0	13.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.6	0.6	0.4	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.6	0.3	0.6	0.6	1.1	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.9	4.7	4.7	5.7	4.7	4.6	14.9	0.0	0.0	13.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B			B		
Approach Vol, veh/h		523			597			158			31	
Approach Delay, s/veh		4.7			4.8			14.9			13.2	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.9		11.5		26.9		11.5				
Change Period (Y+Rc), s		4.9		4.6		4.9		* 4.6				
Max Green Setting (Gmax), s		22.0		31.0		22.0		* 31				
Max Q Clear Time (g_c+I1), s		5.0		2.5		6.7		5.6				
Green Ext Time (p_c), s		1.0		0.1		1.1		0.9				

Intersection Summary												
HCM 7th Control Delay, s/veh			6.2									
HCM 7th LOS			A									

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	507	2	3	580	0	0	1	4	0	0	2
Future Volume (vph)	1	507	2	3	580	0	0	1	4	0	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt								0.887			0.865	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3539	0	1770	3539	0	0	1652	0	0	1611	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3539	0	1770	3539	0	0	1652	0	0	1611	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			1			4						
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	1	618	2	4	707	0	0	1	5	0	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	620	0	4	707	0	0	6	0	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.0%		ICU Level of Service A	
Analysis Period (min) 15			

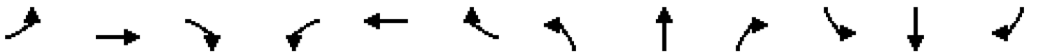
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	507	2	3	580	0	0	1	4	0	0	2
Future Vol, veh/h	1	507	2	3	580	0	0	1	4	0	0	2
Conflicting Peds, #/hr	0	0	1	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	618	2	4	707	0	0	1	5	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	711	0	0	622	0	0	984	1342	311	1031	1343	358
Stage 1	-	-	-	-	-	-	623	623	-	719	719	-
Stage 2	-	-	-	-	-	-	361	719	-	312	624	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	884	-	-	955	-	-	203	151	684	187	151	639
Stage 1	-	-	-	-	-	-	440	477	-	386	431	-
Stage 2	-	-	-	-	-	-	630	431	-	673	476	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	881	-	-	954	-	-	201	150	684	183	149	636
Mov Cap-2 Maneuver	-	-	-	-	-	-	201	150	-	183	149	-
Stage 1	-	-	-	-	-	-	439	475	-	383	428	-
Stage 2	-	-	-	-	-	-	625	428	-	666	475	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.02	0.05	14.17	10.68
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	399	881	-	-	954	-	-	636
HCM Lane V/C Ratio	0.015	0.001	-	-	0.004	-	-	0.004
HCM Control Delay (s/veh)	14.2	9.1	-	-	8.8	-	-	10.7
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

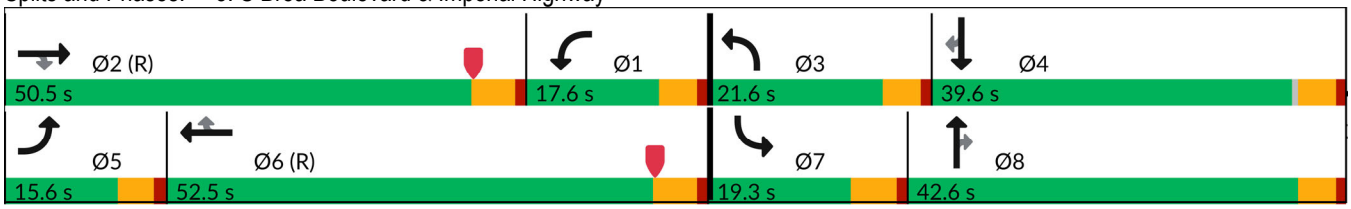


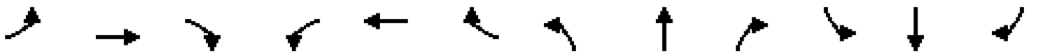
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	1106	242	199	1027	94	297	362	198	137	367	162
Future Volume (vph)	113	1106	242	199	1027	94	297	362	198	137	367	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.99			0.98			0.98			0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1563	3433	5085	1553	3433	5085	1552	3433	3539	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			188			97			235			191
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)						7			6			6
Confl. Bikes (#/hr)			1						2			1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	135	1317	288	237	1223	112	354	431	236	163	437	193
Shared Lane Traffic (%)												
Lane Group Flow (vph)	135	1317	288	237	1223	112	354	431	236	163	437	193
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	15.6	50.5	50.5	17.6	52.5	52.5	21.6	42.6	42.6	19.3	39.6	39.6
Total Split (%)	12.0%	38.8%	38.8%	13.5%	40.4%	40.4%	16.6%	32.8%	32.8%	14.8%	30.5%	30.5%
Maximum Green (s)	11.0	45.2	45.2	13.0	47.2	47.2	17.0	38.0	38.0	14.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		5	5		2	2		7	7		4	4
Act Effct Green (s)	10.3	58.3	58.3	12.0	60.0	60.0	16.0	28.6	28.6	11.2	24.5	24.5
Actuated g/C Ratio	0.08	0.45	0.45	0.09	0.46	0.46	0.12	0.22	0.22	0.09	0.19	0.19
v/c Ratio	0.49	0.58	0.36	0.75	0.52	0.15	0.84	0.38	0.45	0.55	0.66	0.43
Control Delay (s/veh)	63.8	29.3	10.6	72.4	27.0	6.7	73.3	43.4	7.4	60.1	65.1	23.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.8	29.3	10.6	72.4	27.0	6.7	73.3	43.4	7.4	60.1	65.1	23.5
LOS	E	C	B	E	C	A	E	D	A	E	E	C
Approach Delay (s/veh)		28.9			32.4			45.5			53.9	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay (s/veh): 37.1		Intersection LOS: D	
Intersection Capacity Utilization 77.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway





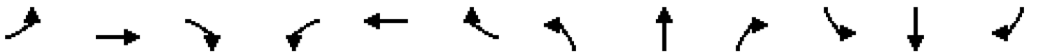
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	1106	242	199	1027	94	297	362	198	137	367	162
Future Volume (veh/h)	113	1106	242	199	1027	94	297	362	198	137	367	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	1317	142	237	1223	52	354	431	93	163	437	73
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	264	1671	512	757	2428	750	406	1119	340	265	654	285
Arrive On Green	0.08	0.33	0.33	0.22	0.48	0.48	0.12	0.22	0.22	0.03	0.06	0.06
Sat Flow, veh/h	3456	5106	1565	3456	5106	1578	3456	5106	1550	3456	3554	1549
Grp Volume(v), veh/h	135	1317	142	237	1223	52	354	431	93	163	437	73
Grp Sat Flow(s),veh/h/ln	1728	1702	1565	1728	1702	1578	1728	1702	1550	1728	1777	1549
Q Serve(g_s), s	4.9	30.4	6.2	7.5	21.5	2.3	13.1	9.4	4.0	6.1	15.7	5.8
Cycle Q Clear(g_c), s	4.9	30.4	6.2	7.5	21.5	2.3	13.1	9.4	4.0	6.1	15.7	5.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	1671	512	757	2428	750	406	1119	340	265	654	285
V/C Ratio(X)	0.51	0.79	0.28	0.31	0.50	0.07	0.87	0.39	0.27	0.61	0.67	0.26
Avail Cap(c_a), veh/h	292	1775	544	757	2428	750	452	1493	453	372	957	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	57.7	39.6	16.4	42.5	23.5	18.5	56.4	43.3	16.3	61.5	57.2	52.6
Incr Delay (d2), s/veh	0.6	3.9	1.3	0.1	0.8	0.2	14.6	0.5	0.9	0.8	2.3	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	13.0	3.4	3.2	8.5	0.9	6.5	4.0	2.5	2.8	7.7	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.3	43.5	17.8	42.6	24.3	18.7	71.0	43.7	17.2	62.3	59.5	53.5
LnGrp LOS	E	D	B	D	C	B	E	D	B	E	E	D
Approach Vol, veh/h		1594			1512			878			673	
Approach Delay, s/veh		42.5			27.0			51.9			59.5	
Approach LOS		D			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.8	47.8	19.9	28.5	14.5	67.1	15.3	33.1
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	13.0	* 45	17.0	35.0	11.0	47.2	14.0	38.0
Max Q Clear Time (g_c+I1), s	9.5	32.4	15.1	17.7	6.9	23.5	8.1	11.4
Green Ext Time (p_c), s	0.1	10.1	0.2	5.0	0.1	15.1	0.1	6.1

Intersection Summary	
HCM 7th Control Delay, s/veh	41.7
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1443	7	0	1315	52	0	0	23	0	0	23
Future Volume (vph)	0	1443	7	0	1315	52	0	0	23	0	0	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.994				0.865		0.850	
Flt Protected												
Satd. Flow (prot)	0	5080	0	0	5055	0	0	0	1611	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	5080	0	0	5055	0	0	0	1611	0	0	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)						9						
Confl. Bikes (#/hr)			1			1						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	0	1760	9	0	1604	63	0	0	28	0	0	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1769	0	0	1667	0	0	0	28	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1443	7	0	1315	52	0	0	23	0	0	23
Future Vol, veh/h	0	1443	7	0	1315	52	0	0	23	0	0	23
Conflicting Peds, #/hr	0	0	0	0	0	9	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1760	9	0	1604	63	0	0	28	0	0	28

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	-	0	0	-	-	0	-	-	884
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	248
Stage 1	0	-	-	0	-	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	0	248
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	21.38
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR
Capacity (veh/h)	248	-	-	-	-
HCM Lane V/C Ratio	0.113	-	-	-	-
HCM Control Delay (s/veh)	21.4	-	-	-	-
HCM Lane LOS	C	-	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1462	1	0	1356	0	4
Future Volume (vph)	1462	1	0	1356	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1611
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1611
Link Speed (mph)	40			40	25	
Link Distance (ft)	366			681	1312	
Travel Time (s)	6.2			11.6	35.8	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	1740	1	0	1614	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1741	0	0	1614	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	38.3%	ICU Level of Service	A
Analysis Period (min)	15		

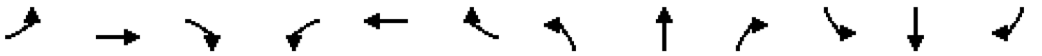
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1462	1	0	1356	0	4
Future Vol, veh/h	1462	1	0	1356	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1740	1	0	1614	0	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	871
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	253
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	253
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	19.52
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	253	-	-	-
HCM Lane V/C Ratio	0.019	-	-	-
HCM Control Delay (s/veh)	19.5	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	1436	10	21	1339	3	2	0	8	3	0	5
Future Volume (vph)	17	1436	10	21	1339	3	2	0	8	3	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.890			0.916	
Flt Protected	0.950			0.950				0.991			0.982	
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1643	0	0	1676	0
Flt Permitted	0.950			0.950				0.991			0.982	
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1643	0	0	1676	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			2			7						
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	1561	11	23	1455	3	2	0	9	3	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	1572	0	23	1458	0	0	11	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.0%		ICU Level of Service A	
Analysis Period (min) 15			

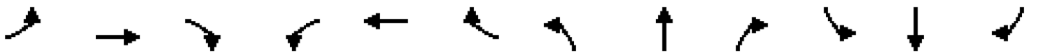
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	1436	10	21	1339	3	2	0	8	3	0	5
Future Vol, veh/h	17	1436	10	21	1339	3	2	0	8	3	0	5
Conflicting Peds, #/hr	0	0	2	0	0	7	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	1561	11	23	1455	3	2	0	9	3	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1466	0	0	1574	0	0	2233	3117	788	2171	3120	736
Stage 1	-	-	-	-	-	-	1605	1605	-	1510	1510	-
Stage 2	-	-	-	-	-	-	628	1511	-	661	1611	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	232	-	-	205	-	-	45	11	287	50	11	310
Stage 1	-	-	-	-	-	-	74	163	-	87	182	-
Stage 2	-	-	-	-	-	-	398	181	-	380	162	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	230	-	-	204	-	-	36	9	286	39	9	308
Mov Cap-2 Maneuver	-	-	-	-	-	-	36	9	-	39	9	-
Stage 1	-	-	-	-	-	-	68	150	-	77	160	-
Stage 2	-	-	-	-	-	-	348	160	-	339	149	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.26	0.38	37.82	51.54
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	120	230	-	-	204	-	-	86
HCM Lane V/C Ratio	0.09	0.08	-	-	0.112	-	-	0.101
HCM Control Delay (s/veh)	37.8	22	-	-	24.8	-	-	51.5
HCM Lane LOS	E	C	-	-	C	-	-	F
HCM 95th %tile Q(veh)	0.3	0.3	-	-	0.4	-	-	0.3

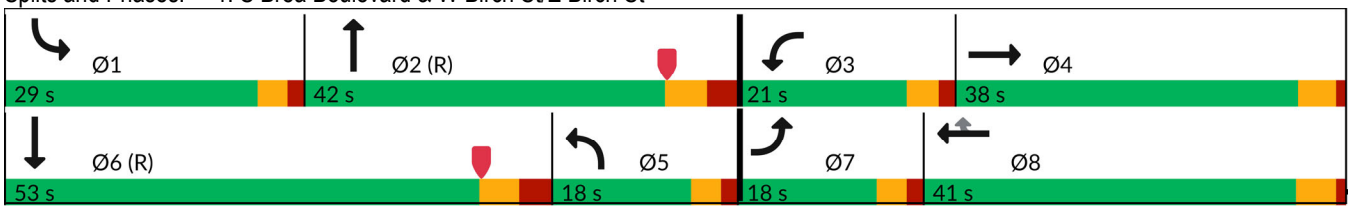


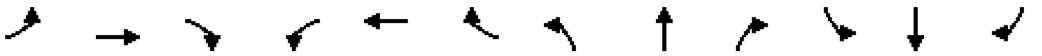
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	79	32	336	102	343	40	524	231	302	530	49
Future Volume (vph)	56	79	32	336	102	343	40	524	231	302	530	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.99			1.00	
Frt		0.956				0.850		0.954			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1762	0	3433	1863	1583	1770	4821	0	3433	4997	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1762	0	3433	1863	1549	1770	4821	0	3433	4997	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				381		84			13	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			19			9			5			10
Confl. Bikes (#/hr)			3									3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	62	88	36	373	113	381	44	582	257	336	589	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	62	124	0	373	113	381	44	839	0	336	643	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	18.0	38.0		21.0	41.0	41.0	18.0	42.0		29.0	53.0	
Total Split (%)	13.8%	29.2%		16.2%	31.5%	31.5%	13.8%	32.3%		22.3%	40.8%	
Maximum Green (s)	13.5	33.4		16.5	36.1	36.1	13.5	35.1		24.5	46.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		7			3	3		0			0	
Act Effct Green (s)	9.6	15.5		16.1	24.1	24.1	12.4	60.8		17.1	68.0	
Actuated g/C Ratio	0.07	0.12		0.12	0.19	0.19	0.10	0.47		0.13	0.52	
v/c Ratio	0.47	0.56		0.88	0.33	0.64	0.26	0.36		0.75	0.25	
Control Delay (s/veh)	69.3	54.6		78.3	47.8	9.1	94.1	48.0		64.7	19.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	69.3	54.6		78.3	47.8	9.1	94.1	48.0		64.7	19.4	
LOS	E	D		E	D	A	F	D		E	B	
Approach Delay (s/veh)		59.5			43.9			50.3			34.9	
Approach LOS		E			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 71 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 43.8		Intersection LOS: D	
Intersection Capacity Utilization 63.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





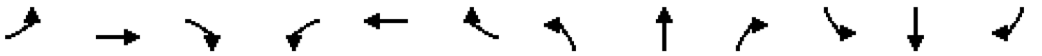
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	79	32	336	102	343	40	524	231	302	530	49
Future Volume (veh/h)	56	79	32	336	102	343	40	524	231	302	530	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.99	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	88	24	373	113	112	44	582	211	336	589	51
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	179	49	422	366	306	386	1766	625	395	1693	145
Arrive On Green	0.05	0.13	0.13	0.12	0.20	0.20	0.43	0.95	0.95	0.11	0.35	0.35
Sat Flow, veh/h	1781	1393	380	3456	1870	1563	1781	3718	1315	3456	4774	409
Grp Volume(v), veh/h	62	0	112	373	113	112	44	532	261	336	418	222
Grp Sat Flow(s),veh/h/ln	1781	0	1773	1728	1870	1563	1781	1702	1629	1728	1702	1778
Q Serve(g_s), s	4.4	0.0	7.6	13.8	6.7	8.1	1.9	1.5	1.5	12.4	11.7	12.0
Cycle Q Clear(g_c), s	4.4	0.0	7.6	13.8	6.7	8.1	1.9	1.5	1.5	12.4	11.7	12.0
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.81	1.00		0.23
Lane Grp Cap(c), veh/h	98	0	228	422	366	306	386	1617	774	395	1207	631
V/C Ratio(X)	0.63	0.00	0.49	0.88	0.31	0.37	0.11	0.33	0.34	0.85	0.35	0.35
Avail Cap(c_a), veh/h	185	0	456	439	519	434	386	1617	774	651	1207	631
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.1	0.0	52.7	56.2	44.8	45.3	29.4	1.7	1.7	56.5	30.9	30.9
Incr Delay (d2), s/veh	2.5	0.0	0.6	17.6	0.2	0.3	0.0	0.5	1.0	2.7	0.8	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	3.5	7.0	3.1	3.2	0.8	0.5	0.6	5.5	4.9	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.6	0.0	53.3	73.7	45.0	45.6	29.5	2.2	2.8	59.2	31.7	32.5
LnGrp LOS	E		D	E	D	D	C	A	A	E	C	C
Approach Vol, veh/h		174			598			837			976	
Approach Delay, s/veh		56.6			63.0			3.8			41.3	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.4	68.7	20.4	21.6	35.0	53.0	11.6	30.3
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	24.5	35.1	16.5	* 33	13.5	* 46	13.5	36.1
Max Q Clear Time (g_c+I1), s	14.4	3.5	15.8	9.6	3.9	14.0	6.4	10.1
Green Ext Time (p_c), s	0.5	3.6	0.1	0.4	0.0	2.7	0.0	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	35.2
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	614	30	9	752	10	9	3	68	0	0	16
Future Volume (vph)	2	614	30	9	752	10	9	3	68	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.885				0.865
Flt Protected				0.950				0.995				
Satd. Flow (prot)	0	3539	1583	1770	3532	0	0	1640	0	0	0	1611
Flt Permitted				0.950				0.995				
Satd. Flow (perm)	0	3539	1583	1770	3532	0	0	1640	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			10			1						
Confl. Bikes (#/hr)			3			1						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	2	640	31	9	783	10	9	3	71	0	0	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	642	31	9	793	0	0	83	0	0	0	17
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.3%		ICU Level of Service A	
Analysis Period (min) 15			

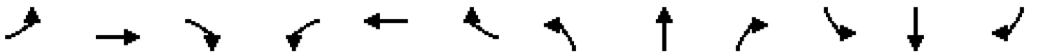
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	614	30	9	752	10	9	3	68	0	0	16
Future Vol, veh/h	2	614	30	9	752	10	9	3	68	0	0	16
Conflicting Peds, #/hr	0	0	10	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	640	31	9	783	10	9	3	71	0	0	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	795	0	0	681	0	0	1064	1467	330	-	-	398
Stage 1	-	-	-	-	-	-	654	654	-	-	-	-
Stage 2	-	-	-	-	-	-	410	814	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	822	-	-	908	-	-	177	127	666	0	0	602
Stage 1	-	-	-	-	-	-	422	461	-	0	0	-
Stage 2	-	-	-	-	-	-	589	390	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	822	-	-	899	-	-	168	124	660	-	-	601
Mov Cap-2 Maneuver	-	-	-	-	-	-	168	124	-	-	-	-
Stage 1	-	-	-	-	-	-	417	456	-	-	-	-
Stage 2	-	-	-	-	-	-	567	385	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.11	15.02	11.16
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	442	822	-	-	899	-	-	601
HCM Lane V/C Ratio	0.188	0.003	-	-	0.01	-	-	0.028
HCM Control Delay (s/veh)	15	9.4	-	-	9	-	-	11.2
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0.1

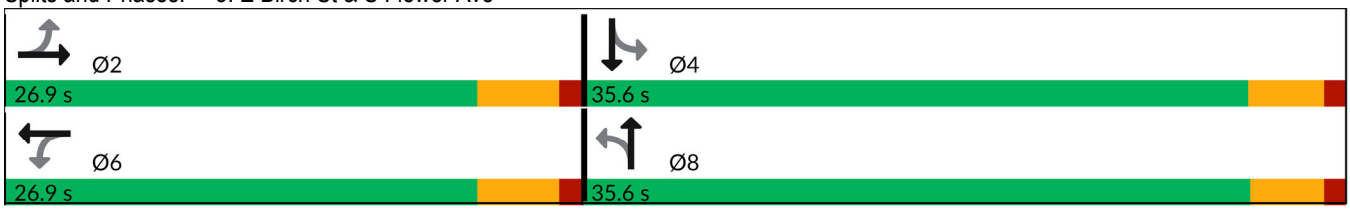


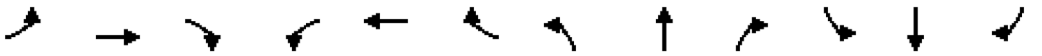
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	573	78	75	642	23	93	43	36	45	10	37
Future Volume (vph)	34	573	78	75	642	23	93	43	36	45	10	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00			0.97				
Frt		0.981			0.995			0.972			0.946	
Flt Protected	0.950			0.950				0.974			0.976	
Satd. Flow (prot)	1770	3454	0	1770	3518	0	0	1715	0	0	1720	0
Flt Permitted	0.381			0.385				0.786			0.801	
Satd. Flow (perm)	710	3454	0	717	3518	0	0	1384	0	0	1411	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			6			30			38	
Link Speed (mph)		35			35			30			25	
Link Distance (ft)		364			329			646			397	
Travel Time (s)		7.1			6.4			14.7			10.8	
Confl. Peds. (#/hr)			12			4			118			
Confl. Bikes (#/hr)			3			2			1			
Peak Hour Factor	0.98	0.98	0.92	0.92	0.98	0.98	0.92	0.92	0.92	0.98	0.92	0.98
Adj. Flow (vph)	35	585	85	82	655	23	101	47	39	46	11	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	670	0	82	678	0	0	187	0	0	95	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (%)	43.0%	43.0%		43.0%	43.0%		57.0%	57.0%		57.0%	57.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		31.1	31.1		31.0	31.0	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.5	3.5		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9			4.5			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		3.0	3.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0		11.0	11.0		24.0	24.0	
Pedestrian Calls (#/hr)	6	6		2	2		73	73		1	1	
Act Effct Green (s)	27.2	27.2		27.2	27.2			15.3			14.8	
Actuated g/C Ratio	0.56	0.56		0.56	0.56			0.32			0.31	
v/c Ratio	0.09	0.34		0.20	0.34			0.41			0.21	
Control Delay (s/veh)	11.8	10.1		13.0	10.4			12.1			7.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	11.8	10.1		13.0	10.4			12.1			7.7	
LOS	B	B		B	B			B			A	
Approach Delay (s/veh)		10.2			10.7			12.1			7.7	
Approach LOS		B			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 62.5			
Actuated Cycle Length: 48.5			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay (s/veh): 10.5		Intersection LOS: B	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: E Birch St & S Flower Ave



