Appendix G

Transportation Impact Study

P21050

Broadstone Villas Transportation Impact Study

Folsom, California

Prepared for:

City of Folsom

Helix Environmental, Inc.

Broadstone Villas

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September 2021

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REVISION HISTORY

Date	Title	Comment
July 17, 2021	Draft TIS	
Sept 2, 2021	Final TIS	Reduced SB left volume at intersection1 and EB left volume at intersection 5 per guidance from City staff, updated findings and recommendations accordingly.

EXECUTIVE SUMMARY

This transportation impact study identifies impacts of the proposed Avenida Folsom Senior Living project (the Project) on the motorized and unmotorized transportation systems in Folsom, California. This study has been prepared for the City of Folsom, Helix Environmental Inc., and Avenida Senior Living.

Project Description

Figure ES-1 provides a project vicinity map. The Project consists of 257 apartment units on a vacant, approximately 16.8 net acre, parcel fronting East Bidwell Street and Broadstone Parkway in Folsom, CA (across from the Palladio shopping and entertainment center). The site is ideally suited for multifamily housing with excellent pedestrian and bike access to employment, shopping, restaurants, and entertainment, and easy auto access to central Folsom and US 50. 523 parking spaces are proposed (291 garage spaces, 202 surface spaces, and 30 tandem spaces). A preliminary site plan is provided in Figure ES-2.

Analysis Scope

The analysis considers the traffic operations at intersections in Folsom that could potentially be impacted by project traffic. Study intersections and segments are shown in **Figure ES-3** and listed in **Table ES-1** and **Table ES-2.** This transportation impact study considers four study scenarios:

- Existing 2021 without Project Condition;
- Existing 2021 with Project Condition;
- Existing Plus Approved Projects (EPAP) 2026 without Project Condition;
- EPAP 2026 with Project Condition.

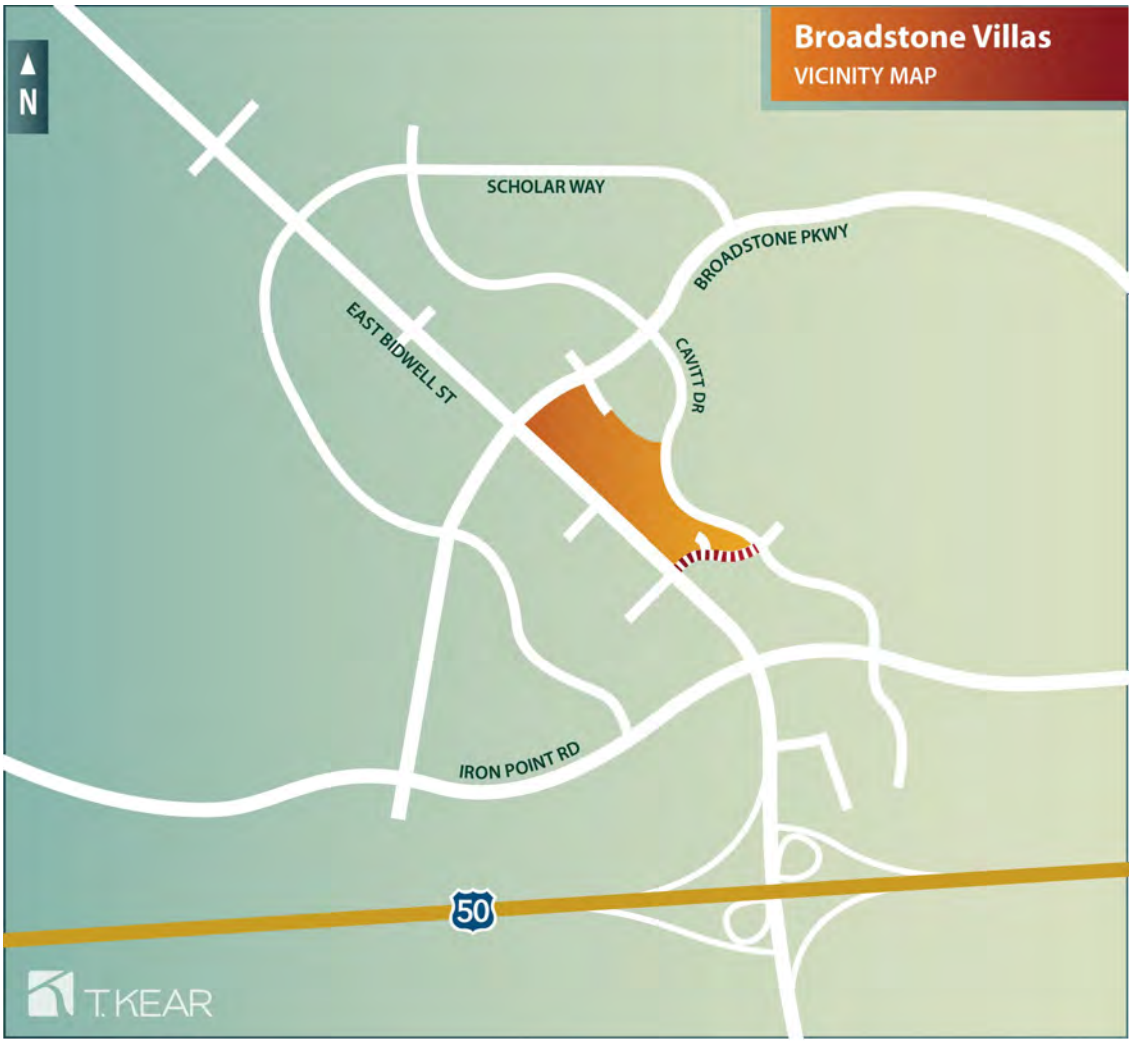


Figure ES-1. Avenida Folsom Senior Living Vicinity Map

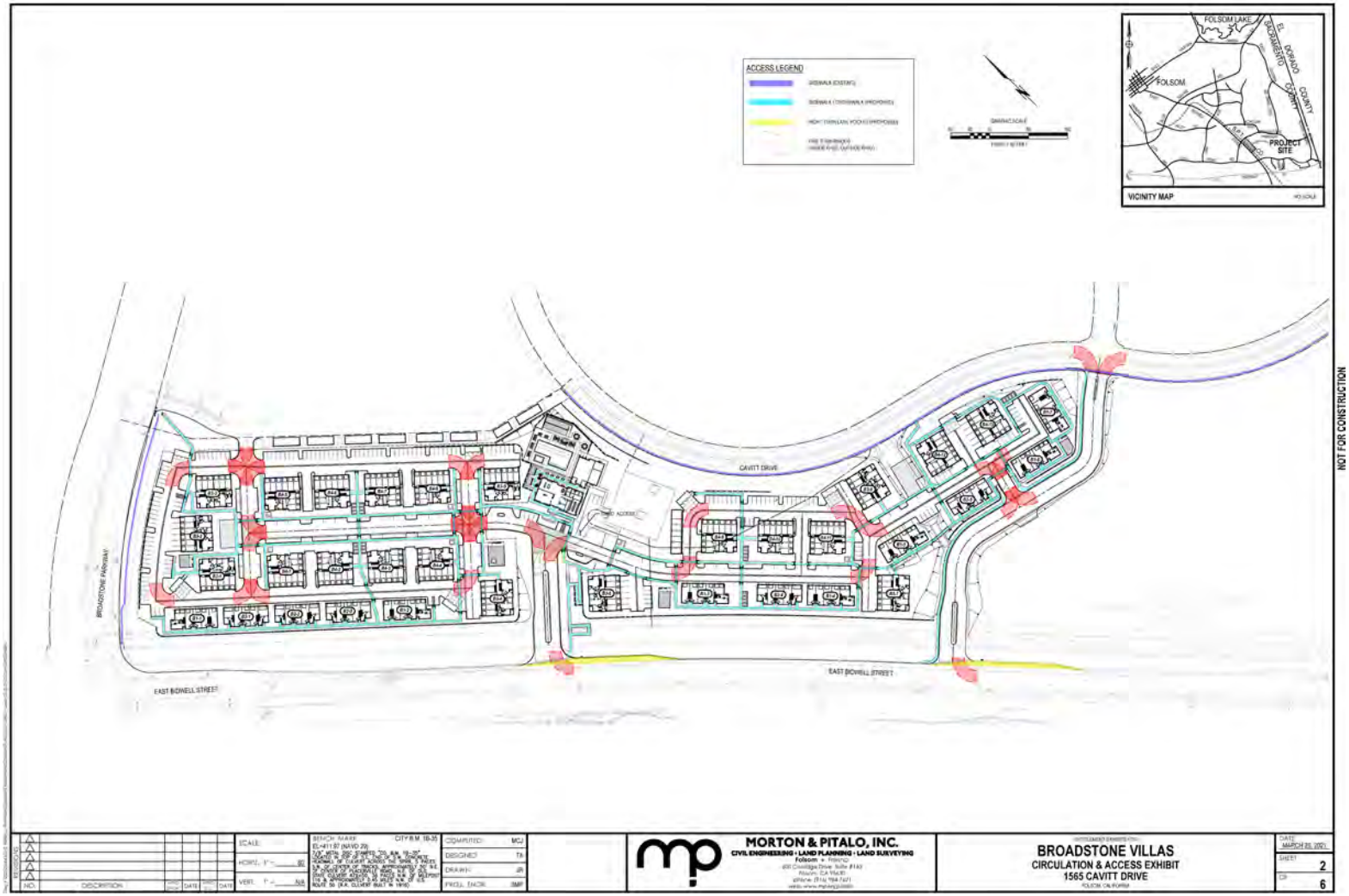


Figure ES-2. Preliminary Site Plan



Figure ES-3. Project area roadways including study intersections and study road segments

Table ES-1. Study Intersections

Intersection	Control
1. East Bidwell Street/College Parkway	Signal
2. East Bidwell Street/Scholar Way	Signal
3. East Bidwell Street/ Power Center Drive	Signal
4. East Bidwell Street/Broadstone Parkway	Signal
5. East Bidwell Street/Via Sole	Signal
6. East Bidwell Street/Via Felice	Signal
7. East Bidwell Street/Iron Point Road	Signal
8. East Bidwell Street/Placerville Road	Signal
9. East Bidwell Street/US 50 Westbound	Signal
10. East Bidwell Street/US 50 Eastbound	Signal
11. Broadstone Parkway/Marketplace	Signal
12. Via Felice Extension/Project Driveway (Does not exist without Project)	AWSC*
13. Broadstone Parkway/Cavitt Drive	Signal
14. Cavitt Drive/Kilrush Drive	TWSC**
15. Iron Point Road/Cavitt Drive	Signal

* All way stop control
** Two Way Stop Control

Table ES-2. US 50 Study Segments

US 50 Study Segments
A. Westbound US 50/East Bidwell Street diverge segment
B. Westbound US 50/East Bidwell Street merge segment
C. Eastbound US 50/East Bidwell Street diverge segment
D. Eastbound US 50/East Bidwell Street merge segment

Findings and Recommendations

The Project is anticipated to generate 1399 daily vehicle trips, 82 AM peak-hour vehicle trips, and 105 PM peak-hour vehicle trips[1]. There are no anticipated project related level-of-service deficiencies.

The Project is anticipated to have a **less-than-significant** impact on vehicle level-of-service, bike and pedestrian activity and facilities, transit operations and facilities, and VMT.

[1] Note that these estimates are based on the ITE equation trip generation rates when those rates are higher than average trip generation. Equation based rates reflect the impact that a development's size can have on trip generation rates. Peak-hour trip generation utilizes rates for the "peak-hour of generation" rather than the peak-hour of adjacent street traffic. The use of equation-based trip generation rates and "peak-hour of generation" rates produces conservatively high estimates to insure that any potential VMT or level-of-service impacts data are identified.

Parking supply at a ratio of 2.03 spaces per apartment exceeds the City requirements and is sufficient to meet the anticipated parking demand.

The proposed driveway throat depths exceed the City's Minimum Required Throat-Depth (MRTD).

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1. INTRODUCTION

This transportation impact study identifies impacts of the proposed Broadstone Villas project (the Project) on the motorized and unmotorized transportation systems in Folsom, California. This study has been prepared for the City of Folsom, Helix Environmental Inc., and Broadstone Villas.

1.1 Project Description

Figure 1 provides a project vicinity map. The Project consists of 257 apartment units on a vacant, approximately 16.8 net acre, parcel fronting East Bidwell Street and Broadstone Parkway in Folsom, CA (across from the Palladio shopping and entertainment center). The site is ideally suited for multifamily housing with excellent pedestrian and bike access to employment, shopping, restaurants, and entertainment, and easy auto access to central Folsom and US 50. 523 parking spaces are proposed (291 garage spaces, 202 surface spaces, and 30 tandem spaces).

The Project is situated on the northwestern portion of the approximately 33.2 net acre parcel 072-0270-155-0000 in the Broadstone Unit 3 Specific Plan area. The approximately 16.4 acre southeastern remainder of parcel 072-0270-155-0000 will be separated from the project by a new private roadway connecting between East Bidwell Street at Via Felice and Cavitt Drive at Kilrush Drive. While the Vesting Tentative Map creates this remainder parcel, that remainder parcel itself is not considered to be part of the Project. Parcel 072-0270-155-0000 has a Community Commercial (CC) General Plan land use designation and is zoned as C-2 (central business district) with a mixed-use overlay (the "East Bidwell Mixed-Use Overlay"). The mixed-use overlay allows for multifamily housing and the proposed project is consistent with the parcel's General Plan land use designation and zoning.

A preliminary site plan is provided in **Figure 2**. Three driveways will provide access to the Project:

- One to East Bidwell Street aligned with Palladio Parkway,
- The second accessing the new private road connecting between East Bidwell Street at Via Felice and Cavitt Drive at Kilrush Drive; and
- The third a shared driveway with the Talavera Apartments accessing Broadstone Parkway across from the Broadstone Marketplace driveway.

All three are proposed as full access driveways, and there are existing traffic signals at the driveway connections to East Bidwell Street and Broadstone Parkway.

1.2 Report Organization

The following sections are discussed after this Introduction: Setting and Study Area (key roadways and intersections, the regulatory setting, and analysis scenarios); Methodology (detailing the analysis procedures); four analysis sections; and, the final sections identifying project impacts, mitigations, triggers for those mitigations, and recommended conditions of approval.

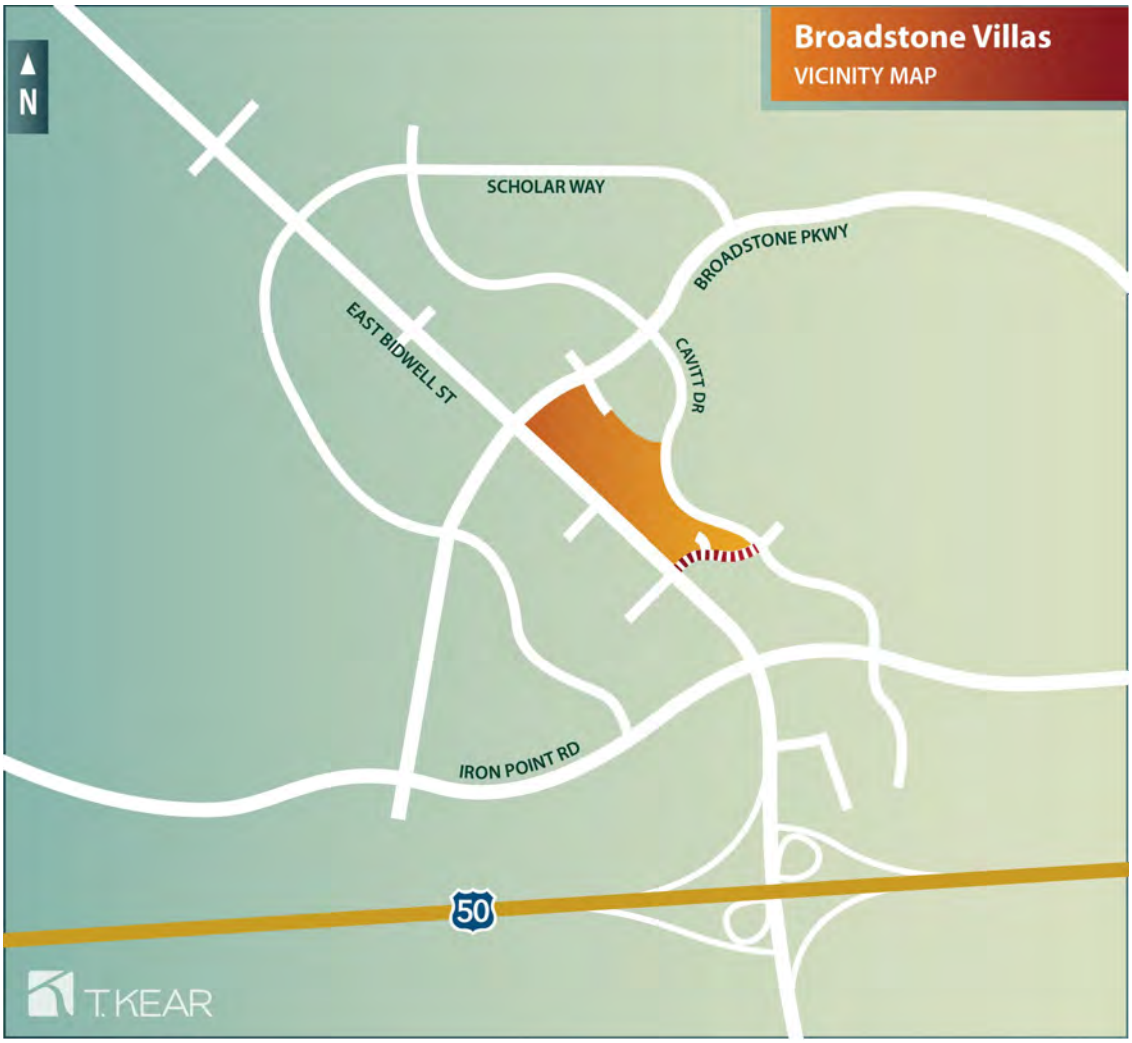


Figure 1. Avenida Folsom Senior Living Vicinity Map

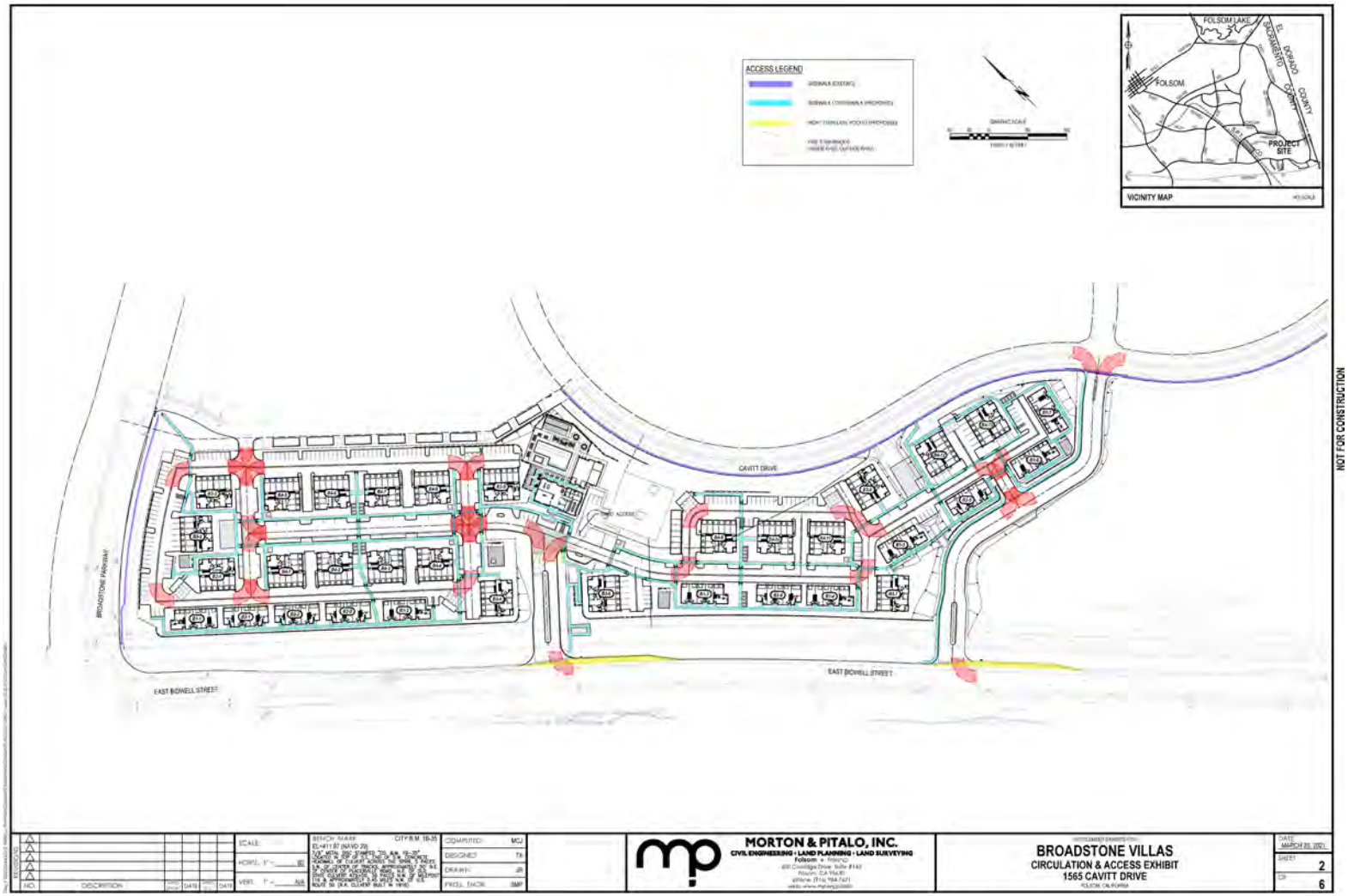


Figure 2. Preliminary Site Plan

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2. SCENARIOS, SETTING AND STUDY AREA

The transportation impact study area generally consists of the region along the portion of East Bidwell Street from Folsom Lake College to US 50, and along Cavitt Drive from Broadstone Parkway to Iron Point Road within the City of Folsom, California. Key roadways within the study area, and study intersections, are shown in **Figure 3**.

2.1 Study Scenarios

Four scenarios were identified for inclusion in this Transportation Impact Study through consultation with City of Folsom staff. The study determines the weekday AM peak-hour and PM peak-hour level-of-service at study intersections under the following scenarios:

- Existing 2021 without Project Condition;
- Existing 2021 with Project Condition;
- Existing Plus Approved Projects (EPAP) 2026 without Project Condition;
- EPAP 2026 with Project Condition.

The Project is consistent with the parcel's current zoning (C-2 SP 95-1) and General Plan land use designation (community commercial). Cumulative analysis is addressed through the General Plan environmental impact report, and not addressed herein.

Existing 2021, and Existing 2021 with Project Condition

Analysis of the existing condition reflects the traffic volumes and roadway geometry at the time the study began. These two scenarios (with and without the Project) quantify performance measures, serve as a known reference point for those familiar with the study area, and identify project related impacts anticipated to occur if the project opened in 2021.

EPAP 2026 Condition, and EPAP 2026 with Project Condition

EPAP scenarios, with and without the project, analyze conditions with the addition of traffic from approved and reasonably foreseeable projects that affect study intersections and segments. These scenarios are intended to reflect anticipated traffic approximately five years into the future, when the project could reasonably be anticipated to be constructed. This "phasing analysis" is intended to assist the City of Folsom in phasing of improvements at study intersections which may be necessary to accommodate traffic from all approved and anticipated tentative maps over the next five years.



Figure 3. Project Area Roadways Including Study Intersections and Study Road Segments

2.2 Project Area Roadways

Brief descriptions of the key roadways serving the Project site are provided below.

Broadstone Parkway in the project vicinity is a four-lane an east-west arterial, that wraps around the back of the Palladio shopping center from Iron Point Road to connect with Empire Ranch Road near the Sacramento-El Dorado county line. Broadstone Parkway has bike lanes, sidewalk, curb, and gutter. Turn pockets are provided at intersections.

Cavitt Drive is a north-south two-lane collector that runs northward from Costco to Folsom Lake College. Within the vicinity of the Project, Cavitt Drive has bike lanes, sidewalk, curb, and gutter. Turn pockets are provided at intersections.

East Bidwell Street runs through the City of Folsom from White Rock Road to Riley Street. East Bidwell Street becomes Scott Road south of US 50. Near the Project area, East Bidwell Street is a six-lane arterial roadway with bike lanes, sidewalk, curb, and gutter. Turn pockets are provided at intersections. The speed limit on East Bidwell Street north of US 50 is 45 mph.

Iron Point Road is an east-west arterial roadway with a raised median that runs from Folsom Boulevard to the eastern city limit along the north side of US 50. Within the vicinity of the Project, Iron Point Road has six lanes, bike lanes, sidewalk, curb, and gutter. The posted speed limit is 45 mph. Turn pockets are provided at intersections.

2.3 Study Intersections

There are four study segments on US 50 (**Table 1**) and fifteen study intersections (**Table 2**).

Table 1. US 50 Study Segment

US 50 Study Segments
A. Westbound US 50/East Bidwell Street diverge segment
B. Westbound US 50/East Bidwell Street merge segment
C. Eastbound US 50/East Bidwell Street diverge segment
D. Eastbound US 50/East Bidwell Street merge segment

Table 2. Study Intersections and Control

Intersection	Control
1. East Bidwell Street/College Parkway	Signal
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9. East Bidwell Street/US 50 Westbound	Signal
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12. Via Felice Extension/Project Driveway (Does not exist without Project)	AWSC*
13. Broadstone Parkway/Cavitt Drive	Signal
14. Cavitt Drive/Kilrush Drive	TWSC**
15. Iron Point Road/Cavitt Drive	Signal

* All way stop control
** Two Way Stop Control

2.4 Transit

City of Folsom's public transportation includes bus and dial-a-ride service provided by the City through "Folsom Stage Lines" and light rail service provided by Sacramento Regional Transit (RT). El Dorado County Transit (EDC Transit) also provides limited bus connections to El Dorado County.

Folsom Stage Lines and Dial-A-Ride

The Folsom Stage Line buses run Monday through Friday. Since February 4, 2019 Folsom Stage Lines has been operated by Sacramento RT. There is no weekend service available. There are currently ten buses running on three routes. They are routes 10, 20 and 30 (**Figure 4**). Routes 10 and 20 intersect at Folsom Lake College. There is no charge to transfer from one Folsom Stage Line route to the other.

- Route 10 - Services Historic Folsom, E. Bidwell St., the Broadstone Market Place, Broadstone Plaza, Folsom Aquatics Center, Folsom Lake College, Intel, Kaiser Permanente, Folsom Premium Outlets, Mercy Hospital, Palladio Mall, and Century Theatres. It connects to light rail and with the RT bus service Line 24. Service with a one-hour headway starts at 5:25 AM with the last pickup at 7:25 PM.
- Route 20 - Services Empire Ranch Road, East Natoma Street, Vista del Lago High School, Folsom Lake College and transfers to Route 10. There is one morning bus and two afternoon buses on Route 20.

- Route 30 - Services Folsom State Prison, City Hall, and Woodmere Drive during peak hours (6 a.m. – 8:10 a.m. and 2:35 p.m. – 4:55 p.m.) with four AM peak-period buses and five PM peak-period buses.

Dial-A-Ride is a curb-to-curb transportation service that operates within the Folsom City limits. It provides transportation to residents who have a physical, developmental, or mental disability. Senior citizens who are 55 years of age or older also qualify for this program.

Sacramento RT

Sacramento Regional Transit (RT) light rail provides service via the Gold Line connecting the Historic Folsom, Glenn, and Iron Point light rail stations to downtown Sacramento and points in between. Service is provided from 5 AM to 7 PM on a 30-minute headway. There is also a connection to RT bus route 24 from Folsom Stage Lines route 10 at the Madison/Main stop. RT route 24 provides service to Sunrise Mall on a (roughly) hourly headway from 6 AM to 7 PM.

El Dorado County Transit

The EDC Transit route 50X (the 50 Express) operates every hour from 6 AM until 7 PM Monday through Friday, with service from Missouri Flat Transfer Center in El Dorado County to the Folsom Iron Point light rail station, Folsom Lake College, and back.

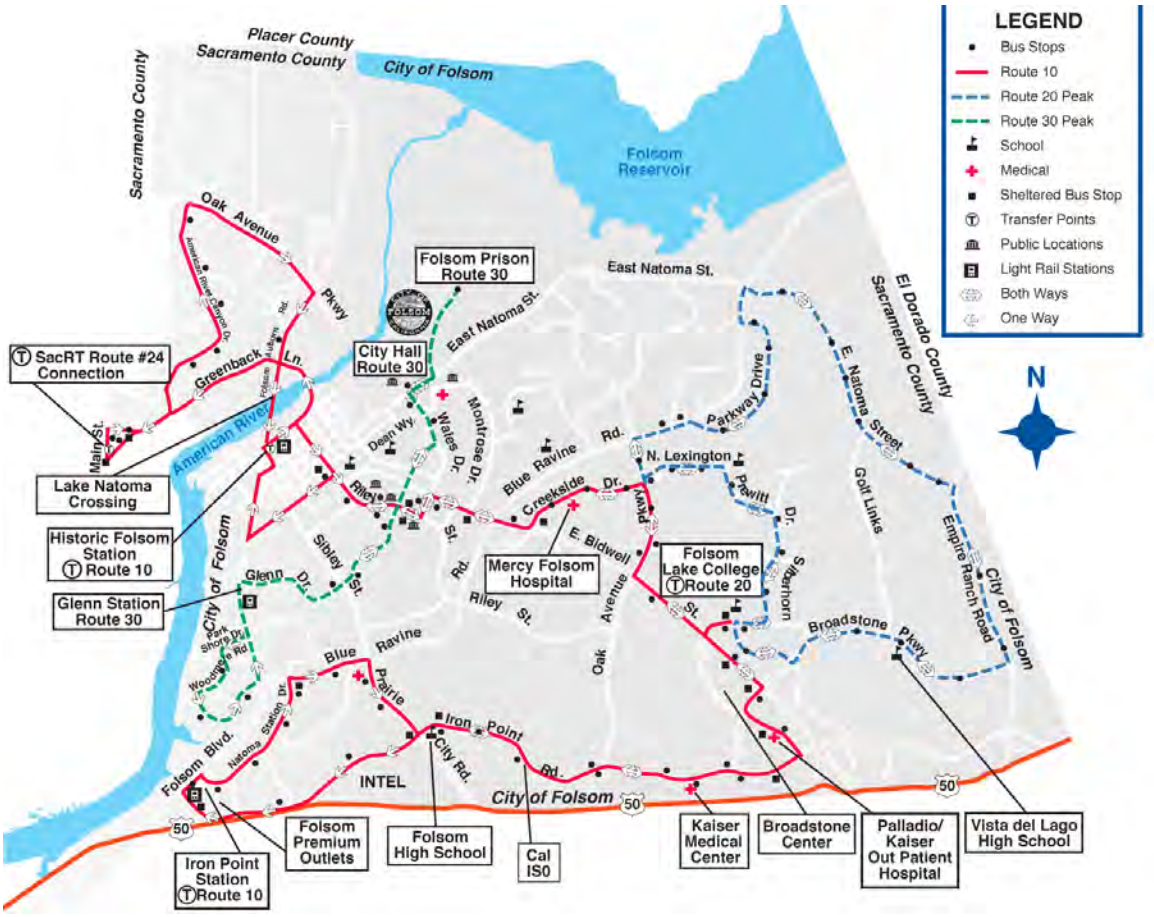


Figure 4. Folsom Stage Lines Routes 10, 20 and 30

2.5 Bicycle Facilities

The City of Folsom is one of the most bike friendly settings in California, with an existing comprehensive bikeway system that is extensive and connects to a vast number of historical and recreational attractions. Existing and planned bicycle facilities within the project area are described in the 2007 Folsom Bikeway Master Plan[2] which provide a framework for the design of a bikeway system that meets the California Street and Highway Code Section 890-894.2 - Bicycle Transportation Act and improves safety and convenience for all users. (Note that there is an updated bike plan under development as part of the Folsom Active Transportation Plan.) There are four types of bicycle facilities (Class 1, 2, 3, and 4) used in Folsom. **Figure 5** provides a Folsom bike map. All road segments in the study area include Class 2 bike lanes. There are existing and planned Class 1 trails along Iron Point Road, as well as a class 1 trail connecting under US 50 paralleling the rail line located to the east of East Bidwell Street. The different classes of bicycle facilities are described after **Figure 5**.

[2] Folsom (2007) Bikeway Master Plan, www.folsom.ca.us/city_hall/depts/parks/parks_n_trails/trails/bikeway_master_plan.asp.



Figure 5. Folsom Bike Map

Class I Bikeway (Bike Trail)

Class I bikeways, unless adjacent to an adequate pedestrian facility, are for the exclusive use of bicycles and pedestrians, therefore any facility serving pedestrians must meet accessibility requirements. Note that sidewalks are not Class I bikeways because they are primarily intended to serve pedestrians, generally cannot meet the design standards for Class I bikeways, and do not minimize vehicle cross flows. Motor vehicles are prohibited from bike paths per the California Vehicle Code (CVC). These prohibitions can be reinforced with signs. Within the Project vicinity there are Class 1 trails along the east side of the American River/Lake Natoma, the east side of Folsom Boulevard, and connections between those two trails both north and south of the Project site.

Generally, bike paths should be used to serve corridors not served by streets and highways or where a wide right-of-way exists, permitting such facilities to be constructed away from the influence of parallel streets. Bike paths should offer opportunities not provided by the road system. They can either provide a recreational opportunity, or in some instances, can serve as direct high-speed commute routes if cross flow by motor vehicles and pedestrian conflicts can be minimized. The most common applications are along rivers, ocean fronts, canals, utility right of way, abandoned railroad right of way, within school campuses, or within and between parks. There may also be situations where such facilities can be provided as part of planned developments. Another common application of Class I facilities is to close gaps to bicycle travel caused by construction of freeways or because of the existence of natural barriers (rivers, mountains, etc.).

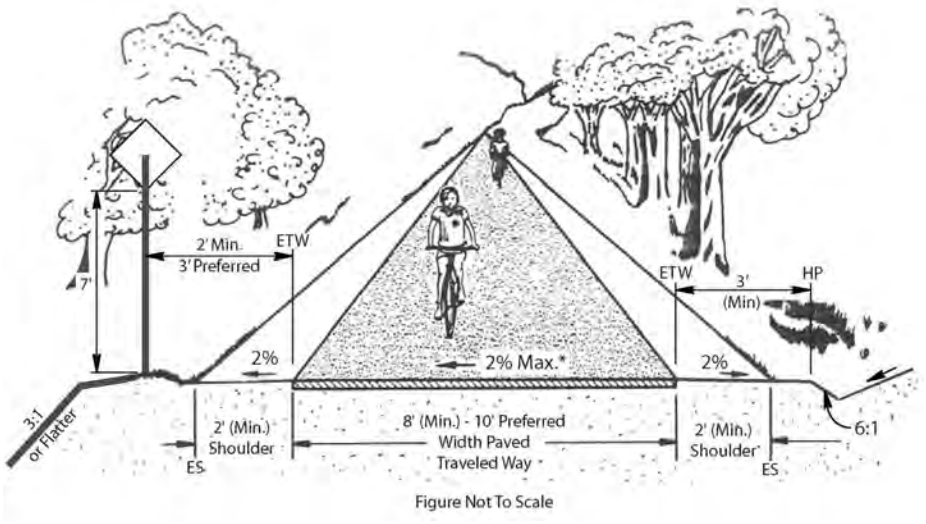


Figure 6. Two-Way Class I Bikeway (Source: Caltrans 2012 HDM Figure 1003.1A)

Class II Bikeway (Bike Lane)

Class II Bikeways are bike lanes generally striped along streets in corridors where there is significant bicycle demand, and where there are distinct needs that can be served by them. The purpose should be to improve conditions for bicyclists in the corridors. Bike lanes are intended to delineate the right-of-way assigned to bicyclists and motorists and to provide for more predictable movements by each. But a more important reason for constructing bike lanes is to better accommodate bicyclists through corridors where insufficient room exists for side-by-side sharing of existing streets by motorists and bicyclists. This can be accomplished by reducing the number of lanes, reducing lane width, or prohibiting or reconfiguring parking on given streets in order to delineate bike lanes. In addition, other things can be done on bike lane streets to improve the situation for bicyclists that might not be possible on all streets (e.g., improvements to the surface, augmented sweeping programs, special signal facilities, etc.). Generally, pavement markings alone will not measurably enhance bicycling.

If bicycle travel is to be provided by delineation, attention should be made to assure that high levels of service are provided with these lanes. It is important to meet bicyclist expectations and increase bicyclist perception of service quality where capacity analysis demonstrates service quality measures are improved, from the bicyclist's point of view.

Class III Bikeway (Bike Route)

Bike routes are unstriped, shared facilities which serve either to:

- Provide continuity to other bicycle facilities (usually Class II bikeways); or
- Designate preferred routes through high demand corridors.

As with bike lanes, designation of bike routes should indicate to bicyclists that there are advantages to using these routes as compared with alternative routes. This means that responsible agencies have taken actions to assure that these routes are suitable as shared routes and will be maintained in a manner consistent with the needs of bicyclists. Normally, bike routes are shared with motor vehicles.

A variant on Class III bikeways, shared lanes, or "sharrow" lanes, are becoming more common. Sharrows are a form of Class III bikeways where the general-purpose lane is too narrow for a bicycle and a vehicle to travel safely side-by-side within the same lane. A sharrow symbol painted (**Figure 7**) on the roadway is used to indicate the likely lateral location of bikes in the lane to inform motor vehicles.



Figure 7. Sharrow

Class IV Bikeway (Separated Bikeway or "Cycle Track")

The Protected Bikeways Act of 2014 (Assembly Bill 1193 - Ting, Chapter 495) established Class IV bikeways for California. Class IV bikeways provide a right-of-way designated exclusively for bicycle travel adjacent to a roadway and which are protected from vehicular traffic. Types of separation include, but are not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking. An example is shown in **Figure 8**.



Figure 8. Class IV Bikeway

(source: Gary Kavanagh image 1272: https://flic.kr/p/hxp5eL)

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3. METHODOLOGY

This section provides a process overview, describes traffic forecasting, and discusses the methods/criteria used to evaluate level-of-service. A discussion of the significance criteria is also included.

3.1 Process Overview

The overall analysis process was structured to identify potential adverse transportation effects related to the proposed project.

- Traffic volumes and turning movements for the Existing 2021 Condition were determined from observed traffic counts taken on Tuesday May 18, 2021, and counts collect by the City of Folsom during April 2021. Those counts were factored up to account for the impact of COVID 19 closures on the transportation system using pre-pandemic counts from March 5, 2020. AM peak-hour counts were increased by 52% and PM peak-hour counts were increased by 28%.
- EPAP 2026 volumes were based on growth from all reasonably foreseeable projects effecting the study intersections.
- Study intersection and segment traffic operations were analyzed both with and without the proposed project to identify potential violations of General Plan level-of-service policies.
- California Environmental Quality ACT (CEQA) VMT impacts were evaluated using screening tools published by the Sacramento Area Council of Governments (SACOG).

3.2 Level-of-Service Methodology

Level-of-service (LOS) is a qualitative indication of the level of delay and congestion experienced by motorists using an intersection. Levels-of-service are designated by the letters A through F, with A being the best conditions and F being the worst (high delay and congestion). Calculation methodologies, measures of performance, and thresholds for each letter grade differ for road segments, signalized intersections, and unsignalized intersections.

Based on guidance from City of Folsom staff, the following procedures described below for intersection and segment traffic operations analysis were selected for this study.

Intersection Traffic Operations Analysis

Signalized Intersections

The methodology from the Highway Capacity Manual (HCM) 6th Edition[3], are used to analyze signalized intersections. Level-of-service can be characterized for the entire intersection, each approach, or by lane group. Control delay alone (the weighted average delay for all vehicles entering the intersection) is used to characterize level-of-service for the entire intersection or an

[3] Transportation Research Board (2016) Highway Capacity Manual, Washington, D.C.

approach. Control delay and volume to capacity ratio are used to characterize level-of-service for lane groups. The average delay criteria used to determine the level-of-service at signalized intersections is presented in **Table 3**. The HCM 2010 methodology is used as the primary method. HCM 2000 methods are only utilized where the signal phasing is incompatible with HCM 2010 methods.

Table 3. Level-of-Service Criteria for Signalized Intersections

Level -of-Service	Description	Average Delay[1] (Sec. /Vehicle.)
A	Very Low Delay: This level-of-service occurs when progression is extremely favorable, and most vehicles arrive during a green phase. Most vehicles do not stop at all.	≤ 10.0
B	Minimal Delays: This level-of-service generally occurs with good progression, short cycle lengths, or both. More vehicles stop than at LOS A, causing higher levels of average delay.	10.1-20.0
C	Acceptable Delay: Delay increases due to only fair progression, longer cycle lengths, or both. Individual cycle failures (*to service all waiting vehicles*) may begin to appear at this level of service. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.	20.1-35.0
D	Approaching Unstable/Tolerable Delays: The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	35.1-55.0
E	Unstable Operation/Significant Delays: This is considered by many agencies the upper limit of acceptable delays. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.	55.1-80.0
F	Excessive Delays: This level, considered to be unacceptable to most drivers, often occurs with oversaturation (i.e., when arrival flow rates exceed the capacity of the intersection). It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also contribute to such delay levels.	> 80.0 or v/c >1.0

Note 1: Weighted average of delay on all approaches. This is the measure used by the Highway Capacity Manual to determine level-of-service. Any movement with a volume-to-capacity ratio (v/c) greater than 1.0 is considered to be level-of-service F.

Source: Transportation Research Board (2016) Highway Capacity Manual 6th Edition, Washington D.C.

Unsignalized Intersections

The methodology from HCM 6th Edition is used for the analysis of unsignalized intersections. At an unsignalized intersection, most of the main street traffic is un-delayed, and by definition have acceptable conditions. The main street left-turn movements and the minor street movements are all susceptible to delay of varying degrees. Generally, the higher the main street traffic volumes,

the higher the delay for the minor movements. Separate methods are utilized for Two-Way Stop-Controlled (TWSC) intersections and All-Way Stop-Controlled (AWSC) intersections.

- **TWSC:** The methodology for analysis of two-way stop-controlled intersections calculates an average total delay per vehicle for each minor street movement and for the major street left-turn movements, based on the availability of adequate gaps in the main street through traffic. A level-of-service designation is assigned to individual movements or combinations of movements (in the case of shared lanes) based upon delay, it is not defined for the intersection as a whole. Unsignalized intersection level-of-service reported herein is for each movement (or group of movements) based upon the respective average delay per vehicle. **Table 4** presents the average delay criteria used to determine the level-of-service at TWSC and AWSC intersections.
- **AWSC:** At all-way stop-controlled intersections, the level-of-service is determined by the weighted average delay for all vehicles entering the intersection. The methodologies for these types of intersections calculate a single weighted average delay and level-of-service for the intersection as a whole. The average delay criteria used to determine the level-of-service at all-way stop intersections is the same as that presented in **Table 4**. Level-of-service for specific movements can also be determined based on the TWSC methodology.

It is not unusual for some of the minor street movements at unsignalized intersections to have level-of-service D, E, or F conditions while the major street movements have level-of-service A, B, or C conditions. In such a case, the minor street traffic experiences delays that can be substantial for individual minor street vehicles, but the majority of vehicles using the intersection have very little delay. Usually in such cases, the minor street traffic volumes are relatively low. If the minor street volume is large enough, improvements to reduce the minor street delay may be justified, such as channelization, widening, or signalization.

Table 4. Level-of-Service Criteria for Unsignalized Intersections

Level of Service (LOS)	Description	TWSC[1] Average Delay by Movement (seconds / vehicle)	AWSC[2] Intersection Wide Average Delay (seconds / vehicle)
A	Little or no delay	< 10	< 10
B	Short traffic delay	> 10 and < 15	> 10 and < 15
C	Average traffic delays	> 15 and < 25	> 15 and < 25
D	Long traffic delays	> 25 and < 35	> 25 and < 35
E	Very long traffic delays	> 35 and < 50	> 35 and < 50
F	Extreme delays potentially affecting other traffic movements in the intersection	> 50 (or, v/c >1.0)	> 50

Note 1: Two-Way Stop-Control (TWSC) level-of-service is calculated separately for each minor street movement (or shared movement) as well as major street left turns using these criteria. Any movement with a volume to capacity ratio (v/c) greater than 1.0 is considered to be level-of-service F.

Note 2: All-Way Stop-Control (AWSC) assessment of level-of-service at the approach and intersection levels is based solely on control delay.

Source: Transportation Research Board (2016) Highway Capacity Manual 6th Edition, Washington D.C.

Signal Warrants

At each unsignalized intersection, the potential need for a traffic signal was evaluated. Traffic signal warrants are a series of standards that provide guidelines for determining if a traffic signal is appropriate. Signal warrant analyses are typically conducted at intersections of uncontrolled major streets and stop sign-controlled minor streets. If one or more signal warrants are met, signalization of the intersection may be appropriate. However, a signal should not be installed if none of the warrants are met, since the installation of signals would increase delays on the previously uncontrolled major street, and may increase the occurrence of particular types of accidents.

As stated in the 2014 California Edition of the Manual on Uniform Traffic Control Devices (California MUTCD 2014)[4], "*An engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified at a particular location.*

The investigation of the need for a traffic control signal shall include an analysis of factors related to the existing operation and safety at the study location and the potential to improve these conditions, and the applicable factors contained in the following traffic signal warrants:

- *Warrant 1, Eight-hour Vehicular Volume*
- *Warrant 2, Four-hour Vehicular Volume*
- *Warrant 3, Peak-hour*
- *Warrant 4, Pedestrian Volume*
- *Warrant 5, School Crossing*
- *Warrant 6, Coordinated Signal System*
- *Warrant 7, Crash Experience*
- *Warrant 8, Roadway Network*
- *Warrant 9, Intersection Near a Grade Crossing*

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal."

Consistent with the industry standard of practice, this Traffic Impact Analysis did not evaluate the full panoply of warrants for traffic signals, but instead focused on the peak-hour warrant. The MUTCD states that, "*This [peak-hour] signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.*" So, the peak-hour warrant is being used in this impact analysis study as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed the peak-hour warrant are considered (for the purposes of this impact analysis) to be likely to meet

[4] Caltrans (2019) California Manual on Uniform Traffic Control Devices - FHWA's MUTCD 2009 Edition as amended for use in California - 2014 Edition - Revision 4, March 29, 2019. Section 4C.

one or more of the other signal warrants (such as the 4-hour or 8-hour warrants). This peak-hour analysis is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction.

Unsignalized intersections were evaluated using the Peak-hour Volume Warrant (Warrant No. 3) in the California MUTCD 2014. The Peak-hour Volume Warrant was applied where the minor street experiences long delays in entering or crossing the major street for at least one hour in a day.

Even if the Peak-hour Volume Warrant is met, a more detailed signal warrant study is recommended before a signal is installed. The more detailed study should consider volumes during the daily peak-hours of roadway traffic, pedestrian traffic, and accident histories.

Freeway Segment Analysis

Freeway merge/diverge segments and basic segments were analyzed utilizing the methodologies outlined in Chapters 12 and 13 of the Highway Capacity Manual, 2010 (HCM 2010)[5].

Basic Segments

Basic freeway segments operations and level-of-service is defined by density (passenger cars per mile per lane) which depends upon traffic volumes, and segment, characteristics. These characteristics include the geometry, grade, free flow speeds, and heavy vehicles. **Table 6** shows the relationship of level-of-service to freeway density for merge, diverge, and weaving segments.

Table 5. Level-of-Service Criteria – Basic Freeway Segments

Level of Service	Maximum Density (passenger vehicles per mile per lane)
A	<11
B	18
C	26
D	35
E	45
F	> 45, or Demand exceeds capacity

Source: Transportation Research Board (2010) Highway Capacity Manual, Chapter 11, Washington, D.C.

Merge and Diverge Segments

Freeway merge and diverge segments operations and level-of-service is defined by density (passenger cars per mile per lane) which depends upon traffic volumes and the ramp characteristics. These characteristics include the length and type of acceleration/deceleration lanes, free-flow speeds, number of lanes, grade, heavy vehicles, and types of facilities. **Table 6**

[5] Transportation Research Board (2010) Highway Capacity Manual, Washington, D.C.

shows the relationship of level-of-service to freeway density for merge, diverge, and weaving segments.

Table 6. Level-of-Service Criteria – Freeway Ramp Merge/Diverge Areas

Level of Service	Maximum Density (passenger vehicles per mile per lane)
A	<10
B	20
C	28
D	35
E	> 35
F	Demand exceeds capacity

Source: Transportation Research Board (2010) Highway Capacity Manual, Chapter 13, Washington, D.C.

3.3 Standards of Significance

Level-of-service impacts of the proposed project were determined based on the methods described above and identified as either "significant" or "less-than-significant" in the following thresholds:

City of Folsom

Policy M 4.13 of the City of Folsom General Plan (adopted August 28, 2018) calls for the City to:

> *Strive to achieve at least traffic Level of Service "D" (or better) for local streets and roadways throughout the City. In designing transportation improvements, the City will prioritize use of smart technologies and innovative solutions that maximize efficiencies and safety while minimizing the physical footprint. During the course of Plan buildout, it may occur that temporarily higher levels-of-service result where roadway improvements have not been adequately phased as development proceeds. However, this situation will be minimized based on annual traffic studies and monitoring programs. City Staff will report to the City Council at regular intervals via the Capital Improvement Program process for the Council to prioritize projects integral to achieving level-of-service D or better.*

Consistent with historical practice within the City of Folsom, the General Plan EIR also includes a criterion addressing potential impacts at locations that operate at level-of-service E or F under no-project conditions. Under that standard, a significant impact would occur if the proposed project would:

> *Increase the average delay by five seconds or more at an intersection that currently operates (or is projected to operate) at an unacceptable level-of-service under "no-project" conditions.*

For the purposes of this analysis, an impact is considered potentially significant if implementation of the Project would result in any of the following:

- Cause an intersection in Folsom that currently operates (or is projected to operate) at level-of-service D or better to degrade to level-of-service E or worse;
- Increase the average delay by five seconds or more at an intersection in Folsom that currently operates (or is projected to operate) at an unacceptable level-of-service E or F.

Freeway Facilities

An impact is considered significant on freeway facilities if the project causes the facility to change from an acceptable to unacceptable level-of-service. For facilities that are or will be operating at unacceptable level-of-service without the project, an impact is considered significant if:

- The existing level-of-service cannot be maintained with the addition of project traffic;
- The project traffic increases vehicle density on a freeway mainline segment or freeway ramp junction by 0.1 passenger cars per lane per mile;
- The project increases the number of peak-hour vehicles on a freeway mainline segment or freeway ramp junction by more than 1 percent.

Per the Caltrans' Guide for the Preparation of Traffic Impact Studies, Caltrans strives to maintain a target level of service at the transition between level-of-service C and level-of-service D on state highway facilities. However, for the effected portion of US 50, Caltrans has established a concept level-of-service E threshold[6]. For consistency with other traffic impact studies performed in the City of Folsom that considered US 50, level-of-service E was selected as the minimum standard for all study freeway facilities.

Bicycle/Pedestrian/Transit Facilities

An impact is considered significant if implementation of the Project would:

- Inhibit the use of bicycle, pedestrian, or transit facilities;
- Eliminate existing bicycle, pedestrian, or transit facilities;
- Prevent the implementation of planned bicycle, pedestrian, or transit facilities.

3.6 Analysis Tools

Control delay and level-of-service for study intersections were calculated using the Synchro/SimTraffic 11 analysis software. This software models vehicle delay, optimizes traffic signal timing, and implements the methodologies of the 6th Ed. of the Highway Capacity Manual for signalized and unsignalized intersections. Data on road characteristics (geometric), traffic counts, and the signal timing data for each analysis intersection are required. In general, default parameters were used, except for locations where specific field data were available. Heavy vehicle percentages of 1% were assumed during the peak-hour (observer counts were generally 1% or less), with the exception of US 50 interchanges and mainline which were assumed to have a 3% heavy vehicle fraction during the AM peak-hour, based on observed counts.

[6] Caltrans (2014) Transportation Concept Report and Corridor System Management Plan, United States Route 50, district 3, California Department of Transportation, June 27, 2014

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4. EXISTING 2021 CONDITIONS

This section presents the Existing Condition. For purposes of this study, Existing Conditions represent typical midweek, non-holiday, traffic volumes in early March of 2020 prior to the start of the onset of the COVID-19 pandemic.

4.1 Existing 2021 Condition

Data Sources

The analysis tools require a variety of data to generate the evaluation criteria. The following sections describe data collection procedures for Existing Conditions. There were three primary data elements (roadway characteristics, intersection turning movement counts, and traffic control data); and two supplementary elements (other recent studies, and field data) that comprised the data collection program for this traffic analysis.

Roadway Geometry and Usage Characteristics

The geometry and usage data for the analysis were collected through aerial photographs, field visits, and prior studies. Current intersection geometry was field validated. **Table 7** shows the key items included in the geometric data and the source for each item.

Table 7. Key Items and Sources for Geometry and Usage Data

Key Item	Source
Lane configurations and width	Aerial photographs and field visits
Lane utilization	Prior studies, aerial photographs, and field visits
Intersection spacing	Aerial photographs and field visits
Length of storage bays	Aerial photographs and field visits
Transit stops and routes	Transit schedules, aerial photographs, and field visits
Turn prohibitions or allowance	Aerial photographs and field visits

Lane configurations and width – These data specify the number of lanes and the width of the roadway in each direction, and the directional turns that are allowed from each lane.

Lane utilization – These data specify how lanes are used by drivers, such as traffic distribution between lanes on a multi-lane roadway.

Intersection spacing – These data refer to the distance (in feet) between intersections.

Length of storage bays – These data refer to the length (in feet) of available storage for left-turning or right-turning vehicles where exclusive turn lanes are available. It is collected for right-turn lanes when the parking lane is used as a right-turn lane.

Transit stops and routes – A transit stop is an area where passengers await, board, alight, and transfer between transit vehicles. A transit route is the roadway that transit vehicles operate on.

Turn prohibitions or allowance – These data specify if right turns on red (RTOR) are allowed on the roadway.

Intersection Turning Movement Counts

Existing morning and evening peak-period vehicle and pedestrian turning movement counts were collected at study intersections in April and May 2021. Pre COVID-19 pandemic counts, collected along East Bidwell Street on March 5, 2020, were used to factor the counts up the 2021 counts to account for short term traffic reductions caused by the economic effect of COVID-19. AM peak hour counts were factored up by 52% and PM peak-hour counts were factored up by 28%. Traffic count data sheets are provided in **Appendix A** of this report[7]. Peak-hour traffic counts were used to conduct the intersection level-of-service analysis. Turning movement counts at consecutive intersections were balanced and adjusted where appropriate to conservatively reflect existing traffic flows[8]. Observed intersection peak-hour factors (PHF) were applied. **Figure 9** provides a summary of the intersection lane geometry and peak-period turning movements under Existing Conditions.

Existing Condition Intersection and Segment Level-of-Service

Table 8 and **Table 9** present a summary of level-of-service results for the study intersections under Existing Conditions. The results indicate that the East Bidwell Street/Power Center Drive and East Bidwell Street/Iron Point Road intersections exceed the General Plan level-of-service standard in the PM prior to the addition of project traffic. These locations are shown in orange highlight in the tables below. Calculation sheets for intersection delay and level-of-service are provided in **Appendix B**.

Table 8. Existing 2021 Intersection Delay and Level-of-Service (LOS)

Intersection	Control	2021 No Project AM Delay (Sec.) and LOS	2021 No Project PM Delay (Sec.) and LOS
1. East Bidwell Street/College Parkway	Signal	16.1 B	15.1 B
2. East Bidwell Street/Scholar Way	Signal	14.4 B	19.0 B
3. East Bidwell Street/ Power Center Drive	Signal	36.9 D	60.8 E
4. East Bidwell Street/Broadstone Parkway	Signal	38.2 D	37.8 D
5. East Bidwell Street/Via Sole	Signal	3.4 A	4.5 A
6. East Bidwell Street/Via Felice	Signal	7.8 A	10.2 B
7. East Bidwell Street/Iron Point Road	Signal	43.8 D	121.3 F
8. East Bidwell Street/Placerville Road	Signal	11.9 B	17.1 B
9. East Bidwell Street/US 50 Westbound	Signal	34.3 C	39.4 D
10. East Bidwell Street/US 50 Eastbound	Signal	10.2 B	15.0 B
11. Broadstone Parkway/Marketplace	Signal	14.1 B	19.1 B
12. Via Felice/Project Driveway	AWSC		
13. Broadstone Parkway/Cavitt Drive	Signal	12.0 B	12.2 B
14. Cavitt Drive/Kilrush Drive	TWSC	9.5 A (WBL)	10.0 B (WBL)
15. Iron Point Road/Cavitt Drive	Signal	18.0 B	25.7 C

[7] Volumes for the southbound left at intersection 1 and the eastbound left at intersection 5 were reduced per guidance from the City (Josh Kinkade email to Tom Kear dated August 16, 2021).

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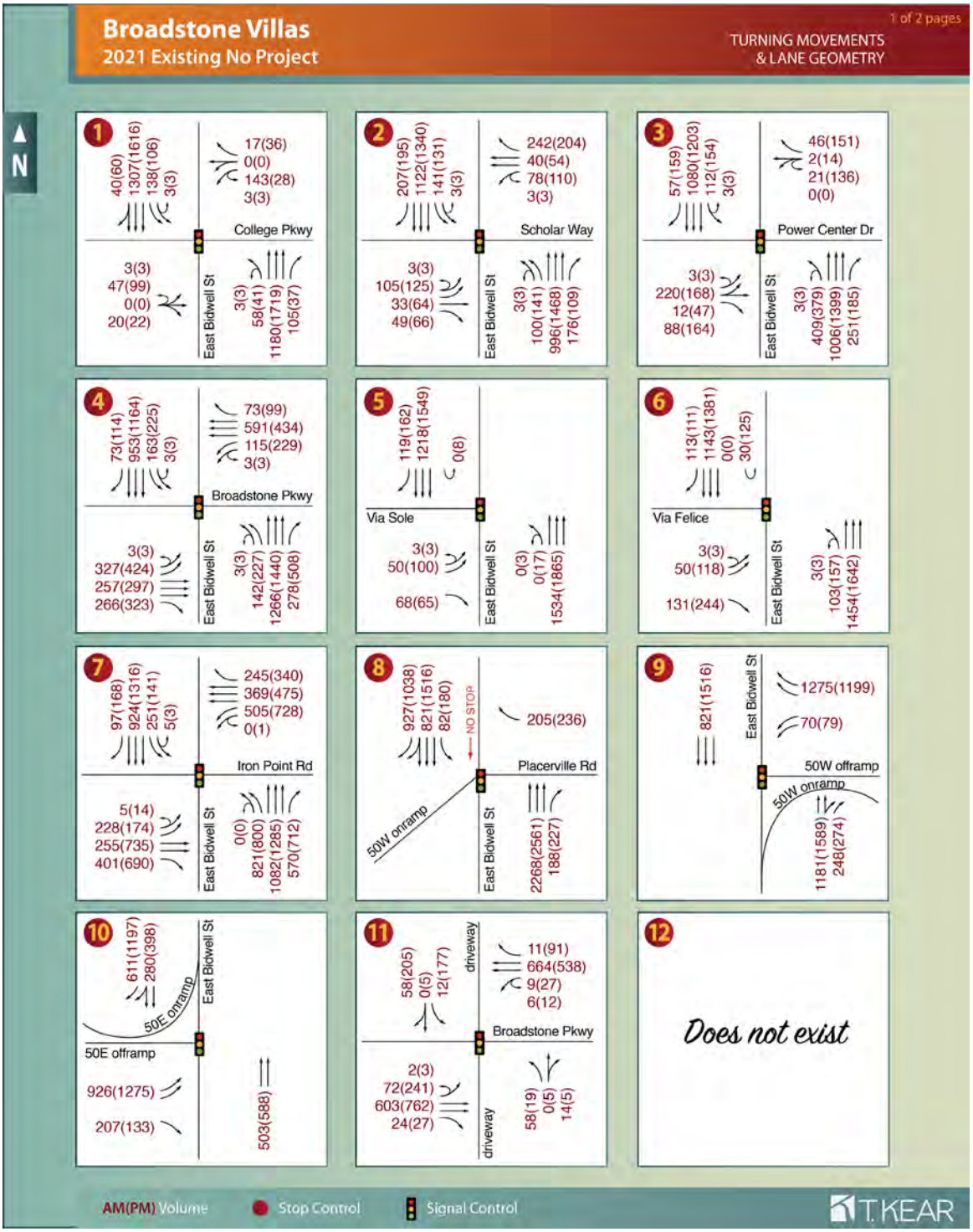


Figure 9. Existing Condition Turn Movements and Geometry

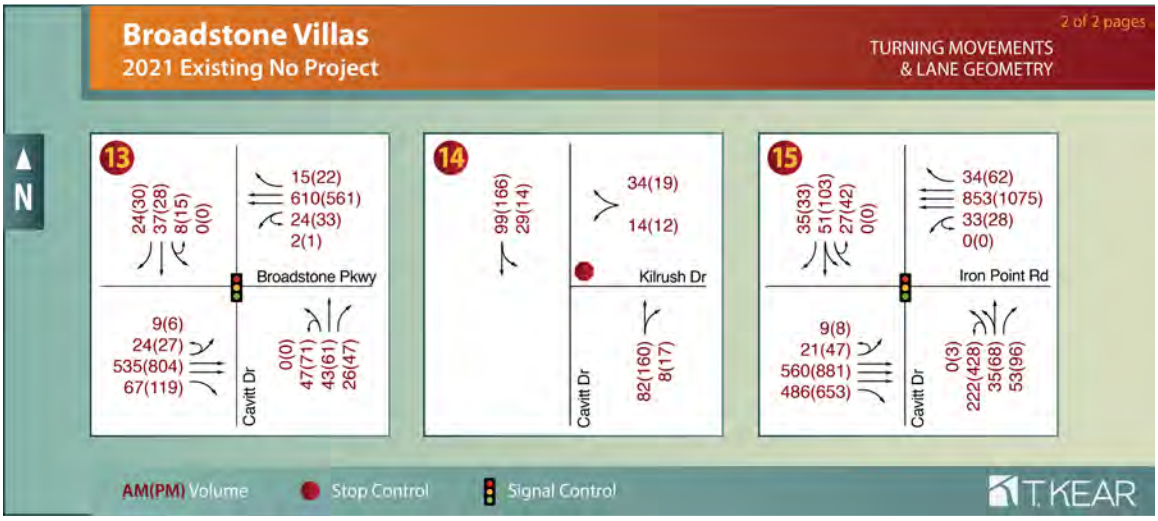


Figure 9. Existing Condition Turn Movements and Geometry (continued)

Table 9. Existing 2021 US 50 Segment Density and Level-of-Service (LOS)

Segment	Segment Type	2021 AM No Project Density and LOS	2021 PM No Project Density and LOS
A. Westbound US 50/East Bidwell Street	Diverge	24.5 C	17.3 B
B. Westbound US 50/East Bidwell Street	Merge	24.4 C	19.4 B
C. Eastbound US 50/East Bidwell Street	Diverge	15.8 b	21.9 C
D. Eastbound US 50/East Bidwell Street	Merge	14.9 B	23.4 C

4.2 Assessment of Proposed Project

Trip Generation

Traffic generated by the proposed project was based on Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition (2017), and is provided in **Table 10** below.

Table 10. Project Trip Generation

Description	ITE Land	Quantity	Metric	Daily	AM Peak-Hour			PM Peak-Hour		
					Total	In	Out	Total	In	Out
Multi-Family Mid-Rise	221	257 dwelling	Rate	5.44	0.32	27%	73%	0.41	60%	40%
			Trips	1,399	82	22	60	105	63	42

Daily Rate: T=5.45(X)-1.75; AM and PM Peak hour rates: average rates for peak hour of generator.
Source: ITE (2017) Trip Generation Manual, Institute of Transportation Engineers, Washington DC.

Trip Distribution

Trip distribution was based on observed traffic counts and select zone analysis within the travel demand model, and nearby projects. New project trips were distributed as follows:

- 20% to/from the north via East Bidwell Street;
- 2% to/from the north via Cavitt Drive;
- 10% to/from the east via Broadstone Parkway;
- 8% to/from the east via Iron Point Road;
- 10% to/from the east via US 50;
- 4% to/from the south via Cavitt Drive;
- 8% to/from the south via East Bidwell Street;
- 8% to/from the west via Iron Point Road;
- 6% to/from the west via Broadstone Parkway; and
- 4% to/from the Palladio shopping center.

Project trip assignment is seen visually in **Figure 10** and **Figure 11**.



Figure 10. Project Trip Assignment

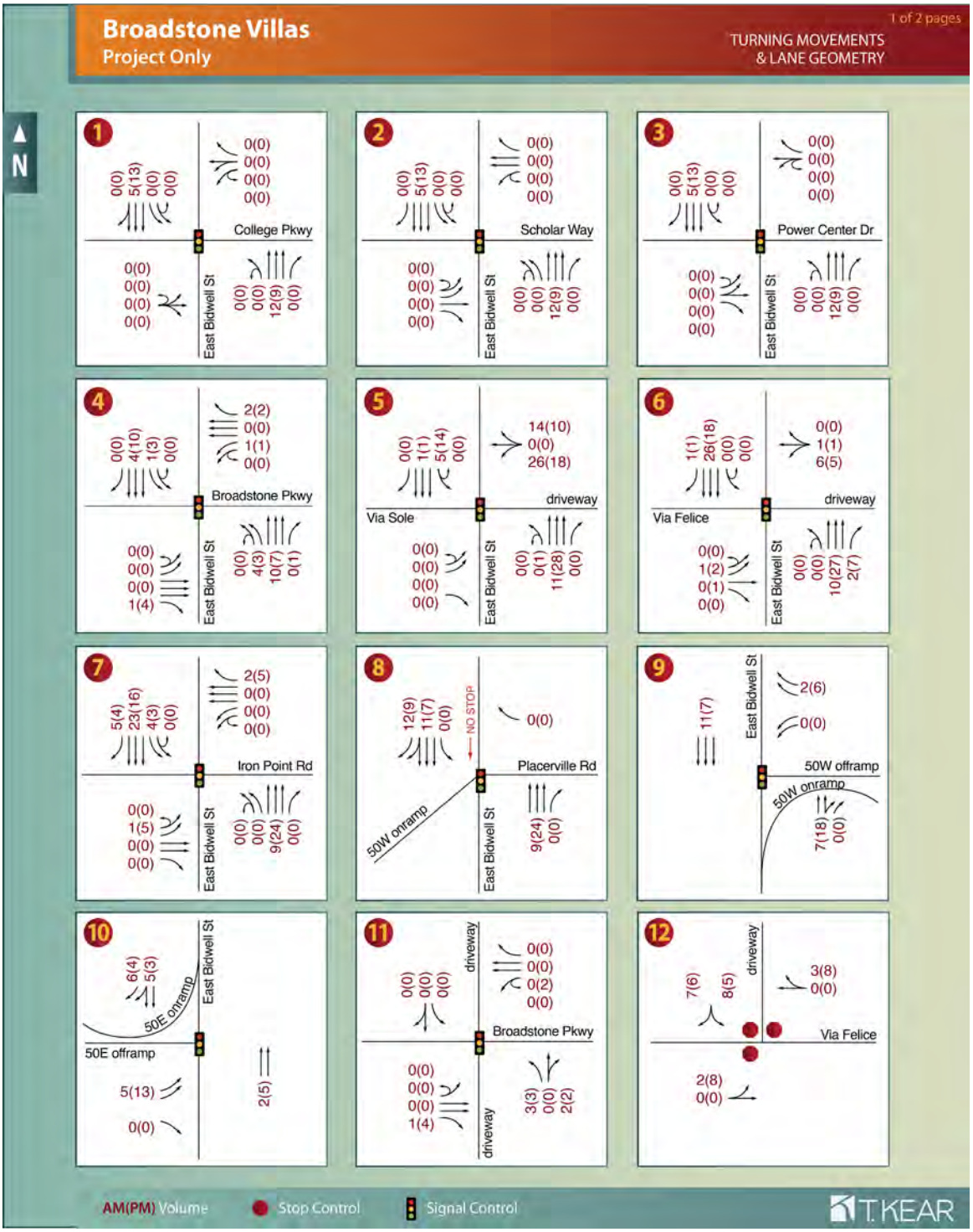


Figure 11. Project Trip Assignment

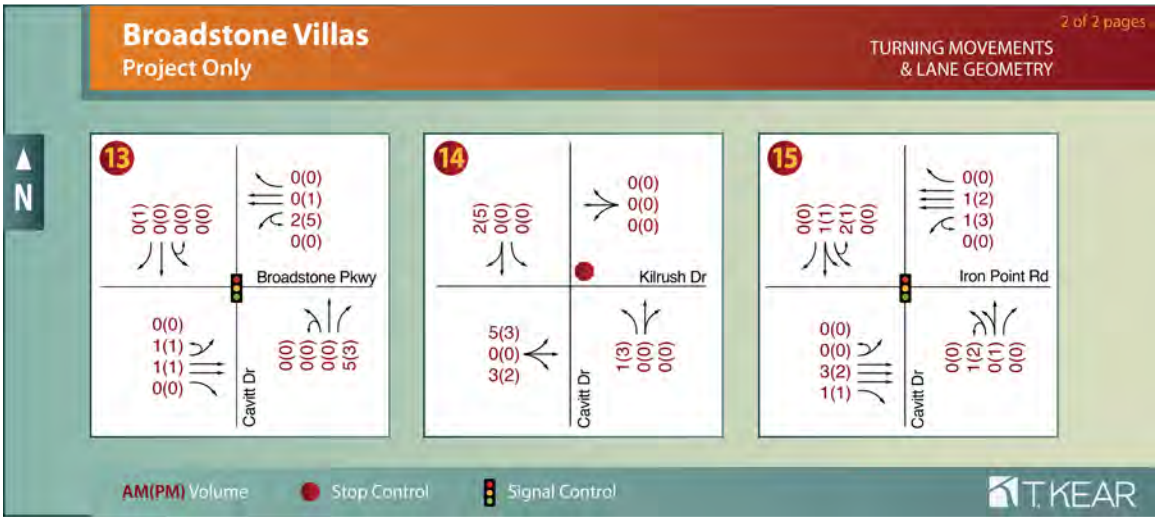


Figure 11. Project Trip Assignment (continued)

4.3 Existing 2021 with Project Conditions

Peak-hour traffic associated with the Project was added to the Existing 2021 turning volumes at each intersection. Delay and level-of-service were determined at the study intersections and segments. **Figure 12** summarizes the turning movements and lane configurations for the Existing with Project Condition. **Table 11** and **Table 12** presents a summary of the level-of-service results for the study intersections and segments.

The results indicate that the East Bidwell Street/Power Center Drive and East Bidwell Street/Iron Point Road intersections continue to exceed the level-of-service standard with the addition of project traffic. These locations are shown in orange highlight in the tables below. Because the increase in delay is less than five seconds, these violations of the General Plan level-of-service policy is not considered a Project impact. Calculation sheets for intersection delay and level-of-service are provided in **Appendix B**.

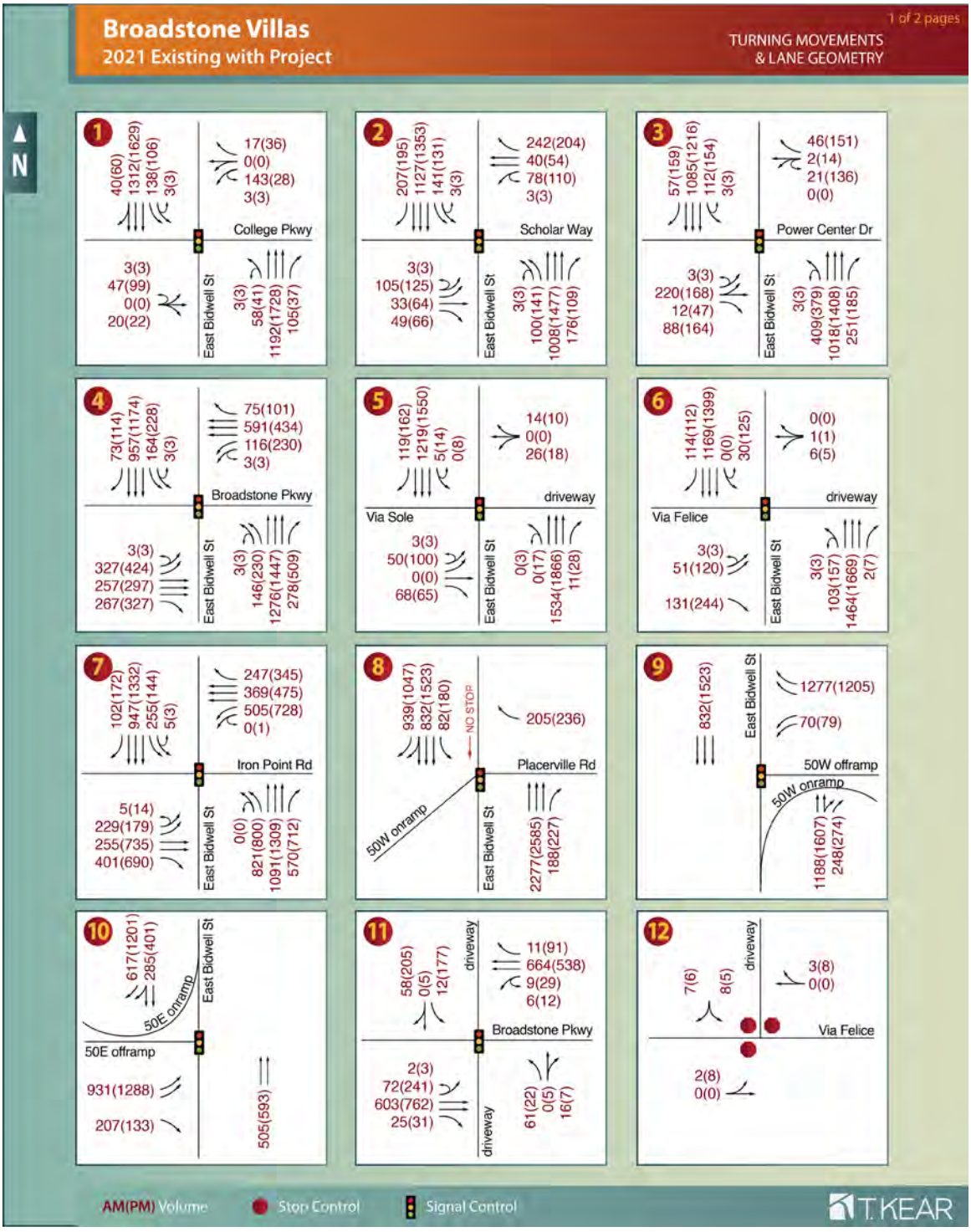


Figure 12. Existing 2021 with Project Condition Turning Movements and Lane Geometry

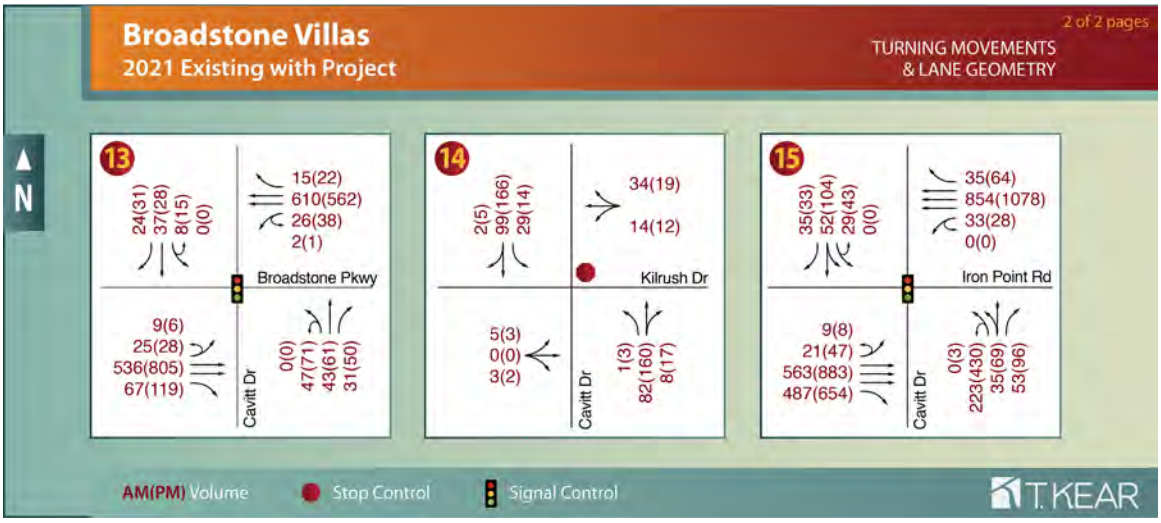


Figure 12. Existing 2021 with Project Condition Turning Movements and Lane Geometry (continued)

Table 11. Existing 2021 Intersection Delay and Level-of-Service (LOS), with and without Project

Intersection	Control	2021 No Project AM Delay (Sec.) and LOS	2021 No Project PM Delay (Sec.) and LOS	2021 Plus Project AM Delay (Sec.) and LOS	2021 Plus Project PM Delay (Sec.) and LOS
1. East Bidwell Street/College Parkway	Signal	16.1 B	15.1 B	14.6 B *	15.1 B
2. East Bidwell Street/Scholar Way	Signal	14.4 B	19.0 B	13.9 B *	18.9 B *
3. East Bidwell Street/ Power Center Drive	Signal	36.9 D	60.8 E	32.5 C *	60.6 E *
4. East Bidwell Street/Broadstone Parkway	Signal	38.2 D	37.8 D	37.9 D *	37.9 D
5. East Bidwell Street/Via Sole	Signal	3.4 A	4.5 A	6.4 A	5.9 A
6. East Bidwell Street/Via Felice	Signal	7.8 A	10.2 B	10.3 B	14.1 B
7. East Bidwell Street/Iron Point Road	Signal	43.8 D	121.3 F	43.9 D	120.8 F *
8. East Bidwell Street/Placerville Road	Signal	11.9 B	17.1 B	11.9 B	17.4 B
9. East Bidwell Street/US 50 Westbound	Signal	34.3 C	39.4 D	34.7 C	40.5 D
10. East Bidwell Street/US 50 Eastbound	Signal	10.2 B	15.0 B	10.2 B	15.4 B
11. Broadstone Parkway/Marketplace	Signal	14.1 B	19.1 B	13.5 B *	19.3 B
12. Via Felice/Project Driveway	AWSC			6.8 A	6.8 A
13. Broadstone Parkway/Cavitt Drive	Signal	12.0 B	12.2 B	11.9 B *	12.4 B
14. Cavitt Drive/Kilrush Drive	TWSC	9.5 A (WBL)	10.0 B (WBL)	10.3 B (EB)	10.7 B (EB)
15. Iron Point Road/Cavitt Drive	Signal	18.0 B	25.7 C	16.5 B *	25.9 C

* Anticipated reduction in average delay with the project results from adding volume to movements that have available capacity, and the corresponding effect that change has on reducing likelihood of some actuated signal phases gapping out.

