

Appendix F

Traffic Impact Analysis

TRAFFIC IMPACT ANALYSIS
FOR
SOLANO LANDING PROJECT
Solano County, CA

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**SOLANO LANDING PROJECT
TRAFFIC IMPACT ANALYSIS**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	I
2040 Conditions	ii
Significant Transportation Effects for 2040 Plus Project Conditions	ii
INTRODUCTION.....	1
Study Purpose and Objectives	1
EXISTING SETTING	4
Study Area	4
Study Area Intersections	4
Analysis Criteria	6
Existing Traffic Conditions.....	9
Non-Automobile Transportation.....	13
EXISTING PLUS PROJECT CONDITIONS	14
Trip Generation.....	14
Existing Plus Project Level of Service Impacts	20
CUMULATIVE IMPACTS	22
Year 2040 Forecasts / Conditions	22
2040 Conditions	23
2040 Plus Project Level of Service Impacts	23
PROJECT ACCESS	28
Need for Left Turn Lanes	29
FINDINGS / RECOMMENDATIONS/ IMPROVEMENTS.....	33
REFERENCES.....	36
APPENDIX.....	37

SOLANO LANDING PROJECT TRAFFIC IMPACT ANALYSIS

EXECUTIVE SUMMARY

Project Description. This study evaluates the traffic impacts associated with the proposed Solano Landing project in Solano County. The project is located in the southeast quadrant of the Suisun Valley Road / Rockville Road intersection, north and west of the City of Fairfield and about 1½ miles north of Interstate 80 (I-80). This area is the County's Agriculture Tourist Center (ATC) Zone and includes the following development:

- 6 - 1,500 square foot wine tasting rooms
- Multi-purpose room / event center to accommodate 100 persons for wine tasting event
- 10-room boutique hotel
- 7,600 square foot fine dining restaurant
- 5,500 square foot specialty supermarket

The project is expected to generate 289 trips in the Friday p.m. peak period and 384 trips in the Saturday peak hour. Due to the ability for a wine tasting room to have a special event two scenarios were evaluated on Saturday, a special event occurring with event traffic inbound and a special event occurring with event traffic departing; the Friday p.m. peak hour assessment assumed that special event traffic was only headed inbound. After considering internal trips and pass-by trips the project is projected to generate 211 new Friday p.m. peak hour trips, 293 new Saturday trips with inbound special event traffic and 289 new Saturday trips with outbound special event traffic.

Existing Setting. Levels of Service were evaluated at nine existing intersections. The study included an analysis of the Friday p.m. peak hour and the Saturday peak hour. County Level of Service policy considers LOS C as the acceptable threshold while the City of Fairfield and Caltrans consider LOS D as the acceptable threshold.

All intersections currently operate within agency thresholds, within LOS C conditions at Solano County intersections and LOS D conditions at City of Fairfield and Caltrans agency intersections. While operating at an acceptable level of service the Suisun Valley Road / Neitzell Road intersection meet the peak hour signal warrant.

Significant Transportation Effects for Existing plus Project Conditions

Under Existing plus Project conditions, all intersections will continue to operate within acceptable levels of service. The Suisun Valley Road / Neitzell Road intersection will continue to operate at an acceptable level of service and meet the peak hour signal warrant.

The following recommendations are noted:

- The project should pay their fair share traffic impact fees in Solano County.
- The County should consider extending the 25-mph speed zone along Rockville Road to east of the project driveway as the site will be within the Rockville community. Shifting the zone to at least 150 feet east of the driveway will provide westbound motorists time to decelerate from 45 mph to 25 mph prior to reaching the driveway.
- The County should consider extending the 25-mph speed zone along Suisun Valley Road at least 100 feet south of the existing speed limit sign location. This will provide northbound motorists time to decelerate to 25-mph prior to reaching the intersection.

2040 Conditions

Under 2040 conditions all intersections are projected to operate within agency thresholds, within LOS C conditions at Solano County intersections and LOS D conditions at City of Fairfield and Caltrans agency intersections. The Suisun Valley Road / Neitzell Road intersection will operate at LOS D or better and meet the peak hour signal warrant.

Significant Transportation Effects for 2040 Plus Project Conditions

Under 2040 plus Project conditions, all intersections will continue to operate within acceptable levels of service. The Suisun Valley Road / Neitzell Road intersection will continue to operate at an acceptable level of service and meet the peak hour signal warrant.

SOLANO LANDING PROJECT TRAFFIC IMPACT ANALYSIS

INTRODUCTION

Study Purpose and Objectives

This study evaluates the traffic impacts associated with the proposed Solano Landing project in Solano County. The project is located in the southeast quadrant of the Suisun Valley Road / Rockville Road intersection, north and west of the City of Fairfield and about 1½ miles north of Interstate 80 (I-80), as shown in Figure 1. The project is within the County's Agriculture Tourist Center (ATC) Zone and includes the following development:

- 6 - 1,500 square foot wine tasting rooms
- Multi-purpose room / event center to accommodate 100 persons for wine tasting event
- 10- room boutique hotel
- 7,600 square foot fine dining restaurant
- 5,500 square foot specialty supermarket

The proposed site plan is shown in Figure 2. Access to the site will be via the existing Suisun Valley Road / Suisun Valley Court intersection and a new driveway along Rockville Road.

The study parameters are consistent with Solano County guidelines. The study addresses the following traffic scenarios:

1. Existing (2021) Peak Hour Traffic Conditions;
2. Existing plus Project Peak Hour Traffic Conditions;
3. Year 2040 Peak Hour Traffic Conditions;
4. Year 2040 plus Project Peak Hour Traffic Conditions;

The purpose of this analysis is to identify the potential traffic-related impacts of the project within the context of current traffic conditions and to evaluate the cumulative impacts of future traffic conditions in the Solano County / City of Fairfield area. As the site is geared primarily to tourist destinations this analysis includes evaluation of existing circulation conditions based upon current Friday p.m. and Saturday peak hour traffic volumes. The extent to which improvements may already be needed to meet minimum standards was determined. The characteristics of the proposed project were determined based on probable peak hour, regional trip distribution and local trip assignment. Forecasts of future year traffic conditions, including other development anticipated under the Solano County General Plan have been analyzed with and without the proposed project using the latest Solano Transportation Authority travel demand model. Mitigation measures needed to ensure satisfactory operation of area intersections under each development scenario are identified.

In addition to analyzing roadway conditions for consistency with the County's General Plan Vehicle Miles Travelled (VMT) was also considered, consistent with the County's 2021 Interim Modifications guidelines.



EXISTING SETTING

Study Area

This study addresses traffic conditions in the vicinity of the Solano Landing project site, including the project routes from the I-80 / Suisun Valley Road and I-80 / I-680-Green Valley Road interchanges. Based on direction from Solano County staff nine intersections along the routes providing access to the site and the two access intersections were analyzed. The text that follows describes the facilities included in this analysis.

Study Area Intersections

The quality of traffic flow is typically governed by the operation of major intersections. Nine intersections serving this site were identified for evaluation. These include:

- 1) Suisun Valley Road / Rockville Road
- 2) Rockville Road / Abernathy Road
- 3) Suisun Valley Road / Solano College Road (south)
- 4) Suisun Valley Road / Westamerica Road
- 5) Suisun Valley Road / Business Center Drive
- 6) Suisun Valley Road / Neitzell
- 7) Pitman Road / I-80 Eastbound Ramps
- 8) Green Valley Road / Business Center Drive
- 9) Green Valley Road / I-80 Westbound On-Ramp

P.m. Friday and Saturday mid-day peak hour counts were conducted at each of these intersections in early December, 2021. The Saturday mid-day peak two-hour period was determined using analytic data from *StreetLight Data*. Intersection turning movements were then counted for this two-hour period, and the peak hour determined. Volume adjustments were made based on 2019 *StreetLight* data and the December 2021 counts to arrive at pre-Covid volumes. Each study intersection is described below:

Suisun Valley Road / Rockville Road is a signalized four-way intersection in the northwest quadrant of the project site. The eastbound approach includes a left turn lane, a through lane and a right turn lane while the westbound approach includes a left turn lane, a through lane and a right turn lane. The right turn lane appears to have originally been designed as a free right turn; however, this lane is now stop controlled north of the signal. The northbound approach includes a shared left-through lane and a right turn lane while the southbound approach is a single shared left-through-right lane. The east-west approaches include protected left turn movements while the north-south approaches are split phased. Crosswalks are present along the west and north approaches with sidewalk only in the northwest quadrant. Bike lanes are not present.

Rockville Road / Abernathy Road is a single lane four-way roundabout four-way intersection about 1¾ miles east of the project site. Bike lanes are present on the east leg of the intersection. Sidewalks are not present.

The **Suisun Valley Road / Solano College Road-Oakwood Drive** is a signalized four-way intersection south of the project site. The northbound approach includes a left turn lane, two through lanes and a single lane “ramp” that transitions to a two-lane stop approach along Solano College Road east of the intersection. The southbound approach includes a left turn lane, a through lane and a shared through-right lane. The eastbound approach along Oakwood Drive includes a shared left-through lane and a right turn lane. The westbound approach includes a left turn lane, a shared left-through lane and a free right turn with yield onto northbound Suisun Valley Road. Suisun Valley Road provides protected left turn movements while the Oakwood Drive and Solano College Road approaches are split phase. Crosswalks are present along the west, north and east approaches with sidewalk and pathways present along Oakwood Drive and Solano College Road and Suisun Valley Road south of the intersection. Bike lanes are present on Suisun Valley Road south of the intersection.

The **Suisun Valley Road / Westamerica Drive-Kaiser Drive** is a signalized four-way intersection south of the project site. The northbound approach includes a left turn lane, two through lanes and a shared through-right lane. The southbound approach includes a left turn lane, two through lanes and a right turn lane. The eastbound approach along Westamerica Drive includes a left turn lane and a shared through-right turn lane while the westbound approach includes a left turn lane, a through lane and a shared through-right lane. Protected left turn movements are provided on all approaches. Crosswalks are present along all approaches. Bike lanes are present on Suisun Valley Road while bike sharrows are present along Westamerica Drive.

The **Suisun Valley Road / Business Center Drive** is a signalized four-way intersection south of the project site. The northbound approach includes dual left turn lanes, a through lane and a shared through-right lane. The southbound approach includes dual left turn lanes, two through lanes and a right turn lane. Both eastbound and westbound approaches along Business Center Drive include dual left turn lanes, two through lanes and a shared through-right lane. Protected left turn movements are provided on all approaches and crosswalks are present along all approaches. Bike lanes are present throughout the intersection except along the northbound Suisun Valley Road approach.

Suisun Valley Road / Neitzell Road is an all-way stop controlled tee intersection. Northbound Suisun Valley Road includes a left turn lane and two through lanes while the southbound approach includes two through lanes and a free right turn lane about 200 feet in advance of the intersection. Neitzell Road includes two left turn lanes and a free right turn lane with yield onto southbound Suisun Valley Road. Bike lanes and crosswalks are not present in the intersection.

I-80 Eastbound Ramps / Pitman Road is a signalized intersection in a Type L-2 configuration. The southbound Pitman Road approach consists of dual left turn lanes and a through lane while the northbound approach includes a through lane and a right turn lane. The eastbound I-80 off-ramp includes a shared left-through lane and a right turn lane. The on-ramp includes two general purpose lanes.

The **Green Valley Road / Business Center Drive** is a signalized four-way intersection southwest of the project site. The northbound Green Valley Road approach includes dual left turn lanes, two through lanes and a right turn lane. The southbound approach includes a left turn lane, a through lane and a shared through-right turn lane. The eastbound approach along Business Center Drive

includes a left turn lane, a shared left-through lane and dual right turn lanes. The westbound approach includes a left turn lane, a shared left-through lane and a shared through-right lane. Protected left turn movements are provided along Green Valley Road while split phasing is used on Business Center Drive. The right turn eastbound Business Center Drive lanes are also overlapped with the northbound Green Valley Road left turn lanes. Crosswalks are present along each approach and bike lanes are present throughout the intersection.

The **Green Valley Road / I-80 Westbound On-Ramp intersection** is a signalized tee intersection providing access to westbound I-80. The northbound Green Valley Drive approach consists of dual left turn lanes and a through lane while the southbound approach includes a through lane and a right turn lane. The westbound I-80 on-ramp includes two general purpose lanes.

The **Suisun Valley Road / Suisun Valley Court intersection** is an unsignalized tee intersection with stop control along Suisun Valley Court; an opposing private driveway is present opposite Suisun Valley Court. All approaches are single lane.

Analysis Criteria

Vehicle Miles Traveled. The impact of a project on LOS is an important factor in determining whether a project has a significant impact. However, changes made in 2018 to CEQA have changed how lead agencies use LOS in determining whether a project has a significant impact on transportation. As noted in the California Governor’s Office of Planning and Research (OPR) document Technical Advisory on Evaluating Transportation Impacts in CEQA (California Governor’s Office of Planning and Research 2018),

“Senate Bill 743 (Steinberg, 2013), which was codified in Public Resources Code section 21099, required changes to the guidelines implementing CEQA (CEQA Guidelines) (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 15000 et seq.) regarding the analysis of transportation impacts. . . OPR has proposed, and the California Natural Resources Agency (Agency) has certified and adopted, changes to the CEQA Guidelines that identify vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project’s transportation impacts. With the California Natural Resources Agency’s certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by “level of service” and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3).)”

Certain types of projects as identified in statute, the CEQA Guidelines, or in OPR’s Technical Advisory are presumed to have a less than significant impact on VMT and therefore a less than significant impact on transportation. Generally, the identified projects contribute to efficient land use patterns enabling higher levels of walking, cycling, and transit as well as lower average trip length. These projects include, for example, projects in transit priority areas, projects consisting of residential infill or those located in low VMT areas.

The County identifies projects and areas presumed to have a less than significant transportation impact. Those include:

1. A Use Permit or other discretionary development which generates 110 total vehicle trips per day or less (770 total vehicle trips per week or less) will have less than significant impact on VMT. Employee trips are not considered in the total vehicle trip generation due to the reduction in regional commute trips and VMT due to local job creation.
2. An agricultural development that facilitates farm products primarily to local ag processing centers, cities and markets in Solano County will have less than significant impact on VMT.
3. A development that is within a ½ mile of an active transit stop with reasonable transportation connections qualifies for less than significant impact on VMT.
4. A development that is adjacent to a fully developed and connected system of bike lanes qualifies for less than significant impact on VMT for up to 125 total vehicle trips per day or less (875 total vehicle trips per week or less).
5. Permitted special events that include advertisements for and coordinated assistance with carpool and / or transit options for attendees.

General Plan Policy Consistency Level of Service Analysis Methodology. To assess the quality of existing traffic conditions and provide a basis for analyzing project impacts, Levels of Service were calculated at study area intersections and project driveways. "Level of Service" is a qualitative measure of traffic operating conditions whereby a letter grade "A" through "F", corresponding to progressively worsening operating conditions, is assigned to an intersection or roadway segment.

The analysis techniques presented in the *Highway Capacity Manual 6th Edition* were used to provide a basis for describing existing traffic conditions and evaluating the significance of project traffic impacts.

Various software programs have been developed to assist in calculating intersection Level of Service, and the level of sophistication of each program responds to factors that affect the overall flow of traffic. Two programs, Synchro and SIDRA were utilized for the analysis depending on the intersection characteristics. Synchro is generally used to analyze signalized and stop controlled intersections while SIDRA is used to analyze roundabouts. Synchro Version 11 and SIDRA Version 9 were used for the analysis.

The Level of Service (LOS) policies of Solano County, City of Fairfield and Caltrans govern this analysis. The Solano County Road Standards documents the County's policies for Level of Service in rural and urban areas. The document notes that LOS C is the design standard for the County; however, if an existing LOS is already below LOS C a project shall be designed such that there will be no decrease in the existing LOS.

The City of Fairfield LOS threshold standards apply to the p.m. peak hour. LOS D is the standard for arterial streets while LOS C is the standard for collector streets and LOS B applies to local streets.

Caltrans *Vehicle Miles Traveled-Focused Transportation Impact Study Guide, 2020* notes that Vehicle Miles Traveled (VMT) analysis is now Caltrans' primary focus under CEQA. However, the prior Caltrans publication *Guide for the Preparation of Traffic Impact Studies (dated December 2002)* states the following: "Caltrans endeavors to maintain a target LOS at the transition between

LOS “C” and LOS “D” on State highway facilities, however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS”.

Therefore, for this analysis, LOS C and better are considered acceptable at Solano County maintained intersections while LOS D worse is considered acceptable at City of Fairfield and Caltrans intersections.

Table 1 presents general characteristics associated with each Level of Service grade.

**TABLE 1
LEVEL OF SERVICE DEFINITIONS**

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Ave Delay ≤ 10 seconds per vehicle	Little or no delay. Ave Delay ≤ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay > 10 sec/veh and ≤ 20 sec/veh	Short traffic delays. Delay > 10 sec/veh and ≤ 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay > 20 sec/veh and < 35 sec/veh	Average traffic delays. Delay > 15 sec/veh and ≤ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestions of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35 sec/veh and < 55 sec/veh	Long traffic delays. Delay > 25 sec/veh and ≤ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55 sec and ≤ 80 sec/veh	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay > 80 sec/veh	Intersection often blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.

Sources: Highway Capacity Manual, 6th Edition

Existing Traffic Conditions

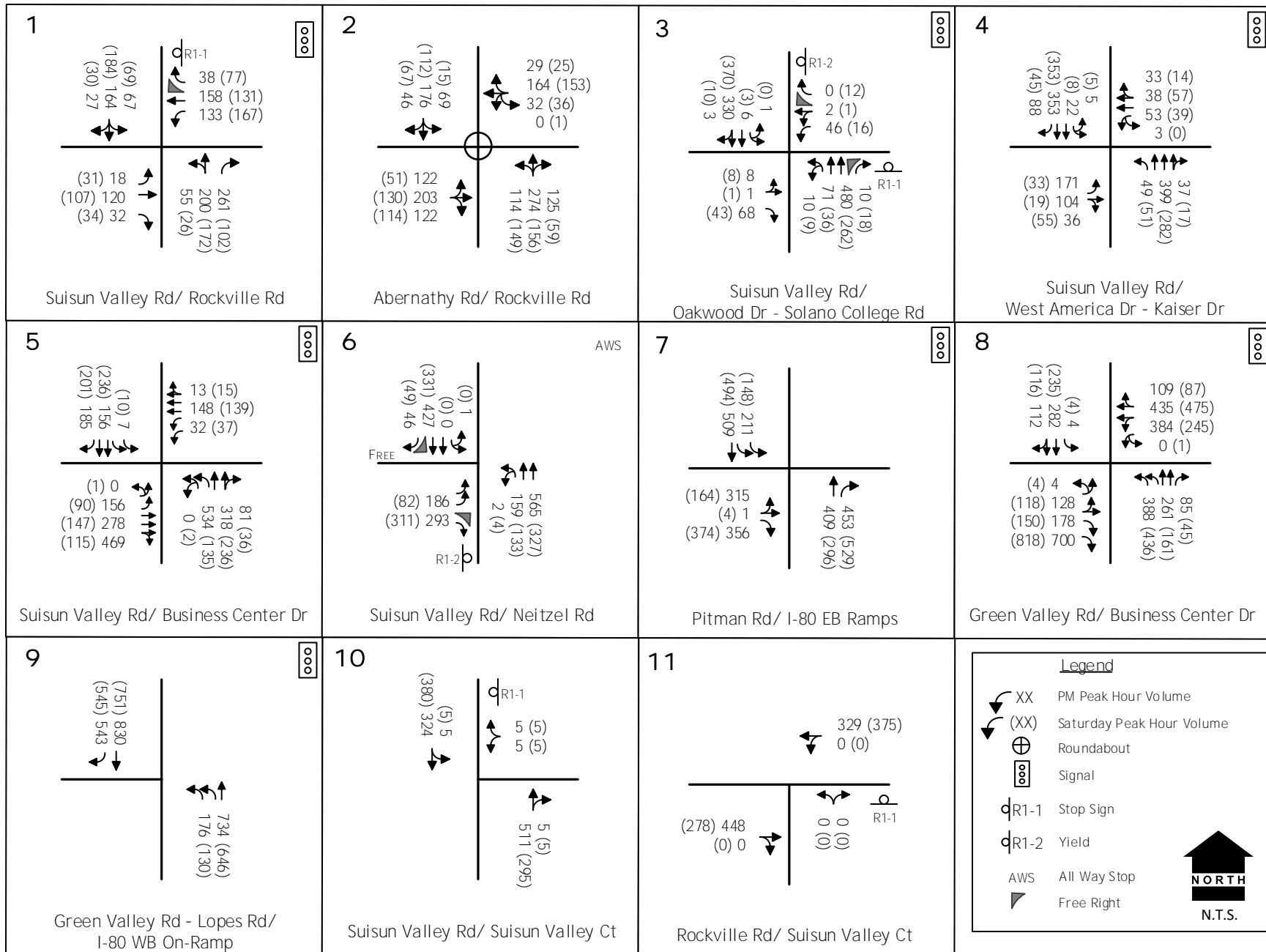
Traffic Volume Counts. Intersection turning movements (ITM) counts were completed during the first week of December 2021. Due to the Covid-19 pandemic, travel patterns had been affected downward due to work and school closures. *StreetLight Data* uses “Big-Data” derived travel pattern analytics against publicly available traffic movement ratios drawn from traffic counts to compare current roadway counts. 2021 ITM’s were compared to 2019 *StreetLight Data* to determine whether current traffic volumes remain significantly lower than pre-Covid conditions. This comparison indicated that current volumes continue to be lower than pre-Covid conditions; therefore, ITM’s were adjusted to 2019 pre-Covid 19 conditions.

Traffic count data from 2021 is included in the Appendix. Figure 3 presents the regional study locations while adjusted ITM’s are presented for each study location in Figure 4.

Intersection Levels of Service. Table 2 summarizes current Levels of Service at the study area intersections during the p.m. and Saturday peak hours. All intersections currently operate within agency LOS thresholds. While the Suisun Valley Road / Neitzell Road intersection operates acceptable the intersection meets the peak hour signal warrant.



REGIONAL STUDY LOCATIONS



**TABLE 2
EXISTING PEAK HOUR LEVELS OF SERVICE AT INTERSECTIONS**

Location	Control	Existing Friday PM Peak Hour		Existing Saturday Peak Hour		Peak Hour Warrant Met?
		LOS	Average Delay (secs)	LOS	Average Delay (secs)	
1. Suisun Valley Rd / Rockville Rd (SC)	Signal	C	22.4	C	22.3	N/A
2. Rockville Rd / Abernathy Rd (SC)	Roundabout	B	11.3	A	6.4	N/A
3. Suisun Valley Rd / Solano College Rd (COF)	Signal	B	11.4	A	9.4	N/A
4. Suisun Valley Rd / Westamerica Dr (COF)	Signal	B	15.1	B	12.1	N/A
5. Suisun Valley Rd / Business Center Dr (COF)	Signal	D	40.3	B	19.7	N/A
6. Suisun Valley Rd / Neitzell Rd (COF)	AWS	C	23.5	B	12.3	Yes
7. Pitman Rd / I-80 EB Ramps (CT)	Signal	B	18.7	C	23.8	N/A
8. Green Valley Rd / Business Center Dr (COF)	Signal	D	38.7	C	30.2	N/A
9. Green Valley Rd / I-80 WB On-Ramp (CT)	Signal	A	5.3	A	4.8	N/A
10. Suisun Valley Rd / Suisun Ct (SC)	WB Stop	A	8.6	A	7.9	No
SB Left		B	14.7	B	12.4	
SC – Solano County COF – City of Fairfield CT – Caltrans AWS – multi-way stop N/A – not applicable						

Non-Automobile Transportation

Public Transit. Various bus services are provided within Fairfield. These include the Fairfield and Suisun Transit System (FAST) and the SolTrans Intercity routes. These services provide local and intercity routes along the I-80 corridor; in the project vicinity FAST routes #7 and #8 operate in the west Fairfield / Cordelia area and the Blue Line between Sacramento and Walnut Creek while SolTrans operates the R Line between Fairfield and Richmond.

The #7 route operates between the Fairfield Transportation Center and the Cordelia Library with stops along Suisun Valley Road at Solano Community College. The route operates with buses departing the Transportation Center hourly from 6:00 a.m. to 6:00 p.m. Monday through Friday. On Saturdays the route operates from 10:00 a.m. with the last bus departing at 4:00 p.m.

The #8 route operates between the Cordelia Library, the Pitman Road / Central Way area and south Cordelia. The route operates with buses departing the Cordelia Library between 6:30 a.m. and 9:30 a.m., 11:30 a.m. and 2:30 p.m. and 3:30 p.m. and 6:30 p.m. Monday through Friday. On Saturdays the route operates from 10:30 a.m. with the last bus departing at 3:30 p.m.

The Blue Line operates Monday through Friday with 20 northbound stops and 19 southbound stops at the Suisun Valley Road / Westamerica Drive – Kaiser Drive intersection. Stops are made throughout the day with the first southbound stop occurring at 6:11 a.m. and the last northbound stop occurring at 7:44 p.m. All stops provide service to the Walnut Creek BART station and the Vacaville Transportation Center. Saturday service is available at a reduced schedule with six northbound and southbound buses. The buses operate on approximately two-hour headways with the first southbound arrival at 8:05 a.m. and the last northbound arrival at 7:40 p.m.

The Red Line operates Monday through Friday with 16 northbound and southbound stops at the Suisun Valley Road / Westamerica Drive – Kaiser Drive intersection. Stops are made generally at one-hour headways beginning southbound at 6:30 a.m. and at 5:24 a.m. in the northbound direction. The last stops occur at 9:28 p.m. southbound and 8:27 p.m. northbound with all buses servicing the Suisun /Fairfield Amtrak Station and the El Cerrito del Norte BART station. Saturday service is available at a reduced schedule with seven northbound and southbound buses. The buses operate on approximately two-hour headways with the first northbound arrival at 8:25 a.m. and the last southbound arrival at 9:29 p.m.

Bicycle and Pedestrian Facilities. As identified within the *Study Area Intersections* section, sidewalks and bike lanes are present along much of Suisun Valley Road. Along the project frontage there are no sidewalks, nor bike lanes as this area transitions from an urban character within the City of Fairfield to a rural character within Solano County.

EXISTING PLUS PROJECT CONDITIONS

The development of this project will attract traffic to the project site. The amount of additional traffic on a particular section of the street network is dependent upon two factors:

- Trip Generation, the number of new trips generated by the project, and
- Trip Distribution and Assignment, the specific routes that the new traffic takes.

Trip Generation

Trip generation is determined by identifying the type and size of land use being developed. Recognized sources of trip generation data may then be used to calculate the total number of trip ends resulting from the day-to-day operation of the businesses in the project.

The trip generation for this project was developed based on the following uses:

- 6 wine tasting rooms at 1,500 sf
- A 10-room boutique hotel
- A 7,600 sf fine dining restaurant
- A 5,500 sf supermarket
- A 100-person 'event / multi-use' center – this would be used for special events at one of the wine tasting rooms. When used, that particular tasting room would close.

Where available, data from the Institute of Transportation Engineers publication, *Trip Generation, 11th Edition*, was used to develop trips. This included the hotel, restaurant and supermarket uses. The wine tasting trip generation was based on the Napa County Winery Trip generation worksheet. For Friday trips it was assumed that a special wine tasting event would occur in the evening; therefore, a special event with outbound traffic assessment was not considered. For the Saturday peak hour it was assumed that 100% of the special event traffic was either inbound or outbound.

As the site has multiple compatible uses, internal trips were considered for the hotel, restaurant and wine tasting facilities while pass-by trips were considered for the supermarket. Table 3 presents the trip generation for the project, with 289 Friday p.m. peak hour trips generated and 384 Saturday trips during a special event. After considering internal trips and pass-by trips the project is expected to generate 211 new Friday p.m. peak hour trips with 146 inbound trips and 65 outbound trips. During the peak hour on Saturday, it is expected that with a special event late in the peak hour period, i.e., special event traffic is headed inbound, 293 new peak hour trips will be generated with 180 inbound trips and 113 outbound trips. For Saturdays where the special event is held early in the peak hour, i.e. special even traffic is leaving, 121 new inbound trips will be generated while 168 outbound trips will occur.

**TABLE 3
TRIP GENERATION**

Land Use	Unit Quantity	Size	Trips Per Unit								
			PM Peak Hour			Saturday Peak Hour - Inbound			Saturday Peak Hour - Outbound		
			Rate	In	Out	Total	In	Out	Total	In	Out
Hotel (LU 330)	Rooms	10	0.41	43%	57%	0.72†	56%	44%	0.72†	56%	44%
Supermarket (LU 850)	KSF	5.50	8.95	50%	50%	10.10	50%	50%	10.10	50%	50%
Fine Dining Restaurant (LU 931)	KSF	7.60	7.80	67%	33%	10.68	59%	41%	10.68	59%	41%
Wine Tasting Room	EA	6	22.00	50%	50%	38.00	50%	50%	38.00	50%	50%
Special Event	EA	1	88.00	100%	0%	88.00	100%	0%	88.00	0%	100%
Hotel (LU 330)			4	2	2	7	4	3	7	4	3
Supermarket (LU 850)			49	25	25	56	28	28	56	28	28
Fine Dining Restaurant (LU 931)			59	40	20	81	48	33	81	48	33
Wine Tasting Room			88	44	44	152	76	76	152	76	76
Special Event			88	88	0	88	88	0	88	0	88
Sub-Total Trips			289	199	91	384	244	140	384	156	228
<i>Internal Trips</i>											
Hotel ‡ (25%)			(1)	0	(1)	(2)	(1)	(1)	(2)	(1)	(1)
Fine Dining Restaurant (25%)			(15)	(10)	(5)	(20)	(12)	(8)	(20)	(12)	(8)
Wine Tasting Room ‡ (25% pm / 18% Sat in / 20% Sat out)			(22)	(11)	(11)	(27)	(19)	(8)	(31)	(12)	(19)
Special Event ‡ (25%)			(22)	(22)	0	(22)	(22)	0	(22)	0	(22)
Sub-Total Internal Trips			(60)	(43)	(16)	(71)	(54)	(17)	(75)	(25)	(50)
<i>Pass-By Trips</i>											
Supermarket (36%)◇			(16)	(8)	(8)	(18)	(9)	(9)	(18)	(9)	(9)
Sub-Total Pass-By Trips			(16)	(8)	(8)	(18)	(9)	(9)	(18)	(9)	(9)
Net New Trips			211	146	65	293	180	113	289	121	168
KSF – thousand square feet Numbers may not match due to rounding											
† no data available for LU 330; used LU 310 ‡ estimated ◇ ITE Trip Generation Handbook, 3 rd Ed											

Vehicle Trip Distribution. The distribution of project vehicular traffic was determined based on the expected origins of the users and included a review of existing traffic counts at the surrounding intersections. Table 4 displays the trip distribution used for the proposed project.

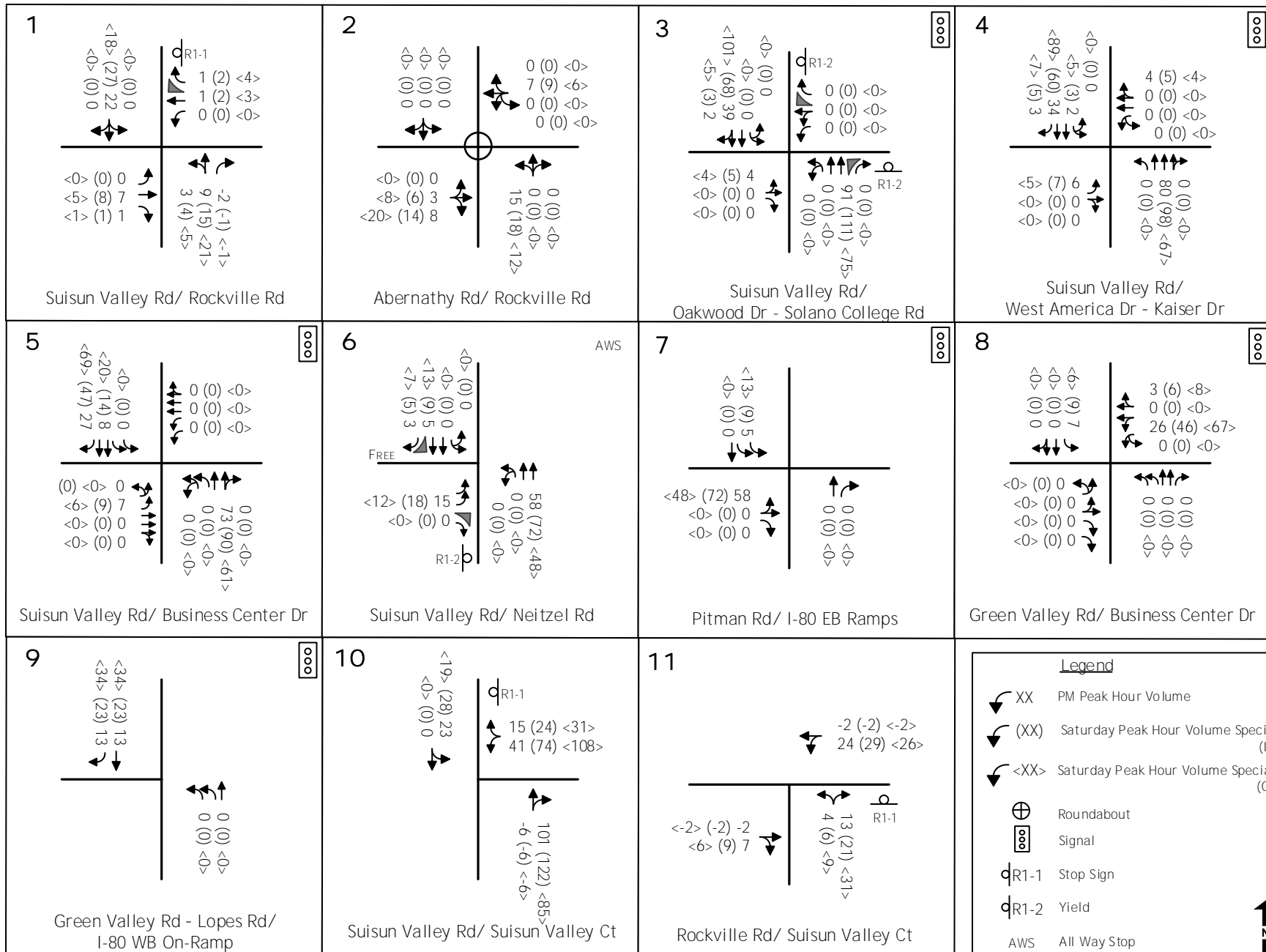
**TABLE 4
TRIP DISTRIBUTION**

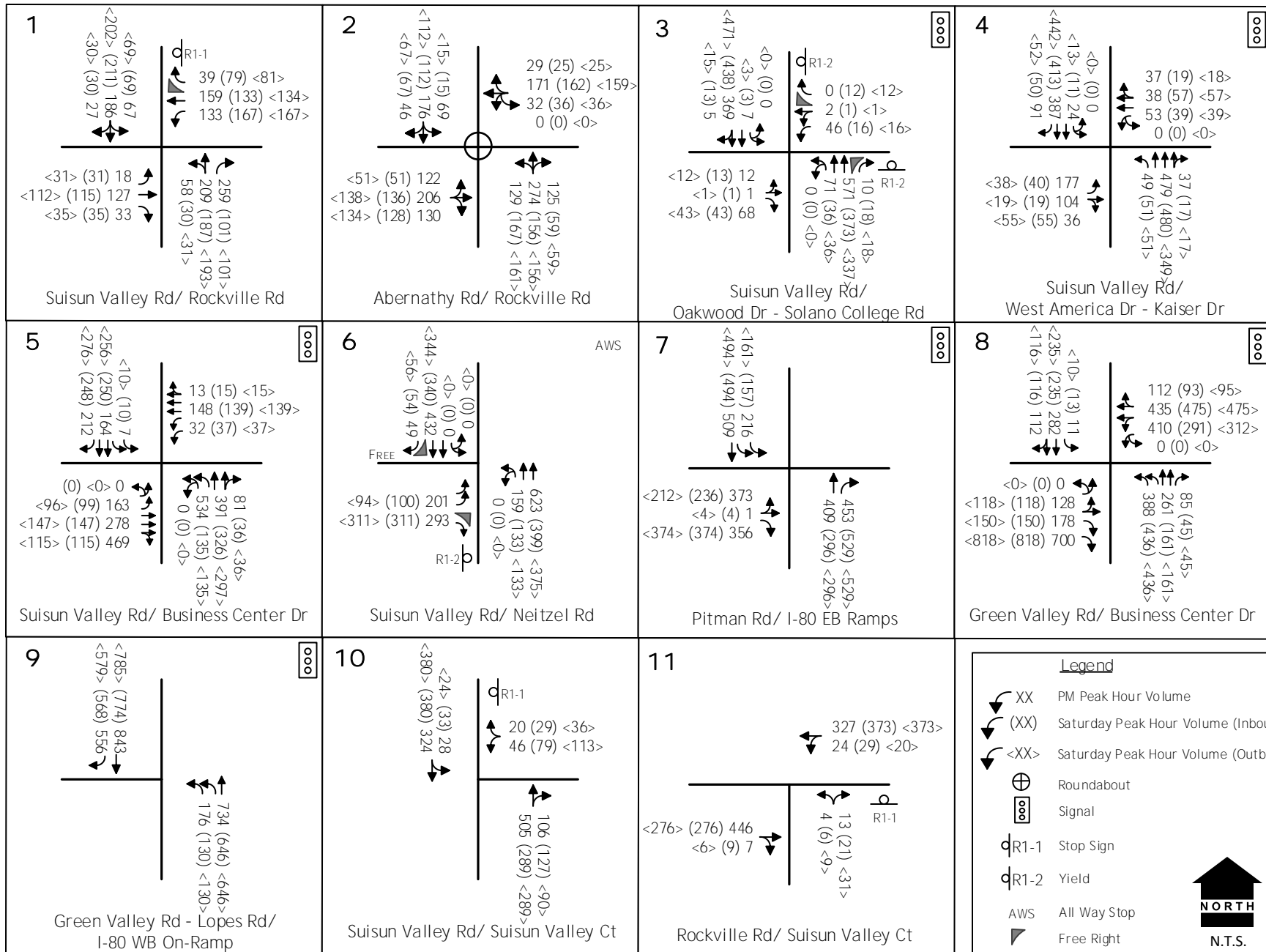
Route	% of Total Trips
To / from Rockville Rd west of	5%
To / from North on Suisun Valley Rd	15%
To / from Rockville Rd east of Abernathy Rd	5%
To / from I-80 East	20%
To / from Green Valley Rd north of Business Center Dr 113	5%
To / from I-80 West	20%
To / from I-680 South	20%
To / from Oakwood Dr west of Suisun Valley Rd	3%
To / from Westamerica Dr west of Suisun Valley Rd	4%
To / from Kaiser Dr east of Suisun Valley Rd	3%
Total	100%

Vehicle Trip Assignment. Traffic generated by the project was assigned to the study roadway system based on the projected trip distribution percentages (Figure 5). Figure 6 displays the project generated traffic. Figure 7 displays the resulting sum of existing Friday p.m. and Saturday peak hour volumes at the study intersections for the Existing plus Project condition.



TRIP DISTRIBUTION PERCENTAGES





Existing Plus Project Level of Service Impacts

Vehicle Miles Traveled. The project is within an Agriculture Tourist Center District north of I-80. This district allows the uses identified in the *Trip Generation* section of this report. The proposed project includes a variety of uses. These include 6-1,500 square foot wine tasting rooms, a multi-purpose room / event center to accommodate 100 persons for wine tasting event, a 10-room boutique hotel, a 7,600 square foot fine dining restaurant and a 5,500 square foot specialty supermarket.

A review of similar uses in the region shows that there are various wineries north and west of the project location. Additionally, the site includes a supermarket and restaurant which will provide residents with local shopping / dining destinations. Increasing opportunities for these uses closer to the trip origins, users may decrease overall VMT by substituting short trips for longer ones. By having a consolidation of wineries, visitors to the region are likely to visit this location rather than driving between wineries further north and west of the project site. Additionally, the project provides residents with local shopping and dining options who will be able to use more local services. The project will construct a total of 33,000 square foot of buildings.

As noted in the County Interim Modification of Standards a Use Permit or other discretionary development which generates 110 total vehicle trips per day or less (770 total vehicle trips per week or less) will have less than significant impact on VMT. Employee trips are not considered in the total vehicle trip generation due to the reduction in regional commute trips and VMT due to local job creation. Annually, this equates to 40,150 daily trips. The projected number of annual trips the project will generate, excluding those trips that are consistent with the County's VMT policy, are projected to generate 125,435 annual trips. This is a significant impact.

Intersection Levels of Service. Table 5 displays the levels of service for the Friday p.m. peak hour, Saturday peak hour with inbound special event traffic and Saturday peak hour with outbound special event traffic periods. All intersections will operate within the LOS thresholds for each agency. The Suisun Valley Road / Neitzell Road intersection will continue to operate at an acceptable level of service and will continue to meet the peak hour signal warrant. No mitigations are necessary.

**TABLE 5
EXISTING PLUS PEAK HOUR LEVELS OF SERVICE AT INTERSECTIONS**

Location	Control	Existing plus Project Friday PM Peak Hour		Existing plus Project Saturday Peak Hour With Inbound Special Event		Existing plus Project Saturday Peak Hour With Outbound Special Event		Peak Hour Warrant Met?
		LOS	Average Delay (secs)	LOS	Average Delay (secs)	LOS	Average Delay (secs)	
1. Suisun Valley Rd / Rockville Rd (SC)	Signal	C	23.5	C	23.9	C	23.7	N/A
2. Rockville Rd / Abernathy Rd (SC)	Roundabout	B	11.8	A	6.9	A	6.9	N/A
3. Suisun Valley Rd / Solano College Rd (COF)	Signal	B	11.4	A	9.3	A	9.4	N/A
4. Suisun Valley Rd / Westamerica Dr (COF)	Signal	B	15.2	B	12.0	B	12.1	N/A
5. Suisun Valley Rd / Business Center Dr (COF)	Signal	D	42.4	C	20.1	C	20.4	N/A
6. Suisun Valley Rd / Neitzell Rd (COF)	AWS	C	24.6	B	13.1	B	13.0	Yes
7. Pitman Rd / I-80 EB Ramps (CT)	Signal	B	19.0	C	23.9	C	24.1	N/A
8. Green Valley Rd / Business Center Dr (COF)	Signal	D	39.9	C	30.7	C	31.0	N/A
9. Green Valley Rd / I-80 WB On-Ramp (CT)	Signal	A	5.3	A	4.9	A	4.9	N/A
10. Suisun Valley Rd / Suisun Ct (COF)	WB Stop	A	9.0	A	8.4	A	8.2	No
SB Left WB		C	21.0	C	19.7	C	21.5	
11. Rockville Rd / Project Access (SC)	NB Stop	B	12.9	B	11.4	B	11.5	No
NB WB Left		A	8.4	A	8.0	A	7.9	
AWS – multi-way stop								

CUMULATIVE IMPACTS

The analysis of Cumulative impacts was considered when accommodating the peak tonnage increase for the site.

The analysis of the long range 2040 cumulative condition is intended to consider the impact of this project within the context of buildout of the General Plan circulation element occurring in 2040.

Year 2040 Forecasts / Conditions

2040 Traffic Forecasts

Year 2040 traffic forecasts were based on the most recent Countywide traffic model provided by the Solano Transportation Authority (STA). The method used to develop forecasts of future year peak hour intersection turning movement traffic volumes was based on the increase or decrease of traffic model generated growth factors. Peak hour traffic volumes from the travel model were used to generate growth factors. These growth factors were applied to existing peak hour intersection turning movement traffic volumes. The development of future year intersection turning movement traffic volumes requires that the turning movements at each intersection “balance”. To achieve the balance, inbound traffic volumes must equal the outbound traffic volumes, and the volumes must be distributed among the various left-turn, through, and right-turn movements at each intersection. The “balancing” of future year intersection turning movement traffic volumes was conducted using methods described in the Transportation Research Board’s (TRB’s) National Cooperative Highway Research Program (NCHRP) Report 255, *Highway Traffic Data for Urbanized Area Project Planning and Design*. The NCHRP 255 method applies the desired peak hour directional volumes to the intersection turning movement volumes, using an iterative process to balance and adjust the resulting forecasts to match the desired peak hour directional volumes. Year 2040 forecasted intersection turning movements are presented in Figure 8.

Roadway Conditions

Roadways conditions in the 2040 model are generally projected to remain with their current lane configurations. No changes were noted. Traffic signal timing was optimized where appropriate under the assumption that signal operations do not remain static between Existing and Cumulative conditions.

It is also acknowledged that the I-80 / I-680 / SR 12 interchange is currently being reconstructed with Caltrans the lead agency. This multi-year, multi-phase project will improve connectivity between the two interstate freeways and the state route highway. The project also includes improving access to and from local roadways in Fairfield. Funding for the entire project is not confirmed. The STA model does not appear to include the proposed improvements.

2040 Conditions

Intersection Levels of Service. Table 6 displays the p.m. and Saturday peak hour Levels of Service at each study intersection in the Cumulative 2040 condition. All intersections will operate at acceptable levels of service. The Suisun Valley Road / Neitzell Road intersection will meet the peak hour signal warrant but will continue to operate within acceptable LOS thresholds, at LOS D or better.

2040 Plus Project Level of Service Impacts

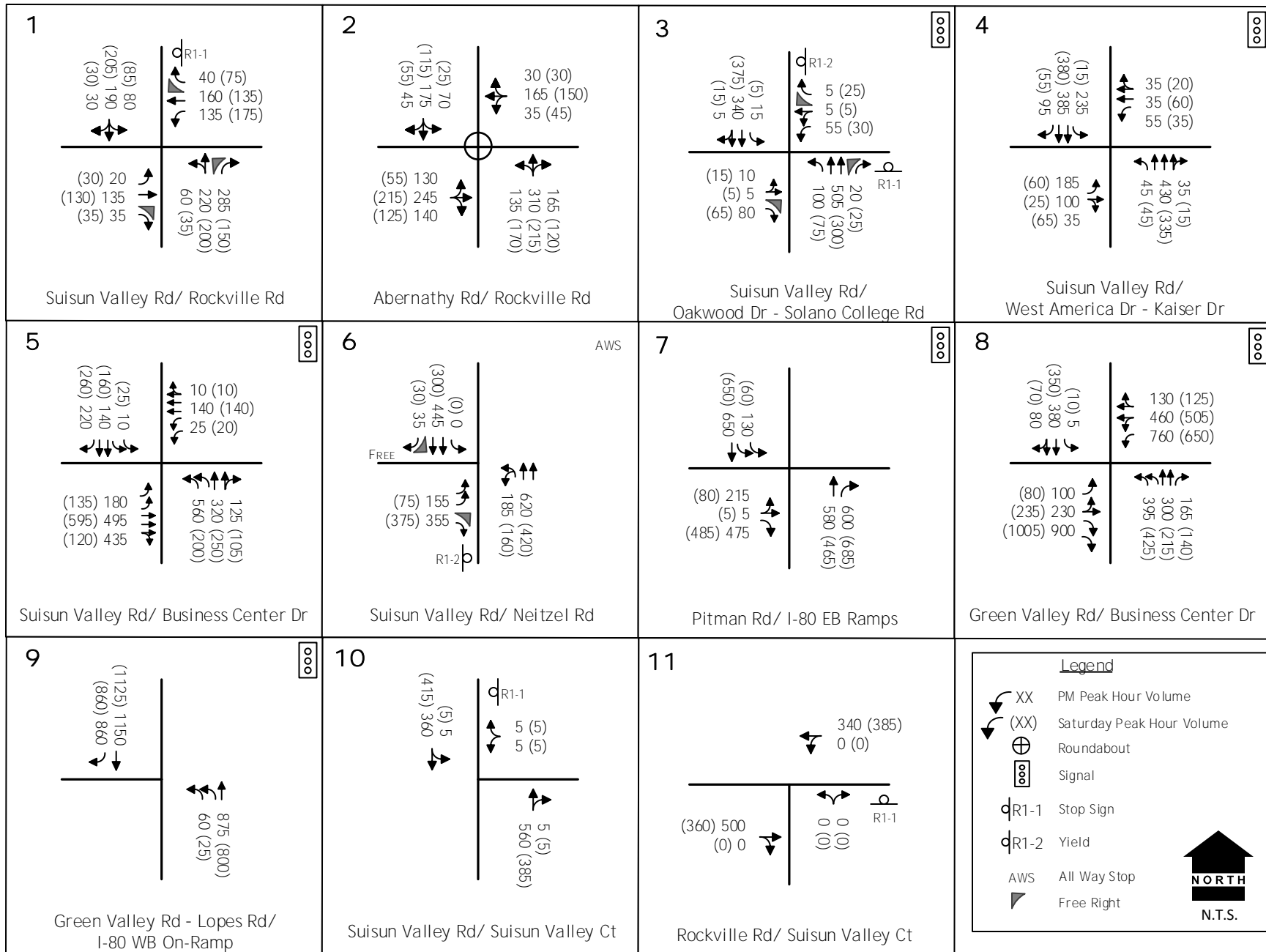
Intersection Levels of Service. Figure 9 presents the projected turning movements at the study intersections under 2040 plus Project conditions. Table 7 displays the Levels of Service at each study intersection in the 2040 plus Project condition for the p.m. peak hour and the Saturday peak hour conditions, considering both inbound and outbound special event traffic. All intersections will operate within the LOS thresholds for each agency. The Suisun Valley Road / Neitzell Road intersection will continue to operate at an acceptable level of service and will continue to meet the peak hour signal warrant. No mitigations are necessary.

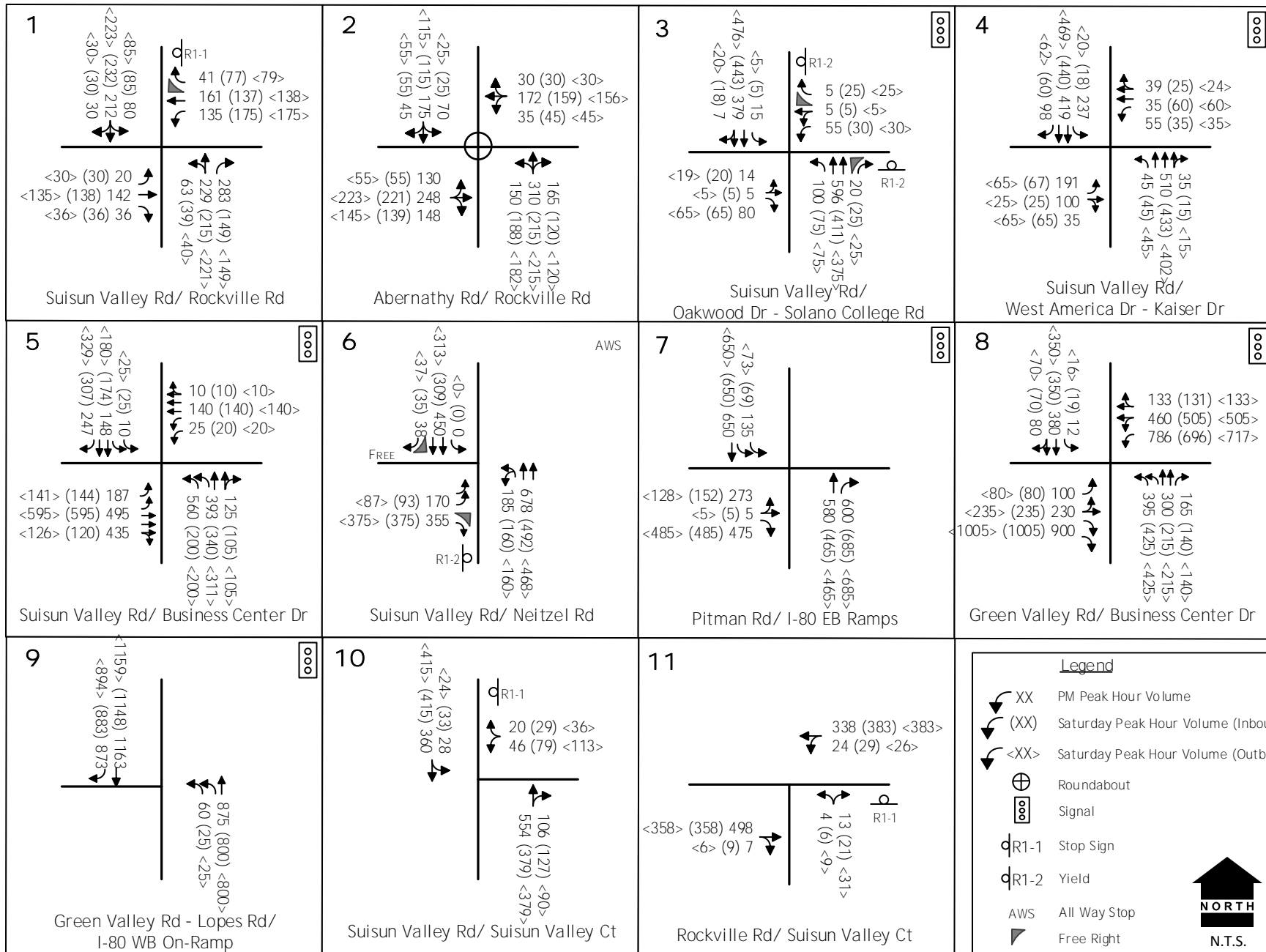
**TABLE 6
2040 PEAK HOUR LEVELS OF SERVICE AT INTERSECTIONS**

Location	Control	2040 Friday Peak Hour		2040 Saturday Peak Hour		Peak Hour Warrant Met?
		LOS	Average Delay (secs)	LOS	Average Delay (secs)	
1. Suisun Valley Rd / Rockville Rd (SC)	Signal	C	25.2	C	25.4	N/A
2. Rockville Rd / Abernathy Rd (SC)	Roundabout	B	16.8	A	9.1	N/A
3. Suisun Valley Rd / Solano College Rd (COF)	Signal	B	12.5	B	11.0	N/A
4. Suisun Valley Rd / Westamerica Dr (COF)	Signal	B	18.2	B	12.5	N/A
5. Suisun Valley Rd / Business Center Dr (COF)	Signal	D	38.8	C	21.9	N/A
6. Suisun Valley Rd / Neitzell Rd (COF)	AWS	D	26.9	B	13.4	Yes
7. Pitman Rd / I-80 EB Ramps (CT)	Signal	C	34.8	D	36.9	N/A
8. Green Valley Rd / Business Center Dr (COF)	Signal	D	47.8	D	46.2	N/A
9. Green Valley Rd / I-80 WB On-Ramp (CT)	Signal	A	7.0	A	4.6	N/A
10. Suisun Valley Rd / Suisun Ct (SC)	WB Stop	A	8.8	A	8.2	No
SB Left WB		C	15.8	B	13.8	
SC – Solano County COF – City of Fairfield CT – Caltrans BOLD values exceed acceptable LOS threshold						

**TABLE 7
2040 PLUS PROJECT PEAK HOUR LEVELS OF SERVICE AT INTERSECTIONS**

Location	Control	2040 plus Project Friday PM Peak Hour		2040 plus Project Saturday Peak Hour With Inbound Special Event		2040 plus Project Saturday Peak Hour With Outbound Special Event		Peak Hour Warrant Met?
		LOS	Average Delay (secs)	LOS	Average Delay (secs)	LOS	Average Delay (secs)	
1. Suisun Valley Rd / Rockville Rd (SC)	Signal	C	26.4	C	27.4	C	27.2	N/A
2. Rockville Rd / Abernathy Rd (SC)	Roundabout	B	18.0	A	9.5	A	9.5	N/A
3. Suisun Valley Rd / Solano College Rd (COF)	Signal	B	12.6	B	11.0	B	11.1	N/A
4. Suisun Valley Rd / Westamerica Dr (COF)	Signal	B	18.8	B	12.7	B	12.7	N/A
5. Suisun Valley Rd / Business Center Dr (COF)	Signal	D	41.0	C	22.9	C	23.6	N/A
6. Suisun Valley Rd / Neitzell Rd (COF)	AWS	D	32.4	B	14.8	B	14.5	Yes
7. Pitman Rd / I-80 EB Ramps (CT)	Signal	C	34.8	D	37.0	D	37.4	N/A
8. Green Valley Rd / Business Center Dr (COF)	Signal	D	49.1	D	48.5	D	49.4	N/A
9. Green Valley Rd / I-80 WB On-Ramp (CT)	Signal	A	7.4	A	5.0	A	5.2	N/A
10. Suisun Valley Rd / Suisun Ct (COF)	WB Stop	A	9.2	A	8.7	A	8.5	No
SB Left WB		C	23.7	C	24.4	D	27.9	
11. Rockville Rd / Project Access (SC)	NB Stop	B	13.6	B	12.3	B	12.4	No
NB WB Left		A	8.6	A	8.2	A	8.2	
SC – Solano County COF – City of Fairfield CT – Caltrans BOLD values exceed acceptable LOS threshold								





PROJECT ACCESS

Two access locations will be provided for the project. One access is the existing Suisun Valley Court intersection along Suisun Valley Road while the second will be along Rockville Road, about 750 feet east of the Suisun Valley Road intersection. Suisun Valley Court will continue to provide access to the existing commercial space in the southeast corner of the Suisun Valley Road / Rockville Road intersection. Several driveways will access the project. The two primary parking areas along the north side of the site will have direct access from the north driveway on Suisun Valley Court and from Rockville Road. A perimeter road will also be provided to provide emergency vehicle access to the south side of the project.