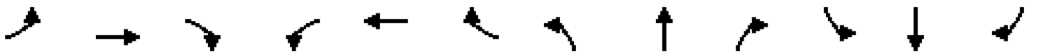


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	573	78	75	642	23	93	43	36	45	10	37
Future Volume (veh/h)	34	573	78	75	642	23	93	43	36	45	10	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.90	0.93		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	585	85	82	655	22	101	47	39	46	11	26
Peak Hour Factor	0.98	0.98	0.92	0.92	0.98	0.98	0.92	0.92	0.92	0.98	0.92	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	1340	194	371	1516	51	387	176	120	388	105	174
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	761	3098	449	764	3505	118	730	462	314	729	275	458
Grp Volume(v), veh/h	35	335	335	82	332	345	187	0	0	83	0	0
Grp Sat Flow(s),veh/h/ln	761	1777	1770	764	1777	1845	1505	0	0	1463	0	0
Q Serve(g_s), s	1.7	6.7	6.7	4.3	6.6	6.6	2.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.4	6.7	6.7	11.0	6.6	6.6	4.2	0.0	0.0	1.5	0.0	0.0
Prop In Lane	1.00		0.25	1.00		0.06	0.54		0.21	0.55		0.31
Lane Grp Cap(c), veh/h	371	768	765	371	768	798	682	0	0	667	0	0
V/C Ratio(X)	0.09	0.44	0.44	0.22	0.43	0.43	0.27	0.00	0.00	0.12	0.00	0.00
Avail Cap(c_a), veh/h	371	768	765	371	768	798	1024	0	0	983	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.0	10.1	10.1	14.0	10.1	10.1	11.0	0.0	0.0	10.2	0.0	0.0
Incr Delay (d2), s/veh	0.5	1.8	1.8	1.4	1.8	1.7	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.4	2.4	0.8	2.4	2.5	1.3	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.5	11.9	11.9	15.3	11.8	11.8	11.2	0.0	0.0	10.3	0.0	0.0
LnGrp LOS	B	B	B	B	B	B	B			B		
Approach Vol, veh/h		705			759			187			83	
Approach Delay, s/veh		12.0			12.2			11.2			10.3	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.9		24.0		26.9		24.0				
Change Period (Y+Rc), s		4.9		4.6		4.9		* 4.6				
Max Green Setting (Gmax), s		22.0		31.0		22.0		* 31				
Max Q Clear Time (g_c+I1), s		10.4		3.5		13.0		6.2				
Green Ext Time (p_c), s		1.3		0.3		1.3		1.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	11.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	629	21	16	738	8	0	0	1	2	0	3
Future Volume (vph)	3	629	21	16	738	8	0	0	1	2	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995			0.998			0.865			0.910	
Flt Protected	0.950			0.950							0.984	
Satd. Flow (prot)	1770	3522	0	1770	3532	0	0	1611	0	0	1668	0
Flt Permitted	0.950			0.950							0.984	
Satd. Flow (perm)	1770	3522	0	1770	3532	0	0	1611	0	0	1668	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			83			5						
Confl. Bikes (#/hr)			3			2						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	4	767	26	20	900	10	0	0	1	2	0	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	793	0	20	910	0	0	1	0	0	6	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.7%		ICU Level of Service A	
Analysis Period (min) 15			

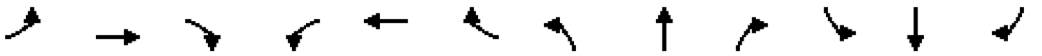
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	629	21	16	738	8	0	0	1	2	0	3
Future Vol, veh/h	3	629	21	16	738	8	0	0	1	2	0	3
Conflicting Peds, #/hr	0	0	83	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	767	26	20	900	10	0	0	1	2	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	915	0	0	876	0	0	1359	1824	479	1340	1832	460
Stage 1	-	-	-	-	-	-	870	870	-	949	949	-
Stage 2	-	-	-	-	-	-	489	954	-	391	883	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	741	-	-	767	-	-	107	76	532	111	75	548
Stage 1	-	-	-	-	-	-	313	367	-	280	337	-
Stage 2	-	-	-	-	-	-	529	335	-	605	362	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	737	-	-	706	-	-	95	68	490	107	67	546
Mov Cap-2 Maneuver	-	-	-	-	-	-	95	68	-	107	67	-
Stage 1	-	-	-	-	-	-	286	336	-	271	326	-
Stage 2	-	-	-	-	-	-	511	325	-	600	332	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.05	0.22	12.36	23.01
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	490	737	-	-	706	-	-	206
HCM Lane V/C Ratio	0.002	0.005	-	-	0.028	-	-	0.03
HCM Control Delay (s/veh)	12.4	9.9	-	-	10.2	-	-	23
HCM Lane LOS	B	A	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0.1	-	-	0.1

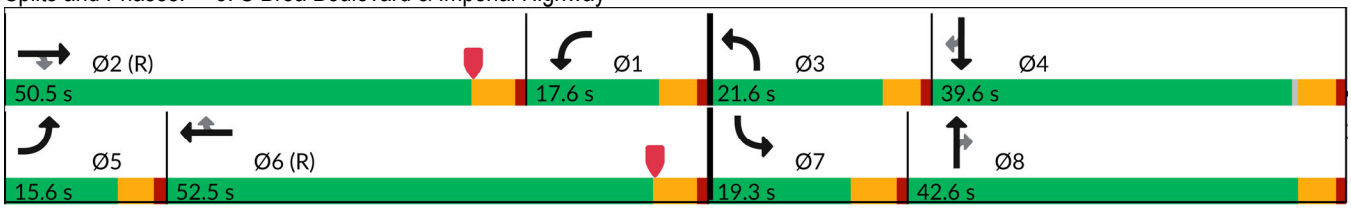


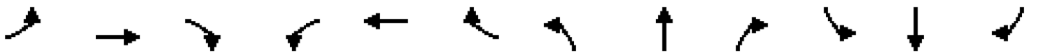
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	1193	379	280	1228	114	372	545	201	211	530	182
Future Volume (vph)	144	1193	379	280	1228	114	372	545	201	211	530	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.97			0.98			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1551	3433	5085	1536	3433	5085	1544	3433	3539	1542
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			272			97			213			184
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			8			17			11			11
Confl. Bikes (#/hr)						1			2			3
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	171	1420	451	333	1462	136	443	649	239	251	631	217
Shared Lane Traffic (%)												
Lane Group Flow (vph)	171	1420	451	333	1462	136	443	649	239	251	631	217
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	15.6	50.5	50.5	17.6	52.5	52.5	21.6	42.6	42.6	19.3	39.6	39.6
Total Split (%)	12.0%	38.8%	38.8%	13.5%	40.4%	40.4%	16.6%	32.8%	32.8%	14.8%	30.5%	30.5%
Maximum Green (s)	11.0	45.2	45.2	13.0	47.2	47.2	17.0	38.0	38.0	14.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		5	5		2	2		7	7		4	4
Act Effct Green (s)	10.6	50.6	50.6	13.0	53.1	53.1	17.0	33.8	33.8	12.8	30.3	30.3
Actuated g/C Ratio	0.08	0.39	0.39	0.10	0.41	0.41	0.13	0.26	0.26	0.10	0.23	0.23
v/c Ratio	0.61	0.72	0.59	0.97	0.70	0.20	0.99	0.49	0.43	0.74	0.77	0.43
Control Delay (s/veh)	67.7	36.7	15.8	99.8	34.9	9.9	96.0	42.0	9.3	66.3	64.3	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.7	36.7	15.8	99.8	34.9	9.9	96.0	42.0	9.3	66.3	64.3	21.5
LOS	E	D	B	F	C	A	F	D	A	E	E	C
Approach Delay (s/veh)		34.7			44.3			54.1			56.3	
Approach LOS		C			D			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay (s/veh): 45.3		Intersection LOS: D	
Intersection Capacity Utilization 84.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway





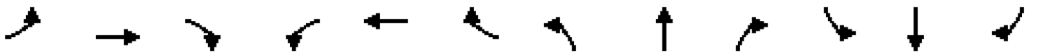
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	1193	379	280	1228	114	372	545	201	211	530	182
Future Volume (veh/h)	144	1193	379	280	1228	114	372	545	201	211	530	182
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	171	1420	305	333	1462	76	443	649	96	251	631	97
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	1725	532	501	2100	636	452	1386	419	305	832	361
Arrive On Green	0.08	0.34	0.34	0.14	0.41	0.41	0.13	0.27	0.27	0.06	0.16	0.16
Sat Flow, veh/h	3456	5106	1574	3456	5106	1546	3456	5106	1545	3456	3554	1540
Grp Volume(v), veh/h	171	1420	305	333	1462	76	443	649	96	251	631	97
Grp Sat Flow(s),veh/h/ln	1728	1702	1574	1728	1702	1546	1728	1702	1545	1728	1777	1540
Q Serve(g_s), s	6.2	33.2	14.2	11.9	30.7	4.0	16.6	13.8	4.4	9.3	22.1	7.2
Cycle Q Clear(g_c), s	6.2	33.2	14.2	11.9	30.7	4.0	16.6	13.8	4.4	9.3	22.1	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	1725	532	501	2100	636	452	1386	419	305	832	361
V/C Ratio(X)	0.64	0.82	0.57	0.67	0.70	0.12	0.98	0.47	0.23	0.82	0.76	0.27
Avail Cap(c_a), veh/h	292	1775	547	501	2100	636	452	1493	451	372	957	415
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	58.3	39.5	16.7	52.6	31.6	23.7	56.3	39.5	17.9	60.2	51.3	45.0
Incr Delay (d2), s/veh	2.9	4.6	4.5	2.7	1.9	0.4	37.0	0.5	0.6	8.7	3.6	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	14.2	5.7	5.3	12.6	1.5	9.5	5.8	2.4	4.5	10.6	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.1	44.1	21.2	55.3	33.5	24.1	93.3	40.1	18.4	68.8	54.9	45.7
LnGrp LOS	E	D	C	E	C	C	F	D	B	E	D	D
Approach Vol, veh/h		1896			1871			1188			979	
Approach Delay, s/veh		41.9			37.0			58.2			57.6	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.1	49.2	21.6	35.0	14.6	58.8	16.8	39.9
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	13.0	* 45	17.0	35.0	11.0	47.2	14.0	38.0
Max Q Clear Time (g_c+I1), s	13.9	35.2	18.6	24.1	8.2	32.7	11.3	15.8
Green Ext Time (p_c), s	0.0	8.8	0.0	5.3	0.1	11.8	0.1	8.4

Intersection Summary	
HCM 7th Control Delay, s/veh	46.2
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1602	19	0	1613	72	0	0	28	0	0	31
Future Volume (vph)	0	1602	19	0	1613	72	0	0	28	0	0	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.994				0.865		0.850	
Flt Protected												
Satd. Flow (prot)	0	5075	0	0	5055	0	0	0	1611	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	5075	0	0	5055	0	0	0	1611	0	0	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			3			11						
Confl. Bikes (#/hr)						3						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	0	1954	23	0	1967	88	0	0	34	0	0	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1977	0	0	2055	0	0	0	34	0	38	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1602	19	0	1613	72	0	0	28	0	0	31
Future Vol, veh/h	0	1602	19	0	1613	72	0	0	28	0	0	31
Conflicting Peds, #/hr	0	0	3	0	0	11	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1954	23	0	1967	88	0	0	34	0	0	38

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	-	0	0	-	-	0	-	-	991
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	210
Stage 1	0	-	-	0	-	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	0	210
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	25.49
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR
Capacity (veh/h)	210	-	-	-	-
HCM Lane V/C Ratio	0.163	-	-	-	-
HCM Control Delay (s/veh)	25.5	-	-	-	-
HCM Lane LOS	D	-	-	-	-
HCM 95th %tile Q(veh)	0.6	-	-	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1619	3	0	1660	0	4
Future Volume (vph)	1619	3	0	1660	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Ped Bike Factor						
Frt						0.865
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1611
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1611
Link Speed (mph)	40			40	25	
Link Distance (ft)	366			681	1312	
Travel Time (s)	6.2			11.6	35.8	
Confl. Peds. (#/hr)		2				
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	1927	4	0	1976	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1931	0	0	1976	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

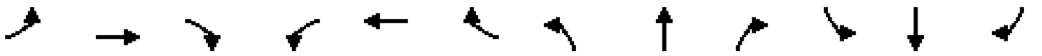
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1619	3	0	1660	0	4
Future Vol, veh/h	1619	3	0	1660	0	4
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1927	4	0	1976	0	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	967
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	218
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	218
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	21.91
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	218	-	-	-
HCM Lane V/C Ratio	0.022	-	-	-
HCM Control Delay (s/veh)	21.9	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1585	14	23	1623	1	1	0	13	4	0	28
Future Volume (vph)	20	1585	14	23	1623	1	1	0	13	4	0	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.874			0.881	
Flt Protected	0.950			0.950				0.997			0.994	
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1623	0	0	1631	0
Flt Permitted	0.950			0.950				0.997			0.994	
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1623	0	0	1631	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			2			4						
Confl. Bikes (#/hr)			1			2			1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	1723	15	25	1764	1	1	0	14	4	0	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	1738	0	25	1765	0	0	15	0	0	34	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	41.4%	ICU Level of Service	A
Analysis Period (min)	15		

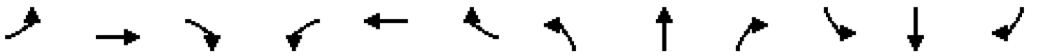
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	1585	14	23	1623	1	1	0	13	4	0	28
Future Vol, veh/h	20	1585	14	23	1623	1	1	0	13	4	0	28
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	1723	15	25	1764	1	1	0	14	4	0	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1769	0	0	1740	0	0	2532	3595	871	2551	3602	887
Stage 1	-	-	-	-	-	-	1776	1776	-	1819	1819	-
Stage 2	-	-	-	-	-	-	756	1819	-	733	1784	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	164	-	-	169	-	-	29	5	253	28	5	247
Stage 1	-	-	-	-	-	-	56	134	-	52	127	-
Stage 2	-	-	-	-	-	-	333	127	-	344	133	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	163	-	-	169	-	-	19	4	252	20	4	246
Mov Cap-2 Maneuver	-	-	-	-	-	-	19	4	-	20	4	-
Stage 1	-	-	-	-	-	-	48	116	-	44	108	-
Stage 2	-	-	-	-	-	-	249	108	-	281	115	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.38	0.42	35.24	58.15
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	134	163	-	-	169	-	-	101
HCM Lane V/C Ratio	0.113	0.133	-	-	0.148	-	-	0.344
HCM Control Delay (s/veh)	35.2	30.5	-	-	30	-	-	58.1
HCM Lane LOS	E	D	-	-	D	-	-	F
HCM 95th %tile Q(veh)	0.4	0.5	-	-	0.5	-	-	1.4

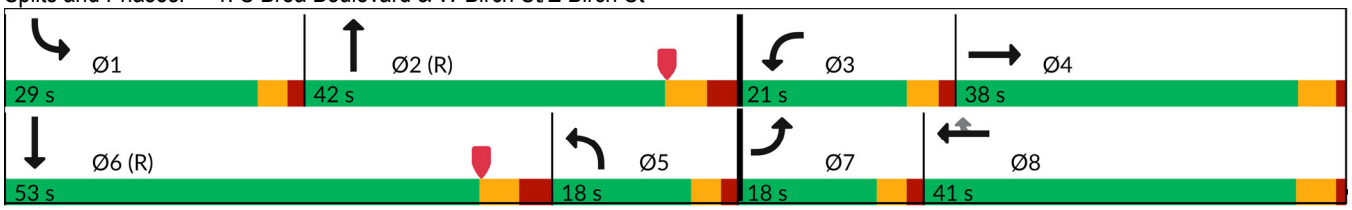


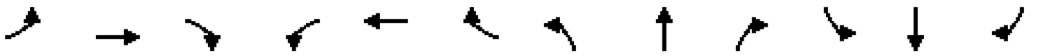
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	108	30	407	150	423	55	682	318	403	532	89
Future Volume (vph)	68	108	30	407	150	423	55	682	318	403	532	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.91		0.96			0.98	
Frt		0.968				0.850		0.952			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1783	0	3433	1863	1583	1770	4665	0	3433	4869	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1783	0	3433	1863	1443	1770	4665	0	3433	4869	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				470		89			28	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			33			70			61			41
Confl. Bikes (#/hr)			2						2			2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	120	33	452	167	470	61	758	353	448	591	99
Shared Lane Traffic (%)												
Lane Group Flow (vph)	76	153	0	452	167	470	61	1111	0	448	690	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	18.0	38.0		21.0	41.0	41.0	18.0	42.0		29.0	53.0	
Total Split (%)	13.8%	29.2%		16.2%	31.5%	31.5%	13.8%	32.3%		22.3%	40.8%	
Maximum Green (s)	13.5	33.4		16.5	36.1	36.1	13.5	35.1		24.5	46.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		7			3	3		0			0	
Act Effct Green (s)	10.3	17.3		16.5	25.7	25.7	12.4	54.9		20.8	65.8	
Actuated g/C Ratio	0.08	0.13		0.13	0.20	0.20	0.10	0.42		0.16	0.51	
v/c Ratio	0.55	0.62		1.04	0.45	0.71	0.36	0.55		0.82	0.28	
Control Delay (s/veh)	71.7	59.1		108.1	50.0	10.1	96.1	60.7		65.1	20.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	71.7	59.1		108.1	50.0	10.1	96.1	60.7		65.1	20.3	
LOS	E	E		F	D	B	F	E		E	C	
Approach Delay (s/veh)		63.3			56.9			62.5			37.9	
Approach LOS		E			E			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 71 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay (s/veh): 53.2		Intersection LOS: D	
Intersection Capacity Utilization 84.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





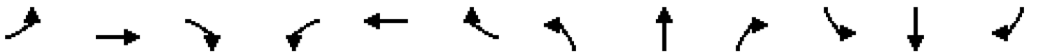
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	108	30	407	150	423	55	682	318	403	532	89
Future Volume (veh/h)	68	108	30	407	150	423	55	682	318	403	532	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.91	1.00		0.94	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	120	21	452	167	201	61	758	307	448	591	96
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	254	44	439	440	340	310	1408	563	506	1554	247
Arrive On Green	0.06	0.17	0.17	0.13	0.24	0.24	0.35	0.80	0.80	0.15	0.35	0.35
Sat Flow, veh/h	1781	1530	268	3456	1870	1444	1781	3515	1405	3456	4383	696
Grp Volume(v), veh/h	76	0	141	452	167	201	61	734	331	448	456	231
Grp Sat Flow(s),veh/h/ln	1781	0	1797	1728	1870	1444	1781	1702	1516	1728	1702	1675
Q Serve(g_s), s	5.5	0.0	9.2	16.5	9.7	16.1	3.1	9.8	10.0	16.5	13.0	13.4
Cycle Q Clear(g_c), s	5.5	0.0	9.2	16.5	9.7	16.1	3.1	9.8	10.0	16.5	13.0	13.4
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.93	1.00		0.42
Lane Grp Cap(c), veh/h	103	0	298	439	440	340	310	1364	607	506	1207	594
V/C Ratio(X)	0.74	0.00	0.47	1.03	0.38	0.59	0.20	0.54	0.55	0.88	0.38	0.39
Avail Cap(c_a), veh/h	185	0	462	439	519	401	310	1364	607	651	1207	594
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.77	0.77	0.77	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.3	0.0	49.1	56.7	41.7	44.2	36.0	8.7	8.7	54.4	31.3	31.4
Incr Delay (d2), s/veh	3.9	0.0	0.4	51.0	0.2	0.6	0.1	1.2	2.7	9.8	0.9	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	4.2	10.2	4.5	5.8	1.3	2.7	2.7	7.8	5.5	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.2	0.0	49.5	107.8	41.9	44.8	36.1	9.9	11.4	64.2	32.2	33.3
LnGrp LOS	E		D	F	D	D	D	A	B	E	C	C
Approach Vol, veh/h		217			820			1126			1135	
Approach Delay, s/veh		54.6			78.9			11.8			45.0	
Approach LOS		D			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.5	59.0	21.0	26.5	29.5	53.0	12.0	35.5
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	24.5	35.1	16.5	* 33	13.5	* 46	13.5	36.1
Max Q Clear Time (g_c+I1), s	18.5	12.0	18.5	11.2	5.1	15.4	7.5	18.1
Green Ext Time (p_c), s	0.5	5.1	0.0	0.5	0.0	3.0	0.0	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	42.7
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	727	82	51	956	23	17	3	70	0	0	34
Future Volume (vph)	7	727	82	51	956	23	17	3	70	0	0	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.996			0.895				0.865
Flt Protected				0.950				0.991				
Satd. Flow (prot)	0	3539	1583	1770	3525	0	0	1652	0	0	0	1611
Flt Permitted				0.950				0.991				
Satd. Flow (perm)	0	3539	1583	1770	3525	0	0	1652	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			8			4						
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	7	757	85	53	996	24	18	3	73	0	0	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	764	85	53	1020	0	0	94	0	0	0	35
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

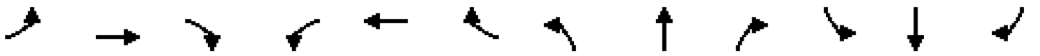
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	727	82	51	956	23	17	3	70	0	0	34
Future Vol, veh/h	7	727	82	51	956	23	17	3	70	0	0	34
Conflicting Peds, #/hr	0	0	8	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	757	85	53	996	24	18	3	73	0	0	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1024	0	0	851	0	0	1384	1910	387	-	-	514
Stage 1	-	-	-	-	-	-	780	780	-	-	-	-
Stage 2	-	-	-	-	-	-	604	1130	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	674	-	-	783	-	-	103	67	612	0	0	506
Stage 1	-	-	-	-	-	-	354	404	-	0	0	-
Stage 2	-	-	-	-	-	-	452	277	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	671	-	-	777	-	-	87	61	607	-	-	504
Mov Cap-2 Maneuver	-	-	-	-	-	-	87	61	-	-	-	-
Stage 1	-	-	-	-	-	-	347	395	-	-	-	-
Stage 2	-	-	-	-	-	-	391	257	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.49	27.74	12.69
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	250	671	-	-	777	-	-	504
HCM Lane V/C Ratio	0.374	0.011	-	-	0.068	-	-	0.07
HCM Control Delay (s/veh)	27.7	10.4	-	-	10	-	-	12.7
HCM Lane LOS	D	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.7	0	-	-	0.2	-	-	0.2