Table 12. Existing 2021 US 50 Segment Density and Level-of-Service (LOS), with and without Project

Segment	Segment Type	2021 AM No Project Density and LOS	2021 PM No Project Density and LOS	2021 AM Plus Project Density and LOS	2021 PM Plus Project Density and LOS
A. Westbound US 50/East Bidwell Street	Diverge	24.5 C	17.3 B	24.5 C	17.3 B
B. Westbound US 50/East Bidwell Street	Merge	24.4 C	19.4 B	24.4 C	19.4 B
C. Eastbound US 50/East Bidwell Street	Diverge	15.8 B	21.9 C	15.8 B	22.0 C
D. Eastbound US 50/East Bidwell Street	Merge	14.9 B	23.4 C	14.9 B	23.4 C

5. EXISTING PLUS APPROVED PROJECTS (EPAP) 2026 CONDITION WITH AND WITHOUT PROJECT

This section presents Existing Condition traffic plus traffic from planned and approved projects that are reasonably expected to be constructed by the time the project is constructed, corresponding to five years' worth of growth.

5.1 EPAP 2026 Growth Increment

Five-year traffic forecasts were developed using two different methodologies, and the higher (more conservative) volume projections were used for this analysis. The first method was based on the traffic anticipated from approved projects that have not been fully built as of April 2021. In coordination with the City a list of recent project applications was reviewed and selected for inclusion as listed below:

Method 1 (Project Increments)

Four Projects north of US 50 plus all development south of US 50 (labeled as Folsom Ranch) were considered.

Folsom Ranch:

The five-year Planned and Approved Projects south of 50 were assumed to include:

- Shops at Folsom Ranch (27.9 ksf commercial with fuel station);
- Dignity Health (two 65 ksf medical office buildings and a 100-bed hospital);
- 2,500 additional single-family dwelling unit equivalents.

Trip Generation for this additional land use is provided in **Table 13** below. These trips were assumed to be distributed based on the trip distribution from the Mangini Ranch phase 2 TIS trip distribution:

- 35% to/from the west via US 50;
- 15% to/from the east via US 50;
- 7% to/from the west via Iron Point Road;
- 7% to/from the east via Iron Point Road;
- 17% to/from the north via East Bidwell Street;
- 7% to/from the Palladio.

Table 13. Folsom Ranch Trip Generation for EPAP 2026 Trip Generation and Assignment

Description	AM	AM Entering	AM Exiting	PM	PM Entering	PM Exiting	Notes
Shops at Folsom Ranch	255	153	103	190	99	91	TKTPM (2018) project traffic Memorandum, 10/24/2018.
65 ksf Medical Office Building	181	141	40	225	63	162	ITE Trip Generation 10th Ed: Peak-hr of Adjacent Street, LU 720
65 ksf Medical Office Building	181	141	40	225	63	162	ITE Trip Generation 10th Ed: Peak-hr of Adjacent Street, LU 720
100-bed (160 ksf) Hospital	245	166	79	235	75	160	ITE Trip Generation 10th Ed: Peak-hr of Adjacent Street, LU 610
2,500 Single Family Homes	1,850	462	1,388	2,475	1,559	916	ITE Trip Generation 10th Ed: Peak-hr of Adjacent Street, LU 210
Total	**2,712**	**1,063**	**1,650**	**3,350**	**1,859**	**1,491**	

Avenida Folsom

The Avenida Folsom project consists of 154 age-restricted senior apartment units located on an undeveloped parcel at 115 Healthy Way in the northeast quadrant of the Serpa Way/Healthy Way intersection in Folsom. Trip generation is provided in **Table 14** below, and trip distribution is bulleted out below:

- 22% to/from the north on East Bidwell Street;
- 20% to/from the west on Iron Point Road;
- 7% to/from Placerville Road;
- 14% to/from the west via US 50;
- 4% to/from the east via US 50; and
- 1% to/from the north on Cavitt Drive.

Table 14. Avenida Folsom trip generation for EPAP 2026

Description	AM	AM Entering	AM Exiting	PM	PM Entering	PM Exiting	Notes
Avenida Folsom	51	24	27	51	27	24	TKTPM (2018) project traffic Study, 4/11/2020.

Scholar Way

The Scholar Way project consists of 110 affordable, age-restricted (senior) apartment units, on an undeveloped 4.57-acre parcel at 89 Scholar Way in Folsom.

Trip generation is provided in **Table 15** below, and trip distribution is bulleted out below:

- 24% to/from the north via East Bidwell Street;
- 4% to/from Palladio;
- 3% to/from the south via East Bidwell Street;
- 30% to/from the west via US 50; and
- 15% to/from the east via US 50.

Table 15. Scholar Way Trip Generation for EPAP 2026

Description	AM	AM Entering	AM Exiting	PM	PM Entering	PM Exiting	Notes
Scholar Way	36	17	19	35	19	16	TKTPM (2018) project traffic Memorandum, 7/13/2020.

Revel Folsom Senior Living

Revel Folsom would consist of 166 age-restricted residential units located on a 6.02-acre site in the southeast quadrant of the intersection of Iron Point Road/Oak Avenue Parkway. Trip generation is provided in **Table 16** below, and trip distribution is bulleted out below:

- 20% to/from the north via East Bidwell Street;
- 20% to/from the east via US 50;
- 10% to/from the south via East Bidwell Street; and
- 10% to/from the east via Iron Point Road.

Table 16. Revel Folsom Trip Generation for EPAP 2026

Description	AM	AM Entering	AM Exiting	PM	PM Entering	PM Exiting	Notes
Revel Folsom	33	11	22	42	23	19	GCTC (2018) project traffic study, 2/20/2018.

Iron Point Retirement Community

The Iron Point Retirement Community project consists of 126 senior residential units of various types, which would be located on a 4.68-acre site on the south side of Iron Point Road between Rowberry Drive and Broadstone Parkway in Folsom. Trip generation is provided in **Table 17** below, and trip distribution is bulleted out below :

- 20% to/from the north via East Bidwell Street;
- 20% to/from the east via US 50;
- 10% to/from the south via East Bidwell Street; and
- 10% to/from the east via Iron Point Road.

Table 17. Iron Point Retirement Community Trip Generation for EPAP 2026

Description	AM	AM Entering	AM Exiting	PM	PM Entering	PM Exiting	Notes
Iron Point Retirement Community	25	13	12	35	18	17	MRO (2015) project traffic study, 7/7/2015.

Method 2 (Travel Demand Model Increment)

Because traffic using the East Bidwell Street interchange to access US 50 is diverted to the Empire Ranch interchange and Oak Avenue Parkway interchange under cumulative conditions, the travel demand model growth increment was found to be smaller than the project increments listed above.

5.2 EPAP 2026 Conditions

EPAP Conditions analysis utilizes lane configurations and signal timing plans from the Existing Conditions. **Figure 13** summarizes the turning movements and lane configurations for the EPAP 2026 Conditions scenario. **Table 18** and **Table 20** present a summary of level-of-service results for the study intersections under EPAP 2026 Conditions. Four intersections are anticipated to exceed the General Plan level-of-service standard prior to the addition of project traffic:

- East Bidwell Street/ Power Center Drive (PM);
- East Bidwell Street/Iron Point Road (AM and PM);
- East Bidwell Street/US 50 Westbound (AM and PM); and
- East Bidwell Street/US 50 Eastbound (AM and PM).

These locations are shown in orange highlight in the tables below. Calculation sheets for intersection delay and level-of-service are provided in **Appendix B**.

Table 18. EPAP 2026 Intersection Delay and Level-of-Service

Intersection	Control	2026 No Project AM Delay (Sec.) and LOS	2026 No Project PM Delay (Sec.) and LOS
1. East Bidwell Street/College Parkway	Signal	16.4 B	15.6 B
2. East Bidwell Street/Scholar Way	Signal	15.0 B	18.9 B
3. East Bidwell Street/ Power Center Drive	Signal	40.0 D	57.3 E
4. East Bidwell Street/Broadstone Parkway	Signal	38.1 D	37.5 D
5. East Bidwell Street/Via Sole	Signal	3.5 A	4.4 A
6. East Bidwell Street/Via Felice	Signal	8.1 A	9.6 A
7. East Bidwell Street/Iron Point Road	Signal	78.8 E	187.8 F
8. East Bidwell Street/Placerville Road	Signal	21.1 C	41.2 D
9. East Bidwell Street/US 50 Westbound	Signal	59.5 E	87.0 F
10. East Bidwell Street/US 50 Eastbound	Signal	81.9 F	137.8 F
11. Broadstone Parkway/Marketplace	Signal	14.1 B	19.1 B
12. Via Felice/Project Driveway	AWSC		
13. Broadstone Parkway/Cavitt Drive	Signal	12.0 B	12.2 B
14. Cavitt Drive/Kilrush Drive	TWSC	9.5 A (WBL)	10.0 B (WBL)
15. Iron Point Road/Cavitt Drive	Signal	17.8 B	25.4 C

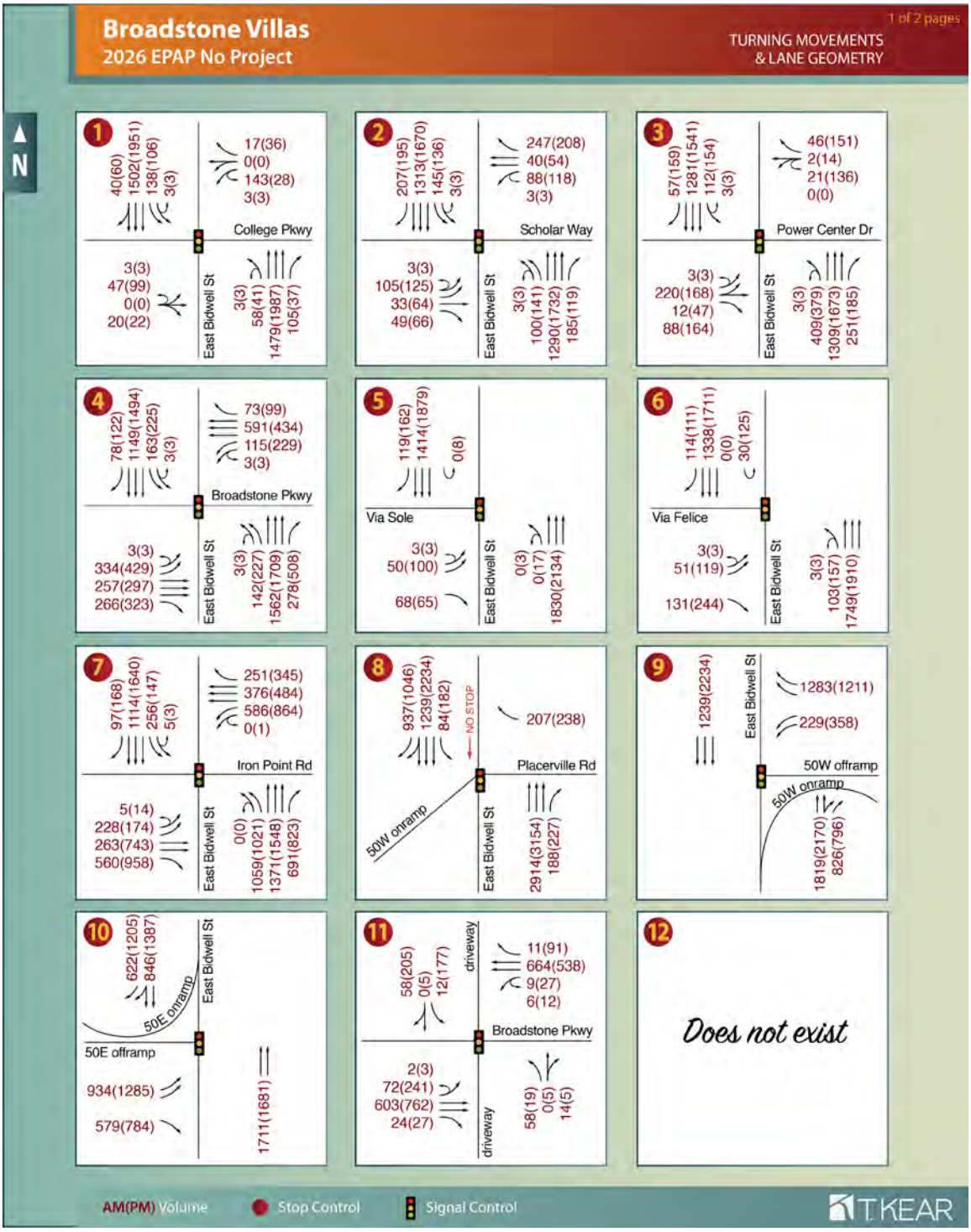


Figure 13. EPAP 2026 Condition Turn Movements and Geometry

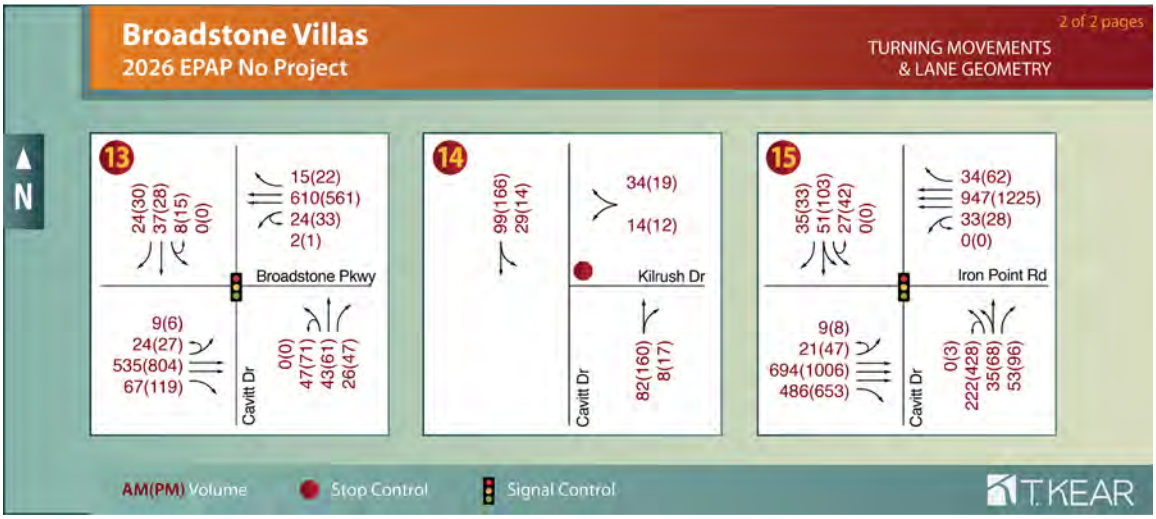


Figure 13. EPAP 2026 Condition Turn Movements and Geometry (continued)

Table 19. EPAP 2026 US 50 Segment Density and Level-of-Service (LOS)

Segment	Segment Type	2026 AM No Project Density and LOS	2026 PM No Project Density and LOS
A. Westbound US 50/East Bidwell Street	Diverge	25.9 C	19.8 B
B. Westbound US 50/East Bidwell Street	Merge	29.0 D	23.6 C
C. Eastbound US 50/East Bidwell Street	Diverge	19.1 B	27.7 C
D. Eastbound US 50/East Bidwell Street	Merge	16.8 B	25.1 C

5.3 EPAP 2026 with Project Condition

Peak-hour traffic associated with the Project was added to anticipated EPAP 2026 turning volumes at each intersection. Delay and level-of-service were then determined at the study intersections. **Figure 14** summarizes the turning movements and lane configurations for the EPAP 2026 with Project Condition. **Table 20** and **Table 21** present a summary of the level-of-service results for the study intersections.

Four intersections are anticipated to continue to exceed the General Plan level-of-service policy after the addition of project traffic:

- East Bidwell Street/ Power Center Drive (PM);
- East Bidwell Street/Iron Point Road (AM and PM);
- East Bidwell Street/US 50 Westbound (AM and PM); and
- East Bidwell Street/US 50 Eastbound (AM and PM).

None of these locations has an increase in delay of 5 seconds or more. These locations are shown in orange highlight in the tables below. Calculation sheets for intersection delay and level-of-service are provided in **Appendix B**.

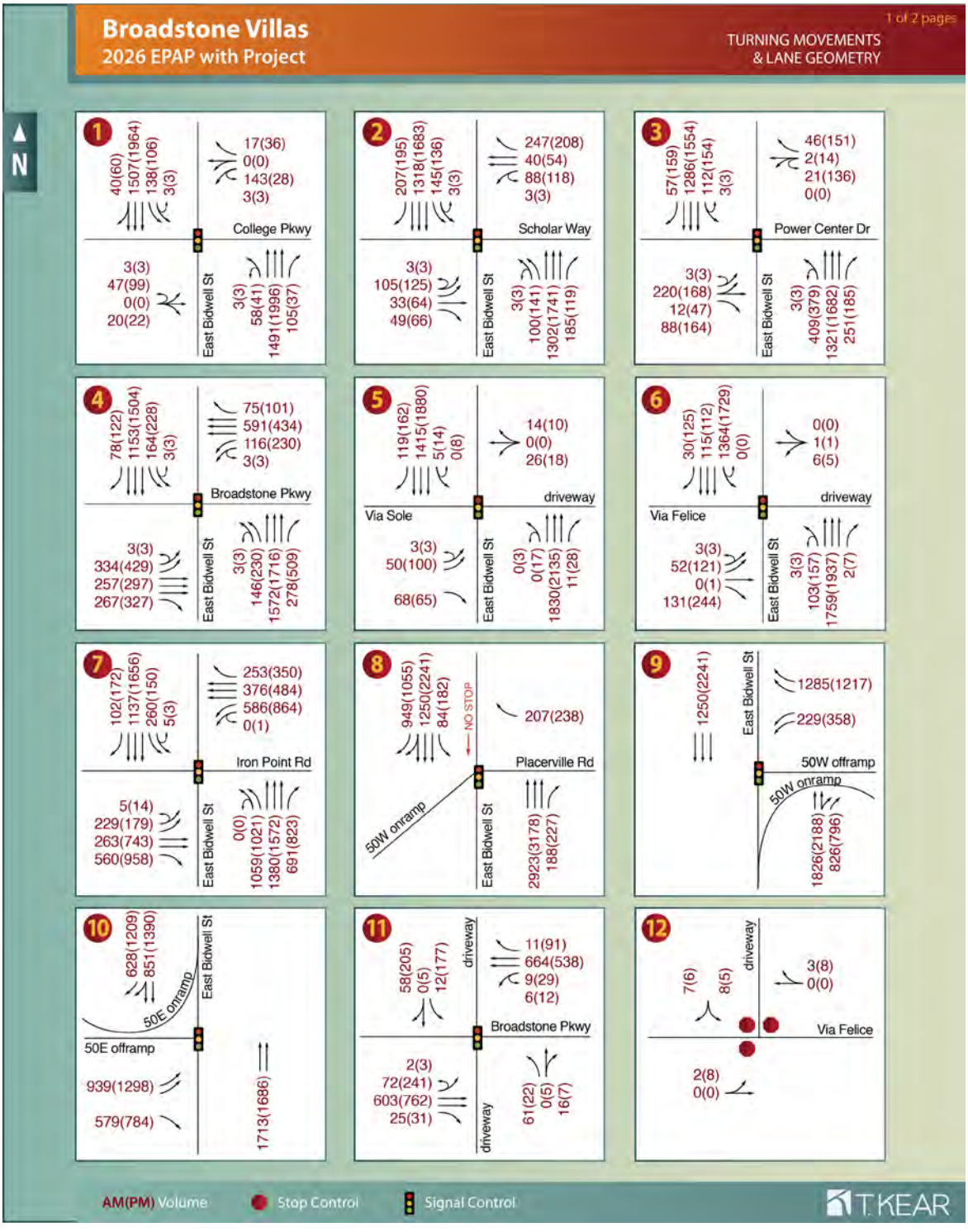


Figure 14. EPAP 2026 with Project Turning Movements and Lane Geometry

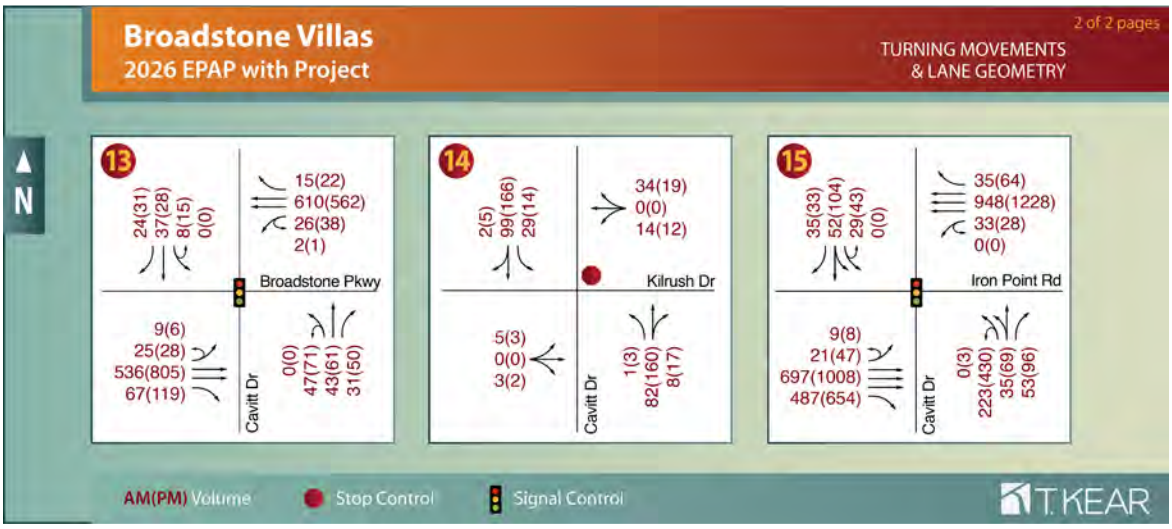


Figure 14. EPAP 2026 with Project Turning Movements and Lane Geometry (Continued)

Table 20. EPAP 2026 Intersection Delay and Level-of-Service, with and without Project

Intersection	Control	2026 No Project AM Delay (Sec.) and LOS	2026 No Project PM Delay (Sec.) and LOS	2026 Plus Project AM Delay (Sec.) and LOS	2026 Plus Project PM Delay (Sec.) and LOS
1. East Bidwell Street/College Parkway	Signal	16.4 B	15.6 B	14.7 B	15.6 B
2. East Bidwell Street/Scholar Way	Signal	15.0 B	18.9 B	14.3 B *	18.9 B *
3. East Bidwell Street/ Power Center Drive	Signal	40.0 D	57.3 E	35.4 D *	57.2 E *
4. East Bidwell Street/Broadstone Parkway	Signal	38.1 D	37.5 D	37.8 D *	37.6 D
5. East Bidwell Street/Via Sole	Signal	3.5 A	4.4 A	6.5 A	6.0 A
6. East Bidwell Street/Via Felice	Signal	8.1 A	9.6 A	10.6 B	13.2 B
7. East Bidwell Street/Iron Point Road	Signal	78.8 E	187.8 F	78.6 E *	187.3 F *
8. East Bidwell Street/Placerville Road	Signal	21.1 C	41.2 D	41.4 C	42.8 D
9. East Bidwell Street/US 50 Westbound	Signal	59.5 E	87.0 F	60.2 E	89.4 F
10. East Bidwell Street/US 50 Eastbound	Signal	81.9 F	137.8 F	82.0 F	139.2 F
11. Broadstone Parkway/Marketplace	Signal	14.1 B	19.1 B	13.5 B *	19.3 B
12. Via Felice/Project Driveway	AWSC			6.8 A	6.8 A
13. Broadstone Parkway/Cavitt Drive	Signal	12.0 B	12.2 B	11.9 B *	12.4 B
14. Cavitt Drive/Kilrush Drive	TWSC	9.5 A (WBL)	10.0 B (WBL)	10.3 B (EB)	10.7 B (EB)
15. Iron Point Road/Cavitt Drive	Signal	17.8 B	25.4 C	16.2 B *	25.6 C

* Anticipated reduction in average delay with the project results from adding volume to movements that have available capacity, and the corresponding effect that change has on reducing likelihood of some actuated signal phases gapping out.

Table 21. EPAP 2026 US 50 Segment Density and Level-of-Service (LOS), with and without Project

Segment	Segment Type	2026 AM No Project Density and LOS	2026 PM No Project Density and LOS	2026 AM Plus Project Density and LOS	2026 PM Plus Project Density and LOS
A. Westbound US 50/East Bidwell Street	Diverge	25.9 C	19.8 B	26.0 C	19.9 B
B. Westbound US 50/East Bidwell Street	Merge	29.0 D	23.6 C	29.1 D	23.6 C
C. Eastbound US 50/East Bidwell Street	Diverge	19.1 B	27.7 C	19.2 B	27.8 C
D. Eastbound US 50/East Bidwell Street	Merge	16.8 B	25.1 C	16.9 B	25.2 C

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6. PROJECT IMPACTS AND MITIGATION

6.1 Level-of-Service Impacts

Under the Existing 2021 scenario two intersections that operate at a deficient level-of-service during the PM were identified:

- East Bidwell Street/Power Center Drive; and
- East Bidwell Street/Iron Point Road.

These two locations are anticipated to continue to operate differently with the addition of Project traffic. Delay is anticipated to increase by less than five seconds at both locations and therefore these deficiencies are not considered to be Project related.

Under the EPAP 2026 scenario, four intersections are anticipated to exceed the General Plan level-of-service policy after the addition of project traffic:

- East Bidwell Street/ Power Center Drive (PM);
- East Bidwell Street/Iron Point Road (AM and PM);
- East Bidwell Street/US 50 Westbound (AM and PM); and
- East Bidwell Street/US 50 Eastbound (AM and PM).

These four locations are anticipated to continue to operate differently with the addition of Project traffic. Delay is anticipated to increase by less than five seconds at all four locations and therefore these deficiencies are not considered to be Project related.

6.2 SB Vehicle Miles Traveled (VMT)

Folsom General Plan policy NCR 3.1.3 addressed vehicle miles traveled (VMT) as shown below:

Policy NCR 3.1.3 "Encourage efforts to reduce the amount of vehicle miles traveled (VMT). These efforts could include encouraging mixed-use development promoting a jobs/housing balance, and, encouraging alternative transportation such as walking, cycling, and public transit."

The Governors' Office of Planning and Research (OPR) has published guidance recommending a CEQA threshold for transportation impacts of land use projects of a 15% VMT reduction per capita, relative to either city or regional averages, based on the California's Climate Scoping Plan[9]. Qualitative assessment of VMT reduction is acceptable to screen projects[10].

Under State Law (SB 743), VMT will become the only CEQA threshold of significance for transportation impacts on July 1, 2020. Without specific General Plan guidance for VMT thresholds, this analysis uses qualitative screening against OPR's guidance of a 15% per capita VMT reduction.

[9] OPR (2018) Technical Advisory on Evaluating Transportation Impacts In CEQA, http://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.
[10] OPR's webinar on SB 743 implementation, 4/16/2020.

To support jurisdictions' SB743 implementation, SACOG developed thresholds and screening maps (**Figure 15**) for residential projects[11], using outputs from the 2016 base year travel demand model run for the 2020 MTP/SCS. SACOG travel demand model is activity/tour based and is designed to estimate an individual's daily travel, accounting for land use, transportation and demographics that influence peoples' travel behaviors. For residential projects, the threshold is defined as total household VMT per capita achieving 15% of reduction comparing to regional (or any appropriate sub-area) average. The map uses HEX geography. Residential VMT per capita per HEX is calculated by tallying all household VMTs, including VMT traveling outside the region, generated by the residents living at the HEX and divided by the total population in the HEX. Green hexagons denote areas where residential VMT is 50% to 85% of the regional average and yellow hexagons denote areas where residential VMT is 85% to 100% of the regional average.

More than 90% of the project is in a green hexagon with average residential VMT of 15.45 miles per capita (per day). Less than 10% of the project is in a yellow hexagon with average residential VMT of 18.92 miles per capita (per day). The weighted average VMT from the project is 15.8 miles per capita per day. The Project is anticipated to generate 76% of the regional per capita residential daily VMT of 20.82 miles and 82% of Folsom's residential daily VMT per capita of 19.16. The daily per capita VMT for the project is anticipated to be less than 85% of the regional and City residential VMT per Capita. **The Project is therefore anticipated to have a less-than-significant impact of VMT.**

[11] SACOG (2021) https://sb743-sacog.opendata.arcgis.com/

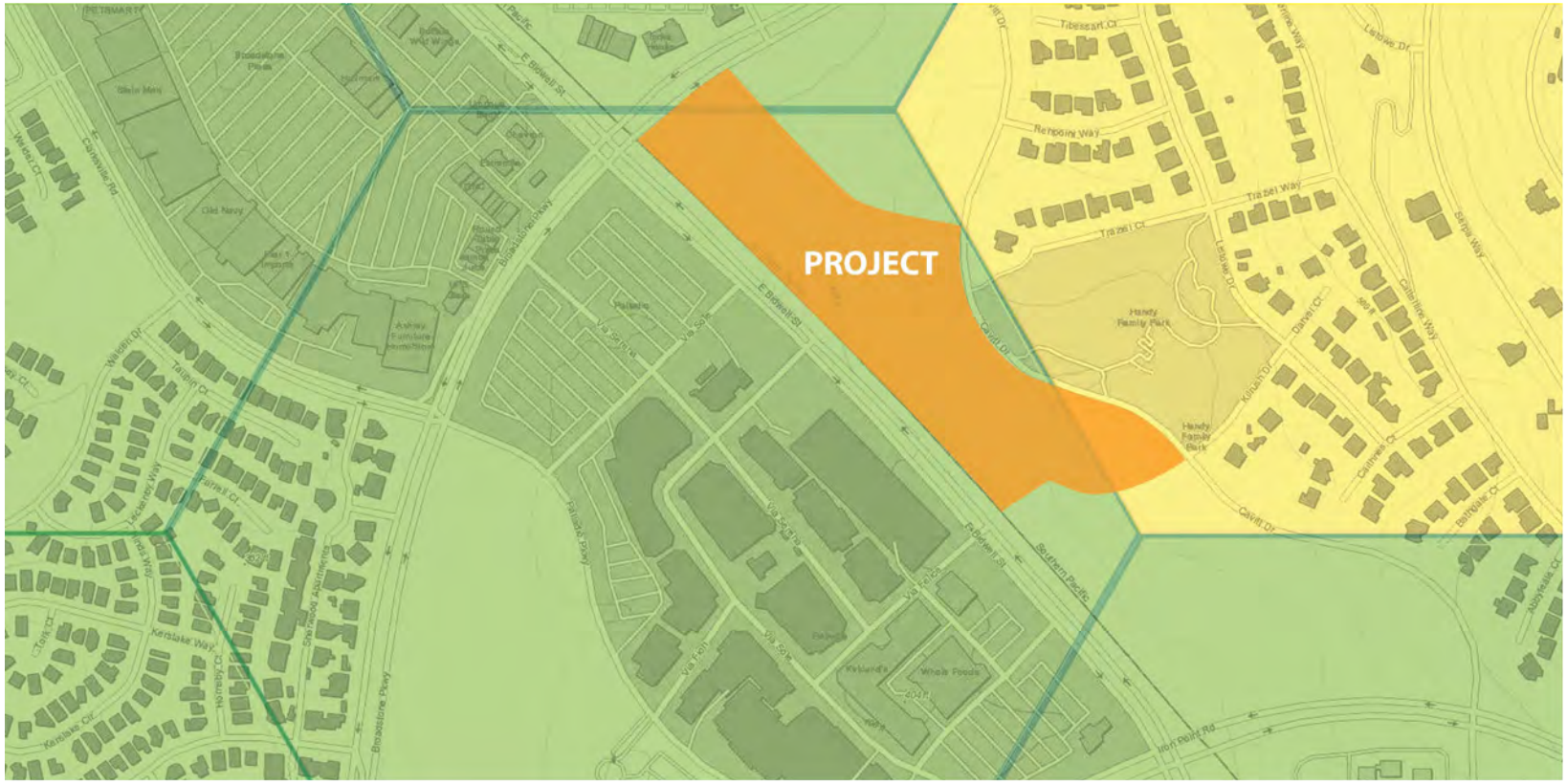


Figure 15. SACOG SB 743 Regional VMT Screening Map

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7. OTHER CONSIDERATIONS

7.1 Internal Circulation and Site Plan Review

A preliminary site plan was provided as **Figure 2**, (page 3). This section reviews parking, driveway throat-depth, and emergency vehicle access.

Parking Requirements

Multiple-family structures and complexes: Folsom Municipal Code[12] requires 1.5 spaces per dwelling unit.

Proposed Project Parking: 523 spaces, including 291 garage spaces, 202 surface spaces, and 30 tandem spaces (yielding 2.035 spaces per unit with the tandem spaces or 1.91 spaces per unit without the tandem spaces).

Parking analysis: The proposed parking supply exceeds the City requirement and is anticipated to be adequate for the Project.

Minimum Required Throat-Depth

Minimum Required Throat-Depth (MRTD): For an 81-160 unit apartment complex, MRTD is 50 feet[13]. This 50-foot distance represents vehicle storage equivalents, which means the total required distance may be achieved by summing the throat depths for several access points if more than one access point is to serve the site.

Throat-Depth provided: Primary driveway throat depth is 50 feet.

MRTD analysis: MRTD requirements are met. For apartment complexes with over 160 units, the MRTD is 100' on arterials with greater than 60' right-of way, and 50' for arterials with right-of-way width less than or equal to 60'. Project driveways accessing East Bidwell Street and Broadstone Parkway both exceed 100'. The Project driveway accessing the private roadway extension of Via Felice exceeds 50'.

Emergency Vehicle Access

The Project's internal drive isles have 25-foot inner/50-foot outer minimum turning radii to accommodate fire department access. Emergency vehicle access is anticipated to be adequate.

Right-Turn Deceleration/Acceleration Lanes and Tapers for Driveways

City code requires a a 60' right turn taper where right turning traffic into the project exceeds 10 vehicles per hour and a 150' deceleration lane and 60' taper where right turning traffic is anticipated to exceed 50 vehicles per hour. Tapers and pockets may both be required by the City Engineer where arterial speeds equal or exceed 45 mph. right turning traffic into project driveways are below these thresholds, but 150' deceleration lanes with 60' tapers should be

[12] Section 17.57.040 "Off-street parking requirements" https://www.codepublishing.com/CA/Folsom/html/Folsom17/Folsom1757.html#17.57.040.
[13] Folsom (2020) Design and Procedures Manual and Improvement Standards, site access Table 12-1, https://www.folsom.ca.us/home/showpublisheddocument/384/637466585843430000.

included in the driveway design along East Bidwell Street where the posted speed limit is 45 mph. Preliminary site plans already include the recommended deceleration lanes and tapers.

7.2 Bicycle/Pedestrian/Transit Facilities

The Project does not inhibit the use of bicycle, pedestrian, or transit facilities; eliminate existing bicycle, pedestrian, or transit facilities; or prevent the implementation of planned bicycle, pedestrian, or transit facilities.

7.3 Queueing

Anticipated 95th-percentile left turn queue lengths were reviewed at all signalized intersections. The 95th-percentile queue is defined to be the queue length (in feet) that has only a 5-percent probability of being exceeded during the analysis time period. It is a useful parameter for determining the appropriate length of turn pockets, but it is not typical of what an average driver would experience. Data are presented as follows:

- **Table 22.** 95% Left Turn Queues under Existing 2021 AM Peak-Hour Conditions with, and without, the **Project**
- **Table 23.** 95% Left Turn Queues under Existing 2021 PM Peak-Hour Conditions with, and without, the **Project**
- **Table 24.** 95% Left Turn Queues under Existing 2026 AM Peak-Hour Conditions with, and without, the **Project**
- **Table 25.** 95% Left Turn Queues under Existing 2026 PM Peak-Hour Conditions with, and without, the **Project**

Only locations where the 95% queues exceed available storage, and the project is anticipated to add more than one car length to the queue, are assumed to be a project specific deficiency which requires abatement. For ease of reading, reported queues where the project adds to the queue length are highlighted:

- In yellow where the queue increases by less than one vehicle length (i.e., 25 feet);
- In orange where the queue increases by at least one vehicle length, but is anticipated to fit within the existing storage bay;
- In red where the queue increases by at least one vehicle length and is anticipated to spill back, blocking adjacent intersections or movements.

As shown in the tables, there are no locations anticipated to have a project related queueing issue.

Table 22. 95% Left Turn Queues under Existing 2021 AM Peak-Hour Conditions with, and without, the Project

Intersection	2021 No Proj. EBL (feet)	2021 No Proj. WBL (feet)	2021 No Proj. NBL (feet)	2021 No Proj. SBL (feet)	2021 Plus Proj. EBL (feet)	2021 Plus Proj. WBL (feet)	2021 Plus Proj. NBL (feet)	2021 Plus Proj. SBL (feet)
1. East Bidwell Street/College Parkway		134	120	127		134	129	126
2. East Bidwell Street/Scholar Way	90	140	88	114	90	140	88	114
3. East Bidwell Street/ Power Center Drive	228		1063	224	228		1063	224
4. East Bidwell Street/Broadstone Parkway	247	106	125	139	247	106	128	140
5. East Bidwell Street/Via Sole	33		0	0	48		0	0
6. East Bidwell Street/Via Felice	38		134	51	47		122	35
7. East Bidwell Street/Iron Point Road	161	355	691	171	162	355	691	173
8. East Bidwell Street/Placerville Road				152				152
9. East Bidwell Street/US 50 Westbound		27				27		
10. East Bidwell Street/US 50 Eastbound	169				170			
11. Broadstone Parkway/Marketplace	113	37	95	32	113	38	98	32
12. Via Felice/Project Driveway								
13. Broadstone Parkway/Cavitt Drive	49	42	63	19	50	44	63	19
14. Cavitt Drive/Kilrush Drive								
15. Iron Point Road/Cavitt Drive	67	73	176	47	67	73	176	49

Movements where the 95% queue length increases, but by less than one car length are show in a yellow highlight.

Table 23. 95% Left Turn Queues under Existing 2021 PM Peak-Hour Conditions with, and without, the Project

Intersection	2021 No Proj. EBL (feet)	2021 No Proj. WBL (feet)	2021 No Proj. NBL (feet)	2021 No Proj. SBL (feet)	2021 Plus Proj. EBL (feet)	2021 Plus Proj. WBL (feet)	2021 Plus Proj. NBL (feet)	2021 Plus Proj. SBL (feet)
1. East Bidwell Street/College Parkway		31	72	72		31	71	72
2. East Bidwell Street/Scholar Way	80	143	94	92	80	143	94	92
3. East Bidwell Street/ Power Center Drive	146		586	204	146		586	205
4. East Bidwell Street/Broadstone Parkway	284	131	122	122	284	132	146	124
5. East Bidwell Street/Via Sole	71		24	15	87		39	0
6. East Bidwell Street/Via Felice	77		226	157	94		210	241
7. East Bidwell Street/Iron Point Road	111	453	531	96	113	453	525	100
8. East Bidwell Street/Placerville Road				223				218
9. East Bidwell Street/US 50 Westbound		30				30		
10. East Bidwell Street/US 50 Eastbound	308				312			
11. Broadstone Parkway/Marketplace	396	75	46	243	396	77	51	243
12. Via Felice/Project Driveway								
13. Broadstone Parkway/Cavitt Drive	48	48	81	28	49	54	82	28
14. Cavitt Drive/Kilrush Drive								
15. Iron Point Road/Cavitt Drive	107	66	401	67	107	66	404	67

Movements where the 95% queue length increases, but by less than one car length are show in a yellow highlight.

Movements where the 95% queue length increases by at least one car length and is anticipated to fit within existing turn pockets are show in an orange highlight.

Table 24. 95% Left Turn Queues under Existing 2026 AM Peak-Hour Conditions with, and without, the Project

Intersection	2026 No Proj. EBL (feet)	2026 No Proj. WBL (feet)	2026 No Proj. NBL (feet)	2026 No Proj. SBL (feet)	2026 Plus Proj. EBL (feet)	2026 Plus Proj. WBL (feet)	2026 Plus Proj. NBL (feet)	2026 Plus Proj. SBL (feet)
1. East Bidwell Street/College Parkway		136	131	129		136	131	129
2. East Bidwell Street/Scholar Way	93	158	90	119	93	158	90	119
3. East Bidwell Street/ Power Center Drive	228		1063	224	228		1063	224
4. East Bidwell Street/Broadstone Parkway	252	106	125	140	252	107	128	140
5. East Bidwell Street/Via Sole	33		0	0	48		0	0
6. East Bidwell Street/Via Felice	39		141	53	48		122	42
7. East Bidwell Street/Iron Point Road	161	445	949	173	162	445	946	176
8. East Bidwell Street/Placerville Road				154				154
9. East Bidwell Street/US 50 Westbound		74				74		
10. East Bidwell Street/US 50 Eastbound	171				172			
11. Broadstone Parkway/Marketplace	113	37	95	32	113	38	98	32
12. Via Felice/Project Driveway								
13. Broadstone Parkway/Cavitt Drive	49	42	63	19	50	44	63	19
14. Cavitt Drive/Kilrush Drive								
15. Iron Point Road/Cavitt Drive	67	73	176	47	67	73	176	49

Movements where the 95% queue length increases, but by less than one car length are show in a yellow highlight.

Table 25. 95% Left Turn Queues under Existing 2026 PM Peak-Hour Conditions with, and without, the Project

Intersection	2026 No Proj. EBL (feet)	2026 No Proj. WBL (feet)	2026 No Proj. NBL (feet)	2026 No Proj. SBL (feet)	2026 Plus Proj. EBL (feet)	2026 Plus Proj. WBL (feet)	2026 Plus Proj. NBL (feet)	2026 Plus Proj. SBL (feet)
1. East Bidwell Street/College Parkway		16	45	112		31	63	72
2. East Bidwell Street/Scholar Way	80	152	93	94	80	152	93	94
3. East Bidwell Street/ Power Center Drive	146		590	206	146		592	205
4. East Bidwell Street/Broadstone Parkway	289	131	125	122	289	132	146	123
5. East Bidwell Street/Via Sole	71		22	10	87		34	0
6. East Bidwell Street/Via Felice	77		204	161	96		193	250
7. East Bidwell Street/Iron Point Road	111	574	571	101	113	574	564	104
8. East Bidwell Street/Placerville Road				127				127
9. East Bidwell Street/US 50 Westbound		115				115		
10. East Bidwell Street/US 50 Eastbound	311				316			
11. Broadstone Parkway/Marketplace	396	75	46	243	396	77	51	243
12. Via Felice/Project Driveway								
13. Broadstone Parkway/Cavitt Drive	48	48	81	28	49	54	82	28
14. Cavitt Drive/Kilrush Drive								
15. Iron Point Road/Cavitt Drive	107	66	401	67	107	66	404	67

Movements where the 95% queue length increases, but by less than one car length are show in a yellow highlight.

Movements where the 95% queue length increases by at least one car length and is anticipated to fit within existing turn pockets are show in an orange highlight.

8. FINDINGS AND RECOMENDATIONS

The Project is anticipated to generate 1399 daily vehicle trips, 82 AM peak-hour vehicle trips, and 105 PM peak-hour vehicle trips[14]. There are no anticipated project related level-of-service deficiencies.

The Project is anticipated to have a **less-than-significant** impact on vehicle level-of-service, bike and pedestrian activity and facilities, transit operations and facilities, and VMT.

Parking supply at a ratio of 2.03 spaces per apartment exceeds the City requirements and is sufficient to meet the anticipated parking demand.

The proposed driveway throat depths exceed the City's Minimum Required Throat-Depth (MRTD).

The project should be conditioned to include a 150' deceleration lane plus a 60' taper on the two driveways accessing East Bidwell Street.

[14] Note that these estimates are based on the ITE equation trip generation rates when those rates are higher than average trip generation. Equation based rates reflect the impact that a development's size can have on trip generation rates. Peak-hour trip generation utilizes rates for the "peak-hour of generation" rather than the peak-hour of adjacent street traffic. The use of equation-based trip generation rates and "peak-hour of generation" rates produces conservatively high estimates to ensure that any potential impacts data are identified.

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Appendix A Counts and Signal Timing

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Prepared by National Data & Surveying Services

E Bidwell St & US 50 WB Ramps

Peak Hour Turning Movement Count

ID: 21-070076-009
City: Folsom

Day: Tuesday
Date: 5/18/2021

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 7:30 AM - 09:30 AM
NOON: NONE
PM: 3:00 PM - 06:00 PM

SOUTHBOUND (E Bidwell St)

AM	610	540	0	0	1616	AM
NOON	0	0	0	0	0	NOON
PM	771	1184	0	0	2178	PM

EASTBOUND (US 50 WB Ramps)

AM	NOON	PM	
610	0	771	⇦
0	0	0	↶ 0
0	0	0	↱ 0
0	0	0	→ 0
0	0	0	↷ 0
AM	NOON	PM	

WESTBOUND (US 50 WB Ramps)

PM	NOON	AM	
937	0	839	2 ↰
0	0	0	0 ←
42	0	46	2 ↙
0	0	0	0 ↶
187	0	163	⇨
PM	NOON	AM	

NORTHBOUND (E Bidwell St)

PM	1226	0	0	1241	187	PM
NOON	0	0	0	0	0	NOON
AM	586	0	0	777	163	AM

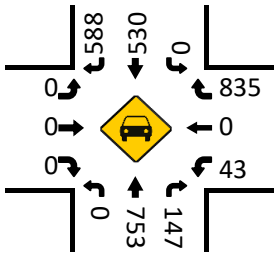
0 3 0 0 — 0 0 2 2

CONTROL

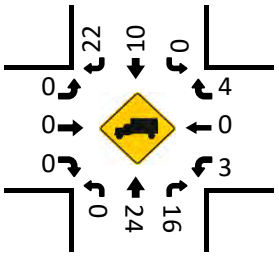
Signalized

TEV	2975 AM	0 NOON	4362 PM
PHF	0.98		0.96

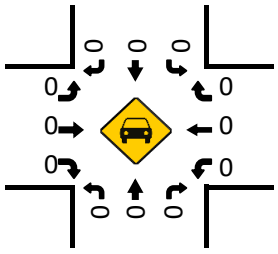
Cars (AM)



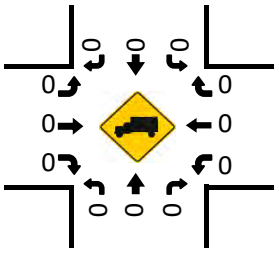
HT (AM)



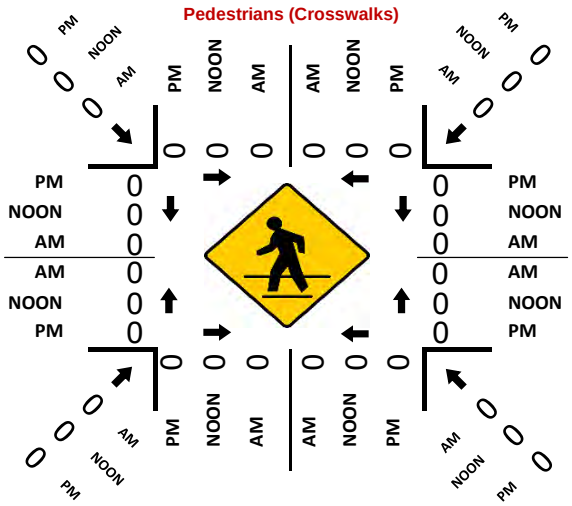
Cars (NOON)



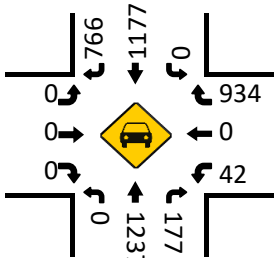
HT (NOON)



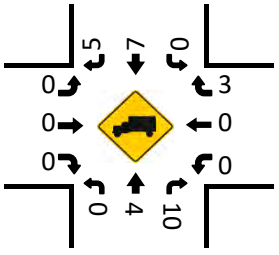
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

E Bidwell St & US 50 EB Ramps

Peak Hour Turning Movement Count

ID: 21-070076-010
City: Folsom

Day: Tuesday
Date: 5/18/2021

	PEAK HOURS	COUNT PERIODS
AM	07:45 AM - 08:45 AM	7:30 AM - 09:30 AM
NOON	NONE	NONE
PM	05:00 PM - 06:00 PM	3:00 PM - 06:00 PM

E Bidwell St — SOUTHBOUND

	Right	Through	Left	U-Turn	Departing
AM	402	178	0	0	940
NOON	0	0	0	0	0
PM	935	311	0	0	1455
Red figures	2	2	0	0	

US 50 EB Ramps — EASTBOUND

Movement	AM	NOON	PM	Red figure
Departing	402	0	935	
U-Turn	0	0	0	0
Left	609	0	996	2
Through	0	0	0	0
Right	136	0	104	1

US 50 EB Ramps — WESTBOUND

Movement	PM	NOON	AM	Red figure
Right	0	0	0	0
Through	0	0	0	0
Left	0	0	0	0
U-Turn	0	0	0	0
Departing	141	0	72	

E Bidwell St — NORTHBOUND

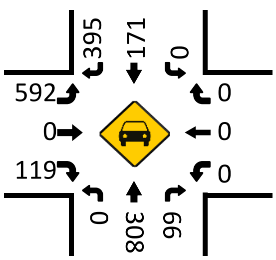
	Departing	U-Turn	Left	Through	Right
Red figures		0	0	2	0
PM	415	0	0	459	141
NOON	0	0	0	0	0
AM	314	0	0	331	72

CONTROL

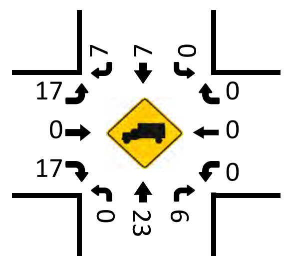
Signalized

	AM	NOON	PM
TEV	1728	0	2946
PHF	0.95		0.96

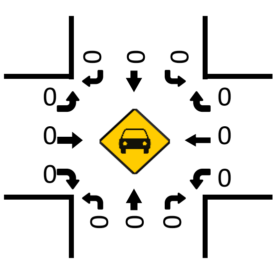
Cars (AM)



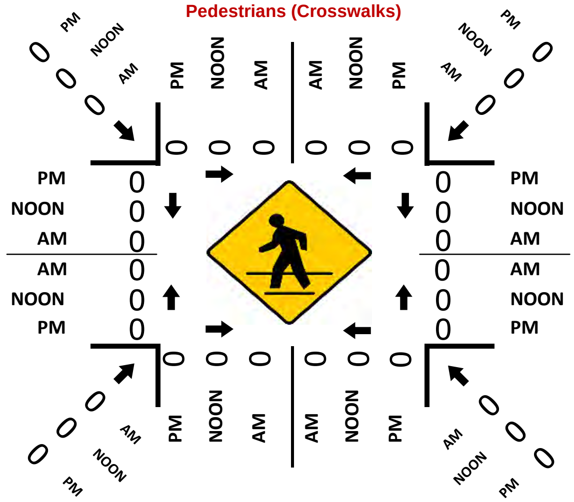
HT (AM)



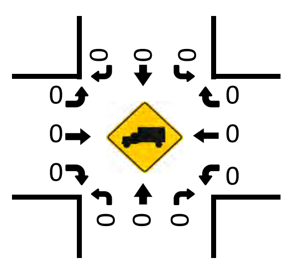
Cars (NOON)



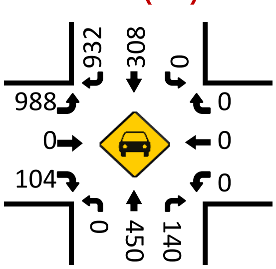
Pedestrians (Crosswalks)



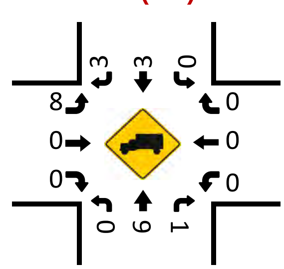
HT (NOON)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

Talavera Apt Access Dwy/Broadstone Marketplace Dwy & Broadstone Pkwy

Peak Hour Turning Movement Count

ID: 21-070076-011
City: Folsom

Day: Tuesday
Date: 5/18/2021

PEAK HOURS

AM	07:45 AM - 08:45 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	7:30 AM - 09:30 AM
NOON	NONE
PM	3:00 PM - 06:00 PM

SOUTHBOUND — Talavera Apt Access Dwy/Broadstone Marketplace Dwy

AM	38	0	8	0	54	AM
NOON	0	0	0	0	0	NOON
PM	160	4	138	0	247	PM
	0.5	0.5	1	0		

EASTBOUND — Broadstone Pkwy

AM	NOON	PM	
514	0	597	
1	0	2	0
47	0	188	1
265	0	551	2
16	0	21	1
AM	NOON	PM	

WESTBOUND — Broadstone Pkwy

PM	NOON	AM	
55	0	7	1
420	0	437	2
6	0	6	1
9	0	4	0
702	0	286	
PM	NOON	AM	

CONTROL

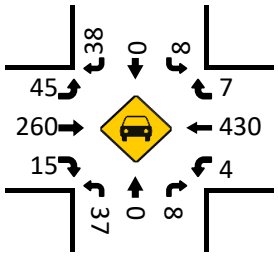
Signalized

TEV	876 AM	0 NOON	1577 PM
PHF	0.88		0.97

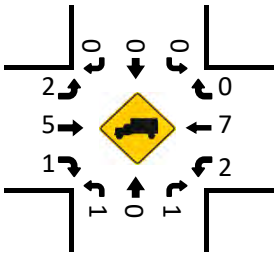
NORTHBOUND — Talavera Apt Access Dwy/Broadstone Marketplace Dwy

PM	31	0	15	4	4	PM
NOON	0	0	0	0	0	NOON
AM	22	0	38	0	9	AM
		0	1	0.5	0.5	

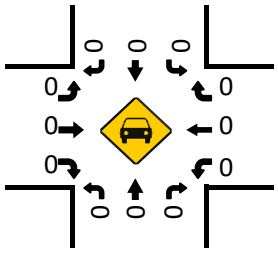
Cars (AM)



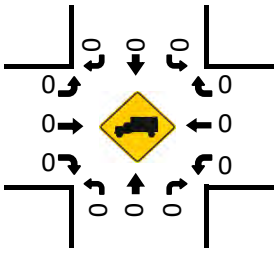
HT (AM)



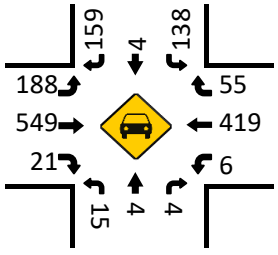
Cars (NOON)



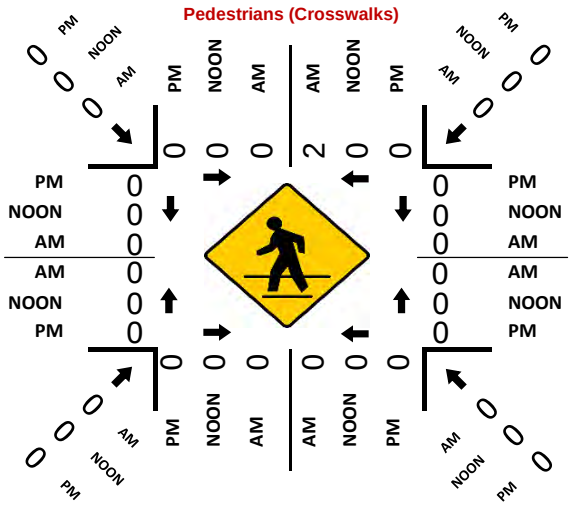
HT (NOON)



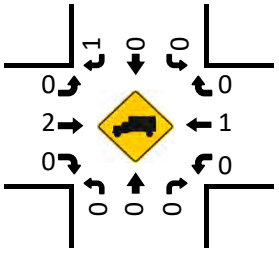
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



Prepared by National Data & Surveying Services

Cavitt Dr & Broadstone Pkwy

Peak Hour Turning Movement Count

ID: 21-070076-013
City: Folsom

Day: Tuesday
Date: 5/18/2021

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:30 AM - 09:30 AM
NONE	NONE
04:45 PM - 05:45 PM	3:00 PM - 06:00 PM

SOUTHBOUND (Cavitt Dr)

AM	16	24	5	0	54	AM
NOON	0	0	0	0	0	NOON
PM	23	22	12	0	86	PM

EASTBOUND (Broadstone Pkwy)

AM	NOON	PM	
452	0	521	
6	0	5	0
16	0	21	1
241	0	572	2
44	0	93	1

WESTBOUND (Broadstone Pkwy)

	PM	NOON	AM
1	17	0	10
2	438	0	399
1	26	0	16
0	1	0	1
	622	0	264

NORTHBOUND (Cavitt Dr)

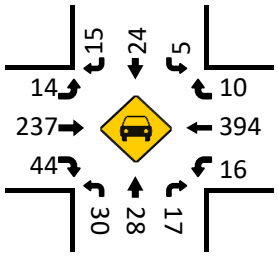
PM	141	0	55	48	37	PM
NOON	0	0	0	0	0	NOON
AM	84	0	31	28	17	AM

CONTROL			
Signalized			
TEV	854 AM	0 NOON	1370 PM
PHF	0.87		0.97

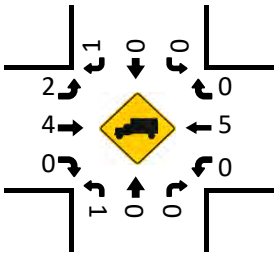
1 1 1 0

0 1 1 1

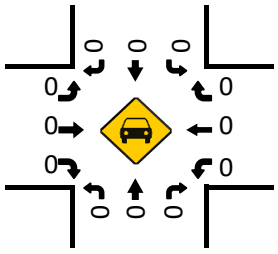
Cars (AM)



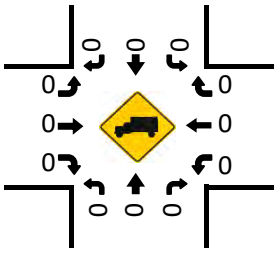
HT (AM)



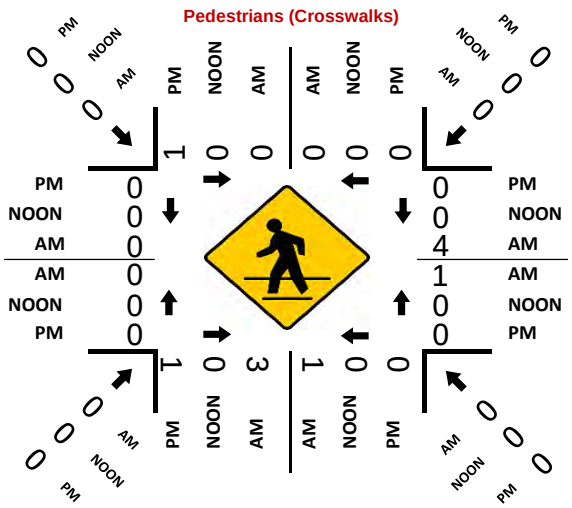
Cars (NOON)



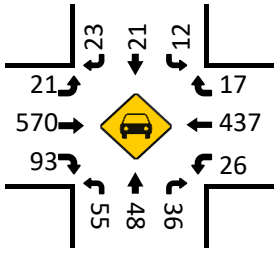
HT (NOON)



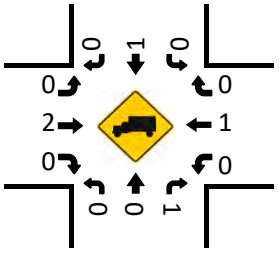
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

Cavitt Dr & Kilrush Dr

Peak Hour Turning Movement Count

ID: 21-070076-014
City: Folsom

Day: Tuesday
Date: 5/18/2021

PEAK HOURS

AM: 08:15 AM - 09:15 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 7:30 AM - 09:30 AM
NOON: NONE
PM: 3:00 PM - 06:00 PM

SOUTHBOUND (Cavitt Dr)

AM	0	65	8	0	61	AM
NOON	0	0	0	0	0	NOON
PM	0	87	11	0	131	PM

EASTBOUND (Kilrush Dr)

AM	NOON	PM	
0	0	0	⇦
0	0	0	↶ 0
0	0	0	→ 0
0	0	0	↷ 0
0	0	0	⇩
AM	NOON	PM	

WESTBOUND (Kilrush Dr)

PM	NOON	AM	
6	0	9	0 ↰
0	0	0	1 ←
9	0	9	0 ↙
0	0	0	0 ↶
24	0	13	⇨
PM	NOON	AM	

NORTHBOUND (Cavitt Dr)

PM	96	0	0	125	13	PM
NOON	0	0	0	0	0	NOON
AM	74	0	0	52	5	AM

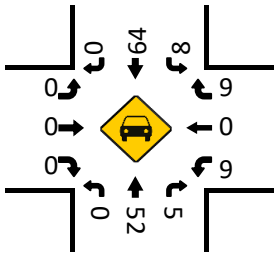
0 1 0 0 (SB turning movements)
0 0 1 0 (NB turning movements)

CONTROL

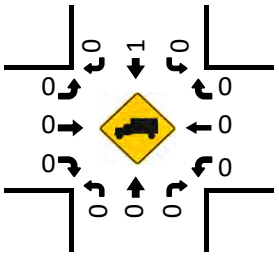
1-Way Stop(WB)

	AM	NOON	PM
TEV	148	0	251
PHF	0.90		0.94

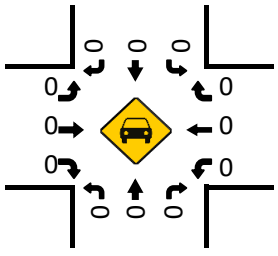
Cars (AM)



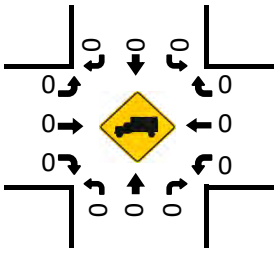
HT (AM)



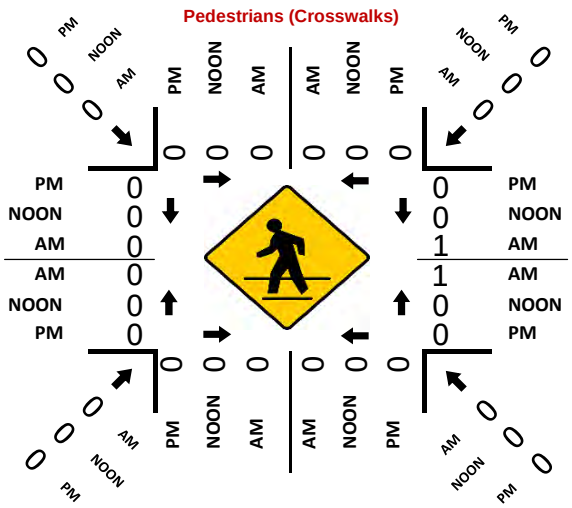
Cars (NOON)



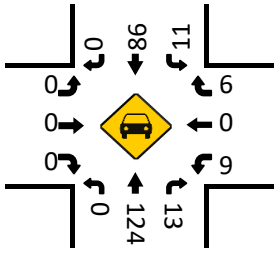
HT (NOON)



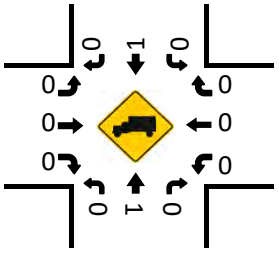
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

Cavitt Dr & Iron Point Rd

Peak Hour Turning Movement Count

ID: 21-070076-015
City: Folsom

Day: Tuesday
Date: 5/18/2021

PEAK HOURS	COUNT PERIODS
08:30 AM - 09:30 AM	7:30 AM - 09:30 AM
NONE	NONE
05:00 PM - 06:00 PM	3:00 PM - 06:00 PM

SOUTHBOUND (Cavitt Dr)

AM	23	24	18	0	59	AM
NOON	0	0	0	0	0	NOON
PM	26	39	33	0	135	PM

EASTBOUND (Iron Point Rd)

AM	NOON	PM	
660	0	897	⇦
6	0	6	↶ 0
14	0	37	↱ 1
368	0	688	→ 3
320	0	510	↷ 1
AM	NOON	PM	

WESTBOUND (Iron Point Rd)

PM	NOON	AM	
48	0	22	1 ↰
531	0	485	3 ←
22	0	22	1 ↙
0	0	0	0 ↶
796	0	421	⇨
PM	NOON	AM	

NORTHBOUND (Cavitt Dr)

PM	573	2	334	50	75	PM
NOON	0	0	0	0	0	NOON
AM	366	0	146	23	35	AM

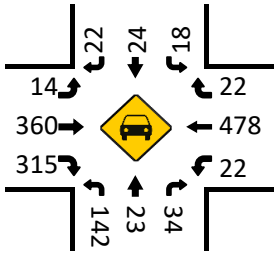
	1	0.5	1.5	0
	0	1.5	0.5	1

CONTROL

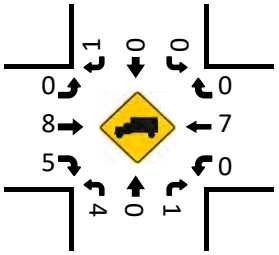
Signalized

TEV	1506 AM	0 NOON	2401 PM
PHF	0.98		0.95

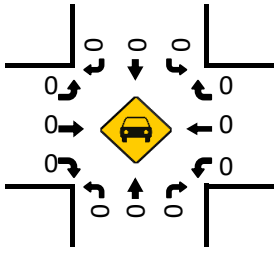
Cars (AM)



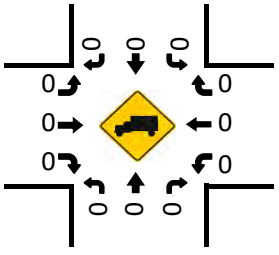
HT (AM)



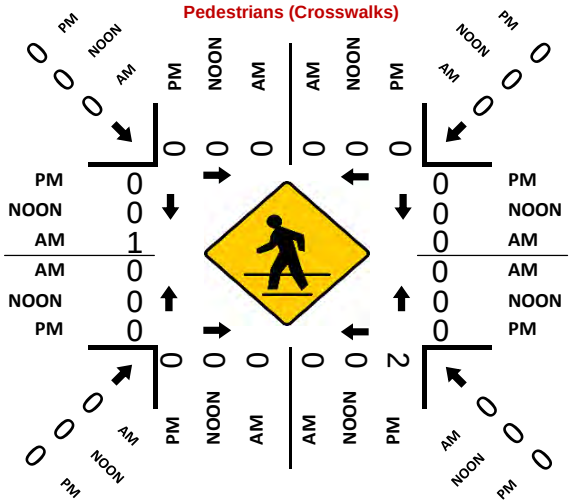
Cars (NOON)



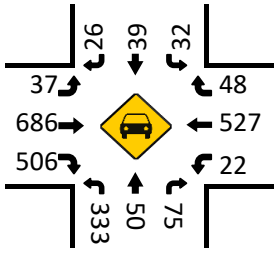
HT (NOON)



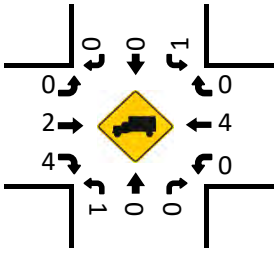
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Summary of Midweek April 2021 Traffic Counts from City of Folsom

ID	Time	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SBU	SBL	SBT	SBR	NBU	NBL	NBT	NBR	Total	PHF
1	8:30-9:30		33	0	13		96	0	11		93	860	350		40	776	69	2341	0.94
1	3:15-4:15		79	0	17		24	0	28		85	1137	584		34	1343	29	3360	0.97

ID	Time	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SBU	SBL	SBT	SBR	NBU	NBL	NBT	NBR	Total	PHF
2	8:30-9:30		55	22	32		53	26	119		85	730	123		68	655	116	2084	0.94
2	3:15-4:15		100	50	51		88	42	159		104	1047	152		112	1025	85	3015	0.99

ID	Time	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SBU	SBL	SBT	SBR	NBU	NBL	NBT	NBR	Total	PHF
3	8:30-9:30		147	8	58		14	1	30		76	710	37		120	533	65	1799	0.90
3	5:00-6:00		133	37	91		71	11	118		122	898	124		208	871	93	2777	0.99

ID	Time	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SBU	SBL	SBT	SBR	NBU	NBL	NBT	NBR	Total	PHF
4	8:15-9:15		217	169	125		39	71	48		109	554	46		95	833	183	2489	0.94
4	4:45-5:45		333	231	167		123	195	77		178	909	87		175	1125	397	3997	0.97

ID	Time	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SBU	SBL	SBT	SBR	NBU	NBL	NBT	NBR	Total	PHF
5	8:30-9:30		30	n/a	23						0	801	78		0	898		1830	0.94
5	4:45-5:45		80	n/a	51						6	1157	126		6	1283		2709	0.94

ID	Time	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SBU	SBL	SBT	SBR	NBU	NBL	NBT	NBR	Total	PHF
6	8:30-9:30		33		30						20	648	54		50	901		1736	0.92
6	4:45-5:45		93		110						98	1078	87		125	1283		2874	0.96

ID	Time	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SBU	SBL	SBT	SBR	NBU	NBL	NBT	NBR	Total	PHF
7	8:30-9:30		78	168	224		290	243	161		168	608	64		488	477	359	3328	0.98
7	3:15-4:15		147	302	474		520	370	266		112	1028	131		489	641	406	4886	0.97

ID	Time	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	SBU	SBL	SBT	SBR	NBU	NBL	NBT	NBR	Total	PHF
8	8:00-9:00								135		54					1132	93	1414	0.93
8	3:30-4:30								184		141					1496	133	1954	0.97

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Nesmith - 10.32.76.1 EOS - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	2	7	0	7	2	7	0	7	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	1.8	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	10	30	0	16	10	30	0	16	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	2.0	3.8	0.0	3.0	2.0	3.9	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0
Min Gap	2.0	2.2	0.0	3.0	2.0	2.4	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	25	69	0	40	25	69	0	40	0	0	0	0	0	0	0	0
Max2	12	24	0	18	12	24	0	18	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0

Ped Clear	0	13	0	30	0	19	0	30	0	0	0	0	0	0	0	0
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Yellow	3.5	4.3	0.0	3.5	3.5	4.3	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall																
Max Recall																
Soft Recall		X				X										
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															

Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Nesmith - 10.32.76.1 EOS - Econolite Type - EOS

Time Base Event Plan
Event Plan (MM) 5-2

Event Plan - 2 - "2" - Event Type: "Coord"

Cycle Length: 120 Offset Value: 97s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	16	55	0	29	29	42	0	20	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: Yes
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	120s	91s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Override Sys:	No	Ped Det Diag Plan:	0
Backup Prevent Plan:	0	Det Log:	None

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 3 - "3" - Event Type: "Coord"

Cycle Length: 155 Offset Value: 86s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	15	76	0	39	42	49	0	25	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: Yes
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	155s	116s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 4 - "4" - Event Type: "Coord"

Cycle Length: 140 Offset Value: 60s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	18	65	0	37	29	54	0	20	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 0
Actuated Walk Rest: No
Phase Reservice: Yes
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	140s	103s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Nesmith - 10.32.76.1 EOS - Econolite Type - EOS

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Event Plan	Start Time
1	1	00:00
2	2	11:00
3	2	11:30
4	2	16:30
5	2	18:00
6	1	18:30

Day Plan #2 - "2"

Event	Event Plan	Start Time
1	1	00:00
2	3	11:00
3	1	17:30

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Clarksville - 10.32.56.1 EOS - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	7	5	4	5	7	5	4	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	1.9	0.0	0.0	0.0	1.6	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	8	25	8	15	8	25	8	15	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	1.0	6.2	2.0	3.2	1.0	6.1	2.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	18	0	0	0	18	0	15	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	25	0	0	0	25	0	15	0	0	0	0	0	0	0	0
Min Gap	1.0	4.7	2.0	3.2	1.0	4.5	2.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	25	69	25	40	25	69	25	40	0	0	0	0	0	0	0	0
Max2	12	24	12	18	12	24	12	18	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0

Ped Clear	0	19	0	28	0	18	0	28	0	0	0	0	0	0	0	0
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Yellow	3.5	4.3	3.5	3.9	3.5	4.3	3.5	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall																
Max Recall																
Soft Recall		X				X										
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															

Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Clarksville - 10.32.56.1 EOS - Econolite Type - EOS

Time Base Event Plan
Event Plan (MM) 5-2

Event Plan - 2 - "2" - Event Type: "Coord"

Cycle Length: 120 Offset Value: 105s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	21	49	25	25	16	54	21	29	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	120s	120s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Override Sys:	No	Ped Det Diag Plan:	0
Backup Prevent Plan:	0	Det Log:	None

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 3 - "3" - Event Type: "Coord"

Cycle Length: 155 Offset Value: 20s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	33	60	35	27	17	76	23	39	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	155s	155s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 4 - "4" - Event Type: "Coord"

Cycle Length: 140 Offset Value: 67s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	35	56	27	22	22	69	28	21	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 0
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	140s	140s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

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ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Clarksville - 10.32.56.1 EOS - Econolite Type - EOS

Time Base Day Plan/Schedule

Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Event Plan	Start Time
1	1	00:00
2	2	11:00
3	2	11:30
4	2	16:30
5	2	18:00
6	1	18:30

Day Plan #2 - "2"

Event	Event Plan	Start Time
1	1	00:00
2	3	11:00
3	1	17:30

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 4

Day Plan No.: 4

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	X	X	X	X	X	X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Power Center - 10.32.49.1 EOS - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	3	7	0	5	3	7	0	2	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	1.6	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	10	25	0	10	10	25	0	10	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	2.0	5.8	0.0	2.0	2.0	6.1	0.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0
Min Gap	1.0	4.3	0.0	2.0	1.0	4.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	25	69	0	40	25	69	0	40	35	35	35	35	35	35	35	35
Max2	12	24	0	18	12	24	0	18	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	10	0	10	0	10	0	10

Ped Clear	0	19	0	29	0	18	0	26	0	16	0	16	0	16	0	16
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Yellow	3.5	4.3	0.0	3.5	3.5	4.3	0.0	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall																
Max Recall																
Soft Recall		X				X										
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															

Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Power Center - 10.32.49.1 EOS - Econolite Type - EOS

Time Base Event Plan
Event Plan (MM) 5-2

Event Plan - 2 - "2" - Event Type: "Coord"

Cycle Length: 120 Offset Value: 118s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	20	59	0	21	22	57	0	20	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	120s	99s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Override Sys:	No	Ped Det Diag Plan:	0
Backup Prevent Plan:	0	Det Log:	None

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 3 - "3" - Event Type: "Coord"

Cycle Length: 155 Offset Value: 13s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	33	53	0	40	25	61	0	29	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: Yes
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	155s	115s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 4 - "4" - Event Type: "Coord"

Cycle Length: 140 Offset Value: 80s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	26	65	0	27	26	65	0	22	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 0
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	140s	113s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Power Center - 10.32.49.1 EOS - Econolite Type - EOS

Time Base Day Plan/Schedule

Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Event Plan	Start Time
1	1	00:00
2	2	11:00
3	2	11:30
4	2	16:30
5	2	18:00
6	1	18:30

Day Plan #2 - "2"

Event	Event Plan	Start Time
1	1	00:00
2	3	11:00
3	1	17:30

Day Plan #3 - "3"

Event	Event Plan	Start Time
1	1	00:00
2	2	07:00
3	4	11:30
4	3	16:30
5	1	18:00

Day Plan #4 - "4"

Event	Event Plan	Start Time
1	1	00:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 4