Sight Distance. A sight distance analysis was completed at the proposed project access locations along Suisun Valley Road and Rockville Road.

Available sight distance was evaluated using the standards documented in the Caltrans *Highway Design Manual* (HDM). Based on the location of the driveways “**Minimum Stopping Sight Distance**” (MSSD) and “**Corner Sight Distance**” (CSD) was considered. These criteria are documented in Tables 201.1 and 405.1A of the HDM. As noted in the HDM corner sight distance are not applied to urban driveways unless signalized. However, based on the roadway conditions corner sight distance criteria was also reviewed.

Suisun Valley Road / Suisun Valley Court. The posted speed limit at the project access intersection along Suisun Valley Road is 25 miles per hour (mph); however, just south of the intersection is a speed reduction from 35 mph. It is expected that many motorists will be in the process of reducing the vehicle speed; thus, the 35 mph speed was considered.

The Minimum Stopping Sight Distance (MSSD) is the distance required for an approaching motorist to identify a hazard and come to a stop. The Caltrans Highway Design Manual (HDM) Table 201.1 notes that the minimum sight distance requirement for the posted speed limit of 35 mph is 250 feet. The line of sight from the “driver’s eye” along on Suisun Valley Road is straight and level, and a motorist has a clear view of traffic exiting from Suisun Valley Court.

Corner Sight Distance (CSD) is the distance needed for a motorist to see approaching vehicles and complete a turning maneuver before that vehicle arrives. Table 405.1A notes that CSD is determined based on the design speed of the major road and the time gap needed to complete the maneuver. For a single-unit truck departing the site and turning south, the required time gap is 9½ seconds. With a 35-mph posted speed limit a CSD of about 490 feet is required ($1.47V_m T_g$) to provide adequate time for the vehicle to enter southbound Suisun Valley Road before an opposing vehicle arrives. The sight distance appears adequate.

Rockville Road Driveway. This driveway will form a tee intersection along Rockville Road. Similar to Suisun Valley Road Rockville Road is generally straight and level. The posted speed is 45 mph. The MSSD is 360 feet, and motorists has a clear line of sight along Rockville Road

With a 45-mph posted speed limit a CSD of about 630 feet is required ($1.47V_mT_g$) to provide adequate time for the vehicle to enter westbound Rockville Road before an opposing vehicle arrives. Based on the approximate driveway location the sight distance may be adequate. There appears to be a line of trees along the property frontage on Rockville Road that could interfere with sight distance looking west. It is unknown whether these trees can be removed. There is adequate sight distance looking east. The sight distance should be confirmed during preparation of improvement plans.

Need for Left Turn Lanes

The extent to which project trips create the need for a separate left turn lane at study intersections has been investigated based application of published criteria to long term cumulative volumes

Methodology. The American Association of State Transportation and Highway Officials (AASHTO) has identified guidelines for evaluating the benefits of installing left turn lanes in their publication *A Policy on Geometric Design of Highways and Streets*. AASHTO guidelines take two forms. These guidelines are presented the 11th Edition (2011) in their Exhibit 9-29 and Table 7 and base the need for a left turn lane on the volume of approaching and opposing traffic on the mainline road and the relative percentage of that traffic that turns. These criteria are applicable to intersections where the major street traffic proceeds freely and side street traffic is controlled by stop signs. This methodology considers high speed roadways of 40 mph or greater.

The AASHTO publication was updated in December 2018 and different guidelines are now available. The newer guidelines suggest that a left turn lane could be beneficial based on the volume of traffic turning and the total volume per lane on the road. The new guidance considered rural and urban conditions. This guidance is presented in their Figures 9-35 and 9-36 (Table 8) which follows. These guidelines also suggest volume thresholds for creation of a “bypass” lane that, absent a full turn lane, would allow through traffic to proceed around a vehicle stopped to turn left at a “tee” intersection. The information supporting the 2018 guidelines notes, however, that *“The volume based guidelines or warrants presented below indicate situations where a left turn lane may be desirable, not necessarily situations where a left-turn lane is definitely needed”*.

TABLE 7 TRAFFIC VOLUMES JUSTIFYING LEFT TURN LANES UNDER 2011 AASHTO				
Opposing Volume (veh/hr)	Advancing Volume (veh/hr)			
	5% Left Turns	10% Left Turns	20% Left Turns	30% Left Turns
40-mph operating speed				
800	330	240	180	160
600	410	305	225	200
400	510	380	275	245
200	640	470	350	305
100	720	515	390	340
50-mph operating speed				
800	280	210	165	135
600	350	260	195	170
400	430	320	240	210
200	550	400	300	270
100	615	445	335	295
60-mph operating speed				
800	230	170	125	115
600	290	210	160	140
400	365	270	200	175
200	450	330	250	215
100	505	370	275	240

Source: *A Policy on Geometric Design of Highway and Streets, AASHTO, 2011.*

TABLE 8 ASSESSMENT OF JUSTIFICATION FOR LEFT TURN LANES UNDER 2018 AASHTO		
Left Turn Lane Volume (VPH)	Major Road Two-Lane Highway Peak-Hour Volume (VPH/Lane)	
	Three-Leg Intersection*	Four-Leg Intersection*
	Warrants a Left Turn Lane	Warrants a Left Turn Lane
5	450 / 200	200 / 150
10	300 / 100	100 / 50
15	250 / 100	100 / 50
20	200 / 50	50 / <50
25	200 / 50	50 / <50
30	150 / 50	50 / <50
35	150 / 50	50 / <50
40	150 / 50	50 / <50
45	150 / 50	50 / <50
50 or more	100 / 50	50 / <50

Source: *A Policy on Geometric Design of Highway and Streets, AASHTO, 2018.*

* Approach volume
Urban areas / Rural area

Assessment. The justification of a for left turn lane was considered at two locations, as noted in Table 9. The need for left turn lanes was considered based on factors such as the frequency of volumes reaching warrants levels, the availability of adequate sight distance and the nature of motorists attracted to the site.

Suisun Valley Road / Suisun Court. As previously determined sight distance is adequate at this intersection. A left turn lane could be justified based on the 2011 AASHTO criteria as the Friday p.m. volumes meet the minimum requirements; however, the method is based on a 40-mph speed, the lowest speed considered. For both Saturday alternatives the left turn lane is not justified. The 2018 methodology shows that a left turn lane could be justified for each of the study periods. While many motorists may not be familiar with the project location those left turning visitors will have just passed through a signalized intersections 250 feet to the north and are traveling through a 25-mph speed zone. A review of crash data from the California Highway Patrol SWITRS database between 2017 and 2019 showed few crashes along Suisun Valley Road in the project vicinity. Of the crashes noted they were generally due to speeding, DUI, improper turns leading to the hitting of an object and one improper starting / backing occurring north of Rockville Road.

As noted in the AASHTO manual the volume-based guidelines indicate situations where a left turn lane may be desirable, not necessarily situations where a left-turn lane is definitely needed. It is recommended that the speed zone along Suisun Valley Road south of Rockville Road be extended south to provide a longer 25-mph speed zone leading to the Rockville Road intersection.

Rockville Road / Project Driveway. It was previously identified that the sight distance at this location should be verified looking west as the location of the driveway relative to the existing tree line is undetermined. The projected volumes at this location will not satisfy the 2011 AASHTO criteria but will satisfy the 2018 methodology. A review of crash data from the California Highway Patrol SWITRS database between 2017 and 2019 showed few crashes along Rockville Road in the project vicinity. Of the crashes noted they were generally due to speeding and improper turns leading to the hitting of an object.

As noted in the AASHTO manual the volume-based guidelines indicate situations where a left turn lane may be desirable, not necessarily situations where a left-turn lane is definitely needed. It is recommended that the speed zone along Rockville Road east of Suisun Valley Road be extended east to provide a longer 25-mph speed zone leading into the project are and the Suisun Valley Road / Rockville Road intersection. The extension of the 25-mph speed zone will also reduce the needed sight distance to about 350 feet.

**TABLE 9
SUMMARY OF LEFT TURN LANE ASSESSMENT
CUMULATIVE PLUS PROJECT CONDITIONS**

Location	AASHTO 2011 Methodology						AASHTO 2018 Methodology	
	Friday Peak Hr Left Turn Volume	Major Street Traffic Volume		Percent Left Turns	Design Speed	Left Turn Lane Justified?	Major Street Volume Per lane	Left Turn Lane Justified?
		Advancing	Opposing					
Suisun Valley Rd / Suisun Valley Ct	28	388	660	7.2%	25 mph	Yes*	660	Yes
Site Access on Rockville Road	24	362	505	6.6%	45 mph	No	505	Yes
	Saturday Peak Hr Inbound Left Turn Volume							
Suisun Valley Rd / Suisun Valley Ct	33	448	506	7.4%	25 mph	No*	506	Yes
Site Access on Rockville Road	29	412	367	7.0%	45 mph	No	367	Yes
	Saturday Peak Hr Outbound Left Turn Volume							
Suisun Valley Rd / Suisun Valley Ct	24	439	469	5.5%	25 mph	No*	469	Yes
Site Access on Rockville Road	20	403	364	5.0%	45 mph	No	364	Yes

* 40 mph lowest operating speed; meets criteria for 40 mph

FINDINGS / RECOMMENDATIONS/ IMPROVEMENTS

The preceding analysis has identified project impacts that may occur without identifying any recommendations or improvements. The text that follows identifies a strategy for recommendations to the 'No Project' conditions or improvements to the 'Plus Project' conditions.

Existing Conditions

Recommendations. All intersections currently operate within agency thresholds, within LOS C conditions at Solano County intersections and LOS D conditions at City of Fairfield and Caltrans agency intersections. While operating at an acceptable level of service the Suisun Valley Road / Neitzell Road intersection meet the peak hour signal warrant.

Significant Transportation Effects for Existing plus Project Conditions

The project's VMT will exceed the County's VMT policy. The California Air Pollution Control Officers Association (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* publication provides alternative measures to reduce VMT and greenhouse gases. To reduce the project VMT the following CAPCOA trip reduction measures should be considered:

T-5 Implement Commute Trip Reduction Program – Voluntary

This strategy would implement a voluntary Commute Trip Reduction (CTR) program with employers to discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. Using the Greenhouse Gas Reduction Formula shown in the appendix the maximum GHG reduction is 4%. The applicant should consider working with *Solano Mobility* to develop trip reduction strategy.

T-7 Implement Commute Trip Reduction (CTR) Marketing

This measure would implement a marketing strategy to promote the project site employer's CTR program. Information sharing and marketing promote and educate employees about their travel choices to the employment location beyond driving such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions. Using the Greenhouse Gas Reduction Formula shown in the appendix the maximum GHG reduction is 4%.

T-9 Implement Subsidized or Discounted Transit Program

This measure would provide subsidized or discounted, or free transit passes for employees and/or residents. Reducing the out-of-pocket cost for choosing transit improves the competitiveness of transit against driving, increasing the total number of transit trips and decreasing vehicle trips. This decrease in vehicle trips results in reduced VMT and thus a reduction in GHG emissions. The closest route to the project is the City of Fairfield FAST Route #7 which operates between the Fairfield Transportation Center and the Cordelia Library with a stop at Solano Community College. This stop is less than ½ mile from the project site.

T-10 Provide End of Trip Facilities

This measure will install and maintain end-of-trip facilities for employee use. End-of-trip facilities include bike parking, bike lockers, showers, and personal lockers. The provision and maintenance of secure bike parking and related facilities encourages commuting by bicycle, thereby reducing VMT and GHG emissions. Using the Greenhouse Gas Reduction Formula shown in the appendix the maximum GHG reduction is 4.4%.

T-14 Provide Electric Vehicle Charging Infrastructure

Install onsite electric vehicle chargers in an amount beyond what is required by the 2019 California Green Building Standards (CALGreen) at buildings with designated parking areas (e.g., commercial, educational, retail, multifamily). This will enable drivers of Plug-In Hybrid Electric Vehicles (PHEVs) to drive a larger share of miles in electric mode (eVMT), as opposed to gasoline-powered mode, thereby displacing GHG emissions from gasoline consumption with a lesser amount of indirect emissions from electricity. Most PHEVs owners charge their vehicles at home overnight. When making trips during the day, the vehicle will switch to gasoline mode if/when it reaches its maximum all-electric range. The maximum GHG reduction is 11.9%.

T-18 Provide Pedestrian Network Improvement

This measure will increase the sidewalk coverage to improve pedestrian access. Providing sidewalks and an enhanced pedestrian network encourages people to walk instead of drive. This mode shift results in a reduction in VMT and GHG emissions. The installation of sidewalk along the Suisun Valley Road frontage will provide for a future connection to Solano Community College.

T-22 Implement Pedal Bikeshare Program (Non-Electric and/or Electric)

This measure will establish a bikeshare program. Bikeshare programs provide users with on-demand access to bikes for short-term use. This encourages a mode shift from vehicles to bicycles, displacing VMT and thus reducing GHG emissions. This program could be useful for visitors to the site exploring the Solano Wine Region along Suisun Valley Road. The maximum GHG reduction is 0.06%.

T-25 Extend Transit Network Coverage or Hours

This measure will expand the local transit network by either adding or modifying existing transit service or extending the operation hours to enhance the service near the project site. Starting services earlier in the morning and/or extending services to late-night hours can accommodate the commuting times of alternative-shift workers. This will encourage the use of transit and therefore reduce VMT and associated GHG emissions. This measure could extend Route 7 of the FAST network to the Suisun Valley Road / Rockville Road intersection to further encourage transit ridership.

Under Existing plus Project conditions, all intersections will continue to operate within acceptable levels of service. The Suisun Valley Road / Neitzell Road intersection will continue to operate at an acceptable level of service and meet the peak hour signal warrant.

The following recommendations are noted:

- The project should pay their fair share traffic impact fees in Solano County.
- The County should consider extending the 25-mph speed zone along Rockville Road to east of the project driveway as the site will be within the Rockville community. Shifting the zone to at least 150 feet east of the driveway will provide westbound motorists time to decelerate from 45 mph to 25 mph prior to reaching the driveway.
- The County should consider extending the 25-mph speed zone along Suisun Valley Road at least 100 feet south of the existing speed limit sign location. This will provide northbound motorists time to decelerate to 25-mph prior to reaching the intersection.

2040 Conditions

Under 2040 conditions all intersections are projected to operate within agency thresholds, within LOS C conditions at Solano County intersections and LOS D conditions at City of Fairfield and Caltrans agency intersections. The Suisun Valley Road / Neitzell Road intersection will operate at LOS D or better and meet the peak hour signal warrant.

Significant Transportation Effects for 2040 Plus Project Conditions

Under 2040 plus Project conditions, all intersections will continue to operate within acceptable levels of service. The Suisun Valley Road / Neitzell Road intersection will continue to operate at an acceptable level of service and meet the peak hour signal warrant.

REFERENCES

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APPENDIX

(under separate cover)

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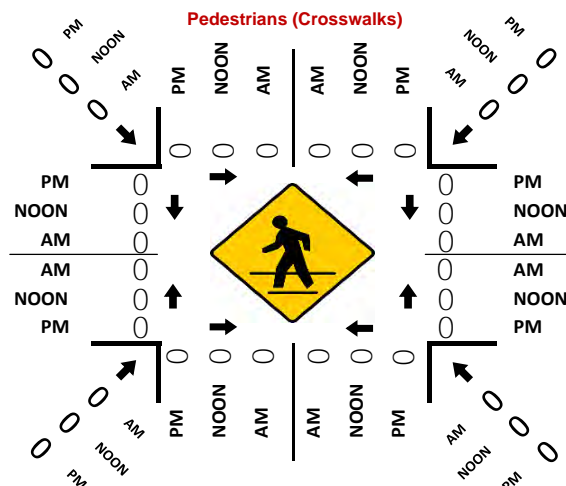
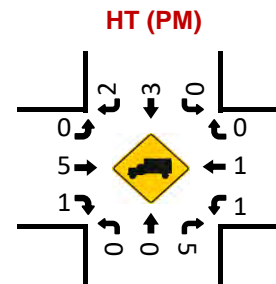
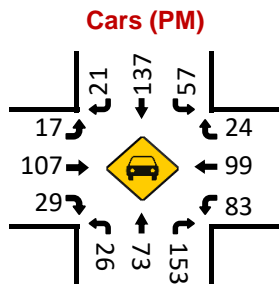
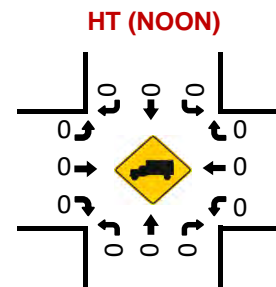
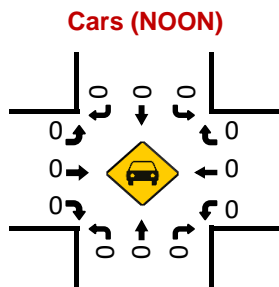
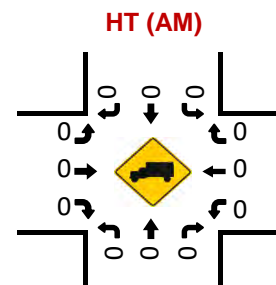
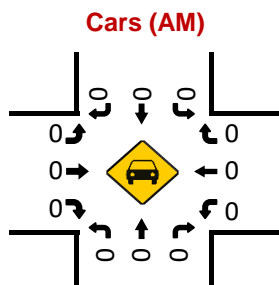
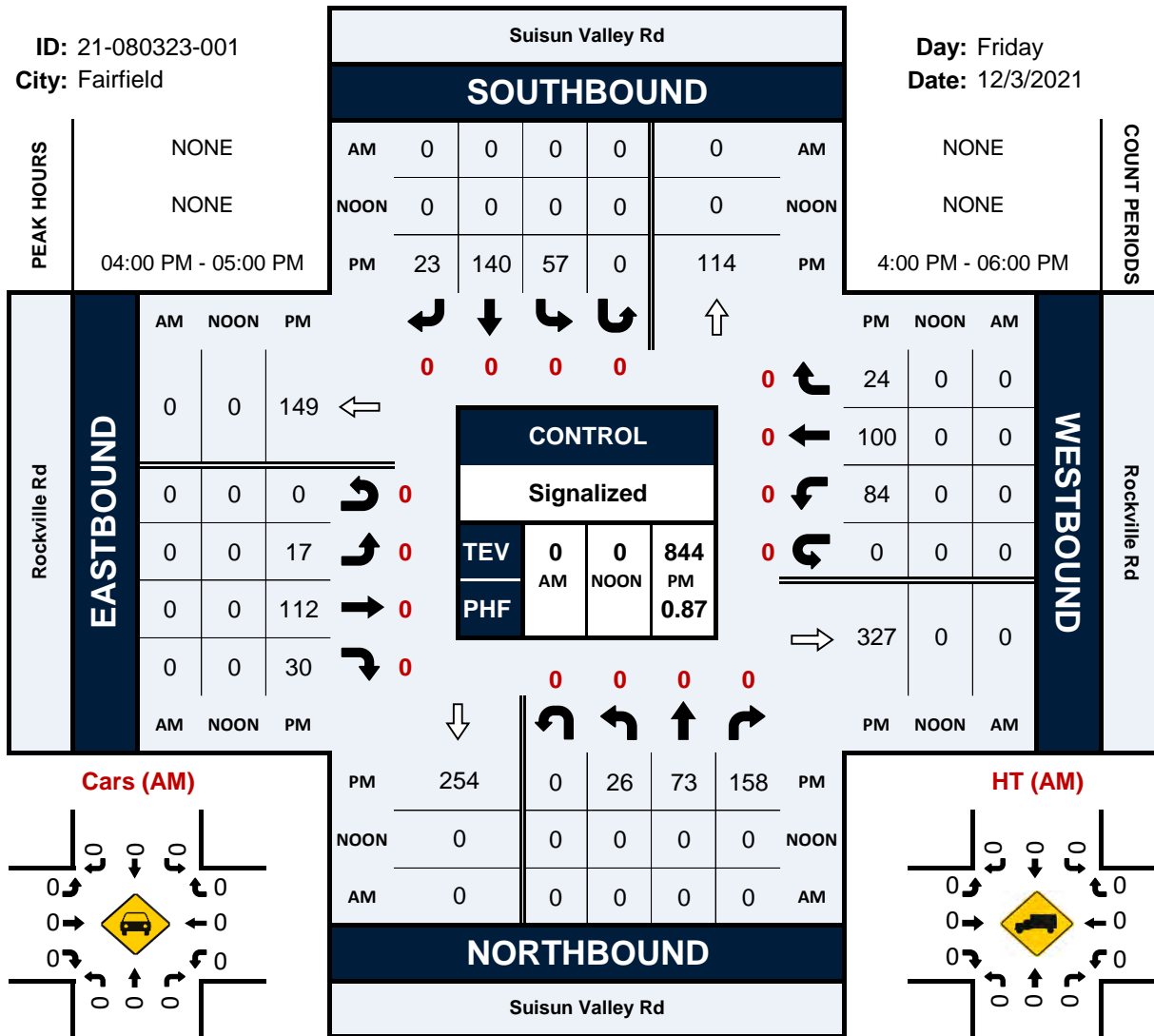
Prepared by National Data & Surveying Services

Suisun Valley Rd & Rockville Rd

Peak Hour Turning Movement Count

ID: 21-080323-001
City: Fairfield

Day: Friday
Date: 12/3/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Rockville Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-001
 Date: 12/3/2021

Data - Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	8	23	54	0	17	30	9	0	6	32	9	0	23	24	8	0	243
4:15 PM	7	21	34	0	15	48	4	0	6	32	9	0	21	24	5	0	226
4:30 PM	9	17	39	0	9	38	3	0	4	25	6	0	24	32	3	0	209
4:45 PM	2	12	31	0	16	24	7	0	1	23	6	0	16	20	8	0	166
5:00 PM	10	19	39	0	10	28	4	0	2	31	8	0	14	26	3	0	194
5:15 PM	6	20	24	0	11	26	5	0	4	23	6	0	25	31	0	0	181
5:30 PM	3	18	17	0	5	27	3	0	2	29	3	0	10	23	3	0	143
5:45 PM	9	11	28	0	6	15	4	0	2	19	2	0	16	14	6	0	132
TOTAL VOLUMES:	54	141	266	0	89	236	39	0	27	214	49	0	149	194	36	0	1494
APPROACH %'s:	11.71%	30.59%	57.70%	0.00%	24.45%	64.84%	10.71%	0.00%	9.31%	73.79%	16.90%	0.00%	39.31%	51.19%	9.50%	0.00%	
PEAK HR:	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL:	26	73	158	0	57	140	23	0	17	112	30	0	84	100	24	0	844
PEAK HR FACTOR:	0.722	0.793	0.731	0.000	0.838	0.729	0.639	0.000	0.708	0.875	0.833	0.000	0.875	0.781	0.750	0.000	0.868
	0.756				0.821				0.846				0.881				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Rockville Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-001
 Date: 12/3/2021

Data - Cars

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	8	23	53	0	17	29	8	0	6	31	9	0	22	24	8	0	238
4:15 PM	7	21	31	0	15	48	4	0	6	29	9	0	21	24	5	0	220
4:30 PM	9	17	38	0	9	38	3	0	4	24	5	0	24	31	3	0	205
4:45 PM	2	12	31	0	16	22	6	0	1	23	6	0	16	20	8	0	163
5:00 PM	10	19	39	0	10	28	4	0	2	31	8	0	12	26	3	0	192
5:15 PM	6	20	24	0	11	26	5	0	4	22	6	0	25	31	0	0	180
5:30 PM	3	18	16	0	5	25	3	0	2	29	3	0	10	23	3	0	140
5:45 PM	9	11	28	0	6	14	4	0	2	19	2	0	16	14	6	0	131
TOTAL VOLUMES:	54	141	260	0	89	230	37	0	27	208	48	0	146	193	36	0	1469
APPROACH %'s:	11.87%	30.99%	57.14%	0.00%	25.00%	64.61%	10.39%	0.00%	9.54%	73.50%	16.96%	0.00%	38.93%	51.47%	9.60%	0.00%	
PEAK HR:	04:00 PM - 05:00 PM																
PEAK HR VOL:	26	73	153	0	57	137	21	0	17	107	29	0	83	99	24	0	826
PEAK HR FACTOR:	0.722	0.793	0.722	0.000	0.838	0.714	0.656	0.000	0.708	0.863	0.806	0.000	0.865	0.798	0.750	0.000	0.868
	0.750				0.802				0.832				0.888				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Rockville Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-001
 Date: 12/3/2021

Data - HT

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	1	0	0	1	1	0	0	1	0	0	1	0	0	0	5
4:15 PM	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	6
4:30 PM	0	0	1	0	0	0	0	0	0	1	1	0	0	1	0	0	4
4:45 PM	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:30 PM	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	0.00%	75.00%	25.00%	0.00%	0.00%	85.71%	14.29%	0.00%	75.00%	25.00%	0.00%	0.00%	25
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	5	0	0	3	2	0	0	5	1	0	1	1	0	0	18
PEAK HR FACTOR :	0.000	0.000	0.417	0.000	0.000	0.375	0.500	0.000	0.000	0.417	0.250	0.000	0.250	0.250	0.000	0.000	0.750
	0.417				0.417				0.500				0.500				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Rockville Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-001
 Date: 12/3/2021

Data - Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	0	2	0	0	0	0	0	0	0	1	0	0	4
APPROACH %'s:	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0.00%	100.00%	0.00%	0.00%	
PEAK HR:	04:00 PM - 05:00 PM																
PEAK HR VOL:	0	0	1	0	0	2	0	0	0	0	0	0	0	1	0	0	4
PEAK HR FACTOR:	0.000	0.000	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.500
	0.250				0.500								0.250				

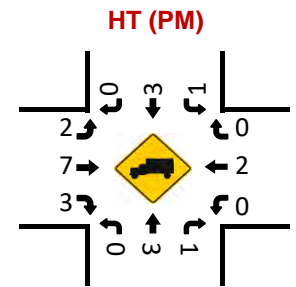
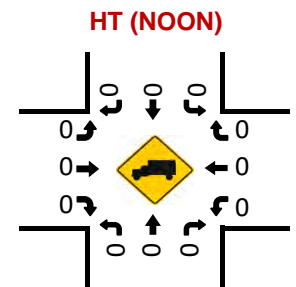
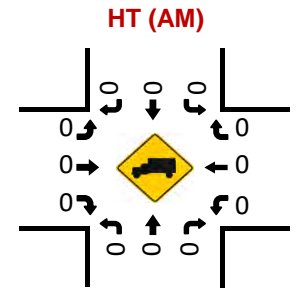
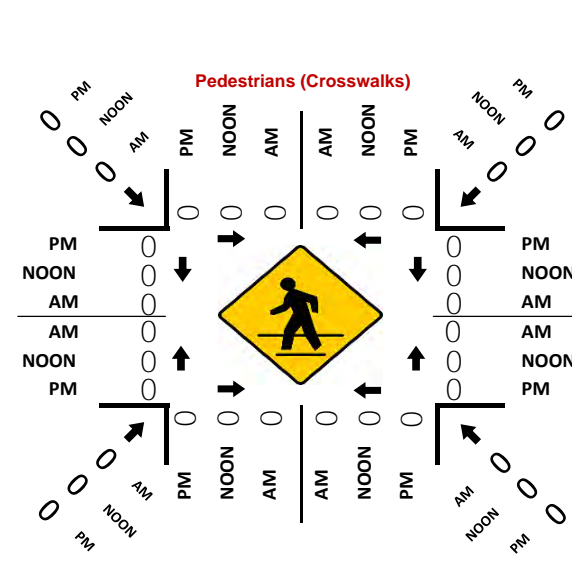
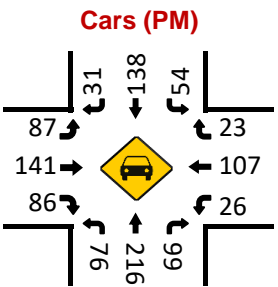
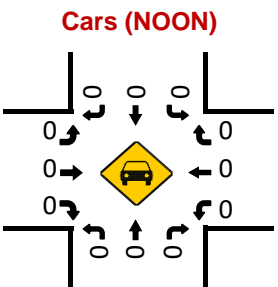
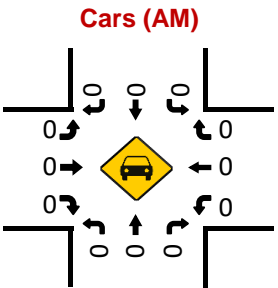
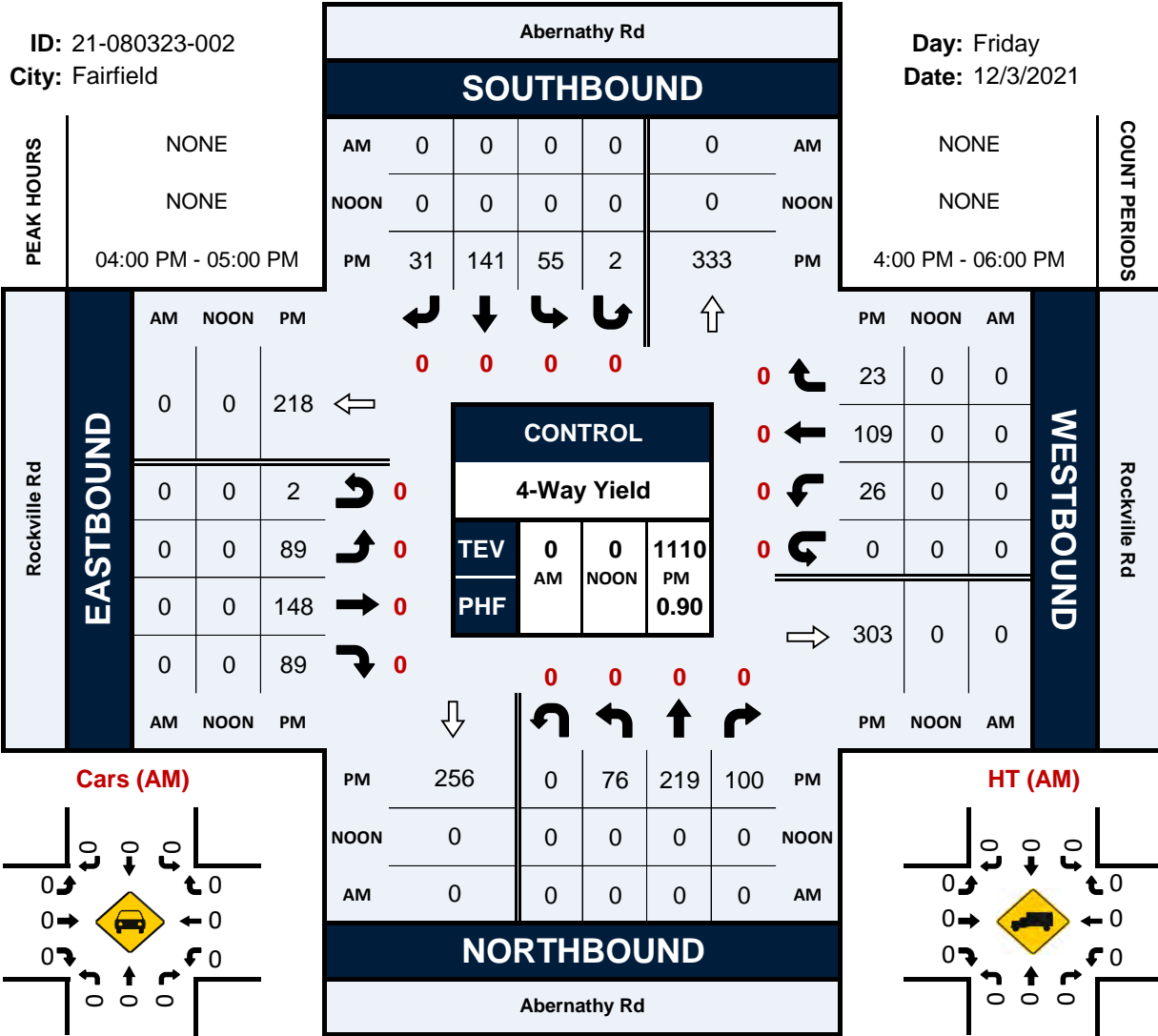
Prepared by National Data & Surveying Services

Abernathy Rd & Rockville Rd

Peak Hour Turning Movement Count

ID: 21-080323-002
City: Fairfield

Day: Friday
Date: 12/3/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Abernathy Rd & Rockville Rd
 City: Fairfield
 Control: 4-Way Yield

Project ID: 21-080323-002
 Date: 12/3/2021

Data - Total

NS/EW Streets:	Abernathy Rd				Abernathy Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	25	60	28	0	13	34	6	0	34	46	25	1	4	29	3	0	308
4:15 PM	18	49	30	0	15	42	11	0	17	40	26	0	7	27	9	0	291
4:30 PM	11	57	26	0	16	36	8	0	25	33	18	1	7	37	6	0	281
4:45 PM	22	53	16	0	11	29	6	2	13	29	20	0	8	16	5	0	230
5:00 PM	19	65	29	0	7	25	6	0	25	33	26	0	8	24	5	0	272
5:15 PM	20	50	19	0	5	39	10	0	15	33	18	1	6	18	6	0	240
5:30 PM	17	43	33	0	7	28	1	0	13	34	14	0	5	22	1	0	218
5:45 PM	17	50	12	0	6	27	6	0	10	26	16	0	5	23	2	0	200
TOTAL VOLUMES :	149	427	193	0	80	260	54	2	152	274	163	3	50	196	37	0	2040
APPROACH %'s :	19.38%	55.53%	25.10%	0.00%	20.20%	65.66%	13.64%	0.51%	25.68%	46.28%	27.53%	0.51%	17.67%	69.26%	13.07%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	76	219	100	0	55	141	31	2	89	148	89	2	26	109	23	0	1110
PEAK HR FACTOR :	0.760	0.913	0.833	0.000	0.859	0.839	0.705	0.250	0.654	0.804	0.856	0.500	0.813	0.736	0.639	0.000	0.901
	0.874				0.842				0.774				0.790				

National Data & Surveying Services Intersection Turning Movement Count

Location: Abernathy Rd & Rockville Rd
 City: Fairfield
 Control: 4-Way Yield

Project ID: 21-080323-002
 Date: 12/3/2021

Data - Cars

NS/EW Streets:	Abernathy Rd				Abernathy Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	25	59	28	0	12	34	6	0	33	45	25	1	4	28	3	0	303
4:15 PM	18	47	30	0	15	41	11	0	17	35	25	0	7	26	9	0	281
4:30 PM	11	57	26	0	16	35	8	0	24	32	17	1	7	37	6	0	277
4:45 PM	22	53	15	0	11	28	6	2	13	29	19	0	8	16	5	0	227
5:00 PM	17	65	29	0	7	25	6	0	25	33	25	0	8	24	5	0	269
5:15 PM	20	50	19	0	5	39	10	0	15	31	18	1	6	18	6	0	238
5:30 PM	17	43	32	0	7	28	1	0	13	33	14	0	4	22	1	0	215
5:45 PM	17	50	11	0	6	27	6	0	10	25	16	0	5	23	2	0	198
TOTAL VOLUMES :	147	424	190	0	79	257	54	2	150	263	159	3	49	194	37	0	2008
APPROACH %'s :	19.32%	55.72%	24.97%	0.00%	20.15%	65.56%	13.78%	0.51%	26.09%	45.74%	27.65%	0.52%	17.50%	69.29%	13.21%	0.00%	
PEAK HR	04:00 PM - 05:00 PM																
PEAK HR VOL	76	216	99	0	54	138	31	2	87	141	86	2	26	107	23	0	1088
PEAK HR FACTOR	0.760	0.915	0.825	0.000	0.844	0.841	0.705	0.250	0.659	0.783	0.860	0.500	0.813	0.723	0.639	0.000	0.898
	0.873				0.840				0.760				0.780				

National Data & Surveying Services Intersection Turning Movement Count

Location: Abernathy Rd & Rockville Rd
 City: Fairfield
 Control: 4-Way Yield

Project ID: 21-080323-002
 Date: 12/3/2021

Data - HT

NS/EW Streets:	Abernathy Rd				Abernathy Rd				Rockville Rd				Rockville Rd					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
4:00 PM	0	1	0	0	1	0	0	0	1	1	0	0	0	1	0	0	0	5
4:15 PM	0	2	0	0	0	1	0	0	0	5	1	0	0	0	1	0	0	10
4:30 PM	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	4
4:45 PM	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	3
5:00 PM	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
5:30 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	3
5:45 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
TOTAL VOLUMES :	2	3	3	0	1	3	0	0	2	11	4	0	1	2	0	0	0	32
APPROACH %'s :	25.00%	37.50%	37.50%	0.00%	25.00%	75.00%	0.00%	0.00%	11.76%	64.71%	23.53%	0.00%	33.33%	66.67%	0.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL	
PEAK HR VOL :	0	3	1	0	1	3	0	0	2	7	3	0	0	2	0	0	0	22
PEAK HR FACTOR :	0.000	0.375	0.250	0.000	0.250	0.750	0.000	0.000	0.500	0.350	0.750	0.000	0.000	0.500	0.000	0.000	0.000	0.550
	0.500				1.000				0.500				0.500					

National Data & Surveying Services Intersection Turning Movement Count

Location: Abernathy Rd & Rockville Rd
 City: Fairfield
 Control: 4-Way Yield

Project ID: 21-080323-002
 Date: 12/3/2021

Data - Bikes

NS/EW Streets:	Abernathy Rd				Abernathy Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	3
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	0	0	0	0	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.250								0.250								

Prepared by National Data & Surveying Services

Suisun Valley Rd & Mangels Blvd/Business Center Dr

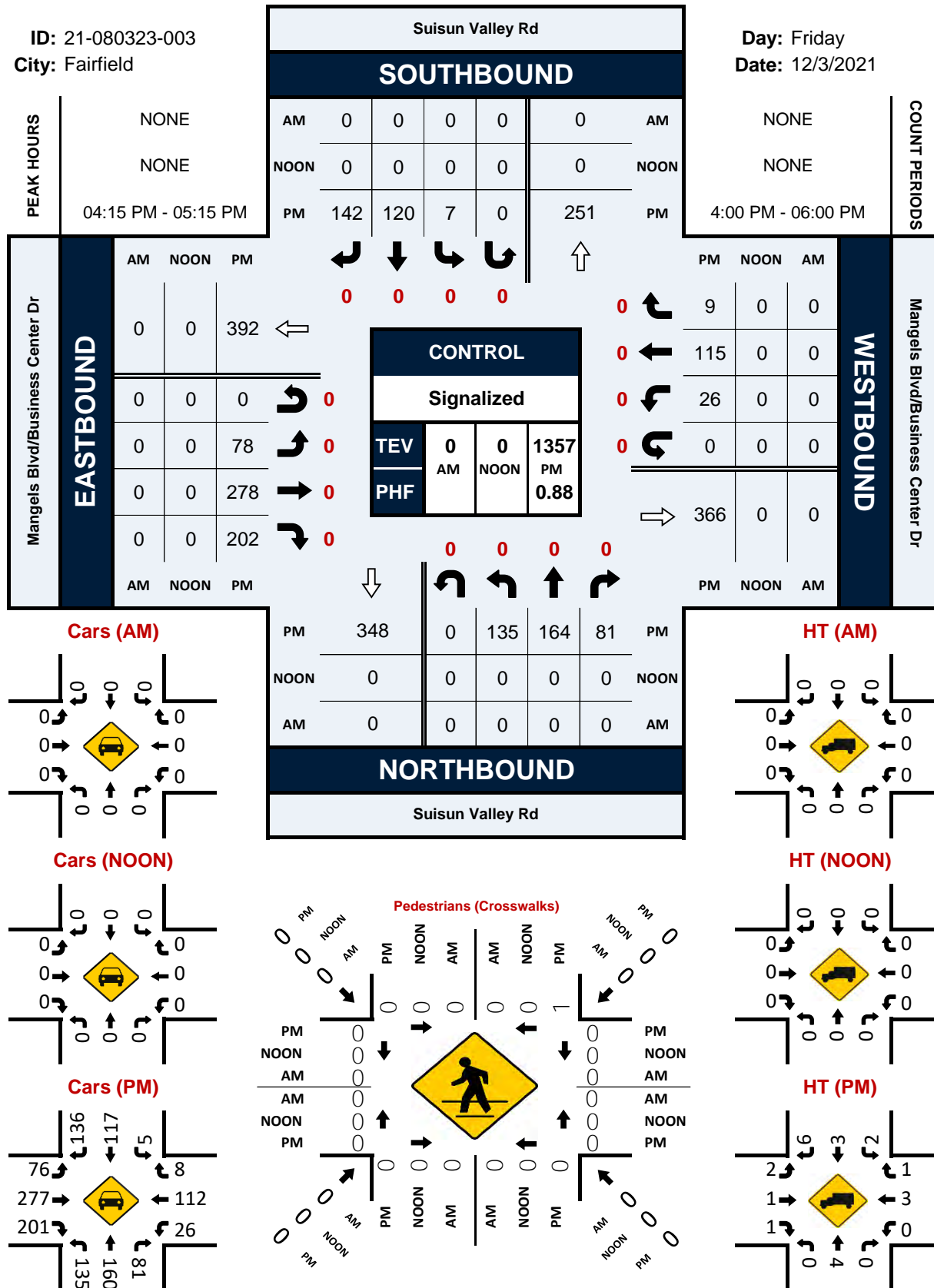
Peak Hour Turning Movement Count

ID: 21-080323-003

City: Fairfield

Day: Friday

Date: 12/3/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Mangels Blvd/Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-003
 Date: 12/3/2021

Data - Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Mangels Blvd/Business Center Dr				Mangels Blvd/Business Center Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	340
4:15 PM	33	53	35	0	0	31	30	0	20	58	44	0	6	30	0	0	343
4:30 PM	28	42	26	0	0	30	47	0	19	76	40	0	2	28	5	0	347
4:45 PM	37	37	16	0	4	35	33	0	25	69	48	0	11	31	1	0	282
5:00 PM	38	44	16	0	0	20	31	0	17	52	33	0	3	27	1	0	385
5:15 PM	32	41	23	0	3	35	31	0	17	81	81	0	10	29	2	0	311
5:30 PM	36	48	10	0	2	31	36	0	20	49	47	0	4	24	4	0	280
5:45 PM	34	37	11	0	5	23	24	0	16	53	38	0	6	33	0	0	275
	38	46	16	0	0	11	31	0	17	52	33	0	3	27	1	0	
TOTAL VOLUMES :	276	348	153	0	14	216	263	0	151	490	364	0	45	229	14	0	2563
APPROACH %'s :	35.52%	44.79%	19.69%	0.00%	2.84%	43.81%	53.35%	0.00%	15.02%	48.76%	36.22%	0.00%	15.63%	79.51%	4.86%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	135	164	81	0	7	120	142	0	78	278	202	0	26	115	9	0	1357
PEAK HR FACTOR :	0.888	0.932	0.779	0.000	0.438	0.857	0.755	0.000	0.780	0.858	0.623	0.000	0.591	0.927	0.450	0.000	0.881
	0.969				0.873				0.779				0.872				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Mangels Blvd/Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-003
 Date: 12/3/2021

Data - Cars

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Mangels Blvd/Business Center Dr				Mangels Blvd/Business Center Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	32	51	34	0	0	30	28	0	20	57	43	0	6	29	0	0	330
4:15 PM	28	39	26	0	0	30	44	0	19	75	39	0	2	26	4	0	332
4:30 PM	37	36	16	0	2	35	33	0	23	69	48	0	11	30	1	0	341
4:45 PM	38	44	16	0	0	18	30	0	17	52	33	0	3	27	1	0	279
5:00 PM	32	41	23	0	3	34	29	0	17	81	81	0	10	29	2	0	382
5:15 PM	36	46	10	0	2	31	34	0	20	49	47	0	4	24	3	0	306
5:30 PM	34	37	11	0	4	23	23	0	15	53	37	0	5	33	0	0	275
5:45 PM	38	44	16	0	0	9	30	0	17	52	33	0	3	27	1	0	270
TOTAL VOLUMES :	275	338	152	0	11	210	251	0	148	488	361	0	44	225	12	0	2515
APPROACH %'s :	35.95%	44.18%	19.87%	0.00%	2.33%	44.49%	53.18%	0.00%	14.84%	48.95%	36.21%	0.00%	15.66%	80.07%	4.27%	0.00%	
PEAK HR	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	135	160	81	0	5	117	136	0	76	277	201	0	26	112	8	0	1334
PEAK HR FACTOR :	0.888	0.909	0.779	0.000	0.417	0.836	0.773	0.000	0.826	0.855	0.620	0.000	0.591	0.933	0.500	0.000	0.873
	0.959				0.872				0.774				0.869				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Mangels Blvd/Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-003
 Date: 12/3/2021

Data - HT

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Mangels Blvd/Business Center Dr				Mangels Blvd/Business Center Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	1	2	1	0	0	1	2	0	0	1	1	0	0	1	0	0	10
4:15 PM	0	3	0	0	0	0	3	0	0	1	1	0	0	2	1	0	11
4:30 PM	0	1	0	0	2	0	0	0	2	0	0	0	0	1	0	0	6
4:45 PM	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	1	0	5
5:30 PM	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	0	5
5:45 PM	0	2	0	0	0	2	1	0	0	0	0	0	0	0	0	0	5
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	10	1	0	3	6	12	0	3	2	3	0	1	4	2	0	48
	8.33%	83.33%	8.33%	0.00%	14.29%	28.57%	57.14%	0.00%	37.50%	25.00%	37.50%	0.00%	14.29%	57.14%	28.57%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																
PEAK HR VOL :	0	4	0	0	2	3	6	0	2	1	1	0	0	3	1	0	23
PEAK HR FACTOR :	0.000	0.333	0.000	0.000	0.250	0.375	0.500	0.000	0.250	0.250	0.250	0.000	0.000	0.375	0.250	0.000	0.523
	0.333				0.917				0.500				0.333				

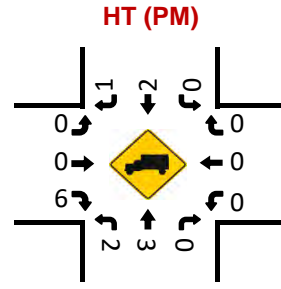
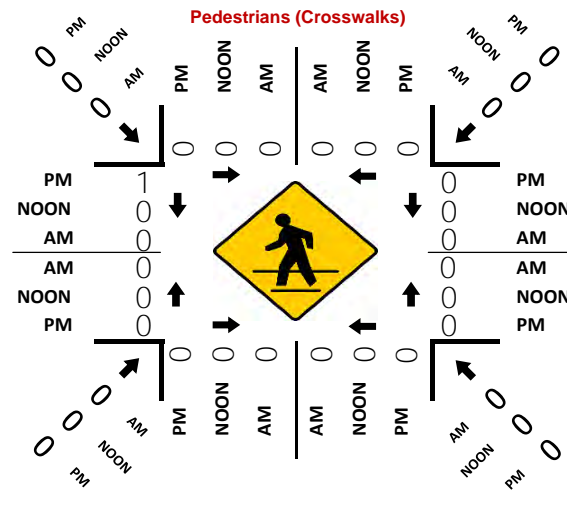
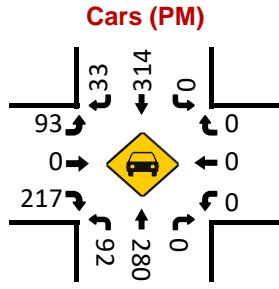
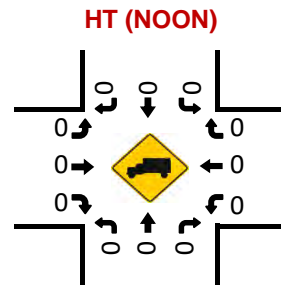
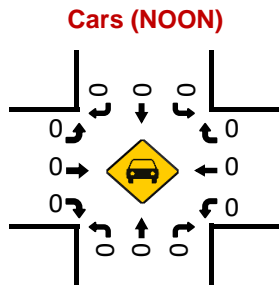
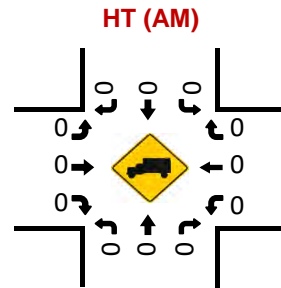
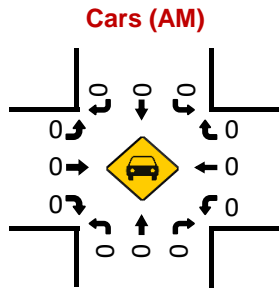
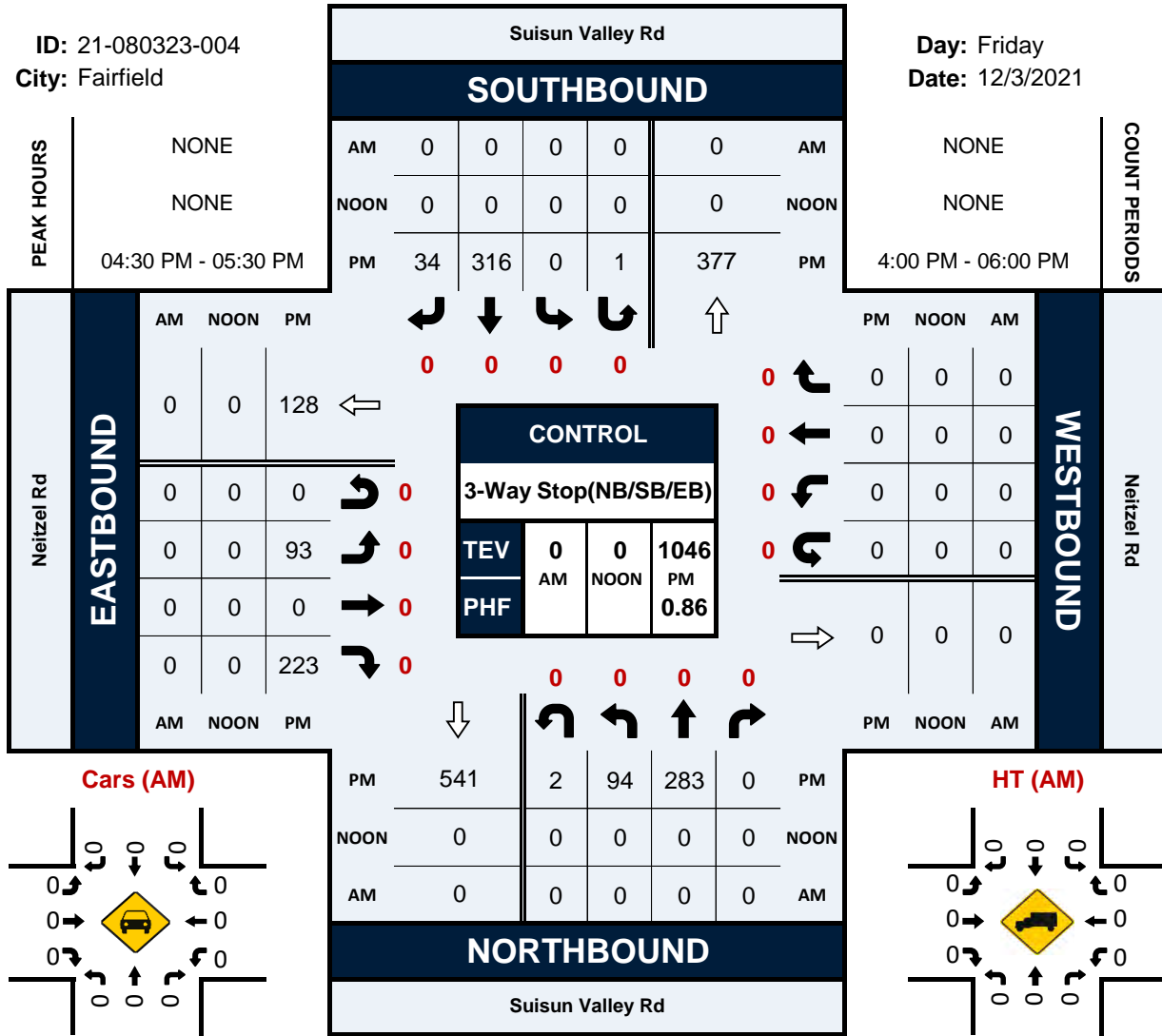
Prepared by National Data & Surveying Services

Suisun Valley Rd & Neitzel Rd

Peak Hour Turning Movement Count

ID: 21-080323-004
City: Fairfield

Day: Friday
Date: 12/3/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Neitzel Rd
 City: Fairfield
 Control: 3-Way Stop(NB/SB/EB)

Project ID: 21-080323-004
 Date: 12/3/2021

Data - Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Neitzel Rd				Neitzel Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	284
4:15 PM	22	92	0	0	0	74	10	0	31	0	55	0	0	0	0	0	234
4:30 PM	17	65	0	1	0	65	7	0	26	0	53	0	0	0	0	0	273
4:45 PM	25	66	0	1	0	78	11	0	27	0	65	0	0	0	0	0	227
5:00 PM	18	71	0	0	0	52	6	0	22	0	58	0	0	0	0	0	305
5:15 PM	26	86	0	0	0	113	10	1	16	0	53	0	0	0	0	0	241
5:30 PM	25	60	0	1	0	73	7	0	28	0	47	0	0	0	0	0	252
5:45 PM	19	54	0	3	0	65	3	0	33	0	75	0	0	0	0	0	232
	17	72	0	2	0	57	4	0	14	0	66	0	0	0	0	0	
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	169	566	0	8	0	577	58	1	197	0	472	0	0	0	0	0	2048
	22.75%	76.18%	0.00%	1.08%	0.00%	90.72%	9.12%	0.16%	29.45%	0.00%	70.55%	0.00%					
PEAK HR:	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL:	94	283	0	2	0	316	34	1	93	0	223	0	0	0	0	0	1046
PEAK HR FACTOR:	0.904	0.823	0.000	0.500	0.000	0.699	0.773	0.250	0.830	0.000	0.858	0.000	0.000	0.000	0.000	0.000	0.857
	0.846				0.708				0.859								

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Neitzel Rd
 City: Fairfield
 Control: 3-Way Stop(NB/SB/EB)

Project ID: 21-080323-004
 Date: 12/3/2021

Data - Cars

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Neitzel Rd				Neitzel Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	279
4:15 PM	22	89	0	0	0	73	10	0	30	0	55	0	0	0	0	0	226
4:30 PM	16	62	0	1	0	63	7	0	26	0	51	0	0	0	0	0	272
4:45 PM	25	65	0	1	0	78	11	0	27	0	65	0	0	0	0	0	220
5:00 PM	17	71	0	0	0	51	5	0	22	0	54	0	0	0	0	0	303
5:15 PM	26	86	0	0	0	112	10	1	16	0	52	0	0	0	0	0	237
5:30 PM	24	58	0	1	0	73	7	0	28	0	46	0	0	0	0	0	248
5:45 PM	19	54	0	3	0	63	3	0	33	0	73	0	0	0	0	0	228
	17	70	0	2	0	55	4	0	14	0	66	0	0	0	0	0	
TOTAL VOLUMES :	166	555	0	8	0	568	57	1	196	0	462	0	0	0	0	0	2013
APPROACH %'s :	22.77%	76.13%	0.00%	1.10%	0.00%	90.73%	9.11%	0.16%	29.79%	0.00%	70.21%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																
PEAK HR VOL :	92	280	0	2	0	314	33	1	93	0	217	0	0	0	0	0	1032
PEAK HR FACTOR :	0.885	0.814	0.000	0.500	0.000	0.701	0.750	0.250	0.830	0.000	0.835	0.000	0.000	0.000	0.000	0.000	0.851
	0.835				0.707				0.842								

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Neitzel Rd
 City: Fairfield
 Control: 3-Way Stop(NB/SB/EB)