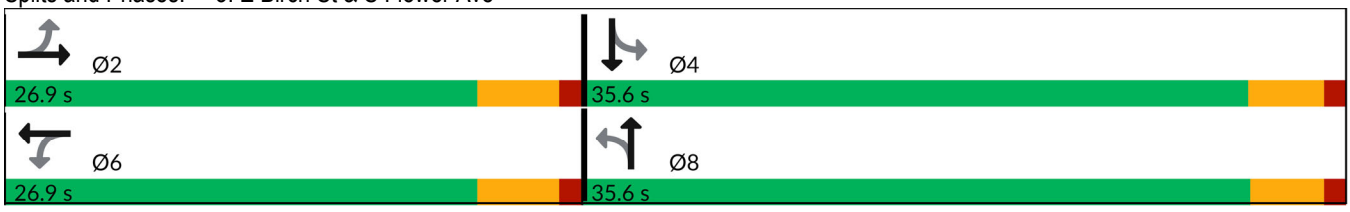


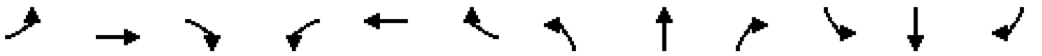
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	671	102	85	911	16	106	11	62	23	2	17
Future Volume (vph)	20	671	102	85	911	16	106	11	62	23	2	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.979			0.997			0.953			0.945	
Flt Protected	0.950			0.950				0.971			0.973	
Satd. Flow (prot)	1770	3452	0	1770	3527	0	0	1713	0	0	1704	0
Flt Permitted	0.271			0.335				0.794			0.833	
Satd. Flow (perm)	505	3452	0	624	3527	0	0	1401	0	0	1459	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			3			60			17	
Link Speed (mph)		35			35			30			25	
Link Distance (ft)		364			329			646			397	
Travel Time (s)		7.1			6.4			14.7			10.8	
Confl. Peds. (#/hr)			3			6			6			1
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.98	0.98	0.92	0.92	0.98	0.98	0.92	0.92	0.92	0.98	0.92	0.98
Adj. Flow (vph)	20	685	111	92	930	16	115	12	67	23	2	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	796	0	92	946	0	0	194	0	0	42	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (s)	26.9	26.9		26.9	26.9		35.6	35.6		35.6	35.6	
Total Split (%)	43.0%	43.0%		43.0%	43.0%		57.0%	57.0%		57.0%	57.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		31.1	31.1		31.0	31.0	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.5	3.5		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9			4.5			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		3.0	3.0		2.0	2.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0		11.0	11.0		24.0	24.0	
Pedestrian Calls (#/hr)	6	6		2	2		0	0		1	1	
Act Effct Green (s)	27.4	27.4		27.4	27.4			11.8			11.5	
Actuated g/C Ratio	0.60	0.60		0.60	0.60			0.26			0.25	
v/c Ratio	0.07	0.38		0.25	0.45			0.48			0.11	
Control Delay (s/veh)	10.5	8.8		12.3	9.7			12.7			8.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	10.5	8.8		12.3	9.7			12.7			8.1	
LOS	B	A		B	A			B			A	
Approach Delay (s/veh)		8.8			9.9			12.7			8.1	
Approach LOS		A			A			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 62.5			
Actuated Cycle Length: 45.6			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 9.7		Intersection LOS: A	
Intersection Capacity Utilization 59.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: E Birch St & S Flower Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	671	102	85	911	16	106	11	62	23	2	17
Future Volume (veh/h)	20	671	102	85	911	16	106	11	62	23	2	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	685	111	92	930	15	115	12	67	23	2	5
Peak Hour Factor	0.98	0.98	0.92	0.92	0.98	0.98	0.92	0.92	0.92	0.98	0.92	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	429	1723	279	484	2022	33	298	38	100	380	42	52
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	593	3050	494	682	3579	58	788	201	522	1135	222	271
Grp Volume(v), veh/h	20	399	397	92	462	483	194	0	0	30	0	0
Grp Sat Flow(s),veh/h/ln	593	1777	1767	682	1777	1860	1511	0	0	1628	0	0
Q Serve(g_s), s	0.8	4.9	4.9	3.4	5.9	5.9	3.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.7	4.9	4.9	8.3	5.9	5.9	4.6	0.0	0.0	0.5	0.0	0.0
Prop In Lane	1.00		0.28	1.00		0.03	0.59		0.35	0.77		0.17
Lane Grp Cap(c), veh/h	429	1004	998	484	1004	1051	436	0	0	474	0	0
V/C Ratio(X)	0.05	0.40	0.40	0.19	0.46	0.46	0.45	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	429	1004	998	484	1004	1051	1337	0	0	1309	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.0	4.7	4.8	7.1	5.0	5.0	14.5	0.0	0.0	13.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	1.2	1.2	0.9	1.5	1.4	0.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.1	1.1	0.4	1.4	1.5	1.4	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.2	5.9	5.9	8.0	6.5	6.4	15.3	0.0	0.0	13.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B			B		
Approach Vol, veh/h		816			1037			194			30	
Approach Delay, s/veh		6.0			6.6			15.3			13.0	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.9	12.0	26.9	12.0
Change Period (Y+Rc), s	4.9	4.6	4.9	* 4.6
Max Green Setting (Gmax), s	22.0	31.0	22.0	* 31
Max Q Clear Time (g_c+I1), s	8.7	2.5	10.3	6.6
Green Ext Time (p_c), s	1.6	0.1	2.1	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	7.2
HCM 7th LOS	A

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	768	7	1	1003	1	4	0	9	0	0	0
Future Volume (vph)	3	768	7	1	1003	1	4	0	9	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.907				
Flt Protected	0.950			0.950				0.985				
Satd. Flow (prot)	1770	3536	0	1770	3539	0	0	1664	0	0	1863	0
Flt Permitted	0.950			0.950				0.985				
Satd. Flow (perm)	1770	3536	0	1770	3539	0	0	1664	0	0	1863	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			15			6						
Confl. Bikes (#/hr)			6			1						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	4	937	9	1	1223	1	5	0	11	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	946	0	1	1224	0	0	16	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.8%		ICU Level of Service A	
Analysis Period (min) 15			

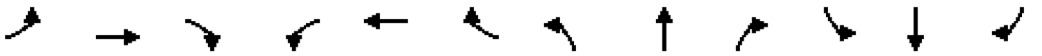
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	768	7	1	1003	1	4	0	9	0	0	0
Future Vol, veh/h	3	768	7	1	1003	1	4	0	9	0	0	0
Conflicting Peds, #/hr	0	0	15	0	0	6	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	937	9	1	1223	1	5	0	11	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1230	0	0	960	0	0	1577	2196	488	1708	2200	618
Stage 1	-	-	-	-	-	-	963	963	-	1232	1232	-
Stage 2	-	-	-	-	-	-	614	1233	-	476	967	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	562	-	-	712	-	-	74	44	526	59	44	432
Stage 1	-	-	-	-	-	-	274	332	-	188	248	-
Stage 2	-	-	-	-	-	-	446	247	-	539	331	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	559	-	-	702	-	-	72	43	518	57	43	430
Mov Cap-2 Maneuver	-	-	-	-	-	-	72	43	-	57	43	-
Stage 1	-	-	-	-	-	-	269	325	-	186	246	-
Stage 2	-	-	-	-	-	-	445	246	-	524	324	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.04	0.01	27.13	0
HCM LOS			D	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	178	559	-	-	702	-	-	-
HCM Lane V/C Ratio	0.089	0.007	-	-	0.002	-	-	-
HCM Control Delay (s/veh)	27.1	11.5	-	-	10.1	-	-	0
HCM Lane LOS	D	B	-	-	B	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	-

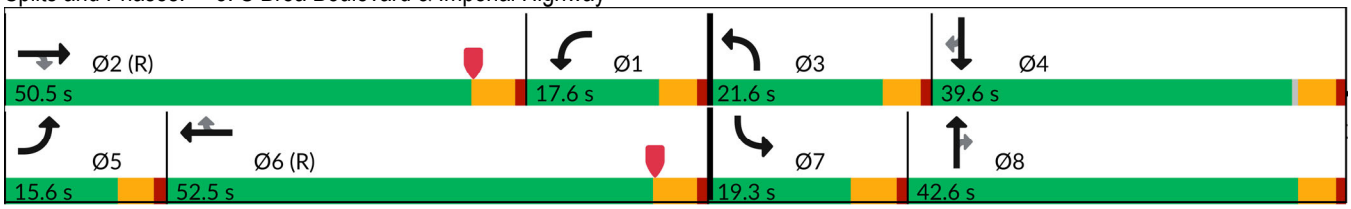


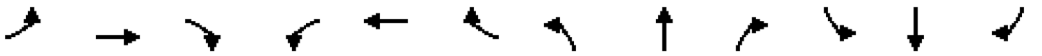
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	194	1458	404	176	1493	162	443	736	239	171	605	213
Future Volume (vph)	194	1458	404	176	1493	162	443	736	239	171	605	213
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.98			0.98			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1552	3433	5085	1556	3433	5085	1551	3433	3539	1539
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			238			108			219			181
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			6			5			6			14
Confl. Bikes (#/hr)			3						3			1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	231	1736	481	210	1777	193	527	876	285	204	720	254
Shared Lane Traffic (%)												
Lane Group Flow (vph)	231	1736	481	210	1777	193	527	876	285	204	720	254
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	15.6	50.5	50.5	17.6	52.5	52.5	21.6	42.6	42.6	19.3	39.6	39.6
Total Split (%)	12.0%	38.8%	38.8%	13.5%	40.4%	40.4%	16.6%	32.8%	32.8%	14.8%	30.5%	30.5%
Maximum Green (s)	11.0	45.2	45.2	13.0	47.2	47.2	17.0	38.0	38.0	14.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		5	5		2	2		7	7		4	4
Act Effct Green (s)	10.8	48.9	48.9	12.7	50.7	50.7	17.0	36.6	36.6	12.0	32.4	32.4
Actuated g/C Ratio	0.08	0.38	0.38	0.10	0.39	0.39	0.13	0.28	0.28	0.09	0.25	0.25
v/c Ratio	0.81	0.91	0.66	0.63	0.90	0.29	1.18	0.61	0.48	0.64	0.82	0.49
Control Delay (s/veh)	80.3	47.0	21.7	65.3	44.7	13.7	148.9	42.5	12.4	63.0	62.0	23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	80.3	47.0	21.7	65.3	44.7	13.7	148.9	42.5	12.4	63.0	62.0	23.1
LOS	F	D	C	E	D	B	F	D	B	E	E	C
Approach Delay (s/veh)		45.1			43.9			70.6			53.8	
Approach LOS		D			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.18			
Intersection Signal Delay (s/veh): 51.9		Intersection LOS: D	
Intersection Capacity Utilization 89.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway





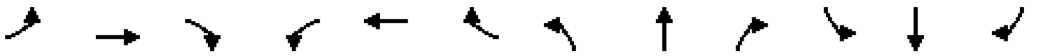
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	1458	404	176	1493	162	443	736	239	171	605	213
Future Volume (veh/h)	194	1458	404	176	1493	162	443	736	239	171	605	213
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	231	1736	335	210	1777	133	527	876	142	204	720	134
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	281	1775	541	414	1999	618	452	1522	463	266	887	384
Arrive On Green	0.08	0.35	0.35	0.12	0.39	0.39	0.13	0.30	0.30	0.08	0.25	0.25
Sat Flow, veh/h	3456	5106	1555	3456	5106	1579	3456	5106	1553	3456	3554	1539
Grp Volume(v), veh/h	231	1736	335	210	1777	133	527	876	142	204	720	134
Grp Sat Flow(s),veh/h/ln	1728	1702	1555	1728	1702	1579	1728	1702	1553	1728	1777	1539
Q Serve(g_s), s	8.6	43.7	15.9	7.4	42.2	7.3	17.0	18.9	6.6	7.5	24.8	9.3
Cycle Q Clear(g_c), s	8.6	43.7	15.9	7.4	42.2	7.3	17.0	18.9	6.6	7.5	24.8	9.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1775	541	414	1999	618	452	1522	463	266	887	384
V/C Ratio(X)	0.82	0.98	0.62	0.51	0.89	0.22	1.17	0.58	0.31	0.77	0.81	0.35
Avail Cap(c_a), veh/h	292	1775	541	414	1999	618	452	1522	463	372	957	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	58.8	41.9	16.4	53.6	36.9	26.3	56.5	38.7	18.3	58.9	45.9	40.1
Incr Delay (d2), s/veh	15.2	16.7	5.3	0.4	6.4	0.8	96.5	0.9	0.8	2.9	4.8	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	20.5	6.3	3.2	18.1	2.9	13.4	8.0	3.5	3.4	11.4	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.0	58.6	21.7	54.0	43.3	27.1	153.0	39.5	19.1	61.8	50.7	41.0
LnGrp LOS	E	E	C	D	D	C	F	D	B	E	D	D
Approach Vol, veh/h		2302			2120			1545			1058	
Approach Delay, s/veh		54.8			43.4			76.3			51.6	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.9	50.5	21.6	37.0	15.2	56.2	15.3	43.3
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	13.0	* 45	17.0	35.0	11.0	47.2	14.0	38.0
Max Q Clear Time (g_c+I1), s	9.4	45.7	19.0	26.8	10.6	44.2	9.5	20.9
Green Ext Time (p_c), s	0.1	0.0	0.0	4.9	0.0	2.8	0.1	9.8

Intersection Summary	
HCM 7th Control Delay, s/veh	55.6
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1854	20	0	1810	89	0	0	21	0	0	36
Future Volume (vph)	0	1854	20	0	1810	89	0	0	21	0	0	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.993				0.865		0.850	
Flt Protected												
Satd. Flow (prot)	0	5075	0	0	5050	0	0	0	1611	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	5075	0	0	5050	0	0	0	1611	0	0	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			4			1						
Confl. Bikes (#/hr)			2			1						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	0	2261	24	0	2207	109	0	0	26	0	0	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2285	0	0	2316	0	0	0	26	0	44	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1854	20	0	1810	89	0	0	21	0	0	36
Future Vol, veh/h	0	1854	20	0	1810	89	0	0	21	0	0	36
Conflicting Peds, #/hr	0	0	4	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2261	24	0	2207	109	0	0	26	0	0	44

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	-	0	0	-	-	0	-	-	1147
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	165
Stage 1	0	-	-	0	-	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	0	165
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	30.82
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR
Capacity (veh/h)	165	-	-	-	-
HCM Lane V/C Ratio	0.155	-	-	-	-
HCM Control Delay (s/veh)	30.8	-	-	-	-
HCM Lane LOS	D	-	-	-	-
HCM 95th %tile Q(veh)	0.5	-	-	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1793	13	0	1945	0	2
Future Volume (vph)	1793	13	0	1945	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Ped Bike Factor						
Frt	0.999					0.865
Flt Protected						
Satd. Flow (prot)	5080	0	0	5085	0	1611
Flt Permitted						
Satd. Flow (perm)	5080	0	0	5085	0	1611
Link Speed (mph)	40			40	25	
Link Distance (ft)	366			681	1312	
Travel Time (s)	6.2			11.6	35.8	
Confl. Peds. (#/hr)		1				
Confl. Bikes (#/hr)		2				
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	2135	15	0	2315	0	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2150	0	0	2315	0	2
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

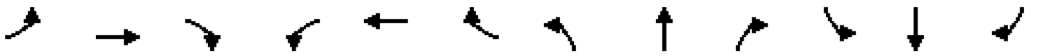
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1793	13	0	1945	0	2
Future Vol, veh/h	1793	13	0	1945	0	2
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2135	15	0	2315	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1076
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	185
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	184
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	24.78
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	184	-	-	-
HCM Lane V/C Ratio	0.013	-	-	-
HCM Control Delay (s/veh)	24.8	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	1872	14	30	1968	2	3	0	14	0	0	10
Future Volume (vph)	32	1872	14	30	1968	2	3	0	14	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.887			0.865	
Flt Protected	0.950			0.950				0.992				
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1639	0	0	1611	0
Flt Permitted	0.950			0.950				0.992				
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1639	0	0	1611	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			1			6						
Confl. Bikes (#/hr)			6			9						
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
Adj. Flow (vph)	35	2035	15	33	2139	2	3	0	15	0	0	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	2050	0	33	2141	0	0	18	0	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	1872	14	30	1968	2	3	0	14	0	0	10
Future Vol, veh/h	32	1872	14	30	1968	2	3	0	14	0	0	10
Conflicting Peds, #/hr	0	0	1	0	0	6	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	2035	15	33	2139	2	3	0	15	0	0	11

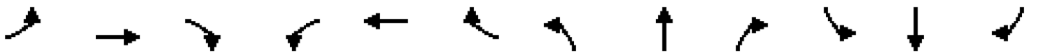
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2147	0	0	2051	0	0	3034	4325	1026	3095	4332	1077
Stage 1	-	-	-	-	-	-	2113	2113	-	2211	2211	-
Stage 2	-	-	-	-	-	-	921	2213	-	883	2121	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	105	-	-	118	-	-	14	2	199	13	2	184
Stage 1	-	-	-	-	-	-	32	90	-	27	80	-
Stage 2	-	-	-	-	-	-	263	80	-	278	90	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	105	-	-	118	-	-	6	1	199	6	1	183
Mov Cap-2 Maneuver	-	-	-	-	-	-	6	1	-	6	1	-
Stage 1	-	-	-	-	-	-	21	60	-	19	58	-
Stage 2	-	-	-	-	-	-	179	58	-	171	60	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.93	0.7	227.63	25.88
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	31	105	-	-	118	-	-	183
HCM Lane V/C Ratio	0.594	0.333	-	-	0.277	-	-	0.059
HCM Control Delay (s/veh)	227.6	55.7	-	-	46.9	-	-	25.9
HCM Lane LOS	F	F	-	-	E	-	-	D
HCM 95th %tile Q(veh)	2	1.3	-	-	1	-	-	0.2

Appendix G

Intersection Level of Service Worksheets (Alternative 4)

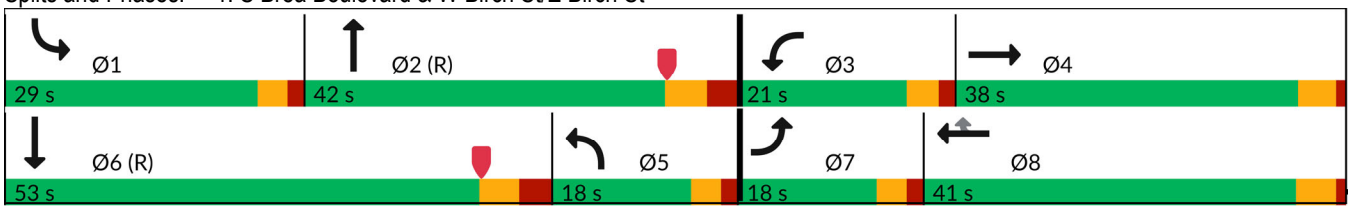


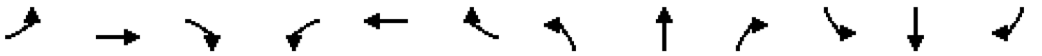
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	62	23	191	79	301	23	434	260	373	774	52
Future Volume (vph)	23	62	23	191	79	301	23	434	260	373	774	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.99			1.00	
Frt		0.959				0.850		0.944			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1773	0	3433	1863	1583	1770	4743	0	3433	5029	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1773	0	3433	1863	1554	1770	4743	0	3433	5029	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14				334		114			9	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			14			6			10			3
Confl. Bikes (#/hr)									4			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	26	69	26	212	88	334	26	482	289	414	860	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	95	0	212	88	334	26	771	0	414	918	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	18.0	38.0		21.0	41.0	41.0	18.0	42.0		29.0	53.0	
Total Split (%)	13.8%	29.2%		16.2%	31.5%	31.5%	13.8%	32.3%		22.3%	40.8%	
Maximum Green (s)	13.5	33.4		16.5	36.1	36.1	13.5	35.1		24.5	46.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		7			3	3		0			0	
Act Effct Green (s)	8.2	14.0		12.4	23.0	23.0	11.3	63.2		19.9	76.8	
Actuated g/C Ratio	0.06	0.11		0.10	0.18	0.18	0.09	0.49		0.15	0.59	
v/c Ratio	0.24	0.47		0.65	0.27	0.61	0.17	0.33		0.79	0.31	
Control Delay (s/veh)	63.3	51.0		65.9	46.8	9.0	93.3	48.0		64.2	17.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	63.3	51.0		65.9	46.8	9.0	93.3	48.0		64.2	17.0	
LOS	E	D		E	D	A	F	D		E	B	
Approach Delay (s/veh)		53.6			33.3			49.5			31.7	
Approach LOS		D			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 71 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 37.9		Intersection LOS: D	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





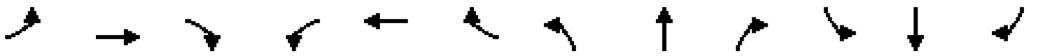
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	62	23	191	79	301	23	434	260	373	774	52
Future Volume (veh/h)	23	62	23	191	79	301	23	434	260	373	774	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	69	14	212	88	65	26	482	243	414	860	55
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	153	31	267	266	222	512	1782	814	473	1736	111
Arrive On Green	0.04	0.10	0.10	0.08	0.14	0.14	0.57	1.00	1.00	0.14	0.35	0.35
Sat Flow, veh/h	1781	1497	304	3456	1870	1565	1781	3404	1554	3456	4896	312
Grp Volume(v), veh/h	26	0	83	212	88	65	26	482	243	414	597	318
Grp Sat Flow(s),veh/h/ln	1781	0	1800	1728	1870	1565	1781	1702	1554	1728	1702	1803
Q Serve(g_s), s	1.9	0.0	5.6	7.8	5.5	4.8	0.8	0.0	0.0	15.3	17.8	18.0
Cycle Q Clear(g_c), s	1.9	0.0	5.6	7.8	5.5	4.8	0.8	0.0	0.0	15.3	17.8	18.0
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	67	0	184	267	266	222	512	1782	814	473	1207	640
V/C Ratio(X)	0.39	0.00	0.45	0.79	0.33	0.29	0.05	0.27	0.30	0.88	0.49	0.50
Avail Cap(c_a), veh/h	185	0	463	439	519	435	512	1782	814	651	1207	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	0.0	54.9	59.0	50.2	49.9	19.9	0.0	0.0	55.0	32.8	32.9
Incr Delay (d2), s/veh	1.4	0.0	0.6	2.0	0.3	0.3	0.0	0.3	0.9	7.7	1.5	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.6	3.5	2.6	1.9	0.4	0.1	0.2	7.1	7.5	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.5	0.0	55.5	61.0	50.5	50.2	19.9	0.3	0.9	62.7	34.3	35.6
LnGrp LOS	E		E	E	D	D	B	A	A	E	C	D
Approach Vol, veh/h		109			365			751			1329	
Approach Delay, s/veh		57.2			56.5			1.2			43.5	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.3	75.0	14.5	18.2	44.3	53.0	9.4	23.4
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	24.5	35.1	16.5	* 33	13.5	* 46	13.5	36.1
Max Q Clear Time (g_c+I1), s	17.3	2.0	9.8	7.6	2.8	20.0	3.9	7.5
Green Ext Time (p_c), s	0.5	3.4	0.2	0.3	0.0	4.1	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	33.5
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	654	45	22	553	8	19	52	89	0	0	12
Future Volume (vph)	1	654	45	22	553	8	19	52	89	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.925				0.865
Flt Protected				0.950				0.994				
Satd. Flow (prot)	0	3539	1583	1770	3532	0	0	1713	0	0	0	1611
Flt Permitted				0.950				0.994				
Satd. Flow (perm)	0	3539	1583	1770	3532	0	0	1713	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			10			5						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1	681	47	23	576	8	20	54	93	0	0	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	682	47	23	584	0	0	167	0	0	0	13
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.1%		ICU Level of Service A	
Analysis Period (min) 15			

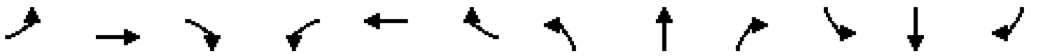
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	654	45	22	553	8	19	52	89	0	0	12
Future Vol, veh/h	1	654	45	22	553	8	19	52	89	0	0	12
Conflicting Peds, #/hr	0	0	10	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	681	47	23	576	8	20	54	93	0	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	589	0	0	738	0	0	1027	1329	351	-	-	297
Stage 1	-	-	-	-	-	-	693	693	-	-	-	-
Stage 2	-	-	-	-	-	-	334	635	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	982	-	-	864	-	-	189	154	646	0	0	699
Stage 1	-	-	-	-	-	-	400	443	-	0	0	-
Stage 2	-	-	-	-	-	-	654	470	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	977	-	-	856	-	-	178	147	639	-	-	696
Mov Cap-2 Maneuver	-	-	-	-	-	-	178	147	-	-	-	-
Stage 1	-	-	-	-	-	-	395	438	-	-	-	-
Stage 2	-	-	-	-	-	-	625	456	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.01	0.35	38.44	10.27
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	267	977	-	-	856	-	-	696
HCM Lane V/C Ratio	0.624	0.001	-	-	0.027	-	-	0.018
HCM Control Delay (s/veh)	38.4	8.7	-	-	9.3	-	-	10.3
HCM Lane LOS	E	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	3.8	0	-	-	0.1	-	-	0.1