Day Plan No.: 4

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	X	X	X	X	X	X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Broadstone - 10.32.54.1 EOS - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	7	5	7	5	7	5	7	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	1.6	0.0	1.7	0.0	1.6	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	11	30	11	20	11	29	11	20	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	2.0	6.1	2.0	4.5	2.0	6.1	2.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	18	0	10	0	18	0	10	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	25	0	20	0	25	0	20	0	0	0	0	0	0	0	0
Min Gap	1.0	4.5	2.0	3.0	1.0	4.5	2.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	25	69	25	40	25	69	40	40	0	0	0	0	0	0	0	0
Max2	12	24	12	18	12	24	12	18	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0

Ped Clear	0	29	0	28	0	28	0	28	0	0	0	0	0	0	0	0
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Yellow	3.5	4.3	3.5	4.3	3.5	4.3	3.5	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall																
Max Recall																
Soft Recall		X				X										
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															

Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Broadstone - 10.32.54.1 EOS - Econolite Type - EOS

Time Base Event Plan
Event Plan (MM) 5-2

Event Plan - 2 - "2" - Event Type: "Coord"

Cycle Length: 120 Offset Value: 72s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	18	57	20	25	18	57	24	21	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	120s	120s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Override Sys:	No	Ped Det Diag Plan:	0
Backup Prevent Plan:	0	Det Log:	None

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 3 - "3" - Event Type: "Coord"

Cycle Length: 155 Offset Value: 40s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	26	65	30	34	26	65	33	31	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: Yes
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	155s	155s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 4 - "4" - Event Type: "Coord"

Cycle Length: 140 Offset Value: 59s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	21	70	20	21	18	68	28	21	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 0
Actuated Walk Rest: No
Phase Reservice: Yes
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	132s	135s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Broadstone - 10.32.54.1 EOS - Econolite Type - EOS

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Event Plan	Start Time
1	1	00:00
2	2	11:00
3	2	11:30
4	2	16:30
5	2	18:00
6	1	18:30

Day Plan #2 - "2"

Event	Event Plan	Start Time
1	1	00:00
2	3	11:00
3	1	17:30

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 4

Day Plan No.: 4

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	X	X	X	X	X	X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Via Sole - 10.32.91.1 EOS - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	2	7	0	0	2	7	0	3	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	1.6	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	10	35	0	0	10	33	0	10	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	2.0	5.3	0.0	0.0	2.0	4.8	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0
Min Gap	2.0	3.8	0.0	0.0	2.0	3.3	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	25	69	0	0	35	69	0	40	0	0	0	0	0	0	0	0
Max2	12	24	0	0	12	24	0	18	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0

Ped Clear	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Yellow	3.5	4.3	0.0	0.0	3.5	4.3	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	1.0	1.0	0.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall																
Max Recall																
Soft Recall		X				X										
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															

Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Via Sole - 10.32.91.1 EOS - Econolite Type - EOS

Time Base Event Plan
Event Plan (MM) 5-2

Event Plan - 2 - "2" - Event Type: "Coord"

Cycle Length: 120 Offset Value: 64s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	15	57	0	0	19	53	0	48	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	120s	120s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Override Sys:	No	Ped Det Diag Plan:	0
Backup Prevent Plan:	0	Det Log:	None

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 3 - "3" - Event Type: "Coord"

Cycle Length: 155 Offset Value: 20s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	40	67	0	0	23	84	0	48	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	155s	155s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 4 - "4" - Event Type: "Coord"

Cycle Length: 140 Offset Value: 50s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	28	77	0	0	25	87	0	28	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 0
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	133s	140s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Via Sole - 10.32.91.1 EOS - Econolite Type - EOS

Time Base Day Plan/Schedule

Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Event Plan	Start Time
1	1	00:00
2	2	11:00
3	2	11:30
4	2	16:30
5	2	18:00
6	1	18:30

Day Plan #2 - "2"

Event	Event Plan	Start Time
1	1	00:00
2	3	11:00
3	1	17:30

Day Plan #3 - "3"

Event	Event Plan	Start Time
1	1	00:00
2	2	07:00
3	4	11:30
4	3	16:30
5	2	18:00
6	1	20:00

Day Plan #4 - "4"

Event	Event Plan	Start Time
1	1	00:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 4

Day Plan No.: 4

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	X	X	X	X	X	X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Via Felice - 10.32.90.1 EOS - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	2	7	0	0	2	7	0	3	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	1.7	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	10	35	0	10	35	0	10	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	2.0	5.3	0.0	0.0	2.0	5.2	0.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0
Min Gap	2.0	3.8	0.0	0.0	2.0	3.7	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	16	69	0	0	35	69	0	40	35	35	35	35	35	35	35	35
Max2	12	24	0	0	12	24	0	18	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	7	0	0	0	10	0	10	0	10	0	10

Ped Clear	0	0	0	0	0	21	0	0	0	16	0	16	0	16	0	16
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Yellow	3.5	4.3	0.0	0.0	3.5	4.3	0.0	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Revert	2.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall																
Max Recall																
Soft Recall		X				X										
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															

Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Via Felice - 10.32.90.1 EOS - Econolite Type - EOS

Time Base Event Plan
Event Plan (MM) 5-2

Event Plan - 2 - "2" - Event Type: "Coord"

Cycle Length: 120 Offset Value: 55s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	26	46	0	0	23	49	0	48	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	120s	120s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Override Sys:	No	Ped Det Diag Plan:	0
Backup Prevent Plan:	0	Det Log:	None

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 3 - "3" - Event Type: "Coord"

Cycle Length: 155 Offset Value: 25s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	41	84	0	0	25	100	0	30	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	155s	155s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 4 - "4" - Event Type: "Coord"

Cycle Length: 140 Offset Value: 42s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	30	87	0	0	32	85	0	23	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 0
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	140s	140s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Via Felice - 10.32.90.1 EOS - Econolite Type - EOS

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Event Plan	Start Time
1	1	00:00
2	2	11:00
3	2	11:30
4	2	16:30
5	2	18:00
6	1	18:30

Day Plan #2 - "2"

Event	Event Plan	Start Time
1	1	00:00
2	3	11:00
3	1	17:30

Day Plan #4 - "4"

Event	Event Plan	Start Time
1	1	00:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 4

Day Plan No.: 4

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	X	X	X	X	X	X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
	X	X	X	X	X	X	X	X	X	X	X
	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**		
	X	X	X	X	X	X	X	X	X		

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Iron Point - 10.32.33.1 EOS - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	2	7	2	5	2	7	2	5	0	0	0	0	0	5	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	1.6	0.0	1.6	0.0	1.7	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	13	26	17	16	13	26	17	16	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	2.0	5.6	2.0	5.6	2.0	5.1	2.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	18	0	10	0	18	0	5	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	2.0	4.1	2.0	4.0	2.0	3.6	2.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	25	69	40	40	45	69	40	40	0	0	0	0	0	0	0	0
Max2	12	24	18	18	12	24	18	18	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0

Ped Clear	0	30	0	29	0	34	0	35	0	0	0	0	0	0	0	0
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Yellow	3.5	4.3	3.5	4.3	3.5	4.3	3.5	4.3	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall																
Max Recall																
Soft Recall		X				X										
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															

Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Iron Point - 10.32.33.1 EOS - Econolite Type - EOS

Time Base Event Plan
Event Plan (MM) 5-2

Event Plan - 2 - "2" - Event Type: "Coord"

Cycle Length: 120 Offset Value: 35s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	24	47	22	27	28	43	29	20	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	120s	120s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Override Sys:	No	Ped Det Diag Plan:	0
Backup Prevent Plan:	0	Det Log:	None

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 3 - "3" - Event Type: "Coord"

Cycle Length: 155 Offset Value: 25s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	36	66	25	28	50	52	32	21	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 1
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	155s	155s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 4 - "4" - Event Type: "Coord"

Cycle Length: 140 Offset Value: 36s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	30	50	35	25	36	44	37	23	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 0
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	140s	140s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell & Iron Point - 10.32.33.1 EOS - Econolite Type - EOS

Time Base Day Plan/Schedule

Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Event Plan	Start Time
1	1	00:00
2	2	11:00
3	2	11:30
4	2	16:30
5	2	18:00
6	1	18:30

Day Plan #2 - "2"

Event	Event Plan	Start Time
1	1	00:00
2	3	11:00
3	1	17:30

Day Plan #3 - "3"

Event	Event Plan	Start Time
1	1	00:00
2	2	07:00
3	4	11:30
4	3	16:30
5	1	18:00

Day Plan #4 - "4"

Event	Event Plan	Start Time
1	1	00:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 3

Day Plan No.: 3

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	12	13	14	15	16	17	18	19	20	21	22
	23	24	25	26	27	28	29	30	31		

Schedule Number - 4

Day Plan No.: 4

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	X	X	X	X	X	X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell Ave & Placerville - 10.32.83.1 EOS - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	2.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	25	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max2	12	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ped Clear	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Yellow	4.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall																
Max Recall																
Soft Recall		X														
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															

Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell Ave & Placerville - 10.32.83.1 EOS - Econolite Type - EOS

Time Base Event Plan
Event Plan (MM) 5-2

Event Plan - 2 - "2" - Event Type: "Coord"

Cycle Length: 60 Offset Value: 35s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	21	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X														
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 0
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	60s	0s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Override Sys:	No	Ped Det Diag Plan:	0
Backup Prevent Plan:	0	Det Log:	None

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 3 - "3" - Event Type: "Coord"

Cycle Length: 80 Offset Value: 25s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	31	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X														
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 0
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	80s	0s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 4 - "4" - Event Type: "Coord"

Cycle Length: 70 Offset Value: 36s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	27	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X														
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 0
Actuated Walk Rest: No
Phase Reservice: No
Max Select: MAXINH
Max Transition: 4
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	70s	0s	0s	0s

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

East Bidwell Ave & Placerville - 10.32.83.1 EOS - Econolite Type - EOS

Time Base Day Plan/Schedule

Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Event Plan	Start Time
1	1	00:00
2	2	11:00
3	2	11:30
4	2	16:30
5	2	18:00
6	1	18:30

Day Plan #2 - "2"

Event	Event Plan	Start Time
1	1	00:00

Day Plan #3 - "3"

Event	Event Plan	Start Time
1	1	00:00
2	2	07:00
3	4	11:30
4	3	16:30
5	1	18:00

Day Plan #4 - "4"

Event	Event Plan	Start Time
1	1	00:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 4

Day Plan No.: 4

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	X	X	X	X	X	X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
	X	X	X	X	X	X	X	X	X	X	X
	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**		
	X	X	X	X	X	X	X	X	X		

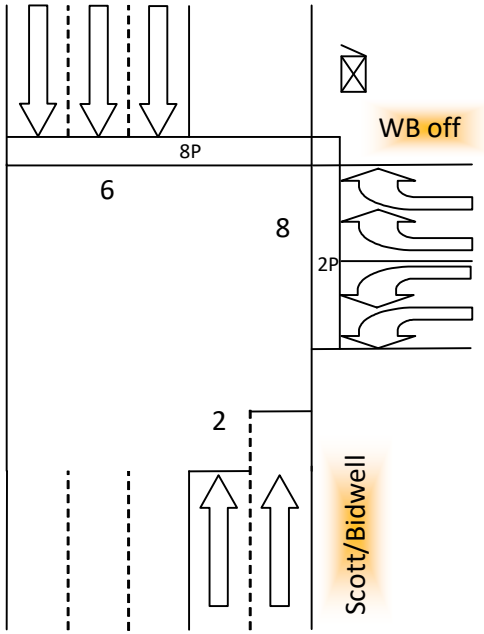
Location: Sac 50 @ East Bidwell & WB Ramps
System: TSCP 2.21 Build 2
Master At:
District:
I/C:
Designed By:
Installed By:
Service Info:

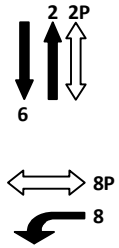
Timing Change: **Date Start:** **Date End:** **Designed:** **Installed:**

			FLASH
PHASE	1)		[ ]
	2)	NB Thru (East Bidwell)	[ ]
	3)		[ ]
	4)		[ ]
	5)		[ ]
	6)	SB Thru (Scott Rd)	[ ]
	7)		[ ]
	8)	WB Off Ramp Left/Right	[ ]

OVERLAP	A)	[ ]
	B)	[ ]
	C)	[ ]
	D)	[ ]
	E)	[ ]
	F)	[ ]

Intersection Layout





Comments and Notes:
2000-12-27 @ 12:45 OTO State: P.A. Diaz & Tom Kelly Main: Gary Batchhelder
2003-12-19 Intalled Phase 8Ped
2013-02-22 Changed crosswalk to 3.5ft/sec: DH
2018-02-16 Changed 170 to 2070 V2.21B2: DH, JK

RAM Checksum

Page 2: 322A	Page 8: 85AF
Page 3: E08E	Page 9: 0A3F
Page 4: 0BF4	Page 10: 3698
Page 5: 191A	Page 11: C3CB
Page 6: 191A	Page 12: D68F
Page 7: 8B90	Page 13: 86F7

Post Mile: Sac 50 @ Scott/ E. Bidwell WB Ramp

Printed: 4/29/2021

CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)	
Permitted	. 2 . . . 6 . 8
Restricted	. . . . .

Phase Recalls (2-1-1-2)	
Vehicle Min	. 2 . . . 6 . .
Vehicle Max	. . . . .
Pedestrian	. . . . .
Bicycle	. . . . .

Phase Locks (2-1-1-3)	
Red	 8
Yellow	. . . . .
Force/Max	. . . . .

Phase Features (2-1-1-4)	
Double Entry	. . . . .
Rest In Walk	. . . . .
Rest In Red	. . . . .
Walk 2	. . . . .
Max Green 2	. . . . .
Max Green 3	. . . . .

Startup (2-1-1-5)	
First Green Phases	. 2 . . . 6 . .
Yellow Start Phases	. . . . .
Vehicle Calls	. 2 . . . 6 . 8
Pedestrian Calls	. 2 8
Yellow Start Overlaps	. . . . .
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	. . . . .	1	. . . . .
2	. . . . .	2	. . . . .
3	. . . . .	3	. . . . .
4	. . . . .	4	. . . . .
5	. . . . .	5	. . . . .
6	. . . . .	6	. . . . .
7	. . . . .	7	. . . . .
8	. . . . .	8	. . . . .

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	. . . . .
Yellow Flash Overlap	. . . . .
Flash In Red Phases	. . . . .
Flash In Red Overlap	. . . . .

Special Operation (2-1-2-3)	
Single Exit Phase	. . . . .
Driveway Signal Phases	. . . . .
Driveway Signal Overlaps	. . . . .
Leading Ped Phases	. . . . .

Protected Permissive (2-1-2-4)	
Protected Permissive	. . . . .

Pedestrian (2-1-3)	
P1	. . . . .
P2	. 2 . . . . .
P3	. . . . .
P4	. . . . .
P5	. . . . .
P6	. . . . .
P7	. . . . .
P8	 8

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	. . . . .	. . . . .	. . . . .	. . . . .
B	. . . . .	. . . . .	. . . . .	. . . . .
C	. . . . .	. . . . .	. . . . .	. . . . .
D	. . . . .	. . . . .	. . . . .	. . . . .
E	. . . . .	. . . . .	. . . . .	. . . . .
F	. . . . .	. . . . .	. . . . .	. . . . .

PHASE TIMING

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	7	0	0	0	0	0	7
Flash Don't Walk	0	19	0	0	0	0	0	23
Minimum Green	0	12	0	0	0	12	0	8
Det Limit	0	20	0	0	0	20	0	20
Max Initial	0	10	0	0	0	10	0	10
Max Green 1	0	50	0	0	0	50	0	30
Max Green 2	0	50	0	0	0	50	0	45
Max Green 3	0	50	0	0	0	50	0	55
Extension	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0
Maximum Gap	0.0	4.0	0.0	0.0	0.0	4.0	0.0	3.5
Minimum Gap	0.0	1.0	0.0	0.0	0.0	1.0	0.0	2.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
Yellow	3.0	4.8	3.0	3.0	3.0	4.8	3.0	4.1
All-Red	0.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0

Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	2
Gap Cnt	2

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor			.....											
Plan 2	Green Factor			.....											
Plan 3	Green Factor			.....											
Plan 4	Green Factor			.....											
Plan 5	Green Factor			.....											
Plan 6	Green Factor			.....											
Plan 7	Green Factor			.....											
Plan 8	Green Factor			.....											
Plan 9	Green Factor			.....											

Master Timer Sync (7-A)	
Enable in Plans	
1-9	.....
11-19	.....
21-29	.....

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
. 2 . 4 . 6 . 8	.....
Veh Min	Veh Max
.....	.....
Ped	Bike
.....	.....
Cond	Cond Grn
.....	10

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	.....	.....	.....	.....	.....	.....	.....	.....
Plan 2	.....	.....	.....	.....	.....	.....	.....	.....
Plan 3	.....	.....	.....	.....	.....	.....	.....	.....
Plan 4	.....	.....	.....	.....	.....	.....	.....	.....
Plan 5	.....	.....	.....	.....	.....	.....	.....	.....
Plan 6	.....	.....	.....	.....	.....	.....	.....	.....
Plan 7	.....	.....	.....	.....	.....	.....	.....	.....
Plan 8	.....	.....	.....	.....	.....	.....	.....	.....
Plan 9	.....	.....	.....	.....	.....	.....	.....	.....

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	OffSet
	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	.....	.....	.....	.....	.....	.....	.....	.....
Plan 12	.....	.....	.....	.....	.....	.....	.....	.....
Plan 13	.....	.....	.....	.....	.....	.....	.....	.....
Plan 14	.....	.....	.....	.....	.....	.....	.....	.....
Plan 15	.....	.....	.....	.....	.....	.....	.....	.....
Plan 16	.....	.....	.....	.....	.....	.....	.....	.....
Plan 17	.....	.....	.....	.....	.....	.....	.....	.....
Plan 18	.....	.....	.....	.....	.....	.....	.....	.....
Plan 19	.....	.....	.....	.....	.....	.....	.....	.....

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	.....	.....	.....	.....	.....	.....	.....	.....
Plan 22	.....	.....	.....	.....	.....	.....	.....	.....
Plan 23	.....	.....	.....	.....	.....	.....	.....	.....
Plan 24	.....	.....	.....	.....	.....	.....	.....	.....
Plan 25	.....	.....	.....	.....	.....	.....	.....	.....
Plan 26	.....	.....	.....	.....	.....	.....	.....	.....
Plan 27	.....	.....	.....	.....	.....	.....	.....	.....
Plan 28	.....	.....	.....	.....	.....	.....	.....	.....
Plan 29	.....	.....	.....	.....	.....	.....	.....	.....

DETECTORS

Detector Attributes (5-1)				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	1	NO	I1U	1			10	3.2
2	COUNT+CALL+EXTEND	1	NO	I1L	2			10	7.2
3	COUNT+CALL+EXTEND	. 2	NO	I2U	3		1.4	10	1.1
4	COUNT+CALL+EXTEND	. 2	NO	I2L	4		1.4	10	1.5
5	COUNT+CALL+EXTEND	. 2	NO	I3U	5		0.5	10	4.5
6	CALL+EXTEND	. 2	NO	I3L	6			10	6.2
7	LIMITED	. 2	NO	I4U	7	2		10	2.1
8	LIMITED	. 2	NO	I4L	8	2		10	7.4
9	COUNT+CALL+EXTEND	. . 3	NO	I5U	9			10	3.4
10	COUNT+CALL+EXTEND	. . 3	NO	I5L	10			10	7.6
11	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6U	11			10	1.3
12	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6L	12			10	1.7
13	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7U	13			10	4.7
14	CALL+EXTEND	. . . 4 . . .	NO	I7L	14			10	6.4
15	LIMITED	. . . 4 . . .	NO	I8U	15			10	2.3
16	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I8L	16			10	7.8
17	COUNT+CALL+EXTEND	1	NO	I9U	17			10	3.6
18	COUNT+CALL+EXTEND	. . 3	NO	I9L	18			10	3.8
19	COUNT+CALL+EXTEND	. 2	NO	I10U	19			10	4.1
20	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I10L	20			10	4.2
21	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1U	21			10	3.1
22	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J1L	22			10	7.1
23	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2U	23		1.4	10	1.2
24	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2L	24		1.4	10	1.6
25	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3U	25		1.4	10	4.6
26	CALL+EXTEND	. . . . . 6 . .	NO	J3L	26		0.5	10	6.3
27	LIMITED	. . . . . 6 . .	NO	J4U	27			10	2.2
28	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4L	28			10	7.3
29	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5U	29			10	3.3
30	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5L	30			10	7.5
31	COUNT+CALL+EXTEND	 8	NO	J6U	31	2		10	1.4
32	COUNT+CALL+EXTEND	 8	NO	J6L	32	2	1.0	10	1.8
33	COUNT+CALL+EXTEND	 8	NO	J7U	33	2		10	4.8
34	CALL+EXTEND	 8	NO	J7L	34	2		10	6.5
35	CALL+EXTEND	 8	NO	J8U	35	6	1.0	10	2.4
36	CALL+EXTEND	 8	NO	J8L	36	6	1.0	10	7.7
37	COUNT+CALL+EXTEND	. . . . 5 . . .	NO	J9U	37			10	3.5
38	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J9L	38			10	3.7
39	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J10U	39			10	4.3
40	COUNT+CALL+EXTEND	 8	NO	J10L	40			10	4.4
41	PEDESTRIAN	. 2	NO	I12U	41			10	5.1
42	PEDESTRIAN	. . . 4 . . .	NO	I12L	42			10	5.3
43	PEDESTRIAN	. . . . . 6 . .	NO	I13U	43			10	5.2
44	PEDESTRIAN	 8	NO	I13L	44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	. . . . .
Detectors 9-16	. . . . .
Detectors17-24	. . . . .
Detectors 25-32	. . . . .
Detectors 33-40	. . . . .
Detectors 41-44	. . . . .

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Nu								
Sys Det	9	10	11	12	13	14	15	16
Det Nu								

CIC Operation (5-6-1)	
Enable in Plans	. . . . .

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 2 (8-2-2)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 3 (8-2-3)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 4 (8-2-4)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 5 (8-2-5)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 6 (8-2-6)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1			. . . . .	
2			. . . . .	
3			. . . . .	
4			. . . . .	
5			. . . . .	
6			. . . . .	
7			. . . . .	
8			. . . . .	
9			. . . . .	
10			. . . . .	
11			. . . . .	
12			. . . . .	
13			. . . . .	
14			. . . . .	
15			. . . . .	
16			. . . . .	

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1			. . . . .	
2			. . . . .	
3			. . . . .	
4			. . . . .	
5			. . . . .	
6			. . . . .	
7			. . . . .	
8			. . . . .	
9			. . . . .	
10			. . . . .	
11			. . . . .	
12			. . . . .	
13			. . . . .	
14			. . . . .	
15			. . . . .	
16			. . . . .	

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	. . . . .
Holiday	. . . . .

Daylight Saving (8-6)

Enabled	YES

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1	0600	0730	M T W T F S S	27	 8
2	0730	0930	M T W T F S .	18	 8
3	0930	2000	M T W T F S S	27	 8
4			. . . . .		. . . . .
5			. . . . .		. . . . .
6			. . . . .		. . . . .
7			. . . . .		. . . . .
8			. . . . .		. . . . .
9			. . . . .		. . . . .
10			. . . . .		. . . . .
11			. . . . .		. . . . .
12			. . . . .		. . . . .
13			. . . . .		. . . . .
14			. . . . .		. . . . .
15			. . . . .		. . . . .
16			. . . . .		. . . . .

Action Codes:

0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11. Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
27. Traffic Actuated Max 2
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)

#	Data	OP	Data	OP	Data	OP	Data
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

*Refer to User's Manual for Data and OP Codes

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	0	.	0	.	0	.	0
Netmask	255	.	255	.	255	.	0
Broadcast	0	.	0	.	0	.	254
Gateway	0	.	0	.	0	.	1

RAILROAD PREEMPTION

RR 1

(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. 2 . . 5 . . .	. . . . .	. . . . .	. . . . .	. . . . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .	. . . . .
Clear 2		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Clear 3		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Hold		. . . . .	. . . . .	1 2 3 4 5 6 7 8	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	A B C D E F
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-1-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . . .	. . . . .	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8

Configuration (3-1-6)			
Primary Port	Secondary Port	Latching	Power-Up
2.5	0.0	YES	FLASHING

RR 2

(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. . . 4 . . 7 .	. . . . .	. . . . .	. . . . .	. . . . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .	. . . . .
Clear 2		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Clear 3		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Hold		1 2 3 . . 6 . .	. . . . .	. . . . .	. 2 . . . 6 . .	. . . . .	. . . 4 . . . 8	. . . . .	. . . . .	. . . . .
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-2-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . . .	. . . . .	. . . 4 . . 7 .	. . . . .

Configuration (3-2-6)			
Primary Port	Secondary Port	Latching	Power-up
2.6	0.0	YES	DARK

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. 2 . . 5 . . .	. . . . .

Port	Latching	Phase Termination
5.5	NO	ADVANCE

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . . 4 . . 7 .	. . . . .

Port	Latching	Phase Termination
5.6	NO	ADVANCE

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	1 . . . . 6 . .	. . . . .

Port	Latching	Phase Termination
5.7	NO	ADVANCE

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . 3 8	. . . . .

Port	Latching	Phase Termination
5.8	NO	ADVANCE

INPUTS

		7 Wire I/C (2-1-5-1)			
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							+
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:

0 Unused (no output)
1-8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C

\+ middle output of loadswitches 3 and 6 Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)				Indicator Output	
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	. . . . .	0.0	OPT	0	0
Plan 11-19	. . . . .	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	. . . . .
	. . . . .

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	. . . . .

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
					. . . . .	0.0	0.0	0.0	0	0.0	0

Location: Sac 50 @ Scott Road & EB Ramps
Designed By:
System: **District:** **Installed By:**
Master At: **I/C:** **Service Info:**

Timing Change: **Date Start:** **Date End:** **Designed:** **Installed:**

		FLASH
PHASE	1)	[ ]
	2) NB Scott/Bidwell	[ ]
	3)	[ ]
	4) EB Off Ramp	[ ]
	5)	[ ]
	6) SB Scott/Bidwell	[ ]
	7)	[ ]
	8)	[ ]

OVERLAP	A)	[ ]
	B)	[ ]
	C)	[ ]
	D)	[ ]
	E)	[ ]
	F)	[ ]

Intersection Layout

Comments and Notes:
2000-12-27 OTO @ 11:10 State: P.A. Diaz & Tom Kelly Maintenance: Gary Batchelder
2013-02-22 Changed crosswalk to 3.5ft/sec: dh
2017-08-30 Changed 170 to 2070 w/2.21 DH
2017-08-30 Changed yellow times DH

RAM Checksum

Page 2: 29A0	Page 8: 85AF
Page 3: 4CBD	Page 9: D2FD
Page 4: 0BF4	Page 10: 6C71
Page 5: 191A	Page 11: C3CB
Page 6: 191A	Page 12: D68F
Page 7: A06D	Page 13: 86F7

Post Mile: Sac 50 @ Scott/Bidwell EB Ramp

Printed: 4/29/2021

CONFIGURATION PHASE FLAGS

Cabinet
332
Configuration
CALTRANS

Phases (2-1-1-1)	
Permitted	. 2 . 4 . 6 . .
Restricted	. . . . .

Phase Recalls (2-1-1-2)	
Vehicle Min	. . . . .
Vehicle Max	. . . . .
Pedestrian	. . . . .
Bicycle	. . . . .

Phase Locks (2-1-1-3)	
Red	. . . . .
Yellow	. . . . .
Force/Max	. . . . .

Phase Features (2-1-1-4)	
Double Entry	. . . . .
Rest In Walk	. . . . .
Rest In Red	. . . . .
Walk 2	. . . . .
Max Green 2	. . . . .
Max Green 3	. . . . .

Startup (2-1-1-5)	
First Green Phases	. 2 . . . 6 . .
Yellow Start Phases	. . . . .
Vehicle Calls	. 2 . 4 . 6 . .
Pedestrian Calls	. . . 4 . 6 . .
Yellow Start Overlaps	. . . . .
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	. . . . .	1	. . . . .
2	. . . . .	2	. . . . .
3	. . . . .	3	. . . . .
4	. . . . .	4	. . . . .
5	. . . . .	5	. . . . .
6	. . . . .	6	. . . . .
7	. . . . .	7	. . . . .
8	. . . . .	8	. . . . .

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	. . . . .
Yellow Flash Overlap	. . . . .
Flash In Red Phases	. . . . .
Flash In Red Overlap	. . . . .

Special Operation (2-1-2-3)	
Single Exit Phase	. . . . .
Driveway Signal Phases	. . . . .
Driveway Signal Overlaps	. . . . .
Leading Ped Phases	. . . . .

Protected Permissive (2-1-2-4)	
Protected Permissive	. . . . .

Pedestrian (2-1-3)	
P1	. . . . .
P2	. . . . .
P3	. . . . .
P4	. . . 4 . . . .
P5	. . . . .
P6	. . . . . 6 . .
P7	. . . . .
P8	. . . . .

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A	. . . . .	. . . . .	. . . . .	. . . . .
B	. . . . .	. . . . .	. . . . .	. . . . .
C	. . . . .	. . . . .	. . . . .	. . . . .
D	. . . . .	. . . . .	. . . . .	. . . . .
E	. . . . .	. . . . .	. . . . .	. . . . .
F	. . . . .	. . . . .	. . . . .	. . . . .

PHASE TIMING

Phase (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	0	0	7	0	7	0	0
Flash Don't Walk	0	0	0	20	0	12	0	0
Minimum Green	0	8	0	6	0	8	0	0
Det Limit	0	20	0	10	0	20	0	0
Max Initial	0	10	0	10	0	10	0	0
Max Green 1	0	45	0	25	0	45	0	0
Max Green 2	0	50	0	50	0	50	0	0
Max Green 3	0	50	0	50	0	50	0	0
Extension	0.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0
Maximum Gap	0.0	4.0	0.0	3.5	0.0	4.0	0.0	0.0
Minimum Gap	0.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
Reduce Every	0.0	1.0	0.0	1.0	0.0	1.0	0.0	0.0
Yellow	3.0	4.8	3.0	4.1	3.0	4.8	3.0	3.0
All-Red	0.0	1.0	0.0	1.0	0.0	1.0	0.0	0.0
Ped/Bike (2-3)	**-1-**	**-2-**	**-3-**	**-4-**	**-5-**	**-6-**	**-7-**	**-8-**
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
All-Red Sec/Min (2-6)	
All-Red Sec/Min:	OFF

Max 2 Extension

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor			.....											
Plan 2	Green Factor			.....											
Plan 3	Green Factor			.....											
Plan 4	Green Factor			.....											
Plan 5	Green Factor			.....											
Plan 6	Green Factor			.....											
Plan 7	Green Factor			.....											
Plan 8	Green Factor			.....											
Plan 9	Green Factor			.....											

Master Timer Sync (7-A)	
Enable in Plans	
1-9	.....
11-19	.....
21-29	.....

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
. 2 . 4 . 6 . 8	.....
Veh Min	Veh Max
.....	.....
Ped	Bike
.....	.....
Cond	Cond Grn
.....	10

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	.....	.....	.....	.....	.....	.....	.....	.....
Plan 2	.....	.....	.....	.....	.....	.....	.....	.....
Plan 3	.....	.....	.....	.....	.....	.....	.....	.....
Plan 4	.....	.....	.....	.....	.....	.....	.....	.....
Plan 5	.....	.....	.....	.....	.....	.....	.....	.....
Plan 6	.....	.....	.....	.....	.....	.....	.....	.....
Plan 7	.....	.....	.....	.....	.....	.....	.....	.....
Plan 8	.....	.....	.....	.....	.....	.....	.....	.....
Plan 9	.....	.....	.....	.....	.....	.....	.....	.....

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	OffSet
	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 11	Green Factor			.....											
Plan 12	Green Factor			.....											
Plan 13	Green Factor			.....											
Plan 14	Green Factor			.....											
Plan 15	Green Factor			.....											
Plan 16	Green Factor			.....											
Plan 17	Green Factor			.....											
Plan 18	Green Factor			.....											
Plan 19	Green Factor			.....											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	.....	.....	.....	.....	.....	.....	.....	.....
Plan 12	.....	.....	.....	.....	.....	.....	.....	.....
Plan 13	.....	.....	.....	.....	.....	.....	.....	.....
Plan 14	.....	.....	.....	.....	.....	.....	.....	.....
Plan 15	.....	.....	.....	.....	.....	.....	.....	.....
Plan 16	.....	.....	.....	.....	.....	.....	.....	.....
Plan 17	.....	.....	.....	.....	.....	.....	.....	.....
Plan 18	.....	.....	.....	.....	.....	.....	.....	.....
Plan 19	.....	.....	.....	.....	.....	.....	.....	.....

Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 21	Green Factor			.....											
Plan 22	Green Factor			.....											
Plan 23	Green Factor			.....											
Plan 24	Green Factor			.....											
Plan 25	Green Factor			.....											
Plan 26	Green Factor			.....											
Plan 27	Green Factor			.....											
Plan 28	Green Factor			.....											
Plan 29	Green Factor			.....											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	.....	.....	.....	.....	.....	.....	.....	.....
Plan 22	.....	.....	.....	.....	.....	.....	.....	.....
Plan 23	.....	.....	.....	.....	.....	.....	.....	.....
Plan 24	.....	.....	.....	.....	.....	.....	.....	.....
Plan 25	.....	.....	.....	.....	.....	.....	.....	.....
Plan 26	.....	.....	.....	.....	.....	.....	.....	.....
Plan 27	.....	.....	.....	.....	.....	.....	.....	.....
Plan 28	.....	.....	.....	.....	.....	.....	.....	.....
Plan 29	.....	.....	.....	.....	.....	.....	.....	.....

DETECTORS

Detector Attributes (5-1)				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	1	NO	I1U	1			10	3.2
2	COUNT+CALL+EXTEND	1	NO	I1L	2			10	7.2
3	COUNT+CALL+EXTEND	. 2	NO	I2U	3		1.5	10	1.1
4	COUNT+CALL+EXTEND	. 2	NO	I2L	4		1.5	10	1.5
5	COUNT+CALL+EXTEND	. 2	NO	I3U	5		0.5	10	4.5
6	CALL+EXTEND	. 2	NO	I3L	6			10	6.2
7	LIMITED	. 2	NO	I4U	7			10	2.1
8	COUNT+CALL+EXTEND	. 2	NO	I4L	8			10	7.4
9	COUNT+CALL+EXTEND	. . 3	NO	I5U	9			10	3.4
10	COUNT+CALL+EXTEND	. . 3	NO	I5L	10			10	7.6
11	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6U	11	2	1.0	10	1.3
12	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I6L	12	2	1.0	10	1.7
13	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I7U	13	2		10	4.7
14	CALL+EXTEND	. . . 4 . . .	NO	I7L	14	2		10	6.4
15	LIMITED	. . . 4 . . .	NO	I8U	15	18		10	2.3
16	LIMITED	. . . 4 . . .	NO	I8L	16	18		10	7.8
17	COUNT+CALL+EXTEND	1	NO	I9U	17			10	3.6
18	COUNT+CALL+EXTEND	. . 3	NO	I9L	18			10	3.8
19	COUNT+CALL+EXTEND	. 2	NO	I10U	19			10	4.1
20	COUNT+CALL+EXTEND	. . . 4 . . .	NO	I10L	20			10	4.2
21	COUNT+CALL+EXTEND	. . . . 5 . .	NO	J1U	21			10	3.1
22	COUNT+CALL+EXTEND	. . . . 5 . .	NO	J1L	22			10	7.1
23	COUNT+CALL+EXTEND	. . . . . 6 .	NO	J2U	23		1.5	10	1.2
24	COUNT+CALL+EXTEND	. . . . . 6 .	NO	J2L	24		1.5	10	1.6
25	COUNT+CALL+EXTEND	. . . . . 6 .	NO	J3U	25		0.5	10	4.6
26	CALL+EXTEND	. . . . . 6 .	NO	J3L	26			10	6.3
27	LIMITED	. . . . . 6 .	NO	J4U	27	2		10	2.2
28	LIMITED	. . . . . 6 .	NO	J4L	28	2		10	7.3
29	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5U	29			10	3.3
30	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5L	30			10	7.5
31	COUNT+CALL+EXTEND	 8	NO	J6U	31			10	1.4
32	COUNT+CALL+EXTEND	 8	NO	J6L	32			10	1.8
33	COUNT+CALL+EXTEND	 8	NO	J7U	33			10	4.8
34	CALL+EXTEND	 8	NO	J7L	34			10	6.5
35	LIMITED	 8	NO	J8U	35			10	2.4
36	COUNT+CALL+EXTEND	 8	NO	J8L	36			10	7.7
37	COUNT+CALL+EXTEND	. . . . 5 . .	NO	J9U	37			10	3.5
38	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J9L	38			10	3.7
39	COUNT+CALL+EXTEND	. . . . . 6 .	NO	J10U	39			10	4.3
40	COUNT+CALL+EXTEND	 8	NO	J10L	40			10	4.4
41	PEDESTRIAN	. 2	NO	I12U	41			10	5.1
42	PEDESTRIAN	. . . 4 . . .	NO	I12L	42			10	5.3
43	PEDESTRIAN	. . . . . 6 .	NO	I13U	43			10	5.2
44	PEDESTRIAN	 8	NO	I13L	44			10	5.4

Failure Times(5-3)	Minutes
Maximum On Time	
Fail Reset Time	

Failure Override (5-4)	
Detectors 1-8	. . . . .
Detectors 9-16	. . . . .
Detectors17-24	. . . . .
Detectors 25-32	. . . . .
Detectors 33-40	. . . . .
Detectors 41-44	. . . . .

System Detector Assignment (5-5)

Sys Det	1	2	3	4	5	6	7	8
Det Nu								
Sys Det	9	10	11	12	13	14	15	16
Det Nu								

CIC Operation (5-6-1)	
Enable in Plans	. . . . .

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)

Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 2 (8-2-2)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 3 (8-2-3)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 4 (8-2-4)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 5 (8-2-5)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

Table 6 (8-2-6)		
Time	Plan	OS
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A
		A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1			. . . . .	
2			. . . . .	
3			. . . . .	
4			. . . . .	
5			. . . . .	
6			. . . . .	
7			. . . . .	
8			. . . . .	
9			. . . . .	
10			. . . . .	
11			. . . . .	
12			. . . . .	
13			. . . . .	
14			. . . . .	
15			. . . . .	
16			. . . . .	

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1			. . . . .	
2			. . . . .	
3			. . . . .	
4			. . . . .	
5			. . . . .	
6			. . . . .	
7			. . . . .	
8			. . . . .	
9			. . . . .	
10			. . . . .	
11			. . . . .	
12			. . . . .	
13			. . . . .	
14			. . . . .	
15			. . . . .	
16			. . . . .	

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	. . . . .
Holiday	. . . . .

Daylight Saving (8-6)

Enabled	YES

TOD FUNCTIONS

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1			. . . . .		. . . . .
2			. . . . .		. . . . .
3			. . . . .		. . . . .
4			. . . . .		. . . . .
5			. . . . .		. . . . .
6			. . . . .		. . . . .
7			. . . . .		. . . . .
8			. . . . .		. . . . .
9			. . . . .		. . . . .
10			. . . . .		. . . . .
11			. . . . .		. . . . .
12			. . . . .		. . . . .
13			. . . . .		. . . . .
14			. . . . .		. . . . .
15			. . . . .		. . . . .
16			. . . . .		. . . . .

Action Codes:

0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11. Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
27. Traffic Actuated Max 2
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	1
Protocol	AB3418
Access Level	0
Baud	9600
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C20 (6-1-2)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

C21 (6-1-3)	
Address	
Protocol	AB3418
Access Level	0
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

Access Levels:

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

SOFT LOGIC

Soft Logic (6-2)							
#	Data	OP	Data	OP	Data	OP	Data
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

*Refer to User's Manual for Data and OP Codes

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

Line Out	
Local Toll	
Long Distance	
Delay	10
Area Code	
Phone Number	

NETWORK

Network (6-4)	
Address	
Protocol	AB3418
Port	27000
Type	STATIC
Central Access	0
Field Access	0

IP Address	0	.	0	.	0	.	0
Netmask	255	.	255	.	255	.	0
Broadcast	0	.	0	.	0	.	254
Gateway	0	.	0	.	0	.	1

RAILROAD PREEMPTION

RR 1

(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. 2 . . 5 . . .	. . . . .	. . . . .	. . . . .	. . . . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .	. . . . .
Clear 2		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Clear 3		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Hold		. . . . .	. . . . .	1 2 3 4 5 6 7 8	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	A B C D E F
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-1-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . . .	. . . . .	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8

Configuration (3-1-6)			
Primary Port	Secondary Port	Latching	Power-Up
2.5	0.0	YES	FLASHING

RR 2

(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Clear 1	10	. . . 4 . . 7 .	. . . . .	. . . . .	. . . . .	. . . . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .	. . . . .
Clear 2		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Clear 3		. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Hold		1 2 3 . . 6 . .	. . . . .	. . . . .	. 2 . . . 6 . .	. . . . .	. . . 4 . . . 8	. . . . .	. . . . .	. . . . .
Exit										
Min Grn										
Ped Clr										

Exit Parameters (3-2-5)			
Phase Green	Overlap Green	Vehicle Call	Ped Call
. . . . .	. . . . .	. . . 4 . . 7 .	. . . . .

Configuration (3-2-6)			
Primary Port	Secondary Port	Latching	Power-up
2.6	0.0	YES	DARK

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. 2 . . 5 . . .	. . . . .

Port	Latching	Phase Termination
5.5	NO	ADVANCE

EVB (3-B)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . . 4 . . 7 .	. . . . .

Port	Latching	Phase Termination
5.6	NO	ADVANCE

EVC (3-C)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	1 . . . . 6 . .	. . . . .

Port	Latching	Phase Termination
5.7	NO	ADVANCE

EVD (3-D)

Preempt Timers			Phase Green	Overlap Green
Delay	Clear	Max		
	30	30	. . 3 8	. . . . .

Port	Latching	Phase Termination
5.8	NO	ADVANCE

INPUTS

		7 Wire I/C (2-1-5-1)			
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	
Advance Enable	

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	
Door Ajar	
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	
2	
3	
4	

Battery Backup (2-1-5-5)	
Port	Operation
2.7	FLASHING

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							+
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:

0 Unused (no output)
1-8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C

\+ middle output of loadswitches 3 and 6 Channel 9 and 10

TRANSIT PRIORITY

Local Plans (3-E) 1...9 11...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											
Plan 11	Green Factor											
Plan 12	Green Factor											
Plan 13	Green Factor											
Plan 14	Green Factor											
Plan 15	Green Factor											
Plan 16	Green Factor											
Plan 17	Green Factor											
Plan 18	Green Factor											
Plan 19	Green Factor											

Transit Priority Configuration (3-E-A)				Indicator Output	
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	. . . . .	0.0	OPT	0	0
Plan 11-19	. . . . .	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
	. . . . .
	. . . . .

Free Plans (3-E-E)	
Max Grn Hold	Hold Phase
	. . . . .

Access Utilities (9-5)	
Password	***
Timeout	30

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	Coord	Lag	Min Recall	Restricted
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	. . . . .	. . . . .

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
					. . . . .	0.0	0.0	0.0	0	0.0	0

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

Broadstone & Marketplace - 10.32.67.1 - Econolite Type - Cobalt

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	E-T	E-L	N-LR	S-L	W-T	W-L	S-T	N	N	N	N	N	N	N	N
Min Green	6	8	6	7	6	8	6	7	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	36	0	15	0	36	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	1.0	6.0	1.0	2.0	1.0	6.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	25	40	25	40	25	40	25	40	0	0	0	0	0	0	0	0
Max2	12	18	12	18	12	18	12	18	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.6	4.7	3.6	3.6	3.6	4.7	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	1.9	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	41	0	0	0	41	0	0	0	0	0	0	0	0	0	0
Time B4	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	20	0	0	0	20	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	4.5	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

Broadstone & Cavitt - 10.32.92.1 - Econolite Type - Cobalt

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	E-T	E-L	N-LR	S-L	W-T	W-L	S-T	N	N	N	N	N	N	N	N
Min Green	5	7	5	5	5	7	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	22	0	37	0	22	0	37	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	2.0	6.3	2.0	2.0	2.0	5.8	2.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	25	40	25	40	35	40	25	40	35	35	35	35	35	35	35	35
Max2	12	24	12	18	12	24	12	18	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.5	4.5	3.5	3.9	3.5	4.5	3.5	3.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	1.9	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	41	0	0	0	39	0	0	0	0	0	0	0	0	0	0
Time B4	0	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	4.7	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Folsom, California

ECONOLITE

MOVING TRAFFIC FORWARD

Iron Point & Cavitt - 10.32.65.1 EOS - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	7	0	5	5	7	0	5	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	1.6	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	41	0	0	0	41	0	0	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	1.0	6.3	0.0	2.0	1.0	6.1	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	20	0	0	0	20	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	4.6	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	25	40	0	40	25	40	0	40	0	0	0	0	0	0	0	0
Max2	12	18	0	12	12	18	0	12	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0

Ped Clear	0	22	0	36	0	21	0	36	0	0	0	0	0	0	0	0
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Yellow	3.5	5.0	0.0	3.5	3.5	5.0	0.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall																
Max Recall																
Soft Recall		X				X										
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															

Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix B Calculation Sheets

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HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

09/02/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (veh/h)	3	47	0	20	3	143	0	17	3	58	1180	105
Future Volume (veh/h)	3	47	0	20	3	143	0	17	3	58	1180	105
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.98		1.00		0.99		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		50	0	21		152	0	18		62	1255	112
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1
Cap, veh/h		113	0	47		399	0	175		80	2446	757
Arrive On Green		0.09	0.00	0.09		0.11	0.00	0.11		0.04	0.48	0.48
Sat Flow, veh/h		1213	0	510		3591	0	1576		1795	5147	1593
Grp Volume(v), veh/h		71	0	0		152	0	18		62	1255	112
Grp Sat Flow(s),veh/h/ln		1723	0	0		1795	0	1576		1795	1716	1593
Q Serve(g_s), s		2.9	0.0	0.0		2.9	0.0	0.8		2.5	12.6	3.0
Cycle Q Clear(g_c), s		2.9	0.0	0.0		2.9	0.0	0.8		2.5	12.6	3.0
Prop In Lane		0.70		0.30		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		161	0	0		399	0	175		80	2446	757
V/C Ratio(X)		0.44	0.00	0.00		0.38	0.00	0.10		0.77	0.51	0.15
Avail Cap(c_a), veh/h		822	0	0		1714	0	752		616	4823	1492
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	0.00		1.00	0.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		31.9	0.0	0.0		30.7	0.0	29.7		35.2	13.5	11.0
Incr Delay (d2), s/veh		1.9	0.0	0.0		0.6	0.0	0.3		5.8	0.2	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.3	0.0	0.0		1.3	0.0	0.3		1.2	4.5	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		33.8	0.0	0.0		31.3	0.0	30.0		41.0	13.8	11.1
LnGrp LOS		C	A	A		C	A	C		D	B	B
Approach Vol, veh/h			71				170				1429	
Approach Delay, s/veh			33.8				31.1				14.7	
Approach LOS			C				C				B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.8	42.4		12.8	9.5	40.6		11.4
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	25.5	69.7		35.5	25.5	69.7		35.5
Max Q Clear Time (g_c+I1), s	4.5	15.8		4.9	5.1	14.6		4.9
Green Ext Time (p_c), s	0.1	21.3		0.6	0.2	19.8		0.4

Intersection Summary	
HCM 6th Ctrl Delay	16.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

09/02/2021

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (veh/h)	3	138	1307	40
Future Volume (veh/h)	3	138	1307	40
Initial Q (Qb), veh		0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.99
Parking Bus, Adj		1.00	1.00	1.00
Work Zone On Approach			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885
Adj Flow Rate, veh/h		147	1390	43
Peak Hour Factor		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1
Cap, veh/h		236	2564	792
Arrive On Green		0.07	0.50	0.50
Sat Flow, veh/h		3483	5147	1590
Grp Volume(v), veh/h		147	1390	43
Grp Sat Flow(s),veh/h/ln		1742	1716	1590
Q Serve(g_s), s		3.1	13.8	1.0
Cycle Q Clear(g_c), s		3.1	13.8	1.0
Prop In Lane		1.00		1.00
Lane Grp Cap(c), veh/h		236	2564	792
V/C Ratio(X)		0.62	0.54	0.05
Avail Cap(c_a), veh/h		1194	4823	1490
HCM Platoon Ratio		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00
Uniform Delay (d), s/veh		33.7	12.8	9.6
Incr Delay (d2), s/veh		1.0	0.2	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.3	4.8	0.3
Unsig. Movement Delay, s/veh				
LnGrp Delay(d),s/veh		34.8	13.1	9.7
LnGrp LOS		C	B	A
Approach Vol, veh/h			1580	
Approach Delay, s/veh			15.0	
Approach LOS			B	

Timer - Assigned Phs

HCM 6th Signalized Intersection Summary
2: E. Bidwell & Scholar

09/02/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	105	33	49	3	78	40	242	3	100	996	176	3	141	1122	207
Future Volume (veh/h)	3	105	33	49	3	78	40	242	3	100	996	176	3	141	1122	207
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		112	35	0		83	43	0		106	1060	0		150	1194	0
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		207	100			108	193			204	2930			232	2971	
Arrive On Green		0.06	0.05	0.00		0.06	0.05	0.00		0.06	0.57	0.00		0.07	0.58	0.00
Sat Flow, veh/h		3483	1885	1598		1795	3582	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		112	35	0		83	43	0		106	1060	0		150	1194	0
Grp Sat Flow(s),veh/h/ln		1742	1885	1598		1795	1791	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		2.4	1.4	0.0		3.5	0.9	0.0		2.3	8.5	0.0		3.2	9.8	0.0
Cycle Q Clear(g_c), s		2.4	1.4	0.0		3.5	0.9	0.0		2.3	8.5	0.0		3.2	9.8	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		207	100			108	193			204	2930			232	2971	
V/C Ratio(X)		0.54	0.35			0.77	0.22			0.52	0.36			0.65	0.40	
Avail Cap(c_a), veh/h		1162	989			599	1879			1162	4692			1162	4692	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		35.0	34.9	0.0		35.4	34.6	0.0		35.0	8.9	0.0		34.8	8.9	0.0
Incr Delay (d2), s/veh		0.8	4.9	0.0		4.2	0.6	0.0		0.8	0.3	0.0		1.1	0.4	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.0	0.8	0.0		1.6	0.4	0.0		1.0	2.9	0.0		1.4	3.3	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		35.8	39.9	0.0		39.6	35.3	0.0		35.7	9.2	0.0		35.9	9.3	0.0
LnGrp LOS		D	D			D	D			D	A			D	A	
Approach Vol, veh/h			147	A			126	A			1166	A			1344	A
Approach Delay, s/veh			36.7				38.1				11.6				12.2	
Approach LOS			D				D				B				B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	49.4	9.0	9.0	9.6	48.8	9.1	8.9
Change Period (Y+Rc), s	4.5	5.3	4.5	4.9	4.5	5.3	4.5	4.9
Max Green Setting (Gmax), s	25.5	69.7	25.5	40.1	25.5	69.7	25.5	40.1
Max Q Clear Time (g_c+I1), s	4.3	11.8	4.4	2.9	5.2	10.5	5.5	3.4
Green Ext Time (p_c), s	0.1	32.4	0.2	0.2	0.1	27.5	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: E. Bidwell & Power Center

09/02/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	220	12	88	21	2	46	3	409	1006	251	3	112	1080	57
Future Volume (veh/h)	3	220	12	88	21	2	46	3	409	1006	251	3	112	1080	57
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.99	1.00		0.98		1.00		1.00		1.00		0.99
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		253	0	98	23	2	51		454	1118	279		124	1200	63
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, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		382	0	168	111	10	104		403	2967	917		152	2250	694
Arrive On Green		0.11	0.00	0.11	0.07	0.07	0.07		0.22	0.58	0.58		0.08	0.44	0.44
Sat Flow, veh/h		3591	0	1575	1658	144	1562		1795	5147	1591		1795	5147	1588
Grp Volume(v), veh/h		253	0	98	25	0	51		454	1118	279		124	1200	63
Grp Sat Flow(s),veh/h/ln		1795	0	1575	1802	0	1562		1795	1716	1591		1795	1716	1588
Q Serve(g_s), s		7.7	0.0	6.7	1.5	0.0	3.6		25.5	13.4	10.2		7.7	19.5	2.6
Cycle Q Clear(g_c), s		7.7	0.0	6.7	1.5	0.0	3.6		25.5	13.4	10.2		7.7	19.5	2.6
Prop In Lane		1.00		1.00	0.92		1.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		382	0	168	120	0	104		403	2967	917		152	2250	694
V/C Ratio(X)		0.66	0.00	0.58	0.21	0.00	0.49		1.13	0.38	0.30		0.81	0.53	0.09
Avail Cap(c_a), veh/h		1310	0	575	642	0	556		403	3155	975		403	3155	974
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		48.8	0.0	48.4	50.2	0.0	51.2		44.1	13.0	12.4		51.1	23.5	18.8
Incr Delay (d2), s/veh		0.7	0.0	1.2	0.3	0.0	1.3		84.3	0.3	0.7		3.9	0.6	0.2
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		3.5	0.0	2.7	0.7	0.0	1.4		20.7	5.1	3.7		3.6	7.9	1.0
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		49.6	0.0	49.6	50.5	0.0	52.5		128.4	13.3	13.1		55.1	24.1	18.9
LnGrp LOS		D	A	D	D	A	D		F	B	B		E	C	B
Approach Vol, veh/h			351			76				1851				1387	
Approach Delay, s/veh			49.6			51.8				41.5				26.7	
Approach LOS			D			D				D				C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.0	55.0		12.1	14.2	70.9		16.6
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	25.5	69.7		40.5	25.5	69.7		41.5
Max Q Clear Time (g_c+I1), s	27.5	21.5		5.6	9.7	15.4		9.7
Green Ext Time (p_c), s	0.0	28.3		0.2	0.1	34.0		0.6

Intersection Summary	
HCM 6th Ctrl Delay	36.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
4: E. Bidwell & Broadstone

09/02/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	327	257	266	3	115	591	73	3	142	1266	278	3	163	953	73
Future Volume (veh/h)	3	327	257	266	3	115	591	73	3	142	1266	278	3	163	953	73
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		348	273	0		122	629	0		151	1347	0		173	1014	0
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		406	1305			173	960			203	2538			226	2572	
Arrive On Green		0.12	0.25	0.00		0.05	0.19	0.00		0.06	0.49	0.00		0.06	0.50	0.00
Sat Flow, veh/h		3483	5147	1598		3483	5147	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		348	273	0		122	629	0		151	1347	0		173	1014	0
Grp Sat Flow(s),veh/h/ln		1742	1716	1598		1742	1716	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		13.9	5.9	0.0		4.9	16.0	0.0		6.0	25.4	0.0		6.9	17.3	0.0
Cycle Q Clear(g_c), s		13.9	5.9	0.0		4.9	16.0	0.0		6.0	25.4	0.0		6.9	17.3	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		406	1305			173	960			203	2538			226	2572	
V/C Ratio(X)		0.86	0.21			0.70	0.65			0.74	0.53			0.77	0.39	
Avail Cap(c_a), veh/h		875	1490			998	1664			629	2538			629	2572	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		61.3	41.6	0.0		66.1	53.3	0.0		65.5	24.6	0.0		65.0	22.0	0.0
Incr Delay (d2), s/veh		2.1	0.1	0.0		2.0	1.3	0.0		2.0	0.8	0.0		2.1	0.5	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		6.3	2.6	0.0		2.2	7.1	0.0		2.7	10.5	0.0		3.1	7.1	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		63.3	41.7	0.0		68.1	54.6	0.0		67.5	25.4	0.0		67.1	22.5	0.0
LnGrp LOS		E	D			E	D			E	C			E	C	
Approach Vol, veh/h			621	A			751	A			1498	A			1187	A
Approach Delay, s/veh			53.8				56.8				29.6				29.0	
Approach LOS			D				E				C				C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	75.9	21.0	31.7	13.7	75.0	11.5	41.1
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	* 5.3
Max Green Setting (Gmax), s	8.5	69.7	35.5	45.7	25.5	69.7	40.5	* 41
Max Q Clear Time (g_c+I1), s	8.0	19.3	15.9	18.0	8.9	27.4	6.9	7.9
Green Ext Time (p_c), s	0.2	24.1	0.6	7.5	0.3	29.7	0.2	3.1

Intersection Summary	
HCM 6th Ctrl Delay	38.2
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: E. Bidwell & Via sole

09/02/2021

Movement	EBU	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (veh/h)	3	50	68	0	1534	0	1218	119
Future Volume (veh/h)	3	50	68	0	1534	0	1218	119
Initial Q (Qb), veh		0	0	0	0		0	0
Ped-Bike Adj(A_pbT)		1.00	1.00	1.00				1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach		No			No		No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885		1885	1885
Adj Flow Rate, veh/h		53	72	0	1632		1296	127
Peak Hour Factor		0.94	0.94	0.94	0.94		0.94	0.94
Percent Heavy Veh, %		1	1	1	1		1	1
Cap, veh/h		246	113	3	3940		3940	1219
Arrive On Green		0.07	0.07	0.00	0.77		0.77	0.77
Sat Flow, veh/h		3483	1598	1795	5316		5316	1592
Grp Volume(v), veh/h		53	72	0	1632		1296	127
Grp Sat Flow(s),veh/h/ln		1742	1598	1795	1716		1716	1592
Q Serve(g_s), s		0.9	2.6	0.0	6.5		4.7	1.2
Cycle Q Clear(g_c), s		0.9	2.6	0.0	6.5		4.7	1.2
Prop In Lane		1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h		246	113	3	3940		3940	1219
V/C Ratio(X)		0.22	0.64	0.00	0.41		0.33	0.10
Avail Cap(c_a), veh/h		2067	948	1066	5997		5997	1855
HCM Platoon Ratio		1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00	1.00		1.00	1.00
Uniform Delay (d), s/veh		26.2	27.1	0.0	2.4		2.2	1.8
Incr Delay (d2), s/veh		0.2	2.2	0.0	0.1		0.1	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln		0.3	1.0	0.0	0.9		0.6	0.2
Unsig. Movement Delay, s/veh								
LnGrp Delay(d),s/veh		26.4	29.3	0.0	2.5		2.3	1.9
LnGrp LOS		C	C	A	A		A	A
Approach Vol, veh/h		125			1632		1423	
Approach Delay, s/veh		28.1			2.5		2.3	
Approach LOS		C			A		A	

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.0	51.1				51.1		8.7
Change Period (Y+Rc), s	4.5	5.3				5.3		4.5
Max Green Setting (Gmax), s	35.5	69.7				69.7		35.5
Max Q Clear Time (g_c+I1), s	10.0	6.7				8.5		4.6
Green Ext Time (p_c), s	0.0	33.5				37.3		0.2

Intersection Summary	
HCM 6th Ctrl Delay	3.4
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
6: E. Bidwell & Via Felice

09/02/2021



Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations									
Traffic Volume (veh/h)	3	50	131	3	103	1454	30	1143	113
Future Volume (veh/h)	3	50	131	3	103	1454	30	1143	113
Initial Q (Qb), veh		0	0		0	0		0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00				1.00
Parking Bus, Adj		1.00	1.00		1.00	1.00		1.00	1.00
Work Zone On Approach		No				No		No	
Adj Sat Flow, veh/h/ln		1885	1885		1885	1885		1885	1885
Adj Flow Rate, veh/h		54	142		112	1580		1242	123
Peak Hour Factor		0.92	0.92		0.92	0.92		0.92	0.92
Percent Heavy Veh, %		1	1		1	1		1	1
Cap, veh/h		407	187		146	4198		3069	949
Arrive On Green		0.12	0.12		0.08	0.74		0.60	0.60
Sat Flow, veh/h		3483	1598		1795	5656		5316	1591
Grp Volume(v), veh/h		54	142		112	1580		1242	123
Grp Sat Flow(s),veh/h/ln		1742	1598		1795	1885		1716	1591
Q Serve(g_s), s		1.0	6.0		4.3	7.0		8.9	2.4
Cycle Q Clear(g_c), s		1.0	6.0		4.3	7.0		8.9	2.4
Prop In Lane		1.00	1.00		1.00				1.00
Lane Grp Cap(c), veh/h		407	187		146	4198		3069	949
V/C Ratio(X)		0.13	0.76		0.77	0.38		0.40	0.13
Avail Cap(c_a), veh/h		2027	930		916	5663		5154	1593
HCM Platoon Ratio		1.00	1.00		1.00	1.00		1.00	1.00
Upstream Filter(I)		1.00	1.00		1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh		27.6	29.8		31.3	3.2		7.5	6.1
Incr Delay (d2), s/veh		0.1	2.4		3.2	0.1		0.2	0.2
Initial Q Delay(d3),s/veh		0.0	0.0		0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln		0.4	2.3		1.9	1.6		2.8	0.7
Unsig. Movement Delay, s/veh									
LnGrp Delay(d),s/veh		27.6	32.2		34.5	3.3		7.7	6.3
LnGrp LOS		C	C		C	A		A	A
Approach Vol, veh/h		196				1692		1365	
Approach Delay, s/veh		30.9				5.4		7.6	
Approach LOS		C				A		A	

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.2	46.8				57.0		12.6
Change Period (Y+Rc), s	4.5	5.3				5.3		4.5
Max Green Setting (Gmax), s	5.5	69.7				69.7		40.5
Max Q Clear Time (g_c+I1), s	10.3	10.9				9.0		8.0
Green Ext Time (p_c), s	0.1	30.6				38.8		0.3

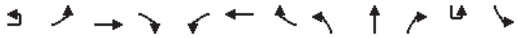
Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
7: E. Bidwell & Iron Point

09/02/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	5	228	255	401	505	369	245	821	1082	570	5	251	924	97
Future Volume (veh/h)	5	228	255	401	505	369	245	821	1082	570	5	251	924	97
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.99	1.00		0.99	1.00		1.00		1.00		0.99
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No			No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		233	260	409	515	377	250	838	1104	582		256	943	99
Peak Hour Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98		0.98	0.98	0.98
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1		1	1	1
Cap, veh/h		301	484	588	588	1120	345	816	2173	672		327	1450	448
Arrive On Green		0.09	0.14	0.14	0.17	0.22	0.22	0.23	0.42	0.42		0.09	0.28	0.28
Sat Flow, veh/h		3483	3582	1580	3483	5147	1587	3483	5147	1592		3483	5147	1589
Grp Volume(v), veh/h		233	260	409	515	377	250	838	1104	582		256	943	99
Grp Sat Flow(s),veh/h/ln		1742	1791	1580	1742	1716	1587	1742	1716	1592		1742	1716	1589
Q Serve(g_s), s		7.1	7.4	14.7	15.7	6.7	15.9	25.5	17.2	36.2		7.8	17.5	5.2
Cycle Q Clear(g_c), s		7.1	7.4	14.7	15.7	6.7	15.9	25.5	17.2	36.2		7.8	17.5	5.2
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		301	484	588	588	1120	345	816	2173	672		327	1450	448
V/C Ratio(X)		0.77	0.54	0.70	0.88	0.34	0.72	1.03	0.51	0.87		0.78	0.65	0.22
Avail Cap(c_a), veh/h		560	484	588	784	1120	345	816	2173	672		752	1688	521
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		48.7	43.9	29.2	44.1	36.0	39.5	41.7	23.1	28.6		48.2	34.4	29.9
Incr Delay (d2), s/veh		1.6	2.4	4.9	7.1	0.5	10.1	38.6	0.4	12.4		1.6	1.5	0.7
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		3.2	3.4	9.7	7.3	2.9	7.1	15.2	6.9	15.7		3.5	7.5	2.1
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		50.3	46.3	34.1	51.2	36.5	49.6	80.2	23.6	41.0		49.8	35.9	30.7
LnGrp LOS		D	D	C	D	D	D	F	C	D		D	D	C
Approach Vol, veh/h			902			1142			2524				1298	
Approach Delay, s/veh			41.8			46.0			46.4				38.3	
Approach LOS			D			D			D				D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.0	36.0	13.9	29.0	14.7	51.2	22.9	20.0
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	5.3
Max Green Setting (Gmax), s	25.5	35.7	17.5	21.7	23.5	37.7	24.5	14.7
Max Q Clear Time (g_c+I1), s	27.5	19.5	9.1	17.9	9.8	38.2	17.7	16.7
Green Ext Time (p_c), s	0.0	10.7	0.3	2.0	0.4	0.0	0.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	43.8
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th Edition methodology does not support custom phasing.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	70	1275	1181	248	0	821
Future Volume (veh/h)	70	1275	1181	248	0	821
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	71	1301	1205	0	0	838
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	1604	1295	1562		0	2133
Arrive On Green	0.47	0.47	0.42	0.00	0.00	0.42
Sat Flow, veh/h	3428	2768	3711	1572	0	5400
Grp Volume(v), veh/h	71	1301	1205	0	0	838
Grp Sat Flow(s),veh/h/ln	1714	1384	1856	1572	0	1689
Q Serve(g_s), s	1.1	45.9	27.3	0.0	0.0	11.3
Cycle Q Clear(g_c), s	1.1	45.9	27.3	0.0	0.0	11.3
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	1604	1295	1562		0	2133
V/C Ratio(X)	0.04	1.00	0.77		0.00	0.39
Avail Cap(c_a), veh/h	1604	1295	1899		0	2592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	14.2	26.1	24.3	0.0	0.0	19.7
Incr Delay (d2), s/veh	0.0	26.1	1.9	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	18.9	11.9	0.0	0.0	4.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.2	52.2	26.2	0.0	0.0	19.9
LnGrp LOS	B	F	C		A	B
Approach Vol, veh/h	1372		1205	A		838
Approach Delay, s/veh	50.3		26.2			19.9
Approach LOS	D		C			B

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	47.1			47.1	51.0
Change Period (Y+Rc), s	5.8			5.8	5.1
Max Green Setting (Gmax), s	50.2			50.2	45.9
Max Q Clear Time (g_c+I1), s	29.3			13.3	47.9
Green Ext Time (p_c), s	12.0			9.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	34.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
10: E. Bidwell & EB offramp

09/02/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	926	207	0	503	280	611
Future Volume (veh/h)	926	207	0	503	280	611
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	0	1856	1856	1856
Adj Flow Rate, veh/h	975	218	0	529	295	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	0	3	3	3
Cap, veh/h	1375	631	0	1007	530	
Arrive On Green	0.40	0.40	0.00	0.29	0.29	0.00
Sat Flow, veh/h	3428	1572	0	3711	1856	3145
Grp Volume(v), veh/h	975	218	0	529	295	0
Grp Sat Flow(s),veh/h/ln	1714	1572	0	1763	1856	1572
Q Serve(g_s), s	8.3	3.4	0.0	4.4	4.7	0.0
Cycle Q Clear(g_c), s	8.3	3.4	0.0	4.4	4.7	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1375	631	0	1007	530	
V/C Ratio(X)	0.71	0.35	0.00	0.53	0.56	
Avail Cap(c_a), veh/h	1773	813	0	1823	960	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.7	7.2	0.0	10.4	10.6	0.0
Incr Delay (d2), s/veh	1.1	0.4	0.0	0.6	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.8	0.0	1.3	1.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.8	7.6	0.0	11.1	11.9	0.0
LnGrp LOS	A	A	A	B	B	
Approach Vol, veh/h	1193			529	295	A
Approach Delay, s/veh	9.4			11.1	11.9	
Approach LOS	A			B	B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	15.7	19.1	15.7
Change Period (Y+Rc), s	5.8	5.1	5.8
Max Green Setting (Gmax), s	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	6.4	10.3	6.7
Green Ext Time (p_c), s	3.6	3.7	1.7

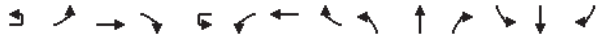
Intersection Summary	
HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
11: Driveway/Marketplace & Broadstone

09/02/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	2	72	603	24	6	9	664	11	58	0	14	12	0	58
Future Volume (veh/h)	2	72	603	24	6	9	664	11	58	0	14	12	0	58
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.99		1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		82	685	27		10	755	12	66	0	16	14	0	66
Peak Hour Factor		0.88	0.88	0.88		0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		139	1668	740		28	1447	641	123	0	236	38	0	161
Arrive On Green		0.08	0.47	0.47		0.02	0.40	0.40	0.07	0.00	0.15	0.02	0.00	0.10
Sat Flow, veh/h		1795	3582	1589		1795	3582	1588	1795	0	1582	1795	0	1578
Grp Volume(v), veh/h		82	685	27		10	755	12	66	0	16	14	0	66
Grp Sat Flow(s),veh/h/ln		1795	1791	1589		1795	1791	1588	1795	0	1582	1795	0	1578
Q Serve(g_s), s		2.5	7.1	0.5		0.3	8.9	0.3	2.0	0.0	0.5	0.4	0.0	2.2
Cycle Q Clear(g_c), s		2.5	7.1	0.5		0.3	8.9	0.3	2.0	0.0	0.5	0.4	0.0	2.2
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		139	1668	740		28	1447	641	123	0	236	38	0	161
V/C Ratio(X)		0.59	0.41	0.04		0.36	0.52	0.02	0.53	0.00	0.07	0.37	0.00	0.41
Avail Cap(c_a), veh/h		654	2195	974		654	2195	973	654	0	1000	654	0	998
HCM Platoon Ratio		1.00	1.00	1.00		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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh		25.0	9.9	8.1		27.3	12.6	10.0	25.2	0.0	20.4	27.0	0.0	23.6
Incr Delay (d2), s/veh		1.5	0.6	0.1		2.9	1.1	0.0	1.3	0.0	0.0	2.2	0.0	0.6
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.0	2.4	0.2		0.1	3.3	0.1	0.8	0.0	0.2	0.2	0.0	0.8
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		26.5	10.5	8.2		30.2	13.7	10.1	26.5	0.0	20.5	29.3	0.0	24.2
LnGrp LOS		C	B	A		C	B	B	C	A	C	C	A	C
Approach Vol, veh/h			794				777			82			80	
Approach Delay, s/veh			12.0				13.8			25.3			25.1	
Approach LOS			B				B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	31.8	5.8	13.0	8.9	28.3	8.4	10.3
Change Period (Y+Rc), s	4.6	5.7	4.6	4.6	4.6	5.7	4.6	4.6
Max Green Setting (Gmax), s	20.4	34.3	20.4	35.4	20.4	34.3	20.4	35.4
Max Q Clear Time (g_c+I1), s	2.3	9.1	2.4	2.5	4.5	10.9	4.0	4.2
Green Ext Time (p_c), s	0.0	11.2	0.0	0.0	0.0	11.7	0.0	0.2

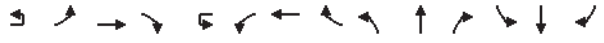
Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
13: Cavitt & Broadstone

09/02/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	9	24	535	67	2	24	610	15	47	43	26	8	37	24
Future Volume (veh/h)	9	24	535	67	2	24	610	15	47	43	26	8	37	24
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.99		1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		28	615	77		28	701	17	54	49	30	9	43	28
Peak Hour Factor		0.87	0.87	0.87		0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		59	1514	671		59	1514	671	97	221	185	21	141	118
Arrive On Green		0.03	0.42	0.42		0.03	0.42	0.42	0.05	0.12	0.12	0.01	0.07	0.07
Sat Flow, veh/h		1795	3582	1588		1795	3582	1588	1795	1885	1577	1795	1885	1575
Grp Volume(v), veh/h		28	615	77		28	701	17	54	49	30	9	43	28
Grp Sat Flow(s),veh/h/ln		1795	1791	1588		1795	1791	1588	1795	1885	1577	1795	1885	1575
Q Serve(g_s), s		0.7	5.6	1.4		0.7	6.6	0.3	1.4	1.1	0.8	0.2	1.0	0.8
Cycle Q Clear(g_c), s		0.7	5.6	1.4		0.7	6.6	0.3	1.4	1.1	0.8	0.2	1.0	0.8
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		59	1514	671		59	1514	671	97	221	185	21	141	118
V/C Ratio(X)		0.48	0.41	0.11		0.48	0.46	0.03	0.56	0.22	0.16	0.42	0.30	0.24
Avail Cap(c_a), veh/h		789	2649	1175		789	2649	1175	789	1419	1187	789	1419	1185
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		22.2	9.4	8.2		22.2	9.7	7.9	21.5	18.7	18.5	22.9	20.4	20.3
Incr Delay (d2), s/veh		2.2	0.8	0.3		2.2	0.7	0.0	1.9	0.2	0.2	4.9	0.4	0.4
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.3	1.9	0.4		0.3	2.2	0.1	0.6	0.4	0.3	0.1	0.4	0.3
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		24.4	10.1	8.5		24.4	10.4	7.9	23.4	18.9	18.7	27.8	20.9	20.7
LnGrp LOS		C	B	A		C	B	A	C	B	B	C	C	C
Approach Vol, veh/h			720				746			133			80	
Approach Delay, s/veh			10.5				10.9			20.7			21.6	
Approach LOS			B				B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	25.2	5.1	10.4	6.0	25.2	7.0	8.4
Change Period (Y+Rc), s	4.5	5.5	4.5	4.9	4.5	5.5	4.5	4.9
Max Green Setting (Gmax), s	30.5	34.5	20.5	35.1	20.5	34.5	20.5	35.1
Max Q Clear Time (g_c+I1), s	2.7	7.6	2.2	3.1	2.7	8.6	3.4	3.0
Green Ext Time (p_c), s	0.0	11.6	0.0	0.2	0.0	11.2	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th TWSC
14: Cavitt & Kilrush

09/02/2021

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	34	82	8	29	99
Future Vol, veh/h	14	34	82	8	29	99
Conflicting Peds, #/hr	5	5	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	90	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	16	38	91	9	32	110

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	275	101	0	0	105	0
Stage 1	96	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	717	957	-	-	1493	-
Stage 1	930	-	-	-	-	-
Stage 2	854	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	694	948	-	-	1486	-
Mov Cap-2 Maneuver	694	-	-	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	831	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	1.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	857	1486	-
HCM Lane V/C Ratio	-	-	0.062	0.022	-
HCM Control Delay (s)	-	-	9.5	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

HCM 6th Signalized Intersection Summary
15: Cavitt & Iron Point

09/02/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	9	21	560	486	33	853	34	222	35	53	27	51
Future Volume (veh/h)	9	21	560	486	33	853	34	222	35	53	27	51
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.99	1.00		1.00	1.00		0.99	1.00	
Parking Bus, Adj		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		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		21	571	496	34	870	35	253	0	54	28	52
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
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		123	2326	718	123	2326	720	446	0	196	156	164
Arrive On Green		0.07	0.45	0.45	0.07	0.45	0.45	0.12	0.00	0.12	0.09	0.09
Sat Flow, veh/h		1795	5147	1589	1795	5147	1592	3591	0	1578	1795	1885
Grp Volume(v), veh/h		21	571	496	34	870	35	253	0	54	28	52
Grp Sat Flow(s),veh/h/ln		1795	1716	1589	1795	1716	1592	1795	0	1578	1795	1885
Q Serve(g_s), s		0.8	5.0	18.1	1.3	8.1	0.9	4.8	0.0	2.3	1.1	1.9
Cycle Q Clear(g_c), s		0.8	5.0	18.1	1.3	8.1	0.9	4.8	0.0	2.3	1.1	1.9
Prop In Lane		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		123	2326	718	123	2326	720	446	0	196	156	164
V/C Ratio(X)		0.17	0.25	0.69	0.28	0.37	0.05	0.57	0.00	0.28	0.18	0.32
Avail Cap(c_a), veh/h		629	2830	874	629	2830	876	1999	0	879	1000	1050
HCM Platoon Ratio		1.00	1.00	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	1.00	1.00	1.00
Uniform Delay (d), s/veh		31.9	12.3	15.9	32.1	13.1	11.2	30.0	0.0	28.9	30.8	31.2
Incr Delay (d2), s/veh		0.2	0.2	4.6	0.4	0.4	0.1	0.4	0.0	0.3	0.2	0.4
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.3	1.8	6.8	0.6	3.0	0.3	2.0	0.0	0.8	0.5	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		32.2	12.5	20.5	32.6	13.6	11.3	30.4	0.0	29.2	31.0	31.6
LnGrp LOS		C	B	C	C	B	B	C	A	C	C	C
Approach Vol, veh/h			1088			939			307			116
Approach Delay, s/veh			16.5			14.2			30.2			31.4
Approach LOS			B			B			C			C

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	38.9		10.8	9.5	38.9		13.5				
Change Period (Y+Rc), s	4.5	6.0		4.5	4.5	6.0		4.5				
Max Green Setting (Gmax), s	25.5	40.0		40.5	25.5	40.0		40.5				
Max Q Clear Time (g_c+I1), s	2.8	10.1		3.9	3.3	20.1		6.8				
Green Ext Time (p_c), s	0.0	16.3		0.3	0.0	12.8		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
15: Cavitt & Iron Point

09/02/2021

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	35
Future Volume (veh/h)	35
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	0.98
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1885
Adj Flow Rate, veh/h	36
Peak Hour Factor	0.98
Percent Heavy Veh, %	1
Cap, veh/h	137
Arrive On Green	0.09
Sat Flow, veh/h	1570
Grp Volume(v), veh/h	36
Grp Sat Flow(s),veh/h/ln	1570
Q Serve(g_s), s	1.6
Cycle Q Clear(g_c), s	1.6
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	137
V/C Ratio(X)	0.26
Avail Cap(c_a), veh/h	874
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	31.0
Incr Delay (d2), s/veh	0.4
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.6
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	31.4
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	