Project ID: 21-080323-004
 Date: 12/3/2021

Data - HT

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Neitzel Rd				Neitzel Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	3	0	0	0	1	0	0	1	0	0	0	0	0	0	0	5
4:15 PM	1	3	0	0	0	2	0	0	0	0	2	0	0	0	0	0	8
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	1	0	0	0	0	1	1	0	0	0	4	0	0	0	0	0	7
5:00 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
5:15 PM	1	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	4
5:45 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	3	11	0	0	0	9	1	0	1	0	10	0	0	0	0	0	35
	21.43%	78.57%	0.00%	0.00%	0.00%	90.00%	10.00%	0.00%	9.09%	0.00%	90.91%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																
PEAK HR VOL :	2	3	0	0	0	2	1	0	0	0	6	0	0	0	0	0	14
PEAK HR FACTOR :	0.500	0.375	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.500
	0.417				0.375				0.375								

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Neitzel Rd
 City: Fairfield
 Control: 3-Way Stop(NB/SB/EB)

Project ID: 21-080323-004
 Date: 12/3/2021

Data - Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Neitzel Rd				Neitzel Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1	0	0	0	0	0	0	100.00%	0.00%	0.00%	0.00%	0	0	0	0	3
	0.00%	100.00%	0.00%	0.00%													
PEAK HR :	04:30 PM - 05:30 PM																
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Neitzel Rd
City: Fairfield

Project ID: 21-080323-004
Date: 12/3/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Suisun Valley Rd		Suisun Valley Rd		Neitzel Rd		Neitzel Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0.00%	100.00%	1
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	1	1
PEAK HR FACTOR :							0.250	0.250	0.250

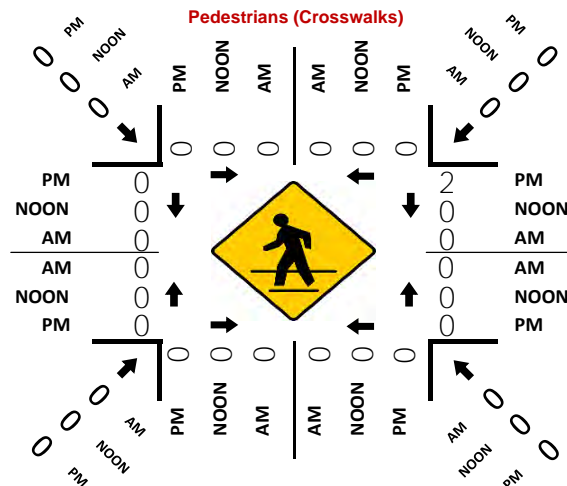
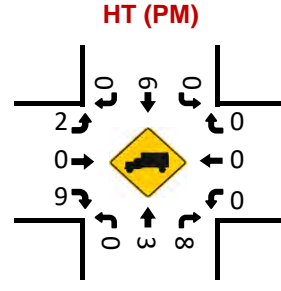
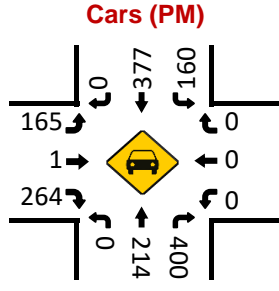
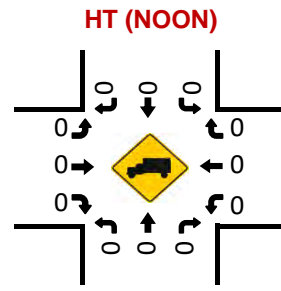
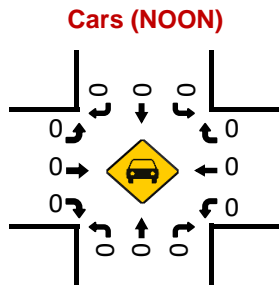
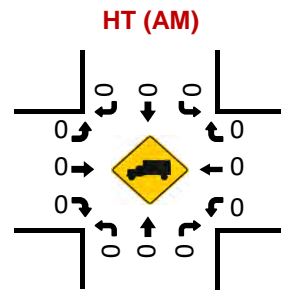
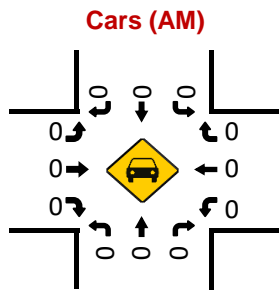
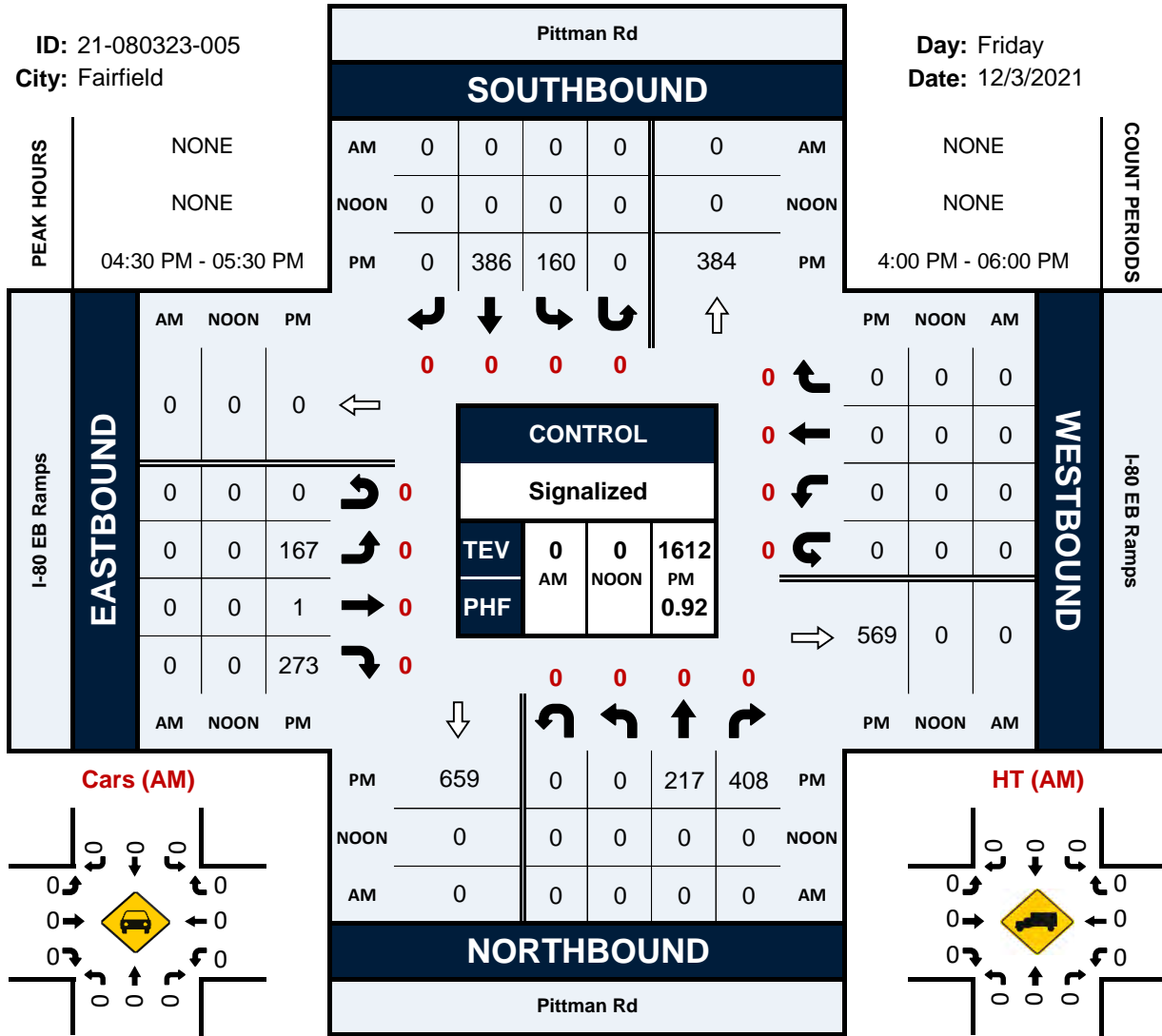
Prepared by National Data & Surveying Services

Pittman Rd & I-80 EB Ramps

Peak Hour Turning Movement Count

ID: 21-080323-005
City: Fairfield

Day: Friday
Date: 12/3/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Pittman Rd & I-80 EB Ramps
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-005
 Date: 12/3/2021

Data - Total

NS/EW Streets:	Pittman Rd				Pittman Rd				I-80 EB Ramps				I-80 EB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	62	83	0	32	93	0	0	46	1	73	0	0	0	0	0	390
4:15 PM	0	51	90	0	33	86	0	0	35	0	59	0	0	0	0	0	354
4:30 PM	0	48	111	0	34	114	0	0	42	0	80	0	0	0	0	0	429
4:45 PM	0	52	94	0	25	85	0	0	40	0	66	0	0	0	0	0	362
5:00 PM	0	55	107	0	57	101	0	0	55	1	61	0	0	0	0	0	437
5:15 PM	0	62	96	0	44	86	0	0	30	0	66	0	0	0	0	0	384
5:30 PM	0	48	86	0	31	106	0	0	25	1	62	0	0	0	0	0	359
5:45 PM	0	55	101	0	26	101	0	0	32	1	81	0	0	0	0	0	397
TOTAL VOLUMES :	0	433	768	0	282	772	0	0	305	4	548	0	0	0	0	0	3112
APPROACH %'s :	0.00%	36.05%	63.95%	0.00%	26.76%	73.24%	0.00%	0.00%	35.59%	0.47%	63.94%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																
PEAK HR VOL :	0	217	408	0	160	386	0	0	167	1	273	0	0	0	0	0	1612
PEAK HR FACTOR :	0.000	0.875	0.919	0.000	0.702	0.846	0.000	0.000	0.759	0.250	0.853	0.000	0.000	0.000	0.000	0.000	0.922
	0.965				0.864				0.904								

National Data & Surveying Services Intersection Turning Movement Count

Location: Pittman Rd & I-80 EB Ramps
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-005
 Date: 12/3/2021

Data - Cars

NS/EW Streets:	Pittman Rd				Pittman Rd				I-80 EB Ramps				I-80 EB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	61	81	0	31	93	0	0	45	1	72	0	0	0	0	0	384
4:15 PM	0	48	89	0	32	83	0	0	34	0	56	0	0	0	0	0	342
4:30 PM	0	48	109	0	34	114	0	0	41	0	78	0	0	0	0	0	424
4:45 PM	0	51	91	0	25	80	0	0	40	0	64	0	0	0	0	0	351
5:00 PM	0	55	106	0	57	99	0	0	55	1	59	0	0	0	0	0	432
5:15 PM	0	60	94	0	44	84	0	0	29	0	63	0	0	0	0	0	374
5:30 PM	0	48	84	0	30	104	0	0	25	1	59	0	0	0	0	0	351
5:45 PM	0	55	100	0	25	100	0	0	30	1	79	0	0	0	0	0	390
TOTAL VOLUMES :	0	426	754	0	278	757	0	0	299	4	530	0	0	0	0	0	3048
APPROACH %'s :	0.00%	36.10%	63.90%	0.00%	26.86%	73.14%	0.00%	0.00%	35.89%	0.48%	63.63%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																
PEAK HR VOL :	0	214	400	0	160	377	0	0	165	1	264	0	0	0	0	0	1581
PEAK HR FACTOR :	0.000	0.892	0.917	0.000	0.702	0.827	0.000	0.000	0.750	0.250	0.846	0.000	0.000	0.000	0.000	0.000	0.915
	0.953				0.861				0.903								

National Data & Surveying Services Intersection Turning Movement Count

Location: Pittman Rd & I-80 EB Ramps
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-005
 Date: 12/3/2021

Data - HT

NS/EW Streets:	Pittman Rd				Pittman Rd				I-80 EB Ramps				I-80 EB Ramps					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
4:00 PM	0	1	2	0	1	0	0	0	1	0	1	0	0	0	0	0	0	6
4:15 PM	0	3	1	0	1	3	0	0	1	0	3	0	0	0	0	0	0	12
4:30 PM	0	0	2	0	0	0	0	0	1	0	2	0	0	0	0	0	0	5
4:45 PM	0	1	3	0	0	5	0	0	0	0	2	0	0	0	0	0	0	11
5:00 PM	0	0	1	0	0	2	0	0	0	0	2	0	0	0	0	0	0	5
5:15 PM	0	2	2	0	0	2	0	0	1	0	3	0	0	0	0	0	0	10
5:30 PM	0	0	2	0	1	2	0	0	0	0	3	0	0	0	0	0	0	8
5:45 PM	0	0	1	0	1	1	0	0	2	0	2	0	0	0	0	0	0	7
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	7	14	0	4	15	0	0	6	0	18	0	0	0	0	0	64	
	0.00%	33.33%	66.67%	0.00%	21.05%	78.95%	0.00%	0.00%	25.00%	0.00%	75.00%	0.00%						
PEAK HR :	04:30 PM - 05:30 PM																TOTAL	
PEAK HR VOL :	0	3	8	0	0	9	0	0	2	0	9	0	0	0	0	0	0	31
PEAK HR FACTOR :	0.000	0.375	0.667	0.000	0.000	0.450	0.000	0.000	0.500	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.705
	0.688				0.450				0.688									

National Data & Surveying Services Intersection Turning Movement Count

Location: Pittman Rd & I-80 EB Ramps
City: Fairfield

Project ID: 21-080323-005
Date: 12/3/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Pittman Rd		Pittman Rd		I-80 EB Ramps		I-80 EB Ramps		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	2	1	0	3
					0.00%	100.00%	100.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	2	0	0	2
PEAK HR FACTOR :					0.500				0.500

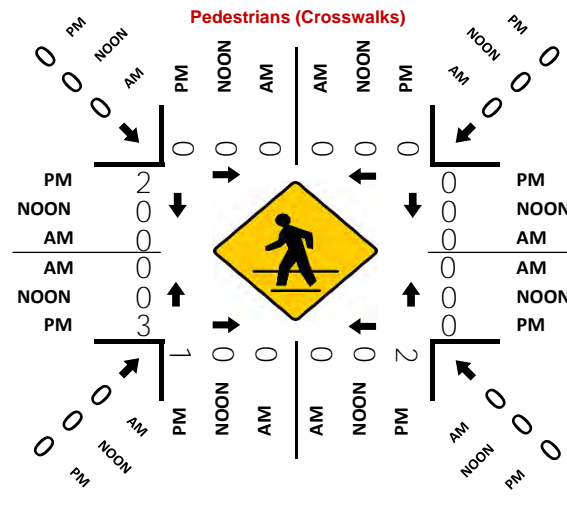
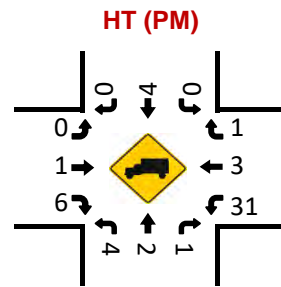
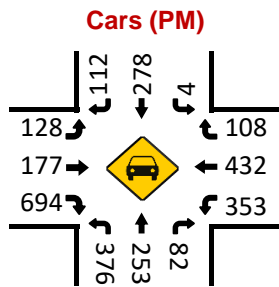
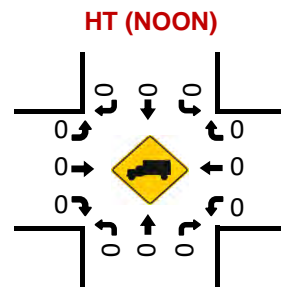
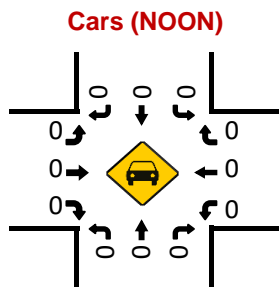
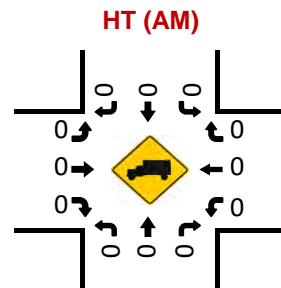
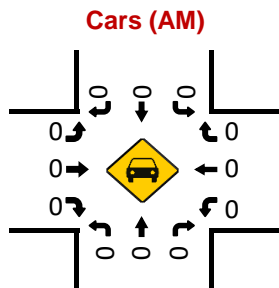
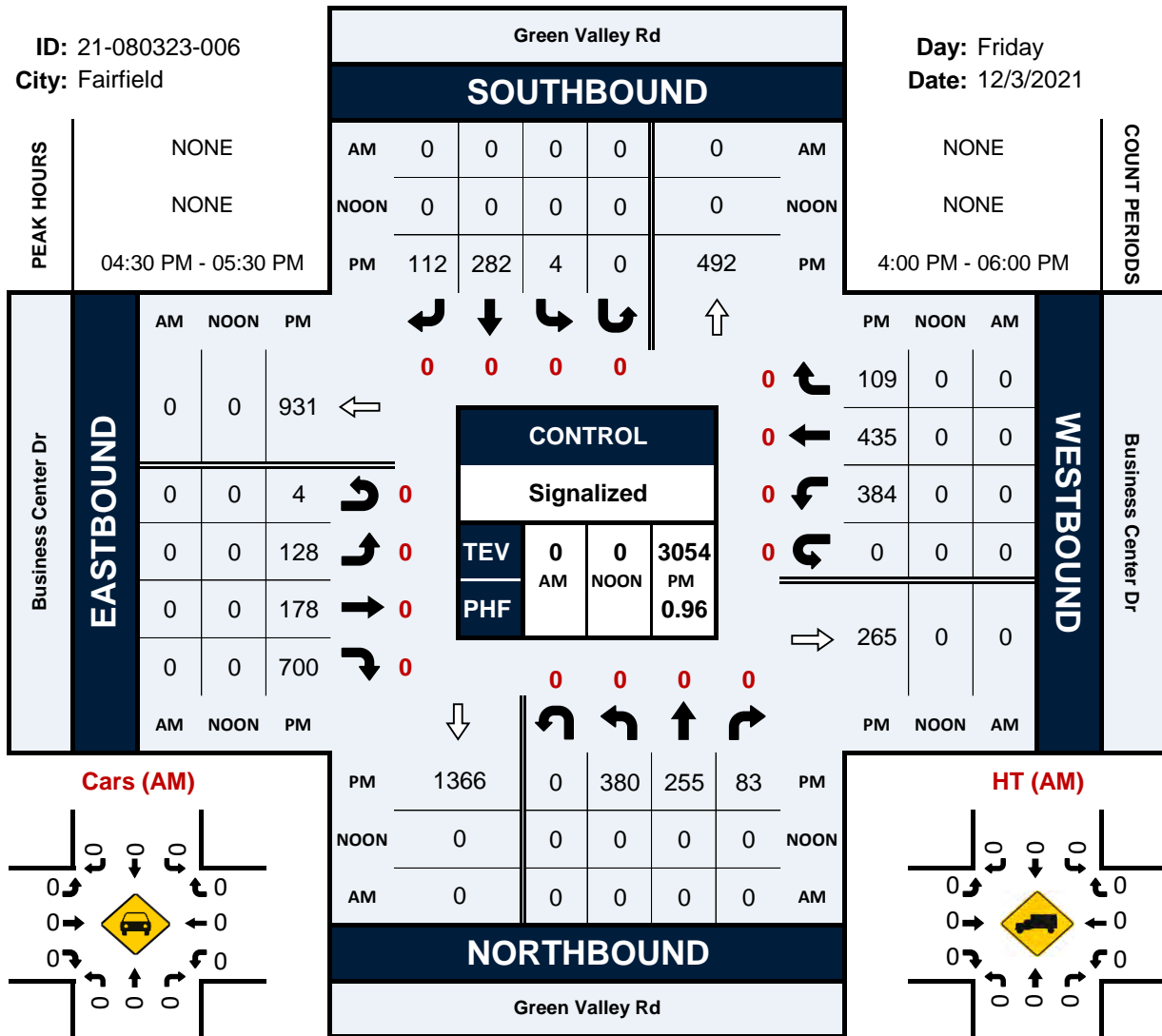
Prepared by National Data & Surveying Services

Green Valley Rd & Business Center Dr

Peak Hour Turning Movement Count

ID: 21-080323-006
City: Fairfield

Day: Friday
Date: 12/3/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Green Valley Rd & Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-006
 Date: 12/3/2021

Data - Total

NS/EW Streets:	Green Valley Rd				Green Valley Rd				Business Center Dr				Business Center Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	761
4:15 PM	90	52	21	0	1	59	24	0	46	49	198	0	112	95	14	0	746
4:30 PM	113	52	26	0	1	64	24	0	46	42	169	0	78	105	26	0	793
4:45 PM	95	62	26	0	2	75	25	0	27	52	209	1	102	92	25	0	734
5:00 PM	102	59	19	0	1	65	30	0	31	37	159	1	85	117	28	0	764
5:15 PM	81	61	21	0	0	75	29	0	38	55	168	1	92	115	28	0	763
5:30 PM	102	73	17	0	1	67	28	0	32	34	164	1	105	111	28	0	672
5:45 PM	70	73	28	0	1	67	24	0	43	40	157	1	65	84	19	0	589
	92	43	13	0	2	52	22	0	39	29	156	0	58	69	14	0	
TOTAL VOLUMES:	745	475	171	0	9	524	206	0	302	338	1380	5	697	788	182	0	5822
APPROACH %'s:	53.56%	34.15%	12.29%	0.00%	1.22%	70.91%	27.88%	0.00%	14.91%	16.69%	68.15%	0.25%	41.81%	47.27%	10.92%	0.00%	
PEAK HR	04:30 PM - 05:30 PM																
PEAK HR VOL	380	255	83	0	4	282	112	0	128	178	700	4	384	435	109	0	3054
PEAK HR FACTOR	0.931	0.873	0.798	0.000	0.500	0.940	0.933	0.000	0.842	0.809	0.837	1.000	0.914	0.929	0.973	0.000	0.963
	0.935				0.957				0.874				0.951				

National Data & Surveying Services Intersection Turning Movement Count

Location: Green Valley Rd & Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-006
 Date: 12/3/2021

Data - Cars

NS/EW Streets:	Green Valley Rd				Green Valley Rd				Business Center Dr				Business Center Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	90	51	21	0	1	59	24	0	46	49	197	0	103	94	14	0	749
4:15 PM	111	51	26	0	1	64	24	0	45	42	167	0	68	104	26	0	729
4:30 PM	94	62	25	0	2	75	25	0	27	51	207	1	92	92	24	0	777
4:45 PM	101	59	19	0	1	63	30	0	31	37	158	1	77	116	28	0	721
5:00 PM	81	60	21	0	0	73	29	0	38	55	166	1	88	115	28	0	755
5:15 PM	100	72	17	0	1	67	28	0	32	34	163	1	96	109	28	0	748
5:30 PM	70	73	28	0	1	66	24	0	43	39	155	1	64	83	19	0	666
5:45 PM	92	42	13	0	2	49	22	0	39	28	156	0	51	69	14	0	577
TOTAL VOLUMES :	739	470	170	0	9	516	206	0	301	335	1369	5	639	782	181	0	5722
APPROACH %'s :	53.59%	34.08%	12.33%	0.00%	1.23%	70.59%	28.18%	0.00%	14.98%	16.67%	68.11%	0.25%	39.89%	48.81%	11.30%	0.00%	
PEAK HR	04:30 PM - 05:30 PM																
PEAK HR VOL :	376	253	82	0	4	278	112	0	128	177	694	4	353	432	108	0	3001
PEAK HR FACTOR :	0.931	0.878	0.820	0.000	0.500	0.927	0.933	0.000	0.842	0.805	0.838	1.000	0.919	0.931	0.964	0.000	0.966
	0.940				0.966				0.877				0.958				

National Data & Surveying Services Intersection Turning Movement Count

Location: Green Valley Rd & Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-006
 Date: 12/3/2021

Data - HT

NS/EW Streets:	Green Valley Rd				Green Valley Rd				Business Center Dr				Business Center Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	1	0	0	0	0	0	0	0	0	1	0	9	1	0	0	12
4:15 PM	2	1	0	0	0	0	0	0	1	0	2	0	10	1	0	0	17
4:30 PM	1	0	1	0	0	0	0	0	0	1	2	0	10	0	1	0	16
4:45 PM	1	0	0	0	0	2	0	0	0	0	1	0	8	1	0	0	13
5:00 PM	0	1	0	0	0	2	0	0	0	0	2	0	4	0	0	0	9
5:15 PM	2	1	0	0	0	0	0	0	0	0	1	0	9	2	0	0	15
5:30 PM	0	0	0	0	0	1	0	0	0	1	2	0	1	1	0	0	6
5:45 PM	0	1	0	0	0	3	0	0	0	1	0	0	7	0	0	0	12
TOTAL VOLUMES:	6	5	1	0	0	8	0	0	1	3	11	0	58	6	1	0	100
APPROACH %'s:	50.00%	41.67%	8.33%	0.00%	0.00%	100.00%	0.00%	0.00%	6.67%	20.00%	73.33%	0.00%	89.23%	9.23%	1.54%	0.00%	
PEAK HR:	04:30 PM - 05:30 PM																
PEAK HR VOL:	4	2	1	0	0	4	0	0	0	1	6	0	31	3	1	0	53
PEAK HR FACTOR:	0.500	0.500	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.750	0.000	0.775	0.375	0.250	0.000	0.828
	0.583				0.500				0.583				0.795				

National Data & Surveying Services Intersection Turning Movement Count

Location: Green Valley Rd & Business Center Dr
City: Fairfield

Project ID: 21-080323-006
Date: 12/3/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Green Valley Rd		Green Valley Rd		Business Center Dr		Business Center Dr		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	1	1
4:45 PM	0	0	1	1	0	0	1	0	3
5:00 PM	0	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	1	0	0	2	0	3
5:30 PM	0	0	2	0	0	0	1	0	3
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	3	2	0	0	5	3	13
			60.00%	40.00%			62.50%	37.50%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	1	2	0	0	3	2	8
PEAK HR FACTOR :			0.250	0.500			0.375	0.500	0.667
			0.375				0.625		

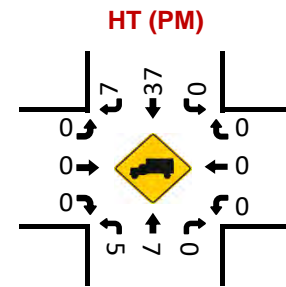
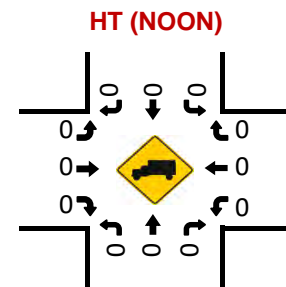
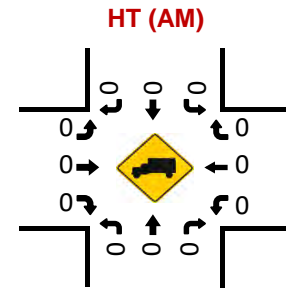
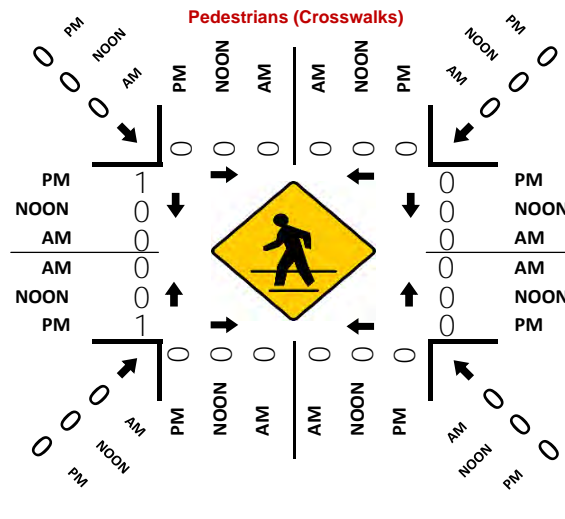
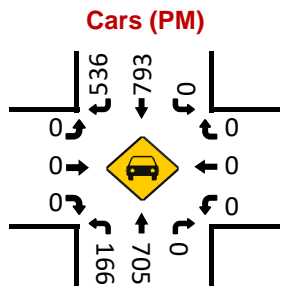
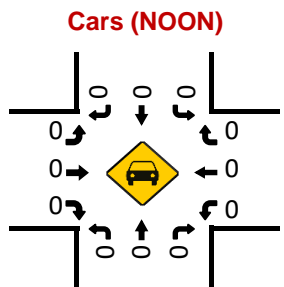
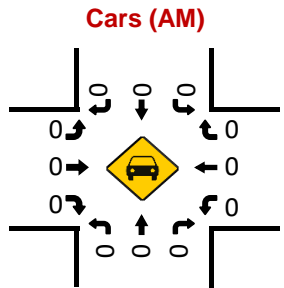
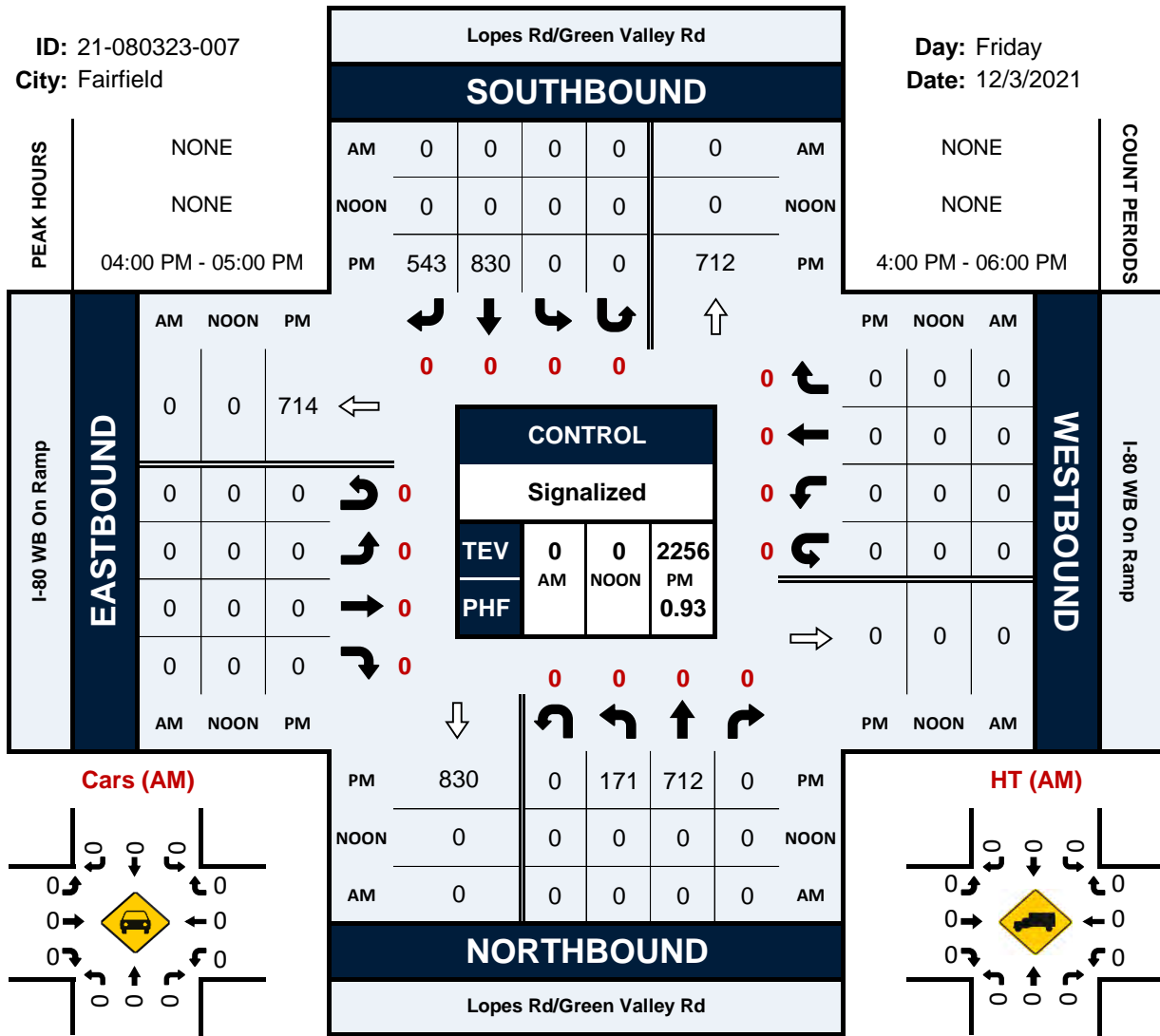
Prepared by National Data & Surveying Services

Lopes Rd/Green Valley Rd & I-80 WB On Ramp

Peak Hour Turning Movement Count

ID: 21-080323-007
City: Fairfield

Day: Friday
Date: 12/3/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Lopes Rd/Green Valley Rd & I-80 WB On Ramp
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-007
 Date: 12/3/2021

Data - Total

NS/EW Streets:	Lopes Rd/Green Valley Rd				Lopes Rd/Green Valley Rd				I-80 WB On Ramp				I-80 WB On Ramp				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	576
4:15 PM	56	157	0	0	0	216	147	0	0	0	0	0	0	0	0	0	555
4:30 PM	34	191	0	0	0	224	156	0	0	0	0	0	0	0	0	0	605
4:45 PM	35	168	0	0	0	206	111	0	0	0	0	0	0	0	0	0	520
5:00 PM	20	175	0	0	0	193	137	0	0	0	0	0	0	0	0	0	525
5:15 PM	32	179	0	0	0	217	123	0	0	0	0	0	0	0	0	0	551
5:30 PM	29	175	0	0	0	162	121	0	0	0	0	0	0	0	0	0	487
5:45 PM	25	146	0	0	0	192	81	0	0	0	0	0	0	0	0	0	444
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	277	1387	0	0	0	1594	1005	0	0	0	0	0	0	0	0	0	4263
	16.65%	83.35%	0.00%	0.00%	0.00%	61.33%	38.67%	0.00%									
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	171	712	0	0	0	830	543	0	0	0	0	0	0	0	0	0	2256
PEAK HR FACTOR :	0.763	0.908	0.000	0.000	0.000	0.926	0.870	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.932
	0.912				0.903												

National Data & Surveying Services Intersection Turning Movement Count

Location: Lopes Rd/Green Valley Rd & I-80 WB On Ramp
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-007
 Date: 12/3/2021

Data - Cars

NS/EW Streets:	Lopes Rd/Green Valley Rd				Lopes Rd/Green Valley Rd				I-80 WB On Ramp				I-80 WB On Ramp				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	562
4:15 PM	52	156	0	0	0	210	144	0	0	0	0	0	0	0	0	0	541
4:30 PM	46	193	0	0	0	175	127	0	0	0	0	0	0	0	0	0	589
4:45 PM	34	189	0	0	0	211	155	0	0	0	0	0	0	0	0	0	508
5:00 PM	34	167	0	0	0	197	110	0	0	0	0	0	0	0	0	0	514
5:15 PM	19	174	0	0	0	186	135	0	0	0	0	0	0	0	0	0	538
5:30 PM	31	176	0	0	0	208	123	0	0	0	0	0	0	0	0	0	479
5:45 PM	26	175	0	0	0	159	119	0	0	0	0	0	0	0	0	0	432
	24	145	0	0	0	183	80	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	266	1375	0	0	0	1529	993	0	0	0	0	0	0	0	0	0	4163
	16.21%	83.79%	0.00%	0.00%	0.00%	60.63%	39.37%	0.00%									
PEAK HR																	
04:00 PM - 05:00 PM																	
PEAK HR VOL :	166	705	0	0	0	793	536	0	0	0	0	0	0	0	0	0	2200
PEAK HR FACTOR :	0.798	0.913	0.000	0.000	0.000	0.940	0.865	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.934
	0.911				0.908												

National Data & Surveying Services Intersection Turning Movement Count

Location: Lopes Rd/Green Valley Rd & I-80 WB On Ramp
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-007
 Date: 12/3/2021

Data - HT

NS/EW Streets:	Lopes Rd/Green Valley Rd				Lopes Rd/Green Valley Rd				I-80 WB On Ramp				I-80 WB On Ramp				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	4	1	0	0	0	6	3	0	0	0	0	0	0	0	0	0	14
4:15 PM	0	3	0	0	0	9	2	0	0	0	0	0	0	0	0	0	14
4:30 PM	0	2	0	0	0	13	1	0	0	0	0	0	0	0	0	0	16
4:45 PM	1	1	0	0	0	9	1	0	0	0	0	0	0	0	0	0	12
5:00 PM	1	1	0	0	0	7	2	0	0	0	0	0	0	0	0	0	11
5:15 PM	1	3	0	0	0	9	0	0	0	0	0	0	0	0	0	0	13
5:30 PM	3	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	8
5:45 PM	1	1	0	0	0	9	1	0	0	0	0	0	0	0	0	0	12
TOTAL VOLUMES :	11	12	0	0	0	65	12	0	0	0	0	0	0	0	0	0	100
APPROACH %'s :	47.83%	52.17%	0.00%	0.00%	0.00%	84.42%	15.58%	0.00%	0	0	0	0	0	0	0	0	
PEAK HR :	04:00 PM - 05:00 PM																
PEAK HR VOL :	5	7	0	0	0	37	7	0	0	0	0	0	0	0	0	0	56
PEAK HR FACTOR :	0.313	0.583	0.000	0.000	0.000	0.712	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.875
	0.600				0.786												

National Data & Surveying Services Intersection Turning Movement Count

Location: Lopes Rd/Green Valley Rd & I-80 WB On Ramp
City: Fairfield

Project ID: 21-080323-007
Date: 12/3/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lopes Rd/Green Valley Rd	Lopes Rd/Green Valley Rd	I-80 WB On Ramp	I-80 WB On Ramp					
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
	4:00 PM	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	1	1
	4:45 PM	0	0	0	0	0	1	0	1
	5:00 PM	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	1	0	1
	5:45 PM	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	66.67%	33.33%	3
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	1	2
PEAK HR FACTOR :							0.250	0.250	0.500

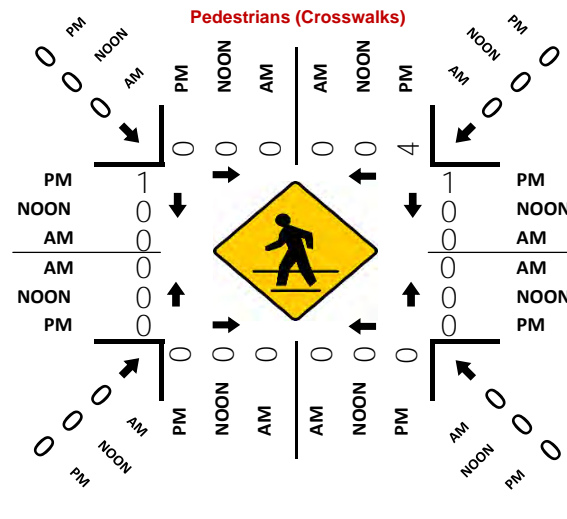
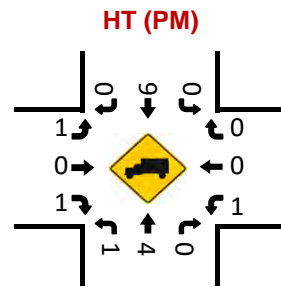
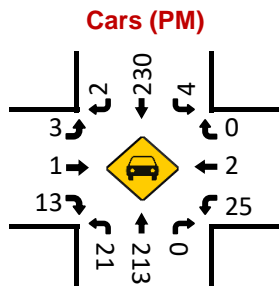
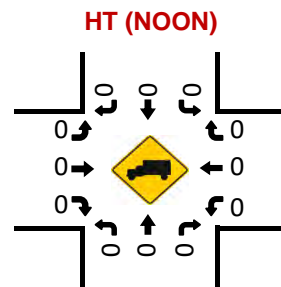
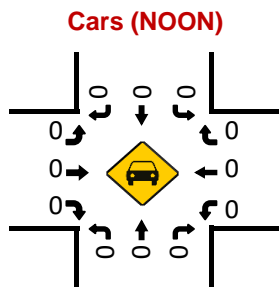
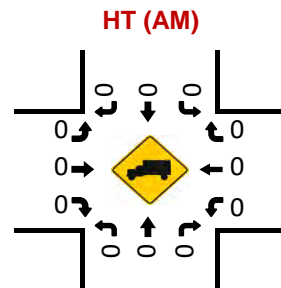
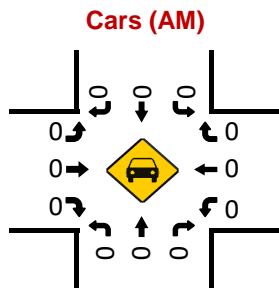
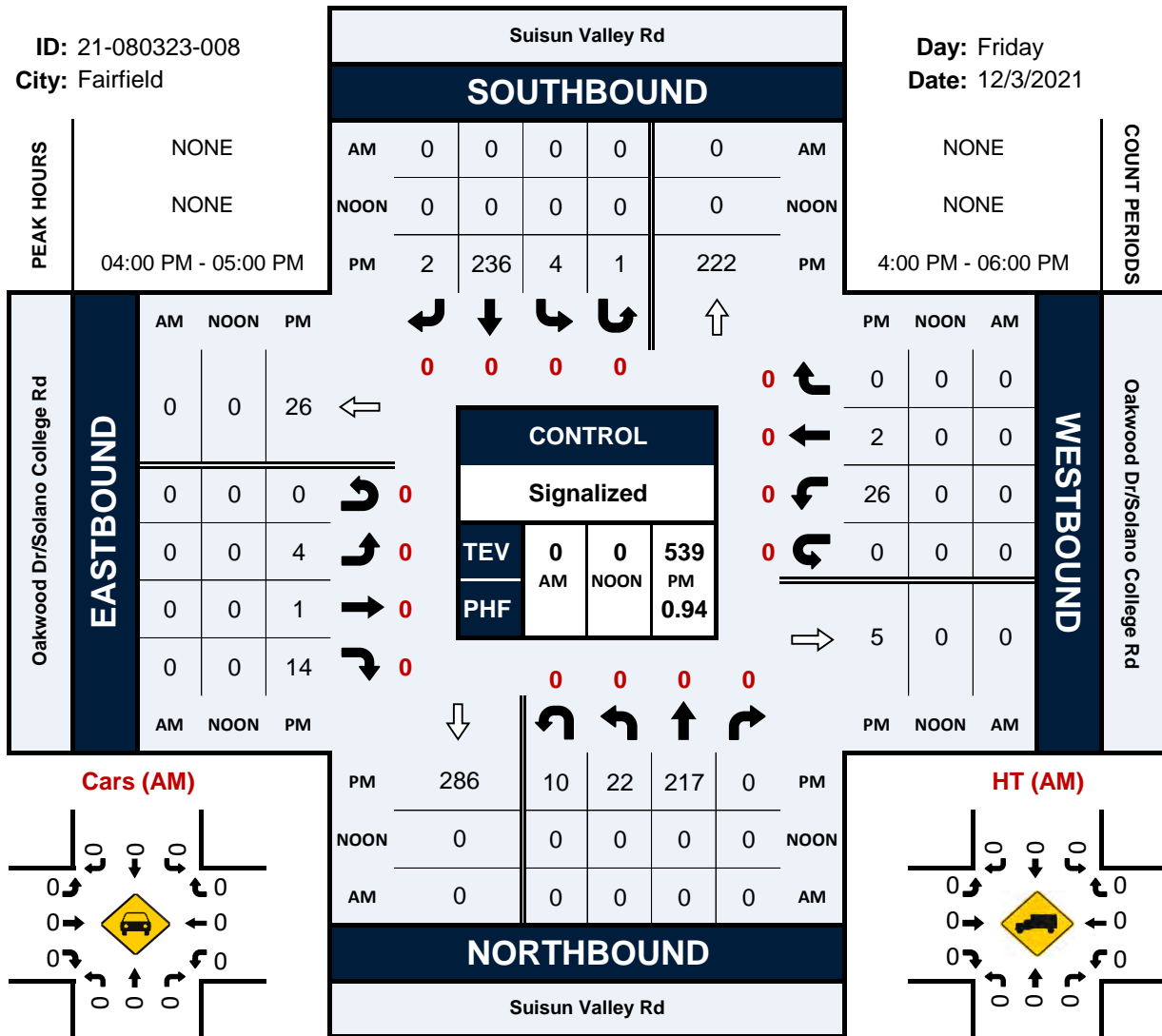
Prepared by National Data & Surveying Services

Suisun Valley Rd & Oakwood Dr/Solano College Rd

Peak Hour Turning Movement Count

ID: 21-080323-008
City: Fairfield

Day: Friday
Date: 12/3/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Oakwood Dr/Solano College Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-008
 Date: 12/3/2021

Data - Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Oakwood Dr/Solano College Rd				Oakwood Dr/Solano College Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	8	63	0	3	1	50	0	0	1	0	3	0	11	1	0	0	141
4:15 PM	6	52	0	3	2	69	1	0	2	1	4	0	3	0	0	0	143
4:30 PM	4	58	0	0	0	66	1	0	1	0	3	0	9	1	0	0	143
4:45 PM	4	44	0	4	1	51	0	1	0	0	4	0	3	0	0	0	112
5:00 PM	8	56	0	3	0	51	4	2	1	0	8	0	2	0	0	0	135
5:15 PM	10	48	0	4	0	51	0	0	2	0	2	0	6	0	0	0	123
5:30 PM	9	43	0	1	0	47	0	0	3	0	2	0	2	1	0	0	108
5:45 PM	4	42	0	5	1	26	1	0	0	0	7	0	2	0	0	0	88
TOTAL VOLUMES:	53	406	0	23	5	411	7	3	10	1	33	0	38	3	0	0	993
APPROACH %'s:	11.00%	84.23%	0.00%	4.77%	1.17%	96.48%	1.64%	0.70%	22.73%	2.27%	75.00%	0.00%	92.68%	7.32%	0.00%	0.00%	
PEAK HR:	04:00 PM - 05:00 PM																
PEAK HR VOL:	22	217	0	10	4	236	2	1	4	1	14	0	26	2	0	0	539
PEAK HR FACTOR:	0.688	0.861	0.000	0.625	0.500	0.855	0.500	0.250	0.500	0.250	0.875	0.000	0.591	0.500	0.000	0.000	0.942
	0.841				0.844				0.679				0.583				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Oakwood Dr/Solano College Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-008
 Date: 12/3/2021

Data - Cars

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Oakwood Dr/Solano College Rd				Oakwood Dr/Solano College Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	8	62	0	3	1	48	0	0	1	0	2	0	11	1	0	0	137
4:15 PM	5	51	0	2	2	68	1	0	1	1	4	0	3	0	0	0	138
4:30 PM	4	56	0	0	0	65	1	0	1	0	3	0	9	1	0	0	140
4:45 PM	4	44	0	4	1	49	0	1	0	0	4	0	2	0	0	0	109
5:00 PM	8	56	0	3	0	48	4	2	1	0	8	0	2	0	0	0	132
5:15 PM	10	47	0	4	0	51	0	0	2	0	2	0	6	0	0	0	122
5:30 PM	9	42	0	1	0	44	0	0	2	0	2	0	2	1	0	0	103
5:45 PM	4	42	0	5	1	25	1	0	0	0	7	0	2	0	0	0	87
TOTAL VOLUMES:	52	400	0	22	5	398	7	3	8	1	32	0	37	3	0	0	968
APPROACH %'s:	10.97%	84.39%	0.00%	4.64%	1.21%	96.37%	1.69%	0.73%	19.51%	2.44%	78.05%	0.00%	92.50%	7.50%	0.00%	0.00%	
PEAK HR:	04:00 PM - 05:00 PM																
PEAK HR VOL:	21	213	0	9	4	230	2	1	3	1	13	0	25	2	0	0	524
PEAK HR FACTOR:	0.656	0.859	0.000	0.563	0.500	0.846	0.500	0.250	0.750	0.250	0.813	0.000	0.568	0.500	0.000	0.000	0.936
	0.832				0.835				0.708				0.563				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Oakwood Dr/Solano College Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-008
 Date: 12/3/2021

Data - HT

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Oakwood Dr/Solano College Rd				Oakwood Dr/Solano College Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	1	0	0	0	2	0	0	0	0	1	0	0	0	0	0	4
4:15 PM	1	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	5
4:30 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	3
5:00 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	1	0	0	0	3	0	0	1	0	0	0	0	0	0	0	5
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	6	0	1	0	13	0	0	2	0	1	0	1	0	0	0	25
	12.50%	75.00%	0.00%	12.50%	0.00%	100.00%	0.00%	0.00%	66.67%	0.00%	33.33%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																
PEAK HR VOL :	1	4	0	1	0	6	0	0	1	0	1	0	1	0	0	0	15
PEAK HR FACTOR :	0.250	0.500	0.000	0.250	0.000	0.750	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.750
	0.500				0.750				0.500				0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Oakwood Dr/Solano College Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-008
 Date: 12/3/2021

Data - Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Oakwood Dr/Solano College Rd				Oakwood Dr/Solano College Rd					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	
					0.00%	100.00%	0.00%	0.00%										
PEAK HR :	04:00 PM - 05:00 PM																TOTAL	
PEAK HR VOL :	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Oakwood Dr/Solano College Rd
City: Fairfield

Project ID: 21-080323-008
Date: 12/3/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Suisun Valley Rd		Suisun Valley Rd		Oakwood Dr/Solano College Rd		Oakwood Dr/Solano College Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	1	2
4:30 PM	0	3	0	0	0	1	0	0	4
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	0	1	0	2
5:15 PM	0	1	0	0	0	0	0	1	2
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	1
TOTAL VOLUMES :	EB 1	WB 6	EB 0	WB 0	NB 0	SB 1	NB 1	SB 2	TOTAL 11
APPROACH %'s :	14.29%	85.71%			0.00%	100.00%	33.33%	66.67%	
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	4	0	0	0	1	0	1	6
PEAK HR FACTOR :		0.333				0.250		0.250	0.375

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Westamerica Dr/Kaiser Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-009
 Date: 12/3/2021

Data - Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Westamerica Dr/Kaiser Dr				Westamerica Dr/Kaiser Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	13	54	1	0	6	52	5	1	19	15	11	0	2	5	4	0	188
4:15 PM	8	52	8	0	0	61	14	2	14	6	6	0	4	6	0	1	182
4:30 PM	11	46	4	0	1	66	15	2	16	6	5	0	5	6	4	0	187
4:45 PM	6	50	8	0	1	42	12	0	10	7	5	0	2	2	1	0	146
5:00 PM	6	53	4	0	0	58	12	0	21	22	9	0	5	6	2	2	200
5:15 PM	12	48	10	0	2	50	11	1	11	2	9	0	5	5	1	0	167
5:30 PM	9	40	6	0	1	45	10	0	10	3	8	0	2	9	4	0	147
5:45 PM	8	40	3	0	0	36	6	0	16	6	7	0	2	2	2	0	128
TOTAL VOLUMES :	73	383	44	0	11	410	85	6	117	67	60	0	27	41	18	3	1345
APPROACH %'s :	14.60%	76.60%	8.80%	0.00%	2.15%	80.08%	16.60%	1.17%	47.95%	27.46%	24.59%	0.00%	30.34%	46.07%	20.22%	3.37%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	31	201	24	0	2	227	53	4	61	41	25	0	16	20	7	3	715
PEAK HR FACTOR :	0.705	0.948	0.750	0.000	0.500	0.860	0.883	0.500	0.726	0.466	0.694	0.000	0.800	0.833	0.438	0.375	0.894
	0.941				0.851				0.611				0.767				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Westamerica Dr/Kaiser Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-009
 Date: 12/3/2021

Data - Cars

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Westamerica Dr/Kaiser Dr				Westamerica Dr/Kaiser Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	13	52	0	0	6	50	5	1	19	15	11	0	2	5	4	0	183
4:15 PM	8	50	7	0	0	59	14	2	14	5	6	0	3	6	0	1	175
4:30 PM	10	44	3	0	1	65	15	2	16	6	5	0	4	6	3	0	180
4:45 PM	6	50	8	0	1	40	12	0	10	7	5	0	1	2	1	0	143
5:00 PM	6	53	4	0	0	55	12	0	21	22	9	0	5	6	2	2	197
5:15 PM	11	47	9	0	2	50	11	1	11	2	9	0	3	5	1	0	162
5:30 PM	9	39	6	0	1	42	10	0	10	3	8	0	2	9	4	0	143
5:45 PM	8	39	2	0	0	34	6	0	16	6	7	0	2	2	2	0	124
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	71	374	39	0	11	395	85	6	117	66	60	0	22	41	17	3	1307
	14.67%	77.27%	8.06%	0.00%	2.21%	79.48%	17.10%	1.21%	48.15%	27.16%	24.69%	0.00%	26.51%	49.40%	20.48%	3.61%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	30	197	22	0	2	219	53	4	61	40	25	0	13	20	6	3	695
PEAK HR FACTOR :	0.750	0.929	0.688	0.000	0.500	0.842	0.883	0.500	0.726	0.455	0.694	0.000	0.650	0.833	0.500	0.375	0.882
	0.958				0.837				0.606				0.700				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Westamerica Dr/Kaiser Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-009
 Date: 12/3/2021

Data - HT

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Westamerica Dr/Kaiser Dr				Westamerica Dr/Kaiser Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	2	1	0	0	2	0	0	0	0	0	0	0	0	0	0	5
4:15 PM	0	2	1	0	0	2	0	0	0	0	1	0	0	1	0	0	7
4:30 PM	1	2	1	0	0	1	0	0	0	0	0	0	0	1	0	0	7
4:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	3
5:00 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	1	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	5
5:30 PM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	4
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	2	9	5	0	0	15	0	0	0	1	0	0	5	0	1	0	38
	12.50%	56.25%	31.25%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	83.33%	0.00%	16.67%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																
PEAK HR VOL :	1	4	2	0	0	8	0	0	0	1	0	0	3	0	1	0	20
PEAK HR FACTOR :	0.250	0.500	0.500	0.000	0.000	0.667	0.000	0.000	0.000	0.250	0.000	0.000	0.750	0.000	0.250	0.000	0.714
	0.438				0.667				0.250				0.500				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Westamerica Dr/Kaiser Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-009
 Date: 12/3/2021

Data - Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Westamerica Dr/Kaiser Dr				Westamerica Dr/Kaiser Dr					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	1	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	5
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0	0	0	0	
PEAK HR :	04:15 PM - 05:15 PM																	
PEAK HR VOL :	0	1	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	5
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.417
	0.250				0.500				0.250									

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Westamerica Dr/Kaiser Dr
City: Fairfield

Project ID: 21-080323-009
Date: 12/3/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Suisun Valley Rd		Suisun Valley Rd		Westamerica Dr/Kaiser Dr		Westamerica Dr/Kaiser Dr		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	1	1	1	0	1	0	0	1	5
4:30 PM	0	0	0	0	0	1	0	3	4
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	1	1	1	1	1	1	0	4	10
APPROACH %'s :	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	0.00%	100.00%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	1	1	1	0	1	1	0	4	9
PEAK HR FACTOR :	0.250	0.250	0.250		0.250	0.250		0.333	0.450
		0.250		0.250		0.500		0.333	