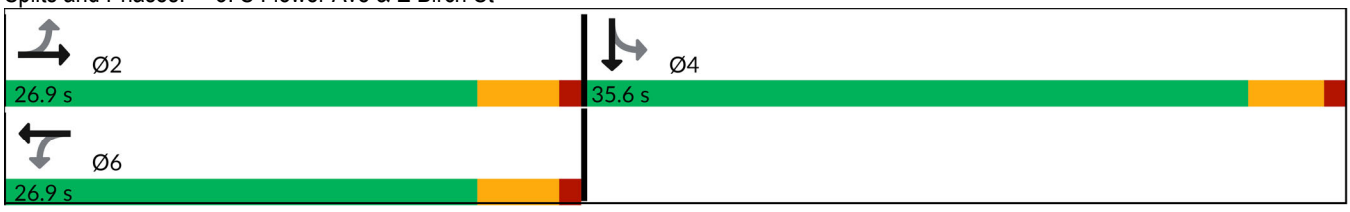


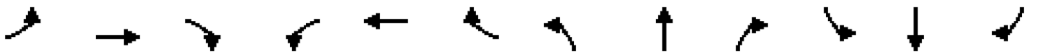
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	570	158	149	566	14	0	0	0	33	7	19
Future Volume (vph)	19	570	158	149	566	14	0	0	0	33	7	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00						1.00	
Frt		0.967			0.996						0.957	
Flt Protected	0.950			0.950							0.972	
Satd. Flow (prot)	1770	3394	0	1770	3522	0	0	0	0	0	1726	0
Flt Permitted	0.428			0.370							0.972	
Satd. Flow (perm)	797	3394	0	689	3522	0	0	0	0	0	1726	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		62			4						19	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		364			329			750			397	
Travel Time (s)		7.1			6.4			20.5			10.8	
Confl. Peds. (#/hr)			13			5			85			1
Confl. Bikes (#/hr)						4			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	19	582	161	152	578	14	0	0	0	34	7	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	743	0	152	592	0	0	0	0	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2					1	2	
Detector Template	Left	Thru		Left	Thru					Left	Thru	
Leading Detector (ft)	20	100		20	100					20	100	
Trailing Detector (ft)	0	0		0	0					0	0	
Detector 1 Position(ft)	0	0		0	0					0	0	
Detector 1 Size(ft)	20	6		20	6					20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA					Perm	NA	
Protected Phases		2			6						4	
Permitted Phases	2			6						4		
Detector Phase	2	2		6	6					4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0					2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9					35.6	35.6	
Total Split (s)	26.9	26.9		26.9	26.9					35.6	35.6	
Total Split (%)	43.0%	43.0%		43.0%	43.0%					57.0%	57.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0					31.0	31.0	
Yellow Time (s)	3.9	3.9		3.9	3.9					3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0					1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0						0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9						4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0					2.0	2.0	
Recall Mode	Max	Max		Max	Max					None	None	
Walk Time (s)	7.0	7.0		7.0	7.0					7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0					24.0	24.0	
Pedestrian Calls (#/hr)	6	6		2	2					1	1	
Act Effct Green (s)	39.6	39.6		39.6	39.6						9.2	
Actuated g/C Ratio	0.81	0.81		0.81	0.81						0.19	
v/c Ratio	0.03	0.27		0.27	0.21						0.18	
Control Delay (s/veh)	7.7	5.4		9.7	5.4						12.1	
Queue Delay	0.0	0.0		0.0	0.0						0.0	
Total Delay (s/veh)	7.7	5.4		9.7	5.4						12.1	
LOS	A	A		A	A						B	
Approach Delay (s/veh)		5.4			6.3						12.1	
Approach LOS		A			A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 62.5			
Actuated Cycle Length: 48.6			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay (s/veh): 6.1		Intersection LOS: A	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: S Flower Ave & E Birch St

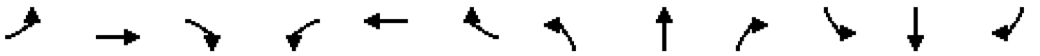




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	570	158	149	566	14	0	0	0	33	7	19
Future Volume (veh/h)	19	570	158	149	566	14	0	0	0	33	7	19
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	19	582	158	152	578	13				34	7	7
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2				2	2	2
Cap, veh/h	722	1855	502	639	2388	54				46	9	9
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67				0.04	0.04	0.04
Sat Flow, veh/h	824	2758	747	717	3551	80				1247	257	257
Grp Volume(v), veh/h	19	374	366	152	289	302				48	0	0
Grp Sat Flow(s),veh/h/ln	824	1777	1727	717	1777	1853				1760	0	0
Q Serve(g_s), s	0.3	2.9	2.9	3.7	2.1	2.1				0.9	0.0	0.0
Cycle Q Clear(g_c), s	2.4	2.9	2.9	6.5	2.1	2.1				0.9	0.0	0.0
Prop In Lane	1.00		0.43	1.00		0.04				0.71		0.15
Lane Grp Cap(c), veh/h	722	1195	1162	639	1195	1247				65	0	0
V/C Ratio(X)	0.03	0.31	0.31	0.24	0.24	0.24				0.74	0.00	0.00
Avail Cap(c_a), veh/h	722	1195	1162	639	1195	1247				1668	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	2.6	2.2	2.2	3.6	2.1	2.1				15.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.7	0.7	0.9	0.5	0.5				6.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.3	0.2	0.2				0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	2.6	2.9	2.9	4.5	2.6	2.6				21.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A				C		
Approach Vol, veh/h		759			743						48	
Approach Delay, s/veh		2.9			3.0						21.6	
Approach LOS		A			A						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		26.9		5.8		26.9						
Change Period (Y+Rc), s		4.9		4.6		4.9						
Max Green Setting (Gmax), s		22.0		31.0		22.0						
Max Q Clear Time (g_c+I1), s		4.9		2.9		8.5						
Green Ext Time (p_c), s		1.5		0.1		1.5						

Intersection Summary												
HCM 7th Control Delay, s/veh			3.5									
HCM 7th LOS			A									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	583	17	35	724	3	5	0	2	2	0	1
Future Volume (vph)	2	583	17	35	724	3	5	0	2	2	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.996			0.999			0.966			0.955	
Flt Protected	0.950			0.950				0.964			0.968	
Satd. Flow (prot)	1770	3525	0	1770	3536	0	0	1735	0	0	1722	0
Flt Permitted	0.950			0.950				0.964			0.968	
Satd. Flow (perm)	1770	3525	0	1770	3536	0	0	1735	0	0	1722	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			26			12						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	2	711	21	43	883	4	6	0	2	2	0	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	732	0	43	887	0	0	8	0	0	3	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.8%		ICU Level of Service A	
Analysis Period (min) 15			

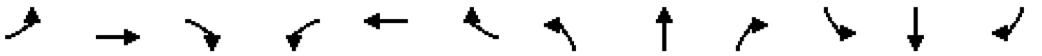
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	583	17	35	724	3	5	0	2	2	0	1
Future Vol, veh/h	2	583	17	35	724	3	5	0	2	2	0	1
Conflicting Peds, #/hr	0	0	26	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	711	21	43	883	4	6	0	2	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	899	0	0	758	0	0	1279	1736	392	1342	1745	455
Stage 1	-	-	-	-	-	-	752	752	-	982	982	-
Stage 2	-	-	-	-	-	-	527	984	-	360	763	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	752	-	-	849	-	-	123	87	607	110	86	552
Stage 1	-	-	-	-	-	-	368	416	-	267	325	-
Stage 2	-	-	-	-	-	-	503	325	-	631	411	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	743	-	-	828	-	-	113	79	592	103	78	546
Mov Cap-2 Maneuver	-	-	-	-	-	-	113	79	-	103	78	-
Stage 1	-	-	-	-	-	-	358	404	-	251	305	-
Stage 2	-	-	-	-	-	-	476	304	-	626	400	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.44	30.96	31.24
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	147	743	-	-	828	-	-	141
HCM Lane V/C Ratio	0.058	0.003	-	-	0.052	-	-	0.026
HCM Control Delay (s/veh)	31	9.9	-	-	9.6	-	-	31.2
HCM Lane LOS	D	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0.2	-	-	0.1

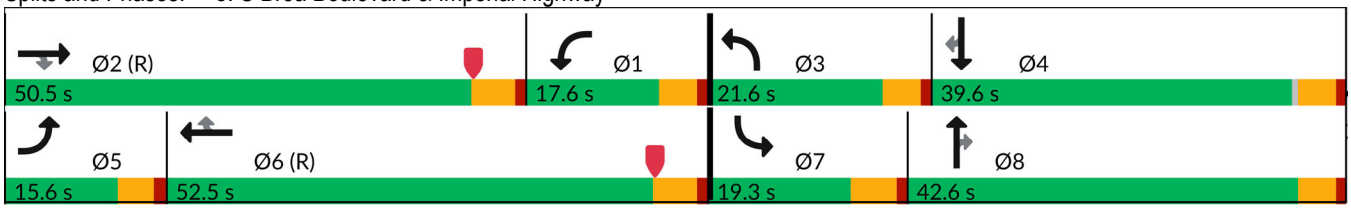


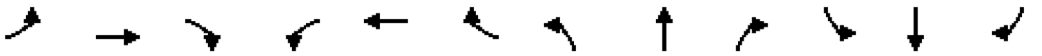
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	163	1426	394	232	1518	92	415	475	138	216	713	58
Future Volume (vph)	163	1426	394	232	1518	92	415	475	138	216	713	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.98			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1545	3433	5085	1556	3433	5085	1536	3433	3539	1542
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237			97			164			147
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			11			5			14			8
Confl. Bikes (#/hr)			1						5			7
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	194	1698	469	276	1807	110	494	565	164	257	849	69
Shared Lane Traffic (%)												
Lane Group Flow (vph)	194	1698	469	276	1807	110	494	565	164	257	849	69
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	15.6	50.5	50.5	17.6	52.5	52.5	21.6	42.6	42.6	19.3	39.6	39.6
Total Split (%)	12.0%	38.8%	38.8%	13.5%	40.4%	40.4%	16.6%	32.8%	32.8%	14.8%	30.5%	30.5%
Maximum Green (s)	11.0	45.2	45.2	13.0	47.2	47.2	17.0	38.0	38.0	14.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		5	5		2	2		7	7		4	4
Act Effct Green (s)	10.7	46.6	46.6	13.0	49.0	49.0	17.0	37.7	37.7	12.9	34.3	34.3
Actuated g/C Ratio	0.08	0.36	0.36	0.10	0.38	0.38	0.13	0.29	0.29	0.10	0.26	0.26
v/c Ratio	0.69	0.93	0.67	0.80	0.94	0.17	1.10	0.38	0.29	0.76	0.91	0.13
Control Delay (s/veh)	71.4	50.6	22.0	75.4	50.5	7.4	124.7	37.9	6.5	62.9	60.3	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.4	50.6	22.0	75.4	50.5	7.4	124.7	37.9	6.5	62.9	60.3	7.8
LOS	E	D	C	E	D	A	F	D	A	E	E	A
Approach Delay (s/veh)		46.6			51.5			68.7			57.8	
Approach LOS		D			D			E			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay (s/veh): 53.9		Intersection LOS: D	
Intersection Capacity Utilization 88.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway





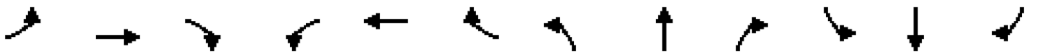
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	1426	394	232	1518	92	415	475	138	216	713	58
Future Volume (veh/h)	163	1426	394	232	1518	92	415	475	138	216	713	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	194	1698	323	276	1807	50	494	565	21	257	849	-51
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1774	539	367	1951	603	452	1528	460	309	936	417
Arrive On Green	0.08	0.35	0.35	0.11	0.38	0.38	0.13	0.30	0.30	0.09	0.26	0.00
Sat Flow, veh/h	3456	5106	1550	3456	5106	1579	3456	5106	1538	3456	3554	1585
Grp Volume(v), veh/h	194	1698	323	276	1807	50	494	565	21	257	849	-51
Grp Sat Flow(s),veh/h/ln	1728	1702	1550	1728	1702	1579	1728	1702	1538	1728	1777	1585
Q Serve(g_s), s	7.1	42.3	15.2	10.1	44.0	2.6	17.0	11.3	0.9	9.5	30.1	0.0
Cycle Q Clear(g_c), s	7.1	42.3	15.2	10.1	44.0	2.6	17.0	11.3	0.9	9.5	30.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1774	539	367	1951	603	452	1528	460	309	936	417
V/C Ratio(X)	0.73	0.96	0.60	0.75	0.93	0.08	1.09	0.37	0.05	0.83	0.91	-0.12
Avail Cap(c_a), veh/h	292	1775	539	367	1951	603	452	1528	460	372	957	427
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.00
Uniform Delay (d), s/veh	58.7	41.5	16.3	56.4	38.4	25.6	56.5	35.9	17.7	58.2	46.4	0.0
Incr Delay (d2), s/veh	6.6	13.4	4.9	7.6	9.1	0.3	69.9	0.3	0.1	10.2	12.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	19.4	6.0	4.7	19.3	1.0	11.7	4.7	0.5	4.6	14.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.3	54.8	21.2	64.0	47.5	25.9	126.4	36.2	17.8	68.4	58.4	0.0
LnGrp LOS	E	D	C	E	D	C	F	D	B	E	E	
Approach Vol, veh/h		2215			2133			1080			1055	
Approach Delay, s/veh		50.8			49.1			77.1			63.7	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.1	50.5	21.6	38.8	14.6	55.0	16.9	43.5
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	13.0	* 45	17.0	35.0	11.0	47.2	14.0	38.0
Max Q Clear Time (g_c+I1), s	12.1	44.3	19.0	32.1	9.1	46.0	11.5	13.3
Green Ext Time (p_c), s	0.1	0.9	0.0	2.0	0.1	1.2	0.1	7.1

Intersection Summary	
HCM 7th Control Delay, s/veh	56.7
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1842	6	0	1818	146	0	0	17	0	0	37
Future Volume (vph)	0	1842	6	0	1818	146	0	0	17	0	0	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.989				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5085	0	0	5029	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5085	0	0	5029	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			2			12						
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	0	2246	7	0	2217	178	0	0	21	0	0	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2253	0	0	2395	0	0	0	21	0	0	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.5%	ICU Level of Service	A
Analysis Period (min)	15		

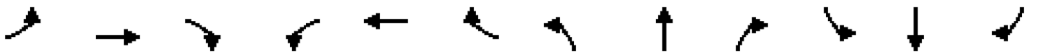
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1842	6	0	1818	146	0	0	17	0	0	37
Future Vol, veh/h	0	1842	6	0	1818	146	0	0	17	0	0	37
Conflicting Peds, #/hr	0	0	2	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2246	7	0	2217	178	0	0	21	0	0	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1129	-	-	1210
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	170	0	0	150
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	170	-	-	148
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	29.14	39.54
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	170	-	-	-	-	148
HCM Lane V/C Ratio	0.122	-	-	-	-	0.304
HCM Control Delay (s/veh)	29.1	-	-	-	-	39.5
HCM Lane LOS	D	-	-	-	-	E
HCM 95th %tile Q(veh)	0.4	-	-	-	-	1.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1852	2	0	1689	0	0	0	12	0	0	276
Future Volume (vph)	0	1852	2	0	1689	0	0	0	12	0	0	276
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	0		0	0		0	0		100
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt									0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5085	0	0	5085	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5085	0	0	5085	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		366			681			1312			750	
Travel Time (s)		6.2			11.6			35.8			20.5	
Confl. Peds. (#/hr)						6						
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	0	2205	2	0	2011	0	0	0	14	0	0	329
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2207	0	0	2011	0	0	0	14	0	0	329
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.4%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	24

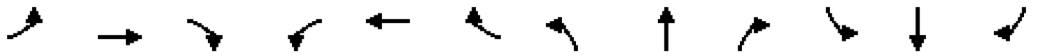
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1852	2	0	1689	0	0	0	12	0	0	276
Future Vol, veh/h	0	1852	2	0	1689	0	0	0	12	0	0	276
Conflicting Peds, #/hr	0	0	0	0	0	6	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2205	2	0	2011	0	0	0	14	0	0	329

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1104	-	-	1005
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	177	0	0	~ 206
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	177	-	-	~ 206
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	27.14	$ 331.85
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	177	-	-	-	206
HCM Lane V/C Ratio	0.081	-	-	-	1.597
HCM Control Delay (s/veh)	27.1	-	-	-	-$ 331.9
HCM Lane LOS	D	-	-	-	F
HCM 95th %tile Q(veh)	0.3	-	-	-	21.2

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	1839	12	35	1657	3	0	0	17	3	1	18
Future Volume (vph)	23	1839	12	35	1657	3	0	0	17	3	1	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.865			0.887	
Flt Protected	0.950			0.950							0.994	
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1611	0	0	1642	0
Flt Permitted	0.950			0.950							0.994	
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1611	0	0	1642	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			1			3						
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
Adj. Flow (vph)	25	1999	13	38	1801	3	0	0	18	3	1	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	2012	0	38	1804	0	0	18	0	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	3.2

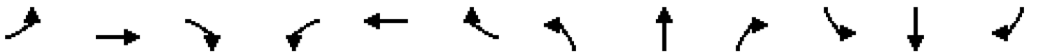
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	1839	12	35	1657	3	0	0	17	3	1	18
Future Vol, veh/h	23	1839	12	35	1657	3	0	0	17	3	1	18
Conflicting Peds, #/hr	0	0	1	0	0	3	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	1999	13	38	1801	3	0	0	18	3	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1807	0	0	2013	0	0	2854	3940	1007	2731	3945	905
Stage 1	-	-	-	-	-	-	2056	2056	-	1882	1882	-
Stage 2	-	-	-	-	-	-	797	1883	-	850	2063	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	156	-	-	123	-	-	18	3	205	22	3	240
Stage 1	-	-	-	-	-	-	35	97	-	47	118	-
Stage 2	-	-	-	-	-	-	314	118	-	291	96	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	156	-	-	123	-	-	5	2	205	11	2	239
Mov Cap-2 Maneuver	-	-	-	-	-	-	5	2	-	11	2	-
Stage 1	-	-	-	-	-	-	29	81	-	32	82	-
Stage 2	-	-	-	-	-	-	197	81	-	223	80	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.97	24.29	$ 400.35
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	205	156	-	-	123	-	-	25
HCM Lane V/C Ratio	0.09	0.16	-	-	0.309	-	-	0.976
HCM Control Delay (s/veh)	24.3	32.4	-	-	46.8	-	-	$ 400.4
HCM Lane LOS	C	D	-	-	E	-	-	F
HCM 95th %tile Q(veh)	0.3	0.6	-	-	1.2	-	-	3

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

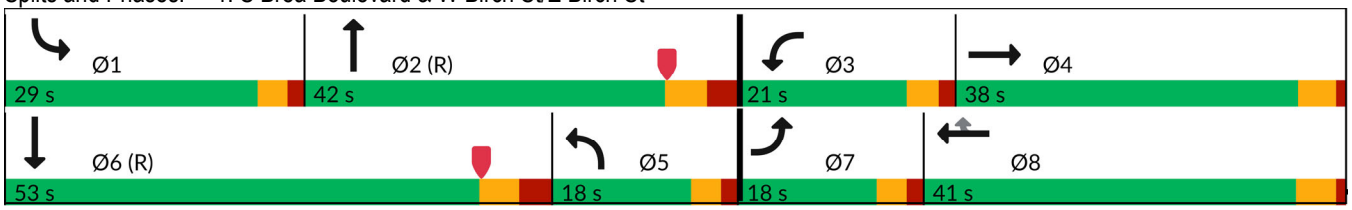


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	75	32	187	88	222	44	300	211	237	376	71
Future Volume (vph)	49	75	32	187	88	222	44	300	211	237	376	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.99			0.99	
Frt		0.955				0.850		0.938			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1764	0	3433	1863	1583	1770	4707	0	3433	4937	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1764	0	3433	1863	1554	1770	4707	0	3433	4937	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16				247		134			33	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			14			6			10			3
Confl. Bikes (#/hr)									4			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	54	83	36	208	98	247	49	333	234	263	418	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	119	0	208	98	247	49	567	0	263	497	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	18.0	38.0		21.0	41.0	41.0	18.0	42.0		29.0	53.0	
Total Split (%)	13.8%	29.2%		16.2%	31.5%	31.5%	13.8%	32.3%		22.3%	40.8%	
Maximum Green (s)	13.5	33.4		16.5	36.1	36.1	13.5	35.1		24.5	46.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		7			3	3		0			0	
Act Effct Green (s)	9.2	15.2		12.2	20.3	20.3	12.4	67.8		14.3	72.2	
Actuated g/C Ratio	0.07	0.12		0.09	0.16	0.16	0.10	0.52		0.11	0.56	
v/c Ratio	0.43	0.54		0.65	0.34	0.55	0.29	0.23		0.70	0.18	
Control Delay (s/veh)	68.2	53.6		66.0	50.4	9.6	74.4	31.8		65.6	16.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	68.2	53.6		66.0	50.4	9.6	74.4	31.8		65.6	16.3	
LOS	E	D		E	D	A	E	C		E	B	
Approach Delay (s/veh)		58.2			38.1			35.2			33.4	
Approach LOS		E			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 71 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 37.2		Intersection LOS: D	
Intersection Capacity Utilization 56.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St



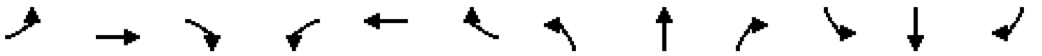
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	75	32	187	88	222	44	300	211	237	376	71
Future Volume (veh/h)	49	75	32	187	88	222	44	300	211	237	376	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	83	24	208	98	-22	49	333	188	263	418	76
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	158	46	263	257	218	493	1894	866	322	1540	272
Arrive On Green	0.05	0.11	0.11	0.08	0.14	0.00	0.55	1.00	1.00	0.09	0.35	0.35
Sat Flow, veh/h	1781	1381	399	3456	1870	1585	1781	3404	1555	3456	4344	766
Grp Volume(v), veh/h	54	0	107	208	98	-22	49	333	188	263	325	169
Grp Sat Flow(s),veh/h/ln	1781	0	1780	1728	1870	1585	1781	1702	1555	1728	1702	1706
Q Serve(g_s), s	3.8	0.0	7.4	7.7	6.2	0.0	1.7	0.0	0.0	9.7	8.8	9.2
Cycle Q Clear(g_c), s	3.8	0.0	7.4	7.7	6.2	0.0	1.7	0.0	0.0	9.7	8.8	9.2
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	94	0	204	263	257	218	493	1894	866	322	1207	605
V/C Ratio(X)	0.57	0.00	0.53	0.79	0.38	-0.10	0.10	0.18	0.22	0.82	0.27	0.28
Avail Cap(c_a), veh/h	185	0	457	439	519	440	493	1894	866	651	1207	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.1	0.0	54.3	59.0	51.0	0.0	21.4	0.0	0.0	57.9	29.9	30.1
Incr Delay (d2), s/veh	2.1	0.0	0.8	2.0	0.3	0.0	0.0	0.2	0.5	2.0	0.5	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	3.4	3.4	2.9	0.0	0.7	0.0	0.1	4.3	3.7	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.2	0.0	55.0	61.1	51.4	0.0	21.4	0.2	0.5	59.8	30.5	31.2
LnGrp LOS	E		E	E	D		C	A	A	E	C	C
Approach Vol, veh/h		161			284			570			757	
Approach Delay, s/veh		57.4			62.5			2.1			40.8	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	79.3	14.4	19.8	42.8	53.0	11.4	22.8
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	24.5	35.1	16.5	* 33	13.5	* 46	13.5	36.1
Max Q Clear Time (g_c+I1), s	11.7	2.0	9.7	9.4	3.7	11.2	5.8	8.2
Green Ext Time (p_c), s	0.4	2.3	0.2	0.4	0.0	2.1	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	33.4
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	477	43	25	483	9	10	9	36	0	0	14
Future Volume (vph)	2	477	43	25	483	9	10	9	36	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.997			0.910				0.865
Flt Protected				0.950				0.991				
Satd. Flow (prot)	0	3539	1583	1770	3529	0	0	1680	0	0	0	1611
Flt Permitted				0.950				0.991				
Satd. Flow (perm)	0	3539	1583	1770	3529	0	0	1680	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			10			5						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	2	497	45	26	503	9	10	9	38	0	0	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	499	45	26	512	0	0	57	0	0	0	15
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.8%		ICU Level of Service A	
Analysis Period (min) 15			