Timer - Assigned Phs

HCM Signalized Intersection Capacity Analysis
8: E. Bidwell & Placerville

07/15/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	205	0	2268	188	82	821	927
Future Volume (vph)	0	0	0	0	0	205	0	2268	188	82	821	927
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)						5.0		5.3	5.3	5.0	2.0	4.0
Lane Util. Factor						1.00		0.91	1.00	1.00	0.86	0.86
Frpb, ped/bikes						0.98		1.00	0.97	1.00	1.00	0.99
Flpb, ped/bikes						1.00		1.00	1.00	1.00	1.00	1.00
Frt						0.86		1.00	0.85	1.00	0.95	0.85
Flt Protected						1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)						1599		5136	1553	1787	4568	1357
Flt Permitted						1.00		1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)						1599		5136	1553	301	4568	1357
Peak-hour factor, PHF	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)	0	0	0	0	0	220	0	2439	202	88	883	997
RTOR Reduction (vph)	0	0	0	0	0	20	0	0	62	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	200	0	2439	140	88	1382	498
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Turn Type						Perm		NA	Perm	custom	NA	Free
Protected Phases								2			6	
Permitted Phases						1			2	1		Free
Actuated Green, G (s)						25.0		55.7	55.7	25.0	91.0	91.0
Effective Green, g (s)						25.0		55.7	55.7	25.0	91.0	91.0
Actuated g/C Ratio						0.27		0.61	0.61	0.27	1.00	1.00
Clearance Time (s)						5.0		5.3	5.3	5.0	2.0	
Vehicle Extension (s)						2.0		6.1	6.1	2.0	3.0	
Lane Grp Cap (vph)						439		3143	950	82	4568	1357
v/s Ratio Prot								c0.47			0.30	
v/s Ratio Perm						0.12			0.09	c0.29		0.37
v/c Ratio						0.45		0.78	0.15	1.07	0.30	0.37
Uniform Delay, d1						27.4		13.0	7.5	33.0	0.0	0.0
Progression Factor						1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2						0.3		1.6	0.2	120.7	0.2	0.8
Delay (s)						27.6		14.6	7.7	153.7	0.2	0.8
Level of Service						C		B	A	F	A	A
Approach Delay (s)		0.0			27.6			14.1			7.2	
Approach LOS		A			C			B			A	

Intersection Summary				
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.87			
Actuated Cycle Length (s)	91.0	Sum of lost time (s)	10.3	
Intersection Capacity Utilization	65.6%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (veh/h)	3	99	0	22	3	28	0	36	3	41	1719	37
Future Volume (veh/h)	3	99	0	22	3	28	0	36	3	41	1719	37
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		102	0	23		29	0	37		42	1772	38
Peak Hour Factor		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1
Cap, veh/h		125	0	28		186	0	83		54	3380	1049
Arrive On Green		0.09	0.00	0.09		0.05	0.00	0.05		0.03	0.66	0.66
Sat Flow, veh/h		1432	0	323		3591	0	1598		1795	5147	1598
Grp Volume(v), veh/h		125	0	0		29	0	37		42	1772	38
Grp Sat Flow(s),veh/h/ln		1755	0	0		1795	0	1598		1795	1716	1598
Q Serve(g_s), s		8.4	0.0	0.0		0.9	0.0	2.7		2.8	21.6	1.0
Cycle Q Clear(g_c), s		8.4	0.0	0.0		0.9	0.0	2.7		2.8	21.6	1.0
Prop In Lane		0.82		0.18		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		153	0	0		186	0	83		54	3380	1049
V/C Ratio(X)		0.82	0.00	0.00		0.16	0.00	0.45		0.78	0.52	0.04
Avail Cap(c_a), veh/h		227	0	0		733	0	326		172	3380	1049
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	0.00		1.00	0.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		53.8	0.0	0.0		54.4	0.0	55.2		57.8	10.8	7.2
Incr Delay (d2), s/veh		13.4	0.0	0.0		0.4	0.0	3.7		8.5	0.6	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		4.3	0.0	0.0		0.4	0.0	1.2		1.4	7.9	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		67.2	0.0	0.0		54.8	0.0	58.9		66.3	11.4	7.3
LnGrp LOS		E	A	A		D	A	E		E	B	A
Approach Vol, veh/h			125				66				1852	
Approach Delay, s/veh			67.2				57.1				12.5	
Approach LOS			E				E				B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	86.2		10.7	10.2	84.1		15.0
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	11.5	49.7		24.5	24.5	36.7		15.5
Max Q Clear Time (g_c+I1), s	4.8	20.7		4.7	5.7	23.6		10.4
Green Ext Time (p_c), s	0.0	19.4		0.1	0.2	10.9		0.2

Intersection Summary	
HCM 6th Ctrl Delay	15.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College
08/31/2021

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (veh/h)	3	106	1616	60
Future Volume (veh/h)	3	106	1616	60
Initial Q (Qb), veh		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00
Work Zone On Approach			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885
Adj Flow Rate, veh/h		109	1666	62
Peak Hour Factor		0.97	0.97	0.97
Percent Heavy Veh, %		1	1	1
Cap, veh/h		165	3469	1077
Arrive On Green		0.05	0.67	0.67
Sat Flow, veh/h		3483	5147	1598
Grp Volume(v), veh/h		109	1666	62
Grp Sat Flow(s),veh/h/ln		1742	1716	1598
Q Serve(g_s), s		3.7	18.7	1.6
Cycle Q Clear(g_c), s		3.7	18.7	1.6
Prop In Lane		1.00		1.00
Lane Grp Cap(c), veh/h		165	3469	1077
V/C Ratio(X)		0.66	0.48	0.06
Avail Cap(c_a), veh/h		711	3469	1077
HCM Platoon Ratio		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00
Uniform Delay (d), s/veh		56.2	9.4	6.6
Incr Delay (d2), s/veh		1.7	0.5	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.7	6.7	0.5
Unsig. Movement Delay, s/veh				
LnGrp Delay(d),s/veh		57.9	9.9	6.7
LnGrp LOS		E	A	A
Approach Vol, veh/h			1837	
Approach Delay, s/veh			12.6	
Approach LOS			B	

Timer - Assigned Phs

HCM 6th Signalized Intersection Summary
2: E. Bidwell & Scholar

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	125	64	66	3	110	54	204	3	141	1468	109	3	131	1340	195
Future Volume (veh/h)	3	125	64	66	3	110	54	204	3	141	1468	109	3	131	1340	195
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		126	65	0		111	55	0		142	1483	0		132	1354	0
Peak Hour Factor		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		184	91			137	256			198	3408			187	3391	
Arrive On Green		0.05	0.05	0.00		0.08	0.07	0.00		0.06	0.66	0.00		0.05	0.66	0.00
Sat Flow, veh/h		3483	1885	1598		1795	3582	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		126	65	0		111	55	0		142	1483	0		132	1354	0
Grp Sat Flow(s),veh/h/ln		1742	1885	1598		1795	1791	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		4.3	4.1	0.0		7.3	1.7	0.0		4.8	16.4	0.0		4.5	14.6	0.0
Cycle Q Clear(g_c), s		4.3	4.1	0.0		7.3	1.7	0.0		4.8	16.4	0.0		4.5	14.6	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		184	91			137	256			198	3408			187	3391	
V/C Ratio(X)		0.69	0.72			0.81	0.21			0.72	0.44			0.71	0.40	
Avail Cap(c_a), veh/h		595	379			247	600			479	3408			334	3391	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		55.9	56.3	0.0		54.6	52.5	0.0		55.6	9.6	0.0		55.9	9.5	0.0
Incr Delay (d2), s/veh		1.7	22.0	0.0		4.3	0.5	0.0		1.8	0.4	0.0		1.8	0.4	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.9	2.5	0.0		3.5	0.8	0.0		2.2	6.0	0.0		2.0	5.3	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		57.5	78.3	0.0		58.9	53.0	0.0		57.5	10.0	0.0		57.7	9.8	0.0
LnGrp LOS		E	E			E	D			E	B			E	A	
Approach Vol, veh/h			191	A			166	A			1625	A			1486	A
Approach Delay, s/veh			64.6				56.9				14.2				14.1	
Approach LOS			E				E				B				B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	84.4	10.8	13.5	10.9	84.8	13.6	10.7
Change Period (Y+Rc), s	4.5	5.3	4.5	4.9	4.5	5.3	4.5	4.9
Max Green Setting (Gmax), s	6.5	43.7	20.5	20.1	11.5	48.7	16.5	24.1
Max Q Clear Time (g_c+I1), s	10.8	16.6	6.3	3.7	6.5	18.4	9.3	6.1
Green Ext Time (p_c), s	0.1	21.3	0.2	0.2	0.0	24.6	0.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: E. Bidwell & Power Center

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	168	47	164	136	14	151	3	379	1399	185	3	154	1203	159
Future Volume (veh/h)	3	168	47	164	136	14	151	3	379	1399	185	3	154	1203	159
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		108	133	166	137	14	153		383	1413	187		156	1215	161
Peak Hour Factor		0.99	0.99	0.99	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		215	226	192	185	19	180		232	2615	812		184	2477	769
Arrive On Green		0.12	0.12	0.12	0.11	0.11	0.11		0.13	0.51	0.51		0.10	0.48	0.48
Sat Flow, veh/h		1795	1885	1598	1636	167	1598		1795	5147	1598		1795	5147	1598
Grp Volume(v), veh/h		108	133	166	151	0	153		383	1413	187		156	1215	161
Grp Sat Flow(s),veh/h/ln		1795	1885	1598	1803	0	1598		1795	1716	1598		1795	1716	1598
Q Serve(g_s), s		6.8	8.0	12.2	9.7	0.0	11.3		15.5	22.3	7.8		10.3	19.2	7.0
Cycle Q Clear(g_c), s		6.8	8.0	12.2	9.7	0.0	11.3		15.5	22.3	7.8		10.3	19.2	7.0
Prop In Lane		1.00		1.00	0.91		1.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		215	226	192	204	0	180		232	2615	812		184	2477	769
V/C Ratio(X)		0.50	0.59	0.87	0.74	0.00	0.85		1.65	0.54	0.23		0.85	0.49	0.21
Avail Cap(c_a), veh/h		232	244	206	248	0	220		232	2615	812		262	2477	769
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		49.4	50.0	51.9	51.5	0.0	52.2		52.2	20.0	16.4		53.0	21.1	18.0
Incr Delay (d2), s/veh		0.7	1.9	26.9	6.7	0.0	19.2		311.7	0.8	0.7		12.0	0.7	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		3.1	3.9	6.3	4.8	0.0	5.5		27.0	9.0	3.0		5.2	7.8	2.7
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		50.1	51.9	78.7	58.3	0.0	71.4		363.9	20.8	17.1		65.0	21.8	18.6
LnGrp LOS		D	D	E	E	A	E		F	C	B		E	C	B
Approach Vol, veh/h			407			304				1983				1532	
Approach Delay, s/veh			62.4			64.9				86.7				25.9	
Approach LOS			E			E				F				C	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	30.0	63.1	18.0	16.8	66.3	18.9
Change Period (Y+Rc), s	4.5	5.3	4.5	4.5	5.3	4.5
Max Green Setting (Gmax), s	15.5	53.7	16.5	17.5	51.7	15.5
Max Q Clear Time (g_c+I1), s	17.5	21.2	13.3	12.3	24.3	14.2
Green Ext Time (p_c), s	0.0	23.0	0.3	0.1	23.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	60.8
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	424	297	323	3	229	434	99	3	227	1440	508	3	225	1164	114
Future Volume (veh/h)	3	424	297	323	3	229	434	99	3	227	1440	508	3	225	1164	114
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		437	306	0		236	447	0		234	1485	0		232	1200	0
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
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		450	847			298	623			292	2589			290	2587	
Arrive On Green		0.13	0.16	0.00		0.09	0.12	0.00		0.08	0.50	0.00		0.08	0.50	0.00
Sat Flow, veh/h		3483	5147	1598		3483	5147	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		437	306	0		236	447	0		234	1485	0		232	1200	0
Grp Sat Flow(s),veh/h/ln		1742	1716	1598		1742	1716	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		15.0	6.3	0.0		8.0	10.0	0.0		7.9	24.2	0.0		7.8	18.1	0.0
Cycle Q Clear(g_c), s		15.0	6.3	0.0		8.0	10.0	0.0		7.9	24.2	0.0		7.8	18.1	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		450	847			298	623			292	2589			290	2587	
V/C Ratio(X)		0.97	0.36			0.79	0.72			0.80	0.57			0.80	0.46	
Avail Cap(c_a), veh/h		450	847			566	845			392	2589			392	2587	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		52.0	44.5	0.0		53.8	50.8	0.0		54.0	20.8	0.0		54.0	19.4	0.0
Incr Delay (d2), s/veh		34.8	0.4	0.0		1.8	2.9	0.0		6.0	0.9	0.0		5.8	0.6	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		8.7	2.7	0.0		3.6	4.5	0.0		3.7	9.7	0.0		3.7	7.3	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		86.8	45.0	0.0		55.6	53.7	0.0		60.0	21.7	0.0		59.8	20.0	0.0
LnGrp LOS		F	D			E	D			E	C			E	B	
Approach Vol, veh/h			743	A			683	A			1719	A			1432	A
Approach Delay, s/veh			69.6				54.4				27.0				26.4	
Approach LOS			E				D				C				C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	65.6	20.0	19.8	14.5	65.7	14.8	25.0
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	* 5.3
Max Green Setting (Gmax), s	13.5	51.7	15.5	19.7	13.5	51.7	19.5	* 16
Max Q Clear Time (g_c+I1), s	10.0	20.1	17.0	12.0	9.8	26.2	10.0	8.3
Green Ext Time (p_c), s	0.2	21.7	0.0	2.5	0.2	21.3	0.3	1.6

Intersection Summary	
HCM 6th Ctrl Delay	37.8
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: E. Bidwell & Via sole

08/31/2021

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations									
Traffic Volume (veh/h)	3	100	65	3	17	1865	8	1549	162
Future Volume (veh/h)	3	100	65	3	17	1865	8	1549	162
Initial Q (Qb), veh		0	0		0	0		0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00				1.00
Parking Bus, Adj		1.00	1.00		1.00	1.00		1.00	1.00
Work Zone On Approach		No				No		No	
Adj Sat Flow, veh/h/ln		1885	1885		1885	1885		1885	1885
Adj Flow Rate, veh/h		106	69		18	1984		1648	172
Peak Hour Factor		0.94	0.94		0.94	0.94		0.94	0.94
Percent Heavy Veh, %		1	1		1	1		1	1
Cap, veh/h		214	98		22	4410		4155	1290
Arrive On Green		0.06	0.06		0.02	1.00		0.81	0.81
Sat Flow, veh/h		3483	1598		1795	5316		5316	1598
Grp Volume(v), veh/h		106	69		18	1984		1648	172
Grp Sat Flow(s),veh/h/ln		1742	1598		1795	1716		1716	1598
Q Serve(g_s), s		3.5	5.1		1.2	0.0		10.9	2.8
Cycle Q Clear(g_c), s		3.5	5.1		1.2	0.0		10.9	2.8
Prop In Lane		1.00	1.00		1.00				1.00
Lane Grp Cap(c), veh/h		214	98		22	4410		4155	1290
V/C Ratio(X)		0.50	0.70		0.83	0.45		0.40	0.13
Avail Cap(c_a), veh/h		1263	579		157	4410		4155	1290
HCM Platoon Ratio		1.00	1.00		2.00	2.00		1.00	1.00
Upstream Filter(I)		1.00	1.00		0.67	0.67		1.00	1.00
Uniform Delay (d), s/veh		54.5	55.2		58.4	0.0		3.3	2.5
Incr Delay (d2), s/veh		0.7	3.4		18.0	0.2		0.3	0.2
Initial Q Delay(d3),s/veh		0.0	0.0		0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln		1.6	2.1		0.6	0.1		3.0	0.8
Unsig. Movement Delay, s/veh									
LnGrp Delay(d),s/veh		55.2	58.7		76.4	0.2		3.6	2.7
LnGrp LOS		E	E		E	A		A	A
Approach Vol, veh/h		175				2002		1820	
Approach Delay, s/veh		56.5				0.9		3.5	
Approach LOS		E				A		A	

Timer - Assigned Phs	1	2				6		8	
Phs Duration (G+Y+Rc), s	5.9	102.2				108.1		11.9	
Change Period (Y+Rc), s	4.5	5.3				5.3		4.5	
Max Green Setting (Gmax), s	10.5	51.7				47.7		43.5	
Max Q Clear Time (g_c+I1), s	13.2	12.9				2.0		7.1	
Green Ext Time (p_c), s	0.0	31.3				37.2		0.3	

Intersection Summary	
HCM 6th Ctrl Delay	4.5
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
6: E. Bidwell & Via Felice

08/31/2021

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations									
Traffic Volume (veh/h)	3	118	244	3	157	1642	125	1381	111
Future Volume (veh/h)	3	118	244	3	157	1642	125	1381	111
Initial Q (Qb), veh		0	0		0	0		0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00				1.00
Parking Bus, Adj		1.00	1.00		1.00	1.00		1.00	1.00
Work Zone On Approach		No				No		No	
Adj Sat Flow, veh/h/ln		1885	1885		1885	1885		1885	1885
Adj Flow Rate, veh/h		123	254		164	1710		1439	116
Peak Hour Factor		0.96	0.96		0.96	0.96		0.96	0.96
Percent Heavy Veh, %		1	1		1	1		1	1
Cap, veh/h		619	284		192	4189		3068	952
Arrive On Green		0.18	0.18		0.11	0.74		1.00	1.00
Sat Flow, veh/h		3483	1598		1795	5656		5316	1598
Grp Volume(v), veh/h		123	254		164	1710		1439	116
Grp Sat Flow(s),veh/h/ln		1742	1598		1795	1885		1716	1598
Q Serve(g_s), s		3.6	18.7		10.8	13.5		0.0	0.0
Cycle Q Clear(g_c), s		3.6	18.7		10.8	13.5		0.0	0.0
Prop In Lane		1.00	1.00		1.00				1.00
Lane Grp Cap(c), veh/h		619	284		192	4189		3068	952
V/C Ratio(X)		0.20	0.90		0.85	0.41		0.47	0.12
Avail Cap(c_a), veh/h		1263	579		322	4189		3068	952
HCM Platoon Ratio		1.00	1.00		1.00	1.00		2.00	2.00
Upstream Filter(I)		1.00	1.00		1.00	1.00		0.92	0.92
Uniform Delay (d), s/veh		42.1	48.2		52.6	5.8		0.0	0.0
Incr Delay (d2), s/veh		0.1	4.0		5.0	0.3		0.5	0.2
Initial Q Delay(d3),s/veh		0.0	0.0		0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln		1.6	7.7		5.1	4.8		0.1	0.1
Unsig. Movement Delay, s/veh									
LnGrp Delay(d),s/veh		42.1	52.2		57.6	6.1		0.5	0.2
LnGrp LOS		D	D		E	A		A	A
Approach Vol, veh/h		377				1874		1555	
Approach Delay, s/veh		48.9				10.6		0.5	
Approach LOS		D				B		A	

Timer - Assigned Phs	1	2				6		8	
Phs Duration (G+Y+Rc), s	17.4	76.8				94.2		25.8	
Change Period (Y+Rc), s	4.5	5.3				5.3		4.5	
Max Green Setting (Gmax), s	21.5	40.7				43.7		43.5	
Max Q Clear Time (g_c+I1), s	12.8	2.0				15.5		20.7	
Green Ext Time (p_c), s	0.1	27.6				23.4		0.7	

Intersection Summary	
HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
7: E. Bidwell & Iron Point

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	14	174	735	690	1	728	475	340	800	1285	712	3	141	1316	168
Future Volume (veh/h)	14	174	735	690	1	728	475	340	800	1285	712	3	141	1316	168
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No			No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		179	758	711		751	490	351	825	1325	734		145	1357	173
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
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1		1	1	1
Cap, veh/h		239	439	455		711	1328	412	566	2322	721		205	1788	555
Arrive On Green		0.07	0.12	0.12		0.20	0.26	0.26	0.27	0.75	0.75		0.06	0.35	0.35
Sat Flow, veh/h		3483	3582	1598		3483	5147	1598	3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		179	758	711		751	490	351	825	1325	734		145	1357	173
Grp Sat Flow(s),veh/h/ln		1742	1791	1598		1742	1716	1598	1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		6.1	14.7	14.7		24.5	9.4	25.1	19.5	13.4	54.1		4.9	28.0	9.5
Cycle Q Clear(g_c), s		6.1	14.7	14.7		24.5	9.4	25.1	19.5	13.4	54.1		4.9	28.0	9.5
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		239	439	455		711	1328	412	566	2322	721		205	1788	555
V/C Ratio(X)		0.75	1.73	1.56		1.06	0.37	0.85	1.46	0.57	1.02		0.71	0.76	0.31
Avail Cap(c_a), veh/h		508	439	455		711	1328	412	566	2322	721		682	1788	555
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.67	1.67	1.67		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		0.73	0.73	0.73	0.35	0.35	0.35		1.00	1.00	1.00
Uniform Delay (d), s/veh		54.9	52.7	42.9		47.7	36.5	42.3	43.7	9.8	14.8		55.5	34.7	28.6
Incr Delay (d2), s/veh		1.8	336.9	263.2		44.8	0.4	13.5	209.4	0.4	24.6		1.7	3.1	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		2.7	27.1	46.6		15.0	4.0	11.4	24.0	3.5	14.8		2.2	12.1	3.9
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		56.6	389.5	306.1		92.6	36.9	55.9	253.1	10.1	39.4		57.1	37.8	30.1
LnGrp LOS		E	F	F		F	D	E	F	B	F		E	D	C
Approach Vol, veh/h			1648				1592			2884				1675	
Approach Delay, s/veh			317.4				67.3			87.1				38.7	
Approach LOS			F				E			F				D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	47.0	12.7	36.3	11.6	59.4	29.0	20.0
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	5.3
Max Green Setting (Gmax), s	19.5	41.7	17.5	21.7	23.5	37.7	24.5	14.7
Max Q Clear Time (g_c+I1), s	21.5	30.0	8.1	27.1	6.9	56.1	26.5	16.7
Green Ext Time (p_c), s	0.0	10.2	0.2	0.0	0.2	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	121.3
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
8: E. Bidwell & Placerville

08/31/2021

HCM 6th Edition methodology does not support custom phasing.

HCM 6th Signalized Intersection Summary
9: E. Bidwell & WB offramp

08/31/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	79	1199	1589	274	0	1516
Future Volume (veh/h)	79	1199	1589	274	0	1516
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	0	1885
Adj Flow Rate, veh/h	82	1249	1655	0	0	1579
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	0	1
Cap, veh/h	1499	1210	1762		0	2405
Arrive On Green	0.43	0.43	0.47	0.00	0.00	0.47
Sat Flow, veh/h	3483	2812	3770	1598	0	5486
Grp Volume(v), veh/h	82	1249	1655	0	0	1579
Grp Sat Flow(s),veh/h/ln	1742	1406	1885	1598	0	1716
Q Serve(g_s), s	1.5	45.9	44.4	0.0	0.0	25.1
Cycle Q Clear(g_c), s	1.5	45.9	44.4	0.0	0.0	25.1
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	1499	1210	1762		0	2405
V/C Ratio(X)	0.05	1.03	0.94		0.00	0.66
Avail Cap(c_a), veh/h	1499	1210	1775		0	2423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	17.7	30.4	27.0	0.0	0.0	21.8
Incr Delay (d2), s/veh	0.0	34.4	10.4	0.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	20.6	21.5	0.0	0.0	9.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.7	64.8	37.3	0.0	0.0	22.6
LnGrp LOS	B	F	D		A	C
Approach Vol, veh/h	1331		1655	A		1579
Approach Delay, s/veh	61.9		37.3			22.6
Approach LOS	E		D			C

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	55.6				55.6	51.0
Change Period (Y+Rc), s	5.8				5.8	5.1
Max Green Setting (Gmax), s	50.2				50.2	45.9
Max Q Clear Time (g_c+I1), s	46.4				27.1	47.9
Green Ext Time (p_c), s	3.4				16.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	39.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
10: E. Bidwell & EB offramp

08/31/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1275	133	0	588	398	1197
Future Volume (veh/h)	1275	133	0	588	398	1197
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	0	1885	1885	1885
Adj Flow Rate, veh/h	1328	139	0	612	415	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	0	1	1	1
Cap, veh/h	1508	692	0	1063	559	
Arrive On Green	0.43	0.43	0.00	0.30	0.30	0.00
Sat Flow, veh/h	3483	1598	0	3770	1885	3195
Grp Volume(v), veh/h	1328	139	0	612	415	0
Grp Sat Flow(s),veh/h/ln	1742	1598	0	1791	1885	1598
Q Serve(g_s), s	14.1	2.2	0.0	5.8	8.0	0.0
Cycle Q Clear(g_c), s	14.1	2.2	0.0	5.8	8.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1508	692	0	1063	559	
V/C Ratio(X)	0.88	0.20	0.00	0.58	0.74	
Avail Cap(c_a), veh/h	1555	713	0	1599	842	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.5	7.1	0.0	12.0	12.8	0.0
Incr Delay (d2), s/veh	6.2	0.2	0.0	0.7	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.6	0.0	1.9	3.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.7	7.3	0.0	12.7	15.6	0.0
LnGrp LOS	B	A	A	B	B	
Approach Vol, veh/h	1467			612	415	A
Approach Delay, s/veh	15.8			12.7	15.6	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	17.8		22.6		17.8
Change Period (Y+Rc), s	5.8		5.1		5.8
Max Green Setting (Gmax), s	18.0		18.0		18.0
Max Q Clear Time (g_c+I1), s	7.8		16.1		10.0
Green Ext Time (p_c), s	3.8		1.4		2.1

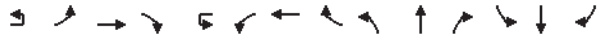
Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
11: Driveway/Marketplace & Broadstone

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	3	241	762	27	12	27	538	91	19	5	5	177	5	205
Future Volume (veh/h)	3	241	762	27	12	27	538	91	19	5	5	177	5	205
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		248	786	28		28	555	94	20	5	5	182	5	211
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
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		297	1590	709		67	1131	505	51	64	64	227	6	269
Arrive On Green		0.17	0.44	0.44		0.04	0.32	0.32	0.03	0.07	0.07	0.13	0.17	0.17
Sat Flow, veh/h		1795	3582	1598		1795	3582	1598	1795	865	865	1795	37	1566
Grp Volume(v), veh/h		248	786	28		28	555	94	20	0	10	182	0	216
Grp Sat Flow(s),veh/h/ln		1795	1791	1598		1795	1791	1598	1795	0	1730	1795	0	1603
Q Serve(g_s), s		8.2	9.6	0.6		0.9	7.7	2.6	0.7	0.0	0.3	6.0	0.0	7.9
Cycle Q Clear(g_c), s		8.2	9.6	0.6		0.9	7.7	2.6	0.7	0.0	0.3	6.0	0.0	7.9
Prop In Lane		1.00		1.00		1.00		1.00	1.00		0.50	1.00		0.98
Lane Grp Cap(c), veh/h		297	1590	709		67	1131	505	51	0	128	227	0	276
V/C Ratio(X)		0.84	0.49	0.04		0.42	0.49	0.19	0.39	0.00	0.08	0.80	0.00	0.78
Avail Cap(c_a), veh/h		598	2007	895		598	2007	895	598	0	1000	598	0	927
HCM Platoon Ratio		1.00	1.00	1.00		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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh		24.7	12.1	9.6		28.8	17.0	15.2	29.2	0.0	26.4	26.0	0.0	24.2
Incr Delay (d2), s/veh		2.4	0.9	0.1		1.6	1.2	0.6	1.8	0.0	0.1	2.5	0.0	1.9
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		3.4	3.5	0.2		0.4	3.1	1.0	0.3	0.0	0.1	2.6	0.0	2.9
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		27.1	13.0	9.7		30.4	18.2	15.9	31.1	0.0	26.5	28.5	0.0	26.1
LnGrp LOS		C	B	A		C	B	B	C	A	C	C	A	C
Approach Vol, veh/h			1062				677			30			398	
Approach Delay, s/veh			16.2				18.3			29.5			27.2	
Approach LOS			B				B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	32.9	12.3	9.1	14.7	25.0	6.3	15.1
Change Period (Y+Rc), s	4.6	5.7	4.6	4.6	4.6	5.7	4.6	4.6
Max Green Setting (Gmax), s	20.4	34.3	20.4	35.4	20.4	34.3	20.4	35.4
Max Q Clear Time (g_c+I1), s	12.9	11.6	8.0	2.3	10.2	9.7	2.7	9.9
Green Ext Time (p_c), s	0.0	12.1	0.1	0.0	0.1	9.7	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
13: Cavitt & Broadstone

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	6	27	804	119	1	33	561	22	71	61	47	15	28	30
Future Volume (veh/h)	6	27	804	119	1	33	561	22	71	61	47	15	28	30
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		28	829	123		34	578	23	73	63	48	15	29	31
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
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		57	1706	761		67	1725	769	112	187	158	34	105	89
Arrive On Green		0.03	0.48	0.48		0.04	0.48	0.48	0.06	0.10	0.10	0.02	0.06	0.06
Sat Flow, veh/h		1795	3582	1598		1795	3582	1598	1795	1885	1598	1795	1885	1598
Grp Volume(v), veh/h		28	829	123		34	578	23	73	63	48	15	29	31
Grp Sat Flow(s),veh/h/ln		1795	1791	1598		1795	1791	1598	1795	1885	1598	1795	1885	1598
Q Serve(g_s), s		0.8	8.3	2.3		1.0	5.2	0.4	2.1	1.6	1.5	0.4	0.8	1.0
Cycle Q Clear(g_c), s		0.8	8.3	2.3		1.0	5.2	0.4	2.1	1.6	1.5	0.4	0.8	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		57	1706	761		67	1725	769	112	187	158	34	105	89
V/C Ratio(X)		0.49	0.49	0.16		0.51	0.34	0.03	0.65	0.34	0.30	0.45	0.28	0.35
Avail Cap(c_a), veh/h		699	2348	1047		699	2348	1047	699	1258	1066	699	1258	1066
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		25.0	9.4	7.8		24.9	8.4	7.2	24.1	22.1	22.0	25.5	23.8	23.9
Incr Delay (d2), s/veh		2.4	0.9	0.4		2.2	0.4	0.1	2.4	0.4	0.4	3.4	0.5	0.9
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.4	2.8	0.7		0.4	1.7	0.1	0.9	0.7	0.5	0.2	0.3	0.4
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		27.4	10.3	8.2		27.1	8.8	7.2	26.5	22.5	22.4	29.0	24.4	24.8
LnGrp LOS		C	B	A		C	A	A	C	C	C	C	C	C
Approach Vol, veh/h			980				635			184			75	
Approach Delay, s/veh			10.5				9.7			24.1			25.5	
Approach LOS			B				A			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	30.6	5.5	10.1	6.2	30.8	7.8	7.8
Change Period (Y+Rc), s	4.5	5.5	4.5	4.9	4.5	5.5	4.5	4.9
Max Green Setting (Gmax), s	20.5	34.5	20.5	35.1	20.5	34.5	20.5	35.1
Max Q Clear Time (g_c+I1), s	13.3	10.3	2.4	3.6	2.8	7.2	4.1	3.0
Green Ext Time (p_c), s	0.0	14.8	0.0	0.3	0.0	9.4	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th TWSC
14: Cavitt & Kilrush 08/31/2021

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	19	160	17	14	166
Future Vol, veh/h	12	19	160	17	14	166
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	90	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	13	20	170	18	15	177

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	377	170	0	0	188	0
Stage 1	170	-	-	-	-	-
Stage 2	207	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	627	876	-	-	1392	-
Stage 1	862	-	-	-	-	-
Stage 2	830	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	620	876	-	-	1392	-
Mov Cap-2 Maneuver	620	-	-	-	-	-
Stage 1	862	-	-	-	-	-
Stage 2	821	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	755	1392	-
HCM Lane V/C Ratio	-	-	0.044	0.011	-
HCM Control Delay (s)	-	-	10	7.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

HCM 6th Signalized Intersection Summary
15: Cavitt & Iron Point 08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	8	47	881	653	28	1075	62	3	428	68	96	42
Future Volume (veh/h)	8	47	881	653	28	1075	62	3	428	68	96	42
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Parking Bus, Adj		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		
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885	1885
Adj Flow Rate, veh/h		49	927	687	29	1132	65		502	0	101	44
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1	1
Cap, veh/h		104	2375	737	104	2375	737		615	0	274	150
Arrive On Green		0.06	0.46	0.46	0.06	0.46	0.46		0.17	0.00	0.17	0.08
Sat Flow, veh/h		1795	5147	1598	1795	5147	1598		3591	0	1598	1795
Grp Volume(v), veh/h		49	927	687	29	1132	65		502	0	101	44
Grp Sat Flow(s),veh/h/ln		1795	1716	1598	1795	1716	1598		1795	0	1598	1795
Q Serve(g_s), s		2.3	10.2	35.1	1.3	13.1	2.0		11.6	0.0	4.8	2.0
Cycle Q Clear(g_c), s		2.3	10.2	35.1	1.3	13.1	2.0		11.6	0.0	4.8	2.0
Prop In Lane		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Lane Grp Cap(c), veh/h		104	2375	737	104	2375	737		615	0	274	150
V/C Ratio(X)		0.47	0.39	0.93	0.28	0.48	0.09		0.82	0.00	0.37	0.29
Avail Cap(c_a), veh/h		530	2385	740	530	2385	740		1685	0	749	842
HCM Platoon Ratio		1.00	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	1.00	1.00
Uniform Delay (d), s/veh		39.4	15.3	22.0	38.9	16.0	13.1		34.5	0.0	31.6	37.2
Incr Delay (d2), s/veh		1.2	0.4	19.8	0.5	0.6	0.2		1.0	0.0	0.3	0.4
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.0	3.9	16.1	0.6	5.0	0.7		5.0	0.0	1.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		40.6	15.7	41.8	39.5	16.7	13.3		35.5	0.0	32.0	37.6
LnGrp LOS		D	B	D	D	B	B		D	A	C	D
Approach Vol, veh/h			1663			1226				603		
Approach Delay, s/veh			27.2			17.0				34.9		
Approach LOS			C			B				C		

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	45.8		11.7	9.5	45.8		19.3				
Change Period (Y+Rc), s	4.5	6.0		4.5	4.5	6.0		4.5				
Max Green Setting (Gmax), s	25.5	40.0		40.5	25.5	40.0		40.5				
Max Q Clear Time (g_c+I1), s	4.3	15.1		6.8	3.3	37.1		13.6				
Green Ext Time (p_c), s	0.0	18.2		0.5	0.0	2.8		1.2				

Intersection Summary	
HCM 6th Ctrl Delay	25.7
HCM 6th LOS	C

Notes
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	103	33
Future Volume (veh/h)	103	33
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1885	1885
Adj Flow Rate, veh/h	108	35
Peak Hour Factor	0.95	0.95
Percent Heavy Veh, %	1	1
Cap, veh/h	157	133
Arrive On Green	0.08	0.08
Sat Flow, veh/h	1885	1598
Grp Volume(v), veh/h	108	35
Grp Sat Flow(s),veh/h/ln	1885	1598
Q Serve(g_s), s	4.8	1.8
Cycle Q Clear(g_c), s	4.8	1.8
Prop In Lane		1.00
Lane Grp Cap(c), veh/h	157	133
V/C Ratio(X)	0.69	0.26
Avail Cap(c_a), veh/h	884	749
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	1.00	1.00
Uniform Delay (d), s/veh	38.5	37.1
Incr Delay (d2), s/veh	2.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.7
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	40.4	37.5
LnGrp LOS	D	D
Approach Vol, veh/h	187	
Approach Delay, s/veh	39.2	
Approach LOS	D	
Timer - Assigned Phs		

HCM Signalized Intersection Capacity Analysis
8: E. Bidwell & Placerville

07/15/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	236	0	2561	227	180	1516	1038
Future Volume (vph)	0	0	0	0	0	236	0	2561	227	180	1516	1038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)						5.0		5.3	5.3	5.0	2.0	4.0
Lane Util. Factor						1.00		0.91	1.00	1.00	0.86	0.86
Frt						0.86		1.00	0.85	1.00	0.97	0.85
Flt Protected						1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)						1627		5136	1599	1787	4685	1375
Flt Permitted						1.00		1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)						1627		5136	1599	470	4685	1375
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	0	0	243	0	2640	234	186	1563	1070
RTOR Reduction (vph)	0	0	0	0	0	31	0	0	102	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	212	0	2640	132	186	2034	599
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type						Perm		NA	Perm	custom	NA	Free
Protected Phases								2			6	
Permitted Phases						1			2	1		Free
Actuated Green, G (s)						16.0		33.7	33.7	16.0	60.0	60.0
Effective Green, g (s)						16.0		33.7	33.7	16.0	60.0	60.0
Actuated g/C Ratio						0.27		0.56	0.56	0.27	1.00	1.00
Clearance Time (s)						5.0		5.3	5.3	5.0	2.0	
Vehicle Extension (s)						2.0		6.1	6.1	2.0	3.0	
Lane Grp Cap (vph)						433		2884	898	125	4685	1375
v/s Ratio Prot								c0.51			0.43	
v/s Ratio Perm						0.13			0.08	c0.40		0.44
v/c Ratio						0.49		0.92	0.15	1.49	0.43	0.44
Uniform Delay, d1						18.6		11.9	6.3	22.0	0.0	0.0
Progression Factor						1.00		1.00	1.00	1.24	1.00	1.00
Incremental Delay, d2						0.3		5.9	0.3	232.9	0.1	0.3
Delay (s)						18.9		17.7	6.6	260.2	0.1	0.3
Level of Service						B		B	A	F	A	A
Approach Delay (s)		0.0			18.9			16.8			17.3	
Approach LOS		A			B			B			B	

Intersection Summary				
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	1.10			
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	10.3	
Intersection Capacity Utilization	72.7%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (veh/h)	3	47	0	20	3	143	0	17	3	58	1192	105
Future Volume (veh/h)	3	47	0	20	3	143	0	17	3	58	1192	105
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		50	0	21		152	0	18		62	1268	112
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1
Cap, veh/h		91	0	38		346	0	154		80	2532	786
Arrive On Green		0.07	0.00	0.07		0.10	0.00	0.10		0.04	0.49	0.49
Sat Flow, veh/h		1220	0	512		3591	0	1598		1795	5147	1598
Grp Volume(v), veh/h		71	0	0		152	0	18		62	1268	112
Grp Sat Flow(s),veh/h/ln		1732	0	0		1795	0	1598		1795	1716	1598
Q Serve(g_s), s		2.8	0.0	0.0		2.8	0.0	0.7		2.4	11.6	2.7
Cycle Q Clear(g_c), s		2.8	0.0	0.0		2.8	0.0	0.7		2.4	11.6	2.7
Prop In Lane		0.70		0.30		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		130	0	0		346	0	154		80	2532	786
V/C Ratio(X)		0.55	0.00	0.00		0.44	0.00	0.12		0.78	0.50	0.14
Avail Cap(c_a), veh/h		877	0	0		1819	0	809		653	5119	1589
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	0.00		1.00	0.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		31.3	0.0	0.0		29.9	0.0	28.9		33.1	12.0	9.7
Incr Delay (d2), s/veh		3.6	0.0	0.0		0.9	0.0	0.3		5.9	0.2	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.2	0.0	0.0		1.2	0.0	0.3		1.1	4.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		34.8	0.0	0.0		30.8	0.0	29.3		39.0	12.2	9.8
LnGrp LOS		C	A	A		C	A	C		D	B	A
Approach Vol, veh/h			71				170				1442	
Approach Delay, s/veh			34.8				30.6				13.2	
Approach LOS			C				C				B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	41.5		11.2	9.3	39.8		9.7
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	25.5	69.7		35.5	25.5	69.7		35.5
Max Q Clear Time (g_c+I1), s	4.4	14.6		4.8	4.9	13.6		4.8
Green Ext Time (p_c), s	0.1	21.5		0.6	0.2	20.2		0.4

Intersection Summary		
HCM 6th Ctrl Delay	14.6	
HCM 6th LOS	B	

Notes
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

08/31/2021

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (veh/h)	3	138	1312	40
Future Volume (veh/h)	3	138	1312	40
Initial Q (Qb), veh		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00
Work Zone On Approach			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885
Adj Flow Rate, veh/h		147	1396	43
Peak Hour Factor		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1
Cap, veh/h		239	2656	825
Arrive On Green		0.07	0.52	0.52
Sat Flow, veh/h		3483	5147	1598
Grp Volume(v), veh/h		147	1396	43
Grp Sat Flow(s),veh/h/ln		1742	1716	1598
Q Serve(g_s), s		2.9	12.6	0.9
Cycle Q Clear(g_c), s		2.9	12.6	0.9
Prop In Lane		1.00		1.00
Lane Grp Cap(c), veh/h		239	2656	825
V/C Ratio(X)		0.61	0.53	0.05
Avail Cap(c_a), veh/h		1267	5119	1589
HCM Platoon Ratio		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00
Uniform Delay (d), s/veh		31.7	11.3	8.4
Incr Delay (d2), s/veh		1.0	0.2	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.2	4.2	0.3
Unsig. Movement Delay, s/veh				
LnGrp Delay(d),s/veh		32.7	11.5	8.5
LnGrp LOS		C	B	A
Approach Vol, veh/h			1586	
Approach Delay, s/veh			13.4	
Approach LOS			B	

Timer - Assigned Phs								
Phs Duration (G+Y+Rc), s	8.9	49.3	9.0	7.3	9.5	48.7	9.0	7.3
Change Period (Y+Rc), s	4.5	5.3	4.5	4.9	4.5	5.3	4.5	4.9
Max Green Setting (Gmax), s	25.5	69.7	25.5	40.1	25.5	69.7	25.5	40.1
Max Q Clear Time (g_c+I1), s	4.2	11.3	4.3	2.9	5.1	10.2	5.4	3.4
Green Ext Time (p_c), s	0.1	32.7	0.2	0.2	0.1	28.0	0.1	0.3

HCM 6th Signalized Intersection Summary
2: E. Bidwell & Scholar

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	105	33	49	3	78	40	242	3	100	1008	176	3	141	1127	207
Future Volume (veh/h)	3	105	33	49	3	78	40	242	3	100	1008	176	3	141	1127	207
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		112	35	0		83	43	0		106	1072	0		150	1199	0
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		211	60			108	113			208	3001			233	3038	
Arrive On Green		0.06	0.03	0.00		0.06	0.03	0.00		0.06	0.58	0.00		0.07	0.59	0.00
Sat Flow, veh/h		3483	1885	1598		1795	3582	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		112	35	0		83	43	0		106	1072	0		150	1199	0
Grp Sat Flow(s),veh/h/ln		1742	1885	1598		1795	1791	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		2.3	1.4	0.0		3.4	0.9	0.0		2.2	8.2	0.0		3.1	9.3	0.0
Cycle Q Clear(g_c), s		2.3	1.4	0.0		3.4	0.9	0.0		2.2	8.2	0.0		3.1	9.3	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		211	60			108	113			208	3001			233	3038	
V/C Ratio(X)		0.53	0.58			0.77	0.38			0.51	0.36			0.64	0.39	
Avail Cap(c_a), veh/h		1193	1015			615	1929			1193	4817			1193	4817	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		34.0	35.6	0.0		34.5	35.3	0.0		34.0	8.2	0.0		33.9	8.1	0.0
Incr Delay (d2), s/veh		0.8	19.4	0.0		4.2	2.3	0.0		0.7	0.3	0.0		1.1	0.3	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.0	0.9	0.0		1.6	0.4	0.0		0.9	2.7	0.0		1.3	3.0	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		34.7	55.0	0.0		38.7	37.6	0.0		34.7	8.5	0.0		35.0	8.5	0.0
LnGrp LOS		C	D			D	D			C	A			C	A	
Approach Vol, veh/h			147	A			126	A			1178	A			1349	A
Approach Delay, s/veh			39.5				38.3				10.8				11.4	
Approach LOS			D				D				B				B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	49.3	9.0	7.3	9.5	48.7	9.0	7.3
Change Period (Y+Rc), s	4.5	5.3	4.5	4.9	4.5	5.3	4.5	4.9
Max Green Setting (Gmax), s	25.5	69.7	25.5	40.1	25.5	69.7	25.5	40.1
Max Q Clear Time (g_c+I1), s	4.2	11.3	4.3	2.9	5.1	10.2	5.4	3.4
Green Ext Time (p_c), s	0.1	32.7	0.2	0.2	0.1	28.0	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: E. Bidwell & Power Center

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	220	12	88	21	2	46	3	409	1018	251	3	112	1085	57
Future Volume (veh/h)	3	220	12	88	21	2	46	3	409	1018	251	3	112	1085	57
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		253	0	98	23	2	51		454	1131	279		124	1206	63
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, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		334	0	149	76	7	74		422	3098	962		153	2327	722
Arrive On Green		0.09	0.00	0.09	0.05	0.05	0.05		0.24	0.60	0.60		0.09	0.45	0.45
Sat Flow, veh/h		3591	0	1598	1658	144	1598		1795	5147	1598		1795	5147	1598
Grp Volume(v), veh/h		253	0	98	25	0	51		454	1131	279		124	1206	63
Grp Sat Flow(s),veh/h/ln		1795	0	1598	1802	0	1598		1795	1716	1598		1795	1716	1598
Q Serve(g_s), s		7.5	0.0	6.4	1.5	0.0	3.4		25.5	12.2	9.1		7.4	18.2	2.4
Cycle Q Clear(g_c), s		7.5	0.0	6.4	1.5	0.0	3.4		25.5	12.2	9.1		7.4	18.2	2.4
Prop In Lane		1.00		1.00	0.92		1.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		334	0	149	83	0	74		422	3098	962		153	2327	722
V/C Ratio(X)		0.76	0.00	0.66	0.30	0.00	0.69		1.08	0.37	0.29		0.81	0.52	0.09
Avail Cap(c_a), veh/h		1374	0	612	673	0	597		422	3309	1027		422	3309	1027
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		48.0	0.0	47.5	50.0	0.0	51.0		41.5	11.0	10.4		48.7	21.2	16.9
Incr Delay (d2), s/veh		1.3	0.0	1.9	0.7	0.0	4.3		65.4	0.3	0.6		3.8	0.6	0.2
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		3.4	0.0	2.6	0.7	0.0	1.4		18.8	4.5	3.2		3.4	7.3	0.9
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		49.3	0.0	49.4	50.8	0.0	55.2		106.8	11.3	11.0		52.5	21.8	17.1
LnGrp LOS		D	A	D	D	A	E		F	B	B		D	C	B
Approach Vol, veh/h			351			76				1864				1393	
Approach Delay, s/veh			49.3			53.8				34.5				24.3	
Approach LOS			D			D				C				C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	54.3		9.5	13.8	70.6		14.6
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	25.5	69.7		40.5	25.5	69.7		41.5
Max Q Clear Time (g_c+I1), s	27.5	20.2		5.4	9.4	14.2		9.5
Green Ext Time (p_c), s	0.0	28.9		0.2	0.1	34.8		0.6

Intersection Summary	
HCM 6th Ctrl Delay	32.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
4: E. Bidwell & Broadstone

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	327	257	267	3	116	591	75	3	146	1276	278	3	164	957	73
Future Volume (veh/h)	3	327	257	267	3	116	591	75	3	146	1276	278	3	164	957	73
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		348	273	0		123	629	0		155	1357	0		174	1018	0
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		407	1277			175	934			208	2557			227	2586	
Arrive On Green		0.12	0.25	0.00		0.05	0.18	0.00		0.06	0.50	0.00		0.07	0.50	0.00
Sat Flow, veh/h		3483	5147	1598		3483	5147	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		348	273	0		123	629	0		155	1357	0		174	1018	0
Grp Sat Flow(s),veh/h/ln		1742	1716	1598		1742	1716	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		13.8	5.9	0.0		4.9	16.0	0.0		6.1	25.3	0.0		6.9	17.2	0.0
Cycle Q Clear(g_c), s		13.8	5.9	0.0		4.9	16.0	0.0		6.1	25.3	0.0		6.9	17.2	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		407	1277			175	934			208	2557			227	2586	
V/C Ratio(X)		0.86	0.21			0.70	0.67			0.75	0.53			0.77	0.39	
Avail Cap(c_a), veh/h		881	1501			1006	1677			633	2557			633	2586	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		60.8	41.9	0.0		65.6	53.5	0.0		64.9	24.1	0.0		64.5	21.6	0.0
Incr Delay (d2), s/veh		2.0	0.1	0.0		1.9	1.5	0.0		2.0	0.8	0.0		2.0	0.5	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		6.2	2.6	0.0		2.2	7.1	0.0		2.8	10.5	0.0		3.1	7.1	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		62.8	42.0	0.0		67.5	55.0	0.0		66.9	24.9	0.0		66.6	22.1	0.0
LnGrp LOS		E	D			E	E			E	C			E	C	
Approach Vol, veh/h			621	A			752	A			1512	A			1192	A
Approach Delay, s/veh			53.7				57.1				29.2				28.6	
Approach LOS			D				E				C				C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	75.8	20.9	30.8	13.6	75.0	11.5	40.1
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	* 5.3
Max Green Setting (Gmax), s	25.5	69.7	35.5	45.7	25.5	69.7	40.5	* 41
Max Q Clear Time (g_c+I1), s	13.1	19.2	15.8	18.0	8.9	27.3	6.9	7.9
Green Ext Time (p_c), s	0.2	24.2	0.6	7.5	0.3	30.0	0.2	3.1

Intersection Summary	
HCM 6th Ctrl Delay	37.9
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: E. Bidwell & Via sole

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	3	50	0	68	26	0	14	0	1534	11	0	5	1219	119
Future Volume (veh/h)	3	50	0	68	26	0	14	0	1534	11	0	5	1219	119
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No			No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		53	0	72	28	0	15	0	1632	12		5	1297	127
Peak Hour Factor		0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1		1	1	1
Cap, veh/h		252	0	112	34	0	18	3	3383	1050		0	3383	1050
Arrive On Green		0.07	0.00	0.07	0.03	0.00	0.03	0.00	0.66	0.66		0.00	0.66	0.66
Sat Flow, veh/h		3591	0	1598	1121	0	600	1795	5147	1598		0	5147	1598
Grp Volume(v), veh/h		53	0	72	43	0	0	0	1632	12		0	1297	127
Grp Sat Flow(s),veh/h/ln		1795	0	1598	1721	0	0	1795	1716	1598		0	1716	1598
Q Serve(g_s), s		0.8	0.0	2.6	1.5	0.0	0.0	0.0	9.4	0.2		0.0	6.8	1.7
Cycle Q Clear(g_c), s		0.8	0.0	2.6	1.5	0.0	0.0	0.0	9.4	0.2		0.0	6.8	1.7
Prop In Lane		1.00		1.00	0.65		0.35	1.00		1.00		0.00		1.00
Lane Grp Cap(c), veh/h		252	0	112	52	0	0	3	3383	1050		0	3383	1050
V/C Ratio(X)		0.21	0.00	0.64	0.83	0.00	0.00	0.00	0.48	0.01		0.00	0.38	0.12
Avail Cap(c_a), veh/h		1247	0	555	452	0	0	471	4333	1345		0	4333	1345
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00		0.00	1.00	1.00
Uniform Delay (d), s/veh		25.9	0.0	26.7	28.5	0.0	0.0	0.0	5.1	3.5		0.0	4.6	3.8
Incr Delay (d2), s/veh		0.2	0.0	2.3	11.5	0.0	0.0	0.0	0.2	0.0		0.0	0.2	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.3	0.0	1.0	0.7	0.0	0.0	0.0	2.2	0.0		0.0	1.6	0.4
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		26.1	0.0	29.0	39.9	0.0	0.0	0.0	5.3	3.5		0.0	4.8	3.9
LnGrp LOS		C	A	C	D	A	A	A	A	A		A	A	A
Approach Vol, veh/h			125			43			1644				1424	
Approach Delay, s/veh			27.8			39.9			5.3				4.7	
Approach LOS			C			D			A				A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	44.1		6.3	0.0	44.1		8.6
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	15.5	49.7		15.5	15.5	49.7		20.5
Max Q Clear Time (g_c+I1), s	10.6	8.8		3.5	0.0	11.4		4.6
Green Ext Time (p_c), s	0.0	26.1		0.1	0.0	27.4		0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
6: E. Bidwell & Via Felice

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	51	0	131	6	1	0	3	103	1464	2	30	0	1169	114
Future Volume (veh/h)	3	51	0	131	6	1	0	3	103	1464	2	30	0	1169	114
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		55	0	142	7	1	0		112	1591	2		0	1271	124
Peak Hour Factor		0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		417	0	185	11	2	0		145	3456	1073		103	2709	841
Arrive On Green		0.12	0.00	0.12	0.01	0.01	0.00		0.08	0.67	0.67		0.00	0.53	0.53
Sat Flow, veh/h		3591	0	1598	1580	226	0		1795	5147	1598		322	5147	1598
Grp Volume(v), veh/h		55	0	142	8	0	0		112	1591	2		0	1271	124
Grp Sat Flow(s),veh/h/ln		1795	0	1598	1806	0	0		1795	1716	1598		322	1716	1598
Q Serve(g_s), s		1.0	0.0	6.0	0.3	0.0	0.0		4.3	10.2	0.0		0.0	10.8	2.8
Cycle Q Clear(g_c), s		1.0	0.0	6.0	0.3	0.0	0.0		4.3	10.2	0.0		0.0	10.8	2.8
Prop In Lane		1.00		1.00	0.87		0.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		417	0	185	13	0	0		145	3456	1073		103	2709	841
V/C Ratio(X)		0.13	0.00	0.77	0.61	0.00	0.00		0.77	0.46	0.00		0.00	0.47	0.15
Avail Cap(c_a), veh/h		1056	0	470	402	0	0		399	3669	1139		163	3669	1139
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	0.00	0.00		1.00	1.00	1.00		0.00	1.00	1.00
Uniform Delay (d), s/veh		27.7	0.0	29.9	34.5	0.0	0.0		31.4	5.4	3.8		0.0	10.4	8.5
Incr Delay (d2), s/veh		0.1	0.0	2.5	16.2	0.0	0.0		3.3	0.2	0.0		0.0	0.3	0.2
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.4	0.0	2.3	0.2	0.0	0.0		1.9	2.7	0.0		0.0	3.6	0.9
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		27.7	0.0	32.4	50.7	0.0	0.0		34.7	5.7	3.8		0.0	10.7	8.7
LnGrp LOS		C	A	C	D	A	A		C	A	A		A	B	A
Approach Vol, veh/h			197			8				1705				1395	
Approach Delay, s/veh			31.1			50.7				7.6				10.5	
Approach LOS			C			D				A				B	

Timer - Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.1	42.0		5.0		52.1		12.6
Change Period (Y+Rc), s	4.5	5.3		4.5		5.3		4.5
Max Green Setting (Gmax), s	15.5	49.7		15.5		49.7		20.5
Max Q Clear Time (g_c+I1), s	10.3	12.8		2.3		12.2		8.0
Green Ext Time (p_c), s	0.1	23.9		0.0		27.9		0.3

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
7: E. Bidwell & Iron Point

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	5	229	255	401	505	369	247	821	1091	570	5	255	947	102
Future Volume (veh/h)	5	229	255	401	505	369	247	821	1091	570	5	255	947	102
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No			No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		234	260	409	515	377	252	838	1113	582		260	966	104
Peak Hour Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98		0.98	0.98	0.98
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1		1	1	1
Cap, veh/h		302	483	590	588	1118	347	816	2168	673		331	1452	451
Arrive On Green		0.09	0.13	0.13	0.17	0.22	0.22	0.23	0.42	0.42		0.10	0.28	0.28
Sat Flow, veh/h		3483	3582	1598	3483	5147	1598	3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		234	260	409	515	377	252	838	1113	582		260	966	104
Grp Sat Flow(s),veh/h/ln		1742	1791	1598	1742	1716	1598	1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		7.2	7.4	14.7	15.7	6.7	16.0	25.5	17.4	36.1		8.0	18.1	5.4
Cycle Q Clear(g_c), s		7.2	7.4	14.7	15.7	6.7	16.0	25.5	17.4	36.1		8.0	18.1	5.4
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		302	483	590	588	1118	347	816	2168	673		331	1452	451
V/C Ratio(X)		0.78	0.54	0.69	0.88	0.34	0.73	1.03	0.51	0.86		0.79	0.67	0.23
Avail Cap(c_a), veh/h		560	483	590	784	1118	347	816	2168	673		752	1687	524
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		48.7	43.9	29.1	44.1	36.0	39.6	41.7	23.3	28.7		48.2	34.6	30.0
Incr Delay (d2), s/veh		1.6	2.4	4.8	7.1	0.5	10.1	38.7	0.4	12.3		1.6	1.7	0.8
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		3.2	3.4	9.7	7.3	2.9	7.2	15.2	7.0	15.7		3.5	7.7	2.2
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		50.3	46.4	33.9	51.2	36.5	49.8	80.4	23.7	41.0		49.8	36.2	30.8
LnGrp LOS		D	D	C	D	D	D	F	C	D		D	D	C
Approach Vol, veh/h			903			1144			2533				1330	
Approach Delay, s/veh			41.8			46.1			46.4				38.4	
Approach LOS			D			D			D				D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.0	36.0	13.9	29.0	14.8	51.2	22.9	20.0
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	5.3
Max Green Setting (Gmax), s	25.5	35.7	17.5	21.7	23.5	37.7	24.5	14.7
Max Q Clear Time (g_c+I1), s	27.5	20.1	9.2	18.0	10.0	38.1	17.7	16.7
Green Ext Time (p_c), s	0.0	10.7	0.3	2.0	0.4	0.0	0.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	43.9
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
8: E. Bidwell & Placerville

08/31/2021

HCM 6th Edition methodology does not support custom phasing.

HCM 6th Signalized Intersection Summary
9: E. Bidwell & WB offramp

08/31/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	70	1277	1188	248	0	832
Future Volume (veh/h)	70	1277	1188	248	0	832
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	71	1303	1212	0	0	849
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	1601	1292	1567		0	2139
Arrive On Green	0.47	0.47	0.42	0.00	0.00	0.42
Sat Flow, veh/h	3428	2768	3711	1572	0	5400
Grp Volume(v), veh/h	71	1303	1212	0	0	849
Grp Sat Flow(s),veh/h/ln	1714	1384	1856	1572	0	1689
Q Serve(g_s), s	1.1	45.9	27.5	0.0	0.0	11.4
Cycle Q Clear(g_c), s	1.1	45.9	27.5	0.0	0.0	11.4
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	1601	1292	1567		0	2139
V/C Ratio(X)	0.04	1.01	0.77		0.00	0.40
Avail Cap(c_a), veh/h	1601	1292	1895		0	2586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	26.2	24.4	0.0	0.0	19.7
Incr Delay (d2), s/veh	0.0	27.1	1.9	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	19.0	12.0	0.0	0.0	4.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.3	53.3	26.3	0.0	0.0	19.9
LnGrp LOS	B	F	C		A	B
Approach Vol, veh/h	1374		1212	A		849
Approach Delay, s/veh	51.3		26.3			19.9
Approach LOS	D		C			B

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	47.3				47.3	51.0
Change Period (Y+Rc), s	5.8				5.8	5.1
Max Green Setting (Gmax), s	50.2				50.2	45.9
Max Q Clear Time (g_c+I1), s	29.5				13.4	47.9
Green Ext Time (p_c), s	12.0				10.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	34.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
10: E. Bidwell & EB offramp

08/31/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	931	207	0	505	285	617
Future Volume (veh/h)	931	207	0	505	285	617
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	0	1856	1856	1856
Adj Flow Rate, veh/h	980	218	0	532	300	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	0	3	3	3
Cap, veh/h	1377	632	0	1009	531	
Arrive On Green	0.40	0.40	0.00	0.29	0.29	0.00
Sat Flow, veh/h	3428	1572	0	3711	1856	3145
Grp Volume(v), veh/h	980	218	0	532	300	0
Grp Sat Flow(s),veh/h/ln	1714	1572	0	1763	1856	1572
Q Serve(g_s), s	8.4	3.4	0.0	4.4	4.8	0.0
Cycle Q Clear(g_c), s	8.4	3.4	0.0	4.4	4.8	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1377	632	0	1009	531	
V/C Ratio(X)	0.71	0.35	0.00	0.53	0.56	
Avail Cap(c_a), veh/h	1767	810	0	1817	956	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.8	7.3	0.0	10.5	10.6	0.0
Incr Delay (d2), s/veh	1.1	0.4	0.0	0.6	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.8	0.0	1.3	1.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.8	7.7	0.0	11.1	12.0	0.0
LnGrp LOS	A	A	A	B	B	
Approach Vol, veh/h	1198			532	300	A
Approach Delay, s/veh	9.4			11.1	12.0	
Approach LOS	A			B	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	15.8		19.1		15.8
Change Period (Y+Rc), s	5.8		5.1		5.8
Max Green Setting (Gmax), s	18.0		18.0		18.0
Max Q Clear Time (g_c+I1), s	6.4		10.4		6.8
Green Ext Time (p_c), s	3.6		3.7		1.7

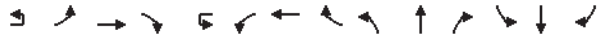
Intersection Summary	
HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
11: Driveway/Marketplace & Broadstone

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	2	72	603	25	6	9	664	11	61	0	16	12	0	58
Future Volume (veh/h)	2	72	603	25	6	9	664	11	61	0	16	12	0	58
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		82	685	28		10	755	12	69	0	18	14	0	66
Peak Hour Factor		0.88	0.88	0.88		0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		141	1697	757		28	1472	656	128	0	210	38	0	130
Arrive On Green		0.08	0.47	0.47		0.02	0.41	0.41	0.07	0.00	0.13	0.02	0.00	0.08
Sat Flow, veh/h		1795	3582	1598		1795	3582	1598	1795	0	1598	1795	0	1598
Grp Volume(v), veh/h		82	685	28		10	755	12	69	0	18	14	0	66
Grp Sat Flow(s),veh/h/ln		1795	1791	1598		1795	1791	1598	1795	0	1598	1795	0	1598
Q Serve(g_s), s		2.4	6.8	0.5		0.3	8.6	0.2	2.0	0.0	0.5	0.4	0.0	2.2
Cycle Q Clear(g_c), s		2.4	6.8	0.5		0.3	8.6	0.2	2.0	0.0	0.5	0.4	0.0	2.2
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		141	1697	757		28	1472	656	128	0	210	38	0	130
V/C Ratio(X)		0.58	0.40	0.04		0.36	0.51	0.02	0.54	0.00	0.09	0.37	0.00	0.51
Avail Cap(c_a), veh/h		673	2257	1007		673	2257	1007	673	0	1039	673	0	1039
HCM Platoon Ratio		1.00	1.00	1.00		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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh		24.2	9.3	7.7		26.5	12.0	9.5	24.4	0.0	20.8	26.3	0.0	24.0
Incr Delay (d2), s/veh		1.4	0.6	0.1		2.9	1.0	0.0	1.3	0.0	0.1	2.2	0.0	1.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.0	2.3	0.2		0.1	3.1	0.1	0.8	0.0	0.2	0.2	0.0	0.8
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		25.6	9.9	7.7		29.4	13.0	9.6	25.7	0.0	20.8	28.5	0.0	25.1
LnGrp LOS		C	A	A		C	B	A	C	A	C	C	A	C
Approach Vol, veh/h			795				777			87			80	
Approach Delay, s/veh			11.4				13.1			24.7			25.7	
Approach LOS			B				B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	31.5	5.7	11.8	8.9	28.1	8.5	9.0
Change Period (Y+Rc), s	4.6	5.7	4.6	4.6	4.6	5.7	4.6	4.6
Max Green Setting (Gmax), s	0.4	34.3	20.4	35.4	20.4	34.3	20.4	35.4
Max Q Clear Time (g_c+I1), s	2.3	8.8	2.4	2.5	4.4	10.6	4.0	4.2
Green Ext Time (p_c), s	0.0	11.3	0.0	0.0	0.0	11.8	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th AWSC
12:

08/31/2021

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

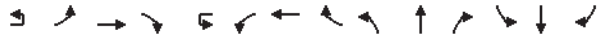
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	0	0	3	8	7
Future Vol, veh/h	2	0	0	3	8	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	2	0	0	3	9	8
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.2	6.4	6.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	53%
Vol Thru, %	0%	0%	0%
Vol Right, %	0%	100%	47%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	2	3	15
LT Vol	2	0	8
Through Vol	0	0	0
RT Vol	0	3	7
Lane Flow Rate	2	3	16
Geometry Grp	1	1	1
Degree of Util (X)	0.003	0.003	0.017
Departure Headway (Hd)	4.147	3.346	3.753
Convergence, Y/N	Yes	Yes	Yes
Cap	867	1074	959
Service Time	2.153	1.353	1.755
HCM Lane V/C Ratio	0.002	0.003	0.017
HCM Control Delay	7.2	6.4	6.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0	0	0.1

HCM 6th Signalized Intersection Summary
13: Cavitt & Broadstone

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	9	25	536	67	2	26	610	15	47	43	31	8	37	24
Future Volume (veh/h)	9	25	536	67	2	26	610	15	47	43	31	8	37	24
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		29	616	77		30	701	17	54	49	36	9	43	28
Peak Hour Factor		0.87	0.87	0.87		0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		60	1523	679		62	1526	681	97	202	171	21	122	104
Arrive On Green		0.03	0.43	0.43		0.03	0.43	0.43	0.05	0.11	0.11	0.01	0.06	0.06
Sat Flow, veh/h		1795	3582	1598		1795	3582	1598	1795	1885	1598	1795	1885	1598
Grp Volume(v), veh/h		29	616	77		30	701	17	54	49	36	9	43	28
Grp Sat Flow(s),veh/h/ln		1795	1791	1598		1795	1791	1598	1795	1885	1598	1795	1885	1598
Q Serve(g_s), s		0.7	5.5	1.3		0.8	6.4	0.3	1.4	1.1	0.9	0.2	1.0	0.8
Cycle Q Clear(g_c), s		0.7	5.5	1.3		0.8	6.4	0.3	1.4	1.1	0.9	0.2	1.0	0.8
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		60	1523	679		62	1526	681	97	202	171	21	122	104
V/C Ratio(X)		0.48	0.40	0.11		0.48	0.46	0.02	0.56	0.24	0.21	0.42	0.35	0.27
Avail Cap(c_a), veh/h		799	2684	1197		799	2684	1197	799	1437	1218	799	1437	1218
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		21.9	9.2	8.0		21.8	9.4	7.7	21.2	18.8	18.8	22.6	20.6	20.5
Incr Delay (d2), s/veh		2.2	0.7	0.3		2.2	0.7	0.0	1.8	0.2	0.2	4.9	0.6	0.5
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.3	1.8	0.4		0.3	2.1	0.1	0.6	0.4	0.3	0.1	0.4	0.3
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		24.0	9.9	8.3		24.0	10.1	7.7	23.1	19.1	19.0	27.5	21.2	21.0
LnGrp LOS		C	A	A		C	B	A	C	B	B	C	C	C
Approach Vol, veh/h			722				748			139			80	
Approach Delay, s/veh			10.3				10.6			20.6			21.9	
Approach LOS			B				B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	25.1	5.0	9.8	6.0	25.1	7.0	7.9
Change Period (Y+Rc), s	4.5	5.5	4.5	4.9	4.5	5.5	4.5	4.9
Max Green Setting (Gmax), s	30.5	34.5	20.5	35.1	20.5	34.5	20.5	35.1
Max Q Clear Time (g_c+I1), s	2.8	7.5	2.2	3.1	2.7	8.4	3.4	3.0
Green Ext Time (p_c), s	0.0	11.6	0.0	0.2	0.0	11.2	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th TWSC
14: Cavitt & Kilrush

08/31/2021

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	5	0	3	14	0	34	1	82	8	29	99	2
Future Vol, veh/h	5	0	3	14	0	34	1	82	8	29	99	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	90	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	6	0	3	16	0	38	1	91	9	32	110	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	292	277	111	270	269	91	112	0	0	100	0	0
Stage 1	175	175	-	93	93	-	-	-	-	-	-	-
Stage 2	117	102	-	177	176	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	662	632	945	685	639	969	1484	-	-	1499	-	-
Stage 1	829	756	-	916	820	-	-	-	-	-	-	-
Stage 2	890	813	-	827	755	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	626	618	945	671	625	969	1484	-	-	1499	-	-
Mov Cap-2 Maneuver	626	618	-	671	625	-	-	-	-	-	-	-
Stage 1	828	740	-	915	819	-	-	-	-	-	-	-
Stage 2	854	812	-	806	739	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	9.5	0.1	1.7
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1484	-	-	717	858	1499	-	-
HCM Lane V/C Ratio	0.001	-	-	0.012	0.062	0.021	-	-
HCM Control Delay (s)	7.4	-	-	10.1	9.5	7.5	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0.1	-	-

HCM 6th Signalized Intersection Summary
15: Cavitt & Iron Point

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	9	21	563	487	33	854	35	223	35	53	29	52
Future Volume (veh/h)	9	21	563	487	33	854	35	223	35	53	29	52
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj		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		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		21	574	497	34	871	36	254	0	54	30	53
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
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		132	2414	749	132	2414	749	379	0	168	118	124
Arrive On Green		0.07	0.47	0.47	0.07	0.47	0.47	0.11	0.00	0.11	0.07	0.07
Sat Flow, veh/h		1795	5147	1598	1795	5147	1598	3591	0	1598	1795	1885
Grp Volume(v), veh/h		21	574	497	34	871	36	254	0	54	30	53
Grp Sat Flow(s),veh/h/ln		1795	1716	1598	1795	1716	1598	1795	0	1598	1795	1885
Q Serve(g_s), s		0.7	4.5	16.3	1.2	7.4	0.8	4.6	0.0	2.1	1.1	1.8
Cycle Q Clear(g_c), s		0.7	4.5	16.3	1.2	7.4	0.8	4.6	0.0	2.1	1.1	1.8
Prop In Lane		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		132	2414	749	132	2414	749	379	0	168	118	124
V/C Ratio(X)		0.16	0.24	0.66	0.26	0.36	0.05	0.67	0.00	0.32	0.25	0.43
Avail Cap(c_a), veh/h		672	3024	939	672	3024	939	2136	0	950	1068	1121
HCM Platoon Ratio		1.00	1.00	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	1.00	1.00	1.00
Uniform Delay (d), s/veh		29.6	10.8	13.9	29.8	11.6	9.8	29.3	0.0	28.2	30.2	30.6
Incr Delay (d2), s/veh		0.2	0.2	3.9	0.4	0.4	0.1	0.8	0.0	0.4	0.4	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
%ile BackOfQ(50%),veh/ln		0.3	1.6	6.0	0.5	2.6	0.3	2.0	0.0	0.8	0.5	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		29.8	11.0	17.8	30.2	11.9	9.9	30.1	0.0	28.6	30.6	31.4
LnGrp LOS		C	B	B	C	B	A	C	A	C	C	C
Approach Vol, veh/h			1092			941			308			119
Approach Delay, s/veh			14.5			12.5			29.8			31.1
Approach LOS			B			B			C			C

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	37.9		9.0	9.5	37.9		11.7				
Change Period (Y+Rc), s	4.5	6.0		4.5	4.5	6.0		4.5				
Max Green Setting (Gmax), s	25.5	40.0		40.5	25.5	40.0		40.5				
Max Q Clear Time (g_c+I1), s	2.7	9.4		3.8	3.2	18.3		6.6				
Green Ext Time (p_c), s	0.0	16.6		0.3	0.0	13.6		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
15: Cavitt & Iron Point

08/31/2021

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	35
Future Volume (veh/h)	35
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1885
Adj Flow Rate, veh/h	36
Peak Hour Factor	0.98
Percent Heavy Veh, %	1
Cap, veh/h	105
Arrive On Green	0.07
Sat Flow, veh/h	1598
Grp Volume(v), veh/h	36
Grp Sat Flow(s),veh/h/ln	1598
Q Serve(g_s), s	1.5
Cycle Q Clear(g_c), s	1.5
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	105
V/C Ratio(X)	0.34
Avail Cap(c_a), veh/h	950
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	30.4
Incr Delay (d2), s/veh	0.7
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.6
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	31.1
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM Signalized Intersection Capacity Analysis
8: E. Bidwell & Placerville

07/15/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	205	0	2277	188	82	832	939
Future Volume (vph)	0	0	0	0	0	205	0	2277	188	82	832	939
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)						5.0		5.3	5.3	5.0	2.0	4.0
Lane Util. Factor						1.00		0.91	1.00	1.00	0.86	0.86
Frt						0.86		1.00	0.85	1.00	0.95	0.85
Flt Protected						1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)						1627		5136	1599	1787	4591	1375
Flt Permitted						1.00		1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)						1627		5136	1599	301	4591	1375
Peak-hour factor, PHF	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)	0	0	0	0	0	220	0	2448	202	88	895	1010
RTOR Reduction (vph)	0	0	0	0	0	20	0	0	62	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	200	0	2448	140	88	1400	505
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type						Perm		NA	Perm	custom	NA	Free
Protected Phases								2			6	
Permitted Phases						1			2	1		Free
Actuated Green, G (s)						25.0		55.7	55.7	25.0	91.0	91.0
Effective Green, g (s)						25.0		55.7	55.7	25.0	91.0	91.0
Actuated g/C Ratio						0.27		0.61	0.61	0.27	1.00	1.00
Clearance Time (s)						5.0		5.3	5.3	5.0	2.0	
Vehicle Extension (s)						2.0		6.1	6.1	2.0	3.0	
Lane Grp Cap (vph)						446		3143	978	82	4591	1375
v/s Ratio Prot								c0.48			0.30	
v/s Ratio Perm						0.12			0.09	c0.29		0.37
v/c Ratio						0.45		0.78	0.14	1.07	0.30	0.37
Uniform Delay, d1						27.3		13.1	7.5	33.0	0.0	0.0
Progression Factor						1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2						0.3		1.6	0.2	120.7	0.2	0.8
Delay (s)						27.6		14.7	7.7	153.7	0.2	0.8
Level of Service						C		B	A	F	A	A
Approach Delay (s)		0.0			27.6			14.2			7.1	
Approach LOS		A			C			B			A	

Intersection Summary				
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.87			
Actuated Cycle Length (s)	91.0	Sum of lost time (s)	10.3	
Intersection Capacity Utilization	65.3%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (veh/h)	3	99	0	22	3	28	0	36	3	41	1728	37
Future Volume (veh/h)	3	99	0	22	3	28	0	36	3	41	1728	37
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		102	0	23		29	0	37		42	1781	38
Peak Hour Factor		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1
Cap, veh/h		125	0	28		186	0	83		54	3380	1049
Arrive On Green		0.09	0.00	0.09		0.05	0.00	0.05		0.03	0.66	0.66
Sat Flow, veh/h		1432	0	323		3591	0	1598		1795	5147	1598
Grp Volume(v), veh/h		125	0	0		29	0	37		42	1781	38
Grp Sat Flow(s),veh/h/ln		1755	0	0		1795	0	1598		1795	1716	1598
Q Serve(g_s), s		8.4	0.0	0.0		0.9	0.0	2.7		2.8	21.8	1.0
Cycle Q Clear(g_c), s		8.4	0.0	0.0		0.9	0.0	2.7		2.8	21.8	1.0
Prop In Lane		0.82		0.18		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		153	0	0		186	0	83		54	3380	1049
V/C Ratio(X)		0.82	0.00	0.00		0.16	0.00	0.45		0.78	0.53	0.04
Avail Cap(c_a), veh/h		227	0	0		733	0	326		172	3380	1049
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	0.00		1.00	0.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		53.8	0.0	0.0		54.4	0.0	55.2		57.8	10.8	7.2
Incr Delay (d2), s/veh		13.4	0.0	0.0		0.4	0.0	3.7		8.5	0.6	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		4.3	0.0	0.0		0.4	0.0	1.2		1.4	7.9	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		67.2	0.0	0.0		54.8	0.0	58.9		66.3	11.4	7.3
LnGrp LOS		E	A	A		D	A	E		E	B	A
Approach Vol, veh/h			125				66				1861	
Approach Delay, s/veh			67.2				57.1				12.6	
Approach LOS			E				E				B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	86.2		10.7	10.2	84.1		15.0
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	11.5	49.7		24.5	24.5	36.7		15.5
Max Q Clear Time (g_c+I1), s	4.8	20.9		4.7	5.7	23.8		10.4
Green Ext Time (p_c), s	0.0	19.5		0.1	0.2	10.8		0.2

Intersection Summary	
HCM 6th Ctrl Delay	15.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