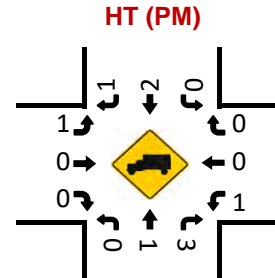
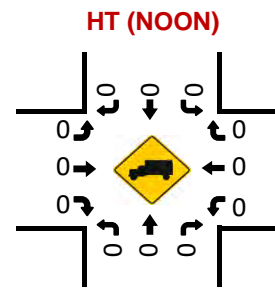
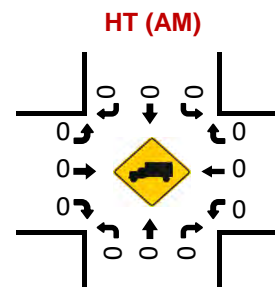
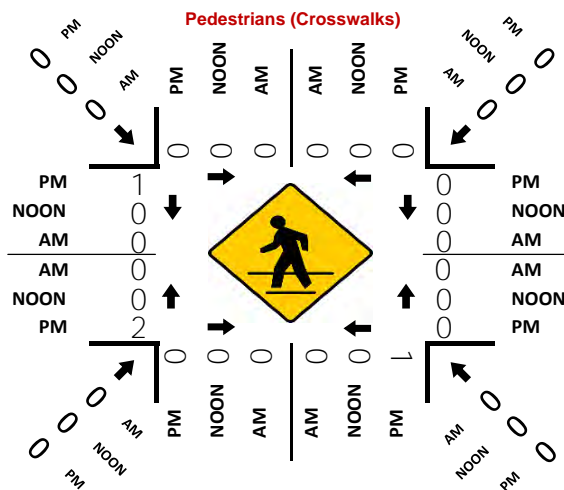
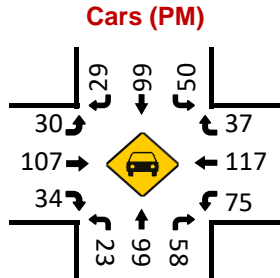
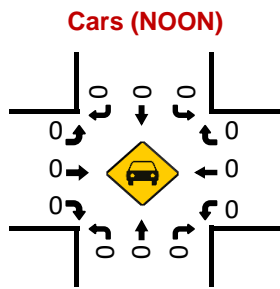
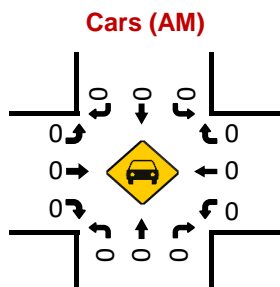
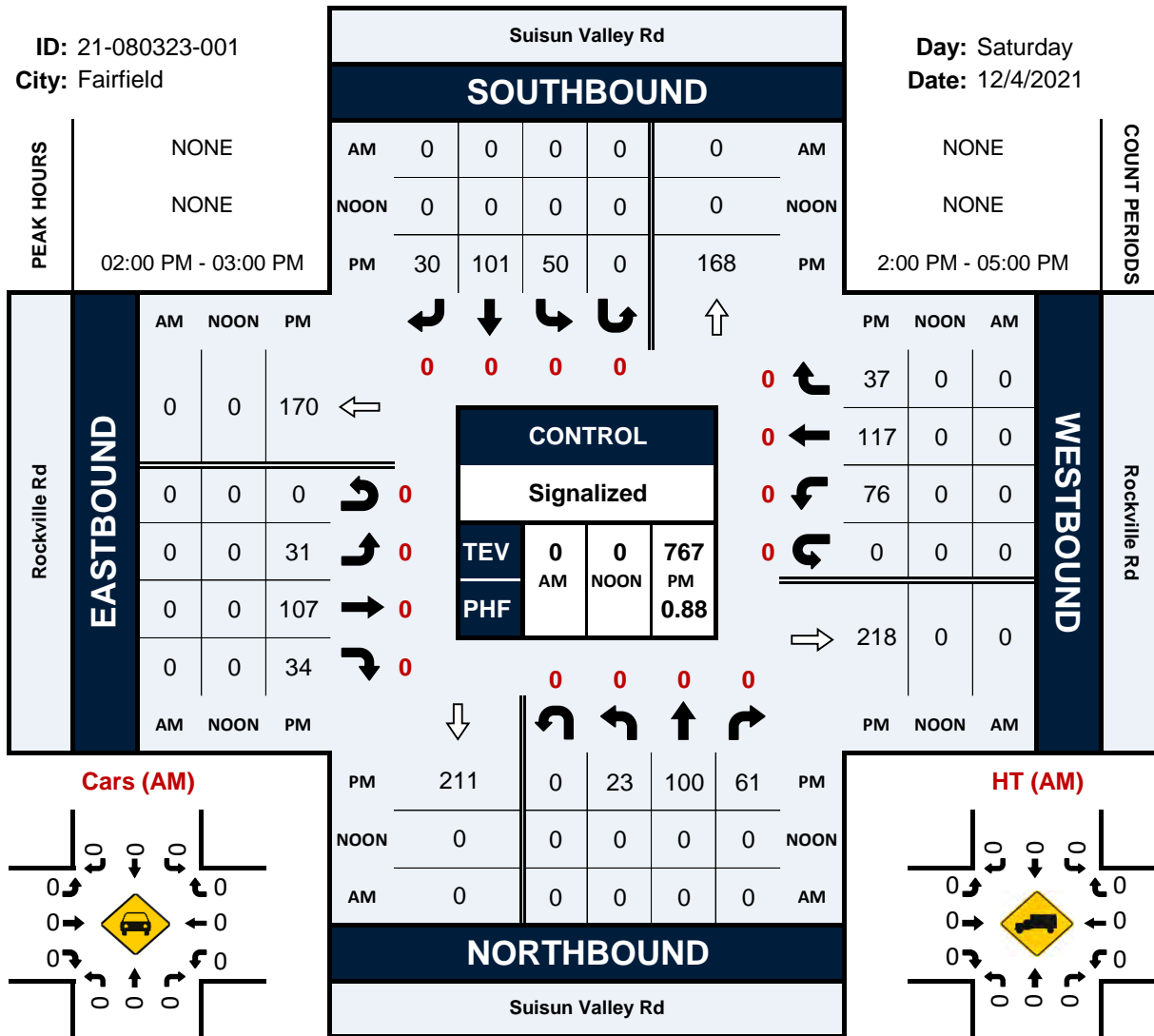
Prepared by National Data & Surveying Services

Suisun Valley Rd & Rockville Rd

Peak Hour Turning Movement Count

ID: 21-080323-001
City: Fairfield

Day: Saturday
Date: 12/4/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Rockville Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-001
 Date: 12/4/2021

Data - Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	8	23	24	0	17	26	8	0	4	28	5	0	22	29	12	0	206
2:15 PM	4	22	8	0	7	19	6	0	7	25	8	0	27	29	12	0	174
2:30 PM	5	29	15	0	11	35	10	0	11	27	13	0	17	38	6	0	217
2:45 PM	6	26	14	0	15	21	6	0	9	27	8	0	10	21	7	0	170
3:00 PM	2	27	18	0	7	27	6	0	10	21	8	0	18	26	11	0	181
3:15 PM	7	29	11	0	13	30	5	0	6	25	4	0	14	25	12	0	181
3:30 PM	4	27	23	0	10	19	7	0	4	21	4	0	13	27	10	0	169
3:45 PM	6	28	14	0	13	26	7	0	4	39	6	0	13	27	9	0	192
4:00 PM	1	26	15	0	7	24	10	0	9	24	9	0	13	24	5	0	167
4:15 PM	3	25	19	0	10	33	4	0	7	36	8	0	11	25	6	0	187
4:30 PM	2	15	7	0	10	27	8	0	11	15	6	0	15	21	6	0	143
4:45 PM	5	24	19	0	12	27	9	0	4	27	7	0	16	14	5	0	169
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	53	301	187	0	132	314	86	0	86	315	86	0	189	306	101	0	2156
	9.80%	55.64%	34.57%	0.00%	24.81%	59.02%	16.17%	0.00%	17.66%	64.68%	17.66%	0.00%	31.71%	51.34%	16.95%	0.00%	
PEAK HR :	02:00 PM - 03:00 PM																TOTAL
PEAK HR VOL :	23	100	61	0	50	101	30	0	31	107	34	0	76	117	37	0	767
PEAK HR FACTOR :	0.719	0.862	0.635	0.000	0.735	0.721	0.750	0.000	0.705	0.955	0.654	0.000	0.704	0.770	0.771	0.000	0.884
	0.836				0.808				0.843				0.846				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Rockville Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-001
 Date: 12/4/2021

Data - Cars

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	8	22	24	0	17	26	7	0	4	28	5	0	22	29	12	0	204
2:15 PM	4	22	7	0	7	18	6	0	7	25	8	0	27	29	12	0	172
2:30 PM	5	29	14	0	11	34	10	0	10	27	13	0	16	38	6	0	213
2:45 PM	6	26	13	0	15	21	6	0	9	27	8	0	10	21	7	0	169
3:00 PM	2	27	18	0	7	27	6	0	10	21	8	0	16	26	11	0	179
3:15 PM	6	28	10	0	13	30	5	0	6	25	4	0	14	25	12	0	178
3:30 PM	4	26	23	0	10	19	7	0	4	21	4	0	13	27	10	0	168
3:45 PM	6	28	14	0	13	26	7	0	4	39	6	0	12	27	9	0	191
4:00 PM	1	26	15	0	7	22	10	0	9	24	9	0	12	24	5	0	164
4:15 PM	3	25	19	0	10	32	4	0	7	36	8	0	11	25	6	0	186
4:30 PM	2	15	7	0	10	27	8	0	11	15	5	0	15	21	6	0	142
4:45 PM	5	24	19	0	12	26	9	0	4	27	7	0	16	14	5	0	168
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	52	298	183	0	132	308	85	0	85	315	85	0	184	306	101	0	2134
	9.76%	55.91%	34.33%	0.00%	25.14%	58.67%	16.19%	0.00%	17.53%	64.95%	17.53%	0.00%	31.13%	51.78%	17.09%	0.00%	
PEAK HR :	02:00 PM - 03:00 PM																TOTAL
PEAK HR VOL :	23	99	58	0	50	99	29	0	30	107	34	0	75	117	37	0	758
PEAK HR FACTOR :	0.719	0.853	0.604	0.000	0.735	0.728	0.725	0.000	0.750	0.955	0.654	0.000	0.694	0.770	0.771	0.000	0.890
	0.833				0.809				0.855				0.842				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Rockville Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-001
 Date: 12/4/2021

Data - HT

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
2:30 PM	0	0	1	0	0	1	0	0	0	1	0	0	0	1	0	0	4
2:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
3:15 PM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
4:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	3
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	3	4	0	0	6	1	0	1	0	1	0	5	0	0	0	22
	12.50%	37.50%	50.00%	0.00%	0.00%	85.71%	14.29%	0.00%	50.00%	0.00%	50.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	02:00 PM - 03:00 PM																
PEAK HR VOL :	0	1	3	0	0	2	1	0	1	0	0	0	1	0	0	0	9
PEAK HR FACTOR :	0.000	0.250	0.750	0.000	0.000	0.500	0.250	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.563
	1.000				0.750				0.250				0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Rockville Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-001
 Date: 12/4/2021

Data - Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Rockville Rd				Rockville Rd					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
2:30 PM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
3:30 PM	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
3:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	75.00%	0.00%	25.00%	0.00%	0.00%	0.00%	100.00%	0.00%	20.00%	20.00%	60.00%	0.00%	0.00%	0.00%	100.00%	0.00%	13	
PEAK HR :	02:00 PM - 03:00 PM																TOTAL	
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3	
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.375	
	0.250								0.250				0.250					

National Data & Surveying Services **Intersection Turning** **Movement Count**

Location: Suisun Valley Rd & Rockville Rd
City: Fairfield

Project ID: 21-080323-001
Date: 12/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Suisun Valley Rd		Suisun Valley Rd		Rockville Rd		Rockville Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
2:00 PM	0	0	0	0	0	0	1	1	2
2:15 PM	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	1	0	0	1	0	2
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	1	1
3:45 PM	0	0	0	0	0	0	1	0	1
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	1	0	0	3	2	6
			0.00%	100.00%			60.00%	40.00%	
PEAK HR :	02:00 PM - 03:00 PM								TOTAL
PEAK HR VOL :	0	0	0	1	0	0	2	1	4
PEAK HR FACTOR :				0.250			0.500	0.250	0.500
			0.250				0.375		

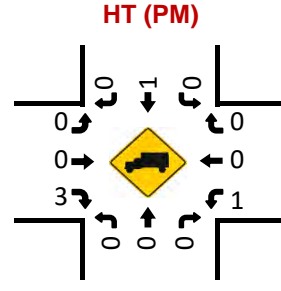
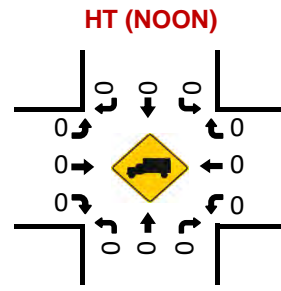
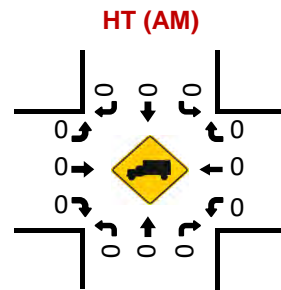
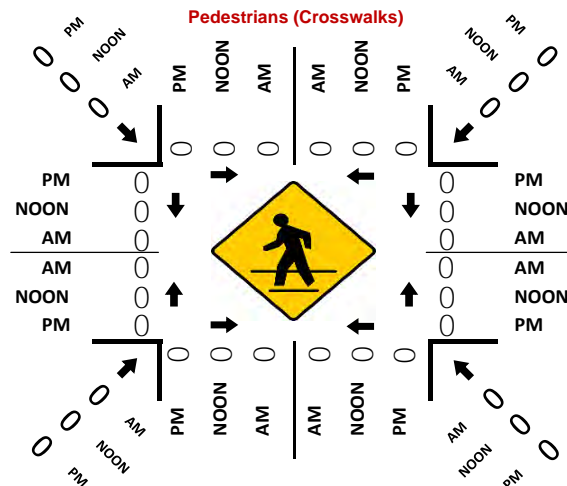
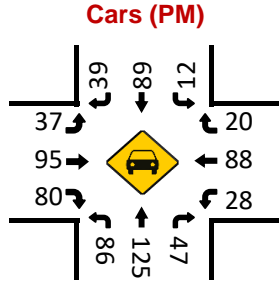
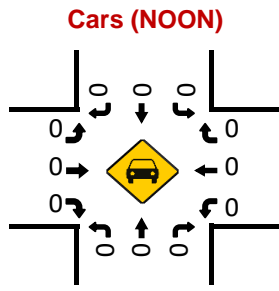
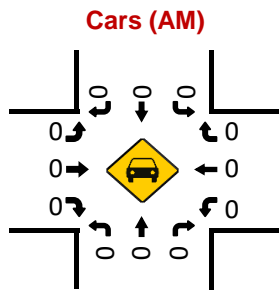
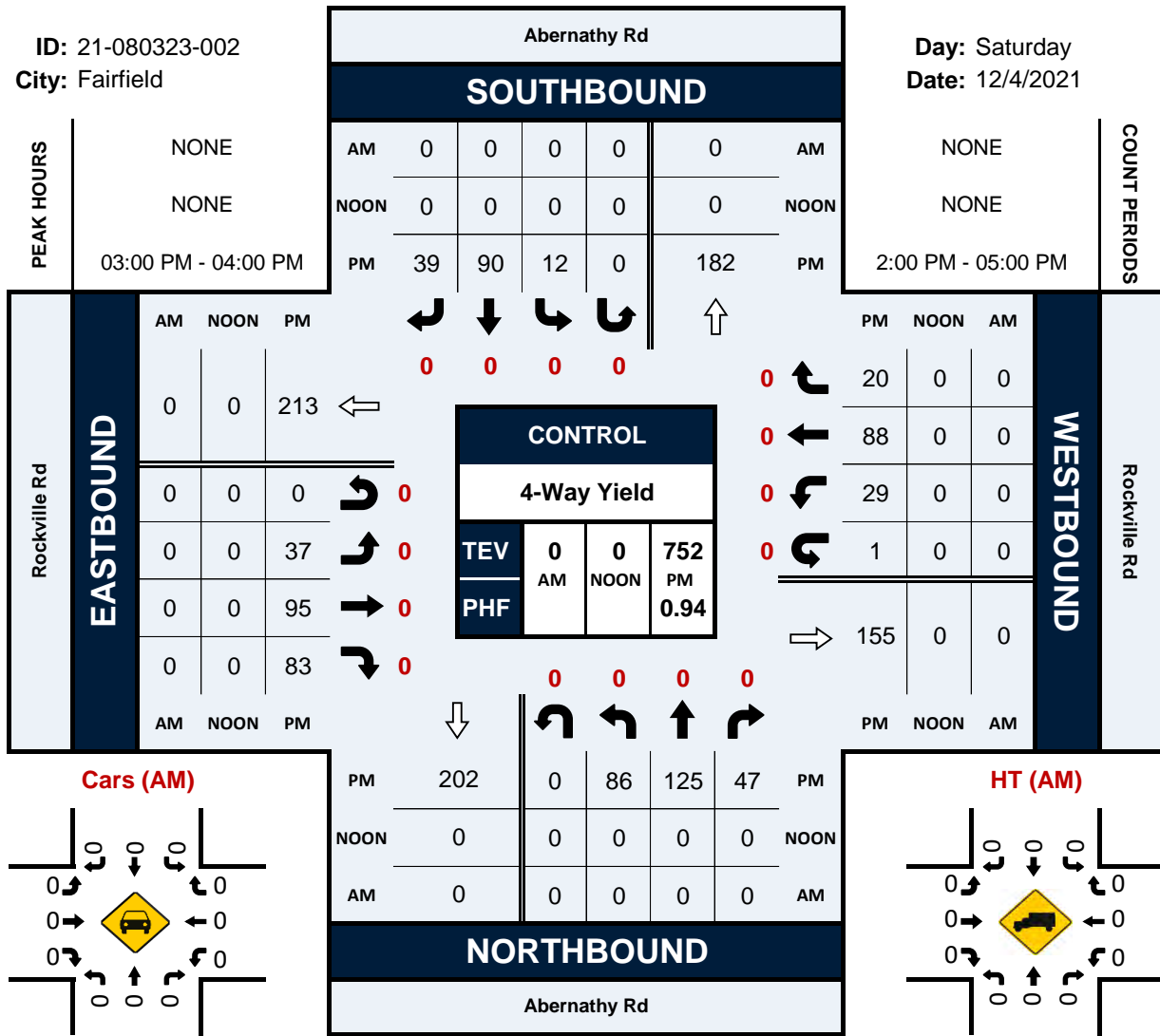
Prepared by National Data & Surveying Services

Abernathy Rd & Rockville Rd

Peak Hour Turning Movement Count

ID: 21-080323-002
City: Fairfield

Day: Saturday
Date: 12/4/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Abernathy Rd & Rockville Rd
 City: Fairfield
 Control: 4-Way Yield

Project ID: 21-080323-002
 Date: 12/4/2021

Data - Total

NS/EW Streets:	Abernathy Rd				Abernathy Rd				Rockville Rd				Rockville Rd				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	19	29	9	0	4	22	4	0	11	23	33	0	4	39	6	0	203
2:15 PM	27	24	7	1	5	15	9	0	7	22	18	0	13	31	7	0	186
2:30 PM	18	27	10	0	6	21	15	0	7	24	22	0	12	23	4	0	189
2:45 PM	11	19	7	0	2	21	11	0	6	27	25	0	9	21	6	0	165
3:00 PM	26	30	21	0	3	22	13	0	9	20	20	0	6	23	7	0	200
3:15 PM	16	37	10	0	3	24	10	0	5	21	23	0	4	24	7	1	185
3:30 PM	18	28	6	0	3	22	11	0	11	22	20	0	10	26	2	0	179
3:45 PM	26	30	10	0	3	22	5	0	12	32	20	0	9	15	4	0	188
4:00 PM	20	33	9	0	1	21	4	0	7	21	14	0	3	19	3	0	155
4:15 PM	21	27	5	0	3	25	6	0	13	25	29	0	2	26	3	0	185
4:30 PM	15	26	5	0	3	23	5	0	3	19	20	0	6	19	1	0	145
4:45 PM	14	26	9	0	7	27	5	0	6	20	24	0	11	18	2	0	169
TOTAL VOLUMES :	231	336	108	1	43	265	98	0	97	276	268	0	89	284	52	1	2149
APPROACH % 's :	34.17%	49.70%	15.98%	0.15%	10.59%	65.27%	24.14%	0.00%	15.13%	43.06%	41.81%	0.00%	20.89%	66.67%	12.21%	0.23%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	86	125	47	0	12	90	39	0	37	95	83	0	29	88	20	1	752
PEAK HR FACTOR :	0.827	0.845	0.560	0.000	1.000	0.938	0.750	0.000	0.771	0.742	0.902	0.000	0.725	0.846	0.714	0.250	0.940
	0.838				0.928				0.840				0.908				

National Data & Surveying Services Intersection Turning Movement Count

Location: Abernathy Rd & Rockville Rd
 City: Fairfield
 Control: 4-Way Yield

Project ID: 21-080323-002
 Date: 12/4/2021

Data - Cars

NS/EW Streets:	Abernathy Rd				Abernathy Rd				Rockville Rd				Rockville Rd				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	19	29	9	0	3	21	4	0	11	23	32	0	4	39	6	0	200
2:15 PM	27	24	7	1	5	15	9	0	7	21	18	0	13	31	7	0	185
2:30 PM	17	27	10	0	6	21	15	0	7	24	21	0	12	23	4	0	187
2:45 PM	11	19	7	0	2	21	9	0	6	27	24	0	9	21	6	0	162
3:00 PM	26	30	21	0	3	21	13	0	9	20	19	0	6	23	7	0	198
3:15 PM	16	37	10	0	3	24	10	0	5	21	22	0	3	24	7	0	182
3:30 PM	18	28	6	0	3	22	11	0	11	22	19	0	10	26	2	0	178
3:45 PM	26	30	10	0	3	22	5	0	12	32	20	0	9	15	4	0	188
4:00 PM	19	33	9	0	1	21	4	0	7	21	14	0	3	19	3	0	154
4:15 PM	21	27	5	0	3	23	6	0	13	25	29	0	2	26	3	0	183
4:30 PM	15	26	5	0	3	22	5	0	3	19	20	0	6	19	1	0	144
4:45 PM	14	26	8	0	7	26	5	0	6	20	24	0	10	18	2	0	166
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH % 's :	229	336	107	1	42	259	96	0	97	275	262	0	87	284	52	0	2127
	34.03%	49.93%	15.90%	0.15%	10.58%	65.24%	24.18%	0.00%	15.30%	43.38%	41.32%	0.00%	20.57%	67.14%	12.29%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	86	125	47	0	12	89	39	0	37	95	80	0	28	88	20	0	746
PEAK HR FACTOR :	0.827	0.845	0.560	0.000	1.000	0.927	0.750	0.000	0.771	0.742	0.909	0.000	0.700	0.846	0.714	0.000	0.942
	0.838				0.946				0.828				0.895				

National Data & Surveying Services Intersection Turning Movement Count

Location: Abernathy Rd & Rockville Rd
 City: Fairfield
 Control: 4-Way Yield

Project ID: 21-080323-002
 Date: 12/4/2021

Data - HT

NS/EW Streets:	Abernathy Rd				Abernathy Rd				Rockville Rd				Rockville Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	3
2:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
2:30 PM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
2:45 PM	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	3
3:00 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
3:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	3
3:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	3
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	66.67%	0.00%	33.33%	0.00%	11.11%	66.67%	22.22%	0.00%	0.00%	14.29%	85.71%	0.00%	66.67%	0.00%	0.00%	33.33%	22
PEAK HR :	03:00 PM - 04:00 PM																
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	0	3	0	1	0	0	1	6
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.750	0.000	0.250	0.000	0.000	0.250	0.500
					0.250				0.750				0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Abernathy Rd & Rockville Rd
 City: Fairfield
 Control: 4-Way Yield

Project ID: 21-080323-002
 Date: 12/4/2021

Data - Bikes

NS/EW Streets:	Abernathy Rd				Abernathy Rd				Rockville Rd				Rockville Rd					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
2:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	1	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0	5	
	50.00%	0.00%	50.00%	0.00%					0.00%	33.33%	66.67%	0.00%						
PEAK HR :	03:00 PM - 04:00 PM																	
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.500	
	0.250								0.250									

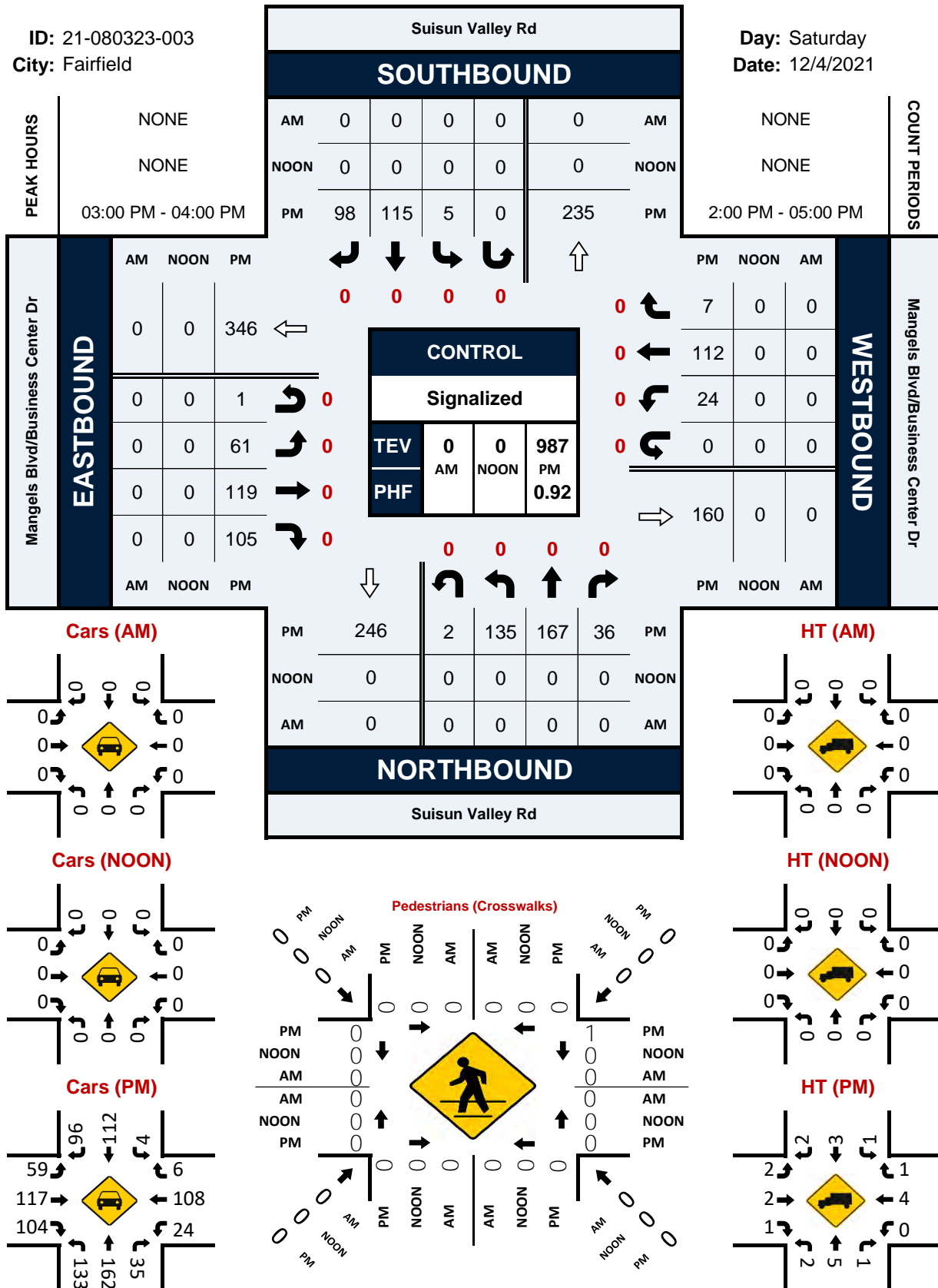
Prepared by National Data & Surveying Services

Suisun Valley Rd & Mangels Blvd/Business Center Dr

Peak Hour Turning Movement Count

ID: 21-080323-003
City: Fairfield

Day: Saturday
Date: 12/4/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Mangels Blvd/Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-003
 Date: 12/4/2021

Data - Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Mangels Blvd/Business Center Dr				Mangels Blvd/Business Center Dr				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	34	35	7	0	3	30	27	0	20	32	32	1	9	35	4	0	269
2:15 PM	20	36	8	0	2	28	27	0	6	29	30	1	7	30	3	0	227
2:30 PM	30	54	4	0	1	40	24	0	7	25	25	0	8	29	0	0	247
2:45 PM	28	28	4	0	0	15	26	0	12	32	31	0	1	33	3	0	213
3:00 PM	38	42	11	2	1	35	31	0	14	32	28	0	8	24	1	0	267
3:15 PM	39	38	8	0	1	30	23	0	18	27	22	0	5	35	3	0	249
3:30 PM	33	42	8	0	1	27	16	0	13	30	21	0	6	21	2	0	220
3:45 PM	25	45	9	0	2	23	28	0	16	30	34	1	5	32	1	0	251
4:00 PM	30	37	14	0	0	31	24	0	14	28	31	0	7	35	2	0	253
4:15 PM	34	35	8	0	0	36	24	0	12	17	21	0	16	23	2	0	228
4:30 PM	28	32	15	0	2	30	18	0	11	24	25	0	14	40	2	0	241
4:45 PM	20	40	16	0	0	25	28	0	14	29	38	0	7	27	2	0	246
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	38.31%	49.52%	11.95%	0.21%	1.97%	53.11%	44.92%	0.00%	18.85%	40.22%	40.58%	0.36%	19.29%	75.52%	5.19%	0.00%	2911
PEAK HR:	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL:	135	167	36	2	5	115	98	0	61	119	105	1	24	112	7	0	987
PEAK HR FACTOR:	0.865	0.928	0.818	0.250	0.625	0.821	0.790	0.000	0.847	0.930	0.772	0.250	0.750	0.800	0.583	0.000	0.924
	0.914				0.813				0.883				0.831				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Mangels Blvd/Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-003
 Date: 12/4/2021

Data - Cars

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Mangels Blvd/Business Center Dr				Mangels Blvd/Business Center Dr				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	34	35	7	0	3	30	27	0	20	32	32	1	9	35	4	0	269
2:15 PM	20	35	8	0	2	28	24	0	4	29	30	1	7	29	2	0	219
2:30 PM	30	53	4	0	0	39	22	0	5	25	25	0	8	29	0	0	240
2:45 PM	28	27	4	0	0	15	26	0	12	32	31	0	1	33	3	0	212
3:00 PM	38	41	10	2	1	35	30	0	14	32	27	0	8	23	1	0	262
3:15 PM	39	36	8	0	1	29	22	0	17	26	22	0	5	32	2	0	239
3:30 PM	32	40	8	0	0	26	16	0	12	29	21	0	6	21	2	0	213
3:45 PM	24	45	9	0	2	22	28	0	16	30	34	1	5	32	1	0	249
4:00 PM	30	37	14	0	0	31	23	0	14	28	31	0	7	33	2	0	250
4:15 PM	34	35	8	0	0	34	22	0	12	17	21	0	15	22	1	0	221
4:30 PM	28	32	15	0	2	28	18	0	11	23	25	0	14	39	2	0	237
4:45 PM	20	39	16	0	0	25	28	0	14	27	35	0	6	27	2	0	239
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	357	455	111	2	11	342	286	0	151	330	334	3	91	355	22	0	2850
	38.59%	49.19%	12.00%	0.22%	1.72%	53.52%	44.76%	0.00%	18.46%	40.34%	40.83%	0.37%	19.44%	75.85%	4.70%	0.00%	
PEAK HR:	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL:	133	162	35	2	4	112	96	0	59	117	104	1	24	108	6	0	963
PEAK HR FACTOR:	0.853	0.900	0.875	0.250	0.500	0.800	0.800	0.000	0.868	0.914	0.765	0.250	0.750	0.844	0.750	0.000	0.919
	0.912				0.803				0.867				0.885				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Mangels Blvd/Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-003
 Date: 12/4/2021

Data - HT

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Mangels Blvd/Business Center Dr				Mangels Blvd/Business Center Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	1	0	0	0	0	3	0	2	0	0	0	0	1	1	0	0
2:30 PM	0	1	0	0	1	1	2	0	2	0	0	0	0	0	0	0	0
2:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	1	1	0	0	0	1	0	0	0	1	0	0	1	0	0	0
3:15 PM	0	2	0	0	0	1	1	0	1	1	0	0	0	3	1	0	0
3:30 PM	1	2	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0
3:45 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0
4:15 PM	0	0	0	0	0	2	2	0	0	0	0	0	1	1	1	0	0
4:30 PM	0	0	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	2	3	0	1	0	0	0	0
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	2	9	1	0	2	8	10	0	6	5	4	0	2	9	3	0	61
	16.67%	75.00%	8.33%	0.00%	10.00%	40.00%	50.00%	0.00%	40.00%	33.33%	26.67%	0.00%	14.29%	64.29%	21.43%	0.00%	
PEAK HR:	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL:	2	5	1	0	1	3	2	0	2	2	1	0	0	4	1	0	24
PEAK HR FACTOR:	0.500	0.625	0.250	0.000	0.250	0.750	0.500	0.000	0.500	0.500	0.250	0.000	0.000	0.333	0.250	0.000	0.600
	0.667				0.750				0.625				0.313				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Mangels Blvd/Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-003
 Date: 12/4/2021

Data - Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Mangels Blvd/Business Center Dr				Mangels Blvd/Business Center Dr					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
2:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
2:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	3
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	2	2	0	0	1	0	0	3	1	0	0	0	1	2	0	12	
	0.00%	50.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	75.00%	25.00%	0.00%	0.00%	0.00%	33.33%	66.67%	0.00%		
PEAK HR :	03:00 PM - 04:00 PM																TOTAL	
PEAK HR VOL :	0	0	1	0	0	1	0	0	1	0	0	0	0	1	1	0	5	
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.417	
	0.250				0.250				0.250				0.500					

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Mangels Blvd/Business Center Dr
City: Fairfield

Project ID: 21-080323-003
Date: 12/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Suisun Valley Rd		Suisun Valley Rd		Mangels Blvd/Business Center Dr		Mangels Blvd/Business Center Dr		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
2:00 PM	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	1	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	1	0	0	2
4:30 PM	0	0	0	1	0	0	1	0	2
4:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	1	1	2	1	0	5
			0.00%	100.00%	33.33%	66.67%	100.00%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :					0.250				0.250

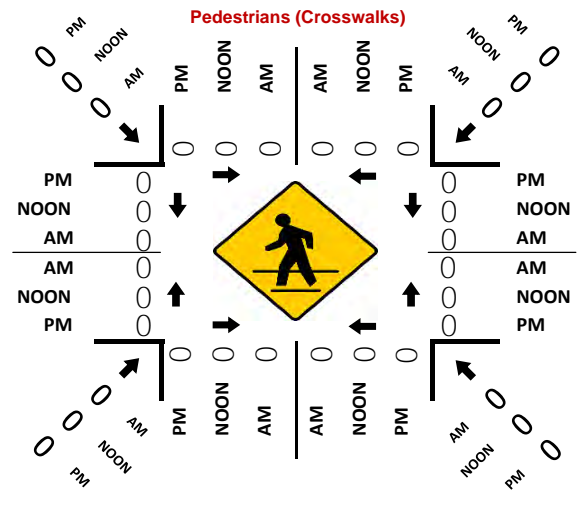
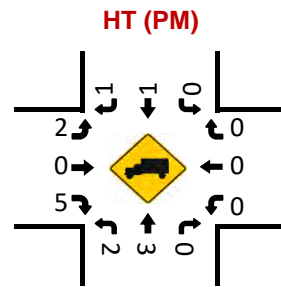
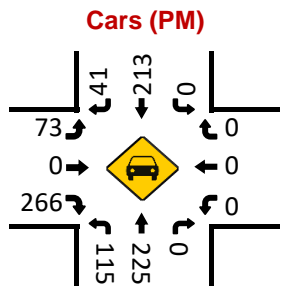
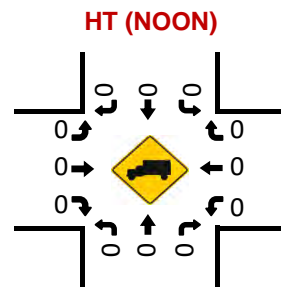
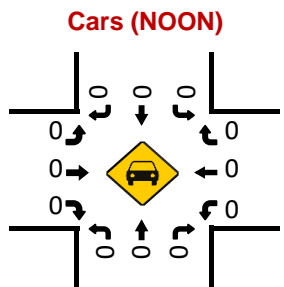
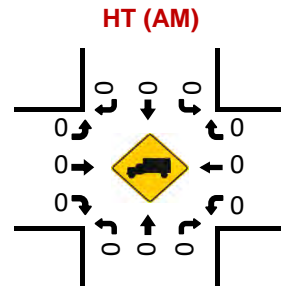
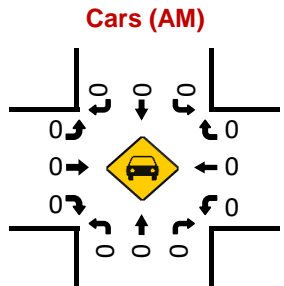
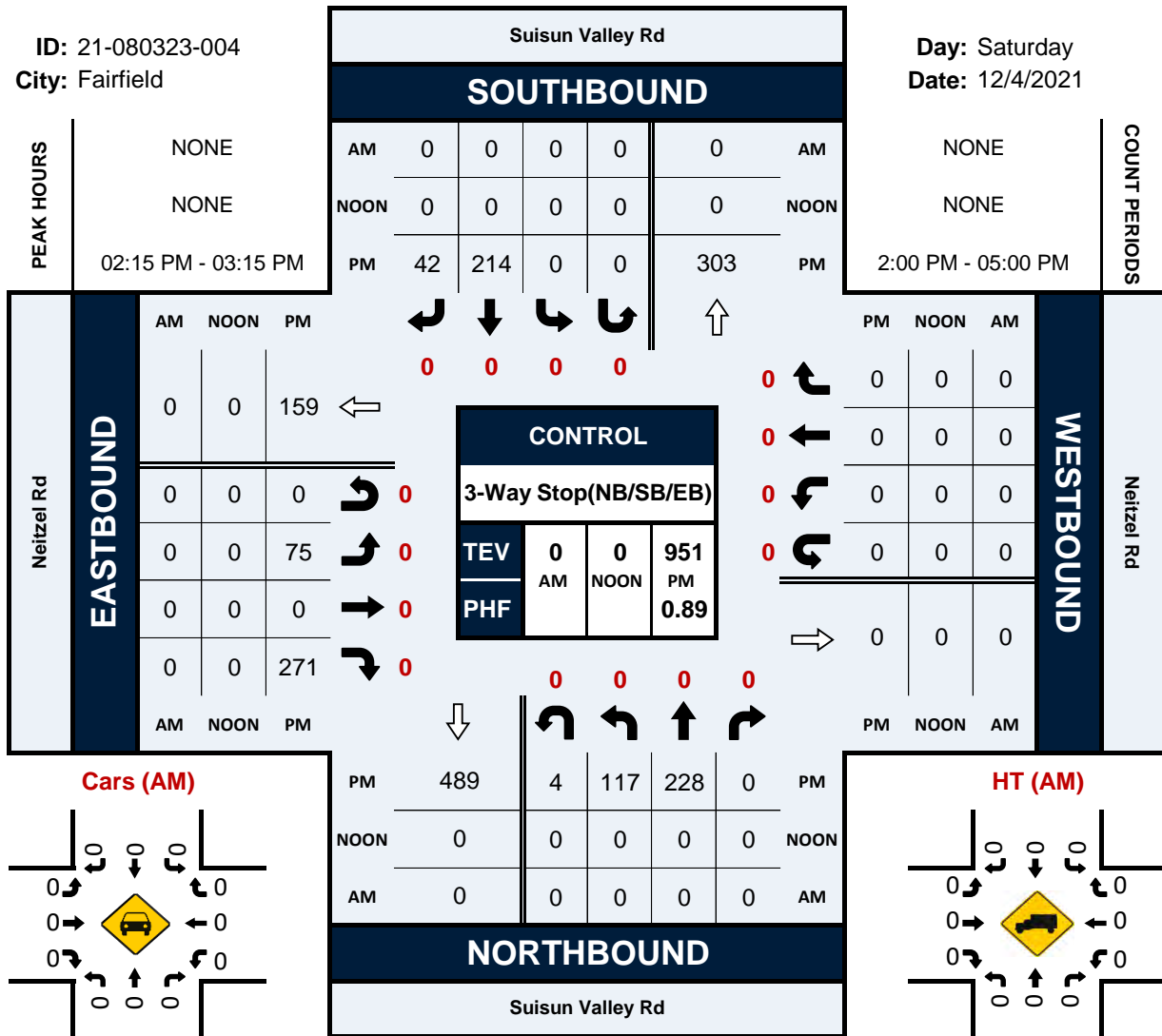
Prepared by National Data & Surveying Services

Suisun Valley Rd & Neitzel Rd

Peak Hour Turning Movement Count

ID: 21-080323-004
City: Fairfield

Day: Saturday
Date: 12/4/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Neitzel Rd
 City: Fairfield
 Control: 3-Way Stop(NB/SB/EB)

Project ID: 21-080323-004
 Date: 12/4/2021

Data - Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Neitzel Rd				Neitzel Rd				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	258
2:15 PM	32	58	0	0	0	57	14	0	21	0	76	0	0	0	0	0	213
2:30 PM	33	51	0	0	0	55	6	0	11	0	57	0	0	0	0	0	268
2:45 PM	26	64	0	2	0	59	17	0	23	0	77	0	0	0	0	0	203
3:00 PM	27	48	0	0	0	39	9	0	17	0	63	0	0	0	0	0	267
3:15 PM	31	65	0	2	0	61	10	0	24	0	74	0	0	0	0	0	212
3:30 PM	24	54	0	2	0	46	8	0	32	0	46	0	0	0	0	0	237
3:45 PM	26	58	0	1	0	52	7	0	29	0	64	0	0	0	0	0	225
4:00 PM	25	50	0	0	0	53	7	0	25	0	65	0	0	0	0	0	250
4:15 PM	24	60	0	0	0	64	7	0	23	0	71	1	0	0	0	0	230
4:30 PM	27	56	0	0	0	60	11	0	18	0	58	0	0	0	0	0	226
4:45 PM	18	56	0	1	0	56	15	0	21	0	59	0	0	0	0	0	225
4:45 PM	26	58	0	0	0	63	6	0	20	0	52	0	0	0	0	0	2814
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	319	678	0	8	0	665	117	0	264	0	762	1	0	0	0	0	2814
	31.74%	67.46%	0.00%	0.80%	0.00%	85.04%	14.96%	0.00%	25.71%	0.00%	74.20%	0.10%	0	0	0	0	
PEAK HR :	02:15 PM - 03:15 PM																
PEAK HR VOL :	117	228	0	4	0	214	42	0	75	0	271	0	0	0	0	0	951
PEAK HR FACTOR :	0.886	0.877	0.000	0.500	0.000	0.877	0.618	0.000	0.781	0.000	0.880	0.000	0.000	0.000	0.000	0.000	0.887
	0.890				0.842				0.865								

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Neitzel Rd
 City: Fairfield
 Control: 3-Way Stop(NB/SB/EB)

Project ID: 21-080323-004
 Date: 12/4/2021

Data - Cars

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Neitzel Rd				Neitzel Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	32	58	0	0	0	57	14	0	21	0	74	0	0	0	0	0	256
2:15 PM	31	51	0	0	0	55	6	0	10	0	56	0	0	0	0	0	209
2:30 PM	26	63	0	2	0	59	16	0	23	0	75	0	0	0	0	0	264
2:45 PM	27	47	0	0	0	39	9	0	16	0	62	0	0	0	0	0	200
3:00 PM	31	64	0	2	0	60	10	0	24	0	73	0	0	0	0	0	264
3:15 PM	24	53	0	2	0	45	8	0	31	0	46	0	0	0	0	0	209
3:30 PM	26	56	0	1	0	52	6	0	28	0	63	0	0	0	0	0	232
3:45 PM	25	49	0	0	0	53	6	0	25	0	65	0	0	0	0	0	223
4:00 PM	24	60	0	0	0	63	7	0	23	0	70	1	0	0	0	0	248
4:15 PM	27	56	0	0	0	59	10	0	18	0	58	0	0	0	0	0	228
4:30 PM	18	56	0	1	0	54	15	0	21	0	58	0	0	0	0	0	223
4:45 PM	25	57	0	0	0	59	6	0	20	0	50	0	0	0	0	0	217
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	316	670	0	8	0	655	113	0	260	0	750	1	0	0	0	0	2773
	31.79%	67.40%	0.00%	0.80%	0.00%	85.29%	14.71%	0.00%	25.72%	0.00%	74.18%	0.10%	0	0	0	0	
PEAK HR :	02:15 PM - 03:15 PM																TOTAL
PEAK HR VOL :	115	225	0	4	0	213	41	0	73	0	266	0	0	0	0	0	937
PEAK HR FACTOR :	0.927	0.879	0.000	0.500	0.000	0.888	0.641	0.000	0.760	0.000	0.887	0.000	0.000	0.000	0.000	0.000	0.887
	0.887				0.847				0.865								

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Neitzel Rd
 City: Fairfield
 Control: 3-Way Stop(NB/SB/EB)

Project ID: 21-080323-004
 Date: 12/4/2021

Data - HT

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Neitzel Rd				Neitzel Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
2:15 PM	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	4
2:30 PM	0	1	0	0	0	0	1	0	0	0	2	0	0	0	0	0	4
2:45 PM	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3
3:00 PM	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3
3:15 PM	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3
3:30 PM	0	2	0	0	0	0	1	0	1	0	1	0	0	0	0	0	5
3:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	3
4:45 PM	1	1	0	0	0	4	0	0	0	0	2	0	0	0	0	0	8
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	27.27%	72.73%	0.00%	0.00%	0.00%	71.43%	28.57%	0.00%	25.00%	0.00%	75.00%	0.00%	0	0	0	0	41
PEAK HR :	02:15 PM - 03:15 PM																
PEAK HR VOL :	2	3	0	0	0	1	1	0	2	0	5	0	0	0	0	0	14
PEAK HR FACTOR :	0.250	0.750	0.000	0.000	0.000	0.250	0.250	0.000	0.500	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.875

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Neitzel Rd
 City: Fairfield
 Control: 3-Way Stop(NB/SB/EB)

Project ID: 21-080323-004
 Date: 12/4/2021

Data - Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Neitzel Rd				Neitzel Rd					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0	0	0	0	5	
PEAK HR :	02:15 PM - 03:15 PM																	
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Neitzel Rd
City: Fairfield

Project ID: 21-080323-004
Date: 12/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:		Suisun Valley Rd		Suisun Valley Rd		Neitzel Rd		Neitzel Rd		
PM		NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
		EB	WB	EB	WB	NB	SB	NB	SB	
2:00 PM		0	0	0	0	0	0	0	0	0
2:15 PM		0	0	0	0	0	0	0	0	0
2:30 PM		0	0	0	0	0	0	0	0	0
2:45 PM		0	0	0	0	0	0	0	0	0
3:00 PM		0	0	0	0	0	0	0	0	0
3:15 PM		0	0	0	0	0	0	0	0	0
3:30 PM		0	0	0	0	0	0	0	0	0
3:45 PM		0	0	0	0	0	0	0	0	0
4:00 PM		0	0	0	0	0	0	0	0	0
4:15 PM		0	0	0	0	0	0	0	0	0
4:30 PM		0	0	0	0	0	0	0	0	0
4:45 PM		0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :		EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :		0	0	0	0	0	0	0	0	0
PEAK HR :	02:15 PM - 03:15 PM									TOTAL
PEAK HR VOL :		0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :										

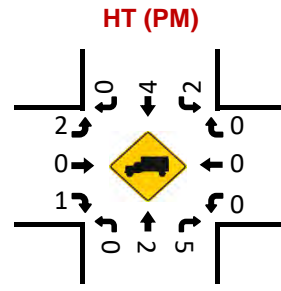
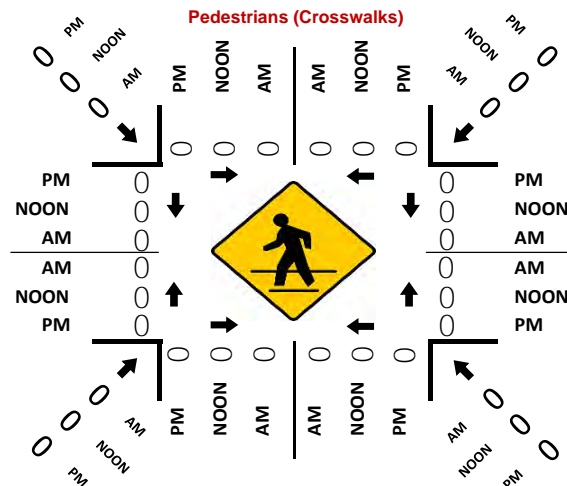
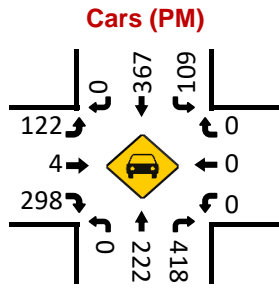
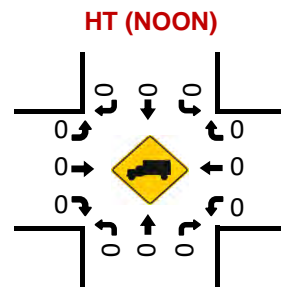
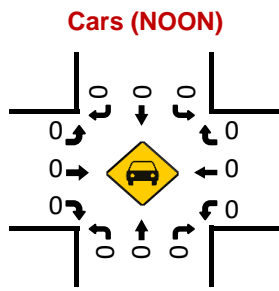
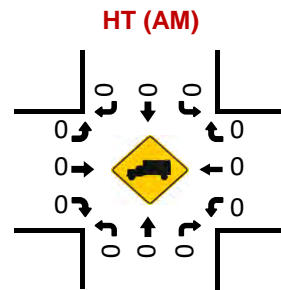
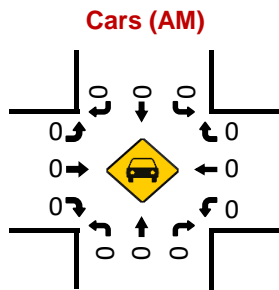
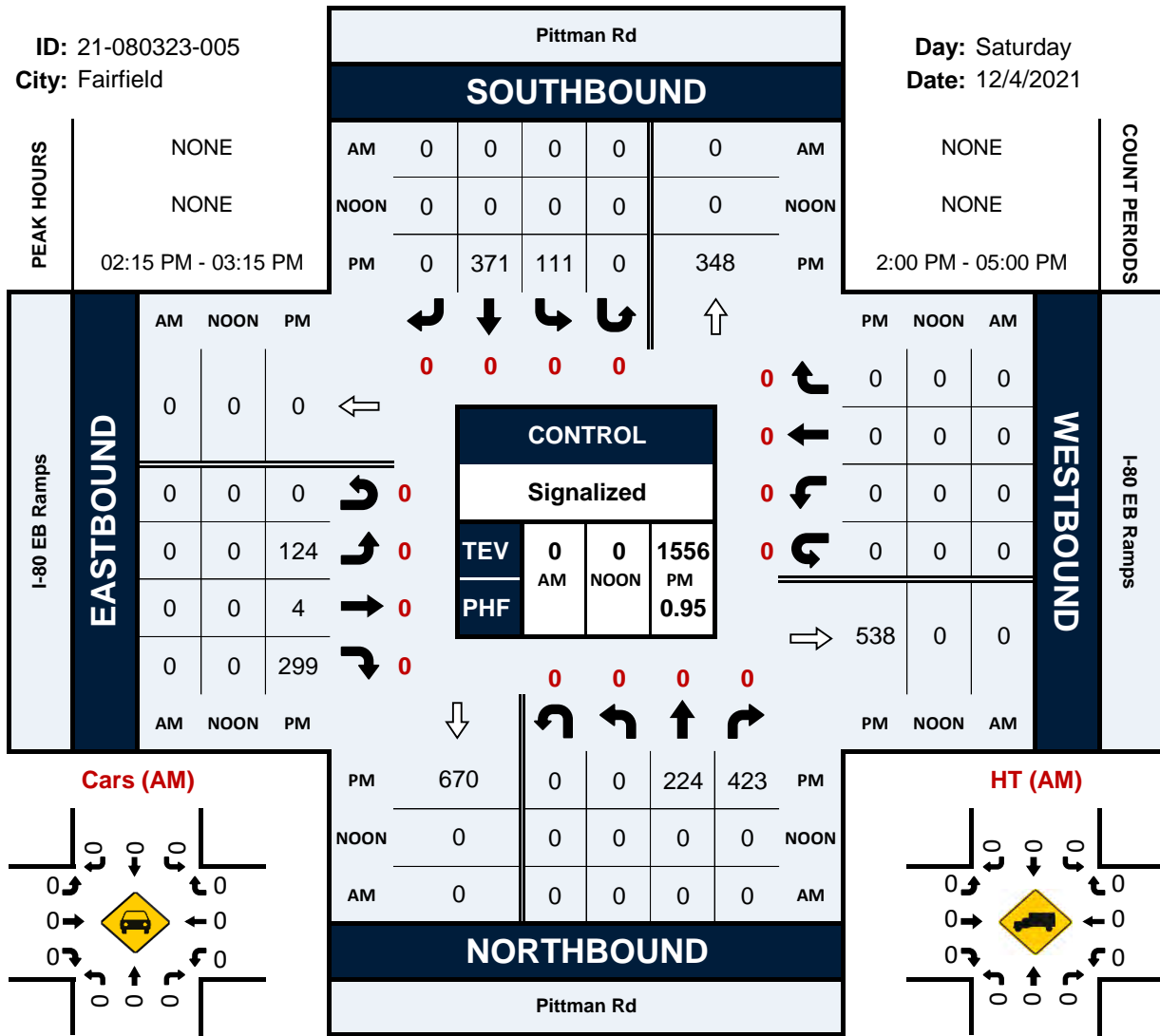
Prepared by National Data & Surveying Services

Pittman Rd & I-80 EB Ramps

Peak Hour Turning Movement Count

ID: 21-080323-005
City: Fairfield

Day: Saturday
Date: 12/4/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Pittman Rd & I-80 EB Ramps
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-005
 Date: 12/4/2021

Data - Total

NS/EW Streets:	Pittman Rd				Pittman Rd				I-80 EB Ramps				I-80 EB Ramps				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	409
2:15 PM	0	56	113	0	27	109	0	0	32	2	70	0	0	0	0	0	380
2:30 PM	0	53	98	0	27	112	0	0	29	4	72	0	0	0	0	0	402
2:45 PM	0	55	98	0	22	80	0	0	38	0	74	0	0	0	0	0	363
3:00 PM	0	60	118	0	31	100	0	0	23	0	85	0	0	0	0	0	411
3:15 PM	0	48	102	0	25	76	0	0	34	0	68	0	0	0	0	0	368
3:30 PM	0	51	86	0	24	87	0	0	33	0	84	0	0	0	0	0	358
3:45 PM	0	41	85	0	28	94	0	0	38	1	71	0	0	0	0	0	349
4:00 PM	0	63	118	0	28	108	0	0	31	0	70	0	0	0	0	0	407
4:15 PM	0	53	96	0	29	87	0	0	23	1	66	0	0	0	0	0	370
4:30 PM	0	45	99	0	28	91	0	0	28	0	77	0	0	0	0	0	389
4:45 PM	0	49	102	0	29	80	0	0	33	1	92	0	0	0	0	0	360
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH % 's :	0.00%	630	1224	0	329	1103	0	0	376	10	894	0	0	0	0	0	4566
	0.00%	33.98%	66.02%	0.00%	22.97%	77.03%	0.00%	0.00%	29.38%	0.78%	69.84%	0.00%					
PEAK HR :	02:15 PM - 03:15 PM																
PEAK HR VOL :	0	224	423	0	111	371	0	0	124	4	299	0	0	0	0	0	1556
PEAK HR FACTOR :	0.000	0.933	0.896	0.000	0.895	0.828	0.000	0.000	0.816	0.250	0.879	0.000	0.000	0.000	0.000	0.000	0.946
		0.909				0.867				0.953							

National Data & Surveying Services Intersection Turning Movement Count

Location: Pittman Rd & I-80 EB Ramps
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-005
 Date: 12/4/2021

Data - Cars

NS/EW Streets:	Pittman Rd				Pittman Rd				I-80 EB Ramps				I-80 EB Ramps				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	56	112	0	25	109	0	0	32	2	68	0	0	0	0	0	404
2:15 PM	0	55	106	0	31	78	0	0	29	4	72	0	0	0	0	0	375
2:30 PM	0	53	97	0	27	111	0	0	37	0	73	0	0	0	0	0	398
2:45 PM	0	54	97	0	21	79	0	0	23	0	85	0	0	0	0	0	359
3:00 PM	0	60	118	0	30	99	0	0	33	0	68	0	0	0	0	0	408
3:15 PM	0	48	102	0	24	76	0	0	32	0	84	0	0	0	0	0	366
3:30 PM	0	51	86	0	24	86	0	0	36	1	71	0	0	0	0	0	355
3:45 PM	0	40	85	0	28	94	0	0	30	0	67	0	0	0	0	0	344
4:00 PM	0	63	117	0	27	108	0	0	23	1	64	0	0	0	0	0	403
4:15 PM	0	53	96	0	28	86	0	0	28	0	77	0	0	0	0	0	368
4:30 PM	0	45	96	0	26	90	0	0	33	1	90	0	0	0	0	0	381
4:45 PM	0	48	102	0	27	77	0	0	33	1	65	0	0	0	0	0	353
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH % 's :	0	626	1214	0	318	1093	0	0	369	10	884	0	0	0	0	0	4514
	0.00%	34.02%	65.98%	0.00%	22.54%	77.46%	0.00%	0.00%	29.22%	0.79%	69.99%	0.00%					
PEAK HR :	02:15 PM - 03:15 PM																
PEAK HR VOL :	0	222	418	0	109	367	0	0	122	4	298	0	0	0	0	0	1540
PEAK HR FACTOR :	0.000	0.925	0.886	0.000	0.879	0.827	0.000	0.000	0.824	0.250	0.876	0.000	0.000	0.000	0.000	0.000	0.944
		0.899				0.862				0.964							

National Data & Surveying Services Intersection Turning Movement Count

Location: Pittman Rd & I-80 EB Ramps
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-005
 Date: 12/4/2021