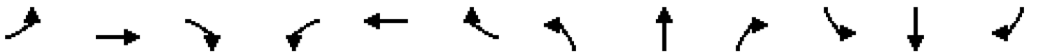
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	477	43	25	483	9	10	9	36	0	0	14
Future Vol, veh/h	2	477	43	25	483	9	10	9	36	0	0	14
Conflicting Peds, #/hr	0	0	10	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	497	45	26	503	9	10	9	38	0	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	518	0	0	552	0	0	815	1081	258	-	-	261
Stage 1	-	-	-	-	-	-	511	511	-	-	-	-
Stage 2	-	-	-	-	-	-	304	570	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	1045	-	-	1014	-	-	269	217	740	0	0	737
Stage 1	-	-	-	-	-	-	514	535	-	0	0	-
Stage 2	-	-	-	-	-	-	681	504	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1040	-	-	1005	-	-	254	207	733	-	-	734
Mov Cap-2 Maneuver	-	-	-	-	-	-	254	207	-	-	-	-
Stage 1	-	-	-	-	-	-	507	529	-	-	-	-
Stage 2	-	-	-	-	-	-	650	488	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.42	15	10
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	417	1040	-	-	1005	-	-	734
HCM Lane V/C Ratio	0.137	0.002	-	-	0.026	-	-	0.02
HCM Control Delay (s/veh)	15	8.5	-	-	8.7	-	-	10
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	0.1

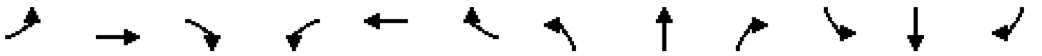


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	428	66	76	494	11	0	0	0	26	3	13
Future Volume (vph)	14	428	66	76	494	11	0	0	0	26	3	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00						1.00	
Frt		0.980			0.997						0.959	
Flt Protected	0.950			0.950							0.970	
Satd. Flow (prot)	1770	3451	0	1770	3526	0	0	0	0	0	1726	0
Flt Permitted	0.462			0.467							0.970	
Satd. Flow (perm)	861	3451	0	870	3526	0	0	0	0	0	1726	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			4						13	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		364			329			750			397	
Travel Time (s)		7.1			6.4			20.5			10.8	
Confl. Peds. (#/hr)			13			5			85			1
Confl. Bikes (#/hr)						4			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	14	437	67	78	504	11	0	0	0	27	3	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	504	0	78	515	0	0	0	0	0	43	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2					1	2	
Detector Template	Left	Thru		Left	Thru					Left	Thru	
Leading Detector (ft)	20	100		20	100					20	100	
Trailing Detector (ft)	0	0		0	0					0	0	
Detector 1 Position(ft)	0	0		0	0					0	0	
Detector 1 Size(ft)	20	6		20	6					20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA					Perm	NA	
Protected Phases		2			6						4	
Permitted Phases	2			6						4		
Detector Phase	2	2		6	6					4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0					2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9					35.6	35.6	
Total Split (s)	26.9	26.9		26.9	26.9					35.6	35.6	
Total Split (%)	43.0%	43.0%		43.0%	43.0%					57.0%	57.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0					31.0	31.0	
Yellow Time (s)	3.9	3.9		3.9	3.9					3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0					1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0						0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9						4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0					2.0	2.0	
Recall Mode	Max	Max		Max	Max					None	None	
Walk Time (s)	7.0	7.0		7.0	7.0					7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0					24.0	24.0	
Pedestrian Calls (#/hr)	6	6		2	2					1	1	
Act Effct Green (s)	41.3	41.3		41.3	41.3						8.9	
Actuated g/C Ratio	0.83	0.83		0.83	0.83						0.18	
v/c Ratio	0.02	0.18		0.11	0.18						0.14	
Control Delay (s/veh)	7.1	4.8		6.8	4.9						13.2	
Queue Delay	0.0	0.0		0.0	0.0						0.0	
Total Delay (s/veh)	7.1	4.8		6.8	4.9						13.2	
LOS	A	A		A	A						B	
Approach Delay (s/veh)		4.8			5.2						13.2	
Approach LOS		A			A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 62.5			
Actuated Cycle Length: 49.9			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.18			
Intersection Signal Delay (s/veh): 5.3		Intersection LOS: A	
Intersection Capacity Utilization 50.9%		ICU Level of Service A	
Analysis Period (min) 15			

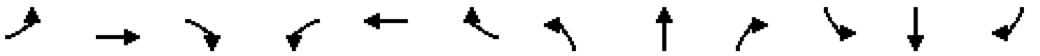
Splits and Phases: 3: S Flower Ave & E Birch St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	428	66	76	494	11	0	0	0	26	3	13
Future Volume (veh/h)	14	428	66	76	494	11	0	0	0	26	3	13
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	14	437	64	78	504	10				27	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2				2	2	2
Cap, veh/h	780	2119	308	785	2428	48				37	4	1
Arrive On Green	0.68	0.68	0.68	0.68	0.68	0.68				0.02	0.02	0.02
Sat Flow, veh/h	885	3108	452	893	3562	71				1552	172	57
Grp Volume(v), veh/h	14	249	252	78	251	263				31	0	0
Grp Sat Flow(s),veh/h/ln	885	1777	1784	893	1777	1855				1782	0	0
Q Serve(g_s), s	0.2	1.7	1.7	1.1	1.7	1.7				0.6	0.0	0.0
Cycle Q Clear(g_c), s	1.9	1.7	1.7	2.8	1.7	1.7				0.6	0.0	0.0
Prop In Lane	1.00		0.25	1.00		0.04				0.87		0.03
Lane Grp Cap(c), veh/h	780	1211	1216	785	1211	1265				43	0	0
V/C Ratio(X)	0.02	0.21	0.21	0.10	0.21	0.21				0.72	0.00	0.00
Avail Cap(c_a), veh/h	780	1211	1216	785	1211	1265				1712	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	2.3	1.9	1.9	2.4	1.9	1.9				15.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.3	0.4	0.4				8.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.1	0.1	0.1				0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	2.3	2.3	2.3	2.7	2.3	2.3				23.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A				C		
Approach Vol, veh/h		515			592						31	
Approach Delay, s/veh		2.3			2.3						23.9	
Approach LOS		A			A						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		26.9		5.4		26.9						
Change Period (Y+Rc), s		4.9		4.6		4.9						
Max Green Setting (Gmax), s		22.0		31.0		22.0						
Max Q Clear Time (g_c+I1), s		3.9		2.6		4.8						
Green Ext Time (p_c), s		1.0		0.1		1.1						

Intersection Summary												
HCM 7th Control Delay, s/veh			2.9									
HCM 7th LOS			A									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	448	2	3	580	0	0	1	4	0	0	2
Future Volume (vph)	1	448	2	3	580	0	0	1	4	0	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.887			0.865	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	3536	0	1770	3539	0	0	1652	0	0	1611	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3536	0	1770	3539	0	0	1652	0	0	1611	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			26			12						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	1	546	2	4	707	0	0	1	5	0	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	548	0	4	707	0	0	6	0	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.0%		ICU Level of Service A	
Analysis Period (min) 15			

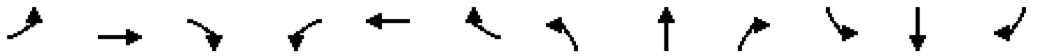
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	448	2	3	580	0	0	1	4	0	0	2
Future Vol, veh/h	1	448	2	3	580	0	0	1	4	0	0	2
Conflicting Peds, #/hr	0	0	26	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	546	2	4	707	0	0	1	5	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	719	0	0	575	0	0	937	1303	300	1003	1304	366
Stage 1	-	-	-	-	-	-	576	576	-	727	727	-
Stage 2	-	-	-	-	-	-	361	727	-	276	577	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	878	-	-	994	-	-	219	159	696	196	159	631
Stage 1	-	-	-	-	-	-	470	500	-	382	427	-
Stage 2	-	-	-	-	-	-	630	427	-	707	500	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	868	-	-	970	-	-	212	153	678	190	153	624
Mov Cap-2 Maneuver	-	-	-	-	-	-	212	153	-	190	153	-
Stage 1	-	-	-	-	-	-	457	487	-	376	421	-
Stage 2	-	-	-	-	-	-	625	421	-	699	487	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.02	0.04	14.09	10.79
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	402	868	-	-	970	-	-	624
HCM Lane V/C Ratio	0.015	0.001	-	-	0.004	-	-	0.004
HCM Control Delay (s/veh)	14.1	9.2	-	-	8.7	-	-	10.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

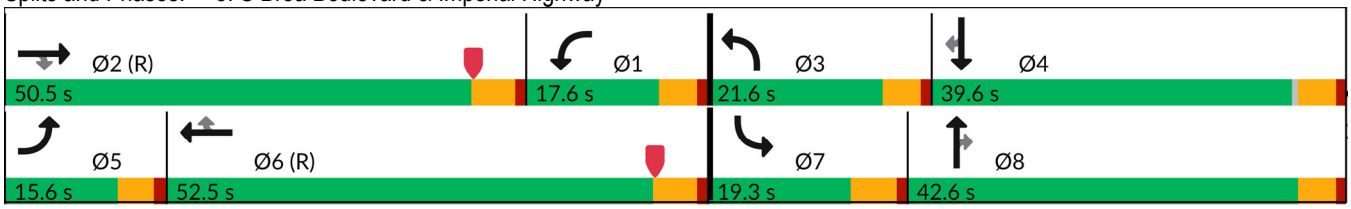


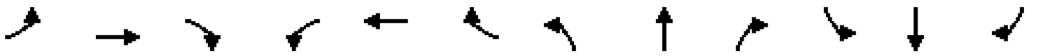
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	1106	242	290	1075	94	297	362	198	137	334	114
Future Volume (vph)	113	1106	242	290	1075	94	297	362	198	137	334	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.98			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1545	3433	5085	1556	3433	5085	1536	3433	3539	1542
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			188			97			235			147
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			11			5			14			8
Confl. Bikes (#/hr)			1						5			7
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	135	1317	288	345	1280	112	354	431	236	163	398	136
Shared Lane Traffic (%)												
Lane Group Flow (vph)	135	1317	288	345	1280	112	354	431	236	163	398	136
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	15.6	50.5	50.5	17.6	52.5	52.5	21.6	42.6	42.6	19.3	39.6	39.6
Total Split (%)	12.0%	38.8%	38.8%	13.5%	40.4%	40.4%	16.6%	32.8%	32.8%	14.8%	30.5%	30.5%
Maximum Green (s)	11.0	45.2	45.2	13.0	47.2	47.2	17.0	38.0	38.0	14.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		5	5		2	2		7	7		4	4
Act Effct Green (s)	10.3	58.5	58.5	13.0	61.1	61.1	16.0	27.5	27.5	11.2	23.4	23.4
Actuated g/C Ratio	0.08	0.45	0.45	0.10	0.47	0.47	0.12	0.21	0.21	0.09	0.18	0.18
v/c Ratio	0.49	0.58	0.36	1.01	0.54	0.14	0.84	0.40	0.46	0.55	0.62	0.34
Control Delay (s/veh)	63.8	29.0	10.5	107.9	26.7	6.6	73.3	44.4	7.7	59.1	61.5	19.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.8	29.0	10.5	107.9	26.7	6.6	73.3	44.4	7.7	59.1	61.5	19.6
LOS	E	C	B	F	C	A	E	D	A	E	E	B
Approach Delay (s/veh)		28.7			41.5			45.9			52.8	
Approach LOS		C			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay (s/veh): 39.6		Intersection LOS: D	
Intersection Capacity Utilization 80.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway





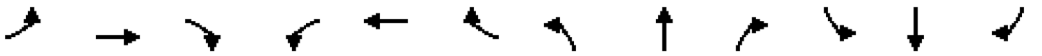
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	1106	242	290	1075	94	297	362	198	137	334	114
Future Volume (veh/h)	113	1106	242	290	1075	94	297	362	198	137	334	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	1317	142	345	1280	52	354	431	93	163	398	16
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	264	1671	507	794	2482	768	406	1065	318	265	616	265
Arrive On Green	0.08	0.33	0.33	0.23	0.49	0.49	0.12	0.21	0.21	0.03	0.06	0.06
Sat Flow, veh/h	3456	5106	1549	3456	5106	1580	3456	5106	1527	3456	3554	1531
Grp Volume(v), veh/h	135	1317	142	345	1280	52	354	431	93	163	398	16
Grp Sat Flow(s),veh/h/ln	1728	1702	1549	1728	1702	1580	1728	1702	1527	1728	1777	1531
Q Serve(g_s), s	4.9	30.4	6.3	11.1	22.3	2.3	13.1	9.5	4.1	6.1	14.3	1.3
Cycle Q Clear(g_c), s	4.9	30.4	6.3	11.1	22.3	2.3	13.1	9.5	4.1	6.1	14.3	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	1671	507	794	2482	768	406	1065	318	265	616	265
V/C Ratio(X)	0.51	0.79	0.28	0.43	0.52	0.07	0.87	0.40	0.29	0.61	0.65	0.06
Avail Cap(c_a), veh/h	292	1775	539	794	2482	768	452	1493	446	372	957	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	57.7	39.6	16.4	42.8	22.9	17.7	56.4	44.5	16.3	61.5	57.4	51.3
Incr Delay (d2), s/veh	0.6	3.9	1.4	0.1	0.8	0.2	14.6	0.5	1.1	0.8	2.3	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	13.0	3.4	4.7	8.9	0.9	6.5	4.0	2.5	2.8	7.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.3	43.5	17.8	43.0	23.7	17.9	71.0	45.0	17.4	62.3	59.7	51.5
LnGrp LOS	E	D	B	D	C	B	E	D	B	E	E	D
Approach Vol, veh/h		1594			1677			878			577	
Approach Delay, s/veh		42.5			27.5			52.6			60.2	
Approach LOS		D			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	35.2	47.8	19.9	27.1	14.5	68.5	15.3	31.7
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	13.0	* 45	17.0	35.0	11.0	47.2	14.0	38.0
Max Q Clear Time (g_c+I1), s	13.1	32.4	15.1	16.3	6.9	24.3	8.1	11.5
Green Ext Time (p_c), s	0.0	10.1	0.2	4.3	0.1	15.3	0.1	6.1

Intersection Summary	
HCM 7th Control Delay, s/veh	41.2
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1501	7	0	1454	48	0	0	23	0	0	23
Future Volume (vph)	0	1501	7	0	1454	48	0	0	23	0	0	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.995				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5080	0	0	5060	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5080	0	0	5060	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			2			12						
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	0	1830	9	0	1773	59	0	0	28	0	0	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1839	0	0	1832	0	0	0	28	0	0	28
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.2%		ICU Level of Service A	
Analysis Period (min) 15			

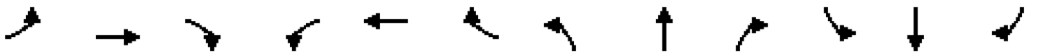
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1501	7	0	1454	48	0	0	23	0	0	23
Future Vol, veh/h	0	1501	7	0	1454	48	0	0	23	0	0	23
Conflicting Peds, #/hr	0	0	2	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1830	9	0	1773	59	0	0	28	0	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	922	-	-	928
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	234	0	0	232
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	233	-	-	229
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	22.51	22.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	233	-	-	-	-	229
HCM Lane V/C Ratio	0.12	-	-	-	-	0.122
HCM Control Delay (s/veh)	22.5	-	-	-	-	22.9
HCM Lane LOS	C	-	-	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1520	1	0	1356	0	0	0	4	0	0	145
Future Volume (vph)	0	1520	1	0	1356	0	0	0	4	0	0	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	0		0	0		0	0		100
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt									0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5085	0	0	5085	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5085	0	0	5085	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		366			681			1312			750	
Travel Time (s)		6.2			11.6			35.8			20.5	
Confl. Peds. (#/hr)						6						
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	0	1810	1	0	1614	0	0	0	5	0	0	173
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1811	0	0	1614	0	0	0	5	0	0	173
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		

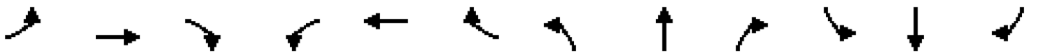
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1520	1	0	1356	0	0	0	4	0	0	145
Future Vol, veh/h	0	1520	1	0	1356	0	0	0	4	0	0	145
Conflicting Peds, #/hr	0	0	0	0	0	6	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1810	1	0	1614	0	0	0	5	0	0	173

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	905	-	-	807
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	240	0	0	278
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	240	-	-	278
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	20.32	36.91
HCM LOS			C	E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	240	-	-	-	278
HCM Lane V/C Ratio	0.02	-	-	-	0.62
HCM Control Delay (s/veh)	20.3	-	-	-	36.9
HCM Lane LOS	C	-	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	3.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	1503	10	21	1339	3	2	0	8	3	0	5
Future Volume (vph)	17	1503	10	21	1339	3	2	0	8	3	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.890			0.916	
Flt Protected	0.950			0.950				0.991			0.982	
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1643	0	0	1676	0
Flt Permitted	0.950			0.950				0.991			0.982	
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1643	0	0	1676	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			1			3						
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
Adj. Flow (vph)	18	1634	11	23	1455	3	2	0	9	3	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	1645	0	23	1458	0	0	11	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.3%		ICU Level of Service A	
Analysis Period (min) 15			

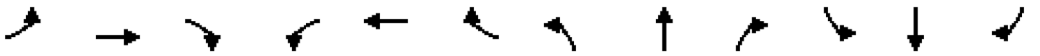
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	1503	10	21	1339	3	2	0	8	3	0	5
Future Vol, veh/h	17	1503	10	21	1339	3	2	0	8	3	0	5
Conflicting Peds, #/hr	0	0	1	0	0	3	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	1634	11	23	1455	3	2	0	9	3	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1462	0	0	1646	0	0	2305	3184	823	2196	3188	732
Stage 1	-	-	-	-	-	-	1677	1677	-	1506	1506	-
Stage 2	-	-	-	-	-	-	628	1507	-	690	1683	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	233	-	-	189	-	-	41	10	272	48	10	312
Stage 1	-	-	-	-	-	-	66	150	-	88	182	-
Stage 2	-	-	-	-	-	-	398	182	-	365	149	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	232	-	-	188	-	-	32	8	271	37	8	311
Mov Cap-2 Maneuver	-	-	-	-	-	-	32	8	-	37	8	-
Stage 1	-	-	-	-	-	-	61	138	-	77	160	-
Stage 2	-	-	-	-	-	-	344	159	-	325	137	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.24	0.41	41.38	53.38
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	110	232	-	-	188	-	-	83
HCM Lane V/C Ratio	0.099	0.08	-	-	0.121	-	-	0.105
HCM Control Delay (s/veh)	41.4	21.8	-	-	26.7	-	-	53.4
HCM Lane LOS	E	C	-	-	D	-	-	F
HCM 95th %tile Q(veh)	0.3	0.3	-	-	0.4	-	-	0.3

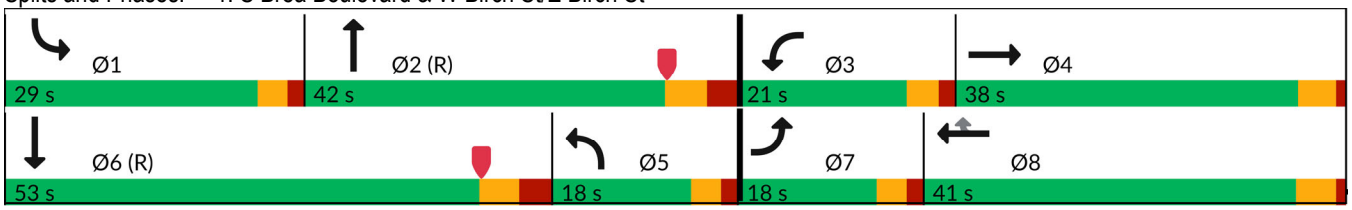


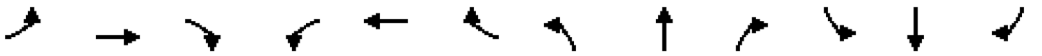
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	79	32	243	102	343	40	524	231	302	530	49
Future Volume (vph)	56	79	32	243	102	343	40	524	231	302	530	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.99			1.00	
Frt		0.956				0.850		0.954			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1766	0	3433	1863	1583	1770	4804	0	3433	5005	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1766	0	3433	1863	1554	1770	4804	0	3433	5005	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				381		84			13	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			14			6			10			3
Confl. Bikes (#/hr)									4			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	62	88	36	270	113	381	44	582	257	336	589	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	62	124	0	270	113	381	44	839	0	336	643	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	18.0	38.0		21.0	41.0	41.0	18.0	42.0		29.0	53.0	
Total Split (%)	13.8%	29.2%		16.2%	31.5%	31.5%	13.8%	32.3%		22.3%	40.8%	
Maximum Green (s)	13.5	33.4		16.5	36.1	36.1	13.5	35.1		24.5	46.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		7			3	3		0			0	
Act Effct Green (s)	9.6	15.5		14.1	22.1	22.1	12.4	62.8		17.1	70.0	
Actuated g/C Ratio	0.07	0.12		0.11	0.17	0.17	0.10	0.48		0.13	0.54	
v/c Ratio	0.47	0.56		0.73	0.36	0.66	0.26	0.35		0.75	0.24	
Control Delay (s/veh)	69.3	54.6		67.6	49.6	9.7	93.6	46.9		64.7	18.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	69.3	54.6		67.6	49.6	9.7	93.6	46.9		64.7	18.6	
LOS	E	D		E	D	A	F	D		E	B	
Approach Delay (s/veh)		59.5			36.1			49.2			34.4	
Approach LOS		E			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 71 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 41.2		Intersection LOS: D	
Intersection Capacity Utilization 62.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