08/31/2021

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (veh/h)	3	106	1629	60
Future Volume (veh/h)	3	106	1629	60
Initial Q (Qb), veh		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00
Work Zone On Approach			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885
Adj Flow Rate, veh/h		109	1679	62
Peak Hour Factor		0.97	0.97	0.97
Percent Heavy Veh, %		1	1	1
Cap, veh/h		165	3469	1077
Arrive On Green		0.05	0.67	0.67
Sat Flow, veh/h		3483	5147	1598
Grp Volume(v), veh/h		109	1679	62
Grp Sat Flow(s),veh/h/ln		1742	1716	1598
Q Serve(g_s), s		3.7	18.9	1.6
Cycle Q Clear(g_c), s		3.7	18.9	1.6
Prop In Lane		1.00		1.00
Lane Grp Cap(c), veh/h		165	3469	1077
V/C Ratio(X)		0.66	0.48	0.06
Avail Cap(c_a), veh/h		711	3469	1077
HCM Platoon Ratio		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00
Uniform Delay (d), s/veh		56.2	9.5	6.6
Incr Delay (d2), s/veh		1.7	0.5	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.7	6.8	0.5
Unsig. Movement Delay, s/veh				
LnGrp Delay(d),s/veh		57.9	9.9	6.7
LnGrp LOS		E	A	A
Approach Vol, veh/h			1850	
Approach Delay, s/veh			12.7	
Approach LOS			B	

Timer - Assigned Phs

HCM 6th Signalized Intersection Summary
2: E. Bidwell & Scholar

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	125	64	66	3	110	54	204	3	141	1477	109	3	131	1353	195
Future Volume (veh/h)	3	125	64	66	3	110	54	204	3	141	1477	109	3	131	1353	195
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		126	65	0		111	55	0		142	1492	0		132	1367	0
Peak Hour Factor		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		184	91			137	256			198	3408			187	3391	
Arrive On Green		0.05	0.05	0.00		0.08	0.07	0.00		0.06	0.66	0.00		0.05	0.66	0.00
Sat Flow, veh/h		3483	1885	1598		1795	3582	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		126	65	0		111	55	0		142	1492	0		132	1367	0
Grp Sat Flow(s),veh/h/ln		1742	1885	1598		1795	1791	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		4.3	4.1	0.0		7.3	1.7	0.0		4.8	16.6	0.0		4.5	14.8	0.0
Cycle Q Clear(g_c), s		4.3	4.1	0.0		7.3	1.7	0.0		4.8	16.6	0.0		4.5	14.8	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		184	91			137	256			198	3408			187	3391	
V/C Ratio(X)		0.69	0.72			0.81	0.21			0.72	0.44			0.71	0.40	
Avail Cap(c_a), veh/h		595	379			247	600			479	3408			334	3391	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		55.9	56.3	0.0		54.6	52.5	0.0		55.6	9.6	0.0		55.9	9.5	0.0
Incr Delay (d2), s/veh		1.7	22.0	0.0		4.3	0.5	0.0		1.8	0.4	0.0		1.8	0.4	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.9	2.5	0.0		3.5	0.8	0.0		2.2	6.0	0.0		2.0	5.4	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		57.5	78.3	0.0		58.9	53.0	0.0		57.5	10.1	0.0		57.7	9.9	0.0
LnGrp LOS		E	E			E	D			E	B			E	A	
Approach Vol, veh/h			191	A			166	A			1634	A			1499	A
Approach Delay, s/veh			64.6				56.9				14.2				14.1	
Approach LOS			E				E				B				B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	84.4	10.8	13.5	10.9	84.8	13.6	10.7
Change Period (Y+Rc), s	4.5	5.3	4.5	4.9	4.5	5.3	4.5	4.9
Max Green Setting (Gmax), s	6.5	43.7	20.5	20.1	11.5	48.7	16.5	24.1
Max Q Clear Time (g_c+I1), s	10.8	16.8	6.3	3.7	6.5	18.6	9.3	6.1
Green Ext Time (p_c), s	0.1	21.4	0.2	0.2	0.0	24.6	0.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: E. Bidwell & Power Center

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	168	47	164	136	14	151	3	379	1408	185	3	154	1216	159
Future Volume (veh/h)	3	168	47	164	136	14	151	3	379	1408	185	3	154	1216	159
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		108	133	166	137	14	153		383	1422	187		156	1228	161
Peak Hour Factor		0.99	0.99	0.99	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		215	226	192	185	19	180		232	2615	812		184	2477	769
Arrive On Green		0.12	0.12	0.12	0.11	0.11	0.11		0.13	0.51	0.51		0.10	0.48	0.48
Sat Flow, veh/h		1795	1885	1598	1636	167	1598		1795	5147	1598		1795	5147	1598
Grp Volume(v), veh/h		108	133	166	151	0	153		383	1422	187		156	1228	161
Grp Sat Flow(s),veh/h/ln		1795	1885	1598	1803	0	1598		1795	1716	1598		1795	1716	1598
Q Serve(g_s), s		6.8	8.0	12.2	9.7	0.0	11.3		15.5	22.5	7.8		10.3	19.5	7.0
Cycle Q Clear(g_c), s		6.8	8.0	12.2	9.7	0.0	11.3		15.5	22.5	7.8		10.3	19.5	7.0
Prop In Lane		1.00		1.00	0.91		1.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		215	226	192	204	0	180		232	2615	812		184	2477	769
V/C Ratio(X)		0.50	0.59	0.87	0.74	0.00	0.85		1.65	0.54	0.23		0.85	0.50	0.21
Avail Cap(c_a), veh/h		232	244	206	248	0	220		232	2615	812		262	2477	769
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		49.4	50.0	51.9	51.5	0.0	52.2		52.2	20.1	16.4		53.0	21.2	18.0
Incr Delay (d2), s/veh		0.7	1.9	26.9	6.7	0.0	19.2		311.7	0.8	0.7		12.0	0.7	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		3.1	3.9	6.3	4.8	0.0	5.5		27.0	9.0	3.0		5.2	7.9	2.7
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		50.1	51.9	78.7	58.3	0.0	71.4		363.9	20.9	17.1		65.0	21.9	18.6
LnGrp LOS		D	D	E	E	A	E		F	C	B		E	C	B
Approach Vol, veh/h			407			304				1992				1545	
Approach Delay, s/veh			62.4			64.9				86.5				25.9	
Approach LOS			E			E				F				C	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	30.0	63.1	18.0	16.8	66.3	18.9
Change Period (Y+Rc), s	4.5	5.3	4.5	4.5	5.3	4.5
Max Green Setting (Gmax), s	15.5	53.7	16.5	17.5	51.7	15.5
Max Q Clear Time (g_c+I1), s	17.5	21.5	13.3	12.3	24.5	14.2
Green Ext Time (p_c), s	0.0	23.1	0.3	0.1	23.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	60.6
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	424	297	327	3	230	434	101	3	230	1447	509	3	228	1174	114
Future Volume (veh/h)	3	424	297	327	3	230	434	101	3	230	1447	509	3	228	1174	114
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		437	306	0		237	447	0		237	1492	0		235	1210	0
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
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		450	845			299	623			295	2585			293	2582	
Arrive On Green		0.13	0.16	0.00		0.09	0.12	0.00		0.08	0.50	0.00		0.08	0.50	0.00
Sat Flow, veh/h		3483	5147	1598		3483	5147	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		437	306	0		237	447	0		237	1492	0		235	1210	0
Grp Sat Flow(s),veh/h/ln		1742	1716	1598		1742	1716	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		15.0	6.3	0.0		8.0	10.0	0.0		8.0	24.4	0.0		8.0	18.4	0.0
Cycle Q Clear(g_c), s		15.0	6.3	0.0		8.0	10.0	0.0		8.0	24.4	0.0		8.0	18.4	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		450	845			299	623			295	2585			293	2582	
V/C Ratio(X)		0.97	0.36			0.79	0.72			0.80	0.58			0.80	0.47	
Avail Cap(c_a), veh/h		450	845			566	845			392	2585			392	2582	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		52.0	44.6	0.0		53.8	50.8	0.0		53.9	20.9	0.0		54.0	19.5	0.0
Incr Delay (d2), s/veh		34.8	0.4	0.0		1.8	2.9	0.0		6.3	0.9	0.0		6.1	0.6	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		8.7	2.7	0.0		3.6	4.5	0.0		3.8	9.8	0.0		3.7	7.4	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		86.8	45.0	0.0		55.6	53.7	0.0		60.3	21.9	0.0		60.1	20.1	0.0
LnGrp LOS		F	D			E	D			E	C			E	C	
Approach Vol, veh/h			743	A			684	A			1729	A			1445	A
Approach Delay, s/veh			69.6				54.4				27.1				26.6	
Approach LOS			E				D				C				C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	65.5	20.0	19.8	14.6	65.6	14.8	25.0
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	* 5.3
Max Green Setting (Gmax), s	13.5	51.7	15.5	19.7	13.5	51.7	19.5	* 16
Max Q Clear Time (g_c+I1), s	10.0	20.4	17.0	12.0	10.0	26.4	10.0	8.3
Green Ext Time (p_c), s	0.2	21.7	0.0	2.5	0.2	21.2	0.3	1.6

Intersection Summary	
HCM 6th Ctrl Delay	37.9
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: E. Bidwell & Via sole

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	100	0	65	18	0	10	3	17	1866	28	8	14	1550	162
Future Volume (veh/h)	3	100	0	65	18	0	10	3	17	1866	28	8	14	1550	162
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		106	0	69	19	0	11		18	1985	30		15	1649	172
Peak Hour Factor		0.94	0.94	0.94	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		218	0	97	0	0	25		22	4139	1285		44	3667	1206
Arrive On Green		0.06	0.00	0.06	0.02	0.00	0.02		0.02	1.00	1.00		0.75	0.75	0.75
Sat Flow, veh/h		3591	0	1598	0	0	1598		1795	5147	1598		17	4859	1598
Grp Volume(v), veh/h		106	0	69	0	0	11		18	1985	30		600	1064	172
Grp Sat Flow(s),veh/h/ln		1795	0	1598	0	0	1598		1795	1716	1598		1754	1561	1598
Q Serve(g_s), s		3.4	0.0	5.1	0.0	0.0	0.8		1.2	0.0	0.0		0.0	15.2	3.6
Cycle Q Clear(g_c), s		3.4	0.0	5.1	0.0	0.0	0.8		1.2	0.0	0.0		13.8	15.2	3.6
Prop In Lane		1.00		1.00	0.00		1.00		1.00		1.00		0.02		1.00
Lane Grp Cap(c), veh/h		218	0	97	0	0	25		22	4139	1285		1355	2356	1206
V/C Ratio(X)		0.49	0.00	0.71	0.00	0.00	0.44		0.83	0.48	0.02		0.44	0.45	0.14
Avail Cap(c_a), veh/h		613	0	273	0	0	206		232	4139	1285		1355	2356	1206
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	0.00	0.00	1.00		0.91	0.91	0.91		1.00	1.00	1.00
Uniform Delay (d), s/veh		54.5	0.0	55.3	0.0	0.0	58.5		58.4	0.0	0.0		5.3	5.5	4.0
Incr Delay (d2), s/veh		0.6	0.0	3.5	0.0	0.0	4.3		23.1	0.4	0.0		1.1	0.6	0.2
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.6	0.0	2.1	0.0	0.0	0.4		0.7	0.1	0.0		5.1	4.5	1.1
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		55.2	0.0	58.8	0.0	0.0	62.9		81.5	0.4	0.0		6.4	6.1	4.3
LnGrp LOS		E	A	E	A	A	E		F	A	A		A	A	A
Approach Vol, veh/h			175			11				2033				1836	
Approach Delay, s/veh			56.6			62.9				1.1				6.0	
Approach LOS			E			E				A				A	

Timer - Assigned Phs	1	2		4		6		8							
Phs Duration (G+Y+Rc), s	5.9	95.9		6.4		101.8		11.8							
Change Period (Y+Rc), s	4.5	5.3		4.5		5.3		4.5							
Max Green Setting (Gmax), s	15.5	49.7		15.5		49.7		20.5							
Max Q Clear Time (g_c+I1), s	13.2	17.2		2.8		2.0		7.1							
Green Ext Time (p_c), s	0.0	27.2		0.0		38.8		0.2							

Intersection Summary	
HCM 6th Ctrl Delay	5.9
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
6: E. Bidwell & Via Felice

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	120	1	244	5	1	0	3	157	1669	7	125	0	1399	112
Future Volume (veh/h)	3	120	1	244	5	1	0	3	157	1669	7	125	0	1399	112
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		126	0	254	5	1	0		164	1739	7		0	1457	117
Peak Hour Factor		0.96	0.96	0.96	0.96	0.96	0.96		0.96	0.96	0.96		0.96	0.96	0.96
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		613	0	273	8	2	0		191	3627	1126		60	2886	896
Arrive On Green		0.17	0.00	0.17	0.01	0.01	0.00		0.11	0.70	0.70		0.00	1.00	1.00
Sat Flow, veh/h		3591	0	1598	1508	302	0		1795	5147	1598		280	5147	1598
Grp Volume(v), veh/h		126	0	254	6	0	0		164	1739	7		0	1457	117
Grp Sat Flow(s),veh/h/ln		1795	0	1598	1810	0	0		1795	1716	1598		280	1716	1598
Q Serve(g_s), s		3.6	0.0	18.8	0.4	0.0	0.0		10.8	18.1	0.2		0.0	0.0	0.0
Cycle Q Clear(g_c), s		3.6	0.0	18.8	0.4	0.0	0.0		10.8	18.1	0.2		0.0	0.0	0.0
Prop In Lane		1.00		1.00	0.83		0.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		613	0	273	10	0	0		191	3627	1126		60	2886	896
V/C Ratio(X)		0.21	0.00	0.93	0.63	0.00	0.00		0.86	0.48	0.01		0.00	0.50	0.13
Avail Cap(c_a), veh/h		613	0	273	234	0	0		232	3627	1126		60	2886	896
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		2.00	2.00	2.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	0.00	0.00		1.00	1.00	1.00		0.00	0.88	0.88
Uniform Delay (d), s/veh		42.8	0.0	49.0	59.6	0.0	0.0		52.7	7.9	5.3		0.0	0.0	0.0
Incr Delay (d2), s/veh		0.1	0.0	35.9	22.4	0.0	0.0		19.9	0.5	0.0		0.0	0.6	0.3
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.6	0.0	10.2	0.2	0.0	0.0		5.9	6.3	0.1		0.0	0.1	0.1
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		42.8	0.0	85.0	82.0	0.0	0.0		72.7	8.4	5.3		0.0	0.6	0.3
LnGrp LOS		D	A	F	F	A	A		E	A	A		A	A	A
Approach Vol, veh/h			380			6				1910				1574	
Approach Delay, s/veh			71.0			82.0				13.9				0.5	
Approach LOS			E			F				B				A	

Timer - Assigned Phs	1	2		4		6		8							
Phs Duration (G+Y+Rc), s	7.3	72.6		5.1		89.9		25.0							
Change Period (Y+Rc), s	4.5	5.3		4.5		5.3		4.5							
Max Green Setting (Gmax), s	15.5	49.7		15.5		49.7		20.5							
Max Q Clear Time (g_c+I1), s	12.8	2.0		2.4		20.1		20.8							
Green Ext Time (p_c), s	0.1	32.4		0.0		24.6		0.0							

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
7: E. Bidwell & Iron Point

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	14	179	735	690	1	728	475	345	800	1309	712	3	144	1332	172
Future Volume (veh/h)	14	179	735	690	1	728	475	345	800	1309	712	3	144	1332	172
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No			No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		185	758	711		751	490	356	825	1349	734		148	1373	177
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
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1		1	1	1
Cap, veh/h		245	439	455		711	1319	409	566	2317	719		208	1788	555
Arrive On Green		0.07	0.12	0.12		0.20	0.26	0.26	0.27	0.75	0.75		0.06	0.35	0.35
Sat Flow, veh/h		3483	3582	1598		3483	5147	1598	3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		185	758	711		751	490	356	825	1349	734		148	1373	177
Grp Sat Flow(s),veh/h/ln		1742	1791	1598		1742	1716	1598	1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		6.3	14.7	14.7		24.5	9.4	25.6	19.5	13.9	54.0		5.0	28.5	9.8
Cycle Q Clear(g_c), s		6.3	14.7	14.7		24.5	9.4	25.6	19.5	13.9	54.0		5.0	28.5	9.8
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		245	439	455		711	1319	409	566	2317	719		208	1788	555
V/C Ratio(X)		0.75	1.73	1.56		1.06	0.37	0.87	1.46	0.58	1.02		0.71	0.77	0.32
Avail Cap(c_a), veh/h		508	439	455		711	1319	409	566	2317	719		682	1788	555
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.67	1.67	1.67		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		0.72	0.72	0.72	0.33	0.33	0.33		1.00	1.00	1.00
Uniform Delay (d), s/veh		54.8	52.7	42.9		47.7	36.7	42.7	43.7	9.9	14.9		55.4	34.8	28.7
Incr Delay (d2), s/veh		1.8	336.9	263.2		44.6	0.4	15.2	209.2	0.4	24.6		1.7	3.2	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		2.8	27.1	46.6		15.0	4.0	11.8	24.0	3.6	14.9		2.2	12.3	4.0
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		56.5	389.5	306.1		92.4	37.1	57.9	252.9	10.3	39.5		57.1	38.1	30.2
LnGrp LOS		E	F	F		F	D	E	F	B	F		E	D	C
Approach Vol, veh/h			1654				1597			2908				1698	
Approach Delay, s/veh			316.4				67.7			86.5				38.9	
Approach LOS			F				E			F				D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	47.0	13.0	36.0	11.7	59.3	29.0	20.0
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	5.3
Max Green Setting (Gmax), s	9.5	41.7	17.5	21.7	23.5	37.7	24.5	14.7
Max Q Clear Time (g_c+I1), s	21.5	30.5	8.3	27.6	7.0	56.0	26.5	16.7
Green Ext Time (p_c), s	0.0	9.9	0.2	0.0	0.2	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	120.8
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
8: E. Bidwell & Placerville

08/31/2021

HCM 6th Edition methodology does not support custom phasing.

HCM 6th Signalized Intersection Summary
9: E. Bidwell & WB offramp

08/31/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	79	1205	1607	274	0	1523
Future Volume (veh/h)	79	1205	1607	274	0	1523
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	0	1885
Adj Flow Rate, veh/h	82	1255	1674	0	0	1586
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	0	1
Cap, veh/h	1498	1209	1764		0	2408
Arrive On Green	0.43	0.43	0.47	0.00	0.00	0.47
Sat Flow, veh/h	3483	2812	3770	1598	0	5486
Grp Volume(v), veh/h	82	1255	1674	0	0	1586
Grp Sat Flow(s),veh/h/ln	1742	1406	1885	1598	0	1716
Q Serve(g_s), s	1.5	45.9	45.4	0.0	0.0	25.3
Cycle Q Clear(g_c), s	1.5	45.9	45.4	0.0	0.0	25.3
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	1498	1209	1764		0	2408
V/C Ratio(X)	0.05	1.04	0.95		0.00	0.66
Avail Cap(c_a), veh/h	1498	1209	1773		0	2420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	17.8	30.4	27.2	0.0	0.0	21.8
Incr Delay (d2), s/veh	0.0	36.3	11.6	0.0	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	21.0	22.2	0.0	0.0	10.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.8	66.7	38.8	0.0	0.0	22.6
LnGrp LOS	B	F	D		A	C
Approach Vol, veh/h	1337		1674	A		1586
Approach Delay, s/veh	63.7		38.8			22.6
Approach LOS	E		D			C

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	55.8				55.8	51.0
Change Period (Y+Rc), s	5.8				5.8	5.1
Max Green Setting (Gmax), s	50.2				50.2	45.9
Max Q Clear Time (g_c+I1), s	47.4				27.3	47.9
Green Ext Time (p_c), s	2.6				16.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	40.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
10: E. Bidwell & EB offramp

08/31/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1288	133	0	593	401	1201
Future Volume (veh/h)	1288	133	0	593	401	1201
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	0	1885	1885	1885
Adj Flow Rate, veh/h	1342	139	0	618	418	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	0	1	1	1
Cap, veh/h	1509	692	0	1066	561	
Arrive On Green	0.43	0.43	0.00	0.30	0.30	0.00
Sat Flow, veh/h	3483	1598	0	3770	1885	3195
Grp Volume(v), veh/h	1342	139	0	618	418	0
Grp Sat Flow(s),veh/h/ln	1742	1598	0	1791	1885	1598
Q Serve(g_s), s	14.4	2.2	0.0	5.9	8.1	0.0
Cycle Q Clear(g_c), s	14.4	2.2	0.0	5.9	8.1	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1509	692	0	1066	561	
V/C Ratio(X)	0.89	0.20	0.00	0.58	0.74	
Avail Cap(c_a), veh/h	1547	710	0	1591	837	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.6	7.1	0.0	12.1	12.8	0.0
Incr Delay (d2), s/veh	6.8	0.2	0.0	0.7	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	0.6	0.0	2.0	3.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.4	7.3	0.0	12.8	15.7	0.0
LnGrp LOS	B	A	A	B	B	
Approach Vol, veh/h	1481			618	418	A
Approach Delay, s/veh	16.4			12.8	15.7	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	17.9		22.7		17.9
Change Period (Y+Rc), s	5.8		5.1		5.8
Max Green Setting (Gmax), s	18.0		18.0		18.0
Max Q Clear Time (g_c+I1), s	7.9		16.4		10.1
Green Ext Time (p_c), s	3.8		1.2		2.1

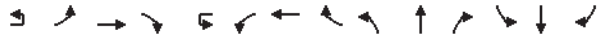
Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
11: Driveway/Marketplace & Broadstone

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	3	241	762	31	12	29	538	91	22	5	7	177	5	205
Future Volume (veh/h)	3	241	762	31	12	29	538	91	22	5	7	177	5	205
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		248	786	32		30	555	94	23	5	7	182	5	211
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
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		297	1579	704		70	1127	503	57	55	77	227	6	269
Arrive On Green		0.17	0.44	0.44		0.04	0.31	0.31	0.03	0.08	0.08	0.13	0.17	0.17
Sat Flow, veh/h		1795	3582	1598		1795	3582	1598	1795	711	995	1795	37	1566
Grp Volume(v), veh/h		248	786	32		30	555	94	23	0	12	182	0	216
Grp Sat Flow(s),veh/h/ln		1795	1791	1598		1795	1791	1598	1795	0	1706	1795	0	1603
Q Serve(g_s), s		8.2	9.7	0.7		1.0	7.7	2.6	0.8	0.0	0.4	6.1	0.0	7.9
Cycle Q Clear(g_c), s		8.2	9.7	0.7		1.0	7.7	2.6	0.8	0.0	0.4	6.1	0.0	7.9
Prop In Lane		1.00		1.00		1.00		1.00	1.00		0.58	1.00		0.98
Lane Grp Cap(c), veh/h		297	1579	704		70	1127	503	57	0	132	227	0	276
V/C Ratio(X)		0.84	0.50	0.05		0.43	0.49	0.19	0.40	0.00	0.09	0.80	0.00	0.78
Avail Cap(c_a), veh/h		595	1995	890		595	1995	890	595	0	980	595	0	921
HCM Platoon Ratio		1.00	1.00	1.00		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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh		24.9	12.3	9.8		28.9	17.1	15.4	29.3	0.0	26.4	26.2	0.0	24.4
Incr Delay (d2), s/veh		2.4	0.9	0.1		1.5	1.2	0.6	1.7	0.0	0.1	2.5	0.0	1.9
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		3.5	3.6	0.2		0.4	3.1	1.0	0.3	0.0	0.2	2.6	0.0	3.0
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		27.3	13.2	9.9		30.4	18.3	16.0	31.0	0.0	26.5	28.7	0.0	26.3
LnGrp LOS		C	B	A		C	B	B	C	A	C	C	A	C
Approach Vol, veh/h			1066				679			35			398	
Approach Delay, s/veh			16.4				18.5			29.4			27.4	
Approach LOS			B				B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	32.8	12.4	9.4	14.8	25.1	6.6	15.2
Change Period (Y+Rc), s	4.6	5.7	4.6	4.6	4.6	5.7	4.6	4.6
Max Green Setting (Gmax), s	20.4	34.3	20.4	35.4	20.4	34.3	20.4	35.4
Max Q Clear Time (g_c+I1), s	3.0	11.7	8.1	2.4	10.2	9.7	2.8	9.9
Green Ext Time (p_c), s	0.0	12.1	0.1	0.0	0.1	9.6	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th AWSC
12:

08/31/2021

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

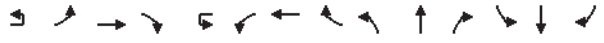
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	0	0	8	5	6
Future Vol, veh/h	8	0	0	8	5	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	9	0	0	9	5	7
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.2	6.4	6.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	45%
Vol Thru, %	0%	0%	0%
Vol Right, %	0%	100%	55%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	8	8	11
LT Vol	8	0	5
Through Vol	0	0	0
RT Vol	0	8	6
Lane Flow Rate	9	9	12
Geometry Grp	1	1	1
Degree of Util (X)	0.01	0.008	0.012
Departure Headway (Hd)	4.145	3.345	3.712
Convergence, Y/N	Yes	Yes	Yes
Cap	868	1075	969
Service Time	2.147	1.349	1.716
HCM Lane V/C Ratio	0.01	0.008	0.012
HCM Control Delay	7.2	6.4	6.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0	0	0

HCM 6th Signalized Intersection Summary
13: Cavitt & Broadstone

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	6	28	805	119	1	38	562	22	71	61	50	15	28	31
Future Volume (veh/h)	6	28	805	119	1	38	562	22	71	61	50	15	28	31
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		29	830	123		39	579	23	73	63	52	15	29	32
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
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		59	1699	758		74	1730	771	112	187	159	34	105	89
Arrive On Green		0.03	0.47	0.47		0.04	0.48	0.48	0.06	0.10	0.10	0.02	0.06	0.06
Sat Flow, veh/h		1795	3582	1598		1795	3582	1598	1795	1885	1598	1795	1885	1598
Grp Volume(v), veh/h		29	830	123		39	579	23	73	63	52	15	29	32
Grp Sat Flow(s),veh/h/ln		1795	1791	1598		1795	1791	1598	1795	1885	1598	1795	1885	1598
Q Serve(g_s), s		0.8	8.4	2.3		1.1	5.3	0.4	2.1	1.6	1.6	0.4	0.8	1.0
Cycle Q Clear(g_c), s		0.8	8.4	2.3		1.1	5.3	0.4	2.1	1.6	1.6	0.4	0.8	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		59	1699	758		74	1730	771	112	187	159	34	105	89
V/C Ratio(X)		0.49	0.49	0.16		0.53	0.33	0.03	0.65	0.34	0.33	0.45	0.28	0.36
Avail Cap(c_a), veh/h		695	2333	1041		695	2333	1041	695	1249	1059	695	1249	1059
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		25.2	9.5	7.9		24.9	8.4	7.2	24.3	22.2	22.2	25.7	24.0	24.1
Incr Delay (d2), s/veh		2.4	0.9	0.4		2.2	0.4	0.1	2.4	0.4	0.4	3.4	0.5	0.9
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.4	2.8	0.7		0.5	1.7	0.1	0.9	0.7	0.6	0.2	0.3	0.4
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		27.5	10.5	8.4		27.0	8.8	7.2	26.7	22.6	22.6	29.1	24.5	25.0
LnGrp LOS		C	B	A		C	A	A	C	C	C	C	C	C
Approach Vol, veh/h			982				641			188			76	
Approach Delay, s/veh			10.7				9.9			24.2			25.6	
Approach LOS			B				A			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	30.6	5.5	10.2	6.2	31.1	7.8	7.9
Change Period (Y+Rc), s	4.5	5.5	4.5	4.9	4.5	5.5	4.5	4.9
Max Green Setting (Gmax), s	20.5	34.5	20.5	35.1	20.5	34.5	20.5	35.1
Max Q Clear Time (g_c+I1), s	3.1	10.4	2.4	3.6	2.8	7.3	4.1	3.0
Green Ext Time (p_c), s	0.0	14.7	0.0	0.3	0.0	9.4	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th TWSC
14: Cavitt & Kilrush

08/31/2021

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	3	0	2	12	0	19	3	160	17	14	166	5
Future Vol, veh/h	3	0	2	12	0	19	3	160	17	14	166	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	90	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	2	1	1	1	1	1	1
Mvmt Flow	3	0	2	13	0	20	3	170	18	15	177	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	405	404	180	387	388	170	182	0	0	188	0	0
Stage 1	210	210	-	176	176	-	-	-	-	-	-	-
Stage 2	195	194	-	211	212	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.22	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.318	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	558	537	865	573	548	874	1399	-	-	1392	-	-
Stage 1	794	730	-	828	755	-	-	-	-	-	-	-
Stage 2	809	742	-	793	729	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	540	530	865	566	541	874	1399	-	-	1392	-	-
Mov Cap-2 Maneuver	540	530	-	566	541	-	-	-	-	-	-	-
Stage 1	792	722	-	826	753	-	-	-	-	-	-	-
Stage 2	789	741	-	783	721	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	10.2	0.1	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1399	-	-	636	722	1392	-	-
HCM Lane V/C Ratio	0.002	-	-	0.008	0.046	0.011	-	-
HCM Control Delay (s)	7.6	-	-	10.7	10.2	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

HCM 6th Signalized Intersection Summary
15: Cavitt & Iron Point

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	8	47	883	654	28	1078	64	3	430	69	96	43
Future Volume (veh/h)	8	47	883	654	28	1078	64	3	430	69	96	43
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Parking Bus, Adj		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		
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885	1885
Adj Flow Rate, veh/h		49	929	688	29	1135	67		505	0	101	45
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1	1
Cap, veh/h		104	2371	736	104	2371	736		618	0	275	151
Arrive On Green		0.06	0.46	0.46	0.06	0.46	0.46		0.17	0.00	0.17	0.08
Sat Flow, veh/h		1795	5147	1598	1795	5147	1598		3591	0	1598	1795
Grp Volume(v), veh/h		49	929	688	29	1135	67		505	0	101	45
Grp Sat Flow(s),veh/h/ln		1795	1716	1598	1795	1716	1598		1795	0	1598	1795
Q Serve(g_s), s		2.3	10.3	35.3	1.3	13.2	2.0		11.7	0.0	4.8	2.0
Cycle Q Clear(g_c), s		2.3	10.3	35.3	1.3	13.2	2.0		11.7	0.0	4.8	2.0
Prop In Lane		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Lane Grp Cap(c), veh/h		104	2371	736	104	2371	736		618	0	275	151
V/C Ratio(X)		0.47	0.39	0.93	0.28	0.48	0.09		0.82	0.00	0.37	0.30
Avail Cap(c_a), veh/h		529	2380	739	529	2380	739		1681	0	748	841
HCM Platoon Ratio		1.00	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	1.00	1.00
Uniform Delay (d), s/veh		39.5	15.4	22.1	39.0	16.1	13.1		34.5	0.0	31.7	37.2
Incr Delay (d2), s/veh		1.2	0.4	20.3	0.5	0.6	0.2		1.0	0.0	0.3	0.4
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.0	3.9	16.3	0.6	5.0	0.8		5.1	0.0	1.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		40.7	15.8	42.4	39.6	16.8	13.4		35.5	0.0	32.0	37.6
LnGrp LOS		D	B	D	D	B	B		D	A	C	D
Approach Vol, veh/h			1666			1231				606		
Approach Delay, s/veh			27.5			17.1				34.9		
Approach LOS			C			B				C		

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	45.9		11.8	9.5	45.9		19.4
Change Period (Y+Rc), s	4.5	6.0		4.5	4.5	6.0		4.5
Max Green Setting (Gmax), s	25.5	40.0		40.5	25.5	40.0		40.5
Max Q Clear Time (g_c+I1), s	4.3	15.2		6.9	3.3	37.3		13.7
Green Ext Time (p_c), s	0.0	18.2		0.5	0.0	2.6		1.2

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
15: Cavitt & Iron Point

08/31/2021

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	104	33
Future Volume (veh/h)	104	33
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1885	1885
Adj Flow Rate, veh/h	109	35
Peak Hour Factor	0.95	0.95
Percent Heavy Veh, %	1	1
Cap, veh/h	159	134
Arrive On Green	0.08	0.08
Sat Flow, veh/h	1885	1598
Grp Volume(v), veh/h	109	35
Grp Sat Flow(s),veh/h/ln	1885	1598
Q Serve(g_s), s	4.9	1.8
Cycle Q Clear(g_c), s	4.9	1.8
Prop In Lane		1.00
Lane Grp Cap(c), veh/h	159	134
V/C Ratio(X)	0.69	0.26
Avail Cap(c_a), veh/h	883	748
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	1.00	1.00
Uniform Delay (d), s/veh	38.5	37.1
Incr Delay (d2), s/veh	2.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.7
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	40.5	37.5
LnGrp LOS	D	D
Approach Vol, veh/h	189	
Approach Delay, s/veh	39.2	
Approach LOS	D	

Timer - Assigned Phs

HCM Signalized Intersection Capacity Analysis
8: E. Bidwell & Placerville

07/15/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	236	0	2585	227	180	1523	1047
Future Volume (vph)	0	0	0	0	0	236	0	2585	227	180	1523	1047
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)						5.0		5.3	5.3	5.0	2.0	4.0
Lane Util. Factor						1.00		0.91	1.00	1.00	0.86	0.86
Frt						0.86		1.00	0.85	1.00	0.97	0.85
Flt Protected						1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)						1627		5136	1599	1787	4684	1375
Flt Permitted						1.00		1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)						1627		5136	1599	470	4684	1375
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	0	0	243	0	2665	234	186	1570	1079
RTOR Reduction (vph)	0	0	0	0	0	31	0	0	101	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	212	0	2665	133	186	2045	604
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type						Perm		NA	Perm	custom	NA	Free
Protected Phases								2			6	
Permitted Phases						1			2	1		Free
Actuated Green, G (s)						16.0		33.7	33.7	16.0	60.0	60.0
Effective Green, g (s)						16.0		33.7	33.7	16.0	60.0	60.0
Actuated g/C Ratio						0.27		0.56	0.56	0.27	1.00	1.00
Clearance Time (s)						5.0		5.3	5.3	5.0	2.0	
Vehicle Extension (s)						2.0		6.1	6.1	2.0	3.0	
Lane Grp Cap (vph)						433		2884	898	125	4684	1375
v/s Ratio Prot								c0.52			0.44	
v/s Ratio Perm						0.13			0.08	c0.40		0.44
v/c Ratio						0.49		0.92	0.15	1.49	0.44	0.44
Uniform Delay, d1						18.6		12.0	6.3	22.0	0.0	0.0
Progression Factor						1.00		1.00	1.00	1.23	1.00	1.00
Incremental Delay, d2						0.3		6.4	0.3	232.7	0.1	0.3
Delay (s)						18.9		18.4	6.6	259.8	0.1	0.3
Level of Service						B		B	A	F	A	A
Approach Delay (s)		0.0			18.9			17.4			17.2	
Approach LOS		A			B			B			B	

Intersection Summary				
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	1.10			
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	10.3	
Intersection Capacity Utilization	73.1%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (veh/h)	3	47	0	20	3	143	0	17	3	58	1479	105
Future Volume (veh/h)	3	47	0	20	3	143	0	17	3	58	1479	105
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.98		1.00		0.98		1.00		1.00
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		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		50	0	21		152	0	18		62	1573	112
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1
Cap, veh/h		105	0	44		356	0	156		81	2741	848
Arrive On Green		0.09	0.00	0.09		0.10	0.00	0.10		0.04	0.53	0.53
Sat Flow, veh/h		1213	0	509		3591	0	1573		1795	5147	1593
Grp Volume(v), veh/h		71	0	0		152	0	18		62	1573	112
Grp Sat Flow(s),veh/h/ln		1722	0	0		1795	0	1573		1795	1716	1593
Q Serve(g_s), s		3.4	0.0	0.0		3.5	0.0	0.9		3.0	17.8	3.1
Cycle Q Clear(g_c), s		3.4	0.0	0.0		3.5	0.0	0.9		3.0	17.8	3.1
Prop In Lane		0.70		0.30		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		149	0	0		356	0	156		81	2741	848
V/C Ratio(X)		0.48	0.00	0.00		0.43	0.00	0.12		0.77	0.57	0.13
Avail Cap(c_a), veh/h		705	0	0		1470	0	644		528	4137	1281
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	0.00		1.00	0.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		37.7	0.0	0.0		36.7	0.0	35.6		41.0	13.6	10.2
Incr Delay (d2), s/veh		2.3	0.0	0.0		0.8	0.0	0.3		5.7	0.3	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.5	0.0	0.0		1.5	0.0	0.4		1.4	6.4	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		40.1	0.0	0.0		37.6	0.0	35.9		46.6	13.9	10.3
LnGrp LOS		D	A	A		D	A	D		D	B	B
Approach Vol, veh/h			71				170				1747	
Approach Delay, s/veh			40.1				37.4				14.8	
Approach LOS			D				D				B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.4	53.2		13.1	10.1	51.5		12.0
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	25.5	69.7		35.5	25.5	69.7		35.5
Max Q Clear Time (g_c+I1), s	5.0	19.5		5.5	5.6	19.8		5.4
Green Ext Time (p_c), s	0.1	25.4		0.6	0.2	26.3		0.4

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College
08/31/2021

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (veh/h)	3	138	1502	40
Future Volume (veh/h)	3	138	1502	40
Initial Q (Qb), veh		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00
Work Zone On Approach			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885
Adj Flow Rate, veh/h		147	1598	43
Peak Hour Factor		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1
Cap, veh/h		226	2844	879
Arrive On Green		0.06	0.55	0.55
Sat Flow, veh/h		3483	5147	1590
Grp Volume(v), veh/h		147	1598	43
Grp Sat Flow(s),veh/h/ln		1742	1716	1590
Q Serve(g_s), s		3.6	17.5	1.1
Cycle Q Clear(g_c), s		3.6	17.5	1.1
Prop In Lane		1.00		1.00
Lane Grp Cap(c), veh/h		226	2844	879
V/C Ratio(X)		0.65	0.56	0.05
Avail Cap(c_a), veh/h		1024	4137	1278
HCM Platoon Ratio		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00
Uniform Delay (d), s/veh		39.6	12.6	8.9
Incr Delay (d2), s/veh		1.2	0.2	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.5	6.1	0.4
Unsig. Movement Delay, s/veh				
LnGrp Delay(d),s/veh		40.7	12.8	8.9
LnGrp LOS		D	B	A
Approach Vol, veh/h			1788	
Approach Delay, s/veh			15.0	
Approach LOS			B	

Timer - Assigned Phs

HCM 6th Signalized Intersection Summary
2: E. Bidwell & Scholar

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	105	33	49	3	88	40	247	3	100	1290	185	3	145	1313	207
Future Volume (veh/h)	3	105	33	49	3	88	40	247	3	100	1290	185	3	145	1313	207
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		112	35	0		94	43	0		106	1372	0		154	1397	0
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		188	92			122	224			186	3059			229	3122	
Arrive On Green		0.05	0.05	0.00		0.07	0.06	0.00		0.05	0.59	0.00		0.07	0.61	0.00
Sat Flow, veh/h		3483	1885	1598		1795	3582	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		112	35	0		94	43	0		106	1372	0		154	1397	0
Grp Sat Flow(s),veh/h/ln		1742	1885	1598		1795	1791	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		2.7	1.5	0.0		4.4	1.0	0.0		2.6	12.7	0.0		3.7	12.6	0.0
Cycle Q Clear(g_c), s		2.7	1.5	0.0		4.4	1.0	0.0		2.6	12.7	0.0		3.7	12.6	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		188	92			122	224			186	3059			229	3122	
V/C Ratio(X)		0.59	0.38			0.77	0.19			0.57	0.45			0.67	0.45	
Avail Cap(c_a), veh/h		1032	878			532	1669			1032	4168			1032	4168	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		39.8	39.7	0.0		39.5	38.3	0.0		39.8	9.7	0.0		39.3	9.1	0.0
Incr Delay (d2), s/veh		1.1	6.0	0.0		3.9	0.4	0.0		1.0	0.4	0.0		1.3	0.4	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.2	0.9	0.0		2.1	0.4	0.0		1.1	4.4	0.0		1.6	4.3	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		40.9	45.7	0.0		43.3	38.7	0.0		40.8	10.1	0.0		40.6	9.5	0.0
LnGrp LOS		D	D			D	D			D	B			D	A	
Approach Vol, veh/h			147	A			137	A			1478	A			1551	A
Approach Delay, s/veh			42.0				41.9				12.3				12.6	
Approach LOS			D				D				B				B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	57.5	9.2	10.3	10.2	56.4	10.3	9.1
Change Period (Y+Rc), s	4.5	5.3	4.5	4.9	4.5	5.3	4.5	4.9
Max Green Setting (Gmax), s	25.5	69.7	25.5	40.1	25.5	69.7	25.5	40.1
Max Q Clear Time (g_c+I1), s	4.6	14.6	4.7	3.0	5.7	14.7	6.4	3.5
Green Ext Time (p_c), s	0.1	37.6	0.2	0.2	0.1	36.3	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: E. Bidwell & Power Center

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	220	12	88	21	2	46	3	409	1309	251	3	112	1281	57
Future Volume (veh/h)	3	220	12	88	21	2	46	3	409	1309	251	3	112	1281	57
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.99	1.00		0.98		1.00		1.00		1.00		0.99
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		253	0	98	23	2	51		454	1454	279		124	1423	63
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, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		374	0	164	109	10	103		372	3052	943		151	2419	747
Arrive On Green		0.10	0.00	0.10	0.07	0.07	0.07		0.21	0.59	0.59		0.08	0.47	0.47
Sat Flow, veh/h		3591	0	1575	1658	144	1561		1795	5147	1591		1795	5147	1589
Grp Volume(v), veh/h		253	0	98	25	0	51		454	1454	279		124	1423	63
Grp Sat Flow(s),veh/h/ln		1795	0	1575	1802	0	1561		1795	1716	1591		1795	1716	1589
Q Serve(g_s), s		8.4	0.0	7.3	1.6	0.0	3.9		25.5	19.7	10.7		8.4	24.9	2.7
Cycle Q Clear(g_c), s		8.4	0.0	7.3	1.6	0.0	3.9		25.5	19.7	10.7		8.4	24.9	2.7
Prop In Lane		1.00		1.00	0.92		1.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		374	0	164	119	0	103		372	3052	943		151	2419	747
V/C Ratio(X)		0.68	0.00	0.60	0.21	0.00	0.49		1.22	0.48	0.30		0.82	0.59	0.08
Avail Cap(c_a), veh/h		1210	0	531	593	0	513		372	3052	943		372	2912	899
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		53.2	0.0	52.7	54.5	0.0	55.5		48.8	14.2	12.4		55.5	23.9	18.0
Incr Delay (d2), s/veh		0.8	0.0	1.3	0.3	0.0	1.4		121.5	0.4	0.7		4.2	0.7	0.2
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		3.8	0.0	3.0	0.7	0.0	1.6		23.9	7.6	3.9		4.0	10.2	1.0
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		54.0	0.0	54.0	54.8	0.0	56.9		170.4	14.7	13.0		59.7	24.7	18.2
LnGrp LOS		D	A	D	D	A	E		F	B	B		E	C	B
Approach Vol, veh/h			351			76				2187				1610	
Approach Delay, s/veh			54.0			56.2				46.8				27.1	
Approach LOS			D			E				D				C	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	30.0	63.2	12.6	14.8	78.3	17.3
Change Period (Y+Rc), s	4.5	5.3	4.5	4.5	5.3	4.5
Max Green Setting (Gmax), s	25.5	69.7	40.5	25.5	69.7	41.5
Max Q Clear Time (g_c+I1), s	27.5	26.9	5.9	10.4	21.7	10.4
Green Ext Time (p_c), s	0.0	30.9	0.2	0.1	38.6	0.6

Intersection Summary	
HCM 6th Ctrl Delay	40.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
4: E. Bidwell & Broadstone

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	334	257	266	3	115	591	73	3	142	1562	278	3	163	1149	78
Future Volume (veh/h)	3	334	257	266	3	115	591	73	3	142	1562	278	3	163	1149	78
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		355	273	0		122	629	0		151	1662	0		173	1222	0
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		413	1314			173	959			203	2531			226	2565	
Arrive On Green		0.12	0.26	0.00		0.05	0.19	0.00		0.06	0.49	0.00		0.06	0.50	0.00
Sat Flow, veh/h		3483	5147	1598		3483	5147	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		355	273	0		122	629	0		151	1662	0		173	1222	0
Grp Sat Flow(s),veh/h/ln		1742	1716	1598		1742	1716	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		14.2	5.9	0.0		4.9	16.1	0.0		6.0	34.3	0.0		6.9	22.1	0.0
Cycle Q Clear(g_c), s		14.2	5.9	0.0		4.9	16.1	0.0		6.0	34.3	0.0		6.9	22.1	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		413	1314			173	959			203	2531			226	2565	
V/C Ratio(X)		0.86	0.21			0.70	0.66			0.74	0.66			0.77	0.48	
Avail Cap(c_a), veh/h		873	1485			995	1660			627	2531			627	2565	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		61.3	41.5	0.0		66.3	53.4	0.0		65.7	27.0	0.0		65.2	23.4	0.0
Incr Delay (d2), s/veh		2.1	0.1	0.0		2.0	1.3	0.0		2.0	1.3	0.0		2.1	0.6	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		6.4	2.6	0.0		2.2	7.1	0.0		2.8	14.3	0.0		3.2	9.2	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		63.3	41.6	0.0		68.3	54.7	0.0		67.7	28.4	0.0		67.3	24.0	0.0
LnGrp LOS		E	D			E	D			E	C			E	C	
Approach Vol, veh/h			628	A			751	A			1813	A			1395	A
Approach Delay, s/veh			53.9				56.9				31.6				29.4	
Approach LOS			D				E				C				C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	75.9	21.3	31.7	13.7	75.0	11.5	41.5
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	* 5.3
Max Green Setting (Gmax), s	8.5	69.7	35.5	45.7	25.5	69.7	40.5	* 41
Max Q Clear Time (g_c+I1), s	8.6	24.1	16.2	18.1	8.9	36.3	6.9	7.9
Green Ext Time (p_c), s	0.2	28.3	0.6	7.5	0.3	28.7	0.2	3.1

Intersection Summary	
HCM 6th Ctrl Delay	38.1
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: E. Bidwell & Via sole

08/31/2021

Movement	EBU	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (veh/h)	3	50	68	0	1830	0	1414	119
Future Volume (veh/h)	3	50	68	0	1830	0	1414	119
Initial Q (Qb), veh		0	0	0	0		0	0
Ped-Bike Adj(A_pbT)		1.00	1.00	1.00				1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach		No			No		No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885		1885	1885
Adj Flow Rate, veh/h		53	72	0	1947		1504	127
Peak Hour Factor		0.94	0.94	0.94	0.94		0.94	0.94
Percent Heavy Veh, %		1	1	1	1		1	1
Cap, veh/h		239	110	3	4075		4075	1261
Arrive On Green		0.07	0.07	0.00	0.79		0.79	0.79
Sat Flow, veh/h		3483	1598	1795	5316		5316	1593
Grp Volume(v), veh/h		53	72	0	1947		1504	127
Grp Sat Flow(s),veh/h/ln		1742	1598	1795	1716		1716	1593
Q Serve(g_s), s		1.0	3.1	0.0	8.9		6.0	1.3
Cycle Q Clear(g_c), s		1.0	3.1	0.0	8.9		6.0	1.3
Prop In Lane		1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h		239	110	3	4075		4075	1261
V/C Ratio(X)		0.22	0.66	0.00	0.48		0.37	0.10
Avail Cap(c_a), veh/h		1760	807	907	5107		5107	1580
HCM Platoon Ratio		1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00	1.00		1.00	1.00
Uniform Delay (d), s/veh		30.9	31.9	0.0	2.5		2.2	1.7
Incr Delay (d2), s/veh		0.2	2.5	0.0	0.2		0.1	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln		0.4	1.2	0.0	1.3		0.9	0.2
Unsig. Movement Delay, s/veh								
LnGrp Delay(d),s/veh		31.1	34.4	0.0	2.6		2.3	1.7
LnGrp LOS		C	C	A	A		A	A
Approach Vol, veh/h		125			1947		1631	
Approach Delay, s/veh		33.0			2.6		2.2	
Approach LOS		C			A		A	

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.0	60.9				60.9		9.3
Change Period (Y+Rc), s	4.5	5.3				5.3		4.5
Max Green Setting (Gmax), s	35.5	69.7				69.7		35.5
Max Q Clear Time (g_c+I1), s	10.9	8.0				10.9		5.1
Green Ext Time (p_c), s	0.0	39.9				44.7		0.2

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
6: E. Bidwell & Via Felice

08/31/2021



Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations									
Traffic Volume (veh/h)	3	51	131	3	103	1749	30	1338	114
Future Volume (veh/h)	3	51	131	3	103	1749	30	1338	114
Initial Q (Qb), veh		0	0		0	0		0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00				1.00
Parking Bus, Adj		1.00	1.00		1.00	1.00		1.00	1.00
Work Zone On Approach		No				No		No	
Adj Sat Flow, veh/h/ln		1885	1885		1885	1885		1885	1885
Adj Flow Rate, veh/h		55	142		112	1901		1454	124
Peak Hour Factor		0.92	0.92		0.92	0.92		0.92	0.92
Percent Heavy Veh, %		1	1		1	1		1	1
Cap, veh/h		398	183		145	4312		3218	995
Arrive On Green		0.11	0.11		0.08	0.76		0.63	0.63
Sat Flow, veh/h		3483	1598		1795	5656		5316	1591
Grp Volume(v), veh/h		55	142		112	1901		1454	124
Grp Sat Flow(s),veh/h/ln		1742	1598		1795	1885		1716	1591
Q Serve(g_s), s		1.1	6.9		4.9	9.6		11.7	2.5
Cycle Q Clear(g_c), s		1.1	6.9		4.9	9.6		11.7	2.5
Prop In Lane		1.00	1.00		1.00				1.00
Lane Grp Cap(c), veh/h		398	183		145	4312		3218	995
V/C Ratio(X)		0.14	0.78		0.77	0.44		0.45	0.12
Avail Cap(c_a), veh/h		1774	813		801	4956		4510	1394
HCM Platoon Ratio		1.00	1.00		1.00	1.00		1.00	1.00
Upstream Filter(I)		1.00	1.00		1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh		31.7	34.2		35.8	3.4		7.8	6.1
Incr Delay (d2), s/veh		0.1	2.7		3.3	0.2		0.2	0.1
Initial Q Delay(d3),s/veh		0.0	0.0		0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln		0.5	2.7		2.2	2.3		3.7	0.8
Unsig. Movement Delay, s/veh									
LnGrp Delay(d),s/veh		31.8	36.9		39.1	3.5		8.0	6.2
LnGrp LOS		C	D		D	A		A	A
Approach Vol, veh/h		197				2013		1578	
Approach Delay, s/veh		35.5				5.5		7.9	
Approach LOS		D				A		A	

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.9	55.0				65.9		13.6
Change Period (Y+Rc), s	4.5	5.3				5.3		4.5
Max Green Setting (Gmax), s	35.5	69.7				69.7		40.5
Max Q Clear Time (g_c+I1), s	10.9	13.7				11.6		8.9
Green Ext Time (p_c), s	0.1	36.0				45.9		0.3

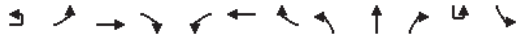
Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
7: E. Bidwell & Iron Point

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	5	228	263	560	586	376	251	1059	1371	691	5	256	1114	97
Future Volume (veh/h)	5	228	263	560	586	376	251	1059	1371	691	5	256	1114	97
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.99	1.00		0.99	1.00		1.00		1.00		0.99
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No			No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		233	268	571	598	384	256	1081	1399	705		261	1137	99
Peak Hour Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98		0.98	0.98	0.98
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1		1	1	1
Cap, veh/h		297	456	554	660	1193	368	769	2157	667		328	1505	465
Arrive On Green		0.09	0.13	0.13	0.19	0.23	0.23	0.22	0.42	0.42		0.09	0.29	0.29
Sat Flow, veh/h		3483	3582	1579	3483	5147	1587	3483	5147	1592		3483	5147	1589
Grp Volume(v), veh/h		233	268	571	598	384	256	1081	1399	705		261	1137	99
Grp Sat Flow(s),veh/h/ln		1742	1791	1579	1742	1716	1587	1742	1716	1592		1742	1716	1589
Q Serve(g_s), s		7.6	8.1	14.7	19.4	7.2	17.1	25.5	25.0	48.4		8.5	23.2	5.4
Cycle Q Clear(g_c), s		7.6	8.1	14.7	19.4	7.2	17.1	25.5	25.0	48.4		8.5	23.2	5.4
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		297	456	554	660	1193	368	769	2157	667		328	1505	465
V/C Ratio(X)		0.79	0.59	1.03	0.91	0.32	0.70	1.41	0.65	1.06		0.80	0.76	0.21
Avail Cap(c_a), veh/h		528	456	554	739	1193	368	769	2157	667		709	1592	492
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		51.8	47.5	37.7	45.8	36.8	40.6	45.0	26.7	33.5		51.2	37.1	30.8
Incr Delay (d2), s/veh		1.7	3.4	46.4	13.0	0.5	8.2	190.1	1.0	50.7		1.7	2.8	0.7
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		3.4	3.9	22.4	9.5	3.1	7.5	31.2	10.3	27.5		3.8	10.0	2.2
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		53.5	50.9	84.1	58.8	37.3	48.8	235.0	27.7	84.2		52.9	39.9	31.5
LnGrp LOS		D	D	F	E	D	D	F	C	F		D	D	C
Approach Vol, veh/h			1072			1238			3185				1497	
Approach Delay, s/veh			69.1			50.0			110.6				41.6	
Approach LOS			E			D			F				D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.0	39.1	14.3	32.1	15.4	53.7	26.4	20.0
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	5.3
Max Green Setting (Gmax), s	25.5	35.7	17.5	21.7	23.5	37.7	24.5	14.7
Max Q Clear Time (g_c+I1), s	27.5	25.2	9.6	19.1	10.5	50.4	21.4	16.7
Green Ext Time (p_c), s	0.0	8.4	0.3	1.5	0.4	0.0	0.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	78.8
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th Edition methodology does not support custom phasing.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	229	1283	1819	826	0	1239
Future Volume (veh/h)	229	1283	1819	826	0	1239
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	234	1309	1856	0	0	1264
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	1471	1187	1741		0	2377
Arrive On Green	0.43	0.43	0.47	0.00	0.00	0.47
Sat Flow, veh/h	3428	2768	3711	1572	0	5400
Grp Volume(v), veh/h	234	1309	1856	0	0	1264
Grp Sat Flow(s),veh/h/ln	1714	1384	1856	1572	0	1689
Q Serve(g_s), s	4.5	45.9	50.2	0.0	0.0	18.9
Cycle Q Clear(g_c), s	4.5	45.9	50.2	0.0	0.0	18.9
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	1471	1187	1741		0	2377
V/C Ratio(X)	0.16	1.10	1.07		0.00	0.53
Avail Cap(c_a), veh/h	1471	1187	1741		0	2377
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	18.7	30.5	28.4	0.0	0.0	20.1
Incr Delay (d2), s/veh	0.1	58.9	41.6	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	24.3	31.2	0.0	0.0	7.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.8	89.5	70.0	0.0	0.0	20.4
LnGrp LOS	B	F	F		A	C
Approach Vol, veh/h	1543		1856	A		1264
Approach Delay, s/veh	78.8		70.0			20.4
Approach LOS	E		E			C

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	56.0				56.0	51.0
Change Period (Y+Rc), s	5.8				5.8	5.1
Max Green Setting (Gmax), s	50.2				50.2	45.9
Max Q Clear Time (g_c+I1), s	52.2				20.9	47.9
Green Ext Time (p_c), s	0.0				14.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	59.5
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
10: E. Bidwell & EB offramp

08/31/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	934	579	0	1711	846	622
Future Volume (veh/h)	934	579	0	1711	846	622
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	0	1856	1856	1856
Adj Flow Rate, veh/h	983	609	0	1801	1100	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	0	3	3	3
Cap, veh/h	1316	604	0	1353	1424	
Arrive On Green	0.38	0.38	0.00	0.38	0.38	0.00
Sat Flow, veh/h	3428	1572	0	3711	3711	1572
Grp Volume(v), veh/h	983	609	0	1801	1100	0
Grp Sat Flow(s),veh/h/ln	1714	1572	0	1763	1856	1572
Q Serve(g_s), s	11.6	18.0	0.0	18.0	12.2	0.0
Cycle Q Clear(g_c), s	11.6	18.0	0.0	18.0	12.2	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1316	604	0	1353	1424	
V/C Ratio(X)	0.75	1.01	0.00	1.33	0.77	
Avail Cap(c_a), veh/h	1316	604	0	1353	1424	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.5	14.4	0.0	14.5	12.7	0.0
Incr Delay (d2), s/veh	2.5	38.9	0.0	154.1	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	11.6	0.0	34.6	4.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.0	53.4	0.0	168.6	15.5	0.0
LnGrp LOS	B	F	A	F	B	
Approach Vol, veh/h	1592			1801	1100	A
Approach Delay, s/veh	29.6			168.6	15.5	
Approach LOS	C			F	B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	23.8	23.1	23.8
Change Period (Y+Rc), s	5.8	5.1	5.8
Max Green Setting (Gmax), s	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	20.0	20.0	14.2
Green Ext Time (p_c), s	0.0	0.0	2.8

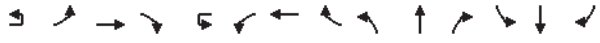
Intersection Summary	
HCM 6th Ctrl Delay	81.9
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
11: Driveway/Marketplace & Broadstone

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	2	72	603	24	6	9	664	11	58	0	14	12	0	58
Future Volume (veh/h)	2	72	603	24	6	9	664	11	58	0	14	12	0	58
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.99		1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		82	685	27		10	755	12	66	0	16	14	0	66
Peak Hour Factor		0.88	0.88	0.88		0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		139	1668	740		28	1447	641	123	0	236	38	0	161
Arrive On Green		0.08	0.47	0.47		0.02	0.40	0.40	0.07	0.00	0.15	0.02	0.00	0.10
Sat Flow, veh/h		1795	3582	1589		1795	3582	1588	1795	0	1582	1795	0	1578
Grp Volume(v), veh/h		82	685	27		10	755	12	66	0	16	14	0	66
Grp Sat Flow(s),veh/h/ln		1795	1791	1589		1795	1791	1588	1795	0	1582	1795	0	1578
Q Serve(g_s), s		2.5	7.1	0.5		0.3	8.9	0.3	2.0	0.0	0.5	0.4	0.0	2.2
Cycle Q Clear(g_c), s		2.5	7.1	0.5		0.3	8.9	0.3	2.0	0.0	0.5	0.4	0.0	2.2
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		139	1668	740		28	1447	641	123	0	236	38	0	161
V/C Ratio(X)		0.59	0.41	0.04		0.36	0.52	0.02	0.53	0.00	0.07	0.37	0.00	0.41
Avail Cap(c_a), veh/h		654	2195	974		654	2195	973	654	0	1000	654	0	998
HCM Platoon Ratio		1.00	1.00	1.00		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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh		25.0	9.9	8.1		27.3	12.6	10.0	25.2	0.0	20.4	27.0	0.0	23.6
Incr Delay (d2), s/veh		1.5	0.6	0.1		2.9	1.1	0.0	1.3	0.0	0.0	2.2	0.0	0.6
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.0	2.4	0.2		0.1	3.3	0.1	0.8	0.0	0.2	0.2	0.0	0.8
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		26.5	10.5	8.2		30.2	13.7	10.1	26.5	0.0	20.5	29.3	0.0	24.2
LnGrp LOS		C	B	A		C	B	B	C	A	C	C	A	C
Approach Vol, veh/h			794				777			82			80	
Approach Delay, s/veh			12.0				13.8			25.3			25.1	
Approach LOS			B				B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	31.8	5.8	13.0	8.9	28.3	8.4	10.3
Change Period (Y+Rc), s	4.6	5.7	4.6	4.6	4.6	5.7	4.6	4.6
Max Green Setting (Gmax), s	20.4	34.3	20.4	35.4	20.4	34.3	20.4	35.4
Max Q Clear Time (g_c+I1), s	2.3	9.1	2.4	2.5	4.5	10.9	4.0	4.2
Green Ext Time (p_c), s	0.0	11.2	0.0	0.0	0.0	11.7	0.0	0.2

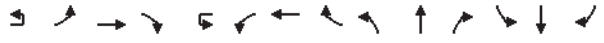
Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
13: Cavitt & Broadstone

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	9	24	535	67	2	24	610	15	47	43	26	8	37	24
Future Volume (veh/h)	9	24	535	67	2	24	610	15	47	43	26	8	37	24
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.99		1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		28	615	77		28	701	17	54	49	30	9	43	28
Peak Hour Factor		0.87	0.87	0.87		0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		59	1514	671		59	1514	671	97	221	185	21	141	118
Arrive On Green		0.03	0.42	0.42		0.03	0.42	0.42	0.05	0.12	0.12	0.01	0.07	0.07
Sat Flow, veh/h		1795	3582	1588		1795	3582	1588	1795	1885	1577	1795	1885	1575
Grp Volume(v), veh/h		28	615	77		28	701	17	54	49	30	9	43	28
Grp Sat Flow(s),veh/h/ln		1795	1791	1588		1795	1791	1588	1795	1885	1577	1795	1885	1575
Q Serve(g_s), s		0.7	5.6	1.4		0.7	6.6	0.3	1.4	1.1	0.8	0.2	1.0	0.8
Cycle Q Clear(g_c), s		0.7	5.6	1.4		0.7	6.6	0.3	1.4	1.1	0.8	0.2	1.0	0.8
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		59	1514	671		59	1514	671	97	221	185	21	141	118
V/C Ratio(X)		0.48	0.41	0.11		0.48	0.46	0.03	0.56	0.22	0.16	0.42	0.30	0.24
Avail Cap(c_a), veh/h		789	2649	1175		789	2649	1175	789	1419	1187	789	1419	1185
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		22.2	9.4	8.2		22.2	9.7	7.9	21.5	18.7	18.5	22.9	20.4	20.3
Incr Delay (d2), s/veh		2.2	0.8	0.3		2.2	0.7	0.0	1.9	0.2	0.2	4.9	0.4	0.4
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.3	1.9	0.4		0.3	2.2	0.1	0.6	0.4	0.3	0.1	0.4	0.3
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		24.4	10.1	8.5		24.4	10.4	7.9	23.4	18.9	18.7	27.8	20.9	20.7
LnGrp LOS		C	B	A		C	B	A	C	B	B	C	C	C
Approach Vol, veh/h			720				746			133			80	
Approach Delay, s/veh			10.5				10.9			20.7			21.6	
Approach LOS			B				B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	25.2	5.1	10.4	6.0	25.2	7.0	8.4
Change Period (Y+Rc), s	4.5	5.5	4.5	4.9	4.5	5.5	4.5	4.9
Max Green Setting (Gmax), s	30.5	34.5	20.5	35.1	20.5	34.5	20.5	35.1
Max Q Clear Time (g_c+I1), s	2.7	7.6	2.2	3.1	2.7	8.6	3.4	3.0
Green Ext Time (p_c), s	0.0	11.6	0.0	0.2	0.0	11.2	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th TWSC
14: Cavitt & Kilrush

08/31/2021

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	34	82	8	29	99
Future Vol, veh/h	14	34	82	8	29	99
Conflicting Peds, #/hr	5	5	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	90	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	16	38	91	9	32	110

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	275	101	0	0	105	0
Stage 1	96	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	717	957	-	-	1493	-
Stage 1	930	-	-	-	-	-
Stage 2	854	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	694	948	-	-	1486	-
Mov Cap-2 Maneuver	694	-	-	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	831	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	1.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 857	1486	-
HCM Lane V/C Ratio	-	- 0.062	0.022	-
HCM Control Delay (s)	-	- 9.5	7.5	-
HCM Lane LOS	-	- A	A	-
HCM 95th %tile Q(veh)	-	- 0.2	0.1	-

HCM 6th Signalized Intersection Summary
15: Cavitt & Iron Point

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	9	21	694	486	33	947	34	222	35	53	27	51
Future Volume (veh/h)	9	21	694	486	33	947	34	222	35	53	27	51
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		0.99	1.00		1.00	1.00		0.99	1.00	
Parking Bus, Adj		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		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		21	708	496	34	966	35	253	0	54	28	52
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
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		121	2372	732	121	2372	734	444	0	195	154	162
Arrive On Green		0.07	0.46	0.46	0.07	0.46	0.46	0.12	0.00	0.12	0.09	0.09
Sat Flow, veh/h		1795	5147	1589	1795	5147	1592	3591	0	1578	1795	1885
Grp Volume(v), veh/h		21	708	496	34	966	35	253	0	54	28	52
Grp Sat Flow(s),veh/h/ln		1795	1716	1589	1795	1716	1592	1795	0	1578	1795	1885
Q Serve(g_s), s		0.8	6.4	18.2	1.3	9.3	0.9	4.9	0.0	2.3	1.1	1.9
Cycle Q Clear(g_c), s		0.8	6.4	18.2	1.3	9.3	0.9	4.9	0.0	2.3	1.1	1.9
Prop In Lane		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		121	2372	732	121	2372	734	444	0	195	154	162
V/C Ratio(X)		0.17	0.30	0.68	0.28	0.41	0.05	0.57	0.00	0.28	0.18	0.32
Avail Cap(c_a), veh/h		616	2770	855	616	2770	857	1957	0	860	978	1027
HCM Platoon Ratio		1.00	1.00	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	1.00	1.00	1.00
Uniform Delay (d), s/veh		32.7	12.5	15.7	33.0	13.3	11.0	30.7	0.0	29.6	31.5	31.9
Incr Delay (d2), s/veh		0.3	0.3	4.3	0.5	0.5	0.1	0.4	0.0	0.3	0.2	0.4
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.4	2.3	6.8	0.6	3.4	0.3	2.1	0.0	0.9	0.5	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		33.0	12.8	20.0	33.4	13.8	11.2	31.1	0.0	29.8	31.7	32.3
LnGrp LOS		C	B	C	C	B	B	C	A	C	C	C
Approach Vol, veh/h			1225			1035			307			116
Approach Delay, s/veh			16.1			14.3			30.9			32.1
Approach LOS			B			B			C			C

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	40.3		10.9	9.5	40.3		13.7				
Change Period (Y+Rc), s	4.5	6.0		4.5	4.5	6.0		4.5				
Max Green Setting (Gmax), s	25.5	40.0		40.5	25.5	40.0		40.5				
Max Q Clear Time (g_c+I1), s	2.8	11.3		3.9	3.3	20.2		6.9				
Green Ext Time (p_c), s	0.0	17.5		0.3	0.0	14.1		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	17.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	35
Future Volume (veh/h)	35
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	0.98
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1885
Adj Flow Rate, veh/h	36
Peak Hour Factor	0.98
Percent Heavy Veh, %	1
Cap, veh/h	135
Arrive On Green	0.09
Sat Flow, veh/h	1570
Grp Volume(v), veh/h	36
Grp Sat Flow(s),veh/h/ln	1570
Q Serve(g_s), s	1.6
Cycle Q Clear(g_c), s	1.6
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	135
V/C Ratio(X)	0.27
Avail Cap(c_a), veh/h	855
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	31.8
Incr Delay (d2), s/veh	0.4
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.6
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	32.2
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM Signalized Intersection Capacity Analysis
8: E. Bidwell & Placerville

07/15/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	207	0	2914	188	84	1239	937
Future Volume (vph)	0	0	0	0	0	207	0	2914	188	84	1239	937
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)						5.0		5.3	5.3	5.0	2.0	4.0
Lane Util. Factor						1.00		0.91	1.00	1.00	0.86	0.86
Frpb, ped/bikes						0.98		1.00	0.97	1.00	1.00	0.99
Flpb, ped/bikes						1.00		1.00	1.00	1.00	1.00	1.00
Frt						0.86		1.00	0.85	1.00	0.96	0.85
Flt Protected						1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)						1599		5136	1553	1787	4646	1357
Flt Permitted						1.00		1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)						1599		5136	1553	301	4646	1357
Peak-hour factor, PHF	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)	0	0	0	0	0	223	0	3133	202	90	1332	1008
RTOR Reduction (vph)	0	0	0	0	0	20	0	0	49	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	203	0	3133	153	90	1806	534
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type						Perm		NA	Perm	custom	NA	Free
Protected Phases								2			6	
Permitted Phases						1			2	1		Free
Actuated Green, G (s)						25.0		55.7	55.7	25.0	91.0	91.0
Effective Green, g (s)						25.0		55.7	55.7	25.0	91.0	91.0
Actuated g/C Ratio						0.27		0.61	0.61	0.27	1.00	1.00
Clearance Time (s)						5.0		5.3	5.3	5.0	2.0	
Vehicle Extension (s)						2.0		6.1	6.1	2.0	3.0	
Lane Grp Cap (vph)						439		3143	950	82	4646	1357
v/s Ratio Prot								c0.61			0.39	
v/s Ratio Perm						0.13			0.10	c0.30		0.39
v/c Ratio						0.46		1.00	0.16	1.10	0.39	0.39
Uniform Delay, d1						27.4		17.6	7.6	33.0	0.0	0.0
Progression Factor						1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2						0.3		15.3	0.2	128.4	0.2	0.9
Delay (s)						27.7		32.8	7.8	161.4	0.2	0.9
Level of Service						C		C	A	F	A	A
Approach Delay (s)		0.0			27.7			31.3			6.3	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	91.0	Sum of lost time (s)	10.3
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (veh/h)	3	99	0	22	3	28	0	36	3	41	1987	37
Future Volume (veh/h)	3	99	0	22	3	28	0	36	3	41	1987	37
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		102	0	23		29	0	37		42	2048	38
Peak Hour Factor		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1
Cap, veh/h		125	0	28		186	0	83		54	3380	1049
Arrive On Green		0.09	0.00	0.09		0.05	0.00	0.05		0.03	0.66	0.66
Sat Flow, veh/h		1432	0	323		3591	0	1598		1795	5147	1598
Grp Volume(v), veh/h		125	0	0		29	0	37		42	2048	38
Grp Sat Flow(s),veh/h/ln		1755	0	0		1795	0	1598		1795	1716	1598
Q Serve(g_s), s		8.4	0.0	0.0		0.9	0.0	2.7		2.8	27.2	1.0
Cycle Q Clear(g_c), s		8.4	0.0	0.0		0.9	0.0	2.7		2.8	27.2	1.0
Prop In Lane		0.82		0.18		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		153	0	0		186	0	83		54	3380	1049
V/C Ratio(X)		0.82	0.00	0.00		0.16	0.00	0.45		0.78	0.61	0.04
Avail Cap(c_a), veh/h		227	0	0		733	0	326		172	3380	1049
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	0.00		1.00	0.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		53.8	0.0	0.0		54.4	0.0	55.2		57.8	11.7	7.2
Incr Delay (d2), s/veh		13.4	0.0	0.0		0.4	0.0	3.7		8.5	0.8	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		4.3	0.0	0.0		0.4	0.0	1.2		1.4	9.9	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		67.2	0.0	0.0		54.8	0.0	58.9		66.3	12.6	7.3
LnGrp LOS		E	A	A		D	A	E		E	B	A
Approach Vol, veh/h			125				66				2128	
Approach Delay, s/veh			67.2				57.1				13.5	
Approach LOS			E				E				B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	86.2		10.7	10.2	84.1		15.0
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	11.5	49.7		24.5	24.5	36.7		15.5
Max Q Clear Time (g_c+I1), s	4.8	27.1		4.7	5.7	29.2		10.4
Green Ext Time (p_c), s	0.0	18.7		0.1	0.2	6.9		0.2

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College
08/31/2021

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (veh/h)	3	106	1951	60
Future Volume (veh/h)	3	106	1951	60
Initial Q (Qb), veh		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00
Work Zone On Approach			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885
Adj Flow Rate, veh/h		109	2011	62
Peak Hour Factor		0.97	0.97	0.97
Percent Heavy Veh, %		1	1	1
Cap, veh/h		165	3469	1077
Arrive On Green		0.05	0.67	0.67
Sat Flow, veh/h		3483	5147	1598
Grp Volume(v), veh/h		109	2011	62
Grp Sat Flow(s),veh/h/ln		1742	1716	1598
Q Serve(g_s), s		3.7	25.1	1.6
Cycle Q Clear(g_c), s		3.7	25.1	1.6
Prop In Lane		1.00		1.00
Lane Grp Cap(c), veh/h		165	3469	1077
V/C Ratio(X)		0.66	0.58	0.06
Avail Cap(c_a), veh/h		711	3469	1077
HCM Platoon Ratio		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00
Uniform Delay (d), s/veh		56.2	10.5	6.6
Incr Delay (d2), s/veh		1.7	0.7	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.7	9.0	0.5
Unsig. Movement Delay, s/veh				
LnGrp Delay(d),s/veh		57.9	11.2	6.7
LnGrp LOS		E	B	A
Approach Vol, veh/h			2182	
Approach Delay, s/veh			13.4	
Approach LOS			B	

Timer - Assigned Phs

HCM 6th Signalized Intersection Summary
2: E. Bidwell & Scholar

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	125	64	66	3	118	54	208	3	141	1732	119	3	136	1670	195
Future Volume (veh/h)	3	125	64	66	3	118	54	208	3	141	1732	119	3	136	1670	195
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		126	65	0		119	55	0		142	1749	0		137	1687	0
Peak Hour Factor		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		184	91			145	273			198	3376			192	3367	
Arrive On Green		0.05	0.05	0.00		0.08	0.08	0.00		0.06	0.66	0.00		0.06	0.65	0.00
Sat Flow, veh/h		3483	1885	1598		1795	3582	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		126	65	0		119	55	0		142	1749	0		137	1687	0
Grp Sat Flow(s),veh/h/ln		1742	1885	1598		1795	1791	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		4.3	4.1	0.0		7.8	1.7	0.0		4.8	21.3	0.0		4.6	20.2	0.0
Cycle Q Clear(g_c), s		4.3	4.1	0.0		7.8	1.7	0.0		4.8	21.3	0.0		4.6	20.2	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		184	91			145	273			198	3376			192	3367	
V/C Ratio(X)		0.69	0.72			0.82	0.20			0.72	0.52			0.71	0.50	
Avail Cap(c_a), veh/h		595	379			247	600			479	3376			334	3367	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		55.9	56.3	0.0		54.3	52.0	0.0		55.6	10.8	0.0		55.8	10.7	0.0
Incr Delay (d2), s/veh		1.7	22.0	0.0		4.3	0.4	0.0		1.8	0.6	0.0		1.8	0.5	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.9	2.5	0.0		3.7	0.8	0.0		2.2	7.8	0.0		2.1	7.4	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		57.5	78.3	0.0		58.5	52.4	0.0		57.5	11.3	0.0		57.6	11.2	0.0
LnGrp LOS		E	E			E	D			E	B			E	B	
Approach Vol, veh/h			191	A			174	A			1891	A			1824	A
Approach Delay, s/veh			64.6				56.6				14.8				14.7	
Approach LOS			E				E				B				B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	83.8	10.8	14.0	11.1	84.0	14.2	10.7
Change Period (Y+Rc), s	4.5	5.3	4.5	4.9	4.5	5.3	4.5	4.9
Max Green Setting (Gmax), s	6.5	43.7	20.5	20.1	11.5	48.7	16.5	24.1
Max Q Clear Time (g_c+I1), s	10.8	22.2	6.3	3.7	6.6	23.3	9.8	6.1
Green Ext Time (p_c), s	0.1	19.5	0.2	0.2	0.0	23.0	0.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: E. Bidwell & Power Center

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	168	47	164	136	14	151	3	379	1673	185	3	154	1541	159
Future Volume (veh/h)	3	168	47	164	136	14	151	3	379	1673	185	3	154	1541	159
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		108	133	166	137	14	153		383	1690	187		156	1557	161
Peak Hour Factor		0.99	0.99	0.99	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		215	226	192	185	19	180		232	2615	812		184	2477	769
Arrive On Green		0.12	0.12	0.12	0.11	0.11	0.11		0.13	0.51	0.51		0.10	0.48	0.48
Sat Flow, veh/h		1795	1885	1598	1636	167	1598		1795	5147	1598		1795	5147	1598
Grp Volume(v), veh/h		108	133	166	151	0	153		383	1690	187		156	1557	161
Grp Sat Flow(s),veh/h/ln		1795	1885	1598	1803	0	1598		1795	1716	1598		1795	1716	1598
Q Serve(g_s), s		6.8	8.0	12.2	9.7	0.0	11.3		15.5	28.9	7.8		10.3	27.0	7.0
Cycle Q Clear(g_c), s		6.8	8.0	12.2	9.7	0.0	11.3		15.5	28.9	7.8		10.3	27.0	7.0
Prop In Lane		1.00		1.00	0.91		1.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		215	226	192	204	0	180		232	2615	812		184	2477	769
V/C Ratio(X)		0.50	0.59	0.87	0.74	0.00	0.85		1.65	0.65	0.23		0.85	0.63	0.21
Avail Cap(c_a), veh/h		232	244	206	248	0	220		232	2615	812		262	2477	769
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		49.4	50.0	51.9	51.5	0.0	52.2		52.2	21.6	16.4		53.0	23.1	18.0
Incr Delay (d2), s/veh		0.7	1.9	26.9	6.7	0.0	19.2		311.7	1.2	0.7		12.0	1.2	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		3.1	3.9	6.3	4.8	0.0	5.5		27.0	11.6	3.0		5.2	11.0	2.7
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		50.1	51.9	78.7	58.3	0.0	71.4		363.9	22.9	17.1		65.0	24.4	18.6
LnGrp LOS		D	D	E	E	A	E		F	C	B		E	C	B
Approach Vol, veh/h			407			304				2260				1874	
Approach Delay, s/veh			62.4			64.9				80.2				27.3	
Approach LOS			E			E				F				C	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	30.0	63.1	18.0	16.8	66.3	18.9
Change Period (Y+Rc), s	4.5	5.3	4.5	4.5	5.3	4.5
Max Green Setting (Gmax), s	15.5	53.7	16.5	17.5	51.7	15.5
Max Q Clear Time (g_c+I1), s	17.5	29.0	13.3	12.3	30.9	14.2
Green Ext Time (p_c), s	0.0	21.5	0.3	0.1	19.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	57.3
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
4: E. Bidwell & Broadstone