Data - HT

NS/EW Streets:	Pittman Rd				Pittman Rd				I-80 EB Ramps				I-80 EB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	0	1	0	2	0	0	0	0	0	2	0	0	0	0	0	5
2:15 PM	0	1	3	0	0	1	0	0	0	0	0	0	0	0	0	0	5
2:30 PM	0	0	1	0	0	1	0	0	0	1	0	1	0	0	0	0	4
2:45 PM	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	4
3:00 PM	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	3
3:15 PM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
3:30 PM	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	3
3:45 PM	0	1	0	0	0	0	0	0	0	1	0	3	0	0	0	0	5
4:00 PM	0	0	1	0	1	0	0	0	0	0	2	0	0	0	0	0	4
4:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	3	0	2	1	0	0	0	0	2	0	0	0	0	0	8
4:45 PM	0	1	0	0	2	3	0	0	0	1	0	0	0	0	0	0	7
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH % 's :	0	4	10	0	11	10	0	0	7	0	10	0	0	0	0	0	52
	0.00%	28.57%	71.43%	0.00%	52.38%	47.62%	0.00%	0.00%	41.18%	0.00%	58.82%	0.00%	0	0	0	0	
PEAK HR :	02:15 PM - 03:15 PM																
PEAK HR VOL :	0	2	5	0	2	4	0	0	2	0	1	0	0	0	0	0	16
PEAK HR FACTOR :	0.000	0.500	0.417	0.000	0.500	1.000	0.000	0.000	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.800
	0.438				0.750				0.375								

National Data & Surveying Services Intersection Turning Movement Count

Location: Pittman Rd & I-80 EB Ramps
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-005
 Date: 12/4/2021

Data - Bikes

NS/EW Streets:	Pittman Rd				Pittman Rd				I-80 EB Ramps				I-80 EB Ramps					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	3	1	0	0	1	0	0	0	0	0	0	0	0	0	0	5	
	0.00%	75.00%	25.00%	0.00%	0.00%	100.00%	0.00%	0.00%										
PEAK HR :	02:15 PM - 03:15 PM																	
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	

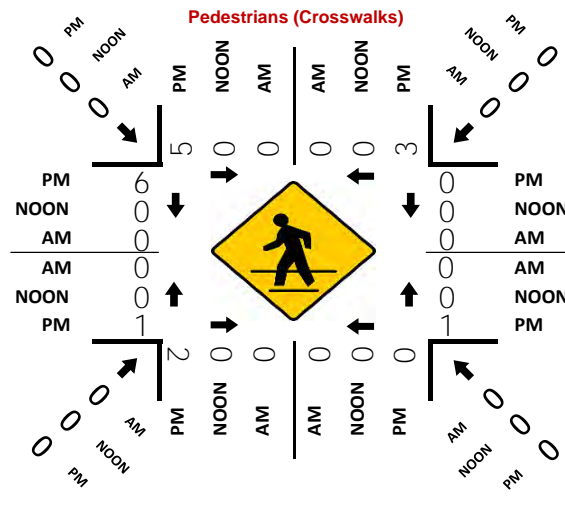
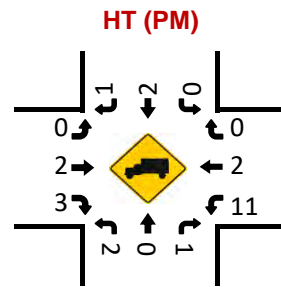
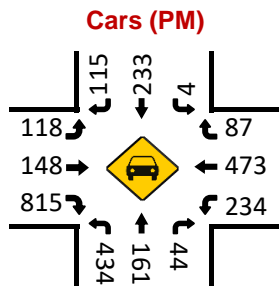
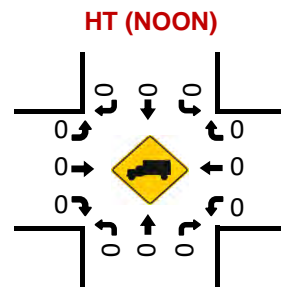
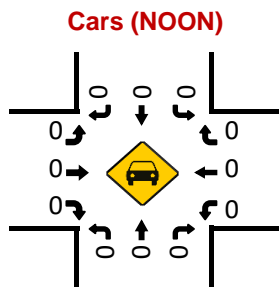
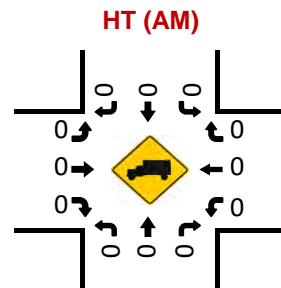
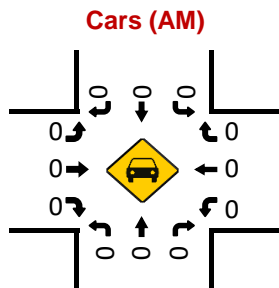
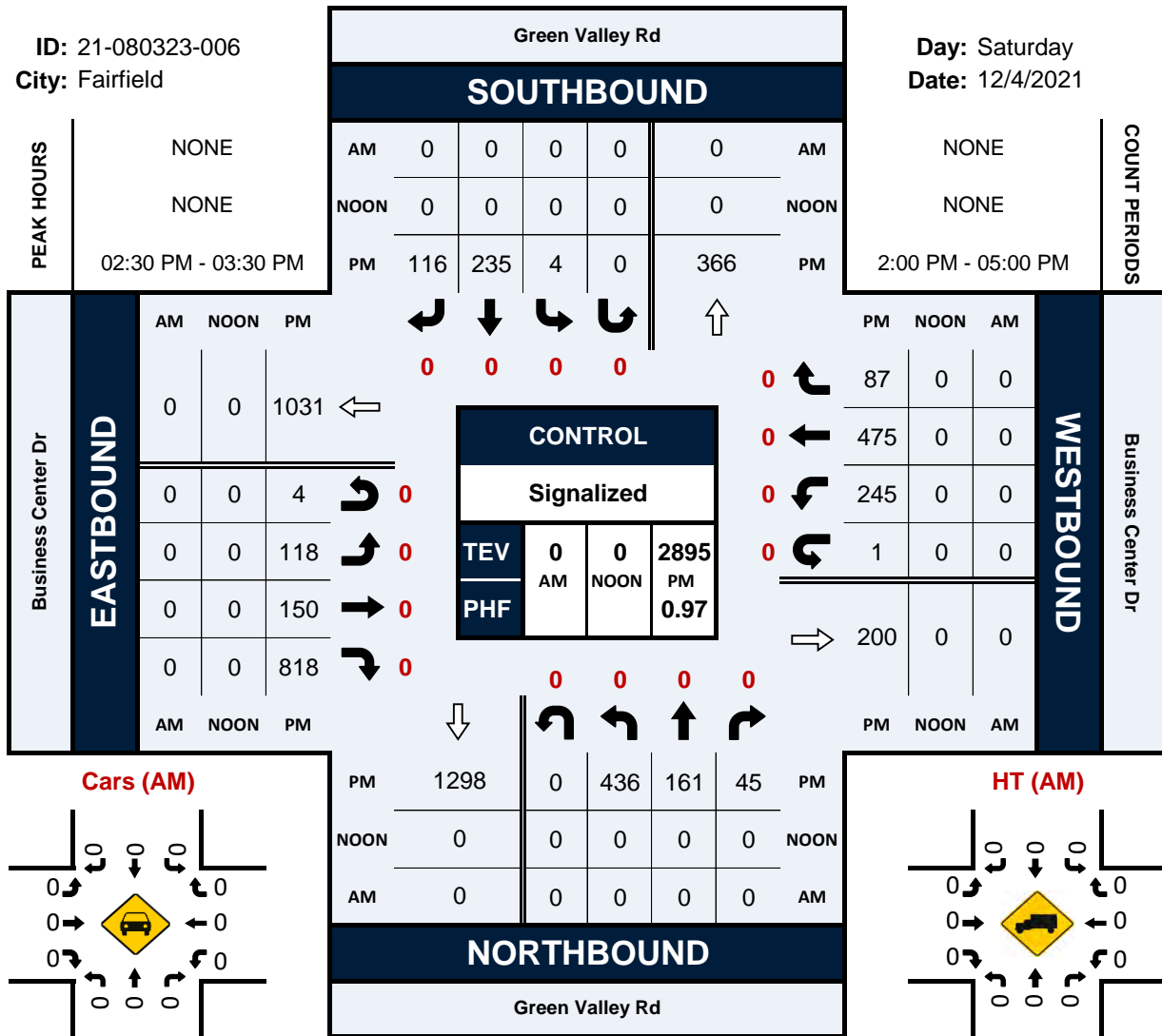
Prepared by National Data & Surveying Services

Green Valley Rd & Business Center Dr

Peak Hour Turning Movement Count

ID: 21-080323-006
City: Fairfield

Day: Saturday
Date: 12/4/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Green Valley Rd & Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-006
 Date: 12/4/2021

Data - Total

NS/EW Streets:	Green Valley Rd				Green Valley Rd				Business Center Dr				Business Center Dr				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	72	51	14	0	2	72	25	0	20	39	213	1	72	143	30	0	754
2:15 PM	96	45	11	0	0	47	15	0	27	29	172	1	65	153	19	0	680
2:30 PM	100	32	13	0	1	75	25	0	29	24	212	0	57	121	15	1	705
2:45 PM	123	39	14	0	2	44	32	0	30	43	207	2	63	120	24	0	743
3:00 PM	95	43	5	0	1	65	33	0	24	47	197	1	63	115	25	0	714
3:15 PM	118	47	13	0	0	51	26	0	35	36	202	1	62	119	23	0	733
3:30 PM	74	44	19	0	1	70	30	0	28	33	189	0	55	126	15	0	684
3:45 PM	103	41	4	0	1	58	30	0	22	34	198	2	59	104	20	0	676
4:00 PM	79	46	6	0	1	87	41	0	37	32	192	0	50	86	17	1	675
4:15 PM	81	46	6	0	0	43	35	0	27	31	171	0	72	114	21	0	647
4:30 PM	84	51	7	0	2	71	31	0	27	35	191	1	55	92	19	0	666
4:45 PM	78	39	5	0	0	63	32	0	39	39	199	0	75	114	19	0	702
TOTAL VOLUMES:	1103	524	117	0	11	746	355	0	345	422	2343	9	748	1407	247	2	8379
APPROACH %'s:	63.25%	30.05%	6.71%	0.00%	0.99%	67.09%	31.92%	0.00%	11.06%	13.53%	75.12%	0.29%	31.11%	58.53%	10.27%	0.08%	
PEAK HR:	02:30 PM - 03:30 PM																
PEAK HR VOL:	436	161	45	0	4	235	116	0	118	150	818	4	245	475	87	1	2895
PEAK HR FACTOR:	0.886	0.856	0.804	0.000	0.500	0.783	0.879	0.000	0.843	0.798	0.965	0.500	0.972	0.981	0.870	0.250	0.974
	0.902				0.879				0.966				0.976				

National Data & Surveying Services Intersection Turning Movement Count

Location: Green Valley Rd & Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-006
 Date: 12/4/2021

Data - Cars

NS/EW Streets:	Green Valley Rd				Green Valley Rd				Business Center Dr				Business Center Dr				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	72	51	14	0	2	72	25	0	20	39	212	1	72	143	28	0	751
2:15 PM	95	44	11	0	0	47	15	0	27	28	172	1	60	152	19	0	671
2:30 PM	99	32	12	0	1	75	24	0	29	24	211	0	54	121	15	1	698
2:45 PM	123	39	14	0	2	43	32	0	30	43	207	1	62	120	24	0	740
3:00 PM	95	43	5	0	1	64	33	0	24	47	196	1	58	114	25	0	706
3:15 PM	117	47	13	0	0	51	26	0	35	34	201	1	60	118	23	0	726
3:30 PM	74	44	18	0	1	69	30	0	28	33	187	0	53	126	15	0	678
3:45 PM	103	41	4	0	1	58	30	0	22	34	197	2	55	104	20	0	671
4:00 PM	78	46	5	0	1	84	41	0	37	32	190	0	46	86	17	1	664
4:15 PM	81	46	6	0	0	42	35	0	27	30	171	0	69	113	21	0	641
4:30 PM	83	51	6	0	2	70	31	0	27	35	191	1	51	92	19	0	659
4:45 PM	78	39	4	0	0	62	32	0	39	39	199	0	71	113	19	0	695
TOTAL VOLUMES:	1098	523	112	0	11	737	354	0	345	418	2334	8	711	1402	245	2	8300
APPROACH %'s:	63.36%	30.18%	6.46%	0.00%	1.00%	66.88%	32.12%	0.00%	11.11%	13.46%	75.17%	0.26%	30.13%	59.41%	10.38%	0.08%	
PEAK HR:	02:30 PM - 03:30 PM																
PEAK HR VOL:	434	161	44	0	4	233	115	0	118	148	815	3	234	473	87	1	2870
PEAK HR FACTOR:	0.882	0.856	0.786	0.000	0.500	0.777	0.871	0.000	0.843	0.787	0.966	0.750	0.944	0.977	0.870	0.250	0.970
	0.903				0.880				0.964				0.965				

National Data & Surveying Services Intersection Turning Movement Count

Location: Green Valley Rd & Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-006
 Date: 12/4/2021

Data - HT

NS/EW Streets:	Green Valley Rd				Green Valley Rd				Business Center Dr				Business Center Dr				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3
2:15 PM	1	1	0	0	0	0	0	0	0	1	0	0	5	1	0	0	9
2:30 PM	1	0	1	0	0	0	1	0	0	0	1	0	3	0	0	0	7
2:45 PM	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	3
3:00 PM	0	0	0	0	0	1	0	0	0	0	1	0	5	1	0	0	8
3:15 PM	1	0	0	0	0	0	0	0	0	2	1	0	2	1	0	0	7
3:30 PM	0	0	1	0	0	1	0	0	0	0	2	0	2	0	0	0	6
3:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	5
4:00 PM	1	0	1	0	0	3	0	0	0	0	2	0	4	0	0	0	11
4:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	3	1	0	0	6
4:30 PM	1	0	1	0	0	1	0	0	0	0	0	0	4	0	0	0	7
4:45 PM	0	0	1	0	0	1	0	0	0	0	0	0	4	1	0	0	7
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	5	1	5	0	0	9	1	0	0	4	9	1	37	5	2	0	79
	45.45%	9.09%	45.45%	0.00%	0.00%	90.00%	10.00%	0.00%	0.00%	28.57%	64.29%	7.14%	84.09%	11.36%	4.55%	0.00%	
PEAK HR :	02:30 PM - 03:30 PM																TOTAL
PEAK HR VOL :	2	0	1	0	0	2	1	0	0	2	3	1	11	2	0	0	25
PEAK HR FACTOR :	0.500	0.000	0.250	0.000	0.000	0.500	0.250	0.000	0.000	0.250	0.750	0.250	0.550	0.500	0.000	0.000	0.781
	0.375				0.750				0.500				0.542				

National Data & Surveying Services Intersection Turning Movement Count

Location: Green Valley Rd & Business Center Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-006
 Date: 12/4/2021

Data - Bikes

NS/EW Streets:	Green Valley Rd				Green Valley Rd				Business Center Dr				Business Center Dr					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
2:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
3:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	4
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	4	0	0	0	2	1	0	1	1	0	0	2	0	3	0	14	
	0.00%	100.00%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	50.00%	50.00%	0.00%	0.00%	40.00%	0.00%	60.00%	0.00%		
PEAK HR :	02:30 PM - 03:30 PM																TOTAL	
PEAK HR VOL :	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.375	
	0.500												0.250					

National Data & Surveying Services Intersection Turning Movement Count

Location: Green Valley Rd & Business Center Dr
City: Fairfield

Project ID: 21-080323-006
Date: 12/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Green Valley Rd		Green Valley Rd		Business Center Dr		Business Center Dr		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
2:00 PM	0	0	0	0	0	0	0	1	1
2:15 PM	0	0	0	0	0	0	0	0	0
2:30 PM	0	2	0	0	0	0	1	2	5
2:45 PM	0	1	1	0	0	0	0	4	6
3:00 PM	0	0	1	0	1	0	0	0	2
3:15 PM	5	0	0	0	0	0	0	0	5
3:30 PM	0	0	0	0	0	0	2	0	2
3:45 PM	0	0	0	0	0	0	0	1	1
4:00 PM	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	1	5	0	6
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	1
TOTAL VOLUMES :	EB 5	WB 3	EB 2	WB 1	NB 1	SB 1	NB 8	SB 9	TOTAL 30
APPROACH %'s :	62.50%	37.50%	66.67%	33.33%	50.00%	50.00%	47.06%	52.94%	
PEAK HR :	02:30 PM - 03:30 PM								TOTAL
PEAK HR VOL :	5	3	2	0	1	0	1	6	18
PEAK HR FACTOR :	0.250	0.375	0.500	0.500	0.250	0.250	0.250	0.375	0.750
	0.400				0.250		0.438		

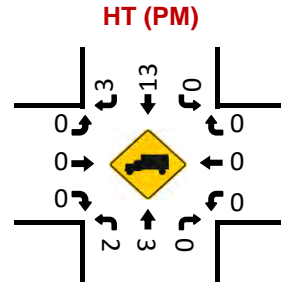
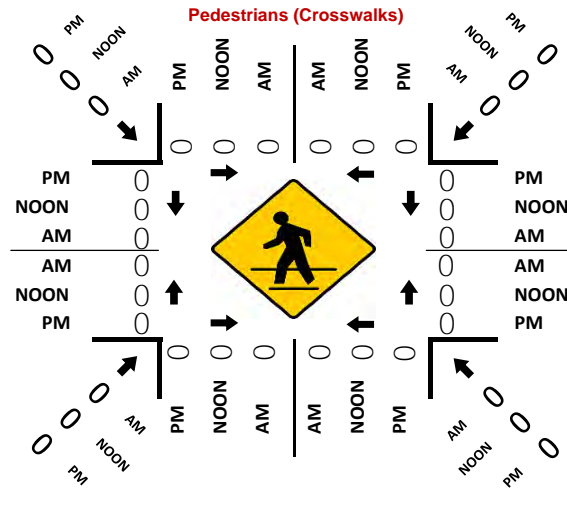
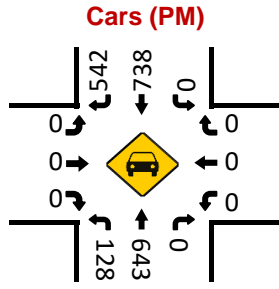
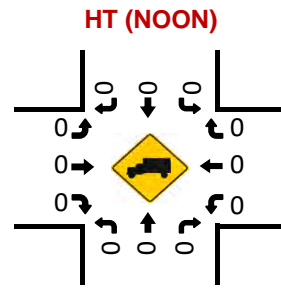
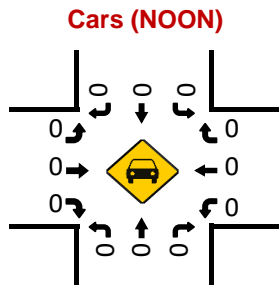
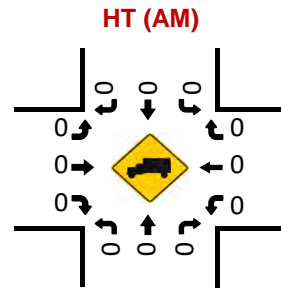
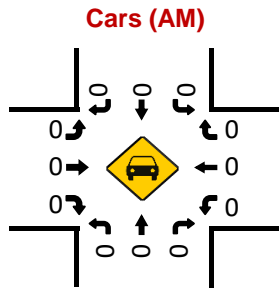
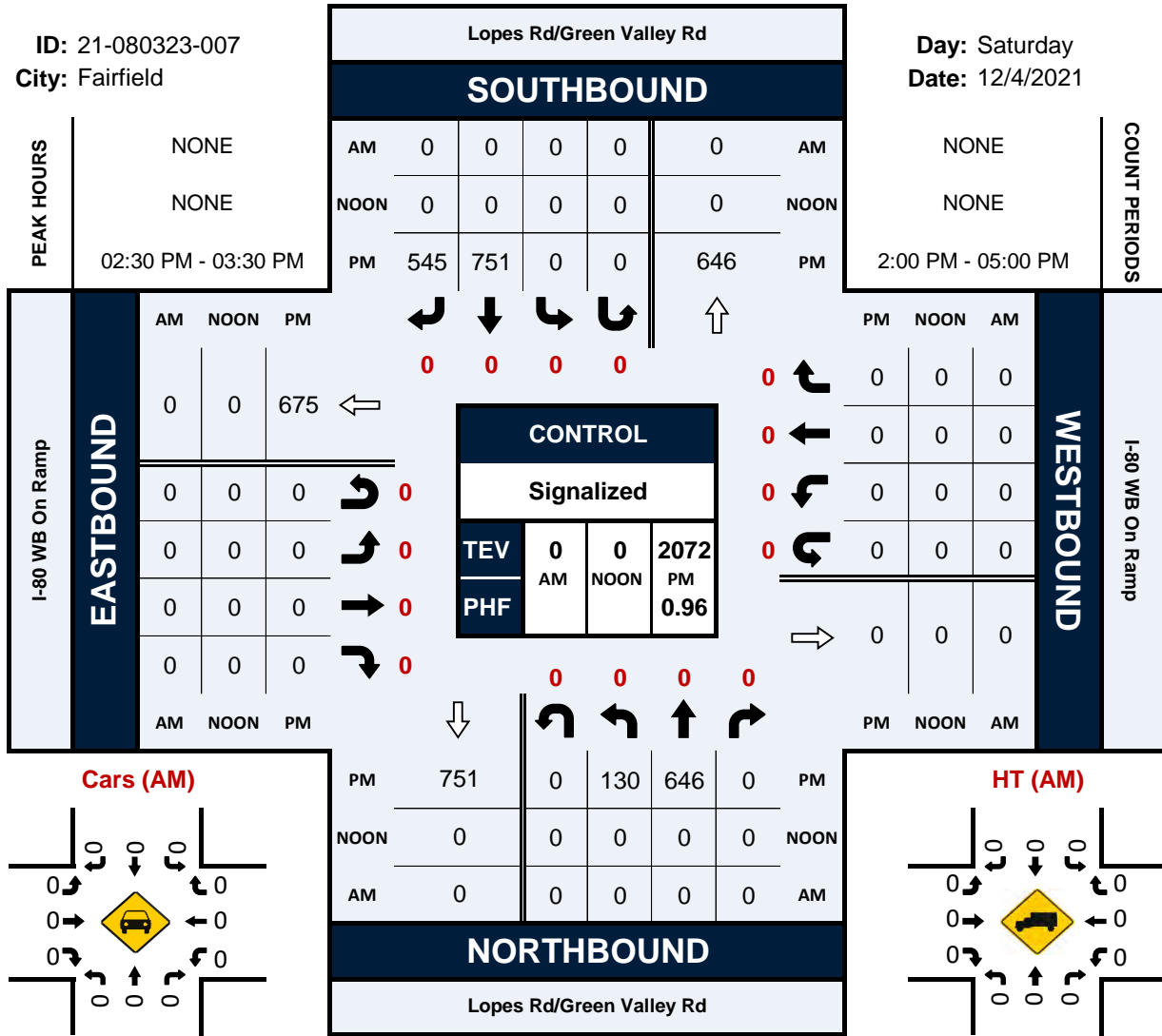
Prepared by National Data & Surveying Services

Lopes Rd/Green Valley Rd & I-80 WB On Ramp

Peak Hour Turning Movement Count

ID: 21-080323-007
City: Fairfield

Day: Saturday
Date: 12/4/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Lopes Rd/Green Valley Rd & I-80 WB On Ramp
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-007
 Date: 12/4/2021

Data - Total

NS/EW Streets:	Lopes Rd/Green Valley Rd				Lopes Rd/Green Valley Rd				I-80 WB On Ramp				I-80 WB On Ramp				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	535
2:15 PM	37	143	0	0	0	184	171	0	0	0	0	0	0	0	0	0	466
2:30 PM	43	160	0	0	0	191	145	0	0	0	0	0	0	0	0	0	539
2:45 PM	31	160	0	0	0	185	138	0	0	0	0	0	0	0	0	0	514
3:00 PM	29	162	0	0	0	189	126	0	0	0	0	0	0	0	0	0	506
3:15 PM	27	164	0	0	0	186	136	0	0	0	0	0	0	0	0	0	513
3:30 PM	38	133	0	0	0	198	110	0	0	0	0	0	0	0	0	0	479
3:45 PM	22	152	0	0	0	192	132	0	0	0	0	0	0	0	0	0	498
4:00 PM	22	127	0	0	0	196	128	0	0	0	0	0	0	0	0	0	473
4:15 PM	30	134	0	0	0	182	106	0	0	0	0	0	0	0	0	0	452
4:30 PM	27	147	0	0	0	182	137	0	0	0	0	0	0	0	0	0	493
4:45 PM	25	117	0	0	0	202	128	0	0	0	0	0	0	0	0	0	472
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	363	1746	0	0	0	2253	1578	0	0	0	0	0	0	0	0	0	5940
	17.21%	82.79%	0.00%	0.00%	0.00%	58.81%	41.19%	0.00%									
PEAK HR :	02:30 PM - 03:30 PM																
PEAK HR VOL :	130	646	0	0	0	751	545	0	0	0	0	0	0	0	0	0	2072
PEAK HR FACTOR :	0.756	0.985	0.000	0.000	0.000	0.983	0.940	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.961
	0.956				0.964												

National Data & Surveying Services Intersection Turning Movement Count

Location: Lopes Rd/Green Valley Rd & I-80 WB On Ramp
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-007
 Date: 12/4/2021

Data - Cars

NS/EW Streets:	Lopes Rd/Green Valley Rd				Lopes Rd/Green Valley Rd				I-80 WB On Ramp				I-80 WB On Ramp				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	35	142	0	0	0	182	170	0	0	0	0	0	0	0	0	0	529
2:15 PM	32	146	0	0	0	162	120	0	0	0	0	0	0	0	0	0	460
2:30 PM	41	158	0	0	0	189	143	0	0	0	0	0	0	0	0	0	531
2:45 PM	31	160	0	0	0	183	138	0	0	0	0	0	0	0	0	0	512
3:00 PM	29	161	0	0	0	184	125	0	0	0	0	0	0	0	0	0	499
3:15 PM	27	164	0	0	0	182	136	0	0	0	0	0	0	0	0	0	509
3:30 PM	38	132	0	0	0	194	109	0	0	0	0	0	0	0	0	0	473
3:45 PM	21	152	0	0	0	188	131	0	0	0	0	0	0	0	0	0	492
4:00 PM	21	125	0	0	0	189	126	0	0	0	0	0	0	0	0	0	461
4:15 PM	30	134	0	0	0	178	106	0	0	0	0	0	0	0	0	0	448
4:30 PM	25	145	0	0	0	179	135	0	0	0	0	0	0	0	0	0	484
4:45 PM	25	115	0	0	0	199	126	0	0	0	0	0	0	0	0	0	465
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH % 's :	355	1734	0	0	0	2209	1565	0	0	0	0	0	0	0	0	0	5863
	16.99%	83.01%	0.00%	0.00%	0.00%	58.53%	41.47%	0.00%									
PEAK HR :	02:30 PM - 03:30 PM																TOTAL
PEAK HR VOL :	128	643	0	0	0	738	542	0	0	0	0	0	0	0	0	0	2051
PEAK HR FACTOR :	0.780	0.980	0.000	0.000	0.000	0.976	0.948	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.966
	0.969				0.964												

National Data & Surveying Services Intersection Turning Movement Count

Location: Lopes Rd/Green Valley Rd & I-80 WB On Ramp
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-007
 Date: 12/4/2021

Data - HT

NS/EW Streets:	Lopes Rd/Green Valley Rd				Lopes Rd/Green Valley Rd				I-80 WB On Ramp				I-80 WB On Ramp				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	2	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	6
2:15 PM	0	1	0	0	0	4	1	0	0	0	0	0	0	0	0	0	6
2:30 PM	2	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	8
2:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
3:00 PM	0	1	0	0	0	5	1	0	0	0	0	0	0	0	0	0	7
3:15 PM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
3:30 PM	0	1	0	0	0	4	1	0	0	0	0	0	0	0	0	0	6
3:45 PM	1	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	6
4:00 PM	1	2	0	0	0	7	2	0	0	0	0	0	0	0	0	0	12
4:15 PM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	2	2	0	0	0	3	2	0	0	0	0	0	0	0	0	0	9
4:45 PM	0	2	0	0	0	3	2	0	0	0	0	0	0	0	0	0	7
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	8	12	0	0	0	44	13	0	0	0	0	0	0	0	0	0	77
	40.00%	60.00%	0.00%	0.00%	0.00%	77.19%	22.81%	0.00%									
PEAK HR :	02:30 PM - 03:30 PM																
PEAK HR VOL :	2	3	0	0	0	13	3	0	0	0	0	0	0	0	0	0	21
PEAK HR FACTOR :	0.250	0.375	0.000	0.000	0.000	0.650	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.656
	0.313				0.667												

National Data & Surveying Services Intersection Turning Movement Count

Location: Lopes Rd/Green Valley Rd & I-80 WB On Ramp
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-007
 Date: 12/4/2021

Data - Bikes

NS/EW Streets:	Lopes Rd/Green Valley Rd				Lopes Rd/Green Valley Rd				I-80 WB On Ramp				I-80 WB On Ramp				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	3
4:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	3	0	0	0	4	0	0	1	0	1	0	0	0	0	0	9
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	0	0	0	0	
PEAK HR :	02:30 PM - 03:30 PM																
PEAK HR VOL :	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
	0.500				0.250												

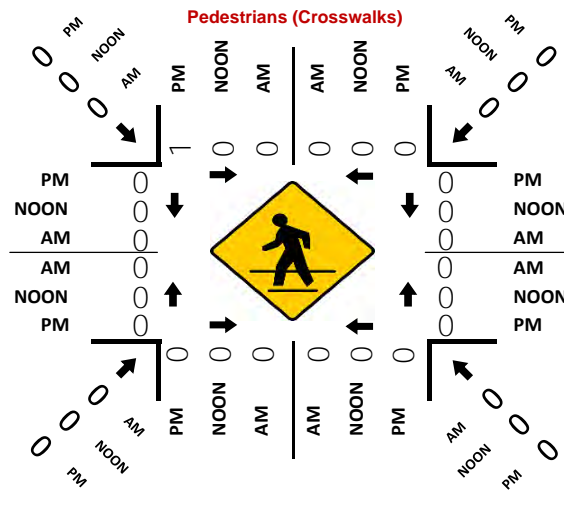
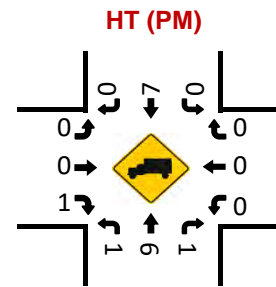
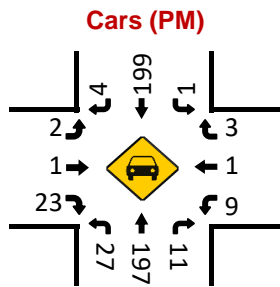
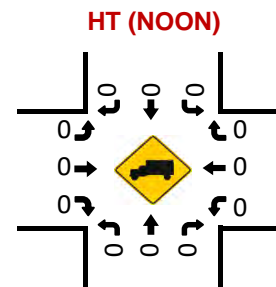
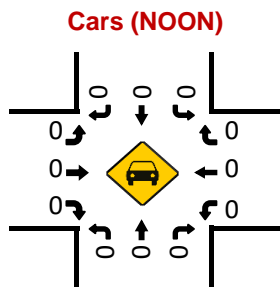
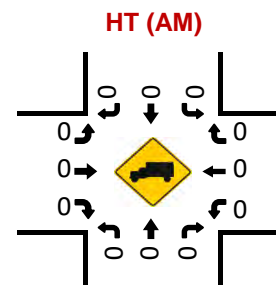
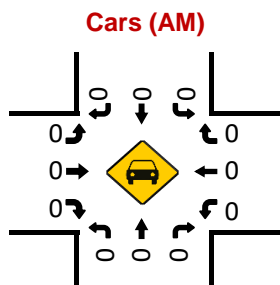
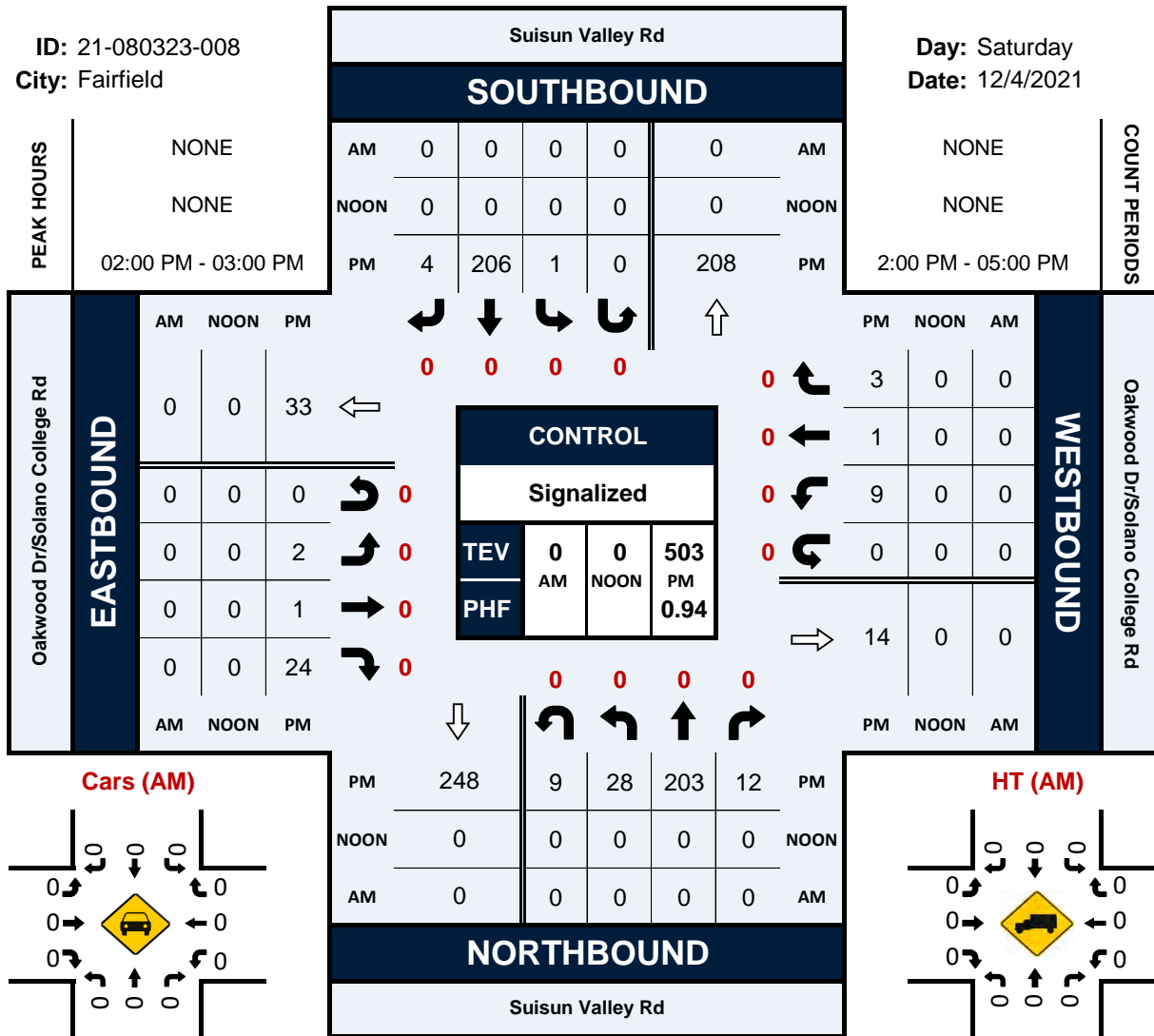
Prepared by National Data & Surveying Services

Suisun Valley Rd & Oakwood Dr/Solano College Rd

Peak Hour Turning Movement Count

ID: 21-080323-008
City: Fairfield

Day: Saturday
Date: 12/4/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Oakwood Dr/Solano College Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-008
 Date: 12/4/2021

Data - Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Oakwood Dr/Solano College Rd				Oakwood Dr/Solano College Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	4	56	2	1	0	56	1	0	0	0	8	0	2	0	2	0	132
2:15 PM	9	39	4	2	0	45	0	0	1	0	4	0	4	0	0	0	108
2:30 PM	7	52	3	6	1	47	2	0	1	0	7	0	2	0	1	0	129
2:45 PM	8	56	3	0	0	58	1	0	0	1	5	0	1	1	0	0	134
3:00 PM	1	45	5	1	1	56	2	2	1	0	5	0	0	2	1	0	122
3:15 PM	4	42	6	3	0	29	4	0	1	0	3	0	4	0	0	0	96
3:30 PM	14	55	4	2	1	41	2	0	0	1	7	0	1	0	0	0	128
3:45 PM	2	31	3	4	0	36	0	0	2	0	7	0	2	1	0	0	88
4:00 PM	5	44	0	4	1	36	4	0	0	0	2	0	3	0	1	0	100
4:15 PM	10	32	3	3	0	52	1	0	1	0	8	0	2	1	2	0	115
4:30 PM	9	40	2	1	0	57	0	0	3	0	4	0	3	0	0	0	119
4:45 PM	10	32	2	5	0	52	6	1	0	0	6	0	0	0	0	0	114
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	83	524	37	32	4	565	23	3	10	2	66	0	24	5	7	0	1385
	12.28%	77.51%	5.47%	4.73%	0.67%	94.96%	3.87%	0.50%	12.82%	2.56%	84.62%	0.00%	66.67%	13.89%	19.44%	0.00%	
PEAK HR:	02:00 PM - 03:00 PM																TOTAL
PEAK HR VOL:	28	203	12	9	1	206	4	0	2	1	24	0	9	1	3	0	503
PEAK HR FACTOR:	0.778	0.906	0.750	0.375	0.250	0.888	0.500	0.000	0.500	0.250	0.750	0.000	0.563	0.250	0.375	0.000	0.938
	0.926				0.894				0.844				0.813				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Oakwood Dr/Solano College Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-008
 Date: 12/4/2021

Data - Cars

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Oakwood Dr/Solano College Rd				Oakwood Dr/Solano College Rd				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	4	56	1	1	0	56	1	0	0	0	8	0	2	0	2	0	131
2:15 PM	9	38	4	2	0	43	0	0	1	0	4	0	4	0	0	0	105
2:30 PM	7	52	3	6	1	43	2	0	1	0	7	0	2	0	1	0	125
2:45 PM	7	51	3	0	0	57	1	0	0	1	4	0	1	1	0	0	126
3:00 PM	1	45	4	1	1	56	2	2	1	0	5	0	0	2	1	0	121
3:15 PM	4	42	6	3	0	28	4	0	1	0	3	0	4	0	0	0	95
3:30 PM	14	52	3	2	1	38	2	0	0	1	7	0	1	0	0	0	121
3:45 PM	2	29	3	4	0	36	0	0	2	0	7	0	2	1	0	0	86
4:00 PM	5	44	0	4	1	35	4	0	0	0	2	0	3	0	1	0	99
4:15 PM	10	32	2	3	0	50	1	0	1	0	8	0	2	1	2	0	112
4:30 PM	9	40	2	1	0	54	0	0	3	0	4	0	3	0	0	0	116
4:45 PM	10	32	2	5	0	51	6	1	0	0	6	0	0	0	0	0	113
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	12.42%	77.73%	5.00%	4.85%	0.69%	94.80%	3.99%	0.52%	12.99%	2.60%	84.42%	0.00%	66.67%	13.89%	19.44%	0.00%	1350
PEAK HR:	02:00 PM - 03:00 PM																TOTAL
PEAK HR VOL:	27	197	11	9	1	199	4	0	2	1	23	0	9	1	3	0	487
PEAK HR FACTOR:	0.750	0.879	0.688	0.375	0.250	0.873	0.500	0.000	0.500	0.250	0.719	0.000	0.563	0.250	0.375	0.000	0.929
	0.897				0.879				0.813				0.813				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Oakwood Dr/Solano College Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-008
 Date: 12/4/2021

Data - HT

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Oakwood Dr/Solano College Rd				Oakwood Dr/Solano College Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
2:30 PM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
2:45 PM	1	5	0	0	0	1	0	0	0	0	0	1	0	0	0	0	8
3:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	3	1	0	0	3	0	0	0	0	0	0	0	0	0	0	7
3:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	1	11	4	0	0	18	0	0	0	0	1	0	0	0	0	0	35
	6.25%	68.75%	25.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0	0	0	0	
PEAK HR:	02:00 PM - 03:00 PM																
PEAK HR VOL:	1	6	1	0	0	7	0	0	0	0	1	0	0	0	0	0	16
PEAK HR FACTOR:	0.250	0.300	0.250	0.000	0.000	0.438	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.500
	0.333				0.438				0.250								

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Oakwood Dr/Solano College Rd
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-008
 Date: 12/4/2021

Data - Bikes

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Oakwood Dr/Solano College Rd				Oakwood Dr/Solano College Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	3
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH % 's :	0	2	2	0	0	5	0	0	0	0	0	0	0	1	0	0	10
	0.00%	50.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	02:00 PM - 03:00 PM																TOTAL
PEAK HR VOL :	0	1	2	0	0	2	0	0	0	0	0	0	0	1	0	0	6
PEAK HR FACTOR :	0.000	0.250	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.500
	0.375				0.500								0.250				

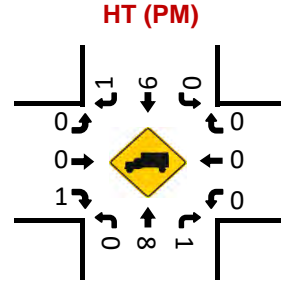
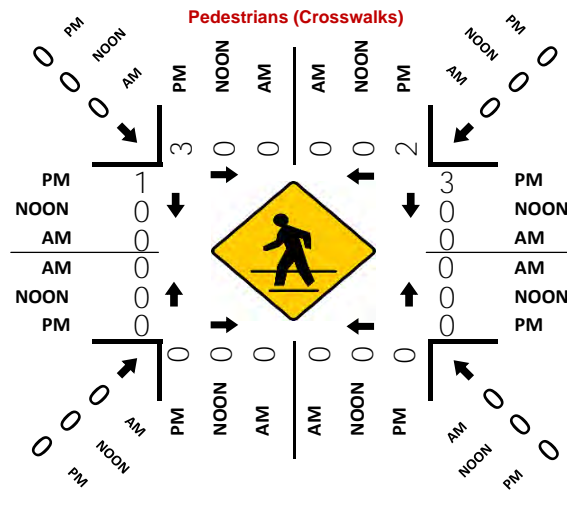
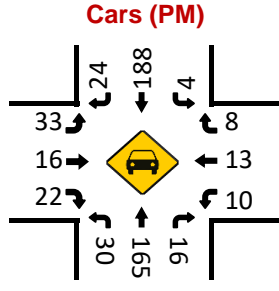
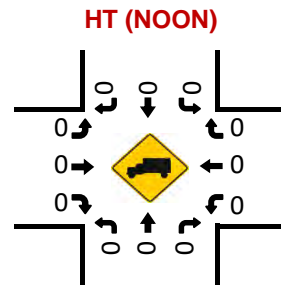
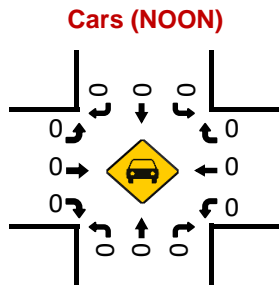
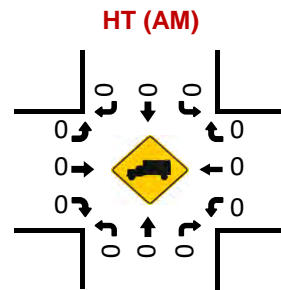
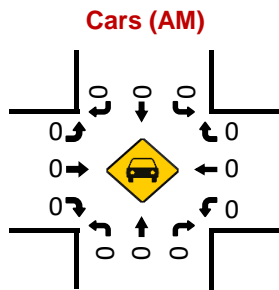
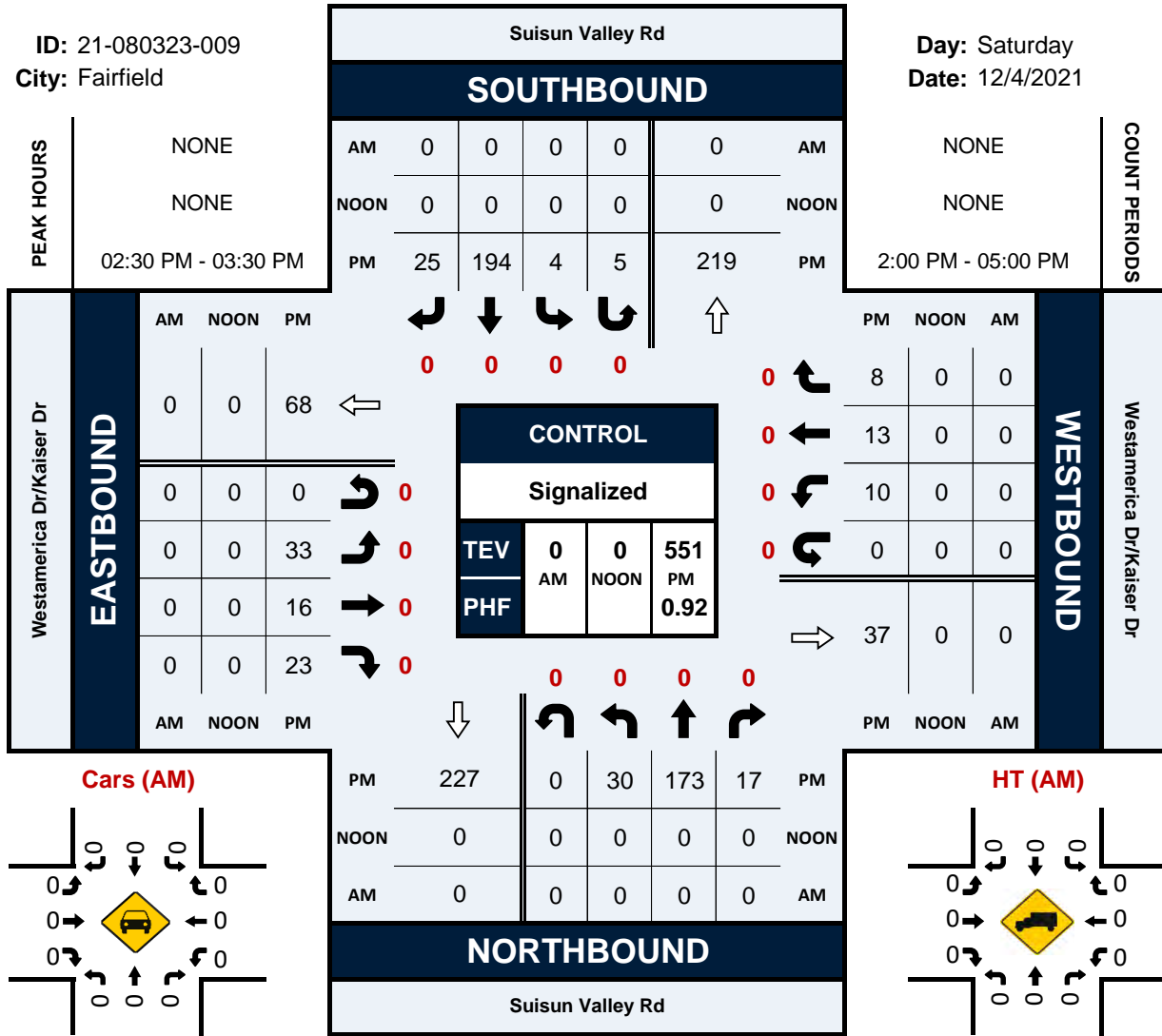
Prepared by National Data & Surveying Services

Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Peak Hour Turning Movement Count

ID: 21-080323-009
City: Fairfield

Day: Saturday
Date: 12/4/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Westamerica Dr/Kaiser Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-009
 Date: 12/4/2021

Data - Total

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Westamerica Dr/Kaiser Dr				Westamerica Dr/Kaiser Dr				TOTAL
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	10	45	5	0	0	50	8	0	7	1	3	0	2	3	1	1	136
2:15 PM	4	38	3	0	2	52	10	1	4	1	5	0	2	8	1	0	131
2:30 PM	10	42	7	0	2	56	5	2	6	4	4	0	3	6	3	0	150
2:45 PM	3	39	4	0	2	39	8	0	7	7	3	0	2	1	4	0	119
3:00 PM	6	46	3	0	0	51	6	2	14	2	10	0	3	4	1	0	148
3:15 PM	11	46	3	0	0	48	6	1	6	3	6	0	2	2	0	0	134
3:30 PM	4	47	5	0	0	35	2	1	7	4	7	0	3	3	1	1	120
3:45 PM	9	46	5	0	0	38	7	0	6	5	2	0	11	3	4	0	136
4:00 PM	5	43	7	1	1	44	5	0	7	1	6	0	7	4	4	0	135
4:15 PM	3	41	4	0	0	51	8	1	7	4	6	0	3	3	2	0	133
4:30 PM	7	36	3	0	3	44	9	1	10	1	3	0	0	5	5	0	127
4:45 PM	3	43	6	1	1	47	8	0	12	5	8	0	2	4	7	0	147
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	75	512	55	2	11	555	82	9	93	38	63	0	40	46	33	2	1616
APPROACH %'s:	11.65%	79.50%	8.54%	0.31%	1.67%	84.47%	12.48%	1.37%	47.94%	19.59%	32.47%	0.00%	33.06%	38.02%	27.27%	1.65%	
PEAK HR:	02:30 PM - 03:30 PM																
PEAK HR VOL:	30	173	17	0	4	194	25	5	33	16	23	0	10	13	8	0	551
PEAK HR FACTOR:	0.682	0.940	0.607	0.000	0.500	0.866	0.781	0.625	0.589	0.571	0.575	0.000	0.833	0.542	0.500	0.000	0.918
	0.917				0.877				0.692				0.646				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Westamerica Dr/Kaiser Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-009
 Date: 12/4/2021

Data - Cars

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Westamerica Dr/Kaiser Dr				Westamerica Dr/Kaiser Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	10	45	5	0	0	50	7	0	7	1	3	0	2	3	1	1	135
2:15 PM	4	34	3	0	2	50	10	1	4	1	5	0	1	8	1	0	124
2:30 PM	10	40	6	0	2	52	5	2	6	4	4	0	3	6	3	0	143
2:45 PM	3	37	4	0	2	39	8	0	7	7	3	0	2	1	4	0	117
3:00 PM	6	46	3	0	0	50	5	2	14	2	10	0	3	4	1	0	146
3:15 PM	11	42	3	0	0	47	6	1	6	3	5	0	2	2	0	0	128
3:30 PM	4	45	4	0	0	34	2	1	7	4	7	0	2	3	1	1	115
3:45 PM	9	46	5	0	0	37	7	0	6	5	2	0	11	3	4	0	135
4:00 PM	5	43	7	1	1	42	5	0	7	1	6	0	7	4	4	0	133
4:15 PM	3	40	4	0	0	49	8	1	7	4	6	0	3	3	2	0	130
4:30 PM	7	36	3	0	3	42	9	1	10	1	3	0	0	5	5	0	125
4:45 PM	3	43	5	1	1	46	7	0	12	5	8	0	2	4	7	0	144
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	75	497	52	2	11	538	79	9	93	38	62	0	38	46	33	2	1575
	11.98%	79.39%	8.31%	0.32%	1.73%	84.46%	12.40%	1.41%	48.19%	19.69%	32.12%	0.00%	31.93%	38.66%	27.73%	1.68%	
PEAK HR:	02:30 PM - 03:30 PM																TOTAL
PEAK HR VOL:	30	165	16	0	4	188	24	5	33	16	22	0	10	13	8	0	534
PEAK HR FACTOR:	0.682	0.897	0.667	0.000	0.500	0.904	0.750	0.625	0.589	0.571	0.550	0.000	0.833	0.542	0.500	0.000	0.914
	0.942				0.906				0.683				0.646				

National Data & Surveying Services Intersection Turning Movement Count

Location: Suisun Valley Rd & Westamerica Dr/Kaiser Dr
 City: Fairfield
 Control: Signalized

Project ID: 21-080323-009
 Date: 12/4/2021

Data - HT

NS/EW Streets:	Suisun Valley Rd				Suisun Valley Rd				Westamerica Dr/Kaiser Dr				Westamerica Dr/Kaiser Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
2:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	4	0	0	0	2	0	0	0	0	0	0	1	0	0	0	7
2:30 PM	0	2	1	0	0	4	0	0	0	0	0	0	0	0	0	0	7
2:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:00 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
3:15 PM	0	4	0	0	0	1	0	0	0	0	0	1	0	0	0	0	6
3:30 PM	0	2	1	0	0	1	0	0	0	0	0	0	1	0	0	0	5
3:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	3
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0.00%	83.33%	16.67%	0.00%	0.00%	85.00%	15.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%	41
PEAK HR :	02:30 PM - 03:30 PM																
PEAK HR VOL :	0	8	1	0	0	6	1	0	0	0	1	0	0	0	0	0	17
PEAK HR FACTOR :	0.000	0.500	0.250	0.000	0.000	0.375	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.607
	0.563				0.438				0.250								

National Data & Surveying Services **Intersection Turning** **Movement Count**

Location: Suisun Valley Rd & Westamerica Dr/Kaiser Dr
City: Fairfield

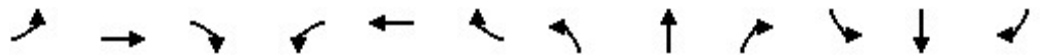
Project ID: 21-080323-009
Date: 12/4/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Suisun Valley Rd		Suisun Valley Rd		Westamerica Dr/Kaiser Dr		Westamerica Dr/Kaiser Dr		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
2:00 PM	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	1	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0
2:45 PM	1	0	0	0	0	0	0	1	2
3:00 PM	2	0	0	0	0	3	0	0	5
3:15 PM	0	2	0	0	0	0	0	0	2
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	1	1	0	0	1	1	0	0	4
4:30 PM	1	0	0	0	0	0	0	0	1
4:45 PM	1	0	0	0	0	0	2	0	3
TOTAL VOLUMES :	EB 6	WB 3	EB 1	WB 0	NB 1	SB 4	NB 2	SB 1	TOTAL 18
APPROACH %'s :	66.67%	33.33%	100.00%	0.00%	20.00%	80.00%	66.67%	33.33%	
PEAK HR :	02:30 PM - 03:30 PM								TOTAL
PEAK HR VOL :	3	2	0	0	0	3	0	1	9
PEAK HR FACTOR :	0.375	0.250				0.250		0.250	0.450
		0.625				0.250		0.250	

HCM 6th Signalized Intersection Summary
 1: Suisun Valley Rd & Rockville Rd

Existing PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	120	32	133	158	38	55	200	261	67	164	27
Future Volume (veh/h)	18	120	32	133	158	38	55	200	261	67	164	27
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	138	37	153	182	0	63	230	300	77	189	31
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	204	173	205	385		96	349	563	102	250	41
Arrive On Green	0.02	0.11	0.11	0.11	0.21	0.00	0.24	0.24	0.24	0.22	0.22	0.22
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	398	1453	1585	470	1154	189
Grp Volume(v), veh/h	21	138	37	153	182	0	293	0	300	297	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1850	0	1585	1813	0	0
Q Serve(g_s), s	0.7	4.1	1.2	4.8	4.9	0.0	8.2	0.0	8.7	8.8	0.0	0.0
Cycle Q Clear(g_c), s	0.7	4.1	1.2	4.8	4.9	0.0	8.2	0.0	8.7	8.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.22		1.00	0.26		0.10
Lane Grp Cap(c), veh/h	44	204	173	205	385		444	0	563	393	0	0
V/C Ratio(X)	0.48	0.68	0.21	0.75	0.47		0.66	0.00	0.53	0.76	0.00	0.00
Avail Cap(c_a), veh/h	464	1460	1237	1391	1460		1445	0	1419	943	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.7	24.7	23.4	24.7	20.1	0.0	19.8	0.0	14.8	21.1	0.0	0.0
Incr Delay (d2), s/veh	2.9	1.5	0.2	5.4	1.9	0.0	1.7	0.0	0.8	3.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	0.4	2.2	2.2	0.0	3.5	0.0	3.0	3.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	26.2	23.7	30.1	22.0	0.0	21.5	0.0	15.6	24.1	0.0	0.0
LnGrp LOS	C	C	C	C	C		C	A	B	C	A	A
Approach Vol, veh/h		196			335			593			297	
Approach Delay, s/veh		26.2			25.7			18.5			24.1	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.2	10.9		17.1	5.6	16.5		18.4				
Change Period (Y+Rc), s	4.6	4.6		4.6	* 4.2	4.6		4.6				
Max Green Setting (Gmax), s	45.0	45.0		30.0	* 15	45.0		45.0				
Max Q Clear Time (g_c+I1), s	6.8	6.1		10.8	2.7	6.9		10.7				
Green Ext Time (p_c), s	0.5	0.6		1.8	0.0	2.2		3.2				