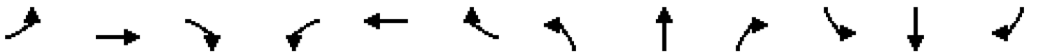
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	79	32	243	102	343	40	524	231	302	530	49
Future Volume (veh/h)	56	79	32	243	102	343	40	524	231	302	530	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	88	24	270	113	112	44	582	211	336	589	51
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	163	45	324	291	243	457	1908	673	395	1694	145
Arrive On Green	0.05	0.12	0.12	0.09	0.16	0.16	0.51	1.00	1.00	0.11	0.35	0.35
Sat Flow, veh/h	1781	1402	382	3456	1870	1567	1781	3703	1306	3456	4777	409
Grp Volume(v), veh/h	62	0	112	270	113	112	44	534	259	336	418	222
Grp Sat Flow(s),veh/h/ln	1781	0	1785	1728	1870	1567	1781	1702	1605	1728	1702	1783
Q Serve(g_s), s	4.4	0.0	7.7	10.0	7.1	8.5	1.6	0.0	0.0	12.4	11.7	11.9
Cycle Q Clear(g_c), s	4.4	0.0	7.7	10.0	7.1	8.5	1.6	0.0	0.0	12.4	11.7	11.9
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.81	1.00		0.23
Lane Grp Cap(c), veh/h	98	0	208	324	291	243	457	1754	827	395	1207	632
V/C Ratio(X)	0.63	0.00	0.54	0.83	0.39	0.46	0.10	0.30	0.31	0.85	0.35	0.35
Avail Cap(c_a), veh/h	185	0	459	439	519	435	457	1754	827	651	1207	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.1	0.0	54.1	57.9	49.3	49.9	23.9	0.0	0.0	56.5	30.9	30.9
Incr Delay (d2), s/veh	2.5	0.0	0.8	7.3	0.3	0.5	0.0	0.4	0.9	2.7	0.8	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	3.5	4.7	3.3	3.3	0.7	0.1	0.2	5.5	4.9	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.6	0.0	54.9	65.2	49.7	50.4	24.0	0.4	0.9	59.2	31.6	32.5
LnGrp LOS	E		D	E	D	D	C	A	A	E	C	C
Approach Vol, veh/h		174			495			837			976	
Approach Delay, s/veh		57.7			58.3			1.8			41.3	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.4	73.9	16.7	20.0	40.2	53.0	11.6	25.1
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	24.5	35.1	16.5	* 33	13.5	* 46	13.5	36.1
Max Q Clear Time (g_c+I1), s	14.4	2.0	12.0	9.7	3.6	13.9	6.4	10.5
Green Ext Time (p_c), s	0.5	3.7	0.2	0.4	0.0	2.7	0.0	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	32.5
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	614	30	9	659	10	9	46	68	0	0	16
Future Volume (vph)	2	614	30	9	659	10	9	46	68	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.925				0.865
Flt Protected				0.950				0.996				
Satd. Flow (prot)	0	3539	1583	1770	3532	0	0	1716	0	0	0	1611
Flt Permitted				0.950				0.996				
Satd. Flow (perm)	0	3539	1583	1770	3532	0	0	1716	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			10			5						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	2	640	31	9	686	10	9	48	71	0	0	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	642	31	9	696	0	0	128	0	0	0	17
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.0%		ICU Level of Service A	
Analysis Period (min) 15			

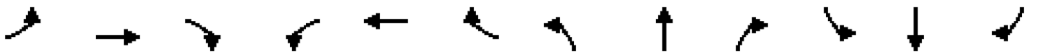
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	614	30	9	659	10	9	46	68	0	0	16
Future Vol, veh/h	2	614	30	9	659	10	9	46	68	0	0	16
Conflicting Peds, #/hr	0	0	10	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	640	31	9	686	10	9	48	71	0	0	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	702	0	0	681	0	0	1016	1374	330	-	-	353
Stage 1	-	-	-	-	-	-	654	654	-	-	-	-
Stage 2	-	-	-	-	-	-	362	721	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	891	-	-	908	-	-	192	144	666	0	0	643
Stage 1	-	-	-	-	-	-	422	461	-	0	0	-
Stage 2	-	-	-	-	-	-	629	430	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	887	-	-	899	-	-	183	140	660	-	-	640
Mov Cap-2 Maneuver	-	-	-	-	-	-	183	140	-	-	-	-
Stage 1	-	-	-	-	-	-	417	456	-	-	-	-
Stage 2	-	-	-	-	-	-	606	424	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.12	32.32	10.78
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	256	887	-	-	899	-	-	640
HCM Lane V/C Ratio	0.5	0.002	-	-	0.01	-	-	0.026
HCM Control Delay (s/veh)	32.3	9.1	-	-	9	-	-	10.8
HCM Lane LOS	D	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	2.6	0	-	-	0	-	-	0.1

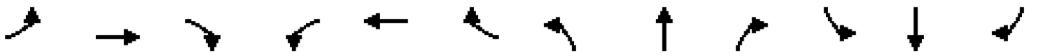


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	573	78	75	642	23	0	0	0	45	10	37
Future Volume (vph)	34	573	78	75	642	23	0	0	0	45	10	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00						0.99	
Frt		0.982			0.995						0.945	
Flt Protected	0.950			0.950							0.976	
Satd. Flow (prot)	1770	3460	0	1770	3518	0	0	0	0	0	1709	0
Flt Permitted	0.394			0.399							0.976	
Satd. Flow (perm)	734	3460	0	743	3518	0	0	0	0	0	1709	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			6						38	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		364			329			750			397	
Travel Time (s)		7.1			6.4			20.5			10.8	
Confl. Peds. (#/hr)			13			5			85			1
Confl. Bikes (#/hr)						4			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	35	585	80	77	655	23	0	0	0	46	10	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	665	0	77	678	0	0	0	0	0	94	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2					1	2	
Detector Template	Left	Thru		Left	Thru					Left	Thru	
Leading Detector (ft)	20	100		20	100					20	100	
Trailing Detector (ft)	0	0		0	0					0	0	
Detector 1 Position(ft)	0	0		0	0					0	0	
Detector 1 Size(ft)	20	6		20	6					20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA					Perm	NA	
Protected Phases		2			6						4	
Permitted Phases	2			6						4		
Detector Phase	2	2		6	6					4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0					2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9					35.6	35.6	
Total Split (s)	26.9	26.9		26.9	26.9					35.6	35.6	
Total Split (%)	43.0%	43.0%		43.0%	43.0%					57.0%	57.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0					31.0	31.0	
Yellow Time (s)	3.9	3.9		3.9	3.9					3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0					1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0						0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9						4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0					2.0	2.0	
Recall Mode	Max	Max		Max	Max					None	None	
Walk Time (s)	7.0	7.0		7.0	7.0					7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0					24.0	24.0	
Pedestrian Calls (#/hr)	6	6		2	2					1	1	
Act Effct Green (s)	34.9	34.9		34.9	34.9						9.5	
Actuated g/C Ratio	0.73	0.73		0.73	0.73						0.20	
v/c Ratio	0.07	0.26		0.14	0.26						0.25	
Control Delay (s/veh)	8.8	6.6		9.1	6.8						10.6	
Queue Delay	0.0	0.0		0.0	0.0						0.0	
Total Delay (s/veh)	8.8	6.6		9.1	6.8						10.6	
LOS	A	A		A	A						B	
Approach Delay (s/veh)		6.7			7.0						10.6	
Approach LOS		A			A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 62.5			
Actuated Cycle Length: 47.7			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay (s/veh): 7.1		Intersection LOS: A	
Intersection Capacity Utilization 51.3%		ICU Level of Service A	
Analysis Period (min) 15			

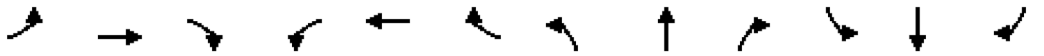
Splits and Phases: 3: S Flower Ave & E Birch St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	573	78	75	642	23	0	0	0	45	10	37
Future Volume (veh/h)	34	573	78	75	642	23	0	0	0	45	10	37
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	35	585	77	77	655	22				46	10	26
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2				2	2	2
Cap, veh/h	650	2058	270	655	2287	77				63	14	36
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.65				0.07	0.07	0.07
Sat Flow, veh/h	761	3154	414	770	3505	118				965	210	546
Grp Volume(v), veh/h	35	329	333	77	332	345				82	0	0
Grp Sat Flow(s),veh/h/ln	761	1777	1791	770	1777	1845				1721	0	0
Q Serve(g_s), s	0.7	2.7	2.7	1.6	2.7	2.7				1.6	0.0	0.0
Cycle Q Clear(g_c), s	3.4	2.7	2.7	4.3	2.7	2.7				1.6	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.06				0.56		0.32
Lane Grp Cap(c), veh/h	650	1160	1169	655	1160	1205				113	0	0
V/C Ratio(X)	0.05	0.28	0.28	0.12	0.29	0.29				0.73	0.00	0.00
Avail Cap(c_a), veh/h	650	1160	1169	655	1160	1205				1583	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.2	2.5	2.5	3.4	2.5	2.5				15.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.6	0.6	0.4	0.6	0.6				3.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.3	0.3	0.1	0.3	0.3				0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.4	3.1	3.1	3.8	3.1	3.1				18.8	0.0	0.0
LnGrp LOS	A	A	A	A	A	A				B		
Approach Vol, veh/h		697			754						82	
Approach Delay, s/veh		3.1			3.2						18.8	
Approach LOS		A			A						B	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		26.9		6.8		26.9						
Change Period (Y+Rc), s		4.9		4.6		4.9						
Max Green Setting (Gmax), s		22.0		31.0		22.0						
Max Q Clear Time (g_c+I1), s		5.4		3.6		6.3						
Green Ext Time (p_c), s		1.4		0.3		1.5						

Intersection Summary												
HCM 7th Control Delay, s/veh			4.0									
HCM 7th LOS			A									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	593	21	16	738	8	0	0	1	2	0	3
Future Volume (vph)	3	593	21	16	738	8	0	0	1	2	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995			0.998			0.865			0.910	
Flt Protected	0.950			0.950							0.984	
Satd. Flow (prot)	1770	3522	0	1770	3532	0	0	1611	0	0	1668	0
Flt Permitted	0.950			0.950							0.984	
Satd. Flow (perm)	1770	3522	0	1770	3532	0	0	1611	0	0	1668	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			26			12						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	4	723	26	20	900	10	0	0	1	2	0	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	749	0	20	910	0	0	1	0	0	6	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.7%		ICU Level of Service A	
Analysis Period (min) 15			

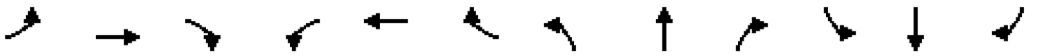
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	593	21	16	738	8	0	0	1	2	0	3
Future Vol, veh/h	3	593	21	16	738	8	0	0	1	2	0	3
Conflicting Peds, #/hr	0	0	26	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	723	26	20	900	10	0	0	1	2	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	922	0	0	775	0	0	1258	1730	400	1325	1738	467
Stage 1	-	-	-	-	-	-	769	769	-	956	956	-
Stage 2	-	-	-	-	-	-	489	961	-	369	782	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	737	-	-	837	-	-	127	87	599	114	86	543
Stage 1	-	-	-	-	-	-	360	409	-	277	335	-
Stage 2	-	-	-	-	-	-	529	333	-	623	403	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	728	-	-	816	-	-	120	82	584	109	81	536
Mov Cap-2 Maneuver	-	-	-	-	-	-	120	82	-	109	81	-
Stage 1	-	-	-	-	-	-	349	396	-	268	323	-
Stage 2	-	-	-	-	-	-	513	321	-	619	391	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.05	0.2	11.17	22.76
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	584	728	-	-	816	-	-	209
HCM Lane V/C Ratio	0.002	0.005	-	-	0.024	-	-	0.029
HCM Control Delay (s/veh)	11.2	10	-	-	9.5	-	-	22.8
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0.1	-	-	0.1

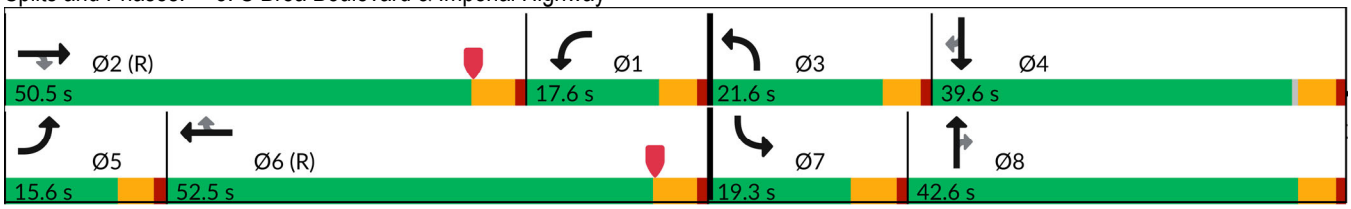


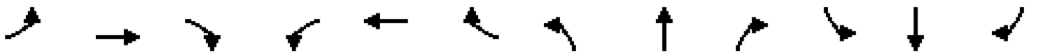
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	1193	379	344	1293	114	372	545	201	211	501	117
Future Volume (vph)	144	1193	379	344	1293	114	372	545	201	211	501	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.98			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1545	3433	5085	1556	3433	5085	1536	3433	3539	1542
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			272			97			213			147
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			11			5			14			8
Confl. Bikes (#/hr)			1						5			7
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	171	1420	451	410	1539	136	443	649	239	251	596	139
Shared Lane Traffic (%)												
Lane Group Flow (vph)	171	1420	451	410	1539	136	443	649	239	251	596	139
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	15.6	50.5	50.5	17.6	52.5	52.5	21.6	42.6	42.6	19.3	39.6	39.6
Total Split (%)	12.0%	38.8%	38.8%	13.5%	40.4%	40.4%	16.6%	32.8%	32.8%	14.8%	30.5%	30.5%
Maximum Green (s)	11.0	45.2	45.2	13.0	47.2	47.2	17.0	38.0	38.0	14.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		5	5		2	2		7	7		4	4
Act Effct Green (s)	10.6	51.7	51.7	13.0	54.2	54.2	17.0	32.7	32.7	12.8	29.2	29.2
Actuated g/C Ratio	0.08	0.40	0.40	0.10	0.42	0.42	0.13	0.25	0.25	0.10	0.22	0.22
v/c Ratio	0.61	0.70	0.58	1.20	0.73	0.19	0.99	0.51	0.44	0.74	0.75	0.30
Control Delay (s/veh)	67.7	35.7	15.4	161.9	35.0	9.7	96.0	43.0	9.5	65.1	62.9	15.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.7	35.7	15.4	161.9	35.0	9.7	96.0	43.0	9.5	65.1	62.9	15.3
LOS	E	D	B	F	C	A	F	D	A	E	E	B
Approach Delay (s/veh)		33.9			58.3			54.6			56.8	
Approach LOS		C			E			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay (s/veh): 49.6		Intersection LOS: D	
Intersection Capacity Utilization 84.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway





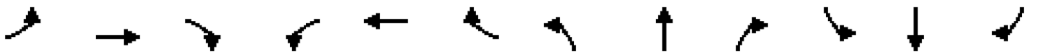
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	1193	379	344	1293	114	372	545	201	211	501	117
Future Volume (veh/h)	144	1193	379	344	1293	114	372	545	201	211	501	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	171	1420	305	410	1539	76	443	649	96	251	596	19
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	1725	524	541	2160	668	452	1326	398	305	790	342
Arrive On Green	0.08	0.34	0.34	0.16	0.42	0.42	0.13	0.26	0.26	0.06	0.15	0.15
Sat Flow, veh/h	3456	5106	1550	3456	5106	1579	3456	5106	1534	3456	3554	1538
Grp Volume(v), veh/h	171	1420	305	410	1539	76	443	649	96	251	596	19
Grp Sat Flow(s),veh/h/ln	1728	1702	1550	1728	1702	1579	1728	1702	1534	1728	1777	1538
Q Serve(g_s), s	6.2	33.2	14.5	14.8	32.4	3.8	16.6	14.0	4.4	9.3	20.9	1.4
Cycle Q Clear(g_c), s	6.2	33.2	14.5	14.8	32.4	3.8	16.6	14.0	4.4	9.3	20.9	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	1725	524	541	2160	668	452	1326	398	305	790	342
V/C Ratio(X)	0.64	0.82	0.58	0.76	0.71	0.11	0.98	0.49	0.24	0.82	0.75	0.06
Avail Cap(c_a), veh/h	292	1775	539	541	2160	668	452	1493	448	372	957	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	58.3	39.5	16.8	52.5	31.0	22.7	56.3	40.8	17.9	60.2	51.9	43.6
Incr Delay (d2), s/veh	2.9	4.6	4.7	5.5	2.0	0.3	37.0	0.6	0.7	9.2	3.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	14.2	5.7	6.7	13.2	1.5	9.5	5.9	2.4	4.6	10.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.1	44.1	21.4	58.0	33.0	23.1	93.3	41.4	18.5	69.4	55.6	43.7
LnGrp LOS	E	D	C	E	C	C	F	D	B	E	E	D
Approach Vol, veh/h		1896			2025			1188			866	
Approach Delay, s/veh		42.0			37.7			58.9			59.4	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.7	49.2	21.6	33.5	14.6	60.3	16.8	38.3
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	13.0	* 45	17.0	35.0	11.0	47.2	14.0	38.0
Max Q Clear Time (g_c+I1), s	16.8	35.2	18.6	22.9	8.2	34.4	11.3	16.0
Green Ext Time (p_c), s	0.0	8.8	0.0	5.0	0.1	10.9	0.1	8.4

Intersection Summary	
HCM 7th Control Delay, s/veh	46.4
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1638	19	0	1742	94	0	0	28	0	0	31
Future Volume (vph)	0	1638	19	0	1742	94	0	0	28	0	0	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.992				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5075	0	0	5045	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5075	0	0	5045	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			2			12						
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	0	1998	23	0	2124	115	0	0	34	0	0	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2021	0	0	2239	0	0	0	34	0	0	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		

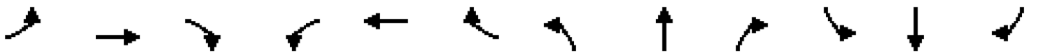
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1638	19	0	1742	94	0	0	28	0	0	31
Future Vol, veh/h	0	1638	19	0	1742	94	0	0	28	0	0	31
Conflicting Peds, #/hr	0	0	2	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1998	23	0	2124	115	0	0	34	0	0	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1012	-	-	1132
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	204	0	0	169
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	203	-	-	167
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	26.27	32.67
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	203	-	-	-	-	167
HCM Lane V/C Ratio	0.168	-	-	-	-	0.226
HCM Control Delay (s/veh)	26.3	-	-	-	-	32.7
HCM Lane LOS	D	-	-	-	-	D
HCM 95th %tile Q(veh)	0.6	-	-	-	-	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1655	3	0	1660	0	0	0	4	0	0	172
Future Volume (vph)	0	1655	3	0	1660	0	0	0	4	0	0	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	0		0	0		0	0		100
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt									0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5085	0	0	5085	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5085	0	0	5085	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		366			681			1312			750	
Travel Time (s)		6.2			11.6			35.8			20.5	
Confl. Peds. (#/hr)						6						
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	0	1970	4	0	1976	0	0	0	5	0	0	205
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1974	0	0	1976	0	0	0	5	0	0	205
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1655	3	0	1660	0	0	0	4	0	0	172
Future Vol, veh/h	0	1655	3	0	1660	0	0	0	4	0	0	172
Conflicting Peds, #/hr	0	0	0	0	0	6	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1970	4	0	1976	0	0	0	5	0	0	205

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	987	-	-	988
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	212	0	0	211
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	212	-	-	211
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	22.4	101.62
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	212	-	-	-	211
HCM Lane V/C Ratio	0.022	-	-	-	0.969
HCM Control Delay (s/veh)	22.4	-	-	-	101.6
HCM Lane LOS	C	-	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	8.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1631	14	23	1623	1	1	0	13	4	0	28
Future Volume (vph)	20	1631	14	23	1623	1	1	0	13	4	0	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.874			0.881	
Flt Protected	0.950			0.950				0.997			0.994	
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1623	0	0	1631	0
Flt Permitted	0.950			0.950				0.997			0.994	
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1623	0	0	1631	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			1			3						
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
Adj. Flow (vph)	22	1773	15	25	1764	1	1	0	14	4	0	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	1788	0	25	1765	0	0	15	0	0	34	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		

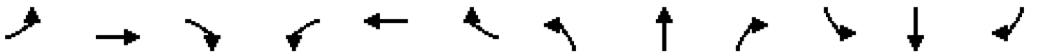
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	1631	14	23	1623	1	1	0	13	4	0	28
Future Vol, veh/h	20	1631	14	23	1623	1	1	0	13	4	0	28
Conflicting Peds, #/hr	0	0	1	0	0	3	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	1773	15	25	1764	1	1	0	14	4	0	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1768	0	0	1789	0	0	2581	3643	895	2570	3650	886
Stage 1	-	-	-	-	-	-	1825	1825	-	1818	1818	-
Stage 2	-	-	-	-	-	-	756	1818	-	753	1833	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	164	-	-	160	-	-	27	5	244	28	5	247
Stage 1	-	-	-	-	-	-	52	127	-	52	128	-
Stage 2	-	-	-	-	-	-	333	128	-	334	125	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	163	-	-	160	-	-	17	4	243	19	4	246
Mov Cap-2 Maneuver	-	-	-	-	-	-	17	4	-	19	4	-
Stage 1	-	-	-	-	-	-	45	110	-	44	107	-
Stage 2	-	-	-	-	-	-	246	107	-	273	109	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.37	0.44	37.31	60.05
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	127	163	-	-	160	-	-	99
HCM Lane V/C Ratio	0.12	0.133	-	-	0.157	-	-	0.352
HCM Control Delay (s/veh)	37.3	30.4	-	-	31.7	-	-	60.1
HCM Lane LOS	E	D	-	-	D	-	-	F
HCM 95th %tile Q(veh)	0.4	0.4	-	-	0.5	-	-	1.4

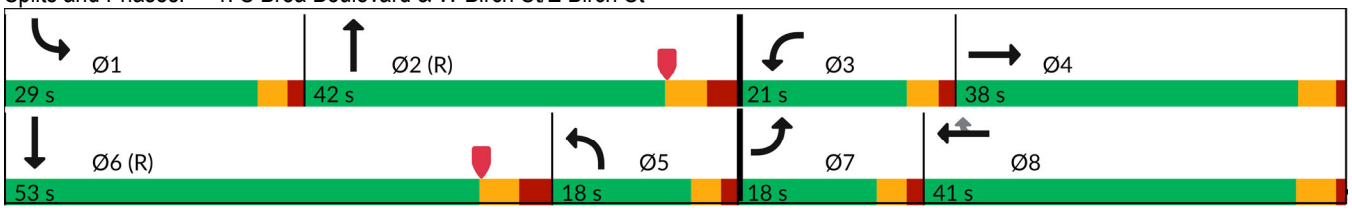


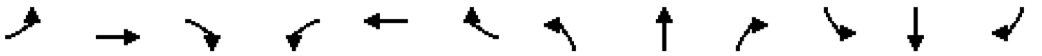
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	108	30	301	150	423	55	682	318	403	532	89
Future Volume (vph)	68	108	30	301	150	423	55	682	318	403	532	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		0	250		0	225		0	280		0
Storage Lanes	1		0	2		1	1		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	0.97	0.91	0.91
Ped Bike Factor		0.99				0.98		0.99			1.00	
Frt		0.968				0.850		0.952			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1792	0	3433	1863	1583	1770	4792	0	3433	4950	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1792	0	3433	1863	1554	1770	4792	0	3433	4950	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				470		89			28	
Link Speed (mph)		25			35			35			35	
Link Distance (ft)		1165			380			688			613	
Travel Time (s)		31.8			7.4			13.4			11.9	
Confl. Peds. (#/hr)			14			6			10			3
Confl. Bikes (#/hr)									4			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	120	33	334	167	470	61	758	353	448	591	99
Shared Lane Traffic (%)												
Lane Group Flow (vph)	76	153	0	334	167	470	61	1111	0	448	690	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	6.0		8.0	6.0	6.0	8.0	15.0		8.0	10.0	
Minimum Split (s)	12.5	37.6		12.5	39.9	39.9	12.5	29.9		12.5	27.9	
Total Split (s)	18.0	38.0		21.0	41.0	41.0	18.0	42.0		29.0	53.0	
Total Split (%)	13.8%	29.2%		16.2%	31.5%	31.5%	13.8%	32.3%		22.3%	40.8%	
Maximum Green (s)	13.5	33.4		16.5	36.1	36.1	13.5	35.1		24.5	46.1	
Yellow Time (s)	3.0	3.6		3.0	3.9	3.9	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.5	1.0		1.5	1.0	1.0	1.5	3.0		1.5	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.6		4.5	4.9	4.9	4.5	6.9		4.5	6.9	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0			28.0	28.0		16.0			14.0	
Pedestrian Calls (#/hr)		7			3	3		0			0	
Act Effct Green (s)	10.3	17.3		15.5	24.7	24.7	12.4	55.9		20.8	66.8	
Actuated g/C Ratio	0.08	0.13		0.12	0.19	0.19	0.10	0.43		0.16	0.51	
v/c Ratio	0.55	0.62		0.82	0.47	0.70	0.36	0.53		0.82	0.27	
Control Delay (s/veh)	71.7	59.0		72.5	51.0	9.5	96.0	59.5		65.1	19.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	71.7	59.0		72.5	51.0	9.5	96.0	59.5		65.1	19.9	
LOS	E	E		E	D	A	F	E		E	B	
Approach Delay (s/veh)		63.2			38.3			61.4			37.7	
Approach LOS		E			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 71 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 47.4		Intersection LOS: D	
Intersection Capacity Utilization 72.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: S Brea Boulevard & W Birch St/E Birch St