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	429	297	323	3	229	434	99	3	227	1709	508	3	225	1494	122
Future Volume (veh/h)	3	429	297	323	3	229	434	99	3	227	1709	508	3	225	1494	122
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		442	306	0		236	447	0		234	1762	0		232	1540	0
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
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		450	847			298	623			292	2589			290	2587	
Arrive On Green		0.13	0.16	0.00		0.09	0.12	0.00		0.08	0.50	0.00		0.08	0.50	0.00
Sat Flow, veh/h		3483	5147	1598		3483	5147	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		442	306	0		236	447	0		234	1762	0		232	1540	0
Grp Sat Flow(s),veh/h/ln		1742	1716	1598		1742	1716	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		15.2	6.3	0.0		8.0	10.0	0.0		7.9	31.0	0.0		7.8	25.5	0.0
Cycle Q Clear(g_c), s		15.2	6.3	0.0		8.0	10.0	0.0		7.9	31.0	0.0		7.8	25.5	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		450	847			298	623			292	2589			290	2587	
V/C Ratio(X)		0.98	0.36			0.79	0.72			0.80	0.68			0.80	0.60	
Avail Cap(c_a), veh/h		450	847			566	845			392	2589			392	2587	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		52.1	44.5	0.0		53.8	50.8	0.0		54.0	22.5	0.0		54.0	21.2	0.0
Incr Delay (d2), s/veh		37.6	0.4	0.0		1.8	2.9	0.0		6.0	1.5	0.0		5.8	1.0	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		9.0	2.7	0.0		3.6	4.5	0.0		3.7	12.6	0.0		3.7	10.3	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		89.7	45.0	0.0		55.6	53.7	0.0		60.0	24.0	0.0		59.8	22.2	0.0
LnGrp LOS		F	D			E	D			E	C			E	C	
Approach Vol, veh/h			748	A			683	A			1996	A			1772	A
Approach Delay, s/veh			71.4				54.4				28.2				27.1	
Approach LOS			E				D				C				C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	65.6	20.0	19.8	14.5	65.7	14.8	25.0
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	* 5.3
Max Green Setting (Gmax), s	13.5	51.7	15.5	19.7	13.5	51.7	19.5	* 16
Max Q Clear Time (g_c+I1), s	10.0	27.5	17.2	12.0	9.8	33.0	10.0	8.3
Green Ext Time (p_c), s	0.2	20.8	0.0	2.5	0.2	17.3	0.3	1.6

Intersection Summary	
HCM 6th Ctrl Delay	37.5
HCM 6th LOS	D

Notes

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

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
4: E. Bidwell & Broadstone 08/31/2021

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: E. Bidwell & Via sole

08/31/2021

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations									
Traffic Volume (veh/h)	3	100	65	3	17	2134	8	1879	162
Future Volume (veh/h)	3	100	65	3	17	2134	8	1879	162
Initial Q (Qb), veh		0	0		0	0		0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00				1.00
Parking Bus, Adj		1.00	1.00		1.00	1.00		1.00	1.00
Work Zone On Approach		No				No		No	
Adj Sat Flow, veh/h/ln		1885	1885		1885	1885		1885	1885
Adj Flow Rate, veh/h		106	69		18	2270		1999	172
Peak Hour Factor		0.94	0.94		0.94	0.94		0.94	0.94
Percent Heavy Veh, %		1	1		1	1		1	1
Cap, veh/h		214	98		22	4410		4155	1290
Arrive On Green		0.06	0.06		0.02	1.00		0.81	0.81
Sat Flow, veh/h		3483	1598		1795	5316		5316	1598
Grp Volume(v), veh/h		106	69		18	2270		1999	172
Grp Sat Flow(s),veh/h/ln		1742	1598		1795	1716		1716	1598
Q Serve(g_s), s		3.5	5.1		1.2	0.0		14.7	2.8
Cycle Q Clear(g_c), s		3.5	5.1		1.2	0.0		14.7	2.8
Prop In Lane		1.00	1.00		1.00				1.00
Lane Grp Cap(c), veh/h		214	98		22	4410		4155	1290
V/C Ratio(X)		0.50	0.70		0.83	0.51		0.48	0.13
Avail Cap(c_a), veh/h		1263	579		157	4410		4155	1290
HCM Platoon Ratio		1.00	1.00		2.00	2.00		1.00	1.00
Upstream Filter(I)		1.00	1.00		0.51	0.51		1.00	1.00
Uniform Delay (d), s/veh		54.5	55.2		58.4	0.0		3.6	2.5
Incr Delay (d2), s/veh		0.7	3.4		14.3	0.2		0.4	0.2
Initial Q Delay(d3),s/veh		0.0	0.0		0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln		1.6	2.1		0.6	0.1		4.0	0.8
Unsig. Movement Delay, s/veh									
LnGrp Delay(d),s/veh		55.2	58.7		72.7	0.2		4.0	2.7
LnGrp LOS		E	E		E	A		A	A
Approach Vol, veh/h		175				2288		2171	
Approach Delay, s/veh		56.5				0.8		3.9	
Approach LOS		E				A		A	
Timer - Assigned Phs		1	2			6		8	
Phs Duration (G+Y+Rc), s		5.9	102.2			108.1		11.9	
Change Period (Y+Rc), s		4.5	5.3			5.3		4.5	
Max Green Setting (Gmax), s		10.5	51.7			47.7		43.5	
Max Q Clear Time (g_c+I1), s		3.2	16.7			2.0		7.1	
Green Ext Time (p_c), s		0.0	31.8			40.8		0.3	

Intersection Summary	
HCM 6th Ctrl Delay	4.4
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
6: E. Bidwell & Via Felice

08/31/2021

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations									
Traffic Volume (veh/h)	3	119	244	3	157	1910	125	1711	111
Future Volume (veh/h)	3	119	244	3	157	1910	125	1711	111
Initial Q (Qb), veh		0	0		0	0		0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00				1.00
Parking Bus, Adj		1.00	1.00		1.00	1.00		1.00	1.00
Work Zone On Approach		No				No		No	
Adj Sat Flow, veh/h/ln		1885	1885		1885	1885		1885	1885
Adj Flow Rate, veh/h		124	254		164	1990		1782	116
Peak Hour Factor		0.96	0.96		0.96	0.96		0.96	0.96
Percent Heavy Veh, %		1	1		1	1		1	1
Cap, veh/h		619	284		192	4189		3068	952
Arrive On Green		0.18	0.18		0.11	0.74		1.00	1.00
Sat Flow, veh/h		3483	1598		1795	5656		5316	1598
Grp Volume(v), veh/h		124	254		164	1990		1782	116
Grp Sat Flow(s),veh/h/ln		1742	1598		1795	1885		1716	1598
Q Serve(g_s), s		3.6	18.7		10.8	16.9		0.0	0.0
Cycle Q Clear(g_c), s		3.6	18.7		10.8	16.9		0.0	0.0
Prop In Lane		1.00	1.00		1.00				1.00
Lane Grp Cap(c), veh/h		619	284		192	4189		3068	952
V/C Ratio(X)		0.20	0.89		0.85	0.48		0.58	0.12
Avail Cap(c_a), veh/h		1263	579		322	4189		3068	952
HCM Platoon Ratio		1.00	1.00		1.00	1.00		2.00	2.00
Upstream Filter(I)		1.00	1.00		1.00	1.00		0.87	0.87
Uniform Delay (d), s/veh		42.1	48.2		52.6	6.2		0.0	0.0
Incr Delay (d2), s/veh		0.1	4.0		5.0	0.4		0.7	0.2
Initial Q Delay(d3),s/veh		0.0	0.0		0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln		1.6	7.7		5.1	6.0		0.2	0.1
Unsig. Movement Delay, s/veh									
LnGrp Delay(d),s/veh		42.1	52.2		57.6	6.6		0.7	0.2
LnGrp LOS		D	D		E	A		A	A
Approach Vol, veh/h		378				2154		1898	
Approach Delay, s/veh		48.9				10.5		0.7	
Approach LOS		D				B		A	
Timer - Assigned Phs		1	2			6		8	
Phs Duration (G+Y+Rc), s		17.4	76.8			94.2		25.8	
Change Period (Y+Rc), s		4.5	5.3			5.3		4.5	
Max Green Setting (Gmax), s		21.5	40.7			43.7		43.5	
Max Q Clear Time (g_c+I1), s		12.8	2.0			18.9		20.7	
Green Ext Time (p_c), s		0.1	32.5			22.6		0.7	

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
7: E. Bidwell & Iron Point

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	14	174	743	958	1	864	484	345	1021	1548	823	3	147	1640	168
Future Volume (veh/h)	14	174	743	958	1	864	484	345	1021	1548	823	3	147	1640	168
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No			No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		179	766	988		891	499	356	1053	1596	848		152	1691	173
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
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1		1	1	1
Cap, veh/h		239	439	455		711	1328	412	566	2311	717		212	1788	555
Arrive On Green		0.07	0.12	0.12		0.20	0.26	0.26	0.27	0.75	0.75		0.06	0.35	0.35
Sat Flow, veh/h		3483	3582	1598		3483	5147	1598	3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		179	766	988		891	499	356	1053	1596	848		152	1691	173
Grp Sat Flow(s),veh/h/ln		1742	1791	1598		1742	1716	1598	1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		6.1	14.7	14.7		24.5	9.6	25.5	19.5	19.3	53.9		5.1	38.3	9.5
Cycle Q Clear(g_c), s		6.1	14.7	14.7		24.5	9.6	25.5	19.5	19.3	53.9		5.1	38.3	9.5
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		239	439	455		711	1328	412	566	2311	717		212	1788	555
V/C Ratio(X)		0.75	1.75	2.17		1.25	0.38	0.86	1.86	0.69	1.18		0.72	0.95	0.31
Avail Cap(c_a), veh/h		508	439	455		711	1328	412	566	2311	717		682	1788	555
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.67	1.67	1.67		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		0.65	0.65	0.65	0.09	0.09	0.09		1.00	1.00	1.00
Uniform Delay (d), s/veh		54.9	52.7	42.9		47.7	36.6	42.5	43.7	10.7	15.0		55.3	38.0	28.6
Incr Delay (d2), s/veh		1.8	344.9	533.7		121.5	0.3	13.3	387.8	0.2	83.4		1.7	11.8	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		2.7	27.6	80.8		22.6	4.1	11.5	38.0	4.4	26.7		2.3	17.8	3.9
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		56.6	397.6	576.6		169.2	36.9	55.8	431.5	10.8	98.4		57.0	49.8	30.1
LnGrp LOS		E	F	F		F	D	E	F	B	F		E	D	C
Approach Vol, veh/h			1933				1746			3497				2016	
Approach Delay, s/veh			457.5				108.3			158.7				48.7	
Approach LOS			F				F			F				D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	47.0	12.7	36.3	11.8	59.2	29.0	20.0
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	5.3
Max Green Setting (Gmax), s	19.5	41.7	17.5	21.7	23.5	37.7	24.5	14.7
Max Q Clear Time (g_c+I1), s	21.5	40.3	8.1	27.5	7.1	55.9	26.5	16.7
Green Ext Time (p_c), s	0.0	1.3	0.2	0.0	0.2	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	187.8
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
8: E. Bidwell & Placerville

08/31/2021

HCM 6th Edition methodology does not support custom phasing.

HCM 6th Signalized Intersection Summary
9: E. Bidwell & WB offramp

08/31/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	358	1211	2170	796	0	2234
Future Volume (veh/h)	358	1211	2170	796	0	2234
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	0	1885
Adj Flow Rate, veh/h	373	1261	2260	0	0	2327
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	0	1
Cap, veh/h	1494	1206	1769		0	2415
Arrive On Green	0.43	0.43	0.47	0.00	0.00	0.47
Sat Flow, veh/h	3483	2812	3770	1598	0	5486
Grp Volume(v), veh/h	373	1261	2260	0	0	2327
Grp Sat Flow(s),veh/h/ln	1742	1406	1885	1598	0	1716
Q Serve(g_s), s	7.3	45.9	50.2	0.0	0.0	46.9
Cycle Q Clear(g_c), s	7.3	45.9	50.2	0.0	0.0	46.9
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	1494	1206	1769		0	2415
V/C Ratio(X)	0.25	1.05	1.28		0.00	0.96
Avail Cap(c_a), veh/h	1494	1206	1769		0	2415
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	19.5	30.6	28.4	0.0	0.0	27.5
Incr Delay (d2), s/veh	0.1	38.6	129.5	0.0	0.0	11.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	21.3	53.3	0.0	0.0	20.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.6	69.2	157.9	0.0	0.0	38.7
LnGrp LOS	B	F	F		A	D
Approach Vol, veh/h	1634		2260	A		2327
Approach Delay, s/veh	57.9		157.9			38.7
Approach LOS	E		F			D

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	56.0			56.0	51.0
Change Period (Y+Rc), s	5.8			5.8	5.1
Max Green Setting (Gmax), s	50.2			50.2	45.9
Max Q Clear Time (g_c+I1), s	52.2			48.9	47.9
Green Ext Time (p_c), s	0.0			1.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	87.0
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
10: E. Bidwell & EB offramp

08/31/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1285	784	0	1681	1387	1205
Future Volume (veh/h)	1285	784	0	1681	1387	1205
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	0	1885	1885	1885
Adj Flow Rate, veh/h	1339	817	0	1751	1978	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	0	1	1	1
Cap, veh/h	1337	613	0	1375	1447	
Arrive On Green	0.38	0.38	0.00	0.38	0.38	0.00
Sat Flow, veh/h	3483	1598	0	3770	3770	1598
Grp Volume(v), veh/h	1339	817	0	1751	1978	0
Grp Sat Flow(s),veh/h/ln	1742	1598	0	1791	1885	1598
Q Serve(g_s), s	18.0	18.0	0.0	18.0	18.0	0.0
Cycle Q Clear(g_c), s	18.0	18.0	0.0	18.0	18.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1337	613	0	1375	1447	
V/C Ratio(X)	1.00	1.33	0.00	1.27	1.37	
Avail Cap(c_a), veh/h	1337	613	0	1375	1447	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.5	14.4	0.0	14.5	14.5	0.0
Incr Delay (d2), s/veh	25.0	160.6	0.0	129.0	169.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	32.5	0.0	30.4	40.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.5	175.0	0.0	143.4	184.1	0.0
LnGrp LOS	F	F	A	F	F	
Approach Vol, veh/h	2156			1751	1978	A
Approach Delay, s/veh	90.8			143.4	184.1	
Approach LOS	F			F	F	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	23.8		23.1		23.8
Change Period (Y+Rc), s	5.8		5.1		5.8
Max Green Setting (Gmax), s	18.0		18.0		18.0
Max Q Clear Time (g_c+I1), s	20.0		20.0		20.0
Green Ext Time (p_c), s	0.0		0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	137.8
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
11: Driveway/Marketplace & Broadstone

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	3	241	762	27	12	27	538	91	19	5	5	177	5	205
Future Volume (veh/h)	3	241	762	27	12	27	538	91	19	5	5	177	5	205
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		248	786	28		28	555	94	20	5	5	182	5	211
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
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		297	1590	709		67	1131	505	51	64	64	227	6	269
Arrive On Green		0.17	0.44	0.44		0.04	0.32	0.32	0.03	0.07	0.07	0.13	0.17	0.17
Sat Flow, veh/h		1795	3582	1598		1795	3582	1598	1795	865	865	1795	37	1566
Grp Volume(v), veh/h		248	786	28		28	555	94	20	0	10	182	0	216
Grp Sat Flow(s),veh/h/ln		1795	1791	1598		1795	1791	1598	1795	0	1730	1795	0	1603
Q Serve(g_s), s		8.2	9.6	0.6		0.9	7.7	2.6	0.7	0.0	0.3	6.0	0.0	7.9
Cycle Q Clear(g_c), s		8.2	9.6	0.6		0.9	7.7	2.6	0.7	0.0	0.3	6.0	0.0	7.9
Prop In Lane		1.00		1.00		1.00		1.00	1.00		0.50	1.00		0.98
Lane Grp Cap(c), veh/h		297	1590	709		67	1131	505	51	0	128	227	0	276
V/C Ratio(X)		0.84	0.49	0.04		0.42	0.49	0.19	0.39	0.00	0.08	0.80	0.00	0.78
Avail Cap(c_a), veh/h		598	2007	895		598	2007	895	598	0	1000	598	0	927
HCM Platoon Ratio		1.00	1.00	1.00		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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh		24.7	12.1	9.6		28.8	17.0	15.2	29.2	0.0	26.4	26.0	0.0	24.2
Incr Delay (d2), s/veh		2.4	0.9	0.1		1.6	1.2	0.6	1.8	0.0	0.1	2.5	0.0	1.9
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		3.4	3.5	0.2		0.4	3.1	1.0	0.3	0.0	0.1	2.6	0.0	2.9
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		27.1	13.0	9.7		30.4	18.2	15.9	31.1	0.0	26.5	28.5	0.0	26.1
LnGrp LOS		C	B	A		C	B	B	C	A	C	C	A	C
Approach Vol, veh/h			1062				677			30			398	
Approach Delay, s/veh			16.2				18.3			29.5			27.2	
Approach LOS			B				B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	32.9	12.3	9.1	14.7	25.0	6.3	15.1
Change Period (Y+Rc), s	4.6	5.7	4.6	4.6	4.6	5.7	4.6	4.6
Max Green Setting (Gmax), s	20.4	34.3	20.4	35.4	20.4	34.3	20.4	35.4
Max Q Clear Time (g_c+I1), s	2.9	11.6	8.0	2.3	10.2	9.7	2.7	9.9
Green Ext Time (p_c), s	0.0	12.1	0.1	0.0	0.1	9.7	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
13: Cavitt & Broadstone

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	6	27	804	119	1	33	561	22	71	61	47	15	28	30
Future Volume (veh/h)	6	27	804	119	1	33	561	22	71	61	47	15	28	30
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		28	829	123		34	578	23	73	63	48	15	29	31
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
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		57	1706	761		67	1725	769	112	187	158	34	105	89
Arrive On Green		0.03	0.48	0.48		0.04	0.48	0.48	0.06	0.10	0.10	0.02	0.06	0.06
Sat Flow, veh/h		1795	3582	1598		1795	3582	1598	1795	1885	1598	1795	1885	1598
Grp Volume(v), veh/h		28	829	123		34	578	23	73	63	48	15	29	31
Grp Sat Flow(s),veh/h/ln		1795	1791	1598		1795	1791	1598	1795	1885	1598	1795	1885	1598
Q Serve(g_s), s		0.8	8.3	2.3		1.0	5.2	0.4	2.1	1.6	1.5	0.4	0.8	1.0
Cycle Q Clear(g_c), s		0.8	8.3	2.3		1.0	5.2	0.4	2.1	1.6	1.5	0.4	0.8	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		57	1706	761		67	1725	769	112	187	158	34	105	89
V/C Ratio(X)		0.49	0.49	0.16		0.51	0.34	0.03	0.65	0.34	0.30	0.45	0.28	0.35
Avail Cap(c_a), veh/h		699	2348	1047		699	2348	1047	699	1258	1066	699	1258	1066
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		25.0	9.4	7.8		24.9	8.4	7.2	24.1	22.1	22.0	25.5	23.8	23.9
Incr Delay (d2), s/veh		2.4	0.9	0.4		2.2	0.4	0.1	2.4	0.4	0.4	3.4	0.5	0.9
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.4	2.8	0.7		0.4	1.7	0.1	0.9	0.7	0.5	0.2	0.3	0.4
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		27.4	10.3	8.2		27.1	8.8	7.2	26.5	22.5	22.4	29.0	24.4	24.8
LnGrp LOS		C	B	A		C	A	A	C	C	C	C	C	C
Approach Vol, veh/h			980				635			184			75	
Approach Delay, s/veh			10.5				9.7			24.1			25.5	
Approach LOS			B				A			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	30.6	5.5	10.1	6.2	30.8	7.8	7.8
Change Period (Y+Rc), s	4.5	5.5	4.5	4.9	4.5	5.5	4.5	4.9
Max Green Setting (Gmax), s	20.5	34.5	20.5	35.1	20.5	34.5	20.5	35.1
Max Q Clear Time (g_c+I1), s	3.0	10.3	2.4	3.6	2.8	7.2	4.1	3.0
Green Ext Time (p_c), s	0.0	14.8	0.0	0.3	0.0	9.4	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th TWSC
14: Cavitt & Kilrush 08/31/2021

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	19	160	17	14	166
Future Vol, veh/h	12	19	160	17	14	166
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	90	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	13	20	170	18	15	177

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	377	170	0	0	188	0
Stage 1	170	-	-	-	-	-
Stage 2	207	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	627	876	-	-	1392	-
Stage 1	862	-	-	-	-	-
Stage 2	830	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	620	876	-	-	1392	-
Mov Cap-2 Maneuver	620	-	-	-	-	-
Stage 1	862	-	-	-	-	-
Stage 2	821	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	755	1392	-
HCM Lane V/C Ratio	-	-	0.044	0.011	-
HCM Control Delay (s)	-	-	10	7.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

HCM 6th Signalized Intersection Summary
15: Cavitt & Iron Point 08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	8	47	1006	653	28	1225	62	3	428	68	96	42
Future Volume (veh/h)	8	47	1006	653	28	1225	62	3	428	68	96	42
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Parking Bus, Adj		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		
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885	1885
Adj Flow Rate, veh/h		49	1059	687	29	1289	65		502	0	101	44
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1	1
Cap, veh/h		104	2376	738	104	2376	738		615	0	274	150
Arrive On Green		0.06	0.46	0.46	0.06	0.46	0.46		0.17	0.00	0.17	0.08
Sat Flow, veh/h		1795	5147	1598	1795	5147	1598		3591	0	1598	1795
Grp Volume(v), veh/h		49	1059	687	29	1289	65		502	0	101	44
Grp Sat Flow(s),veh/h/ln		1795	1716	1598	1795	1716	1598		1795	0	1598	1795
Q Serve(g_s), s		2.3	12.0	35.1	1.3	15.5	2.0		11.6	0.0	4.8	2.0
Cycle Q Clear(g_c), s		2.3	12.0	35.1	1.3	15.5	2.0		11.6	0.0	4.8	2.0
Prop In Lane		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Lane Grp Cap(c), veh/h		104	2376	738	104	2376	738		615	0	274	150
V/C Ratio(X)		0.47	0.45	0.93	0.28	0.54	0.09		0.82	0.00	0.37	0.29
Avail Cap(c_a), veh/h		530	2383	740	530	2383	740		1684	0	749	842
HCM Platoon Ratio		1.00	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	1.00	1.00
Uniform Delay (d), s/veh		39.4	15.8	22.0	39.0	16.7	13.0		34.5	0.0	31.7	37.2
Incr Delay (d2), s/veh		1.2	0.5	19.7	0.5	0.8	0.2		1.0	0.0	0.3	0.4
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.0	4.6	16.2	0.6	5.9	0.7		5.0	0.0	1.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		40.6	16.3	41.7	39.5	17.5	13.3		35.5	0.0	32.0	37.6
LnGrp LOS		D	B	D	D	B	B		D	A	C	D
Approach Vol, veh/h			1795			1383				603		
Approach Delay, s/veh			26.7			17.8				34.9		
Approach LOS			C			B				C		

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	45.9		11.7	9.5	45.9		19.3				
Change Period (Y+Rc), s	4.5	6.0		4.5	4.5	6.0		4.5				
Max Green Setting (Gmax), s	25.5	40.0		40.5	25.5	40.0		40.5				
Max Q Clear Time (g_c+I1), s	4.3	17.5		6.8	3.3	37.1		13.6				
Green Ext Time (p_c), s	0.0	18.2		0.5	0.0	2.8		1.2				

Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Notes
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	103	33
Future Volume (veh/h)	103	33
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1885	1885
Adj Flow Rate, veh/h	108	35
Peak Hour Factor	0.95	0.95
Percent Heavy Veh, %	1	1
Cap, veh/h	157	133
Arrive On Green	0.08	0.08
Sat Flow, veh/h	1885	1598
Grp Volume(v), veh/h	108	35
Grp Sat Flow(s),veh/h/ln	1885	1598
Q Serve(g_s), s	4.8	1.8
Cycle Q Clear(g_c), s	4.8	1.8
Prop In Lane		1.00
Lane Grp Cap(c), veh/h	157	133
V/C Ratio(X)	0.69	0.26
Avail Cap(c_a), veh/h	884	749
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	1.00	1.00
Uniform Delay (d), s/veh	38.5	37.1
Incr Delay (d2), s/veh	2.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.7
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	40.5	37.5
LnGrp LOS	D	D
Approach Vol, veh/h	187	
Approach Delay, s/veh	39.2	
Approach LOS	D	
Timer - Assigned Phs		

HCM Signalized Intersection Capacity Analysis
8: E. Bidwell & Placerville

07/15/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	238	0	3154	227	182	2234	1046
Future Volume (vph)	0	0	0	0	0	238	0	3154	227	182	2234	1046
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)						5.0		5.3	5.3	5.0	2.0	4.0
Lane Util. Factor						1.00		0.91	1.00	1.00	0.86	0.86
Frt						0.86		1.00	0.85	1.00	0.98	0.85
Flt Protected						1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)						1627		5136	1599	1787	4764	1375
Flt Permitted						1.00		1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)						1627		5136	1599	470	4764	1375
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	0	0	245	0	3252	234	188	2303	1078
RTOR Reduction (vph)	0	0	0	0	0	31	0	0	82	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	214	0	3252	152	188	2626	755
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type						Perm		NA	Perm	custom	NA	Free
Protected Phases								2			6	
Permitted Phases						1			2	1		Free
Actuated Green, G (s)						16.0		33.7	33.7	16.0	60.0	60.0
Effective Green, g (s)						16.0		33.7	33.7	16.0	60.0	60.0
Actuated g/C Ratio						0.27		0.56	0.56	0.27	1.00	1.00
Clearance Time (s)						5.0		5.3	5.3	5.0	2.0	
Vehicle Extension (s)						2.0		6.1	6.1	2.0	3.0	
Lane Grp Cap (vph)						433		2884	898	125	4764	1375
v/s Ratio Prot								c0.63			0.55	
v/s Ratio Perm						0.13			0.09	c0.40		0.55
v/c Ratio						0.49		1.13	0.17	1.50	0.55	0.55
Uniform Delay, d1						18.6		13.1	6.4	22.0	0.0	0.0
Progression Factor						1.00		1.00	1.00	1.16	1.00	1.00
Incremental Delay, d2						0.3		62.5	0.4	230.6	0.0	0.1
Delay (s)						18.9		75.6	6.8	256.1	0.0	0.1
Level of Service						B		E	A	F	A	A
Approach Delay (s)		0.0			18.9			71.0			13.6	
Approach LOS		A			B			E			B	

Intersection Summary				
HCM 2000 Control Delay	41.2	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	1.25			
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	10.3	
Intersection Capacity Utilization	84.3%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (veh/h)	3	47	0	20	3	143	0	17	3	58	1491	105
Future Volume (veh/h)	3	47	0	20	3	143	0	17	3	58	1491	105
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		50	0	21		152	0	18		62	1586	112
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1
Cap, veh/h		83	0	35		300	0	133		80	2846	883
Arrive On Green		0.07	0.00	0.07		0.08	0.00	0.08		0.04	0.55	0.55
Sat Flow, veh/h		1220	0	512		3591	0	1598		1795	5147	1598
Grp Volume(v), veh/h		71	0	0		152	0	18		62	1586	112
Grp Sat Flow(s),veh/h/ln		1732	0	0		1795	0	1598		1795	1716	1598
Q Serve(g_s), s		3.3	0.0	0.0		3.3	0.0	0.9		2.8	16.3	2.8
Cycle Q Clear(g_c), s		3.3	0.0	0.0		3.3	0.0	0.9		2.8	16.3	2.8
Prop In Lane		0.70		0.30		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		118	0	0		300	0	133		80	2846	883
V/C Ratio(X)		0.60	0.00	0.00		0.51	0.00	0.13		0.77	0.56	0.13
Avail Cap(c_a), veh/h		749	0	0		1554	0	691		558	4372	1357
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	0.00		1.00	0.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		37.1	0.0	0.0		36.0	0.0	34.8		38.8	11.8	8.8
Incr Delay (d2), s/veh		4.8	0.0	0.0		1.3	0.0	0.5		5.7	0.2	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.5	0.0	0.0		1.5	0.0	0.3		1.3	5.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		41.9	0.0	0.0		37.3	0.0	35.3		44.5	12.1	8.9
LnGrp LOS		D	A	A		D	A	D		D	B	A
Approach Vol, veh/h			71				170				1760	
Approach Delay, s/veh			41.9				37.1				13.0	
Approach LOS			D				D				B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	52.4		11.4	9.9	50.7		10.1
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	25.5	69.7		35.5	25.5	69.7		35.5
Max Q Clear Time (g_c+I1), s	4.8	17.8		5.3	5.4	18.3		5.3
Green Ext Time (p_c), s	0.1	25.9		0.6	0.2	27.0		0.4

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Notes
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

08/31/2021

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (veh/h)	3	138	1507	40
Future Volume (veh/h)	3	138	1507	40
Initial Q (Qb), veh		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00
Work Zone On Approach			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885
Adj Flow Rate, veh/h		147	1603	43
Peak Hour Factor		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1
Cap, veh/h		230	2955	917
Arrive On Green		0.07	0.57	0.57
Sat Flow, veh/h		3483	5147	1598
Grp Volume(v), veh/h		147	1603	43
Grp Sat Flow(s),veh/h/ln		1742	1716	1598
Q Serve(g_s), s		3.4	15.8	1.0
Cycle Q Clear(g_c), s		3.4	15.8	1.0
Prop In Lane		1.00		1.00
Lane Grp Cap(c), veh/h		230	2955	917
V/C Ratio(X)		0.64	0.54	0.05
Avail Cap(c_a), veh/h		1083	4372	1357
HCM Platoon Ratio		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00
Uniform Delay (d), s/veh		37.4	10.8	7.6
Incr Delay (d2), s/veh		1.1	0.2	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.4	5.4	0.3
Unsig. Movement Delay, s/veh				
LnGrp Delay(d),s/veh		38.5	11.0	7.7
LnGrp LOS		D	B	A
Approach Vol, veh/h			1793	
Approach Delay, s/veh			13.2	
Approach LOS			B	
Timer - Assigned Phs				

HCM 6th Signalized Intersection Summary
2: E. Bidwell & Scholar

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	105	33	49	3	88	40	247	3	100	1302	185	3	145	1318	207
Future Volume (veh/h)	3	105	33	49	3	88	40	247	3	100	1302	185	3	145	1318	207
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		112	35	0		94	43	0		106	1385	0		154	1402	0
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		193	50			122	141			190	3137			231	3197	
Arrive On Green		0.06	0.03	0.00		0.07	0.04	0.00		0.05	0.61	0.00		0.07	0.62	0.00
Sat Flow, veh/h		3483	1885	1598		1795	3582	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		112	35	0		94	43	0		106	1385	0		154	1402	0
Grp Sat Flow(s),veh/h/ln		1742	1885	1598		1795	1791	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		2.6	1.5	0.0		4.3	1.0	0.0		2.5	12.0	0.0		3.6	11.9	0.0
Cycle Q Clear(g_c), s		2.6	1.5	0.0		4.3	1.0	0.0		2.5	12.0	0.0		3.6	11.9	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		193	50			122	141			190	3137			231	3197	
V/C Ratio(X)		0.58	0.70			0.77	0.31			0.56	0.44			0.67	0.44	
Avail Cap(c_a), veh/h		1062	904			547	1717			1062	4289			1062	4289	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		38.6	40.4	0.0		38.3	39.1	0.0		38.5	8.7	0.0		38.1	8.2	0.0
Incr Delay (d2), s/veh		1.0	33.8	0.0		3.8	1.3	0.0		0.9	0.4	0.0		1.2	0.4	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.1	1.2	0.0		2.0	0.4	0.0		1.1	4.0	0.0		1.6	3.9	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		39.6	74.2	0.0		42.2	40.4	0.0		39.5	9.1	0.0		39.4	8.6	0.0
LnGrp LOS		D	E			D	D			D	A			D	A	
Approach Vol, veh/h			147	A			137	A			1491	A			1556	A
Approach Delay, s/veh			47.8				41.6				11.3				11.7	
Approach LOS			D				D				B				B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	57.3	9.1	8.2	10.0	56.3	10.2	7.1
Change Period (Y+Rc), s	4.5	5.3	4.5	4.9	4.5	5.3	4.5	4.9
Max Green Setting (Gmax), s	25.5	69.7	25.5	40.1	25.5	69.7	25.5	40.1
Max Q Clear Time (g_c+I1), s	4.6	13.9	4.6	3.0	5.6	14.0	6.3	3.5
Green Ext Time (p_c), s	0.1	38.1	0.2	0.2	0.1	36.9	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: E. Bidwell & Power Center

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	220	12	88	21	2	46	3	409	1321	251	3	112	1286	57
Future Volume (veh/h)	3	220	12	88	21	2	46	3	409	1321	251	3	112	1286	57
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		253	0	98	23	2	51		454	1468	279		124	1429	63
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, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		328	0	146	76	7	73		389	3184	988		152	2503	777
Arrive On Green		0.09	0.00	0.09	0.05	0.05	0.05		0.22	0.62	0.62		0.08	0.49	0.49
Sat Flow, veh/h		3591	0	1598	1658	144	1598		1795	5147	1598		1795	5147	1598
Grp Volume(v), veh/h		253	0	98	25	0	51		454	1468	279		124	1429	63
Grp Sat Flow(s),veh/h/ln		1795	0	1598	1802	0	1598		1795	1716	1598		1795	1716	1598
Q Serve(g_s), s		8.1	0.0	7.0	1.6	0.0	3.7		25.5	17.9	9.5		8.0	23.2	2.5
Cycle Q Clear(g_c), s		8.1	0.0	7.0	1.6	0.0	3.7		25.5	17.9	9.5		8.0	23.2	2.5
Prop In Lane		1.00		1.00	0.92		1.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		328	0	146	82	0	73		389	3184	988		152	2503	777
V/C Ratio(X)		0.77	0.00	0.67	0.30	0.00	0.70		1.17	0.46	0.28		0.82	0.57	0.08
Avail Cap(c_a), veh/h		1267	0	564	621	0	550		389	3184	988		389	3050	947
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		52.2	0.0	51.7	54.3	0.0	55.3		46.1	12.0	10.4		52.9	21.5	16.1
Incr Delay (d2), s/veh		1.5	0.0	2.0	0.8	0.0	4.5		99.2	0.4	0.6		4.1	0.7	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		3.7	0.0	2.9	0.7	0.0	1.6		22.0	6.7	3.4		3.8	9.3	0.9
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		53.7	0.0	53.7	55.1	0.0	59.8		145.3	12.4	11.0		57.0	22.1	16.3
LnGrp LOS		D	A	D	E	A	E		F	B	B		E	C	B
Approach Vol, veh/h			351			76				2201				1616	
Approach Delay, s/veh			53.7			58.2				39.6				24.6	
Approach LOS			D			E				D				C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	62.5		9.9	14.4	78.1		15.2
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	25.5	69.7		40.5	25.5	69.7		41.5
Max Q Clear Time (g_c+I1), s	27.5	25.2		5.7	10.0	19.9		10.1
Green Ext Time (p_c), s	0.0	32.0		0.2	0.1	40.0		0.6

Intersection Summary	
HCM 6th Ctrl Delay	35.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
4: E. Bidwell & Broadstone

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	334	257	267	3	116	591	75	3	146	1572	278	3	164	1153	78
Future Volume (veh/h)	3	334	257	267	3	116	591	75	3	146	1572	278	3	164	1153	78
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		355	273	0		123	629	0		155	1672	0		174	1227	0
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		414	1286			174	933			207	2550			227	2579	
Arrive On Green		0.12	0.25	0.00		0.05	0.18	0.00		0.06	0.50	0.00		0.07	0.50	0.00
Sat Flow, veh/h		3483	5147	1598		3483	5147	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		355	273	0		123	629	0		155	1672	0		174	1227	0
Grp Sat Flow(s),veh/h/ln		1742	1716	1598		1742	1716	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		14.1	5.9	0.0		4.9	16.0	0.0		6.2	34.2	0.0		6.9	22.0	0.0
Cycle Q Clear(g_c), s		14.1	5.9	0.0		4.9	16.0	0.0		6.2	34.2	0.0		6.9	22.0	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		414	1286			174	933			207	2550			227	2579	
V/C Ratio(X)		0.86	0.21			0.70	0.67			0.75	0.66			0.77	0.48	
Avail Cap(c_a), veh/h		879	1496			1003	1672			631	2550			631	2579	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		60.8	41.8	0.0		65.8	53.7	0.0		65.1	26.5	0.0		64.7	23.0	0.0
Incr Delay (d2), s/veh		2.0	0.1	0.0		1.9	1.5	0.0		2.0	1.3	0.0		2.0	0.6	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		6.3	2.6	0.0		2.2	7.1	0.0		2.8	14.2	0.0		3.1	9.1	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		62.9	41.9	0.0		67.7	55.2	0.0		67.1	27.9	0.0		66.7	23.6	0.0
LnGrp LOS		E	D			E	E			E	C			E	C	
Approach Vol, veh/h			628	A			752	A			1827	A			1401	A
Approach Delay, s/veh			53.8				57.2				31.2				29.0	
Approach LOS			D				E				C				C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	75.8	21.2	30.8	13.7	75.0	11.5	40.5
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	* 5.3
Max Green Setting (Gmax), s	25.5	69.7	35.5	45.7	25.5	69.7	40.5	* 41
Max Q Clear Time (g_c+I1), s	18.2	24.0	16.1	18.0	8.9	36.2	6.9	7.9
Green Ext Time (p_c), s	0.2	28.5	0.6	7.5	0.3	28.9	0.2	3.1

Intersection Summary	
HCM 6th Ctrl Delay	37.8
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: E. Bidwell & Via sole

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	3	50	0	68	26	0	14	0	1830	11	0	5	1415	119
Future Volume (veh/h)	3	50	0	68	26	0	14	0	1830	11	0	5	1415	119
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No			No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		53	0	72	28	0	15	0	1947	12		5	1505	127
Peak Hour Factor		0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1		1	1	1
Cap, veh/h		248	0	110	34	0	18	3	3499	1086		0	3499	1086
Arrive On Green		0.07	0.00	0.07	0.03	0.00	0.03	0.00	0.68	0.68		0.00	0.68	0.68
Sat Flow, veh/h		3591	0	1598	1121	0	600	1795	5147	1598		0	5147	1598
Grp Volume(v), veh/h		53	0	72	43	0	0	0	1947	12		0	1505	127
Grp Sat Flow(s),veh/h/ln		1795	0	1598	1721	0	0	1795	1716	1598		0	1716	1598
Q Serve(g_s), s		0.9	0.0	2.8	1.6	0.0	0.0	0.0	12.6	0.2		0.0	8.6	1.8
Cycle Q Clear(g_c), s		0.9	0.0	2.8	1.6	0.0	0.0	0.0	12.6	0.2		0.0	8.6	1.8
Prop In Lane		1.00		1.00	0.65		0.35	1.00		1.00		0.00		1.00
Lane Grp Cap(c), veh/h		248	0	110	53	0	0	3	3499	1086		0	3499	1086
V/C Ratio(X)		0.21	0.00	0.65	0.82	0.00	0.00	0.00	0.56	0.01		0.00	0.43	0.12
Avail Cap(c_a), veh/h		1135	0	505	411	0	0	429	3943	1224		0	3943	1224
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00		0.00	1.00	1.00
Uniform Delay (d), s/veh		28.5	0.0	29.4	31.3	0.0	0.0	0.0	5.3	3.3		0.0	4.7	3.6
Incr Delay (d2), s/veh		0.2	0.0	2.4	10.9	0.0	0.0	0.0	0.3	0.0		0.0	0.2	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.4	0.0	1.1	0.8	0.0	0.0	0.0	3.1	0.0		0.0	2.1	0.4
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		28.7	0.0	31.8	42.2	0.0	0.0	0.0	5.6	3.4		0.0	4.9	3.7
LnGrp LOS		C	A	C	D	A	A	A	A	A		A	A	A
Approach Vol, veh/h			125			43			1959				1632	
Approach Delay, s/veh			30.5			42.2			5.6				4.8	
Approach LOS			C			D			A				A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	49.4		6.5	0.0	49.4		9.0
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	15.5	49.7		15.5	15.5	49.7		20.5
Max Q Clear Time (g_c+I1), s	10.6	10.6		3.6	0.0	14.6		4.8
Green Ext Time (p_c), s	0.0	29.0		0.1	0.0	29.5		0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.5
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
6: E. Bidwell & Via Felice

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	52	0	131	6	1	0	3	103	1759	2	30	0	1364	115
Future Volume (veh/h)	3	52	0	131	6	1	0	3	103	1759	2	30	0	1364	115
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		57	0	142	7	1	0		112	1912	2		0	1483	125
Peak Hour Factor		0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		411	0	183	11	2	0		144	3545	1101		95	2825	877
Arrive On Green		0.11	0.00	0.11	0.01	0.01	0.00		0.08	0.69	0.69		0.00	0.55	0.55
Sat Flow, veh/h		3591	0	1598	1580	226	0		1795	5147	1598		236	5147	1598
Grp Volume(v), veh/h		57	0	142	8	0	0		112	1912	2		0	1483	125
Grp Sat Flow(s),veh/h/ln		1795	0	1598	1806	0	0		1795	1716	1598		236	1716	1598
Q Serve(g_s), s		1.1	0.0	6.5	0.3	0.0	0.0		4.6	13.9	0.0		0.0	13.8	2.9
Cycle Q Clear(g_c), s		1.1	0.0	6.5	0.3	0.0	0.0		4.6	13.9	0.0		0.0	13.8	2.9
Prop In Lane		1.00		1.00	0.87		0.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		411	0	183	13	0	0		144	3545	1101		95	2825	877
V/C Ratio(X)		0.14	0.00	0.78	0.62	0.00	0.00		0.78	0.54	0.00		0.00	0.52	0.14
Avail Cap(c_a), veh/h		975	0	434	371	0	0		369	3545	1101		121	3388	1052
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	0.00	0.00		1.00	1.00	1.00		0.00	1.00	1.00
Uniform Delay (d), s/veh		30.1	0.0	32.5	37.4	0.0	0.0		34.1	5.8	3.7		0.0	10.8	8.3
Incr Delay (d2), s/veh		0.1	0.0	2.7	16.5	0.0	0.0		3.4	0.3	0.0		0.0	0.4	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		0.5	0.0	2.6	0.2	0.0	0.0		2.1	3.8	0.0		0.0	4.7	0.9
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		30.1	0.0	35.1	53.9	0.0	0.0		37.4	6.1	3.7		0.0	11.2	8.5
LnGrp LOS		C	A	D	D	A	A		D	A	A		A	B	A
Approach Vol, veh/h			199			8				2026				1608	
Approach Delay, s/veh			33.7			53.9				7.9				11.0	
Approach LOS			C			D				A				B	

Timer - Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.6	46.7		5.0		57.3		13.1
Change Period (Y+Rc), s	4.5	5.3		4.5		5.3		4.5
Max Green Setting (Gmax), s	15.5	49.7		15.5		49.7		20.5
Max Q Clear Time (g_c+I1), s	10.6	15.8		2.3		15.9		8.5
Green Ext Time (p_c), s	0.1	25.7		0.0		29.3		0.3

Intersection Summary	
HCM 6th Ctrl Delay	10.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
7: E. Bidwell & Iron Point

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	5	229	263	560	586	376	253	1059	1380	691	5	260	1137	102
Future Volume (veh/h)	5	229	263	560	586	376	253	1059	1380	691	5	260	1137	102
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No			No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		234	268	571	598	384	258	1081	1408	705		265	1160	104
Peak Hour Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98		0.98	0.98	0.98
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1		1	1	1
Cap, veh/h		298	456	556	660	1190	369	769	2153	668		332	1508	468
Arrive On Green		0.09	0.13	0.13	0.19	0.23	0.23	0.22	0.42	0.42		0.10	0.29	0.29
Sat Flow, veh/h		3483	3582	1598	3483	5147	1598	3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		234	268	571	598	384	258	1081	1408	705		265	1160	104
Grp Sat Flow(s),veh/h/ln		1742	1791	1598	1742	1716	1598	1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		7.6	8.2	14.7	19.4	7.2	17.1	25.5	25.3	48.3		8.6	23.8	5.7
Cycle Q Clear(g_c), s		7.6	8.2	14.7	19.4	7.2	17.1	25.5	25.3	48.3		8.6	23.8	5.7
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		298	456	556	660	1190	369	769	2153	668		332	1508	468
V/C Ratio(X)		0.79	0.59	1.03	0.91	0.32	0.70	1.41	0.65	1.05		0.80	0.77	0.22
Avail Cap(c_a), veh/h		527	456	556	738	1190	369	769	2153	668		708	1590	494
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		51.8	47.6	37.7	45.8	36.9	40.7	45.0	26.9	33.6		51.2	37.3	30.9
Incr Delay (d2), s/veh		1.8	3.4	45.4	13.0	0.5	8.3	190.7	1.0	50.1		1.7	3.1	0.7
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		3.4	3.9	22.4	9.5	3.1	7.6	31.3	10.4	27.4		3.8	10.3	2.3
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		53.6	51.0	83.0	58.9	37.4	49.0	235.7	27.9	83.7		52.9	40.4	31.6
LnGrp LOS		D	D	F	E	D	D	F	C	F		D	D	C
Approach Vol, veh/h			1073			1240			3194				1529	
Approach Delay, s/veh			68.6			50.1			110.6				41.9	
Approach LOS			E			D			F				D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.0	39.2	14.4	32.0	15.5	53.6	26.4	20.0
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	5.3
Max Green Setting (Gmax), s	25.5	35.7	17.5	21.7	23.5	37.7	24.5	14.7
Max Q Clear Time (g_c+I1), s	27.5	25.8	9.6	19.1	10.6	50.3	21.4	16.7
Green Ext Time (p_c), s	0.0	8.1	0.3	1.5	0.4	0.0	0.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	78.6
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
8: E. Bidwell & Placerville

08/31/2021

HCM 6th Edition methodology does not support custom phasing.

HCM 6th Signalized Intersection Summary
9: E. Bidwell & WB offramp

08/31/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	229	1285	1826	826	0	1250
Future Volume (veh/h)	229	1285	1826	826	0	1250
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	234	1311	1863	0	0	1276
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	1471	1187	1741		0	2377
Arrive On Green	0.43	0.43	0.47	0.00	0.00	0.47
Sat Flow, veh/h	3428	2768	3711	1572	0	5400
Grp Volume(v), veh/h	234	1311	1863	0	0	1276
Grp Sat Flow(s),veh/h/ln	1714	1384	1856	1572	0	1689
Q Serve(g_s), s	4.5	45.9	50.2	0.0	0.0	19.1
Cycle Q Clear(g_c), s	4.5	45.9	50.2	0.0	0.0	19.1
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	1471	1187	1741		0	2377
V/C Ratio(X)	0.16	1.10	1.07		0.00	0.54
Avail Cap(c_a), veh/h	1471	1187	1741		0	2377
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	18.7	30.5	28.4	0.0	0.0	20.2
Incr Delay (d2), s/veh	0.1	59.6	43.1	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	24.4	31.5	0.0	0.0	7.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.8	90.1	71.5	0.0	0.0	20.5
LnGrp LOS	B	F	F		A	C
Approach Vol, veh/h	1545		1863	A		1276
Approach Delay, s/veh	79.3		71.5			20.5
Approach LOS	E		E			C

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	56.0				56.0	51.0
Change Period (Y+Rc), s	5.8				5.8	5.1
Max Green Setting (Gmax), s	50.2				50.2	45.9
Max Q Clear Time (g_c+I1), s	52.2				21.1	47.9
Green Ext Time (p_c), s	0.0				15.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	60.2
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
10: E. Bidwell & EB offramp

08/31/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	939	579	0	1713	851	628
Future Volume (veh/h)	939	579	0	1713	851	628
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	0	1856	1856	1856
Adj Flow Rate, veh/h	988	609	0	1803	1109	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	0	3	3	3
Cap, veh/h	1316	604	0	1353	1424	
Arrive On Green	0.38	0.38	0.00	0.38	0.38	0.00
Sat Flow, veh/h	3428	1572	0	3711	3711	1572
Grp Volume(v), veh/h	988	609	0	1803	1109	0
Grp Sat Flow(s),veh/h/ln	1714	1572	0	1763	1856	1572
Q Serve(g_s), s	11.7	18.0	0.0	18.0	12.3	0.0
Cycle Q Clear(g_c), s	11.7	18.0	0.0	18.0	12.3	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1316	604	0	1353	1424	
V/C Ratio(X)	0.75	1.01	0.00	1.33	0.78	
Avail Cap(c_a), veh/h	1316	604	0	1353	1424	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.5	14.4	0.0	14.5	12.7	0.0
Incr Delay (d2), s/veh	2.5	38.9	0.0	154.8	3.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	11.6	0.0	34.7	4.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.1	53.4	0.0	169.2	15.7	0.0
LnGrp LOS	B	F	A	F	B	
Approach Vol, veh/h	1597			1803	1109	A
Approach Delay, s/veh	29.7			169.2	15.7	
Approach LOS	C			F	B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	23.8		23.1		23.8
Change Period (Y+Rc), s	5.8		5.1		5.8
Max Green Setting (Gmax), s	18.0		18.0		18.0
Max Q Clear Time (g_c+I1), s	20.0		20.0		14.3
Green Ext Time (p_c), s	0.0		0.0		2.7

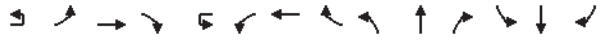
Intersection Summary	
HCM 6th Ctrl Delay	82.0
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
11: Driveway/Marketplace & Broadstone

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	2	72	603	25	6	9	664	11	61	0	16	12	0	58
Future Volume (veh/h)	2	72	603	25	6	9	664	11	61	0	16	12	0	58
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		82	685	28		10	755	12	69	0	18	14	0	66
Peak Hour Factor		0.88	0.88	0.88		0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		141	1697	757		28	1472	656	128	0	210	38	0	130
Arrive On Green		0.08	0.47	0.47		0.02	0.41	0.41	0.07	0.00	0.13	0.02	0.00	0.08
Sat Flow, veh/h		1795	3582	1598		1795	3582	1598	1795	0	1598	1795	0	1598
Grp Volume(v), veh/h		82	685	28		10	755	12	69	0	18	14	0	66
Grp Sat Flow(s),veh/h/ln		1795	1791	1598		1795	1791	1598	1795	0	1598	1795	0	1598
Q Serve(g_s), s		2.4	6.8	0.5		0.3	8.6	0.2	2.0	0.0	0.5	0.4	0.0	2.2
Cycle Q Clear(g_c), s		2.4	6.8	0.5		0.3	8.6	0.2	2.0	0.0	0.5	0.4	0.0	2.2
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		141	1697	757		28	1472	656	128	0	210	38	0	130
V/C Ratio(X)		0.58	0.40	0.04		0.36	0.51	0.02	0.54	0.00	0.09	0.37	0.00	0.51
Avail Cap(c_a), veh/h		673	2257	1007		673	2257	1007	673	0	1039	673	0	1039
HCM Platoon Ratio		1.00	1.00	1.00		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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh		24.2	9.3	7.7		26.5	12.0	9.5	24.4	0.0	20.8	26.3	0.0	24.0
Incr Delay (d2), s/veh		1.4	0.6	0.1		2.9	1.0	0.0	1.3	0.0	0.1	2.2	0.0	1.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.0	2.3	0.2		0.1	3.1	0.1	0.8	0.0	0.2	0.2	0.0	0.8
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		25.6	9.9	7.7		29.4	13.0	9.6	25.7	0.0	20.8	28.5	0.0	25.1
LnGrp LOS		C	A	A		C	B	A	C	A	C	C	A	C
Approach Vol, veh/h			795				777			87			80	
Approach Delay, s/veh			11.4				13.1			24.7			25.7	
Approach LOS			B				B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	31.5	5.7	11.8	8.9	28.1	8.5	9.0
Change Period (Y+Rc), s	4.6	5.7	4.6	4.6	4.6	5.7	4.6	4.6
Max Green Setting (Gmax), s	20.4	34.3	20.4	35.4	20.4	34.3	20.4	35.4
Max Q Clear Time (g_c+I1), s	2.3	8.8	2.4	2.5	4.4	10.6	4.0	4.2
Green Ext Time (p_c), s	0.0	11.3	0.0	0.0	0.0	11.8	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th AWSC
12:

08/31/2021

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

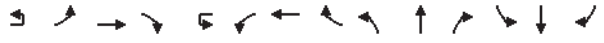
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	0	0	3	8	7
Future Vol, veh/h	2	0	0	3	8	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	2	0	0	3	9	8
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.2	6.4	6.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	53%
Vol Thru, %	0%	0%	0%
Vol Right, %	0%	100%	47%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	2	3	15
LT Vol	2	0	8
Through Vol	0	0	0
RT Vol	0	3	7
Lane Flow Rate	2	3	16
Geometry Grp	1	1	1
Degree of Util (X)	0.003	0.003	0.017
Departure Headway (Hd)	4.147	3.346	3.753
Convergence, Y/N	Yes	Yes	Yes
Cap	867	1074	959
Service Time	2.153	1.353	1.755
HCM Lane V/C Ratio	0.002	0.003	0.017
HCM Control Delay	7.2	6.4	6.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0	0	0.1

HCM 6th Signalized Intersection Summary
13: Cavitt & Broadstone

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	9	25	536	67	2	26	610	15	47	43	31	8	37	24
Future Volume (veh/h)	9	25	536	67	2	26	610	15	47	43	31	8	37	24
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		29	616	77		30	701	17	54	49	36	9	43	28
Peak Hour Factor		0.87	0.87	0.87		0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		60	1523	679		62	1526	681	97	202	171	21	122	104
Arrive On Green		0.03	0.43	0.43		0.03	0.43	0.43	0.05	0.11	0.11	0.01	0.06	0.06
Sat Flow, veh/h		1795	3582	1598		1795	3582	1598	1795	1885	1598	1795	1885	1598
Grp Volume(v), veh/h		29	616	77		30	701	17	54	49	36	9	43	28
Grp Sat Flow(s),veh/h/ln		1795	1791	1598		1795	1791	1598	1795	1885	1598	1795	1885	1598
Q Serve(g_s), s		0.7	5.5	1.3		0.8	6.4	0.3	1.4	1.1	0.9	0.2	1.0	0.8
Cycle Q Clear(g_c), s		0.7	5.5	1.3		0.8	6.4	0.3	1.4	1.1	0.9	0.2	1.0	0.8
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		60	1523	679		62	1526	681	97	202	171	21	122	104
V/C Ratio(X)		0.48	0.40	0.11		0.48	0.46	0.02	0.56	0.24	0.21	0.42	0.35	0.27
Avail Cap(c_a), veh/h		799	2684	1197		799	2684	1197	799	1437	1218	799	1437	1218
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		21.9	9.2	8.0		21.8	9.4	7.7	21.2	18.8	18.8	22.6	20.6	20.5
Incr Delay (d2), s/veh		2.2	0.7	0.3		2.2	0.7	0.0	1.8	0.2	0.2	4.9	0.6	0.5
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.3	1.8	0.4		0.3	2.1	0.1	0.6	0.4	0.3	0.1	0.4	0.3
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		24.0	9.9	8.3		24.0	10.1	7.7	23.1	19.1	19.0	27.5	21.2	21.0
LnGrp LOS		C	A	A		C	B	A	C	B	B	C	C	C
Approach Vol, veh/h			722				748			139			80	
Approach Delay, s/veh			10.3				10.6			20.6			21.9	
Approach LOS			B				B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	25.1	5.0	9.8	6.0	25.1	7.0	7.9
Change Period (Y+Rc), s	4.5	5.5	4.5	4.9	4.5	5.5	4.5	4.9
Max Green Setting (Gmax), s	20.5	34.5	20.5	35.1	20.5	34.5	20.5	35.1
Max Q Clear Time (g_c+I1), s	2.8	7.5	2.2	3.1	2.7	8.4	3.4	3.0
Green Ext Time (p_c), s	0.0	11.6	0.0	0.2	0.0	11.2	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th TWSC
14: Cavitt & Kilrush

08/31/2021

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	5	0	3	14	0	34	1	82	8	29	99	2
Future Vol, veh/h	5	0	3	14	0	34	1	82	8	29	99	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	90	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	6	0	3	16	0	38	1	91	9	32	110	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	292	277	111	270	269	91	112	0	0	100	0	0
Stage 1	175	175	-	93	93	-	-	-	-	-	-	-
Stage 2	117	102	-	177	176	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	662	632	945	685	639	969	1484	-	-	1499	-	-
Stage 1	829	756	-	916	820	-	-	-	-	-	-	-
Stage 2	890	813	-	827	755	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	626	618	945	671	625	969	1484	-	-	1499	-	-
Mov Cap-2 Maneuver	626	618	-	671	625	-	-	-	-	-	-	-
Stage 1	828	740	-	915	819	-	-	-	-	-	-	-
Stage 2	854	812	-	806	739	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	9.5	0.1	1.7
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1484	-	-	717	858	1499	-	-
HCM Lane V/C Ratio	0.001	-	-	0.012	0.062	0.021	-	-
HCM Control Delay (s)	7.4	-	-	10.1	9.5	7.5	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0.1	-	-

HCM 6th Signalized Intersection Summary
15: Cavitt & Iron Point

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	9	21	697	487	33	948	35	223	35	53	29	52
Future Volume (veh/h)	9	21	697	487	33	948	35	223	35	53	29	52
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj		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		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		21	711	497	34	967	36	254	0	54	30	53
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
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		129	2468	766	129	2468	766	376	0	167	116	122
Arrive On Green		0.07	0.48	0.48	0.07	0.48	0.48	0.10	0.00	0.10	0.06	0.06
Sat Flow, veh/h		1795	5147	1598	1795	5147	1598	3591	0	1598	1795	1885
Grp Volume(v), veh/h		21	711	497	34	967	36	254	0	54	30	53
Grp Sat Flow(s),veh/h/ln		1795	1716	1598	1795	1716	1598	1795	0	1598	1795	1885
Q Serve(g_s), s		0.8	5.8	16.4	1.2	8.4	0.8	4.8	0.0	2.2	1.1	1.9
Cycle Q Clear(g_c), s		0.8	5.8	16.4	1.2	8.4	0.8	4.8	0.0	2.2	1.1	1.9
Prop In Lane		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		129	2468	766	129	2468	766	376	0	167	116	122
V/C Ratio(X)		0.16	0.29	0.65	0.26	0.39	0.05	0.68	0.00	0.32	0.26	0.44
Avail Cap(c_a), veh/h		656	2951	916	656	2951	916	2085	0	928	1042	1095
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		30.4	11.0	13.7	30.6	11.6	9.7	30.1	0.0	28.9	31.0	31.4
Incr Delay (d2), s/veh		0.2	0.2	3.6	0.4	0.4	0.1	0.8	0.0	0.4	0.4	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
%ile BackOfQ(50%),veh/ln		0.3	2.0	6.0	0.5	3.0	0.3	2.0	0.0	0.8	0.5	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		30.6	11.2	17.3	31.0	12.1	9.8	30.9	0.0	29.4	31.5	32.3
LnGrp LOS		C	B	B	C	B	A	C	A	C	C	C
Approach Vol, veh/h			1229			1037			308			119
Approach Delay, s/veh			14.0			12.6			30.6			32.0
Approach LOS			B			B			C			C

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	39.5		9.0	9.5	39.5		11.8				
Change Period (Y+Rc), s	4.5	6.0		4.5	4.5	6.0		4.5				
Max Green Setting (Gmax), s	25.5	40.0		40.5	25.5	40.0		40.5				
Max Q Clear Time (g_c+I1), s	2.8	10.4		3.9	3.2	18.4		6.8				
Green Ext Time (p_c), s	0.0	17.9		0.3	0.0	15.1		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	35
Future Volume (veh/h)	35
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1885
Adj Flow Rate, veh/h	36
Peak Hour Factor	0.98
Percent Heavy Veh, %	1
Cap, veh/h	103
Arrive On Green	0.06
Sat Flow, veh/h	1598
Grp Volume(v), veh/h	36
Grp Sat Flow(s),veh/h/ln	1598
Q Serve(g_s), s	1.5
Cycle Q Clear(g_c), s	1.5
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	103
V/C Ratio(X)	0.35
Avail Cap(c_a), veh/h	928
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	31.2
Incr Delay (d2), s/veh	0.7
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.6
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	32.0
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM Signalized Intersection Capacity Analysis
8: E. Bidwell & Placerville

07/15/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	207	0	2923	188	84	1250	949
Future Volume (vph)	0	0	0	0	0	207	0	2923	188	84	1250	949
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)						5.0		5.3	5.3	5.0	2.0	4.0
Lane Util. Factor						1.00		0.91	1.00	1.00	0.86	0.86
Frt						0.86		1.00	0.85	1.00	0.96	0.85
Flt Protected						1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)						1627		5136	1599	1787	4662	1375
Flt Permitted						1.00		1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)						1627		5136	1599	301	4662	1375
Peak-hour factor, PHF	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)	0	0	0	0	0	223	0	3143	202	90	1344	1020
RTOR Reduction (vph)	0	0	0	0	0	20	0	0	48	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	203	0	3143	154	90	1823	541
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type						Perm		NA	Perm	custom	NA	Free
Protected Phases								2			6	
Permitted Phases						1			2	1		Free
Actuated Green, G (s)						25.0		55.7	55.7	25.0	91.0	91.0
Effective Green, g (s)						25.0		55.7	55.7	25.0	91.0	91.0
Actuated g/C Ratio						0.27		0.61	0.61	0.27	1.00	1.00
Clearance Time (s)						5.0		5.3	5.3	5.0	2.0	
Vehicle Extension (s)						2.0		6.1	6.1	2.0	3.0	
Lane Grp Cap (vph)						446		3143	978	82	4662	1375
v/s Ratio Prot								c0.61			0.39	
v/s Ratio Perm						0.12			0.10	c0.30		0.39
v/c Ratio						0.45		1.00	0.16	1.10	0.39	0.39
Uniform Delay, d1						27.3		17.6	7.6	33.0	0.0	0.0
Progression Factor						1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2						0.3		16.1	0.2	128.4	0.2	0.8
Delay (s)						27.6		33.7	7.8	161.4	0.2	0.8
Level of Service						C		C	A	F	A	A
Approach Delay (s)		0.0			27.6			32.1			6.3	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	91.0	Sum of lost time (s)	10.3
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (veh/h)	3	99	0	22	3	28	0	36	3	41	1996	37
Future Volume (veh/h)	3	99	0	22	3	28	0	36	3	41	1996	37
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		102	0	23		29	0	37		42	2058	38
Peak Hour Factor		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1
Cap, veh/h		125	0	28		186	0	83		54	3380	1049
Arrive On Green		0.09	0.00	0.09		0.05	0.00	0.05		0.03	0.66	0.66
Sat Flow, veh/h		1432	0	323		3591	0	1598		1795	5147	1598
Grp Volume(v), veh/h		125	0	0		29	0	37		42	2058	38
Grp Sat Flow(s),veh/h/ln		1755	0	0		1795	0	1598		1795	1716	1598
Q Serve(g_s), s		8.4	0.0	0.0		0.9	0.0	2.7		2.8	27.4	1.0
Cycle Q Clear(g_c), s		8.4	0.0	0.0		0.9	0.0	2.7		2.8	27.4	1.0
Prop In Lane		0.82		0.18		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		153	0	0		186	0	83		54	3380	1049
V/C Ratio(X)		0.82	0.00	0.00		0.16	0.00	0.45		0.78	0.61	0.04
Avail Cap(c_a), veh/h		227	0	0		733	0	326		172	3380	1049
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	0.00		1.00	0.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		53.8	0.0	0.0		54.4	0.0	55.2		57.8	11.8	7.2
Incr Delay (d2), s/veh		13.4	0.0	0.0		0.4	0.0	3.7		8.5	0.8	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		4.3	0.0	0.0		0.4	0.0	1.2		1.4	10.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		67.2	0.0	0.0		54.8	0.0	58.9		66.3	12.6	7.3
LnGrp LOS		E	A	A		D	A	E		E	B	A
Approach Vol, veh/h			125				66				2138	
Approach Delay, s/veh			67.2				57.1				13.6	
Approach LOS			E				E				B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	86.2		10.7	10.2	84.1		15.0
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	11.5	49.7		24.5	24.5	36.7		15.5
Max Q Clear Time (g_c+I1), s	4.8	27.4		4.7	5.7	29.4		10.4
Green Ext Time (p_c), s	0.0	18.6		0.1	0.2	6.7		0.2

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
1: E. Bidwell & Nesmith/College

08/31/2021

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Volume (veh/h)	3	106	1964	60
Future Volume (veh/h)	3	106	1964	60
Initial Q (Qb), veh		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00
Work Zone On Approach			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885
Adj Flow Rate, veh/h		109	2025	62
Peak Hour Factor		0.97	0.97	0.97
Percent Heavy Veh, %		1	1	1
Cap, veh/h		165	3469	1077
Arrive On Green		0.05	0.67	0.67
Sat Flow, veh/h		3483	5147	1598
Grp Volume(v), veh/h		109	2025	62
Grp Sat Flow(s),veh/h/ln		1742	1716	1598
Q Serve(g_s), s		3.7	25.4	1.6
Cycle Q Clear(g_c), s		3.7	25.4	1.6
Prop In Lane		1.00		1.00
Lane Grp Cap(c), veh/h		165	3469	1077
V/C Ratio(X)		0.66	0.58	0.06
Avail Cap(c_a), veh/h		711	3469	1077
HCM Platoon Ratio		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00
Uniform Delay (d), s/veh		56.2	10.5	6.6
Incr Delay (d2), s/veh		1.7	0.7	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.7	9.1	0.5
Unsig. Movement Delay, s/veh				
LnGrp Delay(d),s/veh		57.9	11.2	6.7
LnGrp LOS		E	B	A
Approach Vol, veh/h			2196	
Approach Delay, s/veh			13.4	
Approach LOS			B	

Timer - Assigned Phs

HCM 6th Signalized Intersection Summary
2: E. Bidwell & Scholar

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	125	64	66	3	118	54	208	3	141	1741	119	3	136	1683	195
Future Volume (veh/h)	3	125	64	66	3	118	54	208	3	141	1741	119	3	136	1683	195
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		126	65	0		119	55	0		142	1759	0		137	1700	0
Peak Hour Factor		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		184	91			145	273			198	3376			192	3367	
Arrive On Green		0.05	0.05	0.00		0.08	0.08	0.00		0.06	0.66	0.00		0.06	0.65	0.00
Sat Flow, veh/h		3483	1885	1598		1795	3582	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		126	65	0		119	55	0		142	1759	0		137	1700	0
Grp Sat Flow(s),veh/h/ln		1742	1885	1598		1795	1791	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		4.3	4.1	0.0		7.8	1.7	0.0		4.8	21.4	0.0		4.6	20.5	0.0
Cycle Q Clear(g_c), s		4.3	4.1	0.0		7.8	1.7	0.0		4.8	21.4	0.0		4.6	20.5	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		184	91			145	273			198	3376			192	3367	
V/C Ratio(X)		0.69	0.72			0.82	0.20			0.72	0.52			0.71	0.50	
Avail Cap(c_a), veh/h		595	379			247	600			479	3376			334	3367	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		55.9	56.3	0.0		54.3	52.0	0.0		55.6	10.8	0.0		55.8	10.7	0.0
Incr Delay (d2), s/veh		1.7	22.0	0.0		4.3	0.4	0.0		1.8	0.6	0.0		1.8	0.5	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.9	2.5	0.0		3.7	0.8	0.0		2.2	7.8	0.0		2.1	7.5	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		57.5	78.3	0.0		58.5	52.4	0.0		57.5	11.4	0.0		57.6	11.3	0.0
LnGrp LOS		E	E			E	D			E	B			E	B	
Approach Vol, veh/h			191	A			174	A			1901	A			1837	A
Approach Delay, s/veh			64.6				56.6				14.8				14.7	
Approach LOS			E				E				B				B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	83.8	10.8	14.0	11.1	84.0	14.2	10.7
Change Period (Y+Rc), s	4.5	5.3	4.5	4.9	4.5	5.3	4.5	4.9
Max Green Setting (Gmax), s	6.5	43.7	20.5	20.1	11.5	48.7	16.5	24.1
Max Q Clear Time (g_c+I1), s	10.8	22.5	6.3	3.7	6.6	23.4	9.8	6.1
Green Ext Time (p_c), s	0.1	19.4	0.2	0.2	0.0	22.9	0.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: E. Bidwell & Power Center

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	168	47	164	136	14	151	3	379	1682	185	3	154	1554	159
Future Volume (veh/h)	3	168	47	164	136	14	151	3	379	1682	185	3	154	1554	159
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		108	133	166	137	14	153		383	1699	187		156	1570	161
Peak Hour Factor		0.99	0.99	0.99	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		215	226	192	185	19	180		232	2615	812		184	2477	769
Arrive On Green		0.12	0.12	0.12	0.11	0.11	0.11		0.13	0.51	0.51		0.10	0.48	0.48
Sat Flow, veh/h		1795	1885	1598	1636	167	1598		1795	5147	1598		1795	5147	1598
Grp Volume(v), veh/h		108	133	166	151	0	153		383	1699	187		156	1570	161
Grp Sat Flow(s),veh/h/ln		1795	1885	1598	1803	0	1598		1795	1716	1598		1795	1716	1598
Q Serve(g_s), s		6.8	8.0	12.2	9.7	0.0	11.3		15.5	29.1	7.8		10.3	27.3	7.0
Cycle Q Clear(g_c), s		6.8	8.0	12.2	9.7	0.0	11.3		15.5	29.1	7.8		10.3	27.3	7.0
Prop In Lane		1.00		1.00	0.91		1.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		215	226	192	204	0	180		232	2615	812		184	2477	769
V/C Ratio(X)		0.50	0.59	0.87	0.74	0.00	0.85		1.65	0.65	0.23		0.85	0.63	0.21
Avail Cap(c_a), veh/h		232	244	206	248	0	220		232	2615	812		262	2477	769
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Uniform Delay (d), s/veh		49.4	50.0	51.9	51.5	0.0	52.2		52.2	21.7	16.4		53.0	23.2	18.0
Incr Delay (d2), s/veh		0.7	1.9	26.9	6.7	0.0	19.2		311.7	1.3	0.7		12.0	1.2	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		3.1	3.9	6.3	4.8	0.0	5.5		27.0	11.7	3.0		5.2	11.1	2.7
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		50.1	51.9	78.7	58.3	0.0	71.4		363.9	22.9	17.1		65.0	24.5	18.6
LnGrp LOS		D	D	E	E	A	E		F	C	B		E	C	B
Approach Vol, veh/h			407			304				2269				1887	
Approach Delay, s/veh			62.4			64.9				80.0				27.3	
Approach LOS			E			E				F				C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.0	63.1		18.0	16.8	66.3		18.9
Change Period (Y+Rc), s	4.5	5.3		4.5	4.5	5.3		4.5
Max Green Setting (Gmax), s	25.5	53.7		16.5	17.5	51.7		15.5
Max Q Clear Time (g_c+I1), s	17.5	29.3		13.3	12.3	31.1		14.2
Green Ext Time (p_c), s	0.0	21.3		0.3	0.1	19.2		0.2

Intersection Summary	
HCM 6th Ctrl Delay	57.2
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations																
Traffic Volume (veh/h)	3	429	297	327	3	230	434	101	3	230	1716	509	3	228	1504	122
Future Volume (veh/h)	3	429	297	327	3	230	434	101	3	230	1716	509	3	228	1504	122
Initial Q (Qb), veh		0	0	0		0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		442	306	0		237	447	0		237	1769	0		235	1551	0
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
Percent Heavy Veh, %		1	1	1		1	1	1		1	1	1		1	1	1
Cap, veh/h		450	845			299	623			295	2585			293	2582	
Arrive On Green		0.13	0.16	0.00		0.09	0.12	0.00		0.08	0.50	0.00		0.08	0.50	0.00
Sat Flow, veh/h		3483	5147	1598		3483	5147	1598		3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		442	306	0		237	447	0		237	1769	0		235	1551	0
Grp Sat Flow(s),veh/h/ln		1742	1716	1598		1742	1716	1598		1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		15.2	6.3	0.0		8.0	10.0	0.0		8.0	31.3	0.0		8.0	25.8	0.0
Cycle Q Clear(g_c), s		15.2	6.3	0.0		8.0	10.0	0.0		8.0	31.3	0.0		8.0	25.8	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		450	845			299	623			295	2585			293	2582	
V/C Ratio(X)		0.98	0.36			0.79	0.72			0.80	0.68			0.80	0.60	
Avail Cap(c_a), veh/h		450	845			566	845			392	2585			392	2582	
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	0.00
Uniform Delay (d), s/veh		52.1	44.6	0.0		53.8	50.8	0.0		53.9	22.6	0.0		54.0	21.3	0.0
Incr Delay (d2), s/veh		37.6	0.4	0.0		1.8	2.9	0.0		6.3	1.5	0.0		6.1	1.0	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		9.0	2.7	0.0		3.6	4.5	0.0		3.8	12.7	0.0		3.7	10.4	0.0
Unsig. Movement Delay, s/veh																
LnGrp Delay(d),s/veh		89.7	45.0	0.0		55.6	53.7	0.0		60.3	24.1	0.0		60.1	22.4	0.0
LnGrp LOS		F	D			E	D			E	C			E	C	
Approach Vol, veh/h			748	A			684	A			2006	A			1786	A
Approach Delay, s/veh			71.4				54.4				28.4				27.3	
Approach LOS			E				D				C				C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	65.5	20.0	19.8	14.6	65.6	14.8	25.0
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	* 5.3
Max Green Setting (Gmax), s	13.5	51.7	15.5	19.7	13.5	51.7	19.5	* 16
Max Q Clear Time (g_c+I1), s	10.0	27.8	17.2	12.0	10.0	33.3	10.0	8.3
Green Ext Time (p_c), s	0.2	20.6	0.0	2.5	0.2	17.1	0.3	1.6

Intersection Summary	
HCM 6th Ctrl Delay	37.6
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: E. Bidwell & Via sole

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	100	0	65	18	0	10	3	17	2135	28	8	14	1880	162
Future Volume (veh/h)	3	100	0	65	18	0	10	3	17	2135	28	8	14	1880	162
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		106	0	69	19	0	11		18	2271	30		15	2000	172
Peak Hour Factor		0.94	0.94	0.94	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		218	0	97	0	0	25		22	4139	1285		41	3659	1206
Arrive On Green		0.06	0.00	0.06	0.02	0.00	0.02		0.02	1.00	1.00		0.75	0.75	0.75
Sat Flow, veh/h		3591	0	1598	0	0	1598		1795	5147	1598		14	4849	1598
Grp Volume(v), veh/h		106	0	69	0	0	11		18	2271	30		730	1285	172
Grp Sat Flow(s),veh/h/ln		1795	0	1598	0	0	1598		1795	1716	1598		1741	1561	1598
Q Serve(g_s), s		3.4	0.0	5.1	0.0	0.0	0.8		1.2	0.0	0.0		0.0	20.6	3.6
Cycle Q Clear(g_c), s		3.4	0.0	5.1	0.0	0.0	0.8		1.2	0.0	0.0		18.6	20.6	3.6
Prop In Lane		1.00		1.00	0.00		1.00		1.00		1.00		0.02		1.00
Lane Grp Cap(c), veh/h		218	0	97	0	0	25		22	4139	1285		1344	2356	1206
V/C Ratio(X)		0.49	0.00	0.71	0.00	0.00	0.44		0.83	0.55	0.02		0.54	0.55	0.14
Avail Cap(c_a), veh/h		613	0	273	0	0	206		232	4139	1285		1344	2356	1206
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	0.00	0.00	1.00		0.87	0.87	0.87		1.00	1.00	1.00
Uniform Delay (d), s/veh		54.5	0.0	55.3	0.0	0.0	58.5		58.4	0.0	0.0		5.9	6.1	4.0
Incr Delay (d2), s/veh		0.6	0.0	3.5	0.0	0.0	4.3		22.3	0.5	0.0		1.6	0.9	0.2
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.6	0.0	2.1	0.0	0.0	0.4		0.7	0.2	0.0		6.9	6.1	1.1
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		55.2	0.0	58.8	0.0	0.0	62.9		80.7	0.5	0.0		7.5	7.1	4.3
LnGrp LOS		E	A	E	A	A	E		F	A	A		A	A	A
Approach Vol, veh/h			175			11				2319				2187	
Approach Delay, s/veh			56.6			62.9				1.1				7.0	
Approach LOS			E			E				A				A	

Timer - Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	5.9	95.9		6.4		101.8		11.8
Change Period (Y+Rc), s	4.5	5.3		4.5		5.3		4.5
Max Green Setting (Gmax), s	15.5	49.7		15.5		49.7		20.5
Max Q Clear Time (g_c+I1), s	13.2	22.6		2.8		2.0		7.1
Green Ext Time (p_c), s	0.0	25.2		0.0		42.6		0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
6: E. Bidwell & Via Felice

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	3	121	1	244	5	1	0	3	157	1937	7	125	0	1729	112
Future Volume (veh/h)	3	121	1	244	5	1	0	3	157	1937	7	125	0	1729	112
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No			No				No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		127	0	254	5	1	0		164	2018	7		0	1801	117
Peak Hour Factor		0.96	0.96	0.96	0.96	0.96	0.96		0.96	0.96	0.96		0.96	0.96	0.96
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1		1	1	1
Cap, veh/h		613	0	273	8	2	0		191	3627	1126		60	2886	896
Arrive On Green		0.17	0.00	0.17	0.01	0.01	0.00		0.11	0.70	0.70		0.00	1.00	1.00
Sat Flow, veh/h		3591	0	1598	1508	302	0		1795	5147	1598		213	5147	1598
Grp Volume(v), veh/h		127	0	254	6	0	0		164	2018	7		0	1801	117
Grp Sat Flow(s),veh/h/ln		1795	0	1598	1810	0	0		1795	1716	1598		213	1716	1598
Q Serve(g_s), s		3.6	0.0	18.8	0.4	0.0	0.0		10.8	22.9	0.2		0.0	0.0	0.0
Cycle Q Clear(g_c), s		3.6	0.0	18.8	0.4	0.0	0.0		10.8	22.9	0.2		0.0	0.0	0.0
Prop In Lane		1.00		1.00	0.83		0.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h		613	0	273	10	0	0		191	3627	1126		60	2886	896
V/C Ratio(X)		0.21	0.00	0.93	0.63	0.00	0.00		0.86	0.56	0.01		0.00	0.62	0.13
Avail Cap(c_a), veh/h		613	0	273	234	0	0		232	3627	1126		60	2886	896
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		2.00	2.00	2.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	0.00	0.00		1.00	1.00	1.00		0.00	0.80	0.80
Uniform Delay (d), s/veh		42.8	0.0	49.0	59.6	0.0	0.0		52.7	8.6	5.3		0.0	0.0	0.0
Incr Delay (d2), s/veh		0.1	0.0	35.9	22.4	0.0	0.0		19.9	0.6	0.0		0.0	0.8	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		1.6	0.0	10.2	0.2	0.0	0.0		5.9	7.9	0.1		0.0	0.2	0.1
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		42.8	0.0	85.0	82.0	0.0	0.0		72.7	9.2	5.3		0.0	0.8	0.2
LnGrp LOS		D	A	F	F	A	A		E	A	A		A	A	A
Approach Vol, veh/h			381			6				2189				1918	
Approach Delay, s/veh			70.9			82.0				14.0				0.8	
Approach LOS			E			F				B				A	

Timer - Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	7.3	72.6		5.1		89.9		25.0
Change Period (Y+Rc), s	4.5	5.3		4.5		5.3		4.5
Max Green Setting (Gmax), s	15.5	49.7		15.5		49.7		20.5
Max Q Clear Time (g_c+I1), s	12.8	2.0		2.4		24.9		20.8
Green Ext Time (p_c), s	0.1	39.0		0.0		22.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
7: E. Bidwell & Iron Point

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations															
Traffic Volume (veh/h)	14	179	743	958	1	864	484	350	1021	1572	823	3	150	1656	172
Future Volume (veh/h)	14	179	743	958	1	864	484	350	1021	1572	823	3	150	1656	172
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0		0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach			No				No			No				No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885		1885	1885	1885
Adj Flow Rate, veh/h		185	766	988		891	499	361	1053	1621	848		155	1707	177
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
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1		1	1	1
Cap, veh/h		245	439	455		711	1319	409	566	2306	716		216	1788	555
Arrive On Green		0.07	0.12	0.12		0.20	0.26	0.26	0.27	0.75	0.75		0.06	0.35	0.35
Sat Flow, veh/h		3483	3582	1598		3483	5147	1598	3483	5147	1598		3483	5147	1598
Grp Volume(v), veh/h		185	766	988		891	499	361	1053	1621	848		155	1707	177
Grp Sat Flow(s),veh/h/ln		1742	1791	1598		1742	1716	1598	1742	1716	1598		1742	1716	1598
Q Serve(g_s), s		6.3	14.7	14.7		24.5	9.6	26.1	19.5	20.1	53.8		5.2	38.9	9.8
Cycle Q Clear(g_c), s		6.3	14.7	14.7		24.5	9.6	26.1	19.5	20.1	53.8		5.2	38.9	9.8
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		245	439	455		711	1319	409	566	2306	716		216	1788	555
V/C Ratio(X)		0.75	1.75	2.17		1.25	0.38	0.88	1.86	0.70	1.18		0.72	0.95	0.32
Avail Cap(c_a), veh/h		508	439	455		711	1319	409	566	2306	716		682	1788	555
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.67	1.67	1.67		1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		0.64	0.64	0.64	0.09	0.09	0.09		1.00	1.00	1.00
Uniform Delay (d), s/veh		54.8	52.7	42.9		47.7	36.8	42.9	43.7	10.9	15.1		55.3	38.2	28.7
Incr Delay (d2), s/veh		1.8	344.9	533.7		121.3	0.3	15.0	387.8	0.2	84.5		1.7	12.9	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		2.8	27.6	80.8		22.5	4.1	11.9	38.0	4.5	26.9		2.4	18.2	4.0
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh		56.5	397.6	576.6		169.1	37.1	57.9	431.5	11.0	99.6		57.0	51.2	30.2
LnGrp LOS		E	F	F		F	D	E	F	B	F		E	D	C
Approach Vol, veh/h			1939				1751			3522				2039	
Approach Delay, s/veh			456.3				108.5			158.1				49.8	
Approach LOS			F				F			F				D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	47.0	13.0	36.0	11.9	59.1	29.0	20.0
Change Period (Y+Rc), s	4.5	5.3	4.5	5.3	4.5	5.3	4.5	5.3
Max Green Setting (Gmax), s	9.5	41.7	17.5	21.7	23.5	37.7	24.5	14.7
Max Q Clear Time (g_c+I1), s	21.5	40.9	8.3	28.1	7.2	55.8	26.5	16.7
Green Ext Time (p_c), s	0.0	0.8	0.2	0.0	0.2	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	187.3
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
8: E. Bidwell & Placerville

08/31/2021

HCM 6th Edition methodology does not support custom phasing.