Intersection Summary

HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Existing PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗	↖	↗	↖	↖	↗	↗	↖	↗	↖
Traffic Volume (veh/h)	8	1	68	46	2	0	81	480	10	7	330	3
Future Volume (veh/h)	8	1	68	46	2	0	81	480	10	7	330	3
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	2	72	79	0	0	86	511	0	12	351	3
Peak Hour Factor	0.94	0.60	0.94	0.60	0.60	0.60	0.94	0.94	0.60	0.60	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	26	125	271	0	0	143	1229	0	28	1015	9
Arrive On Green	0.08	0.08	0.08	0.08	0.00	0.00	0.08	0.35	0.00	0.02	0.28	0.28
Sat Flow, veh/h	1470	327	1585	3563	0	1585	1781	3554	1585	1781	3611	31
Grp Volume(v), veh/h	11	0	72	79	0	0	86	511	0	12	173	181
Grp Sat Flow(s),veh/h/ln1797	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1865	0
Q Serve(g_s), s	0.2	0.0	1.6	0.7	0.0	0.0	1.7	3.9	0.0	0.2	2.8	2.8
Cycle Q Clear(g_c), s	0.2	0.0	1.6	0.7	0.0	0.0	1.7	3.9	0.0	0.2	2.8	2.8
Prop In Lane	0.82		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	141	0	125	271	0	0	143	1229	0	28	499	524
V/C Ratio(X)	0.08	0.00	0.58	0.29	0.00	0.00	0.60	0.42	0.00	0.43	0.35	0.35
Avail Cap(c_a), veh/h	1010	0	891	4007	0	0	1002	3997	0	1502	1998	2097
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	15.8	15.5	0.0	0.0	15.8	8.9	0.0	17.3	10.2	10.2
Incr Delay (d2), s/veh	0.1	0.0	1.6	0.6	0.0	0.0	1.5	0.2	0.0	3.8	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/lr0.1	0.0	0.0	0.5	0.3	0.0	0.0	0.6	1.0	0.0	0.1	0.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.3	0.0	17.4	16.1	0.0	0.0	17.3	9.1	0.0	21.2	10.6	10.6
LnGrp LOS	B	A	B	B	A	A	B	A	A	C	B	B
Approach Vol, veh/h		83			79			597			366	
Approach Delay, s/veh		17.1			16.1			10.3			10.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s7.1	14.6			6.9	4.8	16.9		7.0				
Change Period (Y+Rc), s* 4.2	4.6			* 4.2	* 4.2	4.6		4.2				
Max Green Setting (Gmax)20	40.0			* 40	* 30	40.0		20.0				
Max Q Clear Time (g_c+13, s	4.8			2.7	2.2	5.9		3.6				
Green Ext Time (p_c), s	0.1	2.1		0.3	0.0	3.6		0.1				

Intersection Summary

HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

- User approved volume balancing among the lanes for turning movement.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
- Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Existing PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	171	104	36	56	38	33	49	399	37	27	353	88
Future Volume (veh/h)	171	104	36	56	38	33	49	399	37	27	353	88
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	192	117	40	63	43	37	55	448	42	30	397	99
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	268	92	112	229	175	101	1278	118	63	878	392
Arrive On Green	0.14	0.20	0.20	0.06	0.12	0.12	0.06	0.27	0.27	0.04	0.25	0.25
Sat Flow, veh/h	1781	1333	456	1781	1916	1467	1781	4755	440	1781	3554	1585
Grp Volume(v), veh/h	192	0	157	63	39	41	55	319	171	30	397	99
Grp Sat Flow(s),veh/h/ln	1781	0	1788	1781	1777	1606	1781	1702	1791	1781	1777	1585
Q Serve(g_s), s	4.2	0.0	3.1	1.4	0.8	0.9	1.2	3.1	3.1	0.7	3.8	2.0
Cycle Q Clear(g_c), s	4.2	0.0	3.1	1.4	0.8	0.9	1.2	3.1	3.1	0.7	3.8	2.0
Prop In Lane	1.00		0.25	1.00		0.91	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	257	0	359	112	212	192	101	915	481	63	878	392
V/C Ratio(X)	0.75	0.00	0.44	0.56	0.19	0.21	0.54	0.35	0.36	0.48	0.45	0.25
Avail Cap(c_a), veh/h	880	0	663	1100	658	595	880	2944	1549	880	3073	1371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	16.6	0.0	14.2	18.4	16.1	16.1	18.6	11.9	12.0	19.2	12.9	12.2
Incr Delay (d2), s/veh	4.3	0.0	0.8	4.4	0.4	0.5	4.4	0.3	0.5	2.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	1.1	0.6	0.3	0.3	0.5	0.9	1.0	0.3	1.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.9	0.0	15.0	22.8	16.5	16.6	23.0	12.2	12.5	21.2	13.4	12.6
LnGrp LOS	C	A	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		349			143			545			526	
Approach Delay, s/veh		18.3			19.3			13.4			13.7	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.6	15.5	6.7	12.6	6.5	14.6	10.0	9.3				
Change Period (Y+Rc), s	4.2	4.6	* 4.2	4.5	* 4.2	4.6	* 4.2	4.5				
Max Green Setting (Gmax), s	20	35.0	* 25	15.0	* 20	35.0	* 20	15.0				
Max Q Clear Time (g_c+1), s	12.5	5.1	3.4	5.1	3.2	5.8	6.2	2.9				
Green Ext Time (p_c), s	0.0	3.7	0.1	0.5	0.1	3.5	0.4	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.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
5: Suisun Valley Rd & Business Center Dr

Existing PM
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔			↔↔↔			↔↔			↔↔		↔
Traffic Volume (veh/h)	156	278	469	32	148	13	534	318	81	7	156	185
Future Volume (veh/h)	156	278	469	32	148	13	534	318	81	7	156	185
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	177	316	533	36	168	15	607	361	92	8	177	210
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	1143	532	160	1457	127	698	1010	254	35	595	266
Arrive On Green	0.08	0.34	0.34	0.05	0.30	0.30	0.20	0.36	0.36	0.01	0.17	0.17
Sat Flow, veh/h	3456	3404	1585	3456	4782	418	3456	2812	708	3456	3554	1585
Grp Volume(v), veh/h	177	316	533	36	119	64	607	226	227	8	177	210
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1795	1728	1777	1743	1728	1777	1585
Q Serve(g_s), s	4.4	6.1	30.0	0.9	2.2	2.3	15.2	8.4	8.6	0.2	3.9	11.4
Cycle Q Clear(g_c), s	4.4	6.1	30.0	0.9	2.2	2.3	15.2	8.4	8.6	0.2	3.9	11.4
Prop In Lane	1.00		1.00	1.00		0.23	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	267	1143	532	160	1037	547	698	638	626	35	595	266
V/C Ratio(X)	0.66	0.28	1.00	0.23	0.11	0.12	0.87	0.35	0.36	0.23	0.30	0.79
Avail Cap(c_a), veh/h	774	1143	532	774	1143	603	774	638	626	774	994	444
HCM Platoon Ratio	1.00	1.00	1.00	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	40.1	21.7	29.7	41.1	22.4	22.4	34.5	21.0	21.1	43.9	32.6	35.7
Incr Delay (d2), s/veh	3.4	0.2	39.3	0.9	0.1	0.1	10.1	0.4	0.4	4.0	0.3	6.3
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	1.9	2.3	16.3	0.4	0.9	0.9	7.0	3.3	3.3	0.1	1.6	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.4	21.9	69.0	41.9	22.4	22.5	44.6	21.4	21.5	47.8	32.9	42.0
LnGrp LOS	D	C	F	D	C	C	D	C	C	D	C	D
Approach Vol, veh/h		1026			219			1060			395	
Approach Delay, s/veh		50.1			25.7			34.7			38.0	
Approach LOS		D			C			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.1	38.0	9.3	35.9	23.2	20.9	12.1	33.1				
Change Period (Y+Rc), s	5.2	5.9	* 5.2	5.9	* 5.2	5.9	* 5.2	5.9				
Max Green Setting (Gmax), s	20	25.0	* 20	30.0	* 20	25.0	* 20	30.0				
Max Q Clear Time (g_c+1), s	11.2	10.6	2.9	32.0	17.2	13.4	6.4	4.3				
Green Ext Time (p_c), s	0.0	2.6	0.1	0.0	0.8	1.6	0.5	1.2				

Intersection Summary

HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection

Intersection Delay, s/veh 23.5

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗		↗					↖↗	↖↗			↖↗	
Traffic Vol, veh/h	186	0	293	0	0	0	2	159	565	0	1	427	46
Future Vol, veh/h	186	0	293	0	0	0	2	159	565	0	1	427	46
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	216	0	341	0	0	0	2	185	657	0	1	497	53
Number of Lanes	2	0	1	0	0	0	0	1	2	0	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	2	3	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	14.8	27.1	26.7
HCM LOS	B	D	D

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	0%	100%	82%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	161	283	283	93	93	293	215	260
LT Vol	161	0	0	93	93	0	1	0
Through Vol	0	283	283	0	0	0	214	214
RT Vol	0	0	0	0	0	293	0	46
Lane Flow Rate	187	328	328	108	108	341	249	302
Geometry Grp	8	8	8	7	7	7	8	8
Degree of Util (X)	0.442	0.73	0.73	0.261	0.261	0.539	0.595	0.709
Departure Headway (Hd)	8.509	7.997	7.997	8.697	8.697	5.694	8.591	8.461
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	423	450	450	413	413	630	419	425
Service Time	6.282	5.769	5.769	6.456	6.456	3.452	6.378	6.248
HCM Lane V/C Ratio	0.442	0.729	0.729	0.262	0.262	0.541	0.594	0.711
HCM Control Delay	17.9	29.7	29.7	14.5	14.5	15	23.3	29.5
HCM Lane LOS	C	D	D	B	B	B	C	D
HCM 95th-tile Q	2.2	5.8	5.8	1	1	3.2	3.7	5.4

HCM 6th Signalized Intersection Summary
7: Pitman Rd & I-80 EB Off/I-80 EB On

Existing PM
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗					↕	↗	↗↘	↕	
Traffic Volume (veh/h)	315	1	356	0	0	0	0	409	453	211	509	0
Future Volume (veh/h)	315	1	356	0	0	0	0	409	453	211	509	0
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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	342	1	387				0	445	492	229	553	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	502	1	448				0	627	531	355	974	0
Arrive On Green	0.28	0.28	0.28				0.00	0.34	0.34	0.10	0.52	0.00
Sat Flow, veh/h	1776	5	1585				0	1870	1585	3456	1870	0
Grp Volume(v), veh/h	343	0	387				0	445	492	229	553	0
Grp Sat Flow(s),veh/h/ln	1782	0	1585				0	1870	1585	1728	1870	0
Q Serve(g_s), s	7.7	0.0	10.4				0.0	9.3	13.4	2.8	9.0	0.0
Cycle Q Clear(g_c), s	7.7	0.0	10.4				0.0	9.3	13.4	2.8	9.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	504	0	448				0	627	531	355	974	0
V/C Ratio(X)	0.68	0.00	0.86				0.00	0.71	0.93	0.65	0.57	0.00
Avail Cap(c_a), veh/h	1194	0	1063				0	627	531	1236	974	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.3	0.0	15.2				0.0	13.0	14.3	19.3	7.3	0.0
Incr Delay (d2), s/veh	0.6	0.0	2.0				0.0	3.2	22.0	0.7	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
%ile BackOfQ(50%),veh/ln	2.5	0.0	3.2				0.0	3.4	6.8	1.0	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	0.0	17.2				0.0	16.2	36.4	20.0	7.8	0.0
LnGrp LOS	B	A	B				A	B	D	C	A	A
Approach Vol, veh/h		730						937			782	
Approach Delay, s/veh		16.1						26.8			11.4	
Approach LOS		B						C			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		27.9			8.3	19.6		16.9				
Change Period (Y+Rc), s		4.6			3.7	4.6		4.2				
Max Green Setting (Gmax), s		15.0			16.0	15.0		30.0				
Max Q Clear Time (g_c+I1), s		11.0			4.8	15.4		12.4				
Green Ext Time (p_c), s		0.3			0.0	0.0		0.3				

Intersection Summary

HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Notes

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

HCM 6th Signalized Intersection Summary
8: Green Valley Rd & Business Center Dr

Existing PM
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗		↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	132	178	700	384	435	109	388	261	85	4	282	112
Future Volume (veh/h)	132	178	700	384	435	109	388	261	85	4	282	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		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	185	729	322	562	114	404	272	89	4	294	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	463	486	1191	437	741	150	401	961	428	9	399	155
Arrive On Green	0.26	0.26	0.26	0.25	0.25	0.25	0.12	0.27	0.27	0.01	0.16	0.16
Sat Flow, veh/h	1781	1870	3170	1781	3020	611	3456	3554	1585	1781	2500	973
Grp Volume(v), veh/h	138	185	729	322	347	329	404	272	89	4	207	204
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1760	1728	1777	1585	1781	1777	1695
Q Serve(g_s), s	5.8	7.6	17.5	15.6	16.2	16.3	10.9	5.7	4.1	0.2	10.4	10.8
Cycle Q Clear(g_c), s	5.8	7.6	17.5	15.6	16.2	16.3	10.9	5.7	4.1	0.2	10.4	10.8
Prop In Lane	1.00		1.00	1.00		0.35	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	463	486	1191	437	459	432	401	961	428	9	284	270
V/C Ratio(X)	0.30	0.38	0.61	0.74	0.76	0.76	1.01	0.28	0.21	0.43	0.73	0.75
Avail Cap(c_a), veh/h	853	896	1887	702	737	694	401	1173	523	95	624	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	28.6	23.8	32.6	32.8	32.9	41.5	27.1	26.5	46.6	37.5	37.7
Incr Delay (d2), s/veh	0.4	0.5	0.5	2.4	2.6	2.8	46.8	0.2	0.2	27.7	3.6	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.4	6.2	6.7	7.3	6.9	7.1	2.3	1.5	0.2	4.6	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.3	29.1	24.3	35.1	35.4	35.7	88.3	27.2	26.7	74.3	41.2	41.9
LnGrp LOS	C	C	C	D	D	D	F	C	C	E	D	D
Approach Vol, veh/h		1052			998			765			415	
Approach Delay, s/veh		25.6			35.4			59.4			41.9	
Approach LOS		C			D			E			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	30.8		29.5	15.6	20.4		28.4				
Change Period (Y+Rc), s	4.7	5.4		5.1	* 4.7	5.4		5.4				
Max Green Setting (Gmax), s	5	31.0		45.0	* 11	33.0		37.0				
Max Q Clear Time (g_c+1), s	12.2	7.7		19.5	12.9	12.8		18.3				
Green Ext Time (p_c), s	0.0	1.9		4.9	0.0	2.2		4.8				

Intersection Summary

HCM 6th Ctrl Delay	38.7
HCM 6th LOS	D

Notes

- User approved volume balancing among the lanes for turning movement.
- 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
9: Green Valley Rd & I-80 WB Ramp

Existing PM
07/11/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations			↶ ↷	↶	↶	↷
Traffic Volume (veh/h)	0	0	176	734	830	543
Future Volume (veh/h)	0	0	176	734	830	543
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach			No	No		
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			189	789	892	584
Peak Hour Factor			0.93	0.93	0.93	0.93
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			427	1622	1189	1008
Arrive On Green			0.12	0.87	0.64	0.64
Sat Flow, veh/h			3456	1870	1870	1585
Grp Volume(v), veh/h			189	789	892	584
Grp Sat Flow(s),veh/h/ln			1728	1870	1870	1585
Q Serve(g_s), s			2.2	4.2	14.5	9.3
Cycle Q Clear(g_c), s			2.2	4.2	14.5	9.3
Prop In Lane			1.00			1.00
Lane Grp Cap(c), veh/h			427	1622	1189	1008
V/C Ratio(X)			0.44	0.49	0.75	0.58
Avail Cap(c_a), veh/h			1583	3171	2100	1779
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			17.7	0.7	5.5	4.6
Incr Delay (d2), s/veh			0.7	0.2	1.0	0.5
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.8	0.1	2.5	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			18.5	0.9	6.5	5.1
LnGrp LOS			B	A	A	A
Approach Vol, veh/h				978	1476	
Approach Delay, s/veh				4.3	6.0	
Approach LOS				A	A	
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		43.6			10.1	33.6
Change Period (Y+Rc), s		5.8			* 4.7	5.8
Max Green Setting (Gmax), s		74.0			* 20	49.0
Max Q Clear Time (g_c+I1), s		6.2			4.2	16.5
Green Ext Time (p_c), s		6.9			0.5	11.3
Intersection Summary						
HCM 6th Ctrl Delay			5.3			
HCM 6th LOS			A			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	5	511	5	5	324
Future Vol, veh/h	5	5	511	5	5	324
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	5	555	5	5	352

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	920	558	0	0	560	0
Stage 1	558	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	301	529	-	-	1011	-
Stage 1	573	-	-	-	-	-
Stage 2	704	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	299	529	-	-	1011	-
Mov Cap-2 Maneuver	299	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	700	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.7	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	382	1011
HCM Lane V/C Ratio	-	-	0.028	0.005
HCM Control Delay (s)	-	-	14.7	8.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

MOVEMENT SUMMARY

 Site: 2 [Rockville Rd / Abernathy Rd (Site Folder: General)]

Existing PM
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist ft]				
South: Abernathy Rd														
3	L2	114	2.0	127	2.0	0.669	15.7	LOS B	7.7	196.8	0.82	1.05	1.43	29.8
8	T1	274	2.0	304	2.0	0.669	15.7	LOS B	7.7	196.8	0.82	1.05	1.43	29.7
18	R2	125	2.0	139	2.0	0.669	15.7	LOS B	7.7	196.8	0.82	1.05	1.43	29.0
Approach		513	2.0	570	2.0	0.669	15.7	LOS B	7.7	196.8	0.82	1.05	1.43	29.6
East: Rockville Rd														
1	L2	32	2.0	36	2.0	0.333	8.8	LOS A	1.5	38.9	0.65	0.65	0.65	33.0
6	T1	164	2.0	182	2.0	0.333	8.8	LOS A	1.5	38.9	0.65	0.65	0.65	32.9
16	R2	29	2.0	32	2.0	0.333	8.8	LOS A	1.5	38.9	0.65	0.65	0.65	32.0
Approach		225	2.0	250	2.0	0.333	8.8	LOS A	1.5	38.9	0.65	0.65	0.65	32.8
North: Abernathy Rd														
7	L2	69	2.0	77	2.0	0.342	7.5	LOS A	1.7	44.2	0.56	0.47	0.56	33.4
4	T1	176	2.0	196	2.0	0.342	7.5	LOS A	1.7	44.2	0.56	0.47	0.56	33.3
14	R2	46	2.0	51	2.0	0.342	7.5	LOS A	1.7	44.2	0.56	0.47	0.56	32.4
Approach		291	2.0	323	2.0	0.342	7.5	LOS A	1.7	44.2	0.56	0.47	0.56	33.1
West: Rockville Rd														
5	L2	122	2.0	136	2.0	0.511	10.0	LOS A	3.6	92.2	0.62	0.57	0.71	32.0
2	T1	203	7.0	226	7.0	0.511	10.1	LOS B	3.6	92.2	0.62	0.57	0.71	31.9
12	R2	122	2.0	136	2.0	0.511	10.0	LOS A	3.6	92.2	0.62	0.57	0.71	31.1
Approach		447	4.3	497	4.3	0.511	10.0	LOS B	3.6	92.2	0.62	0.57	0.71	31.7
All Vehicles		1476	2.7	1640	2.7	0.669	11.3	LOS B	7.7	196.8	0.68	0.73	0.92	31.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

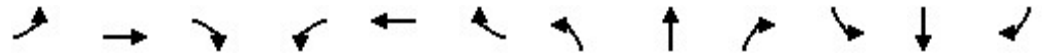
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HCM 6th Signalized Intersection Summary
 1: Suisun Valley Rd & Rockville Rd

Existing Saturday
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	107	34	167	131	77	26	172	102	69	184	30
Future Volume (veh/h)	31	107	34	167	131	77	26	172	102	69	184	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	122	39	190	149	0	30	195	116	78	209	34
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	187	158	252	395		45	295	515	104	278	45
Arrive On Green	0.04	0.10	0.10	0.14	0.21	0.00	0.18	0.18	0.18	0.24	0.24	0.24
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	248	1610	1585	441	1181	192
Grp Volume(v), veh/h	35	122	39	190	149	0	225	0	116	321	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1858	0	1585	1814	0	0
Q Serve(g_s), s	1.0	3.4	1.2	5.5	3.7	0.0	6.1	0.0	2.9	8.9	0.0	0.0
Cycle Q Clear(g_c), s	1.0	3.4	1.2	5.5	3.7	0.0	6.1	0.0	2.9	8.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.13		1.00	0.24		0.11
Lane Grp Cap(c), veh/h	67	187	158	252	395		340	0	515	427	0	0
V/C Ratio(X)	0.52	0.65	0.25	0.75	0.38		0.66	0.00	0.23	0.75	0.00	0.00
Avail Cap(c_a), veh/h	494	1556	1318	1482	1556		1545	0	1543	1006	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.5	23.4	22.5	22.3	18.3	0.0	20.5	0.0	13.3	19.2	0.0	0.0
Incr Delay (d2), s/veh	2.3	1.4	0.3	4.5	1.3	0.0	2.2	0.0	0.2	2.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.5	0.4	2.5	1.6	0.0	2.7	0.0	1.0	3.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.8	24.9	22.8	26.9	19.6	0.0	22.7	0.0	13.5	21.9	0.0	0.0
LnGrp LOS	C	C	C	C	B		C	A	B	C	A	A
Approach Vol, veh/h		196			339			341			321	
Approach Delay, s/veh		25.0			23.7			19.6			21.9	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	10.0		17.3	6.2	16.0		14.5				
Change Period (Y+Rc), s	4.6	4.6		4.6	* 4.2	4.6		4.6				
Max Green Setting (Gmax), s	45.0	45.0		30.0	* 15	45.0		45.0				
Max Q Clear Time (g_c+I1), s	7.5	5.4		10.9	3.0	5.7		8.1				
Green Ext Time (p_c), s	0.6	0.5		1.9	0.0	1.8		1.9				

Intersection Summary

HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Existing Saturday
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗	↖	↗	↖	↖	↗	↗	↖	↗	↖
Traffic Volume (veh/h)	8	1	43	16	1	12	45	262	18	3	370	10
Future Volume (veh/h)	8	1	43	16	1	12	45	262	18	3	370	10
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	1	46	22	0	0	48	279	0	4	394	11
Peak Hour Factor	0.94	0.75	0.94	0.75	0.75	0.75	0.94	0.94	0.75	0.75	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	11	97	99	0	0	97	1291	0	10	1110	31
Arrive On Green	0.06	0.06	0.06	0.03	0.00	0.00	0.05	0.36	0.00	0.01	0.31	0.31
Sat Flow, veh/h	1611	179	1585	3563	0	1585	1781	3554	1585	1781	3531	98
Grp Volume(v), veh/h	10	0	46	22	0	0	48	279	0	4	198	207
Grp Sat Flow(s),veh/h/ln	1790	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1853
Q Serve(g_s), s	0.2	0.0	0.9	0.2	0.0	0.0	0.8	1.7	0.0	0.1	2.7	2.7
Cycle Q Clear(g_c), s	0.2	0.0	0.9	0.2	0.0	0.0	0.8	1.7	0.0	0.1	2.7	2.7
Prop In Lane	0.90		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	110	0	97	99	0	0	97	1291	0	10	559	583
V/C Ratio(X)	0.09	0.00	0.47	0.22	0.00	0.00	0.50	0.22	0.00	0.41	0.35	0.36
Avail Cap(c_a), veh/h	1128	0	999	4491	0	0	1123	4480	0	1684	2240	2335
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.1	0.0	14.4	15.1	0.0	0.0	14.6	7.0	0.0	15.7	8.4	8.4
Incr Delay (d2), s/veh	0.1	0.0	1.3	1.1	0.0	0.0	1.5	0.1	0.0	10.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.1	0.0	0.3	0.1	0.0	0.0	0.3	0.4	0.0	0.0	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.2	0.0	15.7	16.2	0.0	0.0	16.0	7.1	0.0	25.7	8.8	8.8
LnGrp LOS	B	A	B	B	A	A	B	A	A	C	A	A
Approach Vol, veh/h		56			22			327			409	
Approach Delay, s/veh		15.4			16.2			8.4			8.9	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	14.6		5.1	4.4	16.1		6.1				
Change Period (Y+Rc), s	4.2	4.6		* 4.2	* 4.2	4.6		4.2				
Max Green Setting (Gmax), s	20	40.0		* 40	* 30	40.0		20.0				
Max Q Clear Time (g_c+1), s	12.8	4.7		2.2	2.1	3.7		2.9				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	1.9		0.1				

Intersection Summary

HCM 6th Ctrl Delay	9.4
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Existing Saturday
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↕	↗	↖	↕	↗	↖	↗	↖
Traffic Volume (veh/h)	33	19	55	39	57	14	51	282	17	13	353	45
Future Volume (veh/h)	33	19	55	39	57	14	51	282	17	13	353	45
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		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	21	60	42	62	15	55	307	18	14	384	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	51	147	85	359	84	105	1589	92	32	999	446
Arrive On Green	0.04	0.12	0.12	0.05	0.13	0.13	0.06	0.32	0.32	0.02	0.28	0.28
Sat Flow, veh/h	1781	428	1222	1781	2859	668	1781	4937	286	1781	3554	1585
Grp Volume(v), veh/h	36	0	81	42	38	39	55	211	114	14	384	49
Grp Sat Flow(s),veh/h/ln	1781	0	1650	1781	1777	1750	1781	1702	1819	1781	1777	1585
Q Serve(g_s), s	0.7	0.0	1.6	0.8	0.7	0.7	1.1	1.6	1.6	0.3	3.1	0.8
Cycle Q Clear(g_c), s	0.7	0.0	1.6	0.8	0.7	0.7	1.1	1.6	1.6	0.3	3.1	0.8
Prop In Lane	1.00		0.74	1.00		0.38	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	75	0	198	85	223	220	105	1096	586	32	999	446
V/C Ratio(X)	0.48	0.00	0.41	0.49	0.17	0.18	0.52	0.19	0.20	0.43	0.38	0.11
Avail Cap(c_a), veh/h	1002	0	696	1253	750	738	1002	3351	1791	1002	3499	1560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	14.5	16.5	13.9	13.9	16.2	8.7	8.7	17.3	10.3	9.5
Incr Delay (d2), s/veh	4.7	0.0	1.4	4.4	0.4	0.4	4.0	0.1	0.2	3.4	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.5	0.4	0.2	0.2	0.5	0.4	0.4	0.1	0.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	0.0	15.8	20.9	14.2	14.3	20.2	8.8	8.9	20.6	10.6	9.6
LnGrp LOS	C	A	B	C	B	B	C	A	A	C	B	A
Approach Vol, veh/h		117			119			380			447	
Approach Delay, s/veh		17.5			16.6			10.5			10.8	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.8	16.0	5.9	8.8	6.3	14.6	5.7	9.0				
Change Period (Y+Rc), s	4.2	4.6	* 4.2	4.5	* 4.2	4.6	* 4.2	4.5				
Max Green Setting (Gmax), s	20	35.0	* 25	15.0	* 20	35.0	* 20	15.0				
Max Q Clear Time (g_c+1), s	12.3	3.6	2.8	3.6	3.1	5.1	2.7	2.7				
Green Ext Time (p_c), s	0.0	2.4	0.1	0.2	0.1	3.2	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
5: Suisun Valley Rd & Business Center Dr

Existing Saturday
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔↔	↑↑↑		↔↔	↑↑		↔↔	↑↑	↔
Traffic Volume (veh/h)	91	147	115	37	139	15	137	236	36	10	236	201
Future Volume (veh/h)	91	147	115	37	139	15	137	236	36	10	236	201
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		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	99	160	125	40	151	16	149	257	39	11	257	218
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	753	350	201	848	87	392	949	142	49	735	328
Arrive On Green	0.10	0.22	0.22	0.06	0.18	0.18	0.11	0.31	0.31	0.01	0.21	0.21
Sat Flow, veh/h	3456	3404	1585	3456	4702	485	3456	3099	464	3456	3554	1585
Grp Volume(v), veh/h	99	160	125	40	108	59	149	146	150	11	257	218
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1783	1728	1777	1787	1728	1777	1585
Q Serve(g_s), s	1.5	2.1	3.7	0.6	1.5	1.5	2.2	3.4	3.5	0.2	3.4	7.0
Cycle Q Clear(g_c), s	1.5	2.1	3.7	0.6	1.5	1.5	2.2	3.4	3.5	0.2	3.4	7.0
Prop In Lane	1.00		1.00	1.00		0.27	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	341	753	350	201	614	322	392	544	547	49	735	328
V/C Ratio(X)	0.29	0.21	0.36	0.20	0.18	0.18	0.38	0.27	0.27	0.23	0.35	0.67
Avail Cap(c_a), veh/h	1247	1843	858	1247	1843	965	1247	802	806	1247	1603	715
HCM Platoon Ratio	1.00	1.00	1.00	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	23.2	17.6	18.3	24.9	19.2	19.3	22.8	14.5	14.6	27.0	18.8	20.2
Incr Delay (d2), s/veh	0.6	0.2	0.7	0.6	0.2	0.3	0.7	0.3	0.3	2.8	0.3	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.7	1.2	0.2	0.5	0.6	0.8	1.2	1.2	0.1	1.3	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.7	17.8	19.0	25.5	19.4	19.6	23.5	14.8	14.9	29.8	19.1	23.0
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	C
Approach Vol, veh/h		384			207			445			486	
Approach Delay, s/veh		19.7			20.6			17.8			21.1	
Approach LOS		B			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.0	22.9	8.4	18.2	11.5	17.4	10.7	15.9				
Change Period (Y+Rc), s	5.2	5.9	* 5.2	5.9	* 5.2	5.9	* 5.2	5.9				
Max Green Setting (Gmax), s	20	25.0	* 20	30.0	* 20	25.0	* 20	30.0				
Max Q Clear Time (g_c+1), s	12.2	5.5	2.6	5.7	4.2	9.0	3.5	3.5				
Green Ext Time (p_c), s	0.0	1.8	0.1	2.0	0.5	2.4	0.3	1.1				

Intersection Summary

HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

Notes

- User approved pedestrian interval to be less than phase max green.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection

Intersection Delay, s/veh 12.3

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔		↔				↔	↕↕		↔	↕↕	
Traffic Vol, veh/h	82	0	311	0	0	0	137	327	0	0	331	49
Future Vol, veh/h	82	0	311	0	0	0	137	327	0	0	331	49
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	92	0	349	0	0	0	154	367	0	0	372	55
Number of Lanes	2	0	1	0	0	0	1	2	0	1	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	3
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	3	3	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	10.6	11.9	14.4
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	0%	100%	100%	69%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	0%	31%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	137	164	164	41	41	311	0	221	159
LT Vol	137	0	0	41	41	0	0	0	0
Through Vol	0	164	164	0	0	0	0	221	110
RT Vol	0	0	0	0	0	311	0	0	49
Lane Flow Rate	154	184	184	46	46	349	0	248	179
Geometry Grp	8	8	8	7	7	7	8	8	8
Degree of Util (X)	0.311	0.345	0.255	0.094	0.094	0.429	0	0.472	0.33
Departure Headway (Hd)	7.272	6.765	5.005	7.381	7.381	4.415	6.847	6.847	6.628
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	493	529	711	484	484	807	0	523	539
Service Time	5.053	4.546	2.785	5.156	5.156	2.188	4.627	4.627	4.409
HCM Lane V/C Ratio	0.312	0.348	0.259	0.095	0.095	0.432	0	0.474	0.332
HCM Control Delay	13.3	13.1	9.5	10.9	10.9	10.5	9.6	15.7	12.7
HCM Lane LOS	B	B	A	B	B	B	N	C	B
HCM 95th-tile Q	1.3	1.5	1	0.3	0.3	2.2	0	2.5	1.4

HCM 6th Signalized Intersection Summary
 7: Pitman Rd & I-80 EB Off/I-80 EB On

Existing Saturday
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗					↑	↗	↘	↑	
Traffic Volume (veh/h)	164	4	374	0	0	0	0	296	529	148	494	0
Future Volume (veh/h)	164	4	374	0	0	0	0	296	529	148	494	0
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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	173	4	394				0	312	557	156	520	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	498	12	453				0	649	550	271	955	0
Arrive On Green	0.29	0.29	0.29				0.00	0.35	0.35	0.08	0.51	0.00
Sat Flow, veh/h	1743	40	1585				0	1870	1585	3456	1870	0
Grp Volume(v), veh/h	177	0	394				0	312	557	156	520	0
Grp Sat Flow(s),veh/h/ln	1783	0	1585				0	1870	1585	1728	1870	0
Q Serve(g_s), s	3.4	0.0	10.2				0.0	5.7	15.0	1.9	8.1	0.0
Cycle Q Clear(g_c), s	3.4	0.0	10.2				0.0	5.7	15.0	1.9	8.1	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	510	0	453				0	649	550	271	955	0
V/C Ratio(X)	0.35	0.00	0.87				0.00	0.48	1.01	0.58	0.54	0.00
Avail Cap(c_a), veh/h	1237	0	1100				0	649	550	1279	955	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.2	0.0	14.7				0.0	11.1	14.1	19.2	7.2	0.0
Incr Delay (d2), s/veh	0.2	0.0	2.1				0.0	0.2	41.7	0.7	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
%ile BackOfQ(50%),veh/ln	1.1	0.0	3.1				0.0	1.7	10.2	0.7	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.4	0.0	16.7				0.0	11.3	55.8	20.0	7.5	0.0
LnGrp LOS	B	A	B				A	B	F	B	A	A
Approach Vol, veh/h		571						869			676	
Approach Delay, s/veh		15.4						39.8			10.4	
Approach LOS		B						D			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		26.7			7.1	19.6		16.6				
Change Period (Y+Rc), s		4.6			3.7	4.6		4.2				
Max Green Setting (Gmax), s		15.0			16.0	15.0		30.0				
Max Q Clear Time (g_c+I1), s		10.1			3.9	17.0		12.2				
Green Ext Time (p_c), s		0.3			0.0	0.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay	23.8
HCM 6th LOS	C

Notes

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

HCM 6th Signalized Intersection Summary
8: Green Valley Rd & Business Center Dr

Existing Saturday
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗		↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	122	150	818	246	475	87	436	161	45	4	235	116
Future Volume (veh/h)	122	150	818	246	475	87	436	161	45	4	235	116
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	155	843	254	490	90	449	166	46	4	242	120
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	401	421	1203	390	673	123	534	1043	465	9	336	161
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.15	0.29	0.29	0.01	0.14	0.14
Sat Flow, veh/h	1781	1870	3170	1781	3077	562	3456	3554	1585	1781	2329	1117
Grp Volume(v), veh/h	126	155	843	254	297	283	449	166	46	4	183	179
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1769	1728	1777	1585	1781	1777	1669
Q Serve(g_s), s	4.7	5.6	18.0	10.4	11.8	11.9	10.1	2.8	1.7	0.2	7.8	8.2
Cycle Q Clear(g_c), s	4.7	5.6	18.0	10.4	11.8	11.9	10.1	2.8	1.7	0.2	7.8	8.2
Prop In Lane	1.00		1.00	1.00		0.32	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	401	421	1203	390	409	387	534	1043	465	9	256	241
V/C Ratio(X)	0.31	0.37	0.70	0.65	0.73	0.73	0.84	0.16	0.10	0.42	0.71	0.74
Avail Cap(c_a), veh/h	401	421	1203	637	669	632	583	1235	551	111	429	403
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	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	25.9	26.2	21.0	28.5	29.0	29.1	32.9	20.9	20.6	39.7	32.7	32.8
Incr Delay (d2), s/veh	0.4	0.5	1.8	1.8	2.5	2.7	10.0	0.1	0.1	27.2	3.7	4.5
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	2.0	2.4	6.3	4.4	5.2	5.0	4.7	1.1	0.6	0.1	3.4	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	26.7	22.8	30.3	31.5	31.8	42.8	21.0	20.7	66.9	36.3	37.3
LnGrp LOS	C	C	C	C	C	C	D	C	C	E	D	D
Approach Vol, veh/h		1124			834			661			366	
Approach Delay, s/veh		23.7			31.2			35.8			37.1	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	28.9		23.1	17.1	16.9		22.9				
Change Period (Y+Rc), s	4.7	5.4		5.1	* 4.7	5.4		5.4				
Max Green Setting (Gmax), s	5	27.8		18.0	* 14	19.3		28.6				
Max Q Clear Time (g_c+1/2), s	12.2	4.8		20.0	12.1	10.2		13.9				
Green Ext Time (p_c), s	0.0	1.0		0.0	0.3	1.3		3.6				

Intersection Summary

HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
 9: Green Valley Rd & I-80 WB Ramp

Existing Saturday
 07/11/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations			↖ ↗	↑	↓	↘
Traffic Volume (veh/h)	0	0	130	646	751	545
Future Volume (veh/h)	0	0	130	646	751	545
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach			No	No		
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			135	673	782	568
Peak Hour Factor			0.96	0.96	0.96	0.96
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			418	1581	1120	949
Arrive On Green			0.12	0.85	0.60	0.60
Sat Flow, veh/h			3456	1870	1870	1585
Grp Volume(v), veh/h			135	673	782	568
Grp Sat Flow(s),veh/h/ln			1728	1870	1870	1585
Q Serve(g_s), s			1.3	3.3	10.8	8.4
Cycle Q Clear(g_c), s			1.3	3.3	10.8	8.4
Prop In Lane			1.00			1.00
Lane Grp Cap(c), veh/h			418	1581	1120	949
V/C Ratio(X)			0.32	0.43	0.70	0.60
Avail Cap(c_a), veh/h			1844	3693	2445	2072
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			15.1	0.7	5.2	4.7
Incr Delay (d2), s/veh			0.4	0.2	0.8	0.6
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.4	0.1	1.7	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			15.5	0.9	6.0	5.3
LnGrp LOS			B	A	A	A
Approach Vol, veh/h				808	1350	
Approach Delay, s/veh				3.3	5.7	
Approach LOS				A	A	
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		37.5			9.2	28.2
Change Period (Y+Rc), s		5.8			* 4.7	5.8
Max Green Setting (Gmax), s		74.0			* 20	49.0
Max Q Clear Time (g_c+I1), s		5.3			3.3	12.8
Green Ext Time (p_c), s		5.3			0.3	9.7
Intersection Summary						
HCM 6th Ctrl Delay			4.8			
HCM 6th LOS			A			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	R	T	R	L	T
Traffic Vol, veh/h	5	5	295	5	5	380
Future Vol, veh/h	5	5	295	5	5	380
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	5	321	5	5	413

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	747	324	0	0	326
Stage 1	324	-	-	-	-
Stage 2	423	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	381	717	-	-	1234
Stage 1	733	-	-	-	-
Stage 2	661	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	379	717	-	-	1234
Mov Cap-2 Maneuver	379	-	-	-	-
Stage 1	733	-	-	-	-
Stage 2	658	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	496	1234
HCM Lane V/C Ratio	-	-	0.022	0.004
HCM Control Delay (s)	-	-	12.4	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

MOVEMENT SUMMARY

 Site: 2 [Rockville Rd / Abernathy Rd (Site Folder: General)]

Existing Saturday
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist ft]				
South: Abernathy Rd														
3	L2	149	2.0	162	2.0	0.360	6.9	LOS A	2.0	50.8	0.47	0.33	0.47	33.2
8	T1	156	2.0	170	2.0	0.360	6.9	LOS A	2.0	50.8	0.47	0.33	0.47	33.1
18	R2	59	2.0	64	2.0	0.360	6.9	LOS A	2.0	50.8	0.47	0.33	0.47	32.2
Approach		364	2.0	396	2.0	0.360	6.9	LOS A	2.0	50.8	0.47	0.33	0.47	33.0
East: Rockville Rd														
1u	U	1	3.0	1	3.0	0.258	6.7	LOS A	1.2	30.6	0.54	0.47	0.54	34.7
1	L2	36	2.0	39	2.0	0.258	6.7	LOS A	1.2	30.6	0.54	0.47	0.54	33.9
6	T1	153	2.0	166	2.0	0.258	6.7	LOS A	1.2	30.6	0.54	0.47	0.54	33.9
16	R2	25	2.0	27	2.0	0.258	6.7	LOS A	1.2	30.6	0.54	0.47	0.54	32.9
Approach		215	2.0	234	2.0	0.258	6.7	LOS A	1.2	30.6	0.54	0.47	0.54	33.8
North: Abernathy Rd														
7	L2	15	2.0	16	2.0	0.229	6.2	LOS A	1.0	26.6	0.52	0.44	0.52	34.4
4	T1	112	2.0	122	2.0	0.229	6.2	LOS A	1.0	26.6	0.52	0.44	0.52	34.4
14	R2	67	2.0	73	2.0	0.229	6.2	LOS A	1.0	26.6	0.52	0.44	0.52	33.4
Approach		194	2.0	211	2.0	0.229	6.2	LOS A	1.0	26.6	0.52	0.44	0.52	34.0
West: Rockville Rd														
5	L2	51	2.0	55	2.0	0.281	5.8	LOS A	1.5	37.2	0.39	0.26	0.39	34.4
2	T1	130	2.0	141	2.0	0.281	5.8	LOS A	1.5	37.2	0.39	0.26	0.39	34.3
12	R2	114	2.0	124	2.0	0.281	5.8	LOS A	1.5	37.2	0.39	0.26	0.39	33.3
Approach		295	2.0	321	2.0	0.281	5.8	LOS A	1.5	37.2	0.39	0.26	0.39	33.9
All Vehicles		1068	2.0	1161	2.0	0.360	6.4	LOS A	2.0	50.8	0.47	0.36	0.47	33.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

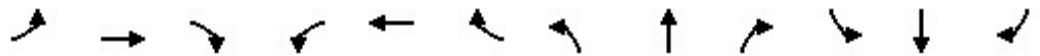
Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCM 6th Signalized Intersection Summary
 1: Suisun Valley Rd & Rockville Rd

Existing plus Project PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	127	33	133	159	39	58	209	259	67	186	27
Future Volume (veh/h)	18	127	33	133	159	39	58	209	259	67	186	27
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	146	38	153	183	0	67	240	298	77	214	31
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	212	180	204	392		96	345	559	100	277	40
Arrive On Green	0.02	0.11	0.11	0.11	0.21	0.00	0.24	0.24	0.24	0.23	0.23	0.23
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	404	1446	1585	435	1208	175
Grp Volume(v), veh/h	21	146	38	153	183	0	307	0	298	322	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1850	0	1585	1817	0	0
Q Serve(g_s), s	0.7	4.5	1.3	5.0	5.2	0.0	9.2	0.0	9.1	10.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	4.5	1.3	5.0	5.2	0.0	9.2	0.0	9.1	10.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.22		1.00	0.24		0.10
Lane Grp Cap(c), veh/h	44	212	180	204	392		441	0	559	417	0	0
V/C Ratio(X)	0.48	0.69	0.21	0.75	0.47		0.70	0.00	0.53	0.77	0.00	0.00
Avail Cap(c_a), veh/h	442	1393	1180	1327	1393		1378	0	1362	902	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.1	25.8	24.3	25.9	20.9	0.0	21.0	0.0	15.6	21.8	0.0	0.0
Incr Delay (d2), s/veh	3.0	1.5	0.2	5.5	1.8	0.0	2.0	0.0	0.8	3.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.0	0.5	2.4	2.4	0.0	4.0	0.0	3.1	4.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.1	27.3	24.6	31.4	22.8	0.0	23.0	0.0	16.4	24.9	0.0	0.0
LnGrp LOS	C	C	C	C	C		C	A	B	C	A	A
Approach Vol, veh/h		205			336			605			322	
Approach Delay, s/veh		27.3			26.7			19.7			24.9	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.5	11.4		18.5	5.7	17.3		19.0				
Change Period (Y+Rc), s	4.6	4.6		4.6	* 4.2	4.6		4.6				
Max Green Setting (Gmax), s	45.0	45.0		30.0	* 15	45.0		45.0				
Max Q Clear Time (g_c+I1), s	7.0	6.5		12.0	2.7	7.2		11.2				
Green Ext Time (p_c), s	0.5	0.6		1.9	0.0	2.3		3.3				

Intersection Summary

HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Existing plus Project PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗	↖	↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	12	1	68	46	2	0	71	571	10	7	369	5
Future Volume (veh/h)	12	1	68	46	2	0	71	571	10	7	369	5
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	2	72	79	0	0	76	607	0	12	393	5
Peak Hour Factor	0.94	0.60	0.94	0.60	0.60	0.60	0.94	0.94	0.60	0.60	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	126	19	129	272	0	0	132	1212	0	28	1015	13
Arrive On Green	0.08	0.08	0.08	0.08	0.00	0.00	0.07	0.34	0.00	0.02	0.28	0.28
Sat Flow, veh/h	1554	239	1585	3563	0	0	1585	1781	3554	1585	1781	3593
Grp Volume(v), veh/h	15	0	72	79	0	0	76	607	0	12	194	204
Grp Sat Flow(s),veh/h/ln	1793	0	1585	1781	0	0	1585	1781	1777	1585	1781	1777
Q Serve(g_s), s	0.3	0.0	1.5	0.7	0.0	0.0	1.5	4.8	0.0	0.2	3.1	3.1
Cycle Q Clear(g_c), s	0.3	0.0	1.5	0.7	0.0	0.0	1.5	4.8	0.0	0.2	3.1	3.1
Prop In Lane	0.87		1.00	1.00			1.00	1.00		1.00	1.00	0.02
Lane Grp Cap(c), veh/h	146	0	129	272	0	0	132	1212	0	28	502	526
V/C Ratio(X)	0.10	0.00	0.56	0.29	0.00	0.00	0.57	0.50	0.00	0.43	0.39	0.39
Avail Cap(c_a), veh/h	1013	0	895	4025	0	0	1006	4015	0	1509	2007	2104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	0.0	15.7	15.4	0.0	0.0	15.8	9.3	0.0	17.3	10.2	10.2
Incr Delay (d2), s/veh	0.1	0.0	1.4	0.6	0.0	0.0	1.5	0.3	0.0	3.8	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.5	0.3	0.0	0.0	0.5	1.3	0.0	0.1	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.2	0.0	17.1	16.0	0.0	0.0	17.3	9.6	0.0	21.1	10.7	10.7
LnGrp LOS	B	A	B	B	A	A	B	A	A	C	B	B
Approach Vol, veh/h		87			79			683			410	
Approach Delay, s/veh		16.7			16.0			10.5			11.0	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	14.6		6.9	4.8	16.7		7.1				
Change Period (Y+Rc), s	4.2	4.6		* 4.2	* 4.2	4.6		4.2				
Max Green Setting (Gmax), s	20	40.0		* 40	* 30	40.0		20.0				
Max Q Clear Time (g_c+13), s	13.5	5.1		2.7	2.2	6.8		3.5				
Green Ext Time (p_c), s	0.1	2.4		0.3	0.0	4.4		0.1				

Intersection Summary

HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

- User approved volume balancing among the lanes for turning movement.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
- Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Existing plus Project PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	104	36	53	38	37	49	479	37	24	387	91
Future Volume (veh/h)	177	104	36	53	38	37	49	479	37	24	387	91
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	199	117	40	60	43	42	55	538	42	27	435	102
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	276	94	108	214	184	101	1316	102	58	881	393
Arrive On Green	0.15	0.21	0.21	0.06	0.12	0.12	0.06	0.27	0.27	0.03	0.25	0.25
Sat Flow, veh/h	1781	1333	456	1781	1813	1554	1781	4833	374	1781	3554	1585
Grp Volume(v), veh/h	199	0	157	60	42	43	55	377	203	27	435	102
Grp Sat Flow(s),veh/h/ln	1781	0	1788	1781	1777	1591	1781	1702	1803	1781	1777	1585
Q Serve(g_s), s	4.4	0.0	3.1	1.3	0.9	1.0	1.2	3.7	3.8	0.6	4.3	2.1
Cycle Q Clear(g_c), s	4.4	0.0	3.1	1.3	0.9	1.0	1.2	3.7	3.8	0.6	4.3	2.1
Prop In Lane	1.00		0.25	1.00		0.98	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	266	0	370	108	210	188	101	927	491	58	881	393
V/C Ratio(X)	0.75	0.00	0.42	0.56	0.20	0.23	0.54	0.41	0.41	0.47	0.49	0.26
Avail Cap(c_a), veh/h	871	0	656	1089	652	583	871	2913	1543	871	3041	1356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	14.1	18.7	16.3	16.3	18.8	12.2	12.2	19.4	13.2	12.4
Incr Delay (d2), s/veh	4.2	0.0	0.8	4.5	0.5	0.6	4.5	0.3	0.7	2.2	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	1.1	0.6	0.3	0.3	0.5	1.1	1.2	0.2	1.4	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.9	0.0	14.9	23.1	16.7	17.0	23.3	12.5	12.9	21.6	13.7	12.8
LnGrp LOS	C	A	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		356			145			635			564	
Approach Delay, s/veh		18.2			19.5			13.6			13.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.5	15.7	6.7	13.0	6.5	14.7	10.3	9.3				
Change Period (Y+Rc), s	4.2	4.6	* 4.2	4.5	* 4.2	4.6	* 4.2	4.5				
Max Green Setting (Gmax), s	20	35.0	* 25	15.0	* 20	35.0	* 20	15.0				
Max Q Clear Time (g_c+1), s	12.6	5.8	3.3	5.1	3.2	6.3	6.4	3.0				
Green Ext Time (p_c), s	0.0	4.5	0.1	0.5	0.1	3.8	0.4	0.2				

Intersection Summary

HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
5: Suisun Valley Rd & Business Center Dr

Existing plus Project PM
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔↔	↑↑↑		↔↔	↑↑		↔↔	↑↑	↔
Traffic Volume (veh/h)	163	278	469	32	148	13	534	391	81	7	164	212
Future Volume (veh/h)	163	278	469	32	148	13	534	391	81	7	164	212
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		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	185	316	533	36	168	15	607	444	92	8	186	241
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	274	1113	518	158	1402	122	692	1102	227	35	659	294
Arrive On Green	0.08	0.33	0.33	0.05	0.29	0.29	0.20	0.38	0.38	0.01	0.19	0.19
Sat Flow, veh/h	3456	3404	1585	3456	4782	418	3456	2935	604	3456	3554	1585
Grp Volume(v), veh/h	185	316	533	36	119	64	607	268	268	8	186	241
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1795	1728	1777	1762	1728	1777	1585
Q Serve(g_s), s	4.8	6.3	30.0	0.9	2.3	2.4	15.6	10.2	10.3	0.2	4.1	13.4
Cycle Q Clear(g_c), s	4.8	6.3	30.0	0.9	2.3	2.4	15.6	10.2	10.3	0.2	4.1	13.4
Prop In Lane	1.00		1.00	1.00		0.23	1.00		0.34	1.00		1.00
Lane Grp Cap(c), veh/h	274	1113	518	158	998	527	692	667	661	35	659	294
V/C Ratio(X)	0.67	0.28	1.03	0.23	0.12	0.12	0.88	0.40	0.41	0.23	0.28	0.82
Avail Cap(c_a), veh/h	753	1113	518	753	1113	587	753	667	661	753	968	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	22.9	30.9	42.2	23.7	23.8	35.6	21.1	21.1	45.1	32.1	35.9
Incr Delay (d2), s/veh	3.5	0.2	47.1	0.9	0.1	0.1	11.1	0.5	0.5	4.0	0.3	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	2.4	17.4	0.4	0.9	1.0	7.4	4.1	4.1	0.1	1.7	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.6	23.1	78.0	43.1	23.8	23.9	46.7	21.5	21.6	49.1	32.4	44.7
LnGrp LOS	D	C	F	D	C	C	D	C	C	D	C	D
Approach Vol, veh/h		1034			219			1143			435	
Approach Delay, s/veh		55.2			27.0			34.9			39.5	
Approach LOS		E			C			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.1	40.4	9.4	35.9	23.6	22.9	12.5	32.8				
Change Period (Y+Rc), s	5.2	5.9	* 5.2	5.9	* 5.2	5.9	* 5.2	5.9				
Max Green Setting (Gmax), s	20	25.0	* 20	30.0	* 20	25.0	* 20	30.0				
Max Q Clear Time (g_c+1), s	12.3	12.3	2.9	32.0	17.6	15.4	6.8	4.4				
Green Ext Time (p_c), s	0.0	2.9	0.1	0.0	0.7	1.6	0.6	1.2				

Intersection Summary

HCM 6th Ctrl Delay	42.4
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection													
Intersection Delay, s/veh	24.6												
Intersection LOS	C												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗		↖					↖↗	↖↗			↖↗	
Traffic Vol, veh/h	201	0	293	0	0	0	0	159	623	0	0	432	49
Future Vol, veh/h	201	0	293	0	0	0	0	159	623	0	0	432	49
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	234	0	341	0	0	0	0	185	724	0	0	502	57
Number of Lanes	2	0	1	0	0	0	0	1	2	0	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB		
Conflicting Lanes Left	2	3	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	15	26.5	31.4
HCM LOS	B	D	D

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	0%	100%	75%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	25%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	159	312	312	101	101	293	288	193
LT Vol	159	0	0	101	101	0	0	0
Through Vol	0	312	312	0	0	0	288	144
RT Vol	0	0	0	0	0	293	0	49
Lane Flow Rate	185	362	362	117	117	341	335	224
Geometry Grp	8	8	8	7	7	7	8	8
Degree of Util (X)	0.442	0.814	0.635	0.283	0.283	0.541	0.804	0.527
Departure Headway (Hd)	8.605	8.092	6.314	8.717	8.717	5.712	8.64	8.458
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	418	446	569	411	411	627	419	424
Service Time	6.386	5.873	4.093	6.484	6.484	3.477	6.439	6.257
HCM Lane V/C Ratio	0.443	0.812	0.636	0.285	0.285	0.544	0.8	0.528
HCM Control Delay	18.1	37.9	19.5	14.9	14.9	15.1	38.8	20.4
HCM Lane LOS	C	E	C	B	B	C	E	C
HCM 95th-tile Q	2.2	7.6	4.4	1.1	1.1	3.2	7.2	3

HCM 6th Signalized Intersection Summary
 7: Pitman Rd & I-80 EB Off/I-80 EB On

Existing plus Project PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗					↑	↗	↘	↑	
Traffic Volume (veh/h)	373	1	356	0	0	0	0	409	453	216	509	0
Future Volume (veh/h)	373	1	356	0	0	0	0	409	453	216	509	0
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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	405	1	387				0	445	492	235	553	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	504	1	450				0	624	529	361	974	0
Arrive On Green	0.28	0.28	0.28				0.00	0.33	0.33	0.10	0.52	0.00
Sat Flow, veh/h	1777	4	1585				0	1870	1585	3456	1870	0
Grp Volume(v), veh/h	406	0	387				0	445	492	235	553	0
Grp Sat Flow(s),veh/h/ln	1782	0	1585				0	1870	1585	1728	1870	0
Q Serve(g_s), s	9.5	0.0	10.4				0.0	9.4	13.5	2.9	9.0	0.0
Cycle Q Clear(g_c), s	9.5	0.0	10.4				0.0	9.4	13.5	2.9	9.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	505	0	450				0	624	529	361	974	0
V/C Ratio(X)	0.80	0.00	0.86				0.00	0.71	0.93	0.65	0.57	0.00
Avail Cap(c_a), veh/h	1189	0	1058				0	624	529	1230	974	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.9	0.0	15.3				0.0	13.1	14.5	19.3	7.3	0.0
Incr Delay (d2), s/veh	1.2	0.0	1.9				0.0	3.3	22.9	0.7	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
%ile BackOfQ(50%),veh/ln	3.2	0.0	3.2				0.0	3.5	6.9	1.0	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	0.0	17.2				0.0	16.4	37.3	20.1	7.8	0.0
LnGrp LOS	B	A	B				A	B	D	C	A	A
Approach Vol, veh/h		793						937			788	
Approach Delay, s/veh		16.6						27.4			11.5	
Approach LOS		B						C			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		28.0			8.4	19.6		16.9				
Change Period (Y+Rc), s		4.6			3.7	4.6		4.2				
Max Green Setting (Gmax), s		15.0			16.0	15.0		30.0				
Max Q Clear Time (g_c+I1), s		11.0			4.9	15.5		12.4				
Green Ext Time (p_c), s		0.3			0.0	0.0		0.3				