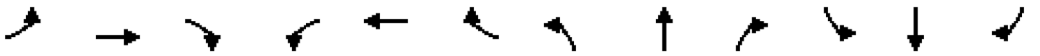
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	108	30	301	150	423	55	682	318	403	532	89
Future Volume (veh/h)	68	108	30	301	150	423	55	682	318	403	532	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	120	21	334	167	201	61	758	307	448	591	96
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	199	35	386	342	287	403	1611	645	506	1567	250
Arrive On Green	0.06	0.13	0.13	0.11	0.18	0.18	0.45	0.91	0.91	0.15	0.35	0.35
Sat Flow, veh/h	1781	1541	270	3456	1870	1569	1781	3558	1425	3456	4418	705
Grp Volume(v), veh/h	76	0	141	334	167	201	61	725	340	448	453	234
Grp Sat Flow(s),veh/h/ln	1781	0	1811	1728	1870	1569	1781	1702	1579	1728	1702	1719
Q Serve(g_s), s	5.5	0.0	9.6	12.4	10.4	15.6	2.6	4.5	4.6	16.5	12.9	13.2
Cycle Q Clear(g_c), s	5.5	0.0	9.6	12.4	10.4	15.6	2.6	4.5	4.6	16.5	12.9	13.2
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.90	1.00		0.41
Lane Grp Cap(c), veh/h	103	0	233	386	342	287	403	1542	715	506	1207	610
V/C Ratio(X)	0.74	0.00	0.60	0.87	0.49	0.70	0.15	0.47	0.48	0.88	0.38	0.38
Avail Cap(c_a), veh/h	185	0	465	439	519	436	403	1542	715	651	1207	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.76	0.76	0.76	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.3	0.0	53.5	56.8	47.6	49.8	28.2	3.6	3.6	54.4	31.2	31.3
Incr Delay (d2), s/veh	3.9	0.0	0.9	13.7	0.4	1.2	0.0	0.8	1.7	9.8	0.9	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	4.5	6.1	4.9	6.2	1.1	1.2	1.4	7.8	5.4	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.2	0.0	54.4	70.5	48.0	50.9	28.3	4.3	5.3	64.2	32.1	33.2
LnGrp LOS	E		D	E	D	D	C	A	A	E	C	C
Approach Vol, veh/h		217			702			1126			1135	
Approach Delay, s/veh		57.9			59.6			5.9			45.0	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.5	65.8	19.0	21.7	36.3	53.0	12.0	28.7
Change Period (Y+Rc), s	4.5	6.9	4.5	* 4.9	6.9	* 6.9	4.5	4.9
Max Green Setting (Gmax), s	24.5	35.1	16.5	* 33	13.5	* 46	13.5	36.1
Max Q Clear Time (g_c+I1), s	18.5	6.6	14.4	11.6	4.6	15.2	7.5	17.6
Green Ext Time (p_c), s	0.5	5.3	0.2	0.5	0.0	3.0	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	35.3
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	727	82	51	850	23	17	14	70	0	0	34
Future Volume (vph)	7	727	82	51	850	23	17	14	70	0	0	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		80	130		0	0		0	0		0
Storage Lanes	0		1	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.996			0.907				0.865
Flt Protected				0.950				0.992				
Satd. Flow (prot)	0	3539	1583	1770	3525	0	0	1676	0	0	0	1611
Flt Permitted				0.950				0.992				
Satd. Flow (perm)	0	3539	1583	1770	3525	0	0	1676	0	0	0	1611
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		380			364			668			208	
Travel Time (s)		7.4			7.1			18.2			5.7	
Confl. Peds. (#/hr)			10			5						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	7	757	85	53	885	24	18	15	73	0	0	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	764	85	53	909	0	0	106	0	0	0	35
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		

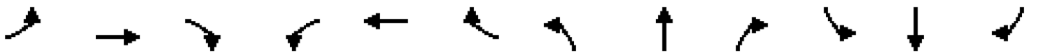
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	727	82	51	850	23	17	14	70	0	0	34
Future Vol, veh/h	7	727	82	51	850	23	17	14	70	0	0	34
Conflicting Peds, #/hr	0	0	10	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	80	130	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	757	85	53	885	24	18	15	73	0	0	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	914	0	0	853	0	0	1331	1803	389	-	-	460
Stage 1	-	-	-	-	-	-	782	782	-	-	-	-
Stage 2	-	-	-	-	-	-	549	1021	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	-	-	3.32
Pot Cap-1 Maneuver	741	-	-	782	-	-	113	79	610	0	0	548
Stage 1	-	-	-	-	-	-	353	403	-	0	0	-
Stage 2	-	-	-	-	-	-	488	312	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	738	-	-	775	-	-	96	71	604	-	-	546
Mov Cap-2 Maneuver	-	-	-	-	-	-	96	71	-	-	-	-
Stage 1	-	-	-	-	-	-	346	394	-	-	-	-
Stage 2	-	-	-	-	-	-	425	289	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.09	0.55	39.3	12.05
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	206	738	-	-	775	-	-	546
HCM Lane V/C Ratio	0.51	0.01	-	-	0.069	-	-	0.065
HCM Control Delay (s/veh)	39.3	9.9	-	-	10	-	-	12.1
HCM Lane LOS	E	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	2.6	0	-	-	0.2	-	-	0.2

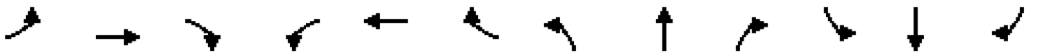


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	671	102	85	911	16	0	0	0	23	2	17
Future Volume (vph)	20	671	102	85	911	16	0	0	0	23	2	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	185		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00						0.99	
Frt		0.980			0.997						0.945	
Flt Protected	0.950			0.950							0.973	
Satd. Flow (prot)	1770	3451	0	1770	3527	0	0	0	0	0	1704	0
Flt Permitted	0.296			0.353							0.973	
Satd. Flow (perm)	551	3451	0	658	3527	0	0	0	0	0	1704	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			3						17	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		364			329			750			397	
Travel Time (s)		7.1			6.4			20.5			10.8	
Confl. Peds. (#/hr)			13			5			85			1
Confl. Bikes (#/hr)						4			2			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	20	685	104	87	930	16	0	0	0	23	2	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	789	0	87	946	0	0	0	0	0	42	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2					1	2	
Detector Template	Left	Thru		Left	Thru					Left	Thru	
Leading Detector (ft)	20	100		20	100					20	100	
Trailing Detector (ft)	0	0		0	0					0	0	
Detector 1 Position(ft)	0	0		0	0					0	0	
Detector 1 Size(ft)	20	6		20	6					20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA					Perm	NA	
Protected Phases		2			6						4	
Permitted Phases	2			6						4		
Detector Phase	2	2		6	6					4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0					2.0	2.0	
Minimum Split (s)	26.9	26.9		26.9	26.9					35.6	35.6	
Total Split (s)	26.9	26.9		26.9	26.9					35.6	35.6	
Total Split (%)	43.0%	43.0%		43.0%	43.0%					57.0%	57.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0					31.0	31.0	
Yellow Time (s)	3.9	3.9		3.9	3.9					3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0					1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0						0.0	
Total Lost Time (s)	4.9	4.9		4.9	4.9						4.6	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0					2.0	2.0	
Recall Mode	Max	Max		Max	Max					None	None	
Walk Time (s)	7.0	7.0		7.0	7.0					7.0	7.0	
Flash Don't Walk (s)	15.0	15.0		15.0	15.0					24.0	24.0	
Pedestrian Calls (#/hr)	6	6		2	2					1	1	
Act Effct Green (s)	41.4	41.4		41.4	41.4						8.8	
Actuated g/C Ratio	0.83	0.83		0.83	0.83						0.18	
v/c Ratio	0.04	0.28		0.16	0.32						0.13	
Control Delay (s/veh)	7.5	5.2		7.7	5.7						12.4	
Queue Delay	0.0	0.0		0.0	0.0						0.0	
Total Delay (s/veh)	7.5	5.2		7.7	5.7						12.4	
LOS	A	A		A	A						B	
Approach Delay (s/veh)		5.3			5.8						12.4	
Approach LOS		A			A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 62.5			
Actuated Cycle Length: 50			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay (s/veh): 5.7		Intersection LOS: A	
Intersection Capacity Utilization 58.3%		ICU Level of Service B	
Analysis Period (min) 15			

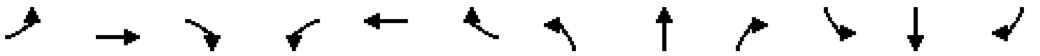
Splits and Phases: 3: S Flower Ave & E Birch St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	671	102	85	911	16	0	0	0	23	2	17
Future Volume (veh/h)	20	671	102	85	911	16	0	0	0	23	2	17
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	20	685	101	87	930	15				23	2	5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2				2	2	2
Cap, veh/h	561	2116	312	630	2440	39				31	3	7
Arrive On Green	0.68	0.68	0.68	0.68	0.68	0.68				0.02	0.02	0.02
Sat Flow, veh/h	593	3103	457	687	3577	58				1341	117	292
Grp Volume(v), veh/h	20	392	394	87	462	483				30	0	0
Grp Sat Flow(s),veh/h/ln	593	1777	1783	687	1777	1858				1749	0	0
Q Serve(g_s), s	0.5	2.9	2.9	1.9	3.6	3.6				0.5	0.0	0.0
Cycle Q Clear(g_c), s	4.1	2.9	2.9	4.8	3.6	3.6				0.5	0.0	0.0
Prop In Lane	1.00		0.26	1.00		0.03				0.77		0.17
Lane Grp Cap(c), veh/h	561	1212	1216	630	1212	1267				41	0	0
V/C Ratio(X)	0.04	0.32	0.32	0.14	0.38	0.38				0.73	0.00	0.00
Avail Cap(c_a), veh/h	561	1212	1216	630	1212	1267				1681	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.1	2.1	2.1	3.1	2.2	2.2				15.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.7	0.7	0.5	0.9	0.9				8.9	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.1	0.3	0.3				0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.2	2.8	2.8	3.5	3.1	3.1				24.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A				C		
Approach Vol, veh/h		806			1032						30	
Approach Delay, s/veh		2.8			3.1						24.6	
Approach LOS		A			A						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		26.9		5.4		26.9						
Change Period (Y+Rc), s		4.9		4.6		4.9						
Max Green Setting (Gmax), s		22.0		31.0		22.0						
Max Q Clear Time (g_c+I1), s		6.1		2.5		6.8						
Green Ext Time (p_c), s		1.6		0.1		2.2						

Intersection Summary												
HCM 7th Control Delay, s/veh			3.3									
HCM 7th LOS			A									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	706	7	1	1003	1	4	0	9	0	0	0
Future Volume (vph)	3	706	7	1	1003	1	4	0	9	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	40		0	140		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998						0.907				
Flt Protected	0.950			0.950				0.985				
Satd. Flow (prot)	1770	3532	0	1770	3539	0	0	1664	0	0	1863	0
Flt Permitted	0.950			0.950				0.985				
Satd. Flow (perm)	1770	3532	0	1770	3539	0	0	1664	0	0	1863	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			815			991			416	
Travel Time (s)		6.4			15.9			27.0			11.3	
Confl. Peds. (#/hr)			26			12						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	4	861	9	1	1223	1	5	0	11	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	870	0	1	1224	0	0	16	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.8%		ICU Level of Service A	
Analysis Period (min) 15			

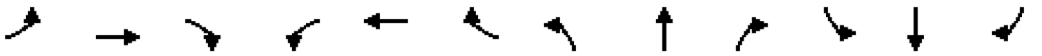
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	706	7	1	1003	1	4	0	9	0	0	0
Future Vol, veh/h	3	706	7	1	1003	1	4	0	9	0	0	0
Conflicting Peds, #/hr	0	0	26	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	40	-	-	140	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	861	9	1	1223	1	5	0	11	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1236	0	0	896	0	0	1513	2137	461	1676	2141	624
Stage 1	-	-	-	-	-	-	899	899	-	1238	1238	-
Stage 2	-	-	-	-	-	-	614	1239	-	438	903	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	559	-	-	754	-	-	82	48	548	62	48	428
Stage 1	-	-	-	-	-	-	300	356	-	186	246	-
Stage 2	-	-	-	-	-	-	446	246	-	568	354	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	553	-	-	735	-	-	80	46	534	60	46	423
Mov Cap-2 Maneuver	-	-	-	-	-	-	80	46	-	60	46	-
Stage 1	-	-	-	-	-	-	291	345	-	184	243	-
Stage 2	-	-	-	-	-	-	445	243	-	552	343	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.05	0.01	25.2	0
HCM LOS			D	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	194	553	-	-	735	-	-	-
HCM Lane V/C Ratio	0.082	0.007	-	-	0.002	-	-	-
HCM Control Delay (s/veh)	25.2	11.6	-	-	9.9	-	-	0
HCM Lane LOS	D	B	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	-

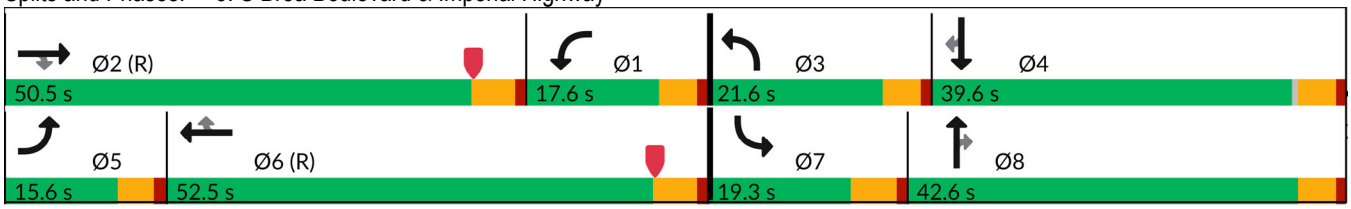


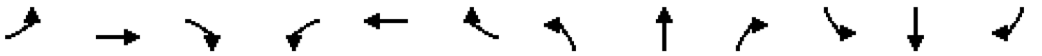
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	194	1458	404	272	1565	162	443	736	239	171	571	141
Future Volume (vph)	194	1458	404	272	1565	162	443	736	239	171	571	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		160	230		185	355		180	245		0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor			0.98			0.98			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1545	3433	5085	1556	3433	5085	1536	3433	3539	1542
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			238			103			219			168
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		615			385			495			688	
Travel Time (s)		10.5			6.6			9.6			13.4	
Confl. Peds. (#/hr)			11			5			14			8
Confl. Bikes (#/hr)			1						5			7
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	231	1736	481	324	1863	193	527	876	285	204	680	168
Shared Lane Traffic (%)												
Lane Group Flow (vph)	231	1736	481	324	1863	193	527	876	285	204	680	168
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	10.0	15.0	15.0	7.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	14.6	42.3	42.3	11.6	42.3	42.3	14.6	41.6	41.6	15.3	39.6	39.6
Total Split (s)	15.6	50.5	50.5	17.6	52.5	52.5	21.6	42.6	42.6	19.3	39.6	39.6
Total Split (%)	12.0%	38.8%	38.8%	13.5%	40.4%	40.4%	16.6%	32.8%	32.8%	14.8%	30.5%	30.5%
Maximum Green (s)	11.0	45.2	45.2	13.0	47.2	47.2	17.0	38.0	38.0	14.0	35.0	35.0
Yellow Time (s)	3.6	4.3	4.3	3.6	4.3	4.3	3.6	3.6	3.6	4.3	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.3	5.3	4.6	5.3	5.3	4.6	4.6	4.6	5.3	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Minimum Gap (s)	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.5	1.5
Time Before Reduce (s)	0.0	5.0	5.0	0.0	5.0	5.0	0.0	4.0	4.0	0.0	4.0	4.0
Time To Reduce (s)	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.5	0.5
Recall Mode	None	C-Min	C-Min	Min	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		30.0	30.0		30.0	30.0		30.0	30.0		28.0	28.0
Pedestrian Calls (#/hr)		5	5		2	2		7	7		4	4
Act Effct Green (s)	10.8	49.4	49.4	13.0	51.6	51.6	17.0	35.8	35.8	12.0	31.5	31.5
Actuated g/C Ratio	0.08	0.38	0.38	0.10	0.40	0.40	0.13	0.28	0.28	0.09	0.24	0.24
v/c Ratio	0.81	0.90	0.66	0.94	0.92	0.28	1.18	0.63	0.49	0.64	0.79	0.34
Control Delay (s/veh)	80.3	45.8	21.5	94.4	46.6	14.2	148.9	43.3	12.7	61.8	61.0	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	80.3	45.8	21.5	94.4	46.6	14.2	148.9	43.3	12.7	61.8	61.0	14.1
LOS	F	D	C	F	D	B	F	D	B	E	E	B
Approach Delay (s/veh)		44.3			50.5			71.1			53.7	
Approach LOS		D			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.18			
Intersection Signal Delay (s/veh): 53.5		Intersection LOS: D	
Intersection Capacity Utilization 86.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: S Brea Boulevard & Imperial Highway





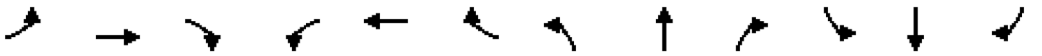
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	1458	404	272	1565	162	443	736	239	171	571	141
Future Volume (veh/h)	194	1458	404	272	1565	162	443	736	239	171	571	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	231	1736	335	324	1863	133	527	876	142	204	680	48
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	281	1775	539	445	2045	632	452	1476	444	266	855	371
Arrive On Green	0.08	0.35	0.35	0.13	0.40	0.40	0.13	0.29	0.29	0.05	0.16	0.16
Sat Flow, veh/h	3456	5106	1550	3456	5106	1579	3456	5106	1538	3456	3554	1540
Grp Volume(v), veh/h	231	1736	335	324	1863	133	527	876	142	204	680	48
Grp Sat Flow(s),veh/h/ln	1728	1702	1550	1728	1702	1579	1728	1702	1538	1728	1777	1540
Q Serve(g_s), s	8.6	43.7	16.0	11.7	44.8	7.2	17.0	19.1	6.7	7.6	23.9	3.5
Cycle Q Clear(g_c), s	8.6	43.7	16.0	11.7	44.8	7.2	17.0	19.1	6.7	7.6	23.9	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1775	539	445	2045	632	452	1476	444	266	855	371
V/C Ratio(X)	0.82	0.98	0.62	0.73	0.91	0.21	1.17	0.59	0.32	0.77	0.80	0.13
Avail Cap(c_a), veh/h	292	1775	539	445	2045	632	452	1493	449	372	957	415
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89	0.89
Uniform Delay (d), s/veh	58.8	41.9	16.4	54.4	36.8	25.5	56.5	39.7	18.3	60.5	51.5	42.9
Incr Delay (d2), s/veh	15.2	16.7	5.3	5.2	7.6	0.8	96.5	1.0	0.9	3.3	4.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	20.5	6.3	5.3	19.4	2.8	13.4	8.1	3.5	3.5	11.6	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.0	58.6	21.8	59.7	44.4	26.3	153.0	40.6	19.2	63.8	56.2	43.2
LnGrp LOS	E	E	C	E	D	C	F	D	B	E	E	D
Approach Vol, veh/h		2302			2320			1545			932	
Approach Delay, s/veh		54.8			45.5			77.0			57.2	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	50.5	21.6	35.9	15.2	57.4	15.3	42.2
Change Period (Y+Rc), s	5.3	* 5.3	4.6	4.6	4.6	5.3	5.3	4.6
Max Green Setting (Gmax), s	13.0	* 45	17.0	35.0	11.0	47.2	14.0	38.0
Max Q Clear Time (g_c+I1), s	13.7	45.7	19.0	25.9	10.6	46.8	9.6	21.1
Green Ext Time (p_c), s	0.0	0.0	0.0	4.7	0.0	0.4	0.1	9.7

Intersection Summary	
HCM 7th Control Delay, s/veh	56.9
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1916	20	0	1977	82	0	0	21	0	0	36
Future Volume (vph)	0	1916	20	0	1977	82	0	0	21	0	0	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.994				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5075	0	0	5055	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5075	0	0	5055	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		385			366			1313			668	
Travel Time (s)		6.6			6.2			35.8			18.2	
Confl. Peds. (#/hr)			2			12						
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	0	2337	24	0	2411	100	0	0	26	0	0	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2361	0	0	2511	0	0	0	26	0	0	44
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.1%		ICU Level of Service A	
Analysis Period (min) 15			

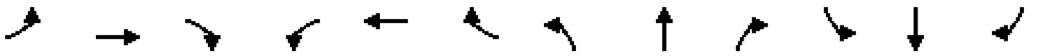
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1916	20	0	1977	82	0	0	21	0	0	36
Future Vol, veh/h	0	1916	20	0	1977	82	0	0	21	0	0	36
Conflicting Peds, #/hr	0	0	2	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2337	24	0	2411	100	0	0	26	0	0	44

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1182	-	-	1267
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	156	0	0	137
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	156	-	-	136
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	32.52	43.8
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	156	-	-	-	-	136
HCM Lane V/C Ratio	0.164	-	-	-	-	0.324
HCM Control Delay (s/veh)	32.5	-	-	-	-	43.8
HCM Lane LOS	D	-	-	-	-	E
HCM 95th %tile Q(veh)	0.6	-	-	-	-	1.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1855	13	0	1945	0	0	0	2	0	0	178
Future Volume (vph)	0	1855	13	0	1945	0	0	0	2	0	0	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	0		0	0		0	0		100
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999							0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5080	0	0	5085	0	0	0	1611	0	0	1611
Flt Permitted												
Satd. Flow (perm)	0	5080	0	0	5085	0	0	0	1611	0	0	1611
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		366			681			1312			750	
Travel Time (s)		6.2			11.6			35.8			20.5	
Confl. Peds. (#/hr)						6						
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	0	2208	15	0	2315	0	0	0	2	0	0	212
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2223	0	0	2315	0	0	0	2	0	0	212
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.3%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	10.2

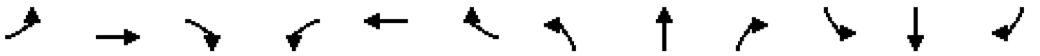
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1855	13	0	1945	0	0	0	2	0	0	178
Future Vol, veh/h	0	1855	13	0	1945	0	0	0	2	0	0	178
Conflicting Peds, #/hr	0	0	0	0	0	6	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2208	15	0	2315	0	0	0	2	0	0	212

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1112	-	-	1158
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	175	0	0	~ 163
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	175	-	-	~ 163
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	25.91	228.13
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	175	-	-	-	163
HCM Lane V/C Ratio	0.014	-	-	-	1.303
HCM Control Delay (s/veh)	25.9	-	-	-	228.1
HCM Lane LOS	D	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	12.5