HCM 6th Signalized Intersection Summary
9: E. Bidwell & WB offramp

08/31/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	358	1217	2188	796	0	2241
Future Volume (veh/h)	358	1217	2188	796	0	2241
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	0	1885
Adj Flow Rate, veh/h	373	1268	2279	0	0	2334
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	0	1
Cap, veh/h	1494	1206	1769		0	2415
Arrive On Green	0.43	0.43	0.47	0.00	0.00	0.47
Sat Flow, veh/h	3483	2812	3770	1598	0	5486
Grp Volume(v), veh/h	373	1268	2279	0	0	2334
Grp Sat Flow(s),veh/h/ln	1742	1406	1885	1598	0	1716
Q Serve(g_s), s	7.3	45.9	50.2	0.0	0.0	47.1
Cycle Q Clear(g_c), s	7.3	45.9	50.2	0.0	0.0	47.1
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	1494	1206	1769		0	2415
V/C Ratio(X)	0.25	1.05	1.29		0.00	0.97
Avail Cap(c_a), veh/h	1494	1206	1769		0	2415
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	19.5	30.6	28.4	0.0	0.0	27.6
Incr Delay (d2), s/veh	0.1	40.5	134.2	0.0	0.0	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	21.6	54.4	0.0	0.0	20.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.6	71.0	162.6	0.0	0.0	39.2
LnGrp LOS	B	F	F		A	D
Approach Vol, veh/h	1641		2279	A		2334
Approach Delay, s/veh	59.4		162.6			39.2
Approach LOS	E		F			D

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	56.0				56.0	51.0
Change Period (Y+Rc), s	5.8				5.8	5.1
Max Green Setting (Gmax), s	50.2				50.2	45.9
Max Q Clear Time (g_c+I1), s	52.2				49.1	47.9
Green Ext Time (p_c), s	0.0				1.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	89.4
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
10: E. Bidwell & EB offramp

08/31/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1298	784	0	1686	1390	1209
Future Volume (veh/h)	1298	784	0	1686	1390	1209
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	0	1885	1885	1885
Adj Flow Rate, veh/h	1352	817	0	1756	1983	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	0	1	1	1
Cap, veh/h	1337	613	0	1375	1447	
Arrive On Green	0.38	0.38	0.00	0.38	0.38	0.00
Sat Flow, veh/h	3483	1598	0	3770	3770	1598
Grp Volume(v), veh/h	1352	817	0	1756	1983	0
Grp Sat Flow(s),veh/h/ln	1742	1598	0	1791	1885	1598
Q Serve(g_s), s	18.0	18.0	0.0	18.0	18.0	0.0
Cycle Q Clear(g_c), s	18.0	18.0	0.0	18.0	18.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1337	613	0	1375	1447	
V/C Ratio(X)	1.01	1.33	0.00	1.28	1.37	
Avail Cap(c_a), veh/h	1337	613	0	1375	1447	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.5	14.4	0.0	14.5	14.5	0.0
Incr Delay (d2), s/veh	27.4	160.6	0.0	130.6	171.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	32.5	0.0	30.7	40.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.9	175.0	0.0	145.0	185.6	0.0
LnGrp LOS	F	F	A	F	F	
Approach Vol, veh/h	2169			1756	1983	A
Approach Delay, s/veh	92.0			145.0	185.6	
Approach LOS	F			F	F	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	23.8		23.1		23.8
Change Period (Y+Rc), s	5.8		5.1		5.8
Max Green Setting (Gmax), s	18.0		18.0		18.0
Max Q Clear Time (g_c+I1), s	20.0		20.0		20.0
Green Ext Time (p_c), s	0.0		0.0		0.0

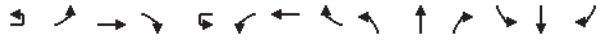
Intersection Summary	
HCM 6th Ctrl Delay	139.2
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
11: Driveway/Marketplace & Broadstone

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	3	241	762	31	12	29	538	91	22	5	7	177	5	205
Future Volume (veh/h)	3	241	762	31	12	29	538	91	22	5	7	177	5	205
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		248	786	32		30	555	94	23	5	7	182	5	211
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
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		297	1579	704		70	1127	503	57	55	77	227	6	269
Arrive On Green		0.17	0.44	0.44		0.04	0.31	0.31	0.03	0.08	0.08	0.13	0.17	0.17
Sat Flow, veh/h		1795	3582	1598		1795	3582	1598	1795	711	995	1795	37	1566
Grp Volume(v), veh/h		248	786	32		30	555	94	23	0	12	182	0	216
Grp Sat Flow(s),veh/h/ln		1795	1791	1598		1795	1791	1598	1795	0	1706	1795	0	1603
Q Serve(g_s), s		8.2	9.7	0.7		1.0	7.7	2.6	0.8	0.0	0.4	6.1	0.0	7.9
Cycle Q Clear(g_c), s		8.2	9.7	0.7		1.0	7.7	2.6	0.8	0.0	0.4	6.1	0.0	7.9
Prop In Lane		1.00		1.00		1.00		1.00	1.00		0.58	1.00		0.98
Lane Grp Cap(c), veh/h		297	1579	704		70	1127	503	57	0	132	227	0	276
V/C Ratio(X)		0.84	0.50	0.05		0.43	0.49	0.19	0.40	0.00	0.09	0.80	0.00	0.78
Avail Cap(c_a), veh/h		595	1995	890		595	1995	890	595	0	980	595	0	921
HCM Platoon Ratio		1.00	1.00	1.00		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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh		24.9	12.3	9.8		28.9	17.1	15.4	29.3	0.0	26.4	26.2	0.0	24.4
Incr Delay (d2), s/veh		2.4	0.9	0.1		1.5	1.2	0.6	1.7	0.0	0.1	2.5	0.0	1.9
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		3.5	3.6	0.2		0.4	3.1	1.0	0.3	0.0	0.2	2.6	0.0	3.0
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		27.3	13.2	9.9		30.4	18.3	16.0	31.0	0.0	26.5	28.7	0.0	26.3
LnGrp LOS		C	B	A		C	B	B	C	A	C	C	A	C
Approach Vol, veh/h			1066				679			35			398	
Approach Delay, s/veh			16.4				18.5			29.4			27.4	
Approach LOS			B				B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	32.8	12.4	9.4	14.8	25.1	6.6	15.2
Change Period (Y+Rc), s	4.6	5.7	4.6	4.6	4.6	5.7	4.6	4.6
Max Green Setting (Gmax), s	20.4	34.3	20.4	35.4	20.4	34.3	20.4	35.4
Max Q Clear Time (g_c+I1), s	3.0	11.7	8.1	2.4	10.2	9.7	2.8	9.9
Green Ext Time (p_c), s	0.0	12.1	0.1	0.0	0.1	9.6	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

HCM 6th AWSC
12:

08/31/2021

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

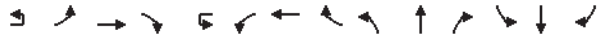
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	0	0	8	5	6
Future Vol, veh/h	8	0	0	8	5	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	9	0	0	9	5	7
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.2	6.4	6.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	45%
Vol Thru, %	0%	0%	0%
Vol Right, %	0%	100%	55%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	8	8	11
LT Vol	8	0	5
Through Vol	0	0	0
RT Vol	0	8	6
Lane Flow Rate	9	9	12
Geometry Grp	1	1	1
Degree of Util (X)	0.01	0.008	0.012
Departure Headway (Hd)	4.145	3.345	3.712
Convergence, Y/N	Yes	Yes	Yes
Cap	868	1075	969
Service Time	2.147	1.349	1.716
HCM Lane V/C Ratio	0.01	0.008	0.012
HCM Control Delay	7.2	6.4	6.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0	0	0

HCM 6th Signalized Intersection Summary
13: Cavitt & Broadstone

08/31/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (veh/h)	6	28	805	119	1	38	562	22	71	61	50	15	28	31
Future Volume (veh/h)	6	28	805	119	1	38	562	22	71	61	50	15	28	31
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		29	830	123		39	579	23	73	63	52	15	29	32
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
Percent Heavy Veh, %		1	1	1		1	1	1	1	1	1	1	1	1
Cap, veh/h		59	1699	758		74	1730	771	112	187	159	34	105	89
Arrive On Green		0.03	0.47	0.47		0.04	0.48	0.48	0.06	0.10	0.10	0.02	0.06	0.06
Sat Flow, veh/h		1795	3582	1598		1795	3582	1598	1795	1885	1598	1795	1885	1598
Grp Volume(v), veh/h		29	830	123		39	579	23	73	63	52	15	29	32
Grp Sat Flow(s),veh/h/ln		1795	1791	1598		1795	1791	1598	1795	1885	1598	1795	1885	1598
Q Serve(g_s), s		0.8	8.4	2.3		1.1	5.3	0.4	2.1	1.6	1.6	0.4	0.8	1.0
Cycle Q Clear(g_c), s		0.8	8.4	2.3		1.1	5.3	0.4	2.1	1.6	1.6	0.4	0.8	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		59	1699	758		74	1730	771	112	187	159	34	105	89
V/C Ratio(X)		0.49	0.49	0.16		0.53	0.33	0.03	0.65	0.34	0.33	0.45	0.28	0.36
Avail Cap(c_a), veh/h		695	2333	1041		695	2333	1041	695	1249	1059	695	1249	1059
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		25.2	9.5	7.9		24.9	8.4	7.2	24.3	22.2	22.2	25.7	24.0	24.1
Incr Delay (d2), s/veh		2.4	0.9	0.4		2.2	0.4	0.1	2.4	0.4	0.4	3.4	0.5	0.9
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.4	2.8	0.7		0.5	1.7	0.1	0.9	0.7	0.6	0.2	0.3	0.4
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh		27.5	10.5	8.4		27.0	8.8	7.2	26.7	22.6	22.6	29.1	24.5	25.0
LnGrp LOS		C	B	A		C	A	A	C	C	C	C	C	C
Approach Vol, veh/h			982				641			188			76	
Approach Delay, s/veh			10.7				9.9			24.2			25.6	
Approach LOS			B				A			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	30.6	5.5	10.2	6.2	31.1	7.8	7.9
Change Period (Y+Rc), s	4.5	5.5	4.5	4.9	4.5	5.5	4.5	4.9
Max Green Setting (Gmax), s	20.5	34.5	20.5	35.1	20.5	34.5	20.5	35.1
Max Q Clear Time (g_c+I1), s	3.1	10.4	2.4	3.6	2.8	7.3	4.1	3.0
Green Ext Time (p_c), s	0.0	14.7	0.0	0.3	0.0	9.4	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th TWSC
14: Cavitt & Kilrush

08/31/2021

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	3	0	2	12	0	19	3	160	17	14	166	5
Future Vol, veh/h	3	0	2	12	0	19	3	160	17	14	166	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	90	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	2	1	1	1	1	1	1
Mvmt Flow	3	0	2	13	0	20	3	170	18	15	177	5

Major/Minor	Minor2			Minor1				Major1			Major2	
Conflicting Flow All	405	404	180	387	388	170	182	0	0	188	0	0
Stage 1	210	210	-	176	176	-	-	-	-	-	-	-
Stage 2	195	194	-	211	212	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.22	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.318	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	558	537	865	573	548	874	1399	-	-	1392	-	-
Stage 1	794	730	-	828	755	-	-	-	-	-	-	-
Stage 2	809	742	-	793	729	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	540	530	865	566	541	874	1399	-	-	1392	-	-
Mov Cap-2 Maneuver	540	530	-	566	541	-	-	-	-	-	-	-
Stage 1	792	722	-	826	753	-	-	-	-	-	-	-
Stage 2	789	741	-	783	721	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	10.2	0.1	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1399	-	-	636	722	1392	-	-
HCM Lane V/C Ratio	0.002	-	-	0.008	0.046	0.011	-	-
HCM Control Delay (s)	7.6	-	-	10.7	10.2	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

HCM 6th Signalized Intersection Summary
15: Cavitt & Iron Point

08/31/2021

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	8	47	1008	654	28	1228	64	3	430	69	96	43
Future Volume (veh/h)	8	47	1008	654	28	1228	64	3	430	69	96	43
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Parking Bus, Adj		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		
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885	1885
Adj Flow Rate, veh/h		49	1061	688	29	1293	67		505	0	101	45
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1	1
Cap, veh/h		104	2372	736	104	2372	736		618	0	275	151
Arrive On Green		0.06	0.46	0.46	0.06	0.46	0.46		0.17	0.00	0.17	0.08
Sat Flow, veh/h		1795	5147	1598	1795	5147	1598		3591	0	1598	1795
Grp Volume(v), veh/h		49	1061	688	29	1293	67		505	0	101	45
Grp Sat Flow(s),veh/h/ln		1795	1716	1598	1795	1716	1598		1795	0	1598	1795
Q Serve(g_s), s		2.3	12.1	35.3	1.3	15.7	2.0		11.7	0.0	4.8	2.0
Cycle Q Clear(g_c), s		2.3	12.1	35.3	1.3	15.7	2.0		11.7	0.0	4.8	2.0
Prop In Lane		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Lane Grp Cap(c), veh/h		104	2372	736	104	2372	736		618	0	275	151
V/C Ratio(X)		0.47	0.45	0.93	0.28	0.55	0.09		0.82	0.00	0.37	0.30
Avail Cap(c_a), veh/h		529	2378	738	529	2378	738		1680	0	748	840
HCM Platoon Ratio		1.00	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	1.00	1.00
Uniform Delay (d), s/veh		39.5	15.8	22.1	39.1	16.8	13.1		34.5	0.0	31.7	37.2
Incr Delay (d2), s/veh		1.2	0.5	20.2	0.5	0.9	0.2		1.0	0.0	0.3	0.4
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.0	4.6	16.3	0.6	6.0	0.8		5.1	0.0	1.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		40.7	16.4	42.3	39.6	17.7	13.4		35.6	0.0	32.0	37.6
LnGrp LOS		D	B	D	D	B	B		D	A	C	D
Approach Vol, veh/h			1798			1389				606		
Approach Delay, s/veh			26.9			17.9				35.0		
Approach LOS			C			B				C		

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	45.9		11.8	9.5	45.9		19.4
Change Period (Y+Rc), s	4.5	6.0		4.5	4.5	6.0		4.5
Max Green Setting (Gmax), s	25.5	40.0		40.5	25.5	40.0		40.5
Max Q Clear Time (g_c+I1), s	4.3	17.7		6.9	3.3	37.3		13.7
Green Ext Time (p_c), s	0.0	18.2		0.5	0.0	2.6		1.2

Intersection Summary	
HCM 6th Ctrl Delay	25.6
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
15: Cavitt & Iron Point

08/31/2021

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	104	33
Future Volume (veh/h)	104	33
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1885	1885
Adj Flow Rate, veh/h	109	35
Peak Hour Factor	0.95	0.95
Percent Heavy Veh, %	1	1
Cap, veh/h	159	134
Arrive On Green	0.08	0.08
Sat Flow, veh/h	1885	1598
Grp Volume(v), veh/h	109	35
Grp Sat Flow(s),veh/h/ln	1885	1598
Q Serve(g_s), s	4.9	1.8
Cycle Q Clear(g_c), s	4.9	1.8
Prop In Lane		1.00
Lane Grp Cap(c), veh/h	159	134
V/C Ratio(X)	0.69	0.26
Avail Cap(c_a), veh/h	882	748
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	1.00	1.00
Uniform Delay (d), s/veh	38.5	37.1
Incr Delay (d2), s/veh	2.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.7
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	40.5	37.5
LnGrp LOS	D	D
Approach Vol, veh/h	189	
Approach Delay, s/veh	39.3	
Approach LOS	D	

Timer - Assigned Phs

HCM Signalized Intersection Capacity Analysis
8: E. Bidwell & Placerville

07/15/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	238	0	3178	227	182	2241	1055
Future Volume (vph)	0	0	0	0	0	238	0	3178	227	182	2241	1055
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)						5.0		5.3	5.3	5.0	2.0	4.0
Lane Util. Factor						1.00		0.91	1.00	1.00	0.86	0.86
Frt						0.86		1.00	0.85	1.00	0.98	0.85
Flt Protected						1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)						1627		5136	1599	1787	4763	1375
Flt Permitted						1.00		1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)						1627		5136	1599	470	4763	1375
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	0	0	245	0	3276	234	188	2310	1088
RTOR Reduction (vph)	0	0	0	0	0	31	0	0	82	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	214	0	3276	152	188	2636	762
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type						Perm		NA	Perm	custom	NA	Free
Protected Phases								2			6	
Permitted Phases						1			2	1		Free
Actuated Green, G (s)						16.0		33.7	33.7	16.0	60.0	60.0
Effective Green, g (s)						16.0		33.7	33.7	16.0	60.0	60.0
Actuated g/C Ratio						0.27		0.56	0.56	0.27	1.00	1.00
Clearance Time (s)						5.0		5.3	5.3	5.0	2.0	
Vehicle Extension (s)						2.0		6.1	6.1	2.0	3.0	
Lane Grp Cap (vph)						433		2884	898	125	4763	1375
v/s Ratio Prot								c0.64			0.55	
v/s Ratio Perm						0.13			0.10	c0.40		0.55
v/c Ratio						0.49		1.14	0.17	1.50	0.55	0.55
Uniform Delay, d1						18.6		13.1	6.4	22.0	0.0	0.0
Progression Factor						1.00		1.00	1.00	1.16	1.00	1.00
Incremental Delay, d2						0.3		66.0	0.4	230.6	0.0	0.1
Delay (s)						18.9		79.1	6.8	256.0	0.0	0.1
Level of Service						B		E	A	F	A	A
Approach Delay (s)		0.0			18.9			74.3			13.5	
Approach LOS		A			B			E			B	

Intersection Summary				
HCM 2000 Control Delay	42.8	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	1.25			
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	10.3	
Intersection Capacity Utilization	84.7%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Queues
1: E. Bidwell & Nesmith/College

08/31/2021

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	74	77	78	18	65	1255	112	150	1390	43
v/c Ratio	0.27	0.31	0.31	0.06	0.36	0.57	0.16	0.40	0.57	0.06
Control Delay	16.2	44.5	44.6	0.4	55.0	24.2	12.6	49.7	23.7	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.2	44.5	44.6	0.4	55.0	24.2	12.6	49.7	23.7	3.5
Queue Length 50th (ft)	3	35	35	0	29	163	14	34	184	0
Queue Length 95th (ft)	54	134	135	0	128	486	85	127	552	15
Internal Link Dist (ft)	615		620			473			1996	
Turn Bay Length (ft)		150			100		160	500		60
Base Capacity (vph)	816	762	762	741	574	4176	1282	1113	4176	1256
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.10	0.10	0.02	0.11	0.30	0.09	0.13	0.33	0.03

Intersection Summary

Queues
2: E. Bidwell & Scholar

08/31/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	115	35	52	86	43	257	109	1060	187	153	1194	220
v/c Ratio	0.42	0.15	0.21	0.51	0.09	0.60	0.46	0.40	0.21	0.55	0.44	0.24
Control Delay	57.3	46.5	8.1	63.1	42.6	11.3	60.0	17.8	6.1	59.5	17.4	6.8
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	57.3	46.5	8.1	63.1	42.6	11.3	60.0	17.8	6.1	59.5	17.4	6.8
Queue Length 50th (ft)	39	22	0	57	14	0	37	139	13	52	157	21
Queue Length 95th (ft)	90	59	24	140	34	71	88	306	74	114	342	95
Internal Link Dist (ft)		296			271			307			296	
Turn Bay Length (ft)	200		200	200		200	250		200	230		200
Base Capacity (vph)	862	736	655	444	1398	770	862	3494	1108	862	3494	1111
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.05	0.08	0.19	0.03	0.33	0.13	0.30	0.17	0.18	0.34	0.20

Intersection Summary

Queues
3: E. Bidwell & Power Center

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	130	130	98	25	51	457	1118	279	127	1200	63
v/c Ratio	0.58	0.58	0.34	0.16	0.27	1.11	0.42	0.33	0.61	0.58	0.10
Control Delay	62.8	62.5	13.6	57.3	12.5	122.3	22.2	14.7	67.9	30.4	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.8	62.5	13.6	57.3	12.5	122.3	22.2	14.7	67.9	30.4	8.7
Queue Length 50th (ft)	90	90	0	17	0	~358	168	60	85	232	2
Queue Length 95th (ft)	228	227	57	56	30	#1063	430	232	224	479	39
Internal Link Dist (ft)		268		445			688			869	
Turn Bay Length (ft)						185		120	220		160
Base Capacity (vph)	634	638	646	654	610	410	3232	1008	410	3220	985
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.20	0.15	0.04	0.08	1.11	0.35	0.28	0.31	0.37	0.06

Intersection Summary

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

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

Queues
4: E. Bidwell & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	351	273	283	125	629	78	154	1347	296	176	1014	78
v/c Ratio	0.76	0.21	0.47	0.54	0.67	0.22	0.59	0.56	0.36	0.62	0.41	0.10
Control Delay	74.5	44.9	7.2	77.7	61.2	11.8	77.6	30.9	14.3	77.3	27.4	4.2
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	74.5	44.9	7.2	77.7	61.2	11.8	77.6	30.9	14.3	77.3	27.4	4.2
Queue Length 50th (ft)	171	77	0	61	210	0	75	336	80	86	229	0
Queue Length 95th (ft)	247	111	74	106	277	48	125	480	187	139	335	28
Internal Link Dist (ft)		353			348			281			264	
Turn Bay Length (ft)	190		190	240		300	230		200	230		170
Base Capacity (vph)	831	1469	650	948	1585	537	596	2417	819	596	2451	794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.19	0.44	0.13	0.40	0.15	0.26	0.56	0.36	0.30	0.41	0.10

Intersection Summary

Queues
5: E. Bidwell & Via sole

08/31/2021

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	56	72	1632	1296	127
v/c Ratio	0.21	0.38	0.38	0.30	0.10
Control Delay	37.9	16.3	2.3	2.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	37.9	16.3	2.3	2.0	0.7
Queue Length 50th (ft)	13	0	59	42	1
Queue Length 95th (ft)	33	40	83	61	10
Internal Link Dist (ft)	273		781	530	
Turn Bay Length (ft)	75	75			215
Base Capacity (vph)	1648	784	4562	4562	1396
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.03	0.09	0.36	0.28	0.09

Intersection Summary

Queues
6: E. Bidwell & Via Felice

08/31/2021

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Group Flow (vph)	57	142	104	1591	33	1242	123
v/c Ratio	0.20	0.55	0.51	0.66	0.24	0.40	0.12
Control Delay	40.4	16.5	44.5	4.0	43.9	9.0	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.4	16.5	44.5	4.0	43.9	9.0	1.9
Queue Length 50th (ft)	13	0	55	62	15	104	0
Queue Length 95th (ft)	38	58	134	104	51	172	22
Internal Link Dist (ft)	195			267		781	
Turn Bay Length (ft)	75	75	290		250		320
Base Capacity (vph)	1822	893	707	2827	823	4465	1384
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.16	0.15	0.56	0.04	0.28	0.09

Intersection Summary

Queues
7: E. Bidwell & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	238	260	409	515	377	250	838	1104	582	261	943	99
v/c Ratio	0.66	0.47	0.61	0.85	0.33	0.46	1.10	0.56	0.66	0.66	0.66	0.18
Control Delay	61.8	48.0	24.0	62.6	38.8	7.1	106.0	32.3	12.7	60.1	41.3	2.3
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	61.8	48.0	24.0	62.6	38.8	7.1	106.0	32.3	12.7	60.1	41.3	2.3
Queue Length 50th (ft)	89	97	179	192	89	0	~367	225	67	97	221	0
Queue Length 95th (ft)	161	143	290	#355	126	62	#691	417	288	171	364	13
Internal Link Dist (ft)		535			948			577			522	
Turn Bay Length (ft)	280			240		270	260		200	440		440
Base Capacity (vph)	524	585	672	733	1198	558	763	1983	880	703	1592	586
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.44	0.61	0.70	0.31	0.45	1.10	0.56	0.66	0.37	0.59	0.17

Intersection Summary

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

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

Queues
8: E. Bidwell & Placerville

08/31/2021



Lane Group	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	220	2439	202	88	1382	498
v/c Ratio	0.48	0.78	0.20	1.07	0.30	0.37
Control Delay	28.0	15.3	2.6	158.0	0.2	0.8
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0
Total Delay	28.0	15.7	2.6	158.0	0.2	0.8
Queue Length 50th (ft)	91	346	9	~56	0	0
Queue Length 95th (ft)	161	410	35	#152	0	0
Internal Link Dist (ft)		574			577	
Turn Bay Length (ft)			150	220		50
Base Capacity (vph)	459	3143	1013	82	4569	1357
Starvation Cap Reductn	0	265	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.85	0.20	1.07	0.30	0.37

Intersection Summary

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

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

Queues
9: E. Bidwell & WB offramp

08/31/2021



Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	71	1301	1230	228	838
v/c Ratio	0.04	1.01	0.87	0.16	0.39
Control Delay	16.6	54.1	33.1	0.2	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.6	54.1	33.1	0.2	20.0
Queue Length 50th (ft)	12	~464	376	0	130
Queue Length 95th (ft)	27	#708	471	0	161
Internal Link Dist (ft)	1141		928		574
Turn Bay Length (ft)	380	380		200	
Base Capacity (vph)	1581	1292	1702	1408	2560
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.04	1.01	0.72	0.16	0.33

Intersection Summary

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

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

Queues
10: E. Bidwell & EB offramp

08/31/2021



Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	975	218	529	617	321
v/c Ratio	0.72	0.29	0.47	0.51	0.23
Control Delay	14.4	3.1	12.4	6.8	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.4	3.1	12.4	6.8	0.4
Queue Length 50th (ft)	87	0	51	28	0
Queue Length 95th (ft)	169	30	83	59	0
Internal Link Dist (ft)	1139		2925	928	
Turn Bay Length (ft)		400			
Base Capacity (vph)	1583	834	1632	1601	1408
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.62	0.26	0.32	0.39	0.23

Intersection Summary

Queues
11: Driveway/Marketplace & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	84	685	27	17	755	13	66	16	14	66
v/c Ratio	0.39	0.31	0.03	0.10	0.43	0.02	0.33	0.02	0.08	0.10
Control Delay	42.6	14.4	0.0	43.3	21.5	0.0	42.6	0.1	43.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.6	14.4	0.0	43.3	21.5	0.0	42.6	0.1	43.2	0.3
Queue Length 50th (ft)	32	68	0	6	117	0	25	0	5	0
Queue Length 95th (ft)	113	285	0	37	347	0	95	0	32	0
Internal Link Dist (ft)		158			561			346		345
Turn Bay Length (ft)	240			160						
Base Capacity (vph)	600	2169	973	600	2018	911	600	1152	600	1110
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.32	0.03	0.03	0.37	0.01	0.11	0.01	0.02	0.06

Intersection Summary

Queues
13: Cavitt & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	38	615	77	30	701	17	54	49	30	9	43	28
v/c Ratio	0.18	0.26	0.07	0.15	0.31	0.02	0.24	0.12	0.07	0.05	0.16	0.09
Control Delay	34.3	11.3	3.4	34.7	13.2	0.0	33.7	22.5	0.3	35.4	29.7	0.6
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	34.3	11.3	3.4	34.7	13.2	0.0	33.7	22.5	0.3	35.4	29.7	0.6
Queue Length 50th (ft)	14	58	0	11	102	0	19	14	0	3	16	0
Queue Length 95th (ft)	49	172	19	42	202	0	63	48	0	19	47	0
Internal Link Dist (ft)		561			392			319			265	
Turn Bay Length (ft)	220			220		250	140		140	150		150
Base Capacity (vph)	734	2461	1088	734	2449	1083	734	1298	1109	734	1298	1109
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.25	0.07	0.04	0.29	0.02	0.07	0.04	0.03	0.01	0.03	0.03

Intersection Summary

Queues
15: Cavitt & Iron Point

08/31/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	30	571	496	34	870	35	132	131	54	25	55	36
v/c Ratio	0.21	0.30	0.56	0.24	0.46	0.06	0.44	0.43	0.16	0.11	0.22	0.13
Control Delay	52.1	23.7	5.9	52.0	25.1	0.9	38.4	38.1	4.2	36.0	37.1	0.9
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	52.1	23.7	5.9	52.0	25.1	0.9	38.4	38.1	4.2	36.0	37.1	0.9
Queue Length 50th (ft)	12	60	0	14	97	0	54	54	0	10	23	0
Queue Length 95th (ft)	67	219	102	73	339	4	176	174	16	47	84	0
Internal Link Dist (ft)		948			1359			563			316	
Turn Bay Length (ft)	200			200		230	250		250	160		160
Base Capacity (vph)	653	2944	1109	653	2948	916	991	1006	949	991	1040	949
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.19	0.45	0.05	0.30	0.04	0.13	0.13	0.06	0.03	0.05	0.04

Intersection Summary

Queues
1: E. Bidwell & Nesmith/College

08/31/2021

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	128	16	16	37	45	1772	38	112	1666	62
v/c Ratio	0.49	0.11	0.11	0.14	0.41	0.55	0.04	0.47	0.50	0.06
Control Delay	12.5	48.1	48.1	1.1	56.0	17.3	1.6	59.8	14.4	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.5	48.1	48.1	1.1	56.0	17.3	1.6	59.8	14.4	1.6
Queue Length 50th (ft)	0	12	12	0	31	166	0	43	215	0
Queue Length 95th (ft)	45	31	31	0	m72	427	m8	72	458	11
Internal Link Dist (ft)	615		620			473			1996	
Turn Bay Length (ft)		150			100		160	500		60
Base Capacity (vph)	353	346	346	441	171	3250	1061	707	3362	1079
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.05	0.05	0.08	0.26	0.55	0.04	0.16	0.50	0.06

Intersection Summary

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

Queues
2: E. Bidwell & Scholar

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	129	65	67	114	55	206	145	1483	110	135	1354	197
v/c Ratio	0.50	0.31	0.22	0.56	0.12	0.53	0.60	0.51	0.12	0.58	0.47	0.20
Control Delay	60.0	50.8	1.6	61.1	42.8	10.6	51.7	31.9	18.4	87.5	5.6	0.8
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	60.0	50.8	1.6	61.1	42.8	10.6	51.7	31.9	18.4	87.5	5.6	0.8
Queue Length 50th (ft)	50	48	0	86	20	0	54	298	17	58	71	0
Queue Length 95th (ft)	80	83	0	143	35	60	94	495	92	92	31	0
Internal Link Dist (ft)		296			271			307			296	
Turn Bay Length (ft)	200		200	200		200	250		200	230		200
Base Capacity (vph)	592	377	436	246	651	460	476	2913	950	332	2899	976
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.17	0.15	0.46	0.08	0.45	0.30	0.51	0.12	0.41	0.47	0.20

Intersection Summary

Queues
3: E. Bidwell & Power Center

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	108	112	166	151	153	386	1413	187	159	1215	161
v/c Ratio	0.65	0.66	0.54	0.74	0.48	1.15	0.54	0.21	0.75	0.53	0.20
Control Delay	69.7	70.0	14.2	72.3	12.8	134.5	8.8	3.6	92.5	15.7	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.7	70.0	14.2	72.3	12.8	134.5	8.8	3.6	92.5	15.7	2.3
Queue Length 50th (ft)	86	89	0	114	0	~356	242	29	132	255	0
Queue Length 95th (ft)	146	150	64	184	61	m#586	m330	m65	204	105	14
Internal Link Dist (ft)		268		445			688			869	
Turn Bay Length (ft)						185		120	220		160
Base Capacity (vph)	219	224	351	247	351	336	2633	873	260	2298	795
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.50	0.47	0.61	0.44	1.15	0.54	0.21	0.61	0.53	0.20

Intersection Summary

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

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

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

Queues
4: E. Bidwell & Broadstone

08/31/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	440	306	333	239	447	102	237	1485	524	235	1200	118
v/c Ratio	0.98	0.34	0.72	0.66	0.59	0.32	0.69	0.63	0.55	0.69	0.51	0.15
Control Delay	91.2	45.0	25.6	60.2	50.9	10.9	57.3	25.7	9.0	46.5	36.2	16.6
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	91.2	45.0	25.6	60.2	50.9	10.9	57.3	25.7	9.0	46.5	36.2	16.6
Queue Length 50th (ft)	177	76	77	93	118	0	99	268	108	92	352	39
Queue Length 95th (ft)	#284	109	#198	131	154	49	121	369	203	122	391	93
Internal Link Dist (ft)		353			348			281			264	
Turn Bay Length (ft)	190		190	240		300	230		200	230		170
Base Capacity (vph)	447	890	461	563	843	348	390	2368	957	390	2368	796
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.34	0.72	0.42	0.53	0.29	0.61	0.63	0.55	0.60	0.51	0.15

Intersection Summary

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

Queues
5: E. Bidwell & Via sole

08/31/2021

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Group Flow (vph)	109	69	21	1984	9	1648	172
v/c Ratio	0.46	0.40	0.19	0.46	0.12	0.40	0.13
Control Delay	59.7	19.0	55.9	3.2	44.8	7.0	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	19.0	55.9	3.2	44.8	7.0	3.9
Queue Length 50th (ft)	42	0	15	62	7	108	6
Queue Length 95th (ft)	71	46	m24	346	m15	273	m51
Internal Link Dist (ft)	273			781		530	
Turn Bay Length (ft)	75	75	250		250		215
Base Capacity (vph)	1256	623	147	4272	215	4089	1302
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.11	0.14	0.46	0.04	0.40	0.13

Intersection Summary

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

Queues
6: E. Bidwell & Via Felice

08/31/2021



Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Group Flow (vph)	126	254	151	1726	130	1439	116
v/c Ratio	0.46	0.71	0.74	0.70	0.67	0.42	0.10
Control Delay	57.8	17.6	69.8	13.8	57.9	12.9	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.8	17.6	69.8	13.8	57.9	12.9	5.0
Queue Length 50th (ft)	49	0	144	137	74	219	24
Queue Length 95th (ft)	77	79	226	220	157	193	35
Internal Link Dist (ft)	195			267		781	
Turn Bay Length (ft)	75	75	290		250		320
Base Capacity (vph)	1256	741	278	2466	275	3433	1107
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.34	0.54	0.70	0.47	0.42	0.10

Intersection Summary

Queues
7: E. Bidwell & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	193	758	711	752	490	351	825	1325	734	148	1357	173
v/c Ratio	0.61	1.73	1.19	1.06	0.41	0.56	1.47	0.60	0.73	0.54	0.76	0.26
Control Delay	60.3	372.1	135.0	97.7	40.5	9.2	247.2	23.8	9.7	70.1	32.1	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	60.3	372.1	135.0	97.7	40.5	9.2	247.2	23.8	10.3	70.1	32.1	8.4
Queue Length 50th (ft)	75	~457	~612	~330	118	11	~463	263	168	62	129	2
Queue Length 95th (ft)	111	#582	#849	#453	160	100	m#531	m302	m193	96	284	64
Internal Link Dist (ft)		535			948			577			522	
Turn Bay Length (ft)	280			240		270	260		200	440		440
Base Capacity (vph)	505	437	595	707	1205	629	563	2212	1002	678	1784	668
Starvation Cap Reductn	0	0	0	0	0	0	0	0	68	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	1.73	1.19	1.06	0.41	0.56	1.47	0.60	0.79	0.22	0.76	0.26

Intersection Summary

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

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

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

Queues
8: E. Bidwell & Placerville

08/31/2021



Lane Group	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	243	2640	234	186	2034	599
v/c Ratio	0.52	0.92	0.23	1.49	0.43	0.44
Control Delay	20.2	18.7	1.7	259.1	0.1	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.2	18.7	1.7	259.1	0.1	0.3
Queue Length 50th (ft)	61	280	0	~182	0	0
Queue Length 95th (ft)	122	#387	24	m#223	m0	m0
Internal Link Dist (ft)		574			577	
Turn Bay Length (ft)			150	220		50
Base Capacity (vph)	464	2884	999	125	4684	1375
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.92	0.23	1.49	0.43	0.44

Intersection Summary

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

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

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

Queues
9: E. Bidwell & WB offramp

08/31/2021



Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	82	1249	1684	256	1579
v/c Ratio	0.06	1.03	1.05	0.18	0.66
Control Delay	18.1	63.9	66.1	0.3	23.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	18.1	63.9	66.1	0.3	23.4
Queue Length 50th (ft)	16	~518	~695	0	294
Queue Length 95th (ft)	30	#665	#842	0	346
Internal Link Dist (ft)	1141		928		574
Turn Bay Length (ft)	380	380		200	
Base Capacity (vph)	1487	1215	1602	1455	2409
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.06	1.03	1.05	0.18	0.66

Intersection Summary

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

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

Queues
10: E. Bidwell & EB offramp

08/31/2021



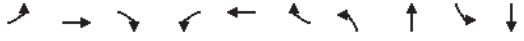
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1328	139	613	1039	623
v/c Ratio	0.94	0.19	0.50	0.70	0.43
Control Delay	29.5	3.2	12.9	7.5	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	29.5	3.2	12.9	7.5	0.9
Queue Length 50th (ft)	166	0	62	41	0
Queue Length 95th (ft)	#308	24	96	87	0
Internal Link Dist (ft)	1139		2925	928	
Turn Bay Length (ft)		400			
Base Capacity (vph)	1418	736	1462	1643	1455
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.94	0.19	0.42	0.63	0.43

Intersection Summary

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

Queues
11: Driveway/Marketplace & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	251	786	28	40	555	94	20	10	182	216
v/c Ratio	0.65	0.42	0.03	0.24	0.49	0.17	0.13	0.04	0.64	0.43
Control Delay	42.8	19.0	0.1	48.5	27.9	8.3	49.7	26.0	48.4	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.8	19.0	0.1	48.5	27.9	8.3	49.7	26.0	48.4	7.0
Queue Length 50th (ft)	86	95	0	15	87	0	7	2	67	2
Queue Length 95th (ft)	#396	392	0	75	297	45	46	18	#243	53
Internal Link Dist (ft)		158			561			346		345
Turn Bay Length (ft)	240			160						
Base Capacity (vph)	527	1922	902	527	1774	841	527	913	527	967
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.41	0.03	0.08	0.31	0.11	0.04	0.01	0.35	0.22

Intersection Summary

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

Queues
13: Cavitt & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	34	829	123	35	578	23	73	63	48	15	29	31
v/c Ratio	0.19	0.38	0.12	0.19	0.27	0.02	0.33	0.16	0.12	0.09	0.13	0.11
Control Delay	36.2	12.9	4.4	36.1	11.9	0.0	35.7	23.9	1.3	36.6	31.2	0.8
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	36.2	12.9	4.4	36.1	11.9	0.0	35.7	23.9	1.3	36.6	31.2	0.8
Queue Length 50th (ft)	12	86	1	13	55	0	26	18	0	5	10	0
Queue Length 95th (ft)	48	262	36	48	173	0	81	61	5	28	38	0
Internal Link Dist (ft)		561			392			319			265	
Turn Bay Length (ft)	220			220		250	140		140	150		150
Base Capacity (vph)	642	2161	1013	642	2162	1003	642	1157	1021	642	1157	1021
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.38	0.12	0.05	0.27	0.02	0.11	0.05	0.05	0.02	0.03	0.03

Intersection Summary

Queues
15: Cavitt & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	927	687	29	1132	65	256	270	101	40	112	35
v/c Ratio	0.48	0.49	0.69	0.31	0.62	0.11	0.80	0.59	0.20	0.17	0.46	0.12
Control Delay	71.2	31.9	8.7	68.6	35.7	8.6	60.1	44.4	8.3	46.4	52.6	0.9
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	71.2	31.9	8.7	68.6	35.7	8.6	60.1	44.4	8.3	46.4	52.6	0.9
Queue Length 50th (ft)	39	177	23	20	234	0	172	170	0	27	80	0
Queue Length 95th (ft)	107	363	203	66	473	37	#401	361	48	67	155	0
Internal Link Dist (ft)		948			1359			563			316	
Turn Bay Length (ft)	200			200		230	250		250	160		160
Base Capacity (vph)	413	1936	998	413	1866	625	451	640	656	630	661	643
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.48	0.69	0.07	0.61	0.10	0.57	0.42	0.15	0.06	0.17	0.05

Intersection Summary

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

Queues
1: E. Bidwell & Nesmith/College

08/31/2021

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	74	77	78	18	65	1268	112	150	1396	43
v/c Ratio	0.27	0.31	0.32	0.06	0.36	0.58	0.16	0.40	0.57	0.05
Control Delay	16.2	44.7	44.7	0.4	55.1	24.2	12.5	49.8	23.7	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.2	44.7	44.7	0.4	55.1	24.2	12.5	49.8	23.7	3.4
Queue Length 50th (ft)	3	35	35	0	29	165	14	34	186	0
Queue Length 95th (ft)	54	134	135	0	129	491	85	126	554	15
Internal Link Dist (ft)	615		620			473			1996	
Turn Bay Length (ft)		150			100		160	500		60
Base Capacity (vph)	819	761	761	754	573	4172	1310	1112	4172	1310
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.10	0.10	0.02	0.11	0.30	0.09	0.13	0.33	0.03

Intersection Summary

Queues
2: E. Bidwell & Scholar

08/31/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	115	35	52	86	43	257	109	1072	187	153	1199	220
v/c Ratio	0.42	0.15	0.20	0.51	0.09	0.59	0.46	0.40	0.21	0.55	0.44	0.24
Control Delay	57.4	46.5	8.1	63.1	42.6	11.1	60.0	17.8	6.2	59.5	17.5	6.8
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	57.4	46.5	8.1	63.1	42.6	11.1	60.0	17.8	6.2	59.5	17.5	6.8
Queue Length 50th (ft)	39	23	0	57	14	0	37	142	14	53	158	21
Queue Length 95th (ft)	90	59	24	140	34	71	88	310	75	114	344	95
Internal Link Dist (ft)		296			271			307			296	
Turn Bay Length (ft)	200		200	200		200	250		200	230		200
Base Capacity (vph)	862	735	666	444	1397	781	862	3490	1131	862	3490	1133
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.05	0.08	0.19	0.03	0.33	0.13	0.31	0.17	0.18	0.34	0.19

Intersection Summary

Queues
3: E. Bidwell & Power Center

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	130	130	98	25	51	457	1131	279	127	1206	63
v/c Ratio	0.58	0.57	0.33	0.16	0.26	1.12	0.42	0.32	0.61	0.58	0.09
Control Delay	62.9	62.6	13.5	57.5	12.4	123.9	22.3	14.6	68.0	30.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.9	62.6	13.5	57.5	12.4	123.9	22.3	14.6	68.0	30.4	8.6
Queue Length 50th (ft)	91	90	0	17	0	~359	170	60	85	234	2
Queue Length 95th (ft)	228	227	57	56	30	#1063	436	230	224	481	39
Internal Link Dist (ft)		268		445			688			869	
Turn Bay Length (ft)						185		120	220		160
Base Capacity (vph)	631	636	656	652	620	408	3221	1044	408	3209	1020
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.20	0.15	0.04	0.08	1.12	0.35	0.27	0.31	0.38	0.06

Intersection Summary

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

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

Queues
4: E. Bidwell & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	351	273	284	126	629	80	158	1357	296	177	1018	78
v/c Ratio	0.76	0.21	0.46	0.54	0.67	0.22	0.59	0.56	0.36	0.62	0.42	0.10
Control Delay	74.6	44.9	7.1	77.9	61.1	11.8	77.7	31.1	14.3	77.4	27.7	4.2
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	74.6	44.9	7.1	77.9	61.1	11.8	77.7	31.1	14.3	77.4	27.7	4.2
Queue Length 50th (ft)	171	77	0	61	210	0	77	340	81	86	231	0
Queue Length 95th (ft)	247	111	74	106	278	48	128	485	187	140	338	28
Internal Link Dist (ft)		353			348			281			264	
Turn Bay Length (ft)	190		190	240		300	230		200	230		170
Base Capacity (vph)	829	1464	658	946	1581	547	595	2412	832	595	2441	806
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.19	0.43	0.13	0.40	0.15	0.27	0.56	0.36	0.30	0.42	0.10

Intersection Summary

Queues
5: E. Bidwell & Via sole

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	28	28	72	43	1632	12	1302	127
v/c Ratio	0.14	0.14	0.26	0.15	0.46	0.01	0.63	0.11
Control Delay	36.6	36.6	4.8	1.1	15.0	0.0	17.7	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.6	36.6	4.8	1.1	15.0	0.0	17.7	4.6
Queue Length 50th (ft)	12	12	0	0	111	0	108	0
Queue Length 95th (ft)	48	48	17	0	#628	0	#670	46
Internal Link Dist (ft)		273		211	781		530	
Turn Bay Length (ft)	75		75			210		215
Base Capacity (vph)	510	510	552	496	3530	1128	2056	1139
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.05	0.13	0.09	0.46	0.01	0.63	0.11

Intersection Summary

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

Queues
6: E. Bidwell & Via Felice

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	29	29	142	8	115	1591	2	33	1271	124
v/c Ratio	0.21	0.21	0.55	0.07	0.53	0.40	0.00	0.20	0.42	0.13
Control Delay	41.3	41.3	16.1	41.7	43.6	3.8	0.0	14.3	10.4	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.3	41.3	16.1	41.7	43.6	3.8	0.0	14.3	10.4	2.6
Queue Length 50th (ft)	14	14	0	4	55	56	0	6	100	0
Queue Length 95th (ft)	47	47	57	20	122	170	0	35	227	28
Internal Link Dist (ft)		195		264		267			781	
Turn Bay Length (ft)	75		75		290		210	250		320
Base Capacity (vph)	462	462	538	370	367	3985	1262	182	3387	1096
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.06	0.26	0.02	0.31	0.40	0.00	0.18	0.38	0.11

Intersection Summary

Queues
7: E. Bidwell & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	239	260	409	515	377	252	838	1113	582	265	966	104
v/c Ratio	0.66	0.47	0.56	0.86	0.33	0.45	1.11	0.56	0.64	0.67	0.66	0.19
Control Delay	62.2	48.3	22.7	63.1	39.0	7.0	108.7	32.4	11.1	60.4	41.4	2.8
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	62.2	48.3	22.7	63.1	39.0	7.0	108.7	32.4	11.1	60.4	41.4	2.8
Queue Length 50th (ft)	90	98	181	193	90	0	~372	228	54	100	227	0
Queue Length 95th (ft)	162	143	290	#355	126	63	#691	422	254	173	374	18
Internal Link Dist (ft)		535			948			577			522	
Turn Bay Length (ft)	280			240		270	260		200	440		440
Base Capacity (vph)	520	582	731	728	1191	564	758	1991	906	699	1582	592
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.45	0.56	0.71	0.32	0.45	1.11	0.56	0.64	0.38	0.61	0.18

Intersection Summary

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

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

Queues
8: E. Bidwell & Placerville

08/31/2021



Lane Group	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	220	2448	202	88	1400	505
v/c Ratio	0.47	0.78	0.19	1.07	0.30	0.37
Control Delay	27.8	15.3	2.5	158.0	0.2	0.8
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0
Total Delay	27.8	15.8	2.5	158.0	0.2	0.8
Queue Length 50th (ft)	91	349	9	~56	0	0
Queue Length 95th (ft)	160	413	34	#152	0	0
Internal Link Dist (ft)		574			577	
Turn Bay Length (ft)			150	220		50
Base Capacity (vph)	467	3143	1041	82	4591	1375
Starvation Cap Reductn	0	264	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.85	0.19	1.07	0.30	0.37

Intersection Summary

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

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

Queues
9: E. Bidwell & WB offramp

08/31/2021



Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	71	1303	1237	228	849
v/c Ratio	0.05	0.99	0.87	0.16	0.40
Control Delay	16.7	50.5	33.2	0.2	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.7	50.5	33.2	0.2	20.0
Queue Length 50th (ft)	12	~447	379	0	132
Queue Length 95th (ft)	27	#700	474	0	164
Internal Link Dist (ft)	1141		928		574
Turn Bay Length (ft)	380	380		200	
Base Capacity (vph)	1577	1312	1699	1427	2555
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.05	0.99	0.73	0.16	0.33

Intersection Summary

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

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

Queues
10: E. Bidwell & EB offramp

08/31/2021

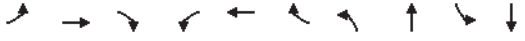


Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	980	218	532	625	324
v/c Ratio	0.73	0.29	0.47	0.51	0.23
Control Delay	14.6	3.1	12.5	6.8	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.6	3.1	12.5	6.8	0.4
Queue Length 50th (ft)	89	0	52	28	0
Queue Length 95th (ft)	170	30	83	59	0
Internal Link Dist (ft)	1139		2925	928	
Turn Bay Length (ft)		400			
Base Capacity (vph)	1578	844	1627	1611	1427
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.62	0.26	0.33	0.39	0.23

Intersection Summary

Queues
11: Driveway/Marketplace & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	84	685	28	17	755	13	69	18	14	66
v/c Ratio	0.39	0.31	0.03	0.10	0.43	0.02	0.34	0.02	0.08	0.10
Control Delay	42.9	14.5	0.0	43.3	21.6	0.0	42.7	0.1	43.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.9	14.5	0.0	43.3	21.6	0.0	42.7	0.1	43.4	0.3
Queue Length 50th (ft)	32	69	0	6	118	0	27	0	5	0
Queue Length 95th (ft)	113	286	0	38	348	0	98	0	32	0
Internal Link Dist (ft)		158			561			346		345
Turn Bay Length (ft)	240			160						
Base Capacity (vph)	598	2167	1005	598	2014	941	598	1184	598	1137
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.32	0.03	0.03	0.37	0.01	0.12	0.02	0.02	0.06

Intersection Summary

Queues
13: Cavitt & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	39	616	77	32	701	17	54	49	36	9	43	28
v/c Ratio	0.19	0.26	0.07	0.16	0.31	0.02	0.24	0.12	0.08	0.05	0.16	0.09
Control Delay	34.3	11.4	3.4	34.6	13.3	0.0	33.7	22.5	0.4	35.4	29.7	0.6
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	34.3	11.4	3.4	34.6	13.3	0.0	33.7	22.5	0.4	35.4	29.7	0.6
Queue Length 50th (ft)	14	58	0	12	102	0	19	14	0	3	16	0
Queue Length 95th (ft)	50	173	19	44	202	0	63	48	0	19	47	0
Internal Link Dist (ft)		561			392			319			265	
Turn Bay Length (ft)	220			220		250	140		140	150		150
Base Capacity (vph)	737	2459	1129	737	2449	1124	737	1298	1134	737	1298	1134
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.25	0.07	0.04	0.29	0.02	0.07	0.04	0.03	0.01	0.03	0.02

Intersection Summary

Queues
15: Cavitt & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	30	574	497	34	871	36	132	132	54	27	56	36
v/c Ratio	0.22	0.30	0.55	0.24	0.46	0.06	0.44	0.43	0.16	0.12	0.23	0.12
Control Delay	52.3	23.7	5.8	52.2	25.1	1.1	38.6	38.4	4.2	36.3	37.3	0.9
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	52.3	23.7	5.8	52.2	25.1	1.1	38.6	38.4	4.2	36.3	37.3	0.9
Queue Length 50th (ft)	12	60	0	14	97	0	54	54	0	11	24	0
Queue Length 95th (ft)	67	220	101	73	340	5	176	175	16	49	85	0
Internal Link Dist (ft)		948			1359			563			316	
Turn Bay Length (ft)	200			200		230	250		250	160		160
Base Capacity (vph)	651	2936	1127	651	2939	944	988	1004	963	988	1037	963
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.20	0.44	0.05	0.30	0.04	0.13	0.13	0.06	0.03	0.05	0.04

Intersection Summary

Queues
1: E. Bidwell & Nesmith/College

08/31/2021



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	128	16	16	37	45	1781	38	112	1679	62
v/c Ratio	0.49	0.11	0.11	0.14	0.41	0.55	0.04	0.47	0.50	0.06
Control Delay	12.5	48.1	48.1	1.1	56.1	17.3	1.6	59.8	14.5	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.5	48.1	48.1	1.1	56.1	17.3	1.6	59.8	14.5	1.6
Queue Length 50th (ft)	0	12	12	0	31	166	0	43	217	0
Queue Length 95th (ft)	45	31	31	0	m71	431	m8	72	463	11
Internal Link Dist (ft)	615		620			473			1996	
Turn Bay Length (ft)		150			100		160	500		60
Base Capacity (vph)	353	346	346	441	171	3250	1061	707	3362	1079
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.05	0.05	0.08	0.26	0.55	0.04	0.16	0.50	0.06

Intersection Summary

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

Queues
2: E. Bidwell & Scholar

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	129	65	67	114	55	206	145	1492	110	135	1367	197
v/c Ratio	0.50	0.31	0.22	0.56	0.12	0.53	0.60	0.51	0.12	0.58	0.47	0.20
Control Delay	60.0	50.8	1.6	61.1	42.8	10.6	51.5	32.1	18.4	87.4	5.6	0.8
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	60.0	50.8	1.6	61.1	42.8	10.6	51.5	32.1	18.4	87.4	5.6	0.8
Queue Length 50th (ft)	50	48	0	86	20	0	54	301	17	57	72	0
Queue Length 95th (ft)	80	83	0	143	35	60	94	498	92	92	32	0
Internal Link Dist (ft)		296			271			307			296	
Turn Bay Length (ft)	200		200	200		200	250		200	230		200
Base Capacity (vph)	592	377	436	246	651	460	476	2913	950	332	2899	975
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.17	0.15	0.46	0.08	0.45	0.30	0.51	0.12	0.41	0.47	0.20

Intersection Summary

Queues
3: E. Bidwell & Power Center

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	108	112	166	151	153	386	1422	187	159	1228	161
v/c Ratio	0.65	0.66	0.54	0.74	0.48	1.15	0.54	0.21	0.75	0.54	0.20
Control Delay	69.7	70.0	14.2	72.3	12.8	136.9	8.3	3.4	92.3	15.8	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.7	70.0	14.2	72.3	12.8	136.9	8.3	3.4	92.3	15.8	2.3
Queue Length 50th (ft)	86	89	0	114	0	~358	214	29	132	259	0
Queue Length 95th (ft)	146	150	64	184	61	m#586	m300	m64	205	108	14
Internal Link Dist (ft)		268		445			688			869	
Turn Bay Length (ft)						185		120	220		160
Base Capacity (vph)	219	224	351	247	351	335	2633	873	260	2298	795
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.50	0.47	0.61	0.44	1.15	0.54	0.21	0.61	0.53	0.20

Intersection Summary

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

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

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

Queues
4: E. Bidwell & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	440	306	337	240	447	104	240	1492	525	238	1210	118
v/c Ratio	0.98	0.34	0.73	0.66	0.59	0.32	0.70	0.63	0.55	0.69	0.51	0.15
Control Delay	91.2	45.0	26.4	60.1	50.9	11.1	67.6	19.2	4.8	46.6	36.4	16.6
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	91.2	45.0	26.4	60.1	50.9	11.1	67.6	19.2	4.8	46.6	36.4	16.6
Queue Length 50th (ft)	177	76	81	93	118	0	101	202	46	93	355	39
Queue Length 95th (ft)	#284	109	#217	132	154	49	123	232	98	124	394	93
Internal Link Dist (ft)		353			348			281			264	
Turn Bay Length (ft)	190		190	240		300	230		200	230		170
Base Capacity (vph)	447	887	460	563	843	349	390	2365	956	390	2365	795
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.34	0.73	0.43	0.53	0.30	0.62	0.63	0.55	0.61	0.51	0.15

Intersection Summary

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

Queues
5: E. Bidwell & Via sole

08/31/2021



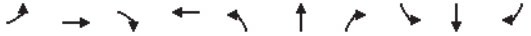
Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	NBR	SBU	SBT	SBR
Lane Group Flow (vph)	55	54	69	30	21	1985	30	9	1664	172
v/c Ratio	0.47	0.46	0.33	0.18	0.20	0.48	0.02	0.12	0.47	0.14
Control Delay	65.9	65.4	7.8	2.4	59.0	2.8	0.0	54.4	11.4	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.9	65.4	7.8	2.4	59.0	2.8	0.0	54.4	11.4	4.8
Queue Length 50th (ft)	44	43	0	0	16	87	0	7	117	0
Queue Length 95th (ft)	87	86	19	0	m39	87	m0	m0	308	m45
Internal Link Dist (ft)		273		211		781			530	
Turn Bay Length (ft)	75		75		250		210	250		215
Base Capacity (vph)	290	290	358	320	166	4161	1313	230	3504	1253
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.19	0.19	0.09	0.13	0.48	0.02	0.04	0.47	0.14

Intersection Summary

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

Queues
6: E. Bidwell & Via Felice

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	64	65	254	6	167	1739	7	130	1457	117
v/c Ratio	0.48	0.49	0.71	0.07	0.71	0.41	0.01	0.84	0.44	0.11
Control Delay	63.7	63.9	17.4	55.3	76.4	1.7	0.0	68.0	17.4	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.7	63.9	17.4	55.3	76.4	1.7	0.0	68.0	17.4	7.1
Queue Length 50th (ft)	51	51	0	5	137	31	0	103	220	24
Queue Length 95th (ft)	94	96	78	19	210	88	m0	#253	202	38
Internal Link Dist (ft)		195		264		267			781	
Turn Bay Length (ft)	75		75		290		210	250		320
Base Capacity (vph)	290	290	483	242	257	4208	1327	154	3340	1080
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.22	0.53	0.02	0.65	0.41	0.01	0.84	0.44	0.11

Intersection Summary

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

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

Queues
7: E. Bidwell & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	199	758	711	752	490	356	825	1349	734	151	1373	177
v/c Ratio	0.61	1.73	1.19	1.06	0.41	0.57	1.47	0.61	0.73	0.54	0.77	0.26
Control Delay	60.3	372.1	135.0	97.7	40.7	9.9	247.0	24.2	9.7	61.0	36.4	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	60.3	372.1	135.0	97.7	40.7	9.9	247.0	24.2	10.4	61.0	36.4	13.9
Queue Length 50th (ft)	77	~457	~612	~330	118	16	~464	269	169	63	137	2
Queue Length 95th (ft)	113	#582	#849	#453	160	107	m#525	m306	m191	100	428	125
Internal Link Dist (ft)		535			948			577			522	
Turn Bay Length (ft)	280			240		270	260		200	440		440
Base Capacity (vph)	505	437	595	707	1196	625	563	2207	999	678	1784	671
Starvation Cap Reductn	0	0	0	0	0	0	0	0	67	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	1.73	1.19	1.06	0.41	0.57	1.47	0.61	0.79	0.22	0.77	0.26

Intersection Summary

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

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

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

Queues
8: E. Bidwell & Placerville

08/31/2021



Lane Group	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	243	2665	234	186	2045	604
v/c Ratio	0.52	0.92	0.23	1.49	0.44	0.44
Control Delay	20.2	19.4	1.8	258.7	0.1	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.2	19.4	1.8	258.7	0.1	0.3
Queue Length 50th (ft)	61	286	1	~183	0	0
Queue Length 95th (ft)	122	#441	24	m#218	m0	m0
Internal Link Dist (ft)		574			577	
Turn Bay Length (ft)			150	220		50
Base Capacity (vph)	464	2884	998	125	4684	1375
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.92	0.23	1.49	0.44	0.44

Intersection Summary

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

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

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

Queues
9: E. Bidwell & WB offramp

08/31/2021



Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	82	1255	1703	256	1586
v/c Ratio	0.06	1.03	1.06	0.18	0.66
Control Delay	18.1	65.3	70.1	0.3	23.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	18.1	65.3	70.1	0.3	23.5
Queue Length 50th (ft)	16	~523	~710	0	296
Queue Length 95th (ft)	30	#672	#857	0	349
Internal Link Dist (ft)	1141		928		574
Turn Bay Length (ft)	380	380		200	
Base Capacity (vph)	1487	1215	1602	1455	2409
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.06	1.03	1.06	0.18	0.66

Intersection Summary

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

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

Queues
10: E. Bidwell & EB offramp

08/31/2021



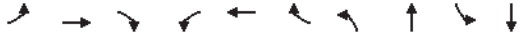
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1342	139	618	1044	625
v/c Ratio	0.95	0.19	0.50	0.70	0.43
Control Delay	31.1	3.2	12.9	7.5	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	31.1	3.2	12.9	7.5	0.9
Queue Length 50th (ft)	170	0	62	42	0
Queue Length 95th (ft)	#312	24	97	88	0
Internal Link Dist (ft)	1139		2925	928	
Turn Bay Length (ft)		400			
Base Capacity (vph)	1417	736	1461	1644	1455
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.95	0.19	0.42	0.64	0.43

Intersection Summary

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

Queues
11: Driveway/Marketplace & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	251	786	32	42	555	94	23	12	182	216
v/c Ratio	0.65	0.42	0.04	0.25	0.49	0.17	0.14	0.04	0.64	0.43
Control Delay	42.8	19.1	0.1	48.5	28.0	8.3	49.3	24.2	48.5	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.8	19.1	0.1	48.5	28.0	8.3	49.3	24.2	48.5	7.0
Queue Length 50th (ft)	86	95	0	16	87	0	9	2	68	2
Queue Length 95th (ft)	#396	393	0	77	297	45	51	19	#243	53
Internal Link Dist (ft)		158			561			346		345
Turn Bay Length (ft)	240			160						
Base Capacity (vph)	526	1917	900	526	1771	840	526	900	526	965
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.41	0.04	0.08	0.31	0.11	0.04	0.01	0.35	0.22

Intersection Summary

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

Queues
13: Cavitt & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	35	830	123	40	579	23	73	63	52	15	29	32
v/c Ratio	0.20	0.39	0.12	0.22	0.26	0.02	0.34	0.17	0.13	0.09	0.13	0.12
Control Delay	37.5	14.1	4.5	37.4	11.6	0.0	37.4	25.2	2.0	37.8	32.4	0.9
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	37.5	14.1	4.5	37.4	11.6	0.0	37.4	25.2	2.0	37.8	32.4	0.9
Queue Length 50th (ft)	15	128	1	17	55	0	32	22	0	7	13	0
Queue Length 95th (ft)	49	265	36	54	174	0	82	62	7	28	38	0
Internal Link Dist (ft)		561			392			319			265	
Turn Bay Length (ft)	220			220		250	140		140	150		150
Base Capacity (vph)	615	2073	976	615	2183	1012	615	1110	983	615	1110	983
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.40	0.13	0.07	0.27	0.02	0.12	0.06	0.05	0.02	0.03	0.03

Intersection Summary

Queues
15: Cavitt & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	929	688	29	1135	67	257	272	101	40	114	35
v/c Ratio	0.48	0.49	0.69	0.31	0.62	0.11	0.80	0.60	0.20	0.17	0.47	0.12
Control Delay	71.4	32.1	8.8	68.9	35.9	9.1	60.2	44.5	8.3	46.4	52.8	0.9
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	71.4	32.1	8.8	68.9	35.9	9.1	60.2	44.5	8.3	46.4	52.8	0.9
Queue Length 50th (ft)	39	179	23	20	236	0	173	171	0	27	82	0
Queue Length 95th (ft)	107	364	203	66	475	39	#404	365	48	67	157	0
Internal Link Dist (ft)		948			1359			563			316	
Turn Bay Length (ft)	200			200		230	250		250	160		160
Base Capacity (vph)	412	1929	997	412	1860	622	449	637	654	627	659	640
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.48	0.69	0.07	0.61	0.11	0.57	0.43	0.15	0.06	0.17	0.05

Intersection Summary

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

Queues
1: E. Bidwell & Nesmith/College

08/31/2021

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	74	77	78	18	65	1573	112	150	1598	43
v/c Ratio	0.29	0.33	0.33	0.07	0.38	0.66	0.15	0.41	0.61	0.05
Control Delay	17.4	48.8	48.9	0.5	59.6	25.4	11.8	53.6	23.9	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.4	48.8	48.9	0.5	59.6	25.4	11.8	53.6	23.9	3.3
Queue Length 50th (ft)	4	42	42	0	34	231	14	40	231	0
Queue Length 95th (ft)	55	136	137	0	131	649	84	129	663	14
Internal Link Dist (ft)	615		620			473			1996	
Turn Bay Length (ft)		150			100		160	500		60
Base Capacity (vph)	750	695	695	681	523	3884	1197	1015	3886	1173
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.11	0.11	0.03	0.12	0.40	0.09	0.15	0.41	0.04

Intersection Summary

Queues
2: E. Bidwell & Scholar

08/31/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	115	35	52	97	43	263	109	1372	197	157	1397	220
v/c Ratio	0.45	0.16	0.22	0.47	0.09	0.61	0.50	0.48	0.22	0.59	0.48	0.23
Control Delay	62.3	50.7	8.6	62.2	45.8	11.7	65.4	18.9	8.2	65.0	17.9	7.9
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	62.3	50.7	8.6	62.2	45.8	11.7	65.4	18.9	8.2	65.0	17.9	7.9
Queue Length 50th (ft)	41	24	0	68	14	0	39	204	26	57	201	29
Queue Length 95th (ft)	93	61	24	158	35	73	90	428	103	119	424	111
Internal Link Dist (ft)		296			271			307			296	
Turn Bay Length (ft)	200		200	200		200	250		200	230		200
Base Capacity (vph)	775	661	595	399	1258	722	775	3140	1000	775	3173	1014
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.05	0.09	0.24	0.03	0.36	0.14	0.44	0.20	0.20	0.44	0.22

Intersection Summary

Queues
3: E. Bidwell & Power Center

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	130	130	98	25	51	457	1454	279	127	1423	63
v/c Ratio	0.61	0.61	0.35	0.17	0.28	1.25	0.51	0.31	0.65	0.61	0.09
Control Delay	69.9	69.5	14.1	62.2	12.7	174.4	23.3	15.9	75.6	30.2	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.9	69.5	14.1	62.2	12.7	174.4	23.3	15.9	75.6	30.2	8.2
Queue Length 50th (ft)	105	105	0	20	0	~452	246	73	98	297	2
Queue Length 95th (ft)	228	227	57	56	30	#1063	598	257	224	593	39
Internal Link Dist (ft)		268		445			688			869	
Turn Bay Length (ft)						185		120	220		160
Base Capacity (vph)	567	571	588	586	553	366	2946	918	366	2880	887
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.23	0.17	0.04	0.09	1.25	0.49	0.30	0.35	0.49	0.07

Intersection Summary

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

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

Queues
4: E. Bidwell & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	358	273	283	125	629	78	154	1662	296	176	1222	83
v/c Ratio	0.76	0.21	0.47	0.54	0.68	0.22	0.59	0.69	0.37	0.62	0.50	0.10
Control Delay	74.5	44.8	7.2	78.0	61.4	11.9	77.8	34.6	17.2	77.6	29.2	4.8
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	74.5	44.8	7.2	78.0	61.4	11.9	77.8	34.6	17.2	77.6	29.2	4.8
Queue Length 50th (ft)	174	77	0	61	210	0	75	454	100	86	293	0
Queue Length 95th (ft)	252	111	74	106	278	48	125	641	215	140	421	32
Internal Link Dist (ft)		353			348			281			264	
Turn Bay Length (ft)	190		190	240		300	230		200	230		170
Base Capacity (vph)	828	1471	650	945	1580	536	595	2411	801	595	2443	791
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.19	0.44	0.13	0.40	0.15	0.26	0.69	0.37	0.30	0.50	0.10

Intersection Summary

Queues
5: E. Bidwell & Via sole

08/31/2021

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	56	72	1947	1504	127
v/c Ratio	0.25	0.42	0.46	0.35	0.10
Control Delay	42.2	18.0	2.7	2.3	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	42.2	18.0	2.7	2.3	0.8
Queue Length 50th (ft)	16	0	77	52	2
Queue Length 95th (ft)	33	40	107	73	11
Internal Link Dist (ft)	273		781	530	
Turn Bay Length (ft)	75	75			215
Base Capacity (vph)	1355	657	4243	4243	1303
Starvation Cap Reductn	0	0	321	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.04	0.11	0.50	0.35	0.10

Intersection Summary

Queues
6: E. Bidwell & Via Felice

08/31/2021

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Group Flow (vph)	58	142	104	1912	33	1454	124
v/c Ratio	0.24	0.58	0.57	0.78	0.27	0.43	0.12
Control Delay	45.8	18.3	53.4	5.0	50.0	8.6	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.8	18.3	53.4	5.0	50.0	8.6	1.7
Queue Length 50th (ft)	17	0	70	84	20	130	0
Queue Length 95th (ft)	39	59	141	138	53	210	21
Internal Link Dist (ft)	195			267		781	
Turn Bay Length (ft)	75	75	290		250		320
Base Capacity (vph)	1550	780	602	2538	700	3952	1240
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.18	0.17	0.75	0.05	0.37	0.10

Intersection Summary

Queues
7: E. Bidwell & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	238	268	571	598	384	256	1081	1399	705	266	1137	99
v/c Ratio	0.67	0.49	0.87	0.92	0.31	0.45	1.48	0.71	0.81	0.68	0.77	0.18
Control Delay	64.0	50.2	43.2	70.2	39.0	6.9	259.5	36.3	21.6	62.3	45.2	2.3
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	64.0	50.2	43.2	70.2	39.0	6.9	259.5	36.3	21.6	62.3	45.2	2.3
Queue Length 50th (ft)	92	105	340	231	92	0	~592	324	189	103	290	0
Queue Length 95th (ft)	161	147	491	#445	128	63	#946	#599	#578	173	453	13
Internal Link Dist (ft)		535			948			577			522	
Turn Bay Length (ft)	280			240		270	260		200	440		440
Base Capacity (vph)	500	564	653	700	1221	568	729	1973	875	672	1522	567
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.48	0.87	0.85	0.31	0.45	1.48	0.71	0.81	0.40	0.75	0.17

Intersection Summary

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

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

Queues
8: E. Bidwell & Placerville

08/31/2021



Lane Group	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	223	3133	202	90	1806	534
v/c Ratio	0.49	1.00	0.20	1.10	0.39	0.39
Control Delay	28.2	33.7	3.6	164.9	0.2	0.9
Queue Delay	0.0	22.4	0.0	0.0	0.0	0.0
Total Delay	28.2	56.1	3.6	164.9	0.2	0.9
Queue Length 50th (ft)	93	599	16	~59	0	0
Queue Length 95th (ft)	164	#783	44	#154	0	0
Internal Link Dist (ft)		574			577	
Turn Bay Length (ft)			150	220		50
Base Capacity (vph)	459	3143	999	82	4648	1357
Starvation Cap Reductn	0	191	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.49	1.06	0.20	1.10	0.39	0.39

Intersection Summary

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

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

Queues
9: E. Bidwell & WB offramp

08/31/2021



Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	234	1309	1940	759	1264
v/c Ratio	0.16	1.12	1.24	0.54	0.54
Control Delay	19.1	96.5	140.6	1.5	21.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	19.1	96.5	140.6	1.5	21.2
Queue Length 50th (ft)	49	~589	~913	0	218
Queue Length 95th (ft)	74	#739	#1061	0	261
Internal Link Dist (ft)	1141		928		574
Turn Bay Length (ft)	380	380		200	
Base Capacity (vph)	1458	1167	1567	1408	2362
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	1.12	1.24	0.54	0.54