Intersection Summary

HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Notes

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

HCM 6th Signalized Intersection Summary
8: Green Valley Rd & Business Center Dr

Existing plus Project PM
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗		↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	128	178	700	410	435	112	388	261	85	11	282	112
Future Volume (veh/h)	128	178	700	410	435	112	388	261	85	11	282	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	133	185	729	332	586	117	404	272	89	11	294	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	461	484	1183	449	764	152	394	923	412	24	397	155
Arrive On Green	0.26	0.26	0.26	0.25	0.25	0.25	0.11	0.26	0.26	0.01	0.16	0.16
Sat Flow, veh/h	1781	1870	3170	1781	3029	603	3456	3554	1585	1781	2500	973
Grp Volume(v), veh/h	133	185	729	332	361	342	404	272	89	11	207	204
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1762	1728	1777	1585	1781	1777	1695
Q Serve(g_s), s	5.7	7.8	17.9	16.4	17.1	17.2	10.9	5.9	4.2	0.6	10.6	11.0
Cycle Q Clear(g_c), s	5.7	7.8	17.9	16.4	17.1	17.2	10.9	5.9	4.2	0.6	10.6	11.0
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	461	484	1183	449	472	445	394	923	412	24	282	269
V/C Ratio(X)	0.29	0.38	0.62	0.74	0.77	0.77	1.02	0.29	0.22	0.47	0.73	0.76
Avail Cap(c_a), veh/h	839	881	1856	690	725	683	394	1154	515	93	614	586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	29.1	24.4	32.8	33.1	33.1	42.3	28.3	27.7	46.8	38.2	38.4
Incr Delay (d2), s/veh	0.3	0.5	0.5	2.4	2.6	2.8	51.6	0.2	0.3	13.6	3.7	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	3.5	6.4	7.0	7.7	7.3	7.3	2.4	1.6	0.3	4.7	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.7	29.6	24.9	35.2	35.7	36.0	93.9	28.5	28.0	60.4	41.9	42.7
LnGrp LOS	C	C	C	D	D	D	F	C	C	E	D	D
Approach Vol, veh/h		1047			1035			765			422	
Approach Delay, s/veh		26.2			35.6			63.0			42.8	
Approach LOS		C			D			E			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	30.2		29.8	15.6	20.6		29.5				
Change Period (Y+Rc), s	4.7	5.4		5.1	* 4.7	5.4		5.4				
Max Green Setting (Gmax), s	5	31.0		45.0	* 11	33.0		37.0				
Max Q Clear Time (g_c+1), s	12.6	7.9		19.9	12.9	13.0		19.2				
Green Ext Time (p_c), s	0.0	1.9		4.8	0.0	2.2		4.9				

Intersection Summary

HCM 6th Ctrl Delay	39.9
HCM 6th LOS	D

Notes

- User approved volume balancing among the lanes for turning movement.
- 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
 9: Green Valley Rd & I-80 WB Ramp

Existing plus Project PM
 07/11/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations			↶ ↷	↶	↶	↷
Traffic Volume (veh/h)	0	0	176	734	843	556
Future Volume (veh/h)	0	0	176	734	843	556
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach			No	No		
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			189	789	906	598
Peak Hour Factor			0.93	0.93	0.93	0.93
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			421	1626	1200	1017
Arrive On Green			0.12	0.87	0.64	0.64
Sat Flow, veh/h			3456	1870	1870	1585
Grp Volume(v), veh/h			189	789	906	598
Grp Sat Flow(s),veh/h/ln			1728	1870	1870	1585
Q Serve(g_s), s			2.3	4.2	15.0	9.6
Cycle Q Clear(g_c), s			2.3	4.2	15.0	9.6
Prop In Lane			1.00			1.00
Lane Grp Cap(c), veh/h			421	1626	1200	1017
V/C Ratio(X)			0.45	0.49	0.75	0.59
Avail Cap(c_a), veh/h			1556	3115	2063	1748
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			18.1	0.7	5.5	4.6
Incr Delay (d2), s/veh			0.7	0.2	1.0	0.5
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.8	0.1	2.7	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			18.9	0.9	6.5	5.1
LnGrp LOS			B	A	A	A
Approach Vol, veh/h				978	1504	
Approach Delay, s/veh				4.4	6.0	
Approach LOS				A	A	
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		44.4			10.1	34.3
Change Period (Y+Rc), s		5.8			* 4.7	5.8
Max Green Setting (Gmax), s		74.0			* 20	49.0
Max Q Clear Time (g_c+I1), s		6.2			4.3	17.0
Green Ext Time (p_c), s		6.9			0.5	11.6
Intersection Summary						
HCM 6th Ctrl Delay			5.3			
HCM 6th LOS			A			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Intersection						
Int Delay, s/veh	1.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T	T	T
Traffic Vol, veh/h	46	20	505	106	28	324
Future Vol, veh/h	46	20	505	106	28	324
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	22	549	115	30	352

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1019	607	0	0	664
Stage 1	607	-	-	-	-
Stage 2	412	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	263	496	-	-	925
Stage 1	544	-	-	-	-
Stage 2	669	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	252	496	-	-	925
Mov Cap-2 Maneuver	252	-	-	-	-
Stage 1	544	-	-	-	-
Stage 2	642	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	296	925
HCM Lane V/C Ratio	-	-	0.242	0.033
HCM Control Delay (s)	-	-	21	9
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.9	0.1

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	446	7	24	327	4	13
Future Vol, veh/h	446	7	24	327	4	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	485	8	26	355	4	14

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	493	0	896
Stage 1	-	-	-	-	489
Stage 2	-	-	-	-	407
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1071	-	311
Stage 1	-	-	-	-	616
Stage 2	-	-	-	-	672
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1071	-	302
Mov Cap-2 Maneuver	-	-	-	-	302
Stage 1	-	-	-	-	616
Stage 2	-	-	-	-	652

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	12.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	476	-	-	1071	-
HCM Lane V/C Ratio	0.039	-	-	0.024	-
HCM Control Delay (s)	12.9	-	-	8.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

MOVEMENT SUMMARY

 Site: 2 [PM Rd / Abernathy Rd (Site Folder: General)]

Existing plus Project PM

Site Category: (None)

Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Abernathy Rd														
3	L2	129	2.0	143	2.0	0.691	16.6	LOS B	8.5	215.5	0.84	1.10	1.52	29.4
8	T1	274	2.0	304	2.0	0.691	16.6	LOS B	8.5	215.5	0.84	1.10	1.52	29.3
18	R2	125	2.0	139	2.0	0.691	16.6	LOS B	8.5	215.5	0.84	1.10	1.52	28.6
Approach		528	2.0	587	2.0	0.691	16.6	LOS B	8.5	215.5	0.84	1.10	1.52	29.2
East: Rockville Rd														
1	L2	32	2.0	36	2.0	0.350	9.2	LOS A	1.7	42.2	0.66	0.67	0.69	32.8
6	T1	171	2.0	190	2.0	0.350	9.2	LOS A	1.7	42.2	0.66	0.67	0.69	32.7
16	R2	29	2.0	32	2.0	0.350	9.2	LOS A	1.7	42.2	0.66	0.67	0.69	31.8
Approach		232	2.0	258	2.0	0.350	9.2	LOS A	1.7	42.2	0.66	0.67	0.69	32.6
North: Abernathy Rd														
7	L2	69	2.0	77	2.0	0.351	7.8	LOS A	1.8	45.2	0.57	0.50	0.57	33.2
4	T1	176	2.0	196	2.0	0.351	7.8	LOS A	1.8	45.2	0.57	0.50	0.57	33.1
14	R2	46	2.0	51	2.0	0.351	7.8	LOS A	1.8	45.2	0.57	0.50	0.57	32.2
Approach		291	2.0	323	2.0	0.351	7.8	LOS A	1.8	45.2	0.57	0.50	0.57	33.0
West: Rockville Rd														
5	L2	122	2.0	136	2.0	0.523	10.2	LOS B	3.9	99.5	0.63	0.59	0.74	31.9
2	T1	206	7.0	229	7.0	0.523	10.4	LOS B	3.9	99.5	0.63	0.59	0.74	31.8
12	R2	130	2.0	144	2.0	0.523	10.2	LOS B	3.9	99.5	0.63	0.59	0.74	31.0
Approach		458	4.2	509	4.2	0.523	10.3	LOS B	3.9	99.5	0.63	0.59	0.74	31.6
All Vehicles		1509	2.7	1677	2.7	0.691	11.8	LOS B	8.5	215.5	0.70	0.76	0.97	31.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

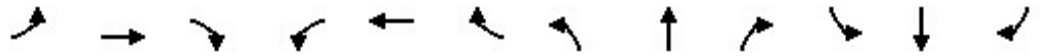
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HCM 6th Signalized Intersection Summary
 1: Suisun Valley Rd & Rockville Rd

Existing plus Project Saturday Inbound
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	115	35	167	133	79	30	187	101	69	211	30
Future Volume (veh/h)	31	115	35	167	133	79	30	187	101	69	211	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	131	40	190	151	0	34	212	115	78	240	34
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	196	166	249	401		49	307	526	100	309	44
Arrive On Green	0.04	0.10	0.10	0.14	0.21	0.00	0.19	0.19	0.19	0.25	0.25	0.25
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	257	1601	1585	403	1240	176
Grp Volume(v), veh/h	35	131	40	190	151	0	246	0	115	352	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1858	0	1585	1819	0	0
Q Serve(g_s), s	1.1	3.9	1.4	6.0	4.0	0.0	7.2	0.0	3.1	10.5	0.0	0.0
Cycle Q Clear(g_c), s	1.1	3.9	1.4	6.0	4.0	0.0	7.2	0.0	3.1	10.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.14		1.00	0.22		0.10
Lane Grp Cap(c), veh/h	66	196	166	249	401		356	0	526	453	0	0
V/C Ratio(X)	0.53	0.67	0.24	0.76	0.38		0.69	0.00	0.22	0.78	0.00	0.00
Avail Cap(c_a), veh/h	457	1439	1219	1370	1439		1429	0	1441	932	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.7	25.2	24.1	24.2	19.6	0.0	22.0	0.0	14.1	20.4	0.0	0.0
Incr Delay (d2), s/veh	2.4	1.5	0.3	4.8	1.2	0.0	2.4	0.0	0.2	2.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.8	0.5	2.7	1.8	0.0	3.2	0.0	1.0	4.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	26.7	24.3	29.0	20.9	0.0	24.4	0.0	14.3	23.3	0.0	0.0
LnGrp LOS	C	C	C	C	C		C	A	B	C	A	A
Approach Vol, veh/h		206			341			361			352	
Approach Delay, s/veh		26.8			25.4			21.2			23.3	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.8	10.7		19.2	6.4	17.1		15.8				
Change Period (Y+Rc), s	4.6	4.6		4.6	* 4.2	4.6		4.6				
Max Green Setting (Gmax), s	45.0	45.0		30.0	* 15	45.0		45.0				
Max Q Clear Time (g_c+I1), s	8.0	5.9		12.5	3.1	6.0		9.2				
Green Ext Time (p_c), s	0.6	0.6		2.1	0.0	1.8		2.0				

Intersection Summary

HCM 6th Ctrl Delay	23.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Existing plus Project Saturday Inbound
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗
Traffic Volume (veh/h)	13	1	43	16	1	12	36	373	18	3	438	13
Future Volume (veh/h)	13	1	43	16	1	12	36	373	18	3	438	13
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	1	46	22	0	0	38	397	0	4	466	14
Peak Hour Factor	0.94	0.75	0.94	0.75	0.75	0.75	0.94	0.94	0.75	0.75	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	8	104	99	0	0	80	1266	0	10	1116	33
Arrive On Green	0.07	0.07	0.07	0.03	0.00	0.00	0.04	0.36	0.00	0.01	0.32	0.32
Sat Flow, veh/h	1668	119	1585	3563	0	1585	1781	3554	1585	1781	3522	106
Grp Volume(v), veh/h	15	0	46	22	0	0	38	397	0	4	235	245
Grp Sat Flow(s),veh/h/ln1787	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1851	
Q Serve(g_s), s	0.2	0.0	0.9	0.2	0.0	0.0	0.7	2.6	0.0	0.1	3.3	3.3
Cycle Q Clear(g_c), s	0.2	0.0	0.9	0.2	0.0	0.0	0.7	2.6	0.0	0.1	3.3	3.3
Prop In Lane	0.93		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	117	0	104	99	0	0	80	1266	0	10	563	586
V/C Ratio(X)	0.13	0.00	0.44	0.22	0.00	0.00	0.48	0.31	0.00	0.41	0.42	0.42
Avail Cap(c_a), veh/h	1132	0	1004	4515	0	0	1129	4504	0	1693	2252	2346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	14.2	15.0	0.0	0.0	14.7	7.4	0.0	15.6	8.5	8.5
Incr Delay (d2), s/veh	0.2	0.0	1.1	1.1	0.0	0.0	1.6	0.1	0.0	10.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln0.1	0.0	0.0	0.3	0.1	0.0	0.0	0.2	0.6	0.0	0.0	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.1	0.0	15.3	16.1	0.0	0.0	16.3	7.5	0.0	25.6	9.0	9.0
LnGrp LOS	B	A	B	B	A	A	B	A	A	C	A	A
Approach Vol, veh/h		61			22			435			484	
Approach Delay, s/veh		15.0			16.1			8.3			9.1	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s5.6	14.6			5.1	4.4	15.8		6.3				
Change Period (Y+Rc), s* 4.2	4.6			* 4.2	* 4.2	4.6		4.2				
Max Green Setting (Gmax)20	40.0			* 40	* 30	40.0		20.0				
Max Q Clear Time (g_c+11, s	5.3			2.2	2.1	4.6		2.9				
Green Ext Time (p_c), s	0.0	2.9		0.0	0.0	2.7		0.1				

Intersection Summary

HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Notes

- User approved volume balancing among the lanes for turning movement.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
- Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Existing plus Project Saturday Inbound
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	↖
Traffic Volume (veh/h)	40	19	55	39	57	19	51	380	17	11	413	50
Future Volume (veh/h)	40	19	55	39	57	19	51	380	17	11	413	50
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	21	60	42	62	21	55	413	18	12	449	54
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	53	150	85	322	104	105	1623	70	28	996	444
Arrive On Green	0.05	0.12	0.12	0.05	0.12	0.12	0.06	0.32	0.32	0.02	0.28	0.28
Sat Flow, veh/h	1781	428	1222	1781	2641	853	1781	5018	217	1781	3554	1585
Grp Volume(v), veh/h	43	0	81	42	41	42	55	279	152	12	449	54
Grp Sat Flow(s),veh/h/ln	1781	0	1650	1781	1777	1717	1781	1702	1831	1781	1777	1585
Q Serve(g_s), s	0.8	0.0	1.6	0.8	0.7	0.8	1.1	2.2	2.2	0.2	3.7	0.9
Cycle Q Clear(g_c), s	0.8	0.0	1.6	0.8	0.7	0.8	1.1	2.2	2.2	0.2	3.7	0.9
Prop In Lane	1.00		0.74	1.00		0.50	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	87	0	203	85	217	209	105	1101	592	28	996	444
V/C Ratio(X)	0.50	0.00	0.40	0.49	0.19	0.20	0.52	0.25	0.26	0.43	0.45	0.12
Avail Cap(c_a), veh/h	998	0	694	1248	747	722	998	3339	1796	998	3485	1555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	14.4	16.6	14.1	14.1	16.3	8.9	8.9	17.4	10.6	9.6
Incr Delay (d2), s/veh	4.3	0.0	1.3	4.4	0.4	0.5	4.0	0.1	0.3	3.8	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.5	0.4	0.3	0.3	0.5	0.5	0.6	0.1	1.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.9	0.0	15.7	21.0	14.5	14.6	20.3	9.0	9.2	21.2	11.0	9.7
LnGrp LOS	C	A	B	C	B	B	C	A	A	C	B	A
Approach Vol, veh/h		124			125			486			515	
Approach Delay, s/veh		17.5			16.7			10.4			11.1	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.8	16.1	5.9	8.9	6.3	14.6	5.9	8.9				
Change Period (Y+Rc), s	4.2	4.6	* 4.2	4.5	* 4.2	4.6	* 4.2	4.5				
Max Green Setting (Gmax), s	20	35.0	* 25	15.0	* 20	35.0	* 20	15.0				
Max Q Clear Time (g_c+1), s	12.2	4.2	2.8	3.6	3.1	5.7	2.8	2.8				
Green Ext Time (p_c), s	0.0	3.2	0.1	0.2	0.1	3.8	0.1	0.2				

Intersection Summary

HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
5: Suisun Valley Rd & Business Center Dr

Existing plus Project Saturday Inbound
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔↔			↔↔↔↔			↔↔↔↔			↔↔↔↔		↔↔↔↔
Traffic Volume (veh/h)	99	147	115	37	139	15	135	326	36	10	250	248
Future Volume (veh/h)	99	147	115	37	139	15	135	326	36	10	250	248
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	160	125	40	151	16	147	354	39	11	272	270
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	730	340	198	810	84	378	1072	117	48	840	375
Arrive On Green	0.10	0.21	0.21	0.06	0.17	0.17	0.11	0.33	0.33	0.01	0.24	0.24
Sat Flow, veh/h	3456	3404	1585	3456	4702	485	3456	3230	353	3456	3554	1585
Grp Volume(v), veh/h	108	160	125	40	108	59	147	194	199	11	272	270
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1783	1728	1777	1807	1728	1777	1585
Q Serve(g_s), s	1.7	2.2	3.9	0.6	1.6	1.6	2.3	4.7	4.8	0.2	3.7	9.1
Cycle Q Clear(g_c), s	1.7	2.2	3.9	0.6	1.6	1.6	2.3	4.7	4.8	0.2	3.7	9.1
Prop In Lane	1.00		1.00	1.00		0.27	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	344	730	340	198	586	307	378	590	600	48	840	375
V/C Ratio(X)	0.31	0.22	0.37	0.20	0.18	0.19	0.39	0.33	0.33	0.23	0.32	0.72
Avail Cap(c_a), veh/h	1191	1759	819	1191	1759	922	1191	765	778	1191	1531	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	18.8	19.4	26.1	20.5	20.6	24.0	14.5	14.6	28.3	18.3	20.4
Incr Delay (d2), s/veh	0.6	0.2	0.8	0.6	0.2	0.4	0.8	0.4	0.4	2.8	0.3	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.8	1.3	0.3	0.6	0.6	0.9	1.7	1.7	0.1	1.3	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	19.0	20.2	26.7	20.7	20.9	24.8	14.9	15.0	31.1	18.6	23.5
LnGrp LOS	C	B	C	C	C	C	C	B	B	C	B	C
Approach Vol, veh/h	393			207			540			553		
Approach Delay, s/veh	21.0			21.9			17.6			21.3		
Approach LOS	C			C			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.0	25.2	8.5	18.3	11.5	19.6	11.0	15.9				
Change Period (Y+Rc), s	5.2	5.9	* 5.2	5.9	* 5.2	5.9	* 5.2	5.9				
Max Green Setting (Gmax), s	20	25.0	* 20	30.0	* 20	25.0	* 20	30.0				
Max Q Clear Time (g_c+1/2g), s	12.2	6.8	2.6	5.9	4.3	11.1	3.7	3.6				
Green Ext Time (p_c), s	0.0	2.4	0.1	2.0	0.5	2.6	0.3	1.1				

Intersection Summary

HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection

Intersection Delay, s/veh 13.1
Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔		↔				↔	↕↕		↔	↕↕	
Traffic Vol, veh/h	100	0	311	0	0	0	133	399	0	0	340	54
Future Vol, veh/h	100	0	311	0	0	0	133	399	0	0	340	54
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	112	0	349	0	0	0	149	448	0	0	382	61
Number of Lanes	2	0	1	0	0	0	1	2	0	1	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	3
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	3	3	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	11.2	12.9	15.5
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	0%	100%	100%	68%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	0%	32%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	133	200	200	50	50	311	0	227	167
LT Vol	133	0	0	50	50	0	0	0	0
Through Vol	0	200	200	0	0	0	0	227	113
RT Vol	0	0	0	0	0	311	0	0	54
Lane Flow Rate	149	224	224	56	56	349	0	255	188
Geometry Grp	8	8	8	7	7	7	8	8	8
Degree of Util (X)	0.309	0.431	0.322	0.118	0.118	0.447	0	0.503	0.359
Departure Headway (Hd)	7.437	6.929	5.167	7.579	7.579	4.607	7.103	7.103	6.873
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	480	516	688	470	470	772	0	504	519
Service Time	5.23	4.722	2.959	5.368	5.368	2.394	4.901	4.901	4.671
HCM Lane V/C Ratio	0.31	0.434	0.326	0.119	0.119	0.452	0	0.506	0.362
HCM Control Delay	13.6	14.9	10.4	11.4	11.4	11.1	9.9	17	13.5
HCM Lane LOS	B	B	B	B	B	B	N	C	B
HCM 95th-tile Q	1.3	2.1	1.4	0.4	0.4	2.3	0	2.8	1.6

HCM 6th Signalized Intersection Summary
 7: Pitman Rd & I-80 EB Off/I-80 EB On

Existing plus Project Saturday Inbound
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗					↑	↗	↘	↑	
Traffic Volume (veh/h)	236	4	374	0	0	0	0	296	529	157	494	0
Future Volume (veh/h)	236	4	374	0	0	0	0	296	529	157	494	0
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		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	248	4	394				0	312	557	165	520	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	503	8	454				0	646	548	276	955	0
Arrive On Green	0.29	0.29	0.29				0.00	0.35	0.35	0.08	0.51	0.00
Sat Flow, veh/h	1754	28	1585				0	1870	1585	3456	1870	0
Grp Volume(v), veh/h	252	0	394				0	312	557	165	520	0
Grp Sat Flow(s),veh/h/ln	1783	0	1585				0	1870	1585	1728	1870	0
Q Serve(g_s), s	5.1	0.0	10.2				0.0	5.7	15.0	2.0	8.2	0.0
Cycle Q Clear(g_c), s	5.1	0.0	10.2				0.0	5.7	15.0	2.0	8.2	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	511	0	454				0	646	548	276	955	0
V/C Ratio(X)	0.49	0.00	0.87				0.00	0.48	1.02	0.60	0.54	0.00
Avail Cap(c_a), veh/h	1232	0	1095				0	646	548	1273	955	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.9	0.0	14.7				0.0	11.2	14.2	19.3	7.2	0.0
Incr Delay (d2), s/veh	0.3	0.0	2.0				0.0	0.2	42.9	0.8	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
%ile BackOfQ(50%),veh/ln	1.6	0.0	3.1				0.0	1.7	10.3	0.7	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	0.0	16.7				0.0	11.4	57.1	20.1	7.6	0.0
LnGrp LOS	B	A	B				A	B	F	C	A	A
Approach Vol, veh/h		646						869			685	
Approach Delay, s/veh		15.3						40.7			10.6	
Approach LOS		B						D			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		26.8			7.2	19.6		16.7				
Change Period (Y+Rc), s		4.6			3.7	4.6		4.2				
Max Green Setting (Gmax), s		15.0			16.0	15.0		30.0				
Max Q Clear Time (g_c+I1), s		10.2			4.0	17.0		12.2				
Green Ext Time (p_c), s		0.3			0.0	0.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay	23.9
HCM 6th LOS	C

Notes

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

HCM 6th Signalized Intersection Summary
8: Green Valley Rd & Business Center Dr

Existing plus Project Saturday Inbound
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗		↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	118	150	818	291	475	93	436	161	45	13	235	116
Future Volume (veh/h)	118	150	818	291	475	93	436	161	45	13	235	116
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	155	843	295	497	96	449	166	46	13	242	120
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	397	416	1194	400	685	132	533	1003	447	28	335	161
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.15	0.28	0.28	0.02	0.14	0.14
Sat Flow, veh/h	1781	1870	3170	1781	3049	586	3456	3554	1585	1781	2329	1117
Grp Volume(v), veh/h	122	155	843	295	304	289	449	166	46	13	183	179
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1765	1728	1777	1585	1781	1777	1669
Q Serve(g_s), s	4.6	5.7	18.0	12.4	12.2	12.3	10.2	2.8	1.7	0.6	7.9	8.3
Cycle Q Clear(g_c), s	4.6	5.7	18.0	12.4	12.2	12.3	10.2	2.8	1.7	0.6	7.9	8.3
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	397	416	1194	400	420	397	533	1003	447	28	256	240
V/C Ratio(X)	0.31	0.37	0.71	0.74	0.72	0.73	0.84	0.17	0.10	0.47	0.72	0.75
Avail Cap(c_a), veh/h	397	416	1194	630	662	624	577	1222	545	110	424	398
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	26.6	21.4	29.1	29.0	29.1	33.3	21.8	21.5	39.5	33.0	33.2
Incr Delay (d2), s/veh	0.4	0.6	1.9	2.7	2.4	2.6	10.3	0.1	0.1	11.6	3.7	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	2.5	6.4	5.3	5.4	5.1	4.8	1.1	0.6	0.3	3.5	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	27.2	23.3	31.8	31.4	31.6	43.6	21.9	21.6	51.1	36.7	37.8
LnGrp LOS	C	C	C	C	C	C	D	C	C	D	D	D
Approach Vol, veh/h		1120			888			661			375	
Approach Delay, s/veh		24.2			31.6			36.6			37.7	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	28.2		23.1	17.2	17.0		23.6				
Change Period (Y+Rc), s	4.7	5.4		5.1	* 4.7	5.4		5.4				
Max Green Setting (Gmax), s	5	27.8		18.0	* 14	19.3		28.6				
Max Q Clear Time (g_c+1), s	12	4.8		20.0	12.2	10.3		14.4				
Green Ext Time (p_c), s	0.0	1.0		0.0	0.2	1.3		3.7				

Intersection Summary

HCM 6th Ctrl Delay	30.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
 9: Green Valley Rd & I-80 WB Ramp

Existing plus Project Saturday Inbound
 07/11/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations			↖ ↗	↑	↑	↘
Traffic Volume (veh/h)	0	0	130	646	774	568
Future Volume (veh/h)	0	0	130	646	774	568
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach			No	No		
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			135	673	806	592
Peak Hour Factor			0.96	0.96	0.96	0.96
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			410	1590	1141	967
Arrive On Green			0.12	0.85	0.61	0.61
Sat Flow, veh/h			3456	1870	1870	1585
Grp Volume(v), veh/h			135	673	806	592
Grp Sat Flow(s),veh/h/ln			1728	1870	1870	1585
Q Serve(g_s), s			1.4	3.3	11.4	9.0
Cycle Q Clear(g_c), s			1.4	3.3	11.4	9.0
Prop In Lane			1.00			1.00
Lane Grp Cap(c), veh/h			410	1590	1141	967
V/C Ratio(X)			0.33	0.42	0.71	0.61
Avail Cap(c_a), veh/h			1786	3576	2368	2007
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			15.6	0.7	5.2	4.7
Incr Delay (d2), s/veh			0.5	0.2	0.8	0.6
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.5	0.1	1.8	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			16.1	0.9	6.0	5.3
LnGrp LOS			B	A	A	A
Approach Vol, veh/h				808	1398	
Approach Delay, s/veh				3.4	5.7	
Approach LOS				A	A	
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		38.7			9.3	29.4
Change Period (Y+Rc), s		5.8			* 4.7	5.8
Max Green Setting (Gmax), s		74.0			* 20	49.0
Max Q Clear Time (g_c+I1), s		5.3			3.4	13.4
Green Ext Time (p_c), s		5.3			0.3	10.2
Intersection Summary						
HCM 6th Ctrl Delay			4.9			
HCM 6th LOS			A			

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	2.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	TT		T			T
Traffic Vol, veh/h	79	29	289	127	33	380
Future Vol, veh/h	79	29	289	127	33	380
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	32	314	138	36	413

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	868	383	0	0	452
Stage 1	383	-	-	-	-
Stage 2	485	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	323	664	-	-	1109
Stage 1	689	-	-	-	-
Stage 2	619	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	309	664	-	-	1109
Mov Cap-2 Maneuver	309	-	-	-	-
Stage 1	689	-	-	-	-
Stage 2	593	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.7	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	361	1109
HCM Lane V/C Ratio	-	-	0.325	0.032
HCM Control Delay (s)	-	-	19.7	8.4
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.4	0.1

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	276	9	29	373	6	21
Future Vol, veh/h	276	9	29	373	6	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	300	10	32	405	7	23

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	310	0	774 305
Stage 1	-	-	-	-	305 -
Stage 2	-	-	-	-	469 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1250	-	367 735
Stage 1	-	-	-	-	748 -
Stage 2	-	-	-	-	630 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1250	-	355 735
Mov Cap-2 Maneuver	-	-	-	-	355 -
Stage 1	-	-	-	-	748 -
Stage 2	-	-	-	-	609 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	594	-	-	1250	-
HCM Lane V/C Ratio	0.049	-	-	0.025	-
HCM Control Delay (s)	11.4	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

MOVEMENT SUMMARY

Site: 2 [Sat In Rockville Rd / Abernathy Rd (Site Folder: General)]

Existing plus Project Saturday
 Special Event Inbound
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Abernathy Rd														
3	L2	167	2.0	186	2.0	0.393	7.4	LOS A	2.2	57.0	0.50	0.37	0.50	32.8
8	T1	156	2.0	173	2.0	0.393	7.4	LOS A	2.2	57.0	0.50	0.37	0.50	32.8
18	R2	59	2.0	66	2.0	0.393	7.4	LOS A	2.2	57.0	0.50	0.37	0.50	31.9
Approach		382	2.0	424	2.0	0.393	7.4	LOS A	2.2	57.0	0.50	0.37	0.50	32.7
East: Rockville Rd														
1	L2	36	2.0	40	2.0	0.282	7.1	LOS A	1.3	33.7	0.57	0.51	0.57	33.8
6	T1	162	2.0	180	2.0	0.282	7.1	LOS A	1.3	33.7	0.57	0.51	0.57	33.7
16	R2	25	2.0	28	2.0	0.282	7.1	LOS A	1.3	33.7	0.57	0.51	0.57	32.7
Approach		223	2.0	248	2.0	0.282	7.1	LOS A	1.3	33.7	0.57	0.51	0.57	33.6
North: Abernathy Rd														
7	L2	15	2.0	17	2.0	0.243	6.6	LOS A	1.1	28.2	0.54	0.48	0.54	34.2
4	T1	112	2.0	124	2.0	0.243	6.6	LOS A	1.1	28.2	0.54	0.48	0.54	34.2
14	R2	67	2.0	74	2.0	0.243	6.6	LOS A	1.1	28.2	0.54	0.48	0.54	33.2
Approach		194	2.0	216	2.0	0.243	6.6	LOS A	1.1	28.2	0.54	0.48	0.54	33.8
West: Rockville Rd														
5	L2	51	2.0	57	2.0	0.314	6.2	LOS A	1.6	42.4	0.41	0.27	0.41	34.1
2	T1	136	7.0	151	7.0	0.314	6.3	LOS A	1.6	42.4	0.41	0.27	0.41	34.0
12	R2	128	2.0	142	2.0	0.314	6.2	LOS A	1.6	42.4	0.41	0.27	0.41	33.1
Approach		315	4.2	350	4.2	0.314	6.3	LOS A	1.6	42.4	0.41	0.27	0.41	33.6
All Vehicles		1114	2.6	1238	2.6	0.393	6.9	LOS A	2.2	57.0	0.49	0.39	0.49	33.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

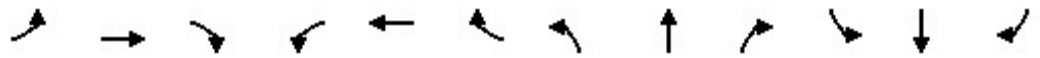
Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCM 6th Signalized Intersection Summary
 1: Suisun Valley Rd & Rockville Rd

Existing plus Project Saturday Outbound
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	112	35	167	134	81	31	193	101	69	202	30
Future Volume (veh/h)	31	112	35	167	134	81	31	193	101	69	202	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	127	40	190	152	0	35	219	115	78	230	34
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	191	162	250	396		50	316	535	101	298	44
Arrive On Green	0.04	0.10	0.10	0.14	0.21	0.00	0.20	0.20	0.20	0.24	0.24	0.24
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	256	1602	1585	414	1222	181
Grp Volume(v), veh/h	35	127	40	190	152	0	254	0	115	342	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1858	0	1585	1817	0	0
Q Serve(g_s), s	1.1	3.8	1.3	6.0	4.0	0.0	7.4	0.0	3.0	10.2	0.0	0.0
Cycle Q Clear(g_c), s	1.1	3.8	1.3	6.0	4.0	0.0	7.4	0.0	3.0	10.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.14		1.00	0.23		0.10
Lane Grp Cap(c), veh/h	66	191	162	250	396		366	0	535	443	0	0
V/C Ratio(X)	0.53	0.67	0.25	0.76	0.38		0.69	0.00	0.22	0.77	0.00	0.00
Avail Cap(c_a), veh/h	460	1449	1228	1380	1449		1440	0	1450	939	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.5	25.1	24.0	24.0	19.6	0.0	21.7	0.0	13.7	20.5	0.0	0.0
Incr Delay (d2), s/veh	2.4	1.5	0.3	4.8	1.3	0.0	2.4	0.0	0.2	2.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.7	0.5	2.7	1.8	0.0	3.3	0.0	1.0	4.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	26.6	24.3	28.8	20.9	0.0	24.0	0.0	13.9	23.3	0.0	0.0
LnGrp LOS	C	C	C	C	C		C	A	B	C	A	A
Approach Vol, veh/h		202			342			369			342	
Approach Delay, s/veh		26.7			25.3			20.9			23.3	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.7	10.5		18.8	6.4	16.9		16.0				
Change Period (Y+Rc), s	4.6	4.6		4.6	* 4.2	4.6		4.6				
Max Green Setting (Gmax), s	45.0	45.0		30.0	* 15	45.0		45.0				
Max Q Clear Time (g_c+I1), s	8.0	5.8		12.2	3.1	6.0		9.4				
Green Ext Time (p_c), s	0.6	0.6		2.0	0.0	1.8		2.1				

Intersection Summary

HCM 6th Ctrl Delay	23.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Existing plus Project Saturday Outbound

07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗	↖	↗	↖	↖	↗	↗	↖	↗	↖
Traffic Volume (veh/h)	12	1	43	16	1	12	36	337	18	3	471	15
Future Volume (veh/h)	12	1	43	16	1	12	36	337	18	3	471	15
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	1	46	22	0	0	38	359	0	4	501	16
Peak Hour Factor	0.94	0.75	0.94	0.75	0.75	0.75	0.94	0.94	0.75	0.75	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	8	103	99	0	0	80	1267	0	10	1114	36
Arrive On Green	0.06	0.06	0.06	0.03	0.00	0.00	0.04	0.36	0.00	0.01	0.32	0.32
Sat Flow, veh/h	1660	128	1585	3563	0	1585	1781	3554	1585	1781	3515	112
Grp Volume(v), veh/h	14	0	46	22	0	0	38	359	0	4	253	264
Grp Sat Flow(s),veh/h/ln1787	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1850	
Q Serve(g_s), s	0.2	0.0	0.9	0.2	0.0	0.0	0.7	2.3	0.0	0.1	3.6	3.6
Cycle Q Clear(g_c), s	0.2	0.0	0.9	0.2	0.0	0.0	0.7	2.3	0.0	0.1	3.6	3.6
Prop In Lane	0.93		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	116	0	103	99	0	0	80	1267	0	10	563	587
V/C Ratio(X)	0.12	0.00	0.45	0.22	0.00	0.00	0.48	0.28	0.00	0.41	0.45	0.45
Avail Cap(c_a), veh/h	1134	0	1005	4519	0	0	1130	4508	0	1695	2254	2347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	14.2	15.0	0.0	0.0	14.7	7.3	0.0	15.6	8.6	8.6
Incr Delay (d2), s/veh	0.2	0.0	1.1	1.1	0.0	0.0	1.6	0.1	0.0	10.0	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.1	0.0	0.0	0.3	0.1	0.0	0.0	0.2	0.5	0.0	0.0	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.1	0.0	15.3	16.1	0.0	0.0	16.3	7.4	0.0	25.6	9.1	9.1
LnGrp LOS	B	A	B	B	A	A	B	A	A	C	A	A
Approach Vol, veh/h		60			22			397			521	
Approach Delay, s/veh		15.0			16.1			8.2			9.3	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s5.6	14.6			5.1	4.4	15.8		6.2				
Change Period (Y+Rc), s* 4.2	4.6			* 4.2	* 4.2	4.6		4.2				
Max Green Setting (Gmax)20	40.0			* 40	* 30	40.0		20.0				
Max Q Clear Time (g_c+11, s	5.6			2.2	2.1	4.3		2.9				
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	2.4		0.1				

Intersection Summary

HCM 6th Ctrl Delay	9.4
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Existing plus Project Saturday Outbound
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	38	19	55	39	57	18	51	349	17	13	442	52
Future Volume (veh/h)	38	19	55	39	57	18	51	349	17	13	442	52
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	21	60	42	62	20	55	379	18	14	480	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	52	149	85	327	101	105	1611	76	32	1001	446
Arrive On Green	0.05	0.12	0.12	0.05	0.12	0.12	0.06	0.32	0.32	0.02	0.28	0.28
Sat Flow, veh/h	1781	428	1222	1781	2674	825	1781	4997	235	1781	3554	1585
Grp Volume(v), veh/h	41	0	81	42	40	42	55	257	140	14	480	57
Grp Sat Flow(s),veh/h/ln	1781	0	1650	1781	1777	1722	1781	1702	1828	1781	1777	1585
Q Serve(g_s), s	0.8	0.0	1.6	0.8	0.7	0.8	1.1	2.0	2.0	0.3	4.0	1.0
Cycle Q Clear(g_c), s	0.8	0.0	1.6	0.8	0.7	0.8	1.1	2.0	2.0	0.3	4.0	1.0
Prop In Lane	1.00		0.74	1.00		0.48	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	83	0	201	85	218	211	105	1097	589	32	1001	446
V/C Ratio(X)	0.49	0.00	0.40	0.49	0.18	0.20	0.52	0.23	0.24	0.43	0.48	0.13
Avail Cap(c_a), veh/h	998	0	693	1247	747	724	998	3338	1792	998	3484	1554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	14.5	16.6	14.1	14.1	16.3	8.9	8.9	17.3	10.6	9.6
Incr Delay (d2), s/veh	4.4	0.0	1.3	4.4	0.4	0.5	4.0	0.1	0.2	3.4	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	0.4	0.0	0.5	0.4	0.3	0.3	0.5	0.5	0.6	0.1	1.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	0.0	15.8	21.0	14.5	14.5	20.3	9.0	9.1	20.7	11.1	9.7
LnGrp LOS	C	A	B	C	B	B	C	A	A	C	B	A
Approach Vol, veh/h		122			124			452			551	
Approach Delay, s/veh		17.6			16.7			10.4			11.2	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.8	16.1	5.9	8.8	6.3	14.7	5.9	8.9				
Change Period (Y+Rc), s	4.2	4.6	* 4.2	4.5	* 4.2	4.6	* 4.2	4.5				
Max Green Setting (Gmax), s	20	35.0	* 25	15.0	* 20	35.0	* 20	15.0				
Max Q Clear Time (g_c+1), s	12.3	4.0	2.8	3.6	3.1	6.0	2.8	2.8				
Green Ext Time (p_c), s	0.0	2.9	0.1	0.2	0.1	4.1	0.1	0.2				

Intersection Summary

HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
5: Suisun Valley Rd & Business Center Dr

Existing plus Project Saturday Outbound
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↔		↔↔	↑↑↔		↔↔	↑↑		↔↔	↑↑	↔
Traffic Volume (veh/h)	96	147	115	37	139	15	135	297	36	10	256	270
Future Volume (veh/h)	96	147	115	37	139	15	135	297	36	10	256	270
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		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	160	125	40	151	16	147	323	39	11	278	293
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	713	332	197	796	82	373	1098	131	48	887	395
Arrive On Green	0.10	0.21	0.21	0.06	0.17	0.17	0.11	0.34	0.34	0.01	0.25	0.25
Sat Flow, veh/h	3456	3404	1585	3456	4702	485	3456	3196	383	3456	3554	1585
Grp Volume(v), veh/h	104	160	125	40	108	59	147	178	184	11	278	293
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1783	1728	1777	1801	1728	1777	1585
Q Serve(g_s), s	1.7	2.3	4.0	0.7	1.6	1.7	2.3	4.3	4.4	0.2	3.8	10.0
Cycle Q Clear(g_c), s	1.7	2.3	4.0	0.7	1.6	1.7	2.3	4.3	4.4	0.2	3.8	10.0
Prop In Lane	1.00		1.00	1.00		0.27	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	335	713	332	197	577	302	373	610	619	48	887	395
V/C Ratio(X)	0.31	0.22	0.38	0.20	0.19	0.19	0.39	0.29	0.30	0.23	0.31	0.74
Avail Cap(c_a), veh/h	1171	1730	806	1171	1730	906	1171	753	763	1171	1505	671
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	19.4	20.0	26.5	21.0	21.1	24.5	14.1	14.2	28.8	18.0	20.4
Incr Delay (d2), s/veh	0.6	0.2	0.9	0.6	0.2	0.4	0.8	0.3	0.3	2.8	0.2	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.8	1.4	0.3	0.6	0.7	0.9	1.5	1.6	0.1	1.4	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.4	19.5	20.9	27.2	21.2	21.4	25.3	14.5	14.5	31.6	18.3	23.7
LnGrp LOS	C	B	C	C	C	C	C	B	B	C	B	C
Approach Vol, veh/h		389			207			509			582	
Approach Delay, s/veh		21.5			22.4			17.6			21.3	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.0	26.2	8.6	18.3	11.6	20.6	10.9	15.9				
Change Period (Y+Rc), s	5.2	5.9	* 5.2	5.9	* 5.2	5.9	* 5.2	5.9				
Max Green Setting (Gmax), s	20	25.0	* 20	30.0	* 20	25.0	* 20	30.0				
Max Q Clear Time (g_c+1), s	12.2	6.4	2.7	6.0	4.3	12.0	3.7	3.7				
Green Ext Time (p_c), s	0.0	2.2	0.1	2.0	0.5	2.7	0.3	1.1				

Intersection Summary

HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection

Intersection Delay, s/veh	13
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔		↔				↔	↕↕		↔	↕↕	
Traffic Vol, veh/h	94	0	311	0	0	0	133	375	0	0	344	56
Future Vol, veh/h	94	0	311	0	0	0	133	375	0	0	344	56
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	106	0	349	0	0	0	149	421	0	0	387	63
Number of Lanes	2	0	1	0	0	0	1	2	0	1	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	3	3	0
Conflicting Approach Right	NB	EB	
Conflicting Lanes Right	3	0	3
HCM Control Delay	11.1	12.6	15.3
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	0%	100%	100%	67%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	0%	33%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	133	188	188	47	47	311	0	229	171
LT Vol	133	0	0	47	47	0	0	0	0
Through Vol	0	188	188	0	0	0	0	229	115
RT Vol	0	0	0	0	0	311	0	0	56
Lane Flow Rate	149	211	211	53	53	349	0	258	192
Geometry Grp	8	8	8	7	7	7	8	8	8
Degree of Util (X)	0.308	0.404	0.301	0.111	0.111	0.443	0	0.503	0.362
Departure Headway (Hd)	7.415	6.907	5.145	7.537	7.537	4.567	7.025	7.025	6.791
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	481	518	691	473	473	779	0	510	525
Service Time	5.206	4.698	2.935	5.324	5.324	2.351	4.818	4.818	4.585
HCM Lane V/C Ratio	0.31	0.407	0.305	0.112	0.112	0.448	0	0.506	0.366
HCM Control Delay	13.5	14.4	10.2	11.3	11.3	11	9.8	16.8	13.4
HCM Lane LOS	B	B	B	B	B	B	N	C	B
HCM 95th-tile Q	1.3	1.9	1.3	0.4	0.4	2.3	0	2.8	1.6

HCM 6th Signalized Intersection Summary
7: Pitman Rd & I-80 EB Off/I-80 EB On

Existing plus Project Saturday Outbound

07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗					↑	↗	↘	↑	
Traffic Volume (veh/h)	212	4	374	0	0	0	0	296	529	161	494	0
Future Volume (veh/h)	212	4	374	0	0	0	0	296	529	161	494	0
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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	223	4	394				0	312	557	169	520	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	501	9	454				0	645	547	282	957	0
Arrive On Green	0.29	0.29	0.29				0.00	0.34	0.34	0.08	0.51	0.00
Sat Flow, veh/h	1751	31	1585				0	1870	1585	3456	1870	0
Grp Volume(v), veh/h	227	0	394				0	312	557	169	520	0
Grp Sat Flow(s),veh/h/ln	1783	0	1585				0	1870	1585	1728	1870	0
Q Serve(g_s), s	4.5	0.0	10.3				0.0	5.7	15.0	2.1	8.2	0.0
Cycle Q Clear(g_c), s	4.5	0.0	10.3				0.0	5.7	15.0	2.1	8.2	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	510	0	454				0	645	547	282	957	0
V/C Ratio(X)	0.44	0.00	0.87				0.00	0.48	1.02	0.60	0.54	0.00
Avail Cap(c_a), veh/h	1230	0	1093				0	645	547	1271	957	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.7	0.0	14.7				0.0	11.2	14.2	19.3	7.2	0.0
Incr Delay (d2), s/veh	0.2	0.0	2.0				0.0	0.2	43.4	0.8	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
%ile BackOfQ(50%),veh/ln	1.5	0.0	3.1				0.0	1.8	10.4	0.7	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.9	0.0	16.8				0.0	11.4	57.6	20.1	7.6	0.0
LnGrp LOS	B	A	B				A	B	F	C	A	A
Approach Vol, veh/h		621						869			689	
Approach Delay, s/veh		15.4						41.0			10.6	
Approach LOS		B						D			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		26.8			7.2	19.6		16.7				
Change Period (Y+Rc), s		4.6			3.7	4.6		4.2				
Max Green Setting (Gmax), s		15.0			16.0	15.0		30.0				
Max Q Clear Time (g_c+I1), s		10.2			4.1	17.0		12.3				
Green Ext Time (p_c), s		0.3			0.0	0.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay	24.1
HCM 6th LOS	C

Notes

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

HCM 6th Signalized Intersection Summary
8: Green Valley Rd & Business Center Dr

Existing plus Project Saturday Outbound
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗		↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	118	150	818	312	475	95	436	161	45	10	235	116
Future Volume (veh/h)	118	150	818	312	475	95	436	161	45	10	235	116
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	155	843	303	516	98	449	166	46	10	242	120
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	393	413	1187	409	701	133	531	1012	451	22	334	160
Arrive On Green	0.22	0.22	0.22	0.23	0.23	0.23	0.15	0.28	0.28	0.01	0.14	0.14
Sat Flow, veh/h	1781	1870	3170	1781	3058	578	3456	3554	1585	1781	2329	1117
Grp Volume(v), veh/h	122	155	843	303	315	299	449	166	46	10	183	179
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1766	1728	1777	1585	1781	1777	1669
Q Serve(g_s), s	4.7	5.7	18.0	12.9	12.7	12.8	10.3	2.9	1.7	0.5	8.0	8.4
Cycle Q Clear(g_c), s	4.7	5.7	18.0	12.9	12.7	12.8	10.3	2.9	1.7	0.5	8.0	8.4
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	393	413	1187	409	429	405	531	1012	451	22	255	239
V/C Ratio(X)	0.31	0.38	0.71	0.74	0.73	0.74	0.85	0.16	0.10	0.45	0.72	0.75
Avail Cap(c_a), veh/h	393	413	1187	625	656	620	572	1212	541	109	421	395
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	27.0	21.7	29.2	29.1	29.1	33.6	21.9	21.5	40.0	33.3	33.5
Incr Delay (d2), s/veh	0.4	0.6	2.0	2.7	2.4	2.7	10.6	0.1	0.1	13.7	3.8	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.5	6.5	5.5	5.6	5.4	4.9	1.1	0.6	0.3	3.5	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	27.5	23.7	31.8	31.5	31.8	44.2	22.0	21.6	53.7	37.1	38.2
LnGrp LOS	C	C	C	C	C	C	D	C	C	D	D	D
Approach Vol, veh/h		1120			917			661			372	
Approach Delay, s/veh		24.6			31.7			37.0			38.0	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	28.6		23.1	17.2	17.1		24.1				
Change Period (Y+Rc), s	4.7	5.4		5.1	* 4.7	5.4		5.4				
Max Green Setting (Gmax), s	5	27.8		18.0	* 14	19.3		28.6				
Max Q Clear Time (g_c+1/2g_s), s	5	4.9		20.0	12.3	10.4		14.9				
Green Ext Time (p_c), s	0.0	1.0		0.0	0.2	1.3		3.8				

Intersection Summary

HCM 6th Ctrl Delay	31.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
9: Green Valley Rd & I-80 WB Ramp

Existing plus Project Saturday Outbound
07/11/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations			↖ ↗	↑	↑	↘
Traffic Volume (veh/h)	0	0	130	646	785	579
Future Volume (veh/h)	0	0	130	646	785	579
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach			No	No		
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			135	673	818	603
Peak Hour Factor			0.96	0.96	0.96	0.96
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			407	1594	1151	975
Arrive On Green			0.12	0.85	0.62	0.62
Sat Flow, veh/h			3456	1870	1870	1585
Grp Volume(v), veh/h			135	673	818	603
Grp Sat Flow(s),veh/h/ln			1728	1870	1870	1585
Q Serve(g_s), s			1.4	3.3	11.8	9.3
Cycle Q Clear(g_c), s			1.4	3.3	11.8	9.3
Prop In Lane			1.00			1.00
Lane Grp Cap(c), veh/h			407	1594	1151	975
V/C Ratio(X)			0.33	0.42	0.71	0.62
Avail Cap(c_a), veh/h			1758	3520	2331	1975
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			15.9	0.7	5.2	4.7
Incr Delay (d2), s/veh			0.5	0.2	0.8	0.6
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.5	0.1	1.9	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			16.4	0.8	6.0	5.3
LnGrp LOS			B	A	A	A
Approach Vol, veh/h				808	1421	
Approach Delay, s/veh				3.4	5.7	
Approach LOS				A	A	
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		39.3			9.3	30.0
Change Period (Y+Rc), s		5.8			* 4.7	5.8
Max Green Setting (Gmax), s		74.0			* 20	49.0
Max Q Clear Time (g_c+I1), s		5.3			3.4	13.8
Green Ext Time (p_c), s		5.3			0.3	10.4
Intersection Summary						
HCM 6th Ctrl Delay			4.9			
HCM 6th LOS			A			

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	3.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	TT		T			T
Traffic Vol, veh/h	113	36	289	90	24	380
Future Vol, veh/h	113	36	289	90	24	380
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	123	39	314	98	26	413

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	828	363	0	0	412	0
Stage 1	363	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	341	682	-	-	1147	-
Stage 1	704	-	-	-	-	-
Stage 2	632	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	331	682	-	-	1147	-
Mov Cap-2 Maneuver	331	-	-	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	614	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.5	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	378	1147
HCM Lane V/C Ratio	-	-	0.428	0.023
HCM Control Delay (s)	-	-	21.5	8.2
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	2.1	0.1

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	276	6	20	373	9	31
Future Vol, veh/h	276	6	20	373	9	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	300	7	22	405	10	34

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	307	0	753 304
Stage 1	-	-	-	-	304 -
Stage 2	-	-	-	-	449 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1254	-	377 736
Stage 1	-	-	-	-	748 -
Stage 2	-	-	-	-	643 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1254	-	368 736
Mov Cap-2 Maneuver	-	-	-	-	368 -
Stage 1	-	-	-	-	748 -
Stage 2	-	-	-	-	628 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	601	-	-	1254	-
HCM Lane V/C Ratio	0.072	-	-	0.017	-
HCM Control Delay (s)	11.5	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

MOVEMENT SUMMARY

Site: 2 [Sat Out Rockville Rd / Abernathy Rd (Site Folder: General)]

Existing plus Project Saturday
 Special Event Outbound
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist ft]				
South: Abernathy Rd														
3	L2	161	2.0	179	2.0	0.388	7.4	LOS A	2.2	55.9	0.50	0.37	0.50	32.9
8	T1	156	2.0	173	2.0	0.388	7.4	LOS A	2.2	55.9	0.50	0.37	0.50	32.8
18	R2	59	2.0	66	2.0	0.388	7.4	LOS A	2.2	55.9	0.50	0.37	0.50	31.9
Approach		376	2.0	418	2.0	0.388	7.4	LOS A	2.2	55.9	0.50	0.37	0.50	32.7
East: Rockville Rd														
1	L2	36	2.0	40	2.0	0.276	7.0	LOS A	1.3	32.9	0.56	0.50	0.56	33.8
6	T1	159	2.0	177	2.0	0.276	7.0	LOS A	1.3	32.9	0.56	0.50	0.56	33.7
16	R2	25	2.0	28	2.0	0.276	7.0	LOS A	1.3	32.9	0.56	0.50	0.56	32.8
Approach		220	2.0	244	2.0	0.276	7.0	LOS A	1.3	32.9	0.56	0.50	0.56	33.6
North: Abernathy Rd														
7	L2	15	2.0	17	2.0	0.240	6.5	LOS A	1.1	28.0	0.54	0.47	0.54	34.3
4	T1	112	2.0	124	2.0	0.240	6.5	LOS A	1.1	28.0	0.54	0.47	0.54	34.2
14	R2	67	2.0	74	2.0	0.240	6.5	LOS A	1.1	28.0	0.54	0.47	0.54	33.2
Approach		194	2.0	216	2.0	0.240	6.5	LOS A	1.1	28.0	0.54	0.47	0.54	33.9
West: Rockville Rd														
5	L2	51	2.0	57	2.0	0.321	6.3	LOS A	1.7	43.7	0.41	0.27	0.41	34.1
2	T1	138	7.0	153	7.0	0.321	6.4	LOS A	1.7	43.7	0.41	0.27	0.41	33.9
12	R2	134	2.0	149	2.0	0.321	6.3	LOS A	1.7	43.7	0.41	0.27	0.41	33.0
Approach		323	4.1	359	4.1	0.321	6.3	LOS A	1.7	43.7	0.41	0.27	0.41	33.6
All Vehicles		1113	2.6	1237	2.6	0.388	6.9	LOS A	2.2	55.9	0.49	0.38	0.49	33.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).























Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCM 6th Signalized Intersection Summary
 1: Suisun Valley Rd & Rockville Rd

Cumulative PM
 07/11/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	135	35	135	160	40	60	220	285	80	190	30
Future Volume (veh/h)	20	135	35	135	160	40	60	220	285	80	190	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	155	40	155	184	0	69	253	328	92	218	34
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	219	186	204	396		99	363	577	116	274	43
Arrive On Green	0.03	0.12	0.12	0.11	0.21	0.00	0.25	0.25	0.25	0.24	0.24	0.24
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	397	1454	1585	485	1149	179
Grp Volume(v), veh/h	23	155	40	155	184	0	322	0	328	344	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1851	0	1585	1814	0	0
Q Serve(g_s), s	0.8	5.2	1.5	5.5	5.6	0.0	10.4	0.0	10.9	11.7	0.0	0.0
Cycle Q Clear(g_c), s	0.8	5.2	1.5	5.5	5.6	0.0	10.4	0.0	10.9	11.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.21		1.00	0.27		0.10
Lane Grp Cap(c), veh/h	46	219	186	204	396		462	0	577	432	0	0
V/C Ratio(X)	0.49	0.71	0.22	0.76	0.46		0.70	0.00	0.57	0.80	0.00	0.00
Avail Cap(c_a), veh/h	407	1282	1086	1221	1282		1268	0	1268	829	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	31.5	27.9	26.3	28.2	22.6	0.0	22.4	0.0	16.7	23.5	0.0	0.0
Incr Delay (d2), s/veh	3.0	1.6	0.2	5.7	1.8	0.0	1.9	0.0	0.9	3.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.4	0.6	2.6	2.6	0.0	4.5	0.0	3.8	5.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	29.5	26.5	33.9	24.4	0.0	24.3	0.0	17.6	26.9	0.0	0.0
LnGrp LOS	C	C	C	C	C		C	A	B	C	A	A
Approach Vol, veh/h		218			339			650			344	
Approach Delay, s/veh		29.5			28.8			20.9			26.9	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.1	12.3		20.2	5.9	18.5		21.0				
Change Period (Y+Rc), s	4.6	4.6		4.6	* 4.2	4.6		4.6				
Max Green Setting (Gmax), s	45.0	45.0		30.0	* 15	45.0		45.0				
Max Q Clear Time (g_c+I1), s	7.5	7.2		13.7	2.8	7.6		12.9				
Green Ext Time (p_c), s	0.5	0.7		2.0	0.0	2.3		3.5				

Intersection Summary

HCM 6th Ctrl Delay	25.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Cumulative PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗	↖	↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	10	5	80	55	5	5	100	505	20	15	340	5
Future Volume (veh/h)	10	5	80	55	5	5	100	505	20	15	340	5
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	8	85	98	0	0	106	537	0	25	362	5
Peak Hour Factor	0.94	0.60	0.94	0.60	0.60	0.60	0.94	0.94	0.60	0.60	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	68	141	306	0	0	160	1171	0	55	971	13
Arrive On Green	0.09	0.09	0.09	0.09	0.00	0.00	0.09	0.33	0.00	0.03	0.27	0.27
Sat Flow, veh/h	1052	765	1585	3563	0	1585	1781	3554	1585	1781	3589	50
Grp Volume(v), veh/h	19	0	85	98	0	0	106	537	0	25	179	188
Grp Sat Flow(s),veh/h/ln	1818	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1861
Q Serve(g_s), s	0.4	0.0	1.9	1.0	0.0	0.0	2.1	4.4	0.0	0.5	3.0	3.0
Cycle Q Clear(g_c), s	0.4	0.0	1.9	1.0	0.0	0.0	2.1	4.4	0.0	0.5	3.0	3.0
Prop In Lane	0.58		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	161	0	141	306	0	0	160	1171	0	55	481	503
V/C Ratio(X)	0.12	0.00	0.60	0.32	0.00	0.00	0.66	0.46	0.00	0.46	0.37	0.37
Avail Cap(c_a), veh/h	983	0	857	3855	0	0	964	3845	0	1445	1922	2014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	16.2	15.9	0.0	0.0	16.3	9.8	0.0	17.6	10.9	10.9
Incr Delay (d2), s/veh	0.1	0.0	1.6	0.6	0.0	0.0	1.8	0.3	0.0	2.2	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.7	0.4	0.0	0.0	0.8	1.2	0.0	0.2	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	0.0	17.8	16.5	0.0	0.0	18.0	10.1	0.0	19.8	11.4	11.4
LnGrp LOS	B	A	B	B	A	A	B	B	A	B	B	B
Approach Vol, veh/h		104			98			643			392	
Approach Delay, s/veh		17.4			16.5			11.4			11.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	14.6		7.4	5.3	16.8		7.5				
Change Period (Y+Rc), s	4.2	4.6		* 4.2	* 4.2	4.6		4.2				
Max Green Setting (Gmax), s	20	40.0		* 40	* 30	40.0		20.0				
Max Q Clear Time (g_c+14), s	14	5.0		3.0	2.5	6.4		3.9				
Green Ext Time (p_c), s	0.1	2.2		0.3	0.0	3.8		0.2				

Intersection Summary

HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Cumulative PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	185	100	35	55	35	35	45	430	35	235	385	95
Future Volume (veh/h)	185	100	35	55	35	35	45	430	35	235	385	95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	208	112	39	62	39	39	51	483	39	264	433	107
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	257	89	103	179	156	91	1010	81	326	1215	542
Arrive On Green	0.15	0.19	0.19	0.06	0.10	0.10	0.05	0.21	0.21	0.18	0.34	0.34
Sat Flow, veh/h	1781	1326	462	1781	1796	1569	1781	4820	385	1781	3554	1585
Grp Volume(v), veh/h	208	0	151	62	39	39	51	340	182	264	433	107
Grp Sat Flow(s),veh/h/ln	1781	0	1787	1781	1777	1588	1781	1702	1801	1781	1777	1585
Q Serve(g_s), s	5.5	0.0	3.7	1.7	1.0	1.1	1.4	4.3	4.4	7.0	4.5	2.3
Cycle Q Clear(g_c), s	5.5	0.0	3.7	1.7	1.0	1.1	1.4	4.3	4.4	7.0	4.5	2.3
Prop In Lane	1.00		0.26	1.00		0.99	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	271	0	346	103	177	158	91	713	377	326	1215	542
V/C Ratio(X)	0.77	0.00	0.44	0.60	0.22	0.25	0.56	0.48	0.48	0.81	0.36	0.20
Avail Cap(c_a), veh/h	723	0	544	904	541	484	723	2419	1280	723	2525	1126
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	0.0	17.5	22.6	20.4	20.5	22.8	17.1	17.1	19.3	12.1	11.4
Incr Delay (d2), s/veh	4.5	0.0	0.9	5.5	0.6	0.8	5.3	0.6	1.2	1.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	1.4	0.8	0.4	0.4	0.6	1.5	1.6	2.6	1.4	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.6	0.0	18.3	28.1	21.0	21.3	28.2	17.7	18.3	21.1	12.4	11.7
LnGrp LOS	C	A	B	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		359			140			573			804	
Approach Delay, s/veh		21.9			24.2			18.8			15.1	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	3.2	14.9	7.1	14.0	6.7	21.4	11.7	9.4				
Change Period (Y+Rc), s	4.2	4.6	* 4.2	4.5	* 4.2	4.6	* 4.2	4.5				
Max Green Setting (Gmax), s	20	35.0	* 25	15.0	* 20	35.0	* 20	15.0				
Max Q Clear Time (g_c+19), s	19.0	6.4	3.7	5.7	3.4	6.5	7.5	3.1				
Green Ext Time (p_c), s	0.3	3.9	0.1	0.5	0.1	3.8	0.4	0.2				

Intersection Summary

HCM 6th Ctrl Delay	18.2
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
5: Suisun Valley Rd & Business Center Dr

Cumulative PM
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔ ↕ ↘	↕ ↕ ↕		↔ ↕ ↕ ↘	↕ ↕ ↕ ↕		↔ ↕ ↕	↕ ↕		↔ ↕ ↘	↕ ↕	↘ ↕ ↘
Traffic Volume (veh/h)	180	495	435	25	140	10	560	320	125	10	140	220
Future Volume (veh/h)	180	495	435	25	140	10	560	320	125	10	140	220
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		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	205	562	494	28	159	11	636	364	142	11	159	250
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	296	1107	515	134	1359	92	713	959	368	46	672	300
Arrive On Green	0.09	0.33	0.33	0.04	0.28	0.28	0.21	0.38	0.38	0.01	0.19	0.19
Sat Flow, veh/h	3456	3404	1585	3456	4883	332	3456	2509	964	3456	3554	1585
Grp Volume(v), veh/h	205	562	494	28	110	60	636	256	250	11	159	250
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1811	1728	1777	1697	1728	1777	1585
Q Serve(g_s), s	5.3	12.3	28.2	0.7	2.2	2.3	16.5	9.6	9.8	0.3	3.5	14.0
Cycle Q Clear(g_c), s	5.3	12.3	28.2	0.7	2.2	2.3	16.5	9.6	9.8	0.3	3.5	14.0
Prop In Lane	1.00		1.00	1.00		0.18	1.00		0.57	1.00		1.00
Lane Grp Cap(c), veh/h	296	1107	515	134	947	504	713	679	648	46	672	300
V/C Ratio(X)	0.69	0.51	0.96	0.21	0.12	0.12	0.89	0.38	0.39	0.24	0.24	0.83
Avail Cap(c_a), veh/h	749	1107	515	749	1107	589	749	679	648	749	963	430
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	25.2	30.5	43.0	24.8	24.9	35.6	20.6	20.7	45.1	31.7	36.0
Incr Delay (d2), s/veh	3.5	0.5	29.4	0.9	0.1	0.1	12.9	0.4	0.5	3.2	0.2	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	4.8	14.2	0.3	0.9	1.0	7.9	3.8	3.7	0.1	1.5	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.5	25.6	59.9	43.9	24.9	25.0	48.5	21.0	21.1	48.2	32.0	46.2
LnGrp LOS	D	C	E	D	C	C	D	C	C	D	C	D
Approach Vol, veh/h		1261			198			1142			420	
Approach Delay, s/veh		42.1			27.6			36.3			40.8	
Approach LOS		D			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.4	41.1	8.8	35.9	24.2	23.3	13.1	31.6				
Change Period (Y+Rc), s	5.2	5.9	* 5.2	5.9	* 5.2	5.9	* 5.2	5.9				
Max Green Setting (Gmax), s	20	25.0	* 20	30.0	* 20	25.0	* 20	30.0				
Max Q Clear Time (g_c+1), s	11.8	11.8	2.7	30.2	18.5	16.0	7.3	4.3				
Green Ext Time (p_c), s	0.0	2.8	0.0	0.0	0.5	1.4	0.6	1.1				

Intersection Summary

HCM 6th Ctrl Delay	38.8
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection													
Intersection Delay, s/veh	26.9												
Intersection LOS	D												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔		↔					↔	↔↔			↔↔	
Traffic Vol, veh/h	155	0	355	0	0	0	0	185	620	0	0	445	35
Future Vol, veh/h	155	0	355	0	0	0	0	185	620	0	0	445	35
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	180	0	413	0	0	0	0	215	721	0	0	517	41
Number of Lanes	2	0	1	0	0	0	0	1	2	0	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB		
Conflicting Lanes Left	2	3	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	17.7	27.7	35.4
HCM LOS	C	D	E

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	0%	100%	81%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	185	310	310	78	78	355	297	183
LT Vol	185	0	0	78	78	0	0	0
Through Vol	0	310	310	0	0	0	297	148
RT Vol	0	0	0	0	0	355	0	35
Lane Flow Rate	215	360	360	90	90	413	345	213
Geometry Grp	8	8	8	7	7	7	8	8
Degree of Util (X)	0.523	0.825	0.647	0.22	0.22	0.662	0.847	0.515
Departure Headway (Hd)	8.754	8.241	6.459	8.885	8.885	5.876	8.84	8.703
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	415	443	562	406	406	619	411	416
Service Time	6.454	5.941	4.159	6.585	6.585	3.576	6.569	6.432
HCM Lane V/C Ratio	0.518	0.813	0.641	0.222	0.222	0.667	0.839	0.512
HCM Control Delay	20.7	39.5	20.2	14.1	14.1	19.3	44.7	20.3
HCM Lane LOS	C	E	C	B	B	C	E	C
HCM 95th-tile Q	2.9	7.8	4.6	0.8	0.8	4.9	8.1	2.9

HCM 6th Signalized Intersection Summary
 7: Pitman Rd & I-80 EB Off/I-80 EB On

Cumulative PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗					↕	↗	↗↘	↕	
Traffic Volume (veh/h)	215	5	475	0	0	0	0	580	600	130	650	0
Future Volume (veh/h)	215	5	475	0	0	0	0	580	600	130	650	0
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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	234	5	516				0	630	652	141	707	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	605	13	549				0	740	627	225	969	0
Arrive On Green	0.35	0.35	0.35				0.00	0.40	0.40	0.07	0.52	0.00
Sat Flow, veh/h	1746	37	1585				0	1870	1585	3456	1870	0
Grp Volume(v), veh/h	239	0	516				0	630	652	141	707	0
Grp Sat Flow(s),veh/h/ln	1783	0	1585				0	1870	1585	1728	1870	0
Q Serve(g_s), s	6.6	0.0	20.5				0.0	19.9	25.7	2.6	19.0	0.0
Cycle Q Clear(g_c), s	6.6	0.0	20.5				0.0	19.9	25.7	2.6	19.0	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	618	0	549				0	740	627	225	969	0
V/C Ratio(X)	0.39	0.00	0.94				0.00	0.85	1.04	0.63	0.73	0.00
Avail Cap(c_a), veh/h	631	0	561				0	740	627	654	1201	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.0	0.0	20.6				0.0	17.9	19.6	29.6	12.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	23.3				0.0	8.9	46.6	1.1	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	10.2				0.0	9.0	16.0	1.0	6.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.2	0.0	43.8				0.0	26.8	66.2	30.6	13.3	0.0
LnGrp LOS	B	A	D				A	C	F	C	B	A
Approach Vol, veh/h		755						1282			848	
Approach Delay, s/veh		35.1						46.9			16.2	
Approach LOS		D						D			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		38.2			7.9	30.3		26.7				
Change Period (Y+Rc), s		4.6			3.7	4.6		4.2				
Max Green Setting (Gmax), s		41.7			12.3	25.7		23.0				
Max Q Clear Time (g_c+I1), s		21.0			4.6	27.7		22.5				
Green Ext Time (p_c), s		0.6			0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Notes

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

HCM 6th Signalized Intersection Summary
 8: Green Valley Rd & Business Center Dr

Cumulative PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗		↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	100	230	900	760	460	130	395	300	165	5	380	80
Future Volume (veh/h)	100	230	900	760	460	130	395	300	165	5	380	80
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		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	240	938	469	932	135	411	312	172	5	396	83
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	313	978	627	1125	163	489	1037	463	11	460	95
Arrive On Green	0.17	0.17	0.17	0.35	0.35	0.35	0.14	0.29	0.29	0.01	0.16	0.16
Sat Flow, veh/h	1781	1870	3170	1781	3195	463	3456	3554	1585	1781	2929	608
Grp Volume(v), veh/h	104	240	938	469	546	521	411	312	172	5	239	240
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1787	1728	1777	1585	1781	1777	1761
Q Serve(g_s), s	5.8	13.9	18.9	26.2	30.1	30.2	13.1	7.7	9.7	0.3	14.8	15.1
Cycle Q Clear(g_c), s	5.8	13.9	18.9	26.2	30.1	30.2	13.1	7.7	9.7	0.3	14.8	15.1
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	298	313	978	627	659	629	489	1037	463	11	279	276
V/C Ratio(X)	0.35	0.77	0.96	0.75	0.83	0.83	0.84	0.30	0.37	0.44	0.86	0.87
Avail Cap(c_a), veh/h	298	313	978	766	804	769	682	1160	518	79	308	305
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.6	44.9	38.4	32.2	33.5	33.5	47.3	31.1	31.8	55.9	46.4	46.5
Incr Delay (d2), s/veh	0.7	10.9	19.5	3.2	6.1	6.3	6.7	0.2	0.5	24.1	19.2	21.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.3	14.9	11.4	14.2	13.6	6.0	3.3	3.7	0.2	7.9	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	55.9	57.8	35.4	39.5	39.8	54.0	31.2	32.3	80.0	65.6	67.7
LnGrp LOS	D	E	E	D	D	D	D	C	C	E	E	E
Approach Vol, veh/h		1282			1536			895			484	
Approach Delay, s/veh		56.2			38.4			41.9			66.8	
Approach LOS		E			D			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	38.4		24.0	20.7	23.1		45.2				
Change Period (Y+Rc), s	4.7	5.4		5.1	* 4.7	5.4		5.4				
Max Green Setting (Gmax), s	5	36.9		18.9	* 22	19.6		48.6				
Max Q Clear Time (g_c+1), s	11.7	11.7		20.9	15.1	17.1		32.2				
Green Ext Time (p_c), s	0.0	2.5		0.0	0.9	0.7		7.6				

Intersection Summary

HCM 6th Ctrl Delay	47.8
HCM 6th LOS	D

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

HCM 6th Signalized Intersection Summary
 9: Green Valley Rd & I-80 WB Ramp

Cumulative PM
 07/11/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations			↖ ↗	↑	↓	↘
Traffic Volume (veh/h)	0	0	60	875	1150	860
Future Volume (veh/h)	0	0	60	875	1150	860
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach			No	No		
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			65	941	1237	925
Peak Hour Factor			0.93	0.93	0.93	0.93
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			230	1686	1412	1197
Arrive On Green			0.07	0.90	0.76	0.76
Sat Flow, veh/h			3456	1870	1870	1585
Grp Volume(v), veh/h			65	941	1237	925
Grp Sat Flow(s),veh/h/ln			1728	1870	1870	1585
Q Serve(g_s), s			1.1	5.9	28.2	20.2
Cycle Q Clear(g_c), s			1.1	5.9	28.2	20.2
Prop In Lane			1.00			1.00
Lane Grp Cap(c), veh/h			230	1686	1412	1197
V/C Ratio(X)			0.28	0.56	0.88	0.77
Avail Cap(c_a), veh/h			1173	2348	1555	1318
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			26.2	0.6	5.2	4.2
Incr Delay (d2), s/veh			0.7	0.3	5.6	2.7
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.4	0.1	5.5	2.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			26.8	0.9	10.8	6.9
LnGrp LOS			C	A	B	A
Approach Vol, veh/h			1006	2162		
Approach Delay, s/veh			2.5	9.1		
Approach LOS			A	A		
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		58.9			8.6	50.3
Change Period (Y+Rc), s		5.8			* 4.7	5.8
Max Green Setting (Gmax), s		74.0			* 20	49.0
Max Q Clear Time (g_c+I1), s		7.9			3.1	30.2
Green Ext Time (p_c), s		9.7			0.1	14.3
Intersection Summary						
HCM 6th Ctrl Delay			7.0			
HCM 6th LOS			A			

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T	T	T
Traffic Vol, veh/h	5	5	560	5	5	360
Future Vol, veh/h	5	5	560	5	5	360
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	5	609	5	5	391

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1013	612	0	0	614	0
Stage 1	612	-	-	-	-	-
Stage 2	401	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	265	493	-	-	965	-
Stage 1	541	-	-	-	-	-
Stage 2	676	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	263	493	-	-	965	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	541	-	-	-	-	-
Stage 2	671	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.8	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	343	965
HCM Lane V/C Ratio	-	-	0.032	0.006
HCM Control Delay (s)	-	-	15.8	8.8
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.1	0

MOVEMENT SUMMARY

 Site: 2 [Cum PM Rd / Abernathy Rd (Site Folder: General)]

Cumulative PM
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Abernathy Rd														
3	L2	135	2.0	150	2.0	0.845	27.9	LOS C	15.7	399.3	0.99	1.53	2.43	25.7
8	T1	310	2.0	344	2.0	0.845	27.9	LOS C	15.7	399.3	0.99	1.53	2.43	25.6
18	R2	165	2.0	183	2.0	0.845	27.9	LOS C	15.7	399.3	0.99	1.53	2.43	25.1
Approach		610	2.0	678	2.0	0.845	27.9	LOS C	15.7	399.3	0.99	1.53	2.43	25.5
East: Rockville Rd														
1	L2	35	2.0	39	2.0	0.367	10.0	LOS A	1.8	46.2	0.68	0.72	0.78	32.4
6	T1	165	2.0	183	2.0	0.367	10.0	LOS A	1.8	46.2	0.68	0.72	0.78	32.3
16	R2	30	2.0	33	2.0	0.367	10.0	LOS A	1.8	46.2	0.68	0.72	0.78	31.5
Approach		230	2.0	256	2.0	0.367	10.0	LOS A	1.8	46.2	0.68	0.72	0.78	32.2
North: Abernathy Rd														
7	L2	70	2.0	78	2.0	0.351	7.8	LOS A	1.8	45.1	0.58	0.51	0.58	33.2
4	T1	175	2.0	194	2.0	0.351	7.8	LOS A	1.8	45.1	0.58	0.51	0.58	33.1
14	R2	45	2.0	50	2.0	0.351	7.8	LOS A	1.8	45.1	0.58	0.51	0.58	32.2
Approach		290	2.0	322	2.0	0.351	7.8	LOS A	1.8	45.1	0.58	0.51	0.58	33.0
West: Rockville Rd														
5	L2	130	2.0	144	2.0	0.588	11.7	LOS B	5.7	146.9	0.68	0.71	0.94	31.3
2	T1	245	7.0	272	7.0	0.588	11.9	LOS B	5.7	146.9	0.68	0.71	0.94	31.2
12	R2	140	2.0	156	2.0	0.588	11.7	LOS B	5.7	146.9	0.68	0.71	0.94	30.4
Approach		515	4.4	572	4.4	0.588	11.8	LOS B	5.7	146.9	0.68	0.71	0.94	31.0
All Vehicles		1645	2.7	1828	2.7	0.845	16.8	LOS B	15.7	399.3	0.78	0.98	1.41	29.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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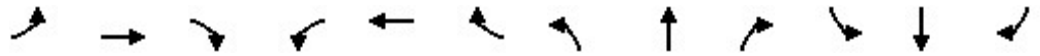
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HCM 6th Signalized Intersection Summary
 1: Suisun Valley Rd & Rockville Rd

Cumulative Saturday
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	130	35	175	135	75	35	200	150	85	205	30
Future Volume (veh/h)	30	130	35	175	135	75	35	200	150	85	205	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	148	40	199	153	0	40	227	170	97	233	34
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	212	180	257	427		56	320	550	122	292	43
Arrive On Green	0.04	0.11	0.11	0.14	0.23	0.00	0.20	0.20	0.20	0.25	0.25	0.25
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	278	1578	1585	484	1162	170
Grp Volume(v), veh/h	34	148	40	199	153	0	267	0	170	364	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1856	0	1585	1816	0	0
Q Serve(g_s), s	1.2	4.9	1.5	6.9	4.4	0.0	8.5	0.0	5.0	12.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	4.9	1.5	6.9	4.4	0.0	8.5	0.0	5.0	12.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.15		1.00	0.27		0.09
Lane Grp Cap(c), veh/h	63	212	180	257	427		376	0	550	457	0	0
V/C Ratio(X)	0.54	0.70	0.22	0.78	0.36		0.71	0.00	0.31	0.80	0.00	0.00
Avail Cap(c_a), veh/h	419	1318	1117	1256	1318		1309	0	1346	853	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	30.3	27.2	25.7	26.3	20.7	0.0	23.7	0.0	15.3	22.4	0.0	0.0
Incr Delay (d2), s/veh	2.6	1.6	0.2	5.0	1.1	0.0	2.5	0.0	0.3	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.2	0.5	3.2	2.0	0.0	3.8	0.0	1.7	5.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	28.8	26.0	31.3	21.8	0.0	26.2	0.0	15.6	25.6	0.0	0.0
LnGrp LOS	C	C	C	C	C		C	A	B	C	A	A
Approach Vol, veh/h		222			352			437			364	
Approach Delay, s/veh		28.9			27.2			22.0			25.6	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.8	11.8		20.7	6.5	19.2		17.5				
Change Period (Y+Rc), s	4.6	4.6		4.6	* 4.2	4.6		4.6				
Max Green Setting (Gmax), s	45.0	45.0		30.0	* 15	45.0		45.0				
Max Q Clear Time (g_c+I1), s	8.9	6.9		14.0	3.2	6.4		10.5				
Green Ext Time (p_c), s	0.6	0.6		2.1	0.0	1.8		2.4				

Intersection Summary

HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Cumulative Saturday
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗	↖	↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	15	5	65	30	5	25	75	300	25	5	375	15
Future Volume (veh/h)	15	5	65	30	5	25	75	300	25	5	375	15
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	7	69	45	0	0	80	319	0	7	399	16
Peak Hour Factor	0.94	0.75	0.94	0.75	0.75	0.75	0.94	0.94	0.75	0.75	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	47	135	181	0	0	138	1270	0	17	1007	40
Arrive On Green	0.08	0.08	0.08	0.05	0.00	0.00	0.08	0.36	0.00	0.01	0.29	0.29
Sat Flow, veh/h	1257	550	1585	3563	0	1585	1781	3554	1585	1781	3483	139
Grp Volume(v), veh/h	23	0	69	45	0	0	80	319	0	7	203	212
Grp Sat Flow(s),veh/h/ln1807	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1845	0
Q Serve(g_s), s	0.4	0.0	1.4	0.4	0.0	0.0	1.5	2.2	0.0	0.1	3.2	3.2
Cycle Q Clear(g_c), s	0.4	0.0	1.4	0.4	0.0	0.0	1.5	2.2	0.0	0.1	3.2	3.2
Prop In Lane	0.70		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	153	0	135	181	0	0	138	1270	0	17	514	534
V/C Ratio(X)	0.15	0.00	0.51	0.25	0.00	0.00	0.58	0.25	0.00	0.42	0.40	0.40
Avail Cap(c_a), veh/h	1046	0	917	4124	0	0	1031	4113	0	1546	2057	2136
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	15.1	15.8	0.0	0.0	15.4	7.8	0.0	17.0	9.9	9.9
Incr Delay (d2), s/veh	0.2	0.0	1.1	0.7	0.0	0.0	1.4	0.1	0.0	6.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.1	0.0	0.0	0.5	0.2	0.0	0.0	0.5	0.6	0.0	0.1	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	0.0	16.3	16.5	0.0	0.0	16.8	7.9	0.0	23.1	10.4	10.3
LnGrp LOS	B	A	B	B	A	A	B	A	A	C	B	B
Approach Vol, veh/h		92			45			399			422	
Approach Delay, s/veh		15.9			16.5			9.7			10.6	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s6.9	14.6			6.0	4.5	16.9		7.1				
Change Period (Y+Rc), s* 4.2	4.6			* 4.2	* 4.2	4.6		4.2				
Max Green Setting (Gmax)20	40.0			* 40	* 30	40.0		20.0				
Max Q Clear Time (g_c+13,5	5.2			2.4	2.1	4.2		3.4				
Green Ext Time (p_c), s	0.1	2.5		0.1	0.0	2.1		0.1				

Intersection Summary

HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Notes

- User approved volume balancing among the lanes for turning movement.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
- Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Cumulative Saturday
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↕		↖	↕		↖	↕	↗
Traffic Volume (veh/h)	60	25	65	35	60	20	45	335	15	15	380	55
Future Volume (veh/h)	60	25	65	35	60	20	45	335	15	15	380	55
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	27	71	38	65	22	49	364	16	16	413	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	66	174	78	325	105	96	1547	67	37	978	436
Arrive On Green	0.07	0.15	0.15	0.04	0.12	0.12	0.05	0.31	0.31	0.02	0.28	0.28
Sat Flow, veh/h	1781	456	1199	1781	2641	853	1781	5016	219	1781	3554	1585
Grp Volume(v), veh/h	65	0	98	38	43	44	49	246	134	16	413	60
Grp Sat Flow(s),veh/h/ln	1781	0	1655	1781	1777	1717	1781	1702	1831	1781	1777	1585
Q Serve(g_s), s	1.3	0.0	2.0	0.8	0.8	0.8	1.0	2.0	2.0	0.3	3.5	1.0
Cycle Q Clear(g_c), s	1.3	0.0	2.0	0.8	0.8	0.8	1.0	2.0	2.0	0.3	3.5	1.0
Prop In Lane	1.00		0.72	1.00		0.50	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	118	0	241	78	219	211	96	1050	565	37	978	436
V/C Ratio(X)	0.55	0.00	0.41	0.49	0.20	0.21	0.51	0.23	0.24	0.44	0.42	0.14
Avail Cap(c_a), veh/h	981	0	683	1226	734	709	981	3280	1764	981	3424	1527
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	0.0	14.1	17.0	14.3	14.3	16.7	9.4	9.4	17.6	10.8	9.9
Incr Delay (d2), s/veh	4.0	0.0	1.1	4.6	0.4	0.5	4.2	0.1	0.3	3.0	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/lr	0.6	0.0	0.6	0.4	0.3	0.3	0.4	0.5	0.6	0.1	1.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.4	0.0	15.2	21.6	14.7	14.8	20.9	9.5	9.6	20.6	11.1	10.1
LnGrp LOS	C	A	B	C	B	B	C	A	A	C	B	B
Approach Vol, veh/h		163			125			429			489	
Approach Delay, s/veh		17.3			16.9			10.8			11.3	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.9	15.8	5.8	9.8	6.2	14.6	6.6	9.0				
Change Period (Y+Rc), s	4.2	4.6	* 4.2	4.5	* 4.2	4.6	* 4.2	4.5				
Max Green Setting (Gmax), s	20	35.0	* 25	15.0	* 20	35.0	* 20	15.0				
Max Q Clear Time (g_c+1), s	12.3	4.0	2.8	4.0	3.0	5.5	3.3	2.8				
Green Ext Time (p_c), s	0.0	2.8	0.1	0.3	0.1	3.5	0.1	0.3				

Intersection Summary

HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
5: Suisun Valley Rd & Business Center Dr

Cumulative Saturday
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔↔↔			↔↔↔↔↔			↔↔↔↔↔			↔↔↔↔↔		↔↔↔↔↔
Traffic Volume (veh/h)	135	595	120	20	140	10	200	250	105	25	160	260
Future Volume (veh/h)	135	595	120	20	140	10	200	250	105	25	160	260
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	147	647	130	22	152	11	217	272	114	27	174	283
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	1105	219	123	921	65	385	771	315	104	824	368
Arrive On Green	0.10	0.26	0.26	0.04	0.19	0.19	0.11	0.31	0.31	0.03	0.23	0.23
Sat Flow, veh/h	3456	4275	847	3456	4866	346	3456	2461	1005	3456	3554	1585
Grp Volume(v), veh/h	147	513	264	22	105	58	217	194	192	27	174	283
Grp Sat Flow(s),veh/h/ln	1728	1702	1718	1728	1702	1808	1728	1777	1689	1728	1777	1585
Q Serve(g_s), s	2.4	8.1	8.2	0.4	1.6	1.6	3.6	5.2	5.4	0.5	2.4	10.2
Cycle Q Clear(g_c), s	2.4	8.1	8.2	0.4	1.6	1.6	3.6	5.2	5.4	0.5	2.4	10.2
Prop In Lane	1.00		0.49	1.00		0.19	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	363	880	444	123	644	342	385	557	529	104	824	368
V/C Ratio(X)	0.41	0.58	0.59	0.18	0.16	0.17	0.56	0.35	0.36	0.26	0.21	0.77
Avail Cap(c_a), veh/h	1128	1667	841	1128	1667	886	1128	725	690	1128	1451	647
HCM Platoon Ratio	1.00	1.00	1.00	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	25.6	19.8	19.9	28.7	20.8	20.8	25.8	16.2	16.3	29.0	19.0	22.0
Incr Delay (d2), s/veh	0.9	0.7	1.5	0.8	0.1	0.3	1.6	0.5	0.5	1.6	0.2	4.1
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	2.9	3.1	0.2	0.6	0.6	1.4	1.9	1.9	0.2	0.9	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	20.6	21.4	29.5	20.9	21.1	27.4	16.7	16.8	30.6	19.2	26.1
LnGrp LOS	C	C	C	C	C	C	C	C	B	B	C	B
Approach Vol, veh/h	924		185		603		484					
Approach Delay, s/veh	21.8		22.0		20.6		23.9					
Approach LOS	C		C		C		C					
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.0	25.1	7.4	21.7	12.0	20.1	11.6	17.5				
Change Period (Y+Rc), s	5.2	5.9	* 5.2	5.9	* 5.2	5.9	* 5.2	5.9				
Max Green Setting (Gmax), s	20	25.0	* 20	30.0	* 20	25.0	* 20	30.0				
Max Q Clear Time (g_c+1), s	7.4	7.4	2.4	10.2	5.6	12.2	4.4	3.6				
Green Ext Time (p_c), s	0.0	2.3	0.0	5.6	0.7	2.0	0.5	1.0				

Intersection Summary

HCM 6th Ctrl Delay	21.9
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Intersection Delay, s/veh	13.4											
Intersection LOS	B											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔		↔				↔	↕↕		↔	↕↕	
Traffic Vol, veh/h	75	0	375	0	0	0	160	420	0	0	300	30
Future Vol, veh/h	75	0	375	0	0	0	160	420	0	0	300	30
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	84	0	421	0	0	0	180	472	0	0	337	34
Number of Lanes	2	0	1	0	0	0	1	2	0	1	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	3
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	3	3	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	12.4	13.4	14.9
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	0%	100%	100%	77%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	0%	23%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	160	210	210	38	38	375	0	200	130
LT Vol	160	0	0	38	38	0	0	0	0
Through Vol	0	210	210	0	0	0	0	200	100
RT Vol	0	0	0	0	0	375	0	0	30
Lane Flow Rate	180	236	236	42	42	421	0	225	146
Geometry Grp	8	8	8	7	7	7	8	8	8
Degree of Util (X)	0.373	0.457	0.341	0.089	0.089	0.534	0	0.46	0.293
Departure Headway (Hd)	7.478	6.97	5.206	7.636	7.636	4.681	7.375	7.375	7.211
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	484	519	694	471	471	775	0	490	500
Service Time	5.181	4.672	2.909	5.353	5.353	2.381	5.098	5.098	4.934
HCM Lane V/C Ratio	0.372	0.455	0.34	0.089	0.089	0.543	0	0.459	0.292
HCM Control Delay	14.6	15.4	10.6	11.1	11.1	12.6	10.1	16.2	12.9
HCM Lane LOS	B	C	B	B	B	B	N	C	B
HCM 95th-tile Q	1.7	2.4	1.5	0.3	0.3	3.2	0	2.4	1.2

HCM 6th Signalized Intersection Summary
 7: Pitman Rd & I-80 EB Off/I-80 EB On

Cumulative Saturday
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗					↑	↗	↘	↑	
Traffic Volume (veh/h)	80	5	485	0	0	0	0	465	685	60	650	0
Future Volume (veh/h)	80	5	485	0	0	0	0	465	685	60	650	0
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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	84	5	511				0	489	721	63	684	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	580	35	545				0	794	673	144	977	0
Arrive On Green	0.34	0.34	0.34				0.00	0.42	0.42	0.04	0.52	0.00
Sat Flow, veh/h	1686	100	1585				0	1870	1585	3456	1870	0
Grp Volume(v), veh/h	89	0	511				0	489	721	63	684	0
Grp Sat Flow(s),veh/h/ln	1786	0	1585				0	1870	1585	1728	1870	0
Q Serve(g_s), s	2.3	0.0	20.5				0.0	13.4	27.9	1.2	18.1	0.0
Cycle Q Clear(g_c), s	2.3	0.0	20.5				0.0	13.4	27.9	1.2	18.1	0.0
Prop In Lane	0.94		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	614	0	545				0	794	673	144	977	0
V/C Ratio(X)	0.14	0.00	0.94				0.00	0.62	1.07	0.44	0.70	0.00
Avail Cap(c_a), veh/h	701	0	622				0	794	673	384	1107	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.9	0.0	20.9				0.0	14.7	18.9	30.8	11.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	19.6				0.0	1.1	55.6	0.8	1.3	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
%ile BackOfQ(50%),veh/lr	0.8	0.0	9.7				0.0	5.0	18.8	0.5	6.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	0.0	40.5				0.0	15.8	74.5	31.5	13.1	0.0
LnGrp LOS	B	A	D				A	B	F	C	B	A
Approach Vol, veh/h		600						1210			747	
Approach Delay, s/veh		36.7						50.8			14.7	
Approach LOS		D						D			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		38.9			6.4	32.5		26.8				
Change Period (Y+Rc), s		4.6			3.7	4.6		4.2				
Max Green Setting (Gmax), s		38.9			7.3	27.9		25.8				
Max Q Clear Time (g_c+I1), s		20.1			3.2	29.9		22.5				
Green Ext Time (p_c), s		0.6			0.0	0.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	36.9
HCM 6th LOS	D

Notes

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

HCM 6th Signalized Intersection Summary
8: Green Valley Rd & Business Center Dr

Cumulative Saturday
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗		↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	80	235	1005	650	505	125	425	215	140	10	350	70
Future Volume (veh/h)	80	235	1005	650	505	125	425	215	140	10	350	70
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		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	242	1036	440	843	129	438	222	144	10	361	72
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	344	1065	581	1033	158	526	1022	456	21	437	86
Arrive On Green	0.18	0.18	0.18	0.33	0.33	0.33	0.15	0.29	0.29	0.01	0.15	0.15
Sat Flow, veh/h	1781	1870	3170	1781	3169	485	3456	3554	1585	1781	2958	584
Grp Volume(v), veh/h	82	242	1036	440	498	474	438	222	144	10	215	218
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1783	1728	1777	1585	1781	1777	1765
Q Serve(g_s), s	4.3	13.1	19.9	23.9	26.4	26.4	13.3	5.1	7.7	0.6	12.7	13.0
Cycle Q Clear(g_c), s	4.3	13.1	19.9	23.9	26.4	26.4	13.3	5.1	7.7	0.6	12.7	13.0
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	328	344	1065	581	610	581	526	1022	456	21	262	260
V/C Ratio(X)	0.25	0.70	0.97	0.76	0.82	0.82	0.83	0.22	0.32	0.47	0.82	0.84
Avail Cap(c_a), veh/h	328	344	1065	734	771	735	808	1311	585	82	322	320
HCM Platoon Ratio	1.00	1.00	1.00	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	37.8	41.4	35.4	32.6	33.5	33.5	44.5	29.3	30.2	53.1	44.7	44.8
Incr Delay (d2), s/veh	0.4	6.3	21.1	3.5	5.5	5.7	4.5	0.1	0.4	15.1	13.0	14.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	6.6	15.9	10.5	12.4	11.9	5.9	2.2	2.9	0.4	6.4	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.2	47.7	56.5	36.1	38.9	39.2	49.1	29.4	30.6	68.2	57.8	59.5
LnGrp LOS	D	D	E	D	D	D	D	C	C	E	E	E
Approach Vol, veh/h		1360			1412			804			443	
Approach Delay, s/veh		53.8			38.2			40.3			58.8	
Approach LOS		D			D			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	36.5		25.0	21.2	21.4		40.7				
Change Period (Y+Rc), s	4.7	5.4		5.1	* 4.7	5.4		5.4				
Max Green Setting (Gmax), s	5	39.9		19.9	* 25	19.6		44.6				
Max Q Clear Time (g_c+1), s	12.6	9.7		21.9	15.3	15.0		28.4				
Green Ext Time (p_c), s	0.0	1.8		0.0	1.1	1.0		6.8				

Intersection Summary

HCM 6th Ctrl Delay	46.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
 9: Green Valley Rd & I-80 WB Ramp

Cumulative Saturday
 07/11/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations			↖ ↗	↑	↓	↘
Traffic Volume (veh/h)	0	0	25	800	1125	860
Future Volume (veh/h)	0	0	25	800	1125	860
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach			No	No		
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			26	833	1172	896
Peak Hour Factor			0.96	0.96	0.96	0.96
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			125	1663	1428	1210
Arrive On Green			0.04	0.89	0.76	0.76
Sat Flow, veh/h			3456	1870	1870	1585
Grp Volume(v), veh/h			26	833	1172	896
Grp Sat Flow(s),veh/h/ln			1728	1870	1870	1585
Q Serve(g_s), s			0.4	4.7	20.8	16.1
Cycle Q Clear(g_c), s			0.4	4.7	20.8	16.1
Prop In Lane			1.00			1.00
Lane Grp Cap(c), veh/h			125	1663	1428	1210
V/C Ratio(X)			0.21	0.50	0.82	0.74
Avail Cap(c_a), veh/h			1321	2644	1751	1484
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(l)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			24.5	0.6	3.9	3.4
Incr Delay (d2), s/veh			0.8	0.2	2.7	1.6
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.2	0.1	2.1	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			25.3	0.8	6.6	5.0
LnGrp LOS			C	A	A	A
Approach Vol, veh/h				859	2068	
Approach Delay, s/veh				1.6	5.9	
Approach LOS				A	A	
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		52.3			6.6	45.7
Change Period (Y+Rc), s		5.8			* 4.7	5.8
Max Green Setting (Gmax), s		74.0			* 20	49.0
Max Q Clear Time (g_c+l1), s		6.7			2.4	22.8
Green Ext Time (p_c), s		7.6			0.0	17.2
Intersection Summary						
HCM 6th Ctrl Delay			4.6			
HCM 6th LOS			A			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T	T	T
Traffic Vol, veh/h	5	5	385	5	5	415
Future Vol, veh/h	5	5	385	5	5	415
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	5	418	5	5	451

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	882	421	0	0	423
Stage 1	421	-	-	-	-
Stage 2	461	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	317	632	-	-	1136
Stage 1	662	-	-	-	-
Stage 2	635	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	315	632	-	-	1136
Mov Cap-2 Maneuver	315	-	-	-	-
Stage 1	662	-	-	-	-
Stage 2	631	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.8	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	420	1136
HCM Lane V/C Ratio	-	-	0.026	0.005
HCM Control Delay (s)	-	-	13.8	8.2
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

MOVEMENT SUMMARY

Site: 2 [Cum Sat Rockville Rd / Abernathy Rd (Site Folder: General)]

Cumulative Saturday
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist. ft]				
South: Abernathy Rd														
3	L2	170	2.0	189	2.0	0.583	11.7	LOS B	5.7	144.1	0.71	0.75	0.99	31.1
8	T1	215	2.0	239	2.0	0.583	11.7	LOS B	5.7	144.1	0.71	0.75	0.99	31.1
18	R2	120	2.0	133	2.0	0.583	11.7	LOS B	5.7	144.1	0.71	0.75	0.99	30.3
Approach		505	2.0	561	2.0	0.583	11.7	LOS B	5.7	144.1	0.71	0.75	0.99	30.9
East: Rockville Rd														
1	L2	45	2.0	50	2.0	0.307	7.9	LOS A	1.4	36.3	0.61	0.58	0.61	33.2
6	T1	150	2.0	167	2.0	0.307	7.9	LOS A	1.4	36.3	0.61	0.58	0.61	33.2
16	R2	30	2.0	33	2.0	0.307	7.9	LOS A	1.4	36.3	0.61	0.58	0.61	32.3
Approach		225	2.0	250	2.0	0.307	7.9	LOS A	1.4	36.3	0.61	0.58	0.61	33.1
North: Abernathy Rd														
7	L2	25	2.0	28	2.0	0.244	6.6	LOS A	1.1	28.4	0.55	0.48	0.55	34.1
4	T1	115	2.0	128	2.0	0.244	6.6	LOS A	1.1	28.4	0.55	0.48	0.55	34.0
14	R2	55	2.0	61	2.0	0.244	6.6	LOS A	1.1	28.4	0.55	0.48	0.55	33.0
Approach		195	2.0	217	2.0	0.244	6.6	LOS A	1.1	28.4	0.55	0.48	0.55	33.7
West: Rockville Rd														
5	L2	55	2.0	61	2.0	0.404	7.5	LOS A	2.3	59.3	0.47	0.34	0.47	33.5
2	T1	215	7.0	239	7.0	0.404	7.6	LOS A	2.3	59.3	0.47	0.34	0.47	33.4
12	R2	125	2.0	139	2.0	0.404	7.5	LOS A	2.3	59.3	0.47	0.34	0.47	32.5
Approach		395	4.7	439	4.7	0.404	7.6	LOS A	2.3	59.3	0.47	0.34	0.47	33.1
All Vehicles		1320	2.8	1467	2.8	0.583	9.1	LOS A	5.7	144.1	0.60	0.56	0.71	32.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.























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HCM 6th Signalized Intersection Summary
 1: Suisun Valley Rd & Rockville Rd

Cumulative plus Project PM
 07/11/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	142	36	135	161	41	63	229	283	80	212	30
Future Volume (veh/h)	20	142	36	135	161	41	63	229	283	80	212	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	163	41	155	185	0	72	263	325	92	244	34
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	226	192	203	402		98	360	573	113	300	42
Arrive On Green	0.03	0.12	0.12	0.11	0.21	0.00	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	398	1453	1585	452	1199	167
Grp Volume(v), veh/h	23	163	41	155	185	0	335	0	325	370	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1850	0	1585	1818	0	0
Q Serve(g_s), s	0.9	5.8	1.6	5.8	5.9	0.0	11.5	0.0	11.3	13.2	0.0	0.0
Cycle Q Clear(g_c), s	0.9	5.8	1.6	5.8	5.9	0.0	11.5	0.0	11.3	13.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.21		1.00	0.25		0.09
Lane Grp Cap(c), veh/h	46	226	192	203	402		458	0	573	455	0	0
V/C Ratio(X)	0.50	0.72	0.21	0.76	0.46		0.73	0.00	0.57	0.81	0.00	0.00
Avail Cap(c_a), veh/h	388	1222	1036	1164	1222		1209	0	1216	792	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.1	29.1	27.3	29.6	23.6	0.0	23.8	0.0	17.7	24.3	0.0	0.0
Incr Delay (d2), s/veh	3.1	1.6	0.2	5.9	1.8	0.0	2.3	0.0	0.9	3.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.6	0.6	2.8	2.7	0.0	5.1	0.0	4.0	5.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.2	30.8	27.5	35.5	25.3	0.0	26.1	0.0	18.5	27.9	0.0	0.0
LnGrp LOS	D	C	C	D	C		C	A	B	C	A	A
Approach Vol, veh/h		227			340			660			370	
Approach Delay, s/veh		30.7			29.9			22.4			27.9	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.4	12.9		21.8	6.0	19.4		21.6				
Change Period (Y+Rc), s	4.6	4.6		4.6	* 4.2	4.6		4.6				
Max Green Setting (Gmax), s	45.0	45.0		30.0	* 15	45.0		45.0				
Max Q Clear Time (g_c+I1), s	7.8	7.8		15.2	2.9	7.9		13.5				
Green Ext Time (p_c), s	0.5	0.7		2.1	0.0	2.3		3.6				

Intersection Summary

HCM 6th Ctrl Delay	26.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Cumulative plus Project PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗	↖	↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	14	5	80	55	5	5	100	596	20	15	379	7
Future Volume (veh/h)	14	5	80	55	5	5	100	596	20	15	379	7
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	8	85	98	0	0	106	634	0	25	403	7
Peak Hour Factor	0.94	0.60	0.94	0.60	0.60	0.60	0.94	0.94	0.60	0.60	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	57	144	305	0	0	160	1169	0	55	965	17
Arrive On Green	0.09	0.09	0.09	0.09	0.00	0.00	0.09	0.33	0.00	0.03	0.27	0.27
Sat Flow, veh/h	1181	630	1585	3563	0	1585	1781	3554	1585	1781	3574	62
Grp Volume(v), veh/h	23	0	85	98	0	0	106	634	0	25	200	210
Grp Sat Flow(s),veh/h/ln	1811	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1859
Q Serve(g_s), s	0.4	0.0	1.9	1.0	0.0	0.0	2.1	5.4	0.0	0.5	3.4	3.4
Cycle Q Clear(g_c), s	0.4	0.0	1.9	1.0	0.0	0.0	2.1	5.4	0.0	0.5	3.4	3.4
Prop In Lane	0.65		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	164	0	144	305	0	0	160	1169	0	55	480	502
V/C Ratio(X)	0.14	0.00	0.59	0.32	0.00	0.00	0.66	0.54	0.00	0.46	0.42	0.42
Avail Cap(c_a), veh/h	978	0	856	3846	0	0	962	3836	0	1442	1918	2007
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	16.2	15.9	0.0	0.0	16.3	10.2	0.0	17.7	11.1	11.1
Incr Delay (d2), s/veh	0.1	0.0	1.5	0.6	0.0	0.0	1.8	0.4	0.0	2.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.2	0.0	0.7	0.4	0.0	0.0	0.8	1.5	0.0	0.2	1.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	0.0	17.6	16.5	0.0	0.0	18.1	10.5	0.0	19.9	11.7	11.7
LnGrp LOS	B	A	B	B	A	A	B	B	A	B	B	B
Approach Vol, veh/h		108			98			740			435	
Approach Delay, s/veh		17.2			16.5			11.6			12.2	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	14.6		7.4	5.3	16.8		7.6				
Change Period (Y+Rc), s	4.2	4.6		* 4.2	* 4.2	4.6		4.2				
Max Green Setting (Gmax), s	20	40.0		* 40	* 30	40.0		20.0				
Max Q Clear Time (g_c+14), s	14	5.4		3.0	2.5	7.4		3.9				
Green Ext Time (p_c), s	0.1	2.5		0.3	0.0	4.6		0.2				

Intersection Summary

HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Notes

- User approved volume balancing among the lanes for turning movement.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
- Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Cumulative plus Project PM
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	191	100	35	55	35	39	45	510	35	237	419	98
Future Volume (veh/h)	191	100	35	55	35	39	45	510	35	237	419	98
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	215	112	39	62	39	44	51	573	39	266	471	110
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	256	89	101	168	150	89	1129	76	326	1294	577
Arrive On Green	0.16	0.19	0.19	0.06	0.09	0.09	0.05	0.23	0.23	0.18	0.36	0.36
Sat Flow, veh/h	1781	1326	462	1781	1777	1585	1781	4885	330	1781	3554	1585
Grp Volume(v), veh/h	215	0	151	62	39	44	51	398	214	266	471	110
Grp Sat Flow(s),veh/h/ln	1781	0	1787	1781	1777	1585	1781	1702	1811	1781	1777	1585
Q Serve(g_s), s	6.0	0.0	3.9	1.8	1.1	1.3	1.5	5.3	5.4	7.5	5.1	2.5
Cycle Q Clear(g_c), s	6.0	0.0	3.9	1.8	1.1	1.3	1.5	5.3	5.4	7.5	5.1	2.5
Prop In Lane	1.00		0.26	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	277	0	346	101	168	150	89	787	418	326	1294	577
V/C Ratio(X)	0.78	0.00	0.44	0.61	0.23	0.29	0.57	0.51	0.51	0.82	0.36	0.19
Avail Cap(c_a), veh/h	683	0	514	854	511	456	683	2285	1215	683	2385	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	0.0	18.5	24.0	21.9	22.0	24.2	17.5	17.5	20.5	12.2	11.3
Incr Delay (d2), s/veh	4.6	0.0	0.9	5.9	0.7	1.1	5.7	0.6	1.2	1.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	1.5	0.8	0.4	0.5	0.7	1.8	2.0	2.8	1.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	0.0	19.4	29.9	22.6	23.1	29.9	18.1	18.6	22.4	12.4	11.5
LnGrp LOS	C	A	B	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		366			145			663			847	
Approach Delay, s/veh		23.1			25.9			19.2			15.4	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.7	16.7	7.2	14.6	6.8	23.6	12.3	9.4				
Change Period (Y+Rc), s	4.2	4.6	* 4.2	4.5	* 4.2	4.6	* 4.2	4.5				
Max Green Setting (Gmax), s	20	35.0	* 25	15.0	* 20	35.0	* 20	15.0				
Max Q Clear Time (g_c+1), s	19.5	7.4	3.8	5.9	3.5	7.1	8.0	3.3				
Green Ext Time (p_c), s	0.3	4.7	0.1	0.4	0.1	4.2	0.5	0.2				

Intersection Summary

HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
5: Suisun Valley Rd & Business Center Dr

Cumulative plus Project PM
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔↔	↑↑↑		↔↔	↑↑		↔↔	↑↑	↔
Traffic Volume (veh/h)	187	495	435	25	140	10	560	393	125	10	148	247
Future Volume (veh/h)	187	495	435	25	140	10	560	393	125	10	148	247
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		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	212	562	494	28	159	11	636	447	142	11	168	281
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	302	1078	502	133	1308	89	706	1056	333	46	733	327
Arrive On Green	0.09	0.32	0.32	0.04	0.27	0.27	0.20	0.40	0.40	0.01	0.21	0.21
Sat Flow, veh/h	3456	3404	1585	3456	4883	332	3456	2659	838	3456	3554	1585
Grp Volume(v), veh/h	212	562	494	28	110	60	636	297	292	11	168	281
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1811	1728	1777	1720	1728	1777	1585
Q Serve(g_s), s	5.7	12.8	29.3	0.7	2.3	2.4	17.0	11.5	11.7	0.3	3.7	16.2
Cycle Q Clear(g_c), s	5.7	12.8	29.3	0.7	2.3	2.4	17.0	11.5	11.7	0.3	3.7	16.2
Prop In Lane	1.00		1.00	1.00		0.18	1.00		0.49	1.00		1.00
Lane Grp Cap(c), veh/h	302	1078	502	133	912	485	706	706	683	46	733	327
V/C Ratio(X)	0.70	0.52	0.98	0.21	0.12	0.12	0.90	0.42	0.43	0.24	0.23	0.86
Avail Cap(c_a), veh/h	730	1078	502	730	1078	573	730	706	683	730	938	418
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	26.5	32.1	44.1	26.2	26.3	36.8	20.7	20.7	46.3	31.3	36.3
Incr Delay (d2), s/veh	3.6	0.5	36.0	0.9	0.1	0.1	14.3	0.5	0.5	3.2	0.2	14.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	5.0	15.5	0.3	0.9	1.0	8.3	4.6	4.5	0.1	1.6	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.6	27.0	68.1	45.1	26.3	26.4	51.0	21.2	21.2	49.5	31.5	50.5
LnGrp LOS	D	C	E	D	C	C	D	C	C	D	C	D
Approach Vol, veh/h		1268			198			1225			460	
Approach Delay, s/veh		46.1			29.0			36.7			43.5	
Approach LOS		D			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	43.5	8.8	35.9	24.6	25.4	13.5	31.3				
Change Period (Y+Rc), s	5.2	5.9	* 5.2	5.9	* 5.2	5.9	* 5.2	5.9				
Max Green Setting (Gmax), s	20	25.0	* 20	30.0	* 20	25.0	* 20	30.0				
Max Q Clear Time (g_c+1), s	12.3	13.7	2.7	31.3	19.0	18.2	7.7	4.4				
Green Ext Time (p_c), s	0.0	3.0	0.0	0.0	0.3	1.3	0.7	1.1				

Intersection Summary

HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection													
Intersection Delay, s/veh32.4													
Intersection LOS D													

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔		↗					↔	↕↕			↕↕	
Traffic Vol, veh/h	170	0	355	0	0	0	0	185	678	0	0	450	38
Future Vol, veh/h	170	0	355	0	0	0	0	185	678	0	0	450	38
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	198	0	413	0	0	0	0	215	788	0	0	523	44
Number of Lanes	2	0	1	0	0	0	0	1	2	0	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	2	3	0
Conflicting Approach RightNB			EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	18.8	36	40.5
HCM LOS	C	E	E

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	0%	100%	80%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	185	339	339	85	85	355	300	188
LT Vol	185	0	0	85	85	0	0	0
Through Vol	0	339	339	0	0	0	300	150
RT Vol	0	0	0	0	0	355	0	38
Lane Flow Rate	215	394	394	99	99	413	349	219
Geometry Grp	8	8	8	7	7	7	8	8
Degree of Util (X)	0.533	0.921	0.726	0.246	0.246	0.682	0.887	0.547
Departure Headway (Hd)	8.928	8.413	6.63	9.073	9.073	6.061	9.152	9.006
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	407	434	548	398	398	599	398	402
Service Time	6.628	6.113	4.33	6.773	6.773	3.761	6.888	6.742
HCM Lane V/C Ratio	0.528	0.908	0.719	0.249	0.249	0.689	0.877	0.545
HCM Control Delay	21.4	55	24.9	14.7	14.7	20.8	52.1	22.1
HCM Lane LOS	C	F	C	B	B	C	F	C
HCM 95th-tile Q	3	10.2	6	1	1	5.3	9	3.2

HCM 6th Signalized Intersection Summary
 7: Pitman Rd & I-80 EB Off/I-80 EB On

Cumulative plus Project PM
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗					↑	↗	↘	↑	
Traffic Volume (veh/h)	273	5	475	0	0	0	0	580	600	135	650	0
Future Volume (veh/h)	273	5	475	0	0	0	0	580	600	135	650	0
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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	297	5	516				0	630	652	147	707	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	608	10	549				0	738	625	232	970	0
Arrive On Green	0.35	0.35	0.35				0.00	0.39	0.39	0.07	0.52	0.00
Sat Flow, veh/h	1753	30	1585				0	1870	1585	3456	1870	0
Grp Volume(v), veh/h	302	0	516				0	630	652	147	707	0
Grp Sat Flow(s),veh/h/ln	1783	0	1585				0	1870	1585	1728	1870	0
Q Serve(g_s), s	8.7	0.0	20.6				0.0	20.1	25.7	2.7	19.1	0.0
Cycle Q Clear(g_c), s	8.7	0.0	20.6				0.0	20.1	25.7	2.7	19.1	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	618	0	549				0	738	625	232	970	0
V/C Ratio(X)	0.49	0.00	0.94				0.00	0.85	1.04	0.63	0.73	0.00
Avail Cap(c_a), veh/h	629	0	559				0	738	625	652	1197	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.7	0.0	20.6				0.0	18.0	19.7	29.6	12.2	0.0
Incr Delay (d2), s/veh	0.2	0.0	23.4				0.0	9.2	47.7	1.1	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	10.2				0.0	9.1	16.2	1.1	6.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.0	0.0	44.0				0.0	27.2	67.5	30.7	13.4	0.0
LnGrp LOS	B	A	D				A	C	F	C	B	A
Approach Vol, veh/h		818						1282			854	
Approach Delay, s/veh		34.0						47.7			16.4	
Approach LOS		C						D			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		38.4			8.1	30.3		26.8				
Change Period (Y+Rc), s		4.6			3.7	4.6		4.2				
Max Green Setting (Gmax), s		41.7			12.3	25.7		23.0				
Max Q Clear Time (g_c+I1), s		21.1			4.7	27.7		22.6				
Green Ext Time (p_c), s		0.6			0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Notes

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

HCM 6th Signalized Intersection Summary
8: Green Valley Rd & Business Center Dr

Cumulative plus Project PM
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗		↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	100	230	900	786	460	133	395	300	165	12	380	80
Future Volume (veh/h)	100	230	900	786	460	133	395	300	165	12	380	80
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	240	938	479	955	139	411	312	172	12	396	83
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	294	309	971	637	1141	166	487	1007	449	25	458	95
Arrive On Green	0.17	0.17	0.17	0.36	0.36	0.36	0.14	0.28	0.28	0.01	0.16	0.16
Sat Flow, veh/h	1781	1870	3170	1781	3193	464	3456	3554	1585	1781	2929	608
Grp Volume(v), veh/