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	1939	14	30	1968	2	3	0	14	0	0	10
Future Volume (vph)	32	1939	14	30	1968	2	3	0	14	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	120		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999						0.887			0.865	
Flt Protected	0.950			0.950				0.992				
Satd. Flow (prot)	1770	5080	0	1770	5085	0	0	1639	0	0	1611	0
Flt Permitted	0.950			0.950				0.992				
Satd. Flow (perm)	1770	5080	0	1770	5085	0	0	1639	0	0	1611	0
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		681			517			606			991	
Travel Time (s)		11.6			8.8			16.5			27.0	
Confl. Peds. (#/hr)			1			3						
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
Adj. Flow (vph)	35	2108	15	33	2139	2	3	0	15	0	0	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	2123	0	33	2141	0	0	18	0	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	1939	14	30	1968	2	3	0	14	0	0	10
Future Vol, veh/h	32	1939	14	30	1968	2	3	0	14	0	0	10
Conflicting Peds, #/hr	0	0	1	0	0	3	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	120	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	2108	15	33	2139	2	3	0	15	0	0	11

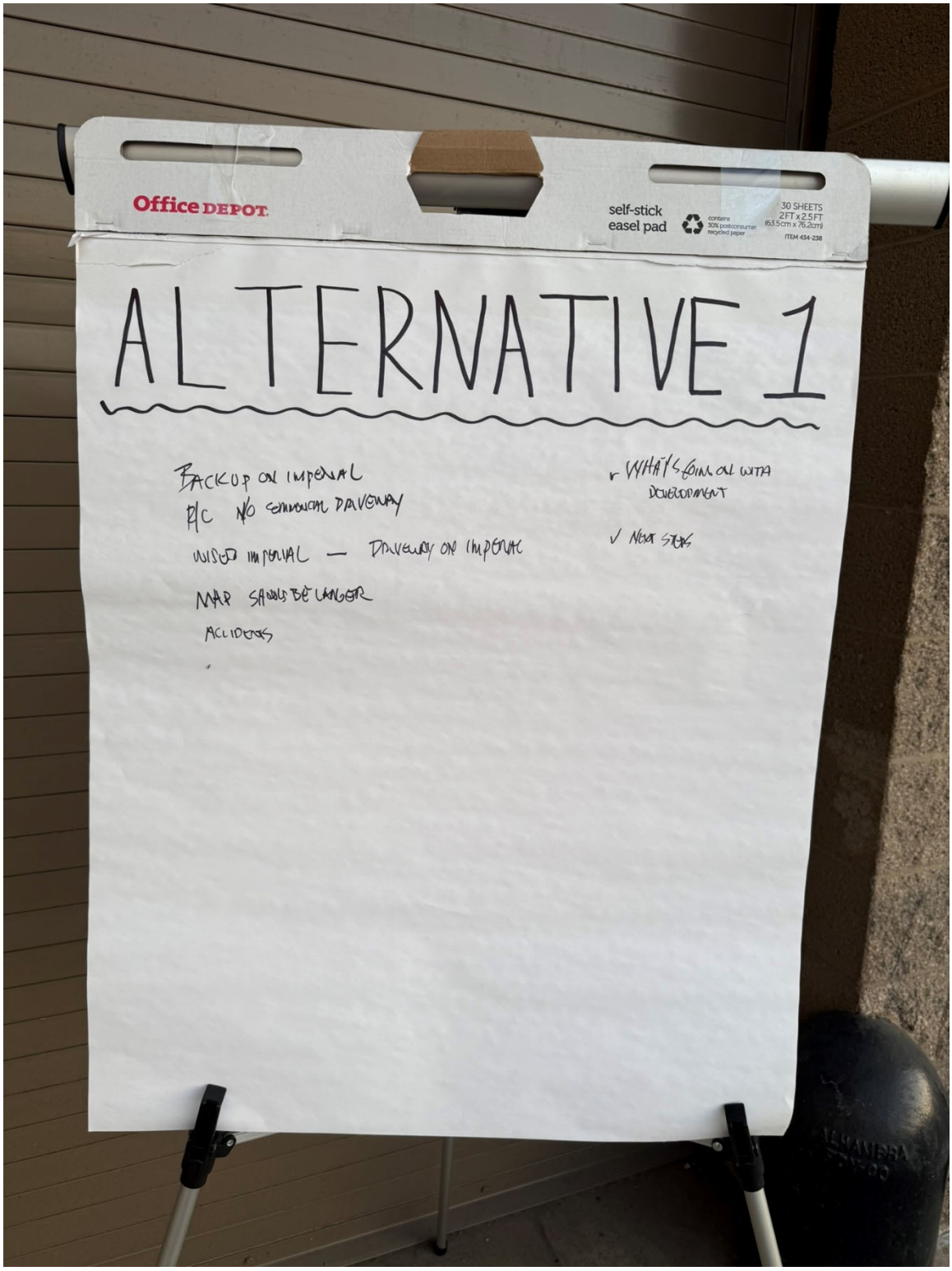
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2144	0	0	2124	0	0	3107	4395	1062	3121	4402	1074
Stage 1	-	-	-	-	-	-	2186	2186	-	2208	2208	-
Stage 2	-	-	-	-	-	-	921	2210	-	913	2193	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	6.54	7.14	6.44	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.74	5.54	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	4.02	3.92	3.82	4.02	3.92
Pot Cap-1 Maneuver	106	-	-	108	-	-	12	2	188	12	1	185
Stage 1	-	-	-	-	-	-	28	83	-	27	81	-
Stage 2	-	-	-	-	-	-	263	81	-	266	82	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	105	-	-	108	-	-	5	1	188	5	1	185
Mov Cap-2 Maneuver	-	-	-	-	-	-	5	1	-	5	1	-
Stage 1	-	-	-	-	-	-	19	55	-	19	56	-
Stage 2	-	-	-	-	-	-	173	56	-	164	55	-

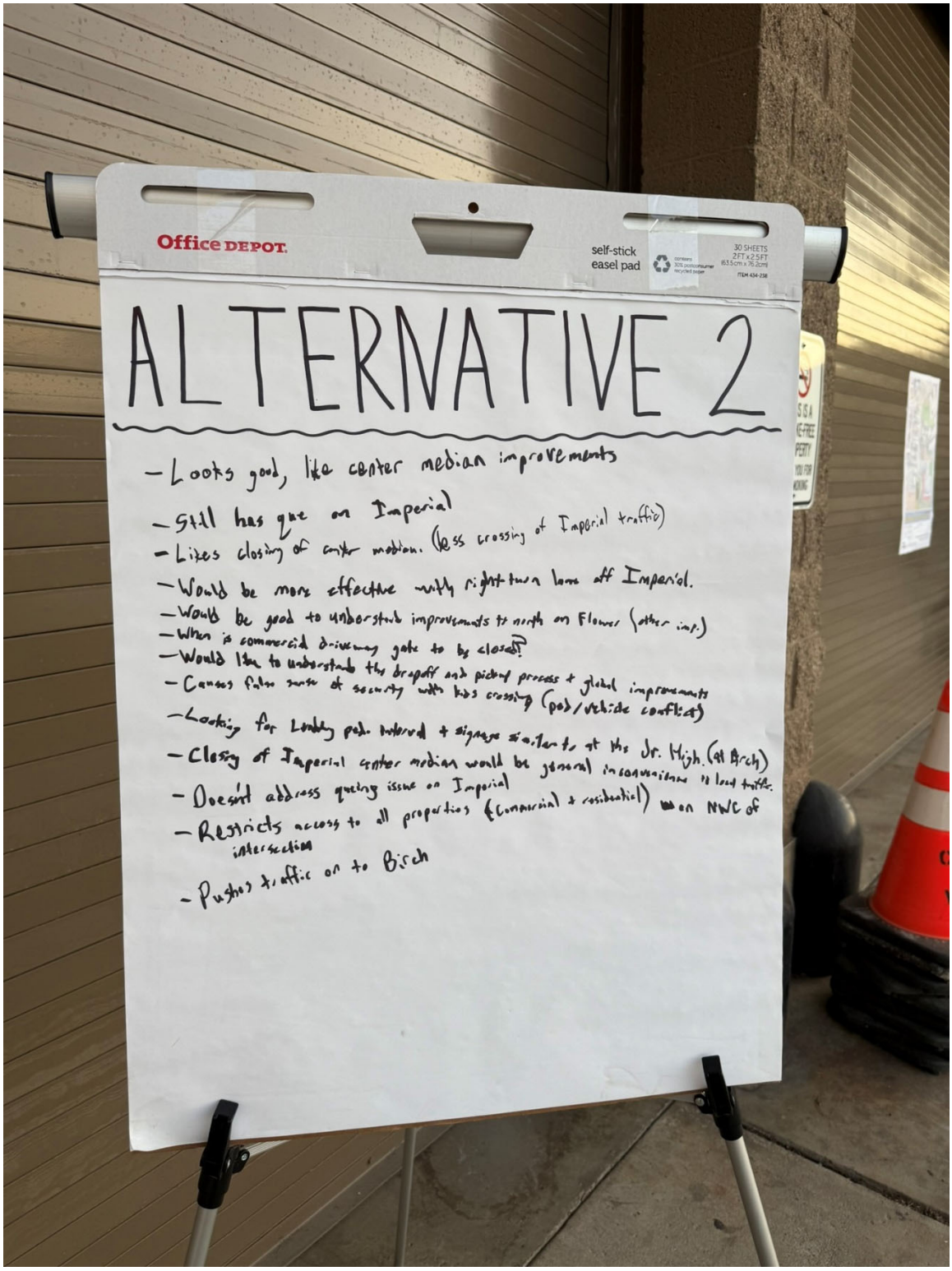
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.89	0.78	277.32	25.71
HCM LOS			F	D

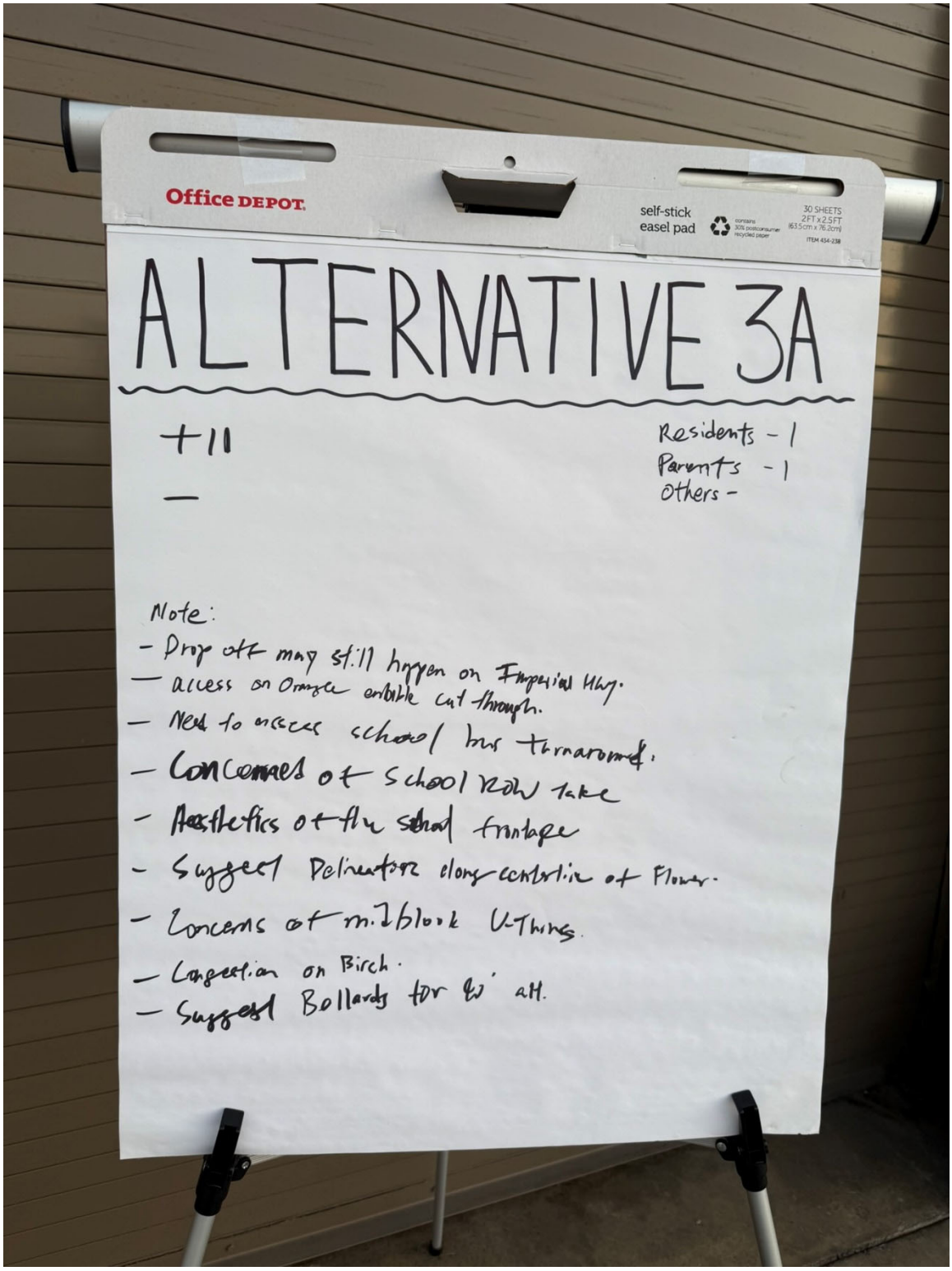
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	27	105	-	-	108	-	-	185
HCM Lane V/C Ratio	0.677	0.33	-	-	0.302	-	-	0.059
HCM Control Delay (s/veh)	277.3	55.2	-	-	52.1	-	-	25.7
HCM Lane LOS	F	F	-	-	F	-	-	D
HCM 95th %tile Q(veh)	2.1	1.3	-	-	1.2	-	-	0.2

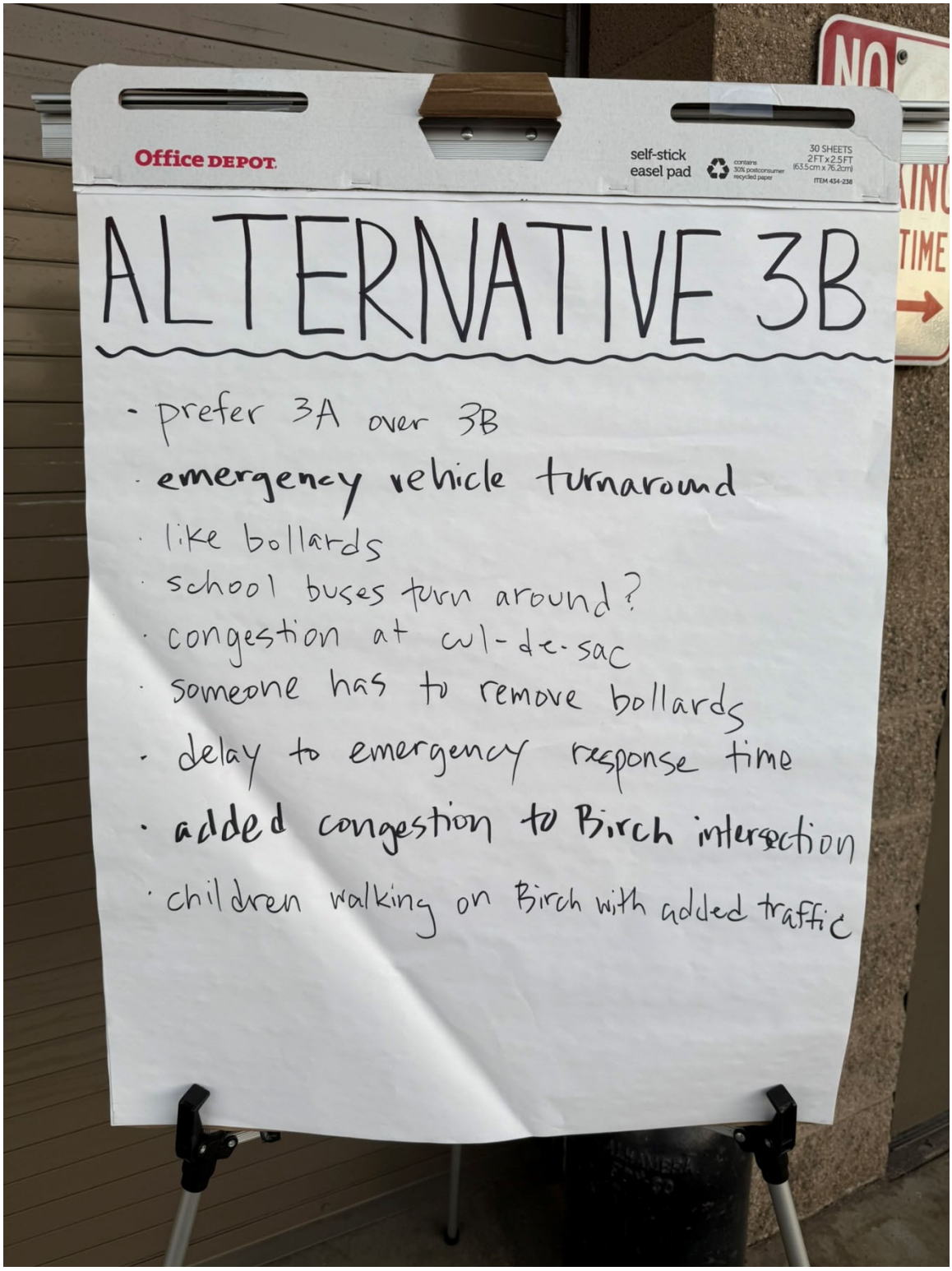
Appendix H

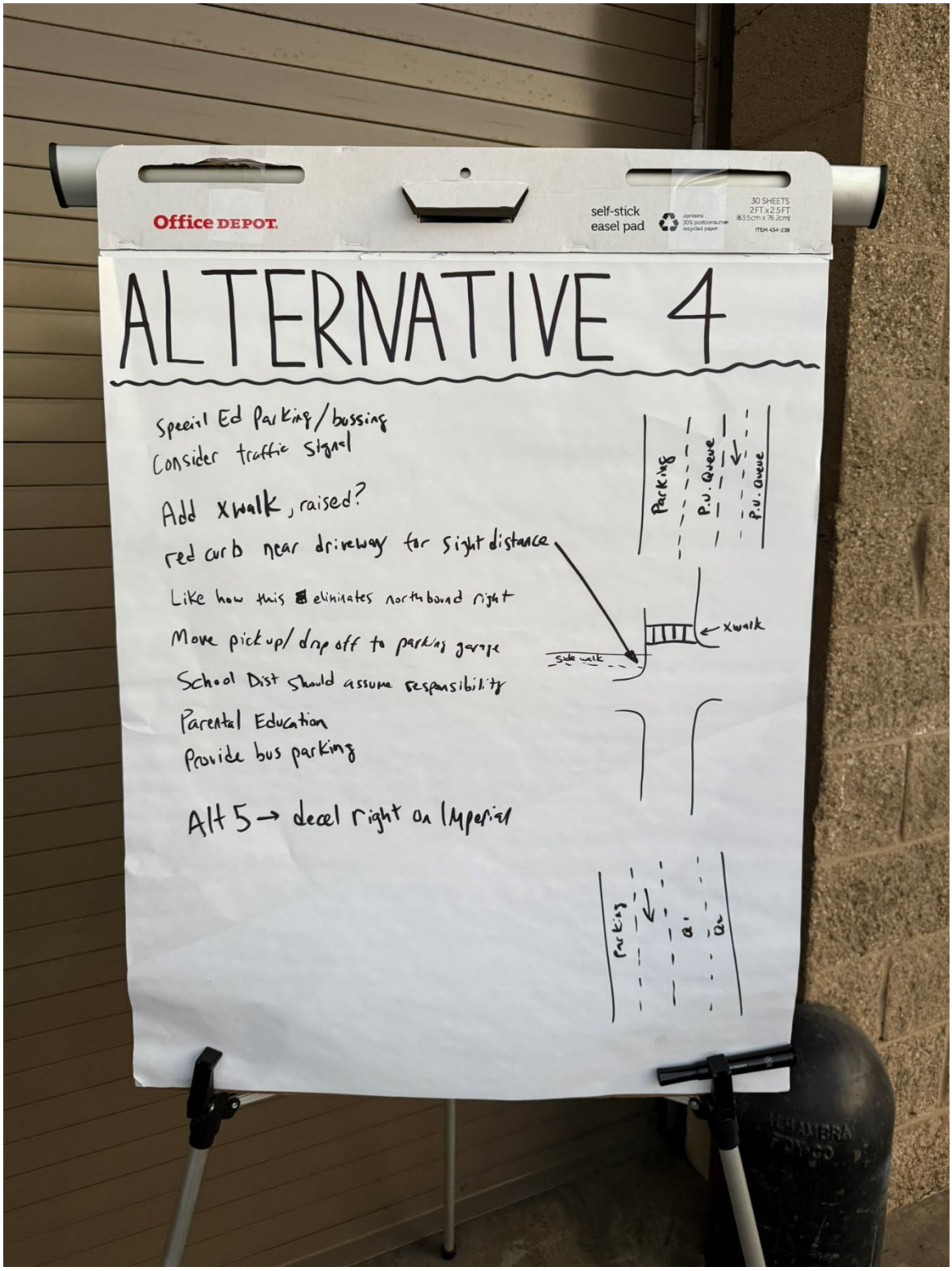
Feedback from Public Engagement


Office DEPOT
self-stick
easel pad
30 SHEETS
2FT x 2.5FT
ALTERNATIVE 1
BACKUP ON IMPERIAL
P/C NO COMMERCIAL DRIVEWAY
WIDEN IMPERIAL — DRIVEWAY ON IMPERIAL
MAP SHOULD BE LONGER
ACCIDENTS
WHAT'S GOING ON WITH DEVELOPMENT
NEXT STEPS


Office DEPOT
self-stick
easel pad
30 SHEETS
2 FT x 2.5 FT
ALTERNATIVE 2
- Looks good, like center median improvements
- Still has gaps on Imperial
- Likes closing of center median. (less crossing of Imperial traffic)
- Would be more effective with right-turn lane off Imperial.
- Would be good to understand improvements to north on Flower (other imp.)
- When is commercial driveway gate to be closed?
- Would like to understand the dropoff and pickup process + global improvements
- Causes false sense of security with kids crossing (ped/vehicle conflicts)
- Looking for Lobby ped. entrance + signage similar to at the Jr. High. (at Birch)
- Closing of Imperial center median would be general inconvenience to local traffic.
- Doesn't address queuing issue on Imperial
- Restricts access to all properties (commercial + residential) on NWC of intersection
- Pushes traffic on to Birch


Office DEPOT
self-stick easel pad
30 SHEETS 2FT x 2.5FT (63.5cm x 76.2cm)
ALTERNATIVE 3A
+11
—
Residents - 1
Parents - 1
Others -
Note:
- Drop off may still happen on Imperial Hwy.
- access on Orange enable cut through.
- Need to address school bus turnaround.
- Concerns of School ROW take
- Aesthetics of the school frontage
- Suggest Delineators along centerline of Flower.
- Concerns of mid block U-Turns.
- Congestion on Birch.
- Suggest Bollards for E/B AM.


Office DEPOT
self-stick
easel pad
30 SHEETS
2 FT x 2.5 FT
ALTERNATIVE 3B
- prefer 3A over 3B
- emergency vehicle turnaround
- like bollards
- school buses turn around?
- congestion at cul-de-sac
- someone has to remove bollards
- delay to emergency response time
- added congestion to Birch intersection
- children walking on Birch with added traffic


Office DEPOT
self-stick
easel pad
30 SHEETS
2FT x 2.5FT
ALTERNATIVE 4
Special Ed Parking/bussing
Consider traffic signal
Add xwalk, raised?
red curb near driveway for sight distance
Like how this eliminates northbound right
Move pick up/drop off to parking garage
School Dist should assume responsibility
Parental Education
Provide bus parking
Alt 5 → decel right on Imperial
Parking
P.U. Queue
P.U. Queue
xwalk
side walk
Parking