Intersection Summary

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

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

Queues
10: E. Bidwell & EB offramp

08/31/2021



Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	983	609	1801	1074	472
v/c Ratio	0.75	0.98	1.34	0.84	0.34
Control Delay	17.2	49.9	177.1	20.4	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	17.2	49.9	177.1	20.4	0.6
Queue Length 50th (ft)	113	145	~354	130	0
Queue Length 95th (ft)	171	#330	#470	#240	0
Internal Link Dist (ft)	1139		2925	928	
Turn Bay Length (ft)		400			
Base Capacity (vph)	1304	621	1345	1286	1408
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.75	0.98	1.34	0.84	0.34

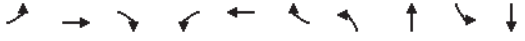
Intersection Summary

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

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

Queues
11: Driveway/Marketplace & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	84	685	27	17	755	13	66	16	14	66
v/c Ratio	0.39	0.31	0.03	0.10	0.43	0.02	0.33	0.02	0.08	0.10
Control Delay	42.6	14.4	0.0	43.3	21.5	0.0	42.6	0.1	43.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.6	14.4	0.0	43.3	21.5	0.0	42.6	0.1	43.2	0.3
Queue Length 50th (ft)	32	68	0	6	117	0	25	0	5	0
Queue Length 95th (ft)	113	285	0	37	347	0	95	0	32	0
Internal Link Dist (ft)		158			561			346		345
Turn Bay Length (ft)	240			160						
Base Capacity (vph)	600	2169	973	600	2018	911	600	1152	600	1110
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.32	0.03	0.03	0.37	0.01	0.11	0.01	0.02	0.06

Intersection Summary

Queues
13: Cavitt & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	38	615	77	30	701	17	54	49	30	9	43	28
v/c Ratio	0.18	0.26	0.07	0.15	0.31	0.02	0.24	0.12	0.07	0.05	0.16	0.09
Control Delay	34.3	11.3	3.4	34.7	13.2	0.0	33.7	22.5	0.3	35.4	29.7	0.6
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	34.3	11.3	3.4	34.7	13.2	0.0	33.7	22.5	0.3	35.4	29.7	0.6
Queue Length 50th (ft)	14	58	0	11	102	0	19	14	0	3	16	0
Queue Length 95th (ft)	49	172	19	42	202	0	63	48	0	19	47	0
Internal Link Dist (ft)		561			392			319			265	
Turn Bay Length (ft)	220			220		250	140		140	150		150
Base Capacity (vph)	734	2461	1088	734	2449	1083	734	1298	1109	734	1298	1109
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.25	0.07	0.04	0.29	0.02	0.07	0.04	0.03	0.01	0.03	0.03

Intersection Summary

Queues
15: Cavitt & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	30	708	496	34	966	35	132	131	54	25	55	36
v/c Ratio	0.23	0.35	0.54	0.25	0.47	0.05	0.46	0.45	0.16	0.11	0.23	0.13
Control Delay	54.5	23.5	5.5	54.4	24.7	0.9	40.9	40.6	4.2	38.0	39.3	1.0
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	54.5	23.5	5.5	54.4	24.7	0.9	40.9	40.6	4.2	38.0	39.3	1.0
Queue Length 50th (ft)	13	76	0	15	110	0	60	60	0	11	25	0
Queue Length 95th (ft)	67	273	102	73	382	4	176	174	16	47	84	0
Internal Link Dist (ft)		948			1359			563			316	
Turn Bay Length (ft)	200			200		230	250		250	160		160
Base Capacity (vph)	613	2766	1072	613	2769	864	931	946	897	931	977	897
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.26	0.46	0.06	0.35	0.04	0.14	0.14	0.06	0.03	0.06	0.04

Intersection Summary

Queues
1: E. Bidwell & Nesmith/College

08/31/2021



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	128	16	16	37	45	2048	38	112	2011	62
v/c Ratio	0.49	0.11	0.11	0.14	0.41	0.63	0.04	0.47	0.60	0.06
Control Delay	12.5	48.1	48.1	1.1	53.3	19.3	1.4	59.8	16.2	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.5	48.1	48.1	1.1	53.3	19.3	1.4	59.8	16.2	1.6
Queue Length 50th (ft)	0	12	12	0	32	178	0	43	287	0
Queue Length 95th (ft)	45	31	31	0	m63	#533	m1	72	#609	11
Internal Link Dist (ft)	615		620			473			1996	
Turn Bay Length (ft)		150			100		160	500		60
Base Capacity (vph)	353	346	346	441	171	3250	1061	707	3362	1079
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.05	0.05	0.08	0.26	0.63	0.04	0.16	0.60	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Queues
2: E. Bidwell & Scholar

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	129	65	67	122	55	210	145	1749	120	140	1687	197
v/c Ratio	0.50	0.31	0.22	0.58	0.12	0.53	0.60	0.60	0.13	0.59	0.58	0.21
Control Delay	60.0	50.8	1.6	61.9	42.5	10.5	48.5	35.9	19.7	85.3	7.5	1.2
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	60.0	50.8	1.6	61.9	42.5	10.5	48.5	35.9	19.7	85.3	7.5	1.2
Queue Length 50th (ft)	50	48	0	92	20	0	55	379	26	58	142	0
Queue Length 95th (ft)	80	83	0	152	35	61	m93	578	m98	94	75	1
Internal Link Dist (ft)		296			271			307			296	
Turn Bay Length (ft)	200		200	200		200	250		200	230		200
Base Capacity (vph)	592	377	436	246	651	463	476	2893	944	332	2886	960
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.17	0.15	0.50	0.08	0.45	0.30	0.60	0.13	0.42	0.58	0.21

Intersection Summary

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

Queues
3: E. Bidwell & Power Center

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	108	112	166	151	153	386	1690	187	159	1557	161
v/c Ratio	0.65	0.66	0.54	0.74	0.48	1.17	0.64	0.22	0.75	0.68	0.21
Control Delay	69.7	70.0	14.2	72.3	12.8	143.1	9.6	3.0	91.0	16.4	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.7	70.0	14.2	72.3	12.8	143.1	9.6	3.0	91.0	16.4	2.8
Queue Length 50th (ft)	86	89	0	114	0	~360	341	25	132	354	1
Queue Length 95th (ft)	146	150	64	184	61	m#590	m435	m49	206	131	18
Internal Link Dist (ft)		268		445			688			869	
Turn Bay Length (ft)						185		120	220		160
Base Capacity (vph)	219	224	351	247	351	329	2633	866	260	2298	777
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.50	0.47	0.61	0.44	1.17	0.64	0.22	0.61	0.68	0.21

Intersection Summary

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

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

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

Queues
4: E. Bidwell & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	445	306	333	239	447	102	237	1762	524	235	1540	126
v/c Ratio	1.00	0.34	0.74	0.66	0.59	0.32	0.69	0.74	0.55	0.69	0.65	0.16
Control Delay	93.9	45.0	27.7	60.2	50.9	10.9	54.9	28.8	10.1	42.4	40.1	17.6
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	93.9	45.0	27.7	60.2	50.9	10.9	54.9	28.8	10.1	42.4	40.1	17.6
Queue Length 50th (ft)	179	76	86	93	118	0	95	391	125	92	459	52
Queue Length 95th (ft)	#289	109	#224	131	154	49	124	494	242	122	505	m98
Internal Link Dist (ft)		353			348			281			264	
Turn Bay Length (ft)	190		190	240		300	230		200	230		170
Base Capacity (vph)	447	890	452	563	843	348	390	2368	945	390	2368	792
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.34	0.74	0.42	0.53	0.29	0.61	0.74	0.55	0.60	0.65	0.16

Intersection Summary

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

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

Queues
5: E. Bidwell & Via sole

08/31/2021



Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Group Flow (vph)	109	69	21	2270	9	1999	172
v/c Ratio	0.46	0.40	0.19	0.53	0.12	0.49	0.13
Control Delay	59.7	19.0	60.9	3.4	39.4	10.2	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	19.0	60.9	3.4	39.4	10.2	5.7
Queue Length 50th (ft)	42	0	16	63	7	213	26
Queue Length 95th (ft)	71	46	m22	378	m10	384	m72
Internal Link Dist (ft)	273			781		530	
Turn Bay Length (ft)	75	75	250		250		215
Base Capacity (vph)	1256	623	147	4272	215	4089	1297
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.11	0.14	0.53	0.04	0.49	0.13

Intersection Summary

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

Queues
6: E. Bidwell & Via Felice

08/31/2021



Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Group Flow (vph)	127	254	151	2006	130	1782	116
v/c Ratio	0.47	0.71	0.74	0.82	0.67	0.52	0.10
Control Delay	57.9	17.6	67.7	21.9	60.7	12.0	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.9	17.6	67.7	21.9	60.7	12.0	3.9
Queue Length 50th (ft)	49	0	144	245	80	229	18
Queue Length 95th (ft)	77	79	m204	325	160	201	27
Internal Link Dist (ft)	195			267		781	
Turn Bay Length (ft)	75	75	290		250		320
Base Capacity (vph)	1256	741	278	2446	275	3433	1105
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.34	0.54	0.82	0.47	0.52	0.10

Intersection Summary

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

Queues
7: E. Bidwell & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	193	766	988	892	499	356	1053	1596	848	155	1691	173
v/c Ratio	0.61	1.75	1.66	1.26	0.41	0.57	1.87	0.73	0.85	0.55	0.95	0.26
Control Delay	60.3	379.9	331.1	168.8	40.7	9.7	419.3	26.5	11.2	68.1	42.7	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0
Total Delay	60.3	379.9	331.1	168.8	40.7	9.7	419.3	26.5	13.7	68.1	42.7	9.9
Queue Length 50th (ft)	75	~464	~1066	~446	120	15	~656	331	231	65	141	1
Queue Length 95th (ft)	111	#589	#1322	#574	163	106	m#571	m299	m180	101	#572	81
Internal Link Dist (ft)		535			948			577			522	
Turn Bay Length (ft)	280			240		270	260		200	440		440
Base Capacity (vph)	505	437	595	707	1205	628	563	2201	996	678	1784	668
Starvation Cap Reductn	0	0	0	0	0	0	0	0	69	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	1.75	1.66	1.26	0.41	0.57	1.87	0.73	0.91	0.23	0.95	0.26

Intersection Summary

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

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

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

Queues
8: E. Bidwell & Placerville

08/31/2021



Lane Group	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	245	3252	234	188	2626	755
v/c Ratio	0.53	1.13	0.24	1.50	0.55	0.55
Control Delay	20.3	79.2	2.5	255.9	0.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.3	79.2	2.5	255.9	0.0	0.1
Queue Length 50th (ft)	61	~516	7	~185	0	0
Queue Length 95th (ft)	123	#609	32	m#127	m0	m0
Internal Link Dist (ft)		574			577	
Turn Bay Length (ft)			150	220		50
Base Capacity (vph)	464	2884	980	125	4766	1375
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	22	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	1.14	0.24	1.50	0.55	0.55

Intersection Summary

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

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

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

Queues
9: E. Bidwell & WB offramp

08/31/2021



Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	373	1261	2343	746	2327
v/c Ratio	0.25	1.04	1.46	0.51	0.97
Control Delay	20.1	69.0	238.6	1.3	40.0
Queue Delay	0.0	0.0	0.0	0.0	7.1
Total Delay	20.1	69.0	238.6	1.3	47.1
Queue Length 50th (ft)	82	~534	~1223	0	550
Queue Length 95th (ft)	115	#682	#1369	0	#683
Internal Link Dist (ft)	1141		928		574
Turn Bay Length (ft)	380	380		200	
Base Capacity (vph)	1487	1208	1600	1455	2409
Starvation Cap Reductn	0	0	0	0	98
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	1.04	1.46	0.51	1.01

Intersection Summary

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

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

Queues
10: E. Bidwell & EB offramp

08/31/2021



Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1339	817	1751	1872	828
v/c Ratio	1.01	1.32	1.28	1.41	0.57
Control Delay	44.3	177.1	149.8	210.4	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	44.3	177.1	149.8	210.4	1.6
Queue Length 50th (ft)	~180	~308	~334	~395	0
Queue Length 95th (ft)	#311	#488	#450	#523	0
Internal Link Dist (ft)	1139		2925	928	
Turn Bay Length (ft)		400			
Base Capacity (vph)	1330	617	1371	1323	1455
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.01	1.32	1.28	1.41	0.57

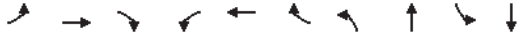
Intersection Summary

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

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

Queues
11: Driveway/Marketplace & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	251	786	28	40	555	94	20	10	182	216
v/c Ratio	0.65	0.42	0.03	0.24	0.49	0.17	0.13	0.04	0.64	0.43
Control Delay	42.8	19.0	0.1	48.5	27.9	8.3	49.7	26.0	48.4	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.8	19.0	0.1	48.5	27.9	8.3	49.7	26.0	48.4	7.0
Queue Length 50th (ft)	86	95	0	15	87	0	7	2	67	2
Queue Length 95th (ft)	#396	392	0	75	297	45	46	18	#243	53
Internal Link Dist (ft)		158			561			346		345
Turn Bay Length (ft)	240			160						
Base Capacity (vph)	527	1922	902	527	1774	841	527	913	527	967
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.41	0.03	0.08	0.31	0.11	0.04	0.01	0.35	0.22

Intersection Summary

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

Queues
13: Cavitt & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	34	829	123	35	578	23	73	63	48	15	29	31
v/c Ratio	0.19	0.38	0.12	0.19	0.27	0.02	0.33	0.16	0.12	0.09	0.13	0.11
Control Delay	36.2	12.9	4.4	36.1	11.9	0.0	35.7	23.9	1.3	36.6	31.2	0.8
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	36.2	12.9	4.4	36.1	11.9	0.0	35.7	23.9	1.3	36.6	31.2	0.8
Queue Length 50th (ft)	12	86	1	13	55	0	26	18	0	5	10	0
Queue Length 95th (ft)	48	262	36	48	173	0	81	61	5	28	38	0
Internal Link Dist (ft)		561			392			319			265	
Turn Bay Length (ft)	220			220		250	140		140	150		150
Base Capacity (vph)	642	2161	1013	642	2162	1003	642	1157	1021	642	1157	1021
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.38	0.12	0.05	0.27	0.02	0.11	0.05	0.05	0.02	0.03	0.03

Intersection Summary

Queues
15: Cavitt & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	1059	687	29	1289	65	256	270	101	40	112	35
v/c Ratio	0.48	0.55	0.73	0.31	0.70	0.10	0.80	0.60	0.20	0.17	0.47	0.12
Control Delay	71.4	33.0	12.8	68.8	36.9	8.6	60.7	44.7	8.3	46.4	52.7	0.9
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	71.4	33.0	12.8	68.8	36.9	8.6	60.7	44.7	8.3	46.4	52.7	0.9
Queue Length 50th (ft)	39	209	61	20	278	0	172	170	0	27	80	0
Queue Length 95th (ft)	107	423	329	66	#597	37	#401	361	48	67	155	0
Internal Link Dist (ft)		948			1359			563			316	
Turn Bay Length (ft)	200			200		230	250		250	160		160
Base Capacity (vph)	410	1920	946	410	1851	620	447	635	652	625	656	638
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.55	0.73	0.07	0.70	0.10	0.57	0.43	0.15	0.06	0.17	0.05

Intersection Summary

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

Queues
1: E. Bidwell & Nesmith/College

08/31/2021



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	74	77	78	18	65	1586	112	150	1603	43
v/c Ratio	0.29	0.33	0.33	0.06	0.38	0.66	0.14	0.41	0.61	0.05
Control Delay	17.3	48.9	49.0	0.5	59.7	25.5	11.8	53.7	23.9	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.3	48.9	49.0	0.5	59.7	25.5	11.8	53.7	23.9	3.3
Queue Length 50th (ft)	4	42	43	0	34	233	14	40	232	0
Queue Length 95th (ft)	55	136	137	0	131	658	84	129	665	14
Internal Link Dist (ft)	615		620			473			1996	
Turn Bay Length (ft)		150			100		160	500		60
Base Capacity (vph)	751	692	692	692	521	3876	1222	1011	3877	1222
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.11	0.11	0.03	0.12	0.41	0.09	0.15	0.41	0.04

Intersection Summary

Queues
2: E. Bidwell & Scholar

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	115	35	52	97	43	263	109	1385	197	157	1402	220
v/c Ratio	0.45	0.16	0.22	0.47	0.09	0.60	0.50	0.49	0.21	0.59	0.48	0.23
Control Delay	62.3	50.7	8.5	62.3	45.8	11.5	65.4	19.0	8.2	65.1	17.9	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	62.3	50.7	8.5	62.3	45.8	11.5	65.4	19.0	8.2	65.1	17.9	7.8
Queue Length 50th (ft)	41	24	0	68	14	0	39	206	26	57	202	29
Queue Length 95th (ft)	93	61	24	158	35	72	90	434	103	119	426	110
Internal Link Dist (ft)		296			271			307			296	
Turn Bay Length (ft)	200		200	200		200	250		200	230		200
Base Capacity (vph)	773	659	604	398	1254	731	773	3130	1019	773	3163	1033
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.05	0.09	0.24	0.03	0.36	0.14	0.44	0.19	0.20	0.44	0.21

Intersection Summary

Queues
3: E. Bidwell & Power Center

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	130	130	98	25	51	457	1468	279	127	1429	63
v/c Ratio	0.62	0.61	0.34	0.17	0.27	1.25	0.52	0.30	0.65	0.61	0.08
Control Delay	70.1	69.8	14.0	62.3	12.6	176.9	23.4	15.7	76.0	30.1	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.1	69.8	14.0	62.3	12.6	176.9	23.4	15.7	76.0	30.1	8.2
Queue Length 50th (ft)	106	106	0	20	0	~455	249	73	99	298	2
Queue Length 95th (ft)	228	227	57	56	30	#1063	606	255	224	597	39
Internal Link Dist (ft)		268		445			688			869	
Turn Bay Length (ft)						185		120	220		160
Base Capacity (vph)	564	568	596	583	561	365	2938	951	365	2867	918
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.23	0.16	0.04	0.09	1.25	0.50	0.29	0.35	0.50	0.07

Intersection Summary

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

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

Queues
4: E. Bidwell & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	358	273	284	126	629	80	158	1672	296	177	1227	83
v/c Ratio	0.77	0.21	0.46	0.54	0.67	0.22	0.59	0.69	0.36	0.62	0.50	0.10
Control Delay	74.7	44.8	7.1	78.1	61.3	11.9	77.9	34.8	17.2	77.7	29.5	4.8
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	74.7	44.8	7.1	78.1	61.3	11.9	77.9	34.8	17.2	77.7	29.5	4.8
Queue Length 50th (ft)	174	77	0	61	210	0	77	460	101	87	295	0
Queue Length 95th (ft)	252	111	74	107	278	48	128	646	214	140	425	32
Internal Link Dist (ft)		353			348			281			264	
Turn Bay Length (ft)	190		190	240		300	230		200	230		170
Base Capacity (vph)	827	1467	659	943	1577	546	594	2406	814	594	2434	804
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.19	0.43	0.13	0.40	0.15	0.27	0.69	0.36	0.30	0.50	0.10

Intersection Summary

Queues
5: E. Bidwell & Via sole

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	28	28	72	43	1947	12	1510	127
v/c Ratio	0.14	0.14	0.26	0.16	0.54	0.01	0.73	0.11
Control Delay	36.8	36.8	4.9	1.2	15.6	0.0	19.1	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.8	36.8	4.9	1.2	15.6	0.0	19.1	5.5
Queue Length 50th (ft)	12	12	0	0	146	0	143	2
Queue Length 95th (ft)	48	48	17	0	#868	0	#821	56
Internal Link Dist (ft)		273		211	781		530	
Turn Bay Length (ft)	75		75			210		215
Base Capacity (vph)	473	473	520	469	3574	1141	2074	1147
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.06	0.14	0.09	0.54	0.01	0.73	0.11

Intersection Summary

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

Queues
6: E. Bidwell & Via Felice

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	30	30	142	8	115	1912	2	33	1483	125
v/c Ratio	0.23	0.23	0.56	0.07	0.55	0.48	0.00	0.28	0.48	0.12
Control Delay	42.1	42.1	16.5	41.9	45.3	4.2	0.0	19.0	10.8	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.1	42.1	16.5	41.9	45.3	4.2	0.0	19.0	10.8	2.5
Queue Length 50th (ft)	14	14	0	4	55	75	0	7	125	0
Queue Length 95th (ft)	48	48	57	20	122	222	0	42	277	28
Internal Link Dist (ft)		195		264		267			781	
Turn Bay Length (ft)	75		75		290		210	250		320
Base Capacity (vph)	428	428	509	343	341	4011	1269	119	3142	1026
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.07	0.28	0.02	0.34	0.48	0.00	0.28	0.47	0.12

Intersection Summary

Queues
7: E. Bidwell & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	239	268	571	598	384	258	1081	1408	705	270	1160	104
v/c Ratio	0.67	0.49	0.80	0.92	0.31	0.45	1.48	0.72	0.78	0.68	0.78	0.19
Control Delay	64.2	50.2	35.7	70.3	39.1	6.8	260.2	36.5	19.4	62.3	45.7	2.7
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	64.2	50.2	35.7	70.3	39.1	6.8	260.2	36.5	19.4	62.3	45.7	2.7
Queue Length 50th (ft)	93	105	340	231	92	0	~592	327	165	105	298	0
Queue Length 95th (ft)	162	147	490	#445	128	63	#946	#608	#536	176	#470	18
Internal Link Dist (ft)		535			948			577			522	
Turn Bay Length (ft)	280			240		270	260		200	440		440
Base Capacity (vph)	500	564	712	700	1220	576	728	1969	899	671	1520	574
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.48	0.80	0.85	0.31	0.45	1.48	0.72	0.78	0.40	0.76	0.18

Intersection Summary

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

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

Queues
8: E. Bidwell & Placerville

08/31/2021



Lane Group	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	223	3143	202	90	1823	541
v/c Ratio	0.48	1.00	0.20	1.10	0.39	0.39
Control Delay	28.0	34.6	3.6	164.9	0.2	0.8
Queue Delay	0.0	22.9	0.0	0.0	0.0	0.0
Total Delay	28.0	57.5	3.6	164.9	0.2	0.8
Queue Length 50th (ft)	93	604	17	~59	0	0
Queue Length 95th (ft)	163	#787	44	#154	0	0
Internal Link Dist (ft)		574			577	
Turn Bay Length (ft)			150	220		50
Base Capacity (vph)	467	3143	1027	82	4664	1375
Starvation Cap Reductn	0	190	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.48	1.06	0.20	1.10	0.39	0.39

Intersection Summary

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

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

Queues
9: E. Bidwell & WB offramp

08/31/2021



Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	234	1311	1947	759	1276
v/c Ratio	0.16	1.10	1.24	0.53	0.54
Control Delay	19.1	89.5	142.1	1.4	21.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	19.1	89.5	142.1	1.4	21.3
Queue Length 50th (ft)	49	~582	~919	0	220
Queue Length 95th (ft)	74	#731	#1066	0	264
Internal Link Dist (ft)	1141		928		574
Turn Bay Length (ft)	380	380		200	
Base Capacity (vph)	1458	1188	1568	1427	2362
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	1.10	1.24	0.53	0.54

Intersection Summary

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

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

Queues
10: E. Bidwell & EB offramp

08/31/2021



Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	988	609	1803	1081	476
v/c Ratio	0.76	0.97	1.34	0.84	0.33
Control Delay	17.4	46.4	177.8	20.6	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	17.4	46.4	177.8	20.6	0.6
Queue Length 50th (ft)	114	143	~354	132	0
Queue Length 95th (ft)	172	#327	#471	#242	0
Internal Link Dist (ft)	1139		2925	928	
Turn Bay Length (ft)		400			
Base Capacity (vph)	1304	630	1345	1289	1427
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.76	0.97	1.34	0.84	0.33

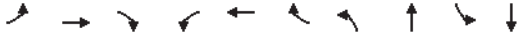
Intersection Summary

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

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

Queues
11: Driveway/Marketplace & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	84	685	28	17	755	13	69	18	14	66
v/c Ratio	0.39	0.31	0.03	0.10	0.43	0.02	0.34	0.02	0.08	0.10
Control Delay	42.9	14.5	0.0	43.3	21.6	0.0	42.7	0.1	43.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.9	14.5	0.0	43.3	21.6	0.0	42.7	0.1	43.4	0.3
Queue Length 50th (ft)	32	69	0	6	118	0	27	0	5	0
Queue Length 95th (ft)	113	286	0	38	348	0	98	0	32	0
Internal Link Dist (ft)		158			561			346		345
Turn Bay Length (ft)	240			160						
Base Capacity (vph)	598	2167	1005	598	2014	941	598	1184	598	1137
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.32	0.03	0.03	0.37	0.01	0.12	0.02	0.02	0.06

Intersection Summary

Queues
13: Cavitt & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	39	616	77	32	701	17	54	49	36	9	43	28
v/c Ratio	0.19	0.26	0.07	0.16	0.31	0.02	0.24	0.12	0.08	0.05	0.16	0.09
Control Delay	34.3	11.4	3.4	34.6	13.3	0.0	33.7	22.5	0.4	35.4	29.7	0.6
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	34.3	11.4	3.4	34.6	13.3	0.0	33.7	22.5	0.4	35.4	29.7	0.6
Queue Length 50th (ft)	14	58	0	12	102	0	19	14	0	3	16	0
Queue Length 95th (ft)	50	173	19	44	202	0	63	48	0	19	47	0
Internal Link Dist (ft)		561			392			319			265	
Turn Bay Length (ft)	220			220		250	140		140	150		150
Base Capacity (vph)	737	2459	1129	737	2449	1124	737	1298	1134	737	1298	1134
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.25	0.07	0.04	0.29	0.02	0.07	0.04	0.03	0.01	0.03	0.02

Intersection Summary

Queues
15: Cavitt & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	30	711	497	34	967	36	132	132	54	27	56	36
v/c Ratio	0.23	0.35	0.53	0.26	0.47	0.05	0.46	0.45	0.16	0.12	0.24	0.13
Control Delay	54.6	23.5	5.4	54.5	24.7	1.1	41.0	40.7	4.2	38.0	39.3	0.9
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	54.6	23.5	5.4	54.5	24.7	1.1	41.0	40.7	4.2	38.0	39.3	0.9
Queue Length 50th (ft)	13	77	0	15	110	0	60	60	0	12	26	0
Queue Length 95th (ft)	67	274	101	73	383	5	176	175	16	49	85	0
Internal Link Dist (ft)		948			1359			563			316	
Turn Bay Length (ft)	200			200		230	250		250	160		160
Base Capacity (vph)	609	2746	1086	609	2749	888	924	939	906	924	970	906
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.26	0.46	0.06	0.35	0.04	0.14	0.14	0.06	0.03	0.06	0.04

Intersection Summary

Queues
1: E. Bidwell & Nesmith/College

08/31/2021



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	128	16	16	37	45	2058	38	112	2025	62
v/c Ratio	0.49	0.11	0.11	0.14	0.41	0.63	0.04	0.47	0.60	0.06
Control Delay	12.5	48.1	48.1	1.1	53.2	19.4	1.4	59.8	16.3	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.5	48.1	48.1	1.1	53.2	19.4	1.4	59.8	16.3	1.6
Queue Length 50th (ft)	0	12	12	0	32	181	0	43	291	0
Queue Length 95th (ft)	45	31	31	0	m63	#540	m1	72	#621	11
Internal Link Dist (ft)	615		620			473			1996	
Turn Bay Length (ft)		150			100		160	500		60
Base Capacity (vph)	353	346	346	441	171	3250	1061	707	3362	1079
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.05	0.05	0.08	0.26	0.63	0.04	0.16	0.60	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Queues
2: E. Bidwell & Scholar

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	129	65	67	122	55	210	145	1759	120	140	1700	197
v/c Ratio	0.50	0.31	0.22	0.58	0.12	0.53	0.60	0.61	0.13	0.59	0.59	0.21
Control Delay	60.0	50.8	1.6	61.9	42.5	10.5	48.3	36.0	19.7	85.3	7.5	1.2
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	60.0	50.8	1.6	61.9	42.5	10.5	48.3	36.0	19.7	85.3	7.5	1.2
Queue Length 50th (ft)	50	48	0	92	20	0	55	382	26	59	146	0
Queue Length 95th (ft)	80	83	0	152	35	61	m93	581	m98	94	76	1
Internal Link Dist (ft)		296			271			307			296	
Turn Bay Length (ft)	200		200	200		200	250		200	230		200
Base Capacity (vph)	592	377	436	246	651	463	476	2893	944	332	2886	960
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.17	0.15	0.50	0.08	0.45	0.30	0.61	0.13	0.42	0.59	0.21

Intersection Summary

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

Queues
3: E. Bidwell & Power Center

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	108	112	166	151	153	386	1699	187	159	1570	161
v/c Ratio	0.65	0.66	0.54	0.74	0.48	1.17	0.65	0.22	0.75	0.68	0.21
Control Delay	69.7	70.0	14.2	72.3	12.8	144.6	9.0	3.0	90.9	16.4	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.7	70.0	14.2	72.3	12.8	144.6	9.0	3.0	90.9	16.4	2.8
Queue Length 50th (ft)	86	89	0	114	0	~359	273	24	132	358	1
Queue Length 95th (ft)	146	150	64	184	61	m#592	m417	m49	205	132	18
Internal Link Dist (ft)		268		445			688			869	
Turn Bay Length (ft)						185		120	220		160
Base Capacity (vph)	219	224	351	247	351	329	2633	866	260	2298	777
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.50	0.47	0.61	0.44	1.17	0.65	0.22	0.61	0.68	0.21

Intersection Summary

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

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

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

Queues
4: E. Bidwell & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	445	306	337	240	447	104	240	1769	525	238	1551	126
v/c Ratio	1.00	0.34	0.75	0.66	0.59	0.32	0.70	0.75	0.56	0.69	0.66	0.16
Control Delay	93.9	45.0	28.6	60.1	50.9	11.1	67.6	20.2	4.8	42.4	40.2	17.6
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	93.9	45.0	28.6	60.1	50.9	11.1	67.6	20.2	4.8	42.4	40.2	17.6
Queue Length 50th (ft)	179	76	90	93	118	0	101	229	40	93	463	53
Queue Length 95th (ft)	#289	109	#233	132	154	49	125	265	88	123	509	m97
Internal Link Dist (ft)		353			348			281			264	
Turn Bay Length (ft)	190		190	240		300	230		200	230		170
Base Capacity (vph)	447	887	451	563	843	349	390	2365	943	390	2365	792
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.34	0.75	0.43	0.53	0.30	0.62	0.75	0.56	0.61	0.66	0.16

Intersection Summary

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

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

Queues
5: E. Bidwell & Via sole

08/31/2021



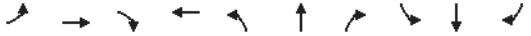
Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	NBR	SBU	SBT	SBR
Lane Group Flow (vph)	55	54	69	30	21	2271	30	9	2015	172
v/c Ratio	0.47	0.46	0.33	0.18	0.20	0.55	0.02	0.12	0.58	0.14
Control Delay	65.9	65.4	7.8	2.4	58.6	2.7	0.0	49.4	16.7	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.9	65.4	7.8	2.4	58.6	2.7	0.0	49.4	16.7	8.0
Queue Length 50th (ft)	44	43	0	0	16	94	0	7	295	22
Queue Length 95th (ft)	87	86	19	0	m34	m87	m0	m0	427	m74
Internal Link Dist (ft)		273		211		781			530	
Turn Bay Length (ft)	75		75		250		210	250		215
Base Capacity (vph)	290	290	358	320	166	4161	1313	230	3485	1247
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.19	0.19	0.09	0.13	0.55	0.02	0.04	0.58	0.14

Intersection Summary

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

Queues
6: E. Bidwell & Via Felice

08/31/2021



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	65	65	254	6	167	2018	7	130	1801	117
v/c Ratio	0.49	0.49	0.71	0.07	0.71	0.48	0.01	1.15	0.54	0.11
Control Delay	64.0	63.9	17.4	55.3	74.7	1.6	0.0	152.3	16.4	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.0	63.9	17.4	55.3	74.7	1.6	0.0	152.3	16.4	5.0
Queue Length 50th (ft)	51	51	0	5	137	33	0	~117	226	17
Queue Length 95th (ft)	96	96	78	19	m193	90	m0	#269	227	29
Internal Link Dist (ft)		195		264		267			781	
Turn Bay Length (ft)	75		75		290		210	250		320
Base Capacity (vph)	290	290	483	242	257	4208	1327	113	3340	1080
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.22	0.53	0.02	0.65	0.48	0.01	1.15	0.54	0.11

Intersection Summary

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

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

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

Queues
7: E. Bidwell & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	199	766	988	892	499	361	1053	1621	848	158	1707	177
v/c Ratio	0.61	1.75	1.66	1.26	0.42	0.58	1.87	0.74	0.85	0.56	0.96	0.26
Control Delay	60.3	379.9	331.1	168.8	40.8	10.5	419.2	26.8	11.3	58.0	48.0	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0
Total Delay	60.3	379.9	331.1	168.8	40.8	10.5	419.2	26.8	13.9	58.0	48.0	14.5
Queue Length 50th (ft)	77	~464	~1066	~446	121	20	~656	336	231	67	226	14
Queue Length 95th (ft)	113	#589	#1322	#574	163	115	m#564	m302	m179	104	#559	124
Internal Link Dist (ft)		535			948			577			522	
Turn Bay Length (ft)	280			240		270	260		200	440		440
Base Capacity (vph)	505	437	595	707	1196	624	563	2197	993	678	1784	671
Starvation Cap Reductn	0	0	0	0	0	0	0	0	69	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	1.75	1.66	1.26	0.42	0.58	1.87	0.74	0.92	0.23	0.96	0.26

Intersection Summary

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

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

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

Queues
8: E. Bidwell & Placerville

08/31/2021



Lane Group	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	245	3276	234	188	2636	762
v/c Ratio	0.53	1.14	0.24	1.50	0.55	0.55
Control Delay	20.3	82.8	2.5	255.9	0.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.3	82.8	2.5	255.9	0.0	0.1
Queue Length 50th (ft)	61	~522	7	~184	0	0
Queue Length 95th (ft)	123	#616	32	m#127	m0	m0
Internal Link Dist (ft)		574			577	
Turn Bay Length (ft)			150	220		50
Base Capacity (vph)	464	2884	980	125	4761	1375
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	23	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	1.15	0.24	1.50	0.55	0.55

Intersection Summary

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

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

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

Queues
9: E. Bidwell & WB offramp

08/31/2021



Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	373	1268	2362	746	2334
v/c Ratio	0.25	1.05	1.48	0.51	0.97
Control Delay	20.1	70.8	243.8	1.3	40.5
Queue Delay	0.0	0.0	0.0	0.0	7.6
Total Delay	20.1	70.8	243.8	1.3	48.0
Queue Length 50th (ft)	82	~540	~1239	0	553
Queue Length 95th (ft)	115	#688	#1384	0	#687
Internal Link Dist (ft)	1141		928		574
Turn Bay Length (ft)	380	380		200	
Base Capacity (vph)	1487	1208	1600	1455	2409
Starvation Cap Reductn	0	0	0	0	97
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	1.05	1.48	0.51	1.01

Intersection Summary

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

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

Queues
10: E. Bidwell & EB offramp

08/31/2021



Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1352	817	1756	1876	831
v/c Ratio	1.02	1.32	1.28	1.42	0.57
Control Delay	46.9	177.1	151.4	211.8	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	46.9	177.1	151.4	211.8	1.6
Queue Length 50th (ft)	~187	~308	~335	~396	0
Queue Length 95th (ft)	#316	#488	#451	#524	0
Internal Link Dist (ft)	1139		2925	928	
Turn Bay Length (ft)		400			
Base Capacity (vph)	1330	617	1371	1323	1455
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.02	1.32	1.28	1.42	0.57

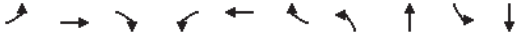
Intersection Summary

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

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

Queues
11: Driveway/Marketplace & Broadstone

08/31/2021



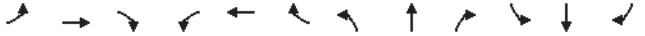
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	251	786	32	42	555	94	23	12	182	216
v/c Ratio	0.65	0.42	0.04	0.25	0.49	0.17	0.14	0.04	0.64	0.43
Control Delay	42.8	19.1	0.1	48.5	28.0	8.3	49.3	24.2	48.5	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.8	19.1	0.1	48.5	28.0	8.3	49.3	24.2	48.5	7.0
Queue Length 50th (ft)	86	95	0	16	87	0	9	2	68	2
Queue Length 95th (ft)	#396	393	0	77	297	45	51	19	#243	53
Internal Link Dist (ft)		158			561			346		345
Turn Bay Length (ft)	240			160						
Base Capacity (vph)	526	1917	900	526	1771	840	526	900	526	965
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.41	0.04	0.08	0.31	0.11	0.04	0.01	0.35	0.22

Intersection Summary

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

Queues
13: Cavitt & Broadstone

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	35	830	123	40	579	23	73	63	52	15	29	32
v/c Ratio	0.20	0.39	0.12	0.22	0.26	0.02	0.34	0.17	0.13	0.09	0.13	0.12
Control Delay	37.5	14.1	4.5	37.4	11.6	0.0	37.4	25.2	2.0	37.8	32.4	0.9
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	37.5	14.1	4.5	37.4	11.6	0.0	37.4	25.2	2.0	37.8	32.4	0.9
Queue Length 50th (ft)	15	128	1	17	55	0	32	22	0	7	13	0
Queue Length 95th (ft)	49	265	36	54	174	0	82	62	7	28	38	0
Internal Link Dist (ft)		561			392			319			265	
Turn Bay Length (ft)	220			220		250	140		140	150		150
Base Capacity (vph)	615	2073	976	615	2183	1012	615	1110	983	615	1110	983
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.40	0.13	0.07	0.27	0.02	0.12	0.06	0.05	0.02	0.03	0.03

Intersection Summary

Queues
15: Cavitt & Iron Point

08/31/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	1061	688	29	1293	67	257	272	101	40	114	35
v/c Ratio	0.48	0.55	0.73	0.31	0.70	0.11	0.80	0.60	0.20	0.17	0.47	0.12
Control Delay	71.6	33.2	13.0	69.0	37.1	9.0	60.8	44.7	8.3	46.5	53.0	0.9
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	71.6	33.2	13.0	69.0	37.1	9.0	60.8	44.7	8.3	46.5	53.0	0.9
Queue Length 50th (ft)	39	210	62	20	280	0	173	171	0	27	82	0
Queue Length 95th (ft)	107	424	331	66	#601	39	#404	365	48	67	157	0
Internal Link Dist (ft)		948			1359			563			316	
Turn Bay Length (ft)	200			200		230	250		250	160		160
Base Capacity (vph)	409	1914	944	409	1845	618	445	632	650	622	654	636
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.55	0.73	0.07	0.70	0.11	0.58	0.43	0.16	0.06	0.17	0.06

Intersection Summary

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

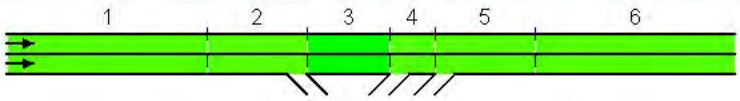
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Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data
Managed Lanes: Turn On
Reliability Analysis (RL): Generate | Delete | Summary
ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only
Analysis Period (A.P.) Control: A.P. 1/1 17:00 - 17:15 | First | Last | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		4		5	6	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	2,545	2545	1412	2023	2132	2132
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				611	109	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,133				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	74.0	61.7	74.7	67.0	66.8	74.9
Total Density (veh/mi/ln)	17.2	15.5	9.4	13.5	14.6	14.2
Total Density (pc/mi/ln)	17.5	15.8	9.6	13.8	14.9	14.5
Influence Area Density (pc/mi/ln)		15.8		13.8	14.9	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	2,545	2,545	1,412	2,023	2,132	2,132
D/C	0.54	0.54	0.30	0.43	0.45	0.45
Mainline Volume Served (vph)	2,545	2,545	1,412	2,023	2,132	2,132
V/C	0.54	0.54	0.30	0.43	0.45	0.45
Adjusted ONR Dem. (vph)				611	109	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				611	109	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,133				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,133				
Density Based LOS	B	B	A	B	B	B
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.81	0.49	0.33	0.20	0.45	0.80
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.01	0.09	0.00	0.02	0.05	0.00
VMTD (veh-miles / interval)	636	318	147	115	266	533
VMTV (veh-miles / interval)	636	318	147	115	266	533
PMTD (p-miles / interval)	636	318	147	115	266	533
PMTV (p-miles / interval)	636	318	147	115	266	533
VHT (travel / interval (hrs))	8.60	5.15	1.97	1.72	3.99	7.11
VHD-M (delay / interval (hrs))	0.11	0.91	0.01	0.18	0.43	0.01
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	0.11	0.91	0.01	0.18	0.43	0.01
Space Mean Speed (mph)	74.0	61.7	74.7	67.0	66.8	74.9
Travel Time Index	1.01	1.21	1.00	1.12	1.12	1.00

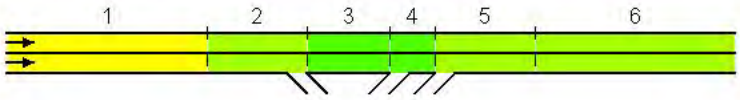
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Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data
Managed Lanes: Turn On
Reliability Analysis (RL): Generate | Delete | Summary
ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only
Analysis Period (A.P.) Control: A.P. 1/1 7:00 - 7:15 | First | Last | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		A		2	B	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	3,536	3536	2191	2439	3366	3366
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				248	927	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,345				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	67.9	61.1	74.7	66.4	64.0	69.3
Total Density (veh/mi/ln)	26.1	24.0	14.6	16.9	23.8	24.3
Total Density (pc/mi/ln)	26.6	24.5	14.9	17.2	24.3	24.8
Influence Area Density (pc/mi/ln)		24.5		17.2	24.3	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	3,536	3,536	2,191	2,439	3,366	3,366
D/C	0.75	0.75	0.47	0.52	0.72	0.72
Mainline Volume Served (vph)	3,536	3,536	2,191	2,439	3,366	3,366
V/C	0.75	0.75	0.47	0.52	0.72	0.72
Adjusted ONR Dem. (vph)				248	927	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				248	927	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,345				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,345				
Density Based LOS	D	C	B	B	C	C
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.88	0.49	0.33	0.21	0.47	0.87
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.08	0.09	0.00	0.02	0.07	0.07
VMTD (veh-miles / interval)	884	442	228	139	421	842
VMTV (veh-miles / interval)	884	442	228	139	421	842
PMTD (p-miles / interval)	884	442	228	139	421	842
PMTV (p-miles / interval)	884	442	228	139	421	842
VHT (travel / interval (hrs))	13.03	7.24	3.05	2.09	6.58	12.14
VHD-M (delay / interval (hrs))	1.24	1.34	0.01	0.24	0.97	0.92
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	1.24	1.34	0.01	0.24	0.97	0.92
Space Mean Speed (mph)	67.9	61.1	74.7	66.4	64.0	69.3
Travel Time Index	1.11	1.23	1.00	1.13	1.17	1.08

FREEVAL-2015e - Z:\Shared\Projects\P21050 Broadstone Villas\US 50\FREEVAL\EB\ex no P PM EB.seed

Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data

Managed Lanes: Turn On

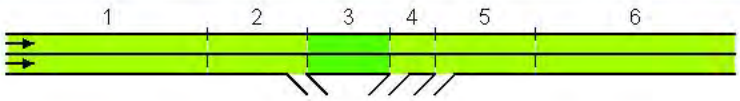
Reliability Analysis (RL): Generate | Delete | Summary

ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only

Analysis Period (A.P.) Control: A.P. 1/1 17:00 - 17:15 | First | Last | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		C			D	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	3,240	3240	1832	3029	3209	3209
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				1,197	180	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,408				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	70.3	60.9	74.7	65.1	64.6	70.5
Total Density (veh/mi/ln)	23.0	21.4	12.2	21.1	22.9	22.8
Total Density (pc/mi/ln)	23.5	21.9	12.5	21.5	23.4	23.2
Influence Area Density (pc/mi/ln)		21.9		21.5	23.4	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	3,240	3,240	1,832	3,029	3,209	3,209
D/C	0.69	0.69	0.39	0.64	0.68	0.68
Mainline Volume Served (vph)	3,240	3,240	1,832	3,029	3,209	3,209
V/C	0.69	0.69	0.39	0.64	0.68	0.68
Adjusted ONR Dem. (vph)				1,197	180	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				1,197	180	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,408				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,408				
Density Based LOS	C	C	B	C	C	C
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.85	0.49	0.33	0.21	0.46	0.85
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.05	0.09	0.00	0.03	0.06	0.05
VMTD (veh-miles / interval)	810	405	191	172	401	802
VMTV (veh-miles / interval)	810	405	191	172	401	802
PMTD (p-miles / interval)	810	405	191	172	401	802
PMTV (p-miles / interval)	810	405	191	172	401	802
VHT (travel / interval (hrs))	11.52	6.65	2.55	2.64	6.21	11.38
VHD-M (delay / interval (hrs))	0.72	1.25	0.01	0.35	0.86	0.68
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	0.72	1.25	0.01	0.35	0.86	0.68
Space Mean Speed (mph)	70.3	60.9	74.7	65.1	64.6	70.5
Travel Time Index	1.07	1.23	1.00	1.15	1.16	1.06

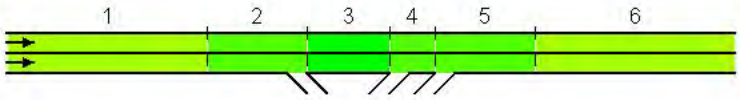
FREEVAL-2015e - Z:\Shared\Projects\P21050 Broadstone Villas\US 50\FREEVAL\WB\ex no P PM WB.seed

Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data
Managed Lanes: Turn On
Reliability Analysis (RL): Generate | Delete | Summary
ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only
Analysis Period (A.P.) Control: A.P. 1/1 7:00 - 7:15 | First | Last | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		a			b	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	2,717	2717	1439	1713	2751	2751
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				274	1,038	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,278				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	73.4	61.3	74.7	67.2	65.8	73.2
Total Density (veh/mi/ln)	18.5	16.9	9.6	11.2	19.0	18.8
Total Density (pc/mi/ln)	18.9	17.3	9.8	11.5	19.4	19.2
Influence Area Density (pc/mi/ln)		17.3		11.5	19.4	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	2,717	2,717	1,439	1,713	2,751	2,751
D/C	0.58	0.58	0.31	0.36	0.58	0.58
Mainline Volume Served (vph)	2,717	2,717	1,439	1,713	2,751	2,751
V/C	0.58	0.58	0.31	0.36	0.58	0.58
Adjusted ONR Dem. (vph)				274	1,038	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				274	1,038	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,278				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,278				
Density Based LOS	C	B	A	B	B	C
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.82	0.49	0.33	0.20	0.46	0.82
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.02	0.09	0.00	0.02	0.06	0.02
VMTD (veh-miles / interval)	679	340	150	97	344	688
VMTV (veh-miles / interval)	679	340	150	97	344	688
PMTD (p-miles / interval)	679	340	150	97	344	688
PMTV (p-miles / interval)	679	340	150	97	344	688
VHT (travel / interval (hrs))	9.26	5.54	2.01	1.45	5.22	9.39
VHD-M (delay / interval (hrs))	0.20	1.01	0.01	0.15	0.64	0.22
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	0.20	1.01	0.01	0.15	0.64	0.22
Space Mean Speed (mph)	73.4	61.3	74.7	67.2	65.8	73.2
Travel Time Index	1.02	1.22	1.00	1.12	1.14	1.02

FREEVAL-2015e - Z:\Shared\Projects\P21050 Broadstone Villas\US 50\FREEVAL\EB\ex + P AM EB.seed

Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data

Managed Lanes: Turn On

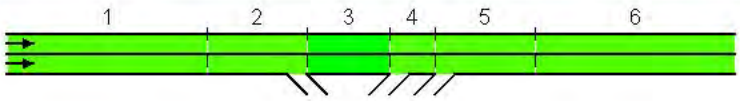
Reliability Analysis (RL): Generate | Delete | Summary

ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only

Analysis Period (A.P.) Control: A.P. 1/1 17:00 - 17:15 | First | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		4		5	6	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	2,550	2550	1412	2029	2138	2138
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				617	109	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,138				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	74.0	61.7	74.7	67.0	66.8	74.9
Total Density (veh/mi/ln)	17.2	15.5	9.4	13.5	14.6	14.3
Total Density (pc/mi/ln)	17.6	15.8	9.6	13.8	14.9	14.6
Influence Area Density (pc/mi/ln)		15.8		13.8	14.9	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	2,550	2,550	1,412	2,029	2,138	2,138
D/C	0.54	0.54	0.30	0.43	0.45	0.45
Mainline Volume Served (vph)	2,550	2,550	1,412	2,029	2,138	2,138
V/C	0.54	0.54	0.30	0.43	0.45	0.45
Adjusted ONR Dem. (vph)				617	109	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				617	109	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,138				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,138				
Density Based LOS	B	B	A	B	B	B
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.81	0.49	0.33	0.20	0.45	0.80
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.01	0.09	0.00	0.02	0.05	0.00
VMTD (veh-miles / interval)	638	319	147	115	267	534
VMTV (veh-miles / interval)	638	319	147	115	267	534
PMTD (p-miles / interval)	638	319	147	115	267	534
PMTV (p-miles / interval)	638	319	147	115	267	534
VHT (travel / interval (hrs))	8.61	5.16	1.97	1.72	4.00	7.14
VHD-M (delay / interval (hrs))	0.11	0.91	0.01	0.18	0.44	0.01
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	0.11	0.91	0.01	0.18	0.44	0.01
Space Mean Speed (mph)	74.0	61.7	74.7	67.0	66.8	74.9
Travel Time Index	1.01	1.22	1.00	1.12	1.12	1.00

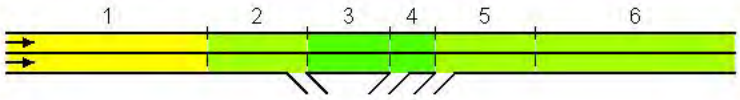
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Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data
Managed Lanes: Turn On
Reliability Analysis (RL): Generate | Delete | Summary
ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only
Analysis Period (A.P.) Control: A.P. 1/1 7:00 - 7:15 | First | Last | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		A		2	B	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	3,538	3538	2191	2439	3378	3378
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				248	939	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,347				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	67.8	61.1	74.7	66.4	63.9	69.2
Total Density (veh/mi/ln)	26.1	24.0	14.6	16.9	23.9	24.4
Total Density (pc/mi/ln)	26.6	24.5	14.9	17.2	24.4	24.9
Influence Area Density (pc/mi/ln)		24.5		17.2	24.4	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	3,538	3,538	2,191	2,439	3,378	3,378
D/C	0.75	0.75	0.47	0.52	0.72	0.72
Mainline Volume Served (vph)	3,538	3,538	2,191	2,439	3,378	3,378
V/C	0.75	0.75	0.47	0.52	0.72	0.72
Adjusted ONR Dem. (vph)				248	939	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				248	939	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,347				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,347				
Density Based LOS	D	C	B	B	C	C
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.88	0.49	0.33	0.21	0.47	0.87
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.08	0.09	0.00	0.02	0.07	0.07
VMTD (veh-miles / interval)	884	442	228	139	422	844
VMTV (veh-miles / interval)	884	442	228	139	422	844
PMTD (p-miles / interval)	884	442	228	139	422	844
PMTV (p-miles / interval)	884	442	228	139	422	844
VHT (travel / interval (hrs))	13.04	7.24	3.05	2.09	6.60	12.20
VHD-M (delay / interval (hrs))	1.24	1.34	0.01	0.24	0.97	0.94
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	1.24	1.34	0.01	0.24	0.97	0.94
Space Mean Speed (mph)	67.8	61.1	74.7	66.4	63.9	69.2
Travel Time Index	1.11	1.23	1.00	1.13	1.17	1.08

FREEVAL-2015e - Z:\Shared\Projects\P21050 Broadstone Villas\US 50\FREEVAL\EB\ex + P PM EB.seed

Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data

Managed Lanes: Turn On

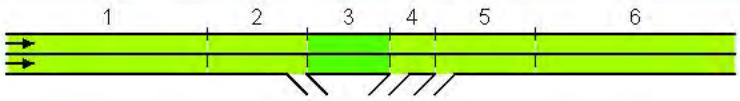
Reliability Analysis (RL): Generate | Delete | Summary

ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only

Analysis Period (A.P.) Control: A.P. 1/1 17:00 - 17:15 | First | Last | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		C			D	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	3,253	3253	1832	3033	3213	3213
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				1,201	180	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,421				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	70.2	60.9	74.7	65.1	64.6	70.5
Total Density (veh/mi/ln)	23.2	21.6	12.2	21.1	23.0	22.8
Total Density (pc/mi/ln)	23.6	22.0	12.5	21.5	23.4	23.2
Influence Area Density (pc/mi/ln)		22.0		21.5	23.4	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	3,253	3,253	1,832	3,033	3,213	3,213
D/C	0.69	0.69	0.39	0.64	0.68	0.68
Mainline Volume Served (vph)	3,253	3,253	1,832	3,033	3,213	3,213
V/C	0.69	0.69	0.39	0.64	0.68	0.68
Adjusted ONR Dem. (vph)				1,201	180	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				1,201	180	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,421				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,421				
Density Based LOS	C	C	B	C	C	C
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.85	0.49	0.33	0.21	0.46	0.85
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.05	0.09	0.00	0.03	0.06	0.05
VMTD (veh-miles / interval)	813	407	191	172	402	803
VMTV (veh-miles / interval)	813	407	191	172	402	803
PMTD (p-miles / interval)	813	407	191	172	402	803
PMTV (p-miles / interval)	813	407	191	172	402	803
VHT (travel / interval (hrs))	11.58	6.68	2.55	2.65	6.22	11.39
VHD-M (delay / interval (hrs))	0.74	1.26	0.01	0.35	0.87	0.68
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	0.74	1.26	0.01	0.35	0.87	0.68
Space Mean Speed (mph)	70.2	60.9	74.7	65.1	64.6	70.5
Travel Time Index	1.07	1.23	1.00	1.15	1.16	1.06

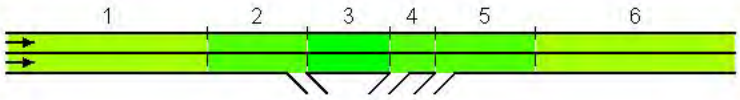
FREEVAL-2015e - Z:\Shared\Projects\P21050 Broadstone Villas\US 50\FREEVAL\WB\ex + P PM WB.seed

Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data
Managed Lanes: Turn On
Reliability Analysis (RL): Generate | Delete | Summary
ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only
Analysis Period (A.P.) Control: A.P. 1/1 7:00 - 7:15 | First | Last | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		a			b	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	2,723	2723	1439	1713	2760	2760
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				274	1,047	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,284				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	73.3	61.3	74.7	67.2	65.8	73.2
Total Density (veh/mi/ln)	18.6	17.0	9.6	11.2	19.0	18.9
Total Density (pc/mi/ln)	18.9	17.3	9.8	11.5	19.4	19.2
Influence Area Density (pc/mi/ln)		17.3		11.5	19.4	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	2,723	2,723	1,439	1,713	2,760	2,760
D/C	0.58	0.58	0.31	0.36	0.59	0.59
Mainline Volume Served (vph)	2,723	2,723	1,439	1,713	2,760	2,760
V/C	0.58	0.58	0.31	0.36	0.59	0.59
Adjusted ONR Dem. (vph)				274	1,047	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				274	1,047	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,284				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,284				
Density Based LOS	C	B	A	B	B	C
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.82	0.49	0.33	0.20	0.46	0.82
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.02	0.09	0.00	0.02	0.06	0.02
VMTD (veh-miles / interval)	681	340	150	97	345	690
VMTV (veh-miles / interval)	681	340	150	97	345	690
PMTD (p-miles / interval)	681	340	150	97	345	690
PMTV (p-miles / interval)	681	340	150	97	345	690
VHT (travel / interval (hrs))	9.28	5.55	2.01	1.45	5.24	9.43
VHD-M (delay / interval (hrs))	0.21	1.02	0.01	0.15	0.64	0.23
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	0.21	1.02	0.01	0.15	0.64	0.23
Space Mean Speed (mph)	73.3	61.3	74.7	67.2	65.8	73.2
Travel Time Index	1.02	1.22	1.00	1.12	1.14	1.03

FREEVAL-2015e - Z:\Shared\Projects\P21050 Broadstone Villas\US 50\FREEVAL\EB\EPAP no P AM EB.seed

Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data

Managed Lanes: Turn On

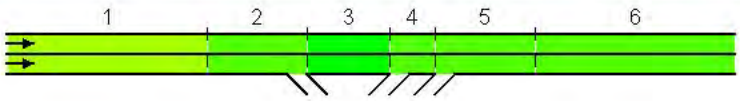
Reliability Analysis (RL): Generate | Delete | Summary

ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only

Analysis Period (A.P.) Control: A.P. 1/1 17:00 - 17:15 | First | Last | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		4		5	6	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	2,925	2925	1412	2034	2391	2391
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				622	357	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,513				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	72.3	60.6	74.7	66.9	66.5	74.5
Total Density (veh/mi/ln)	20.2	18.7	9.4	13.6	16.5	16.1
Total Density (pc/mi/ln)	20.6	19.1	9.6	13.8	16.8	16.4
Influence Area Density (pc/mi/ln)		19.1		13.8	16.8	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	2,925	2,925	1,412	2,034	2,391	2,391
D/C	0.62	0.62	0.30	0.43	0.51	0.51
Mainline Volume Served (vph)	2,925	2,925	1,412	2,034	2,391	2,391
V/C	0.62	0.62	0.30	0.43	0.51	0.51
Adjusted ONR Dem. (vph)				622	357	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				622	357	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,513				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,513				
Density Based LOS	C	B	A	B	B	B
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.83	0.50	0.33	0.20	0.45	0.81
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.03	0.10	0.00	0.02	0.05	0.01
VMTD (veh-miles / interval)	731	366	147	116	299	598
VMTV (veh-miles / interval)	731	366	147	116	299	598
PMTD (p-miles / interval)	731	366	147	116	299	598
PMTV (p-miles / interval)	731	366	147	116	299	598
VHT (travel / interval (hrs))	10.11	6.04	1.97	1.73	4.49	8.03
VHD-M (delay / interval (hrs))	0.36	1.16	0.01	0.19	0.51	0.06
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	0.36	1.16	0.01	0.19	0.51	0.06
Space Mean Speed (mph)	72.3	60.6	74.7	66.9	66.5	74.5
Travel Time Index	1.04	1.24	1.00	1.12	1.13	1.01

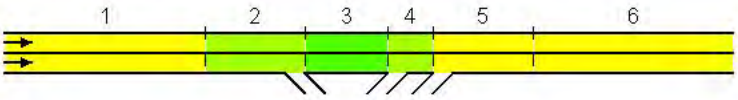
FREEVAL-2015e - Z:\Shared\Projects\P21050 Broadstone Villas\US 50\FREEVAL\WB\EPAP no P AM WB.seed

Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data
Managed Lanes: Turn On
Reliability Analysis (RL): Generate | Delete | Summary
ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only
Analysis Period (A.P.) Control: A.P. 1/1 7:00 - 7:15 | First | Last | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		A		2	B	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	3,703	3703	2191	3017	3954	3954
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				826	937	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,512				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	66.3	60.6	74.7	65.2	60.7	63.6
Total Density (veh/mi/ln)	27.9	25.4	14.6	21.1	28.4	31.1
Total Density (pc/mi/ln)	28.5	25.9	14.9	21.6	29.0	31.7
Influence Area Density (pc/mi/ln)		25.9		21.6	29.0	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	3,703	3,703	2,191	3,017	3,954	3,954
D/C	0.79	0.79	0.47	0.64	0.84	0.84
Mainline Volume Served (vph)	3,703	3,703	2,191	3,017	3,954	3,954
V/C	0.79	0.79	0.47	0.64	0.84	0.84
Adjusted ONR Dem. (vph)				826	937	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				826	937	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,512				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,512				
Density Based LOS	D	C	B	C	D	D
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.91	0.50	0.33	0.21	0.49	0.94
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.11	0.10	0.00	0.03	0.09	0.14
VMTD (veh-miles / interval)	926	463	228	171	494	988
VMTV (veh-miles / interval)	926	463	228	171	494	988
PMTD (p-miles / interval)	926	463	228	171	494	988
PMTV (p-miles / interval)	926	463	228	171	494	988
VHT (travel / interval (hrs))	13.97	7.64	3.05	2.63	8.14	15.55
VHD-M (delay / interval (hrs))	1.63	1.47	0.01	0.34	1.55	2.37
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	1.63	1.47	0.01	0.34	1.55	2.37
Space Mean Speed (mph)	66.3	60.6	74.7	65.2	60.7	63.6
Travel Time Index	1.13	1.24	1.00	1.15	1.24	1.18

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Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data

Managed Lanes: Turn On

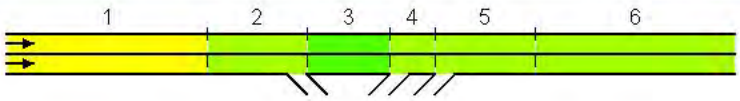
Reliability Analysis (RL): Generate | Delete | Summary

ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only

Analysis Period (A.P.) Control: A.P. 1/1 17:00 - 17:15 | First | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		C			D	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	3,901	3901	1832	3037	3441	3441
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				1,205	404	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		2,069				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	64.2	58.9	74.7	65.1	63.7	68.7
Total Density (veh/mi/ln)	30.4	27.1	12.2	21.1	24.6	25.0
Total Density (pc/mi/ln)	31.0	27.7	12.5	21.5	25.1	25.5
Influence Area Density (pc/mi/ln)		27.7		21.5	25.1	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	3,901	3,901	1,832	3,037	3,441	3,441
D/C	0.83	0.83	0.39	0.65	0.73	0.73
Mainline Volume Served (vph)	3,901	3,901	1,832	3,037	3,441	3,441
V/C	0.83	0.83	0.39	0.65	0.73	0.73
Adjusted ONR Dem. (vph)				1,205	404	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				1,205	404	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		2,069				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		2,069				
Density Based LOS	D	C	B	C	C	C
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.93	0.51	0.33	0.21	0.47	0.87
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.13	0.11	0.00	0.03	0.07	0.07
VMTD (veh-miles / interval)	975	488	191	173	430	860
VMTV (veh-miles / interval)	975	488	191	173	430	860
PMTD (p-miles / interval)	975	488	191	173	430	860
PMTV (p-miles / interval)	975	488	191	173	430	860
VHT (travel / interval (hrs))	15.20	8.28	2.56	2.65	6.76	12.52
VHD-M (delay / interval (hrs))	2.19	1.78	0.01	0.35	1.02	1.05
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	2.19	1.78	0.01	0.35	1.02	1.05
Space Mean Speed (mph)	64.2	58.9	74.7	65.1	63.7	68.7
Travel Time Index	1.17	1.27	1.00	1.15	1.18	1.09

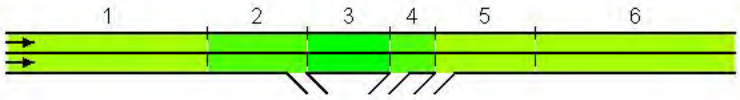
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Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data
Managed Lanes: Turn On
Reliability Analysis (RL): Generate | Delete | Summary
ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only
Analysis Period (A.P.) Control: A.P. 1/1 7:00 - 7:15 | First | Last | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		a			b	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	3,008	3008	1439	2235	3281	3281
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				796	1,046	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,569				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	71.8	60.4	74.7	66.7	64.3	70.0
Total Density (veh/mi/ln)	20.9	19.4	9.6	15.1	23.1	23.4
Total Density (pc/mi/ln)	21.4	19.8	9.8	15.4	23.6	23.9
Influence Area Density (pc/mi/ln)		19.8		15.4	23.6	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	3,008	3,008	1,439	2,235	3,281	3,281
D/C	0.64	0.64	0.31	0.47	0.70	0.70
Mainline Volume Served (vph)	3,008	3,008	1,439	2,235	3,281	3,281
V/C	0.64	0.64	0.31	0.47	0.70	0.70
Adjusted ONR Dem. (vph)				796	1,046	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				796	1,046	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,569				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,569				
Density Based LOS	C	B	A	B	C	C
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.84	0.50	0.33	0.20	0.47	0.86
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.04	0.10	0.00	0.02	0.07	0.06
VMTD (veh-miles / interval)	752	376	150	127	410	820
VMTV (veh-miles / interval)	752	376	150	127	410	820
PMTD (p-miles / interval)	752	376	150	127	410	820
PMTV (p-miles / interval)	752	376	150	127	410	820
VHT (travel / interval (hrs))	10.47	6.22	2.01	1.90	6.38	11.72
VHD-M (delay / interval (hrs))	0.44	1.21	0.01	0.21	0.91	0.78
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	0.44	1.21	0.01	0.21	0.91	0.78
Space Mean Speed (mph)	71.8	60.4	74.7	66.7	64.3	70.0
Travel Time Index	1.04	1.24	1.00	1.12	1.17	1.07

FREEVAL-2015e - Z:\Shared\Projects\P21050 Broadstone Villas\US 50\FREEVAL\EB\EPAP + P AM EB.seed

Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data

Managed Lanes: Turn On

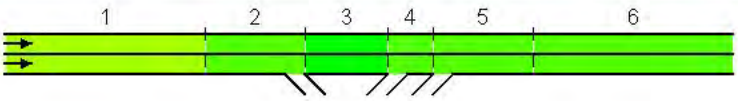
Reliability Analysis (RL): Generate | Delete | Summary

ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only

Analysis Period (A.P.) Control: A.P. 1/1 17:00 - 17:15 | First | Last | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		4		5	6	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	2,930	2930	1412	2040	2397	2397
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				628	357	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,518				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	72.3	60.6	74.7	66.9	66.5	74.5
Total Density (veh/mi/ln)	20.3	18.8	9.4	13.6	16.5	16.1
Total Density (pc/mi/ln)	20.7	19.2	9.6	13.9	16.9	16.4
Influence Area Density (pc/mi/ln)		19.2		13.9	16.9	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	2,930	2,930	1,412	2,040	2,397	2,397
D/C	0.62	0.62	0.30	0.43	0.51	0.51
Mainline Volume Served (vph)	2,930	2,930	1,412	2,040	2,397	2,397
V/C	0.62	0.62	0.30	0.43	0.51	0.51
Adjusted ONR Dem. (vph)				628	357	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				628	357	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,518				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,518				
Density Based LOS	C	B	A	B	B	B
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.83	0.50	0.33	0.20	0.45	0.81
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.03	0.10	0.00	0.02	0.05	0.01
VMTD (veh-miles / interval)	732	366	147	116	300	599
VMTV (veh-miles / interval)	732	366	147	116	300	599
PMTD (p-miles / interval)	732	366	147	116	300	599
PMTV (p-miles / interval)	732	366	147	116	300	599
VHT (travel / interval (hrs))	10.13	6.05	1.97	1.73	4.51	8.05
VHD-M (delay / interval (hrs))	0.36	1.16	0.01	0.19	0.51	0.06
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	0.36	1.16	0.01	0.19	0.51	0.06
Space Mean Speed (mph)	72.3	60.6	74.7	66.9	66.5	74.5
Travel Time Index	1.04	1.24	1.00	1.12	1.13	1.01

FREEVAL-2015e - Z:\Shared\Projects\P21050 Broadstone Villas\US 50\FREEVAL\WB\EPAP + P AM WB.seed

Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data

Managed Lanes: Turn On

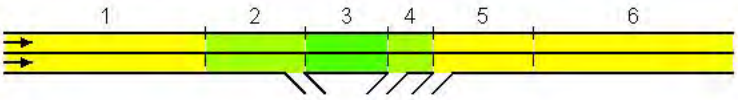
Reliability Analysis (RL): Generate | Delete | Summary

ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only

Analysis Period (A.P.) Control: A.P. 1/1 7:00 - 7:15 | First | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		A		2	B	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	3,705	3705	2191	3017	3966	3966
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				826	949	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,514				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	66.3	60.6	74.7	65.2	60.6	63.4
Total Density (veh/mi/ln)	28.0	25.4	14.6	21.1	28.5	31.3
Total Density (pc/mi/ln)	28.5	26.0	14.9	21.6	29.1	31.9
Influence Area Density (pc/mi/ln)		26.0		21.6	29.1	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	3,705	3,705	2,191	3,017	3,966	3,966
D/C	0.79	0.79	0.47	0.64	0.84	0.84
Mainline Volume Served (vph)	3,705	3,705	2,191	3,017	3,966	3,966
V/C	0.79	0.79	0.47	0.64	0.84	0.84
Adjusted ONR Dem. (vph)				826	949	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				826	949	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,514				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,514				
Density Based LOS	D	C	B	C	D	D
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.91	0.50	0.33	0.21	0.49	0.95
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.11	0.10	0.00	0.03	0.09	0.15
VMTD (veh-miles / interval)	926	463	228	171	496	992
VMTV (veh-miles / interval)	926	463	228	171	496	992
PMTD (p-miles / interval)	926	463	228	171	496	992
PMTV (p-miles / interval)	926	463	228	171	496	992
VHT (travel / interval (hrs))	13.98	7.64	3.05	2.63	8.18	15.63
VHD-M (delay / interval (hrs))	1.63	1.47	0.01	0.34	1.57	2.41
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	1.63	1.47	0.01	0.34	1.57	2.41
Space Mean Speed (mph)	66.3	60.6	74.7	65.2	60.6	63.4
Travel Time Index	1.13	1.24	1.00	1.15	1.24	1.18

FREEVAL-2015e - Z:\Shared\Projects\P21050 Broadstone Villas\US 50\FREEVAL\EB\EPAP + P PM EB.seed

Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data

Managed Lanes: Turn On

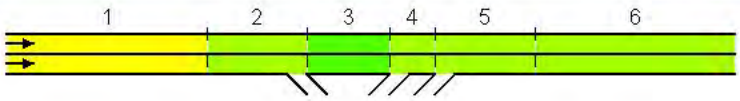
Reliability Analysis (RL): Generate | Delete | Summary

ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only

Analysis Period (A.P.) Control: A.P. 1/1 17:00 - 17:15 | First | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		C			D	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	3,914	3914	1832	3041	3445	3445
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				1,209	404	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		2,082				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	64.0	58.9	74.7	65.1	63.6	68.7
Total Density (veh/mi/ln)	30.6	27.2	12.2	21.2	24.7	25.1
Total Density (pc/mi/ln)	31.2	27.8	12.5	21.6	25.2	25.6
Influence Area Density (pc/mi/ln)		27.8		21.6	25.2	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	3,914	3,914	1,832	3,041	3,445	3,445
D/C	0.83	0.83	0.39	0.65	0.73	0.73
Mainline Volume Served (vph)	3,914	3,914	1,832	3,041	3,445	3,445
V/C	0.83	0.83	0.39	0.65	0.73	0.73
Adjusted ONR Dem. (vph)				1,209	404	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				1,209	404	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		2,082				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		2,082				
Density Based LOS	D	C	B	C	C	C
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.94	0.51	0.33	0.21	0.47	0.87
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.14	0.11	0.00	0.03	0.07	0.07
VMTD (veh-miles / interval)	978	489	191	173	431	861
VMTV (veh-miles / interval)	978	489	191	173	431	861
PMTD (p-miles / interval)	978	489	191	173	431	861
PMTV (p-miles / interval)	978	489	191	173	431	861
VHT (travel / interval (hrs))	15.28	8.31	2.56	2.65	6.77	12.54
VHD-M (delay / interval (hrs))	2.24	1.79	0.01	0.35	1.02	1.06
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	2.24	1.79	0.01	0.35	1.02	1.06
Space Mean Speed (mph)	64.0	58.9	74.7	65.1	63.6	68.7
Travel Time Index	1.17	1.27	1.00	1.15	1.18	1.09

FREEVAL-2015e - Z:\Shared\Projects\P21050 Broadstone Villas\US 50\FREEVAL\WB\EPAP + P PM WB.seed

Project Analyze Edit View Settings Toolbox Help

Edit Seed Facility: Global Input | Fill Data

Managed Lanes: Turn On

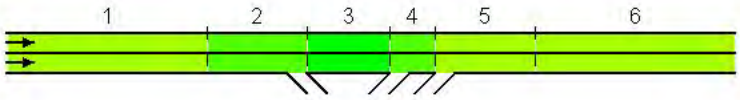
Reliability Analysis (RL): Generate | Delete | Summary

ATDM Analysis: Configure | Delete | Summary

Single Seed/Scenario I/O | Compare | Result Contours | Analysis Period Summary | Segment & Facility Summary

Table Display Options: In & Out | GP Only

Analysis Period (A.P.) Control: A.P. 1/1 7:00 - 7:15 | First | Last | Jump To



Segment	Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5	Seg. 6
General Purpose Segment Data	*	*	*	*	*	*
General Purpose Segment Name		a			b	
General Purpose Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Segment Length (ft)	5,280	2,640	2,200	1,200	2,640	5,280
Terrain	Level	Level	Level	Level	Level	Level
Truck-PC Equivalent (ET)	2.00	2.00	2.00	2.00	2.00	2.00
# of Lanes: Mainline	2	2	2	2	2	2
Free Flow Speed (mph)	75	75	75	75	75	75
Mainline Dem. (vph)	3,014	3014	1439	2235	3290	3290
Mainline Single Unit Truck and Bu...	2.00	2.00	2.00	2.00	2.00	2.00
Mainline Tractor Trailer (%)	0.00	0.00	0.00	0.00	0.00	0.00
Seed Capacity Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Entering Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Exit Dem. Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Free Flow Speed Adj. Fac.	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Capacity Adj. F...	1.00	1.00	1.00	1.00	1.00	1.00
Seed Driver Pop. Free Flow Spee...	1.00	1.00	1.00	1.00	1.00	1.00
Acc/Dec Lane Length (ft)		1,200		1,200	1,200	
ONR Side				Right	Right	
# Lanes: ONR				1	1	
ONR Queue Capacity (veh/ln)				50	50	
ONR Free Flow Speed (mph)				45	45	
ONR/Entering Dem. (vph)				796	1,055	
ONR Single Unit Truck and Bus (%)				2.00	2.00	
ONR Tractor Trailer (%)				0.00	0.00	
ONR Metering Type				None	None	
ONR Metering Fixed Rate (vph)						
OFR Side		Right				
# Lanes: OFR		2				
OFR Free Flow Speed (mph)		45				
OFR/Exit Dem. (vph)		1,575				
OFR Single Unit Truck and Bus (%)		2.00				
OFR Tractor Trailer (%)		0.00				
Weave Segment Ls (ft)						
Weave Segment LCRF						
Weave Segment LCFR						
Weave Segment LCRR						
Weave Segment NW						
Ramp to Ramp Dem. (vph)						
Processed Segment Type	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic
Speed (mph)	71.8	60.4	74.7	66.7	64.3	69.9
Total Density (veh/mi/ln)	21.0	19.5	9.6	15.1	23.2	23.5
Total Density (pc/mi/ln)	21.4	19.9	9.8	15.4	23.6	24.0
Influence Area Density (pc/mi/ln)		19.9		15.4	23.6	
Adjusted Capacity (vph)	4,706	4,706	4,706	4,706	4,706	4,706
Adjusted Mainline Dem. (vph)	3,014	3,014	1,439	2,235	3,290	3,290
D/C	0.64	0.64	0.31	0.47	0.70	0.70
Mainline Volume Served (vph)	3,014	3,014	1,439	2,235	3,290	3,290
V/C	0.64	0.64	0.31	0.47	0.70	0.70
Adjusted ONR Dem. (vph)				796	1,055	
ONR Capacity (vph)				2,059	2,059	
ONR Volume Served (vph)				796	1,055	
ONR Avg RM Rate (vph)						
ONR Time RM Active (min)				0.00	0.00	
Adjusted OFR Dem. (vph)		1,575				
OFR Capacity (vph)		4,118				
OFR Volume Served (vph)		1,575				
Density Based LOS	C	B	A	B	C	C
Dem. Based LOS						
Mainline Queue Length (ft)						
Mainline Queue Length (%)						
ONR Queue (veh)						
Actual Travel Time (min)	0.84	0.50	0.33	0.20	0.47	0.86
FFS Travel Time (min)	0.80	0.40	0.33	0.18	0.40	0.80
Mainline Delay (min)	0.04	0.10	0.00	0.02	0.07	0.06
VMTD (veh-miles / interval)	754	377	150	127	411	822
VMTV (veh-miles / interval)	754	377	150	127	411	822
PMTD (p-miles / interval)	754	377	150	127	411	822
PMTV (p-miles / interval)	754	377	150	127	411	822
VHT (travel / interval (hrs))	10.49	6.24	2.01	1.90	6.40	11.76
VHD-M (delay / interval (hrs))	0.45	1.21	0.01	0.21	0.91	0.80
VHD-R (delay / interval (hrs))				0.00	0.00	
VHD-Access (delay / interval (hrs))						
VHD-MDE (delay / interval (hrs))	0.00					
VHD (delay / interval (hrs))	0.45	1.21	0.01	0.21	0.91	0.80
Space Mean Speed (mph)	71.8	60.4	74.7	66.7	64.3	69.9
Travel Time Index	1.04	1.24	1.00	1.12	1.17	1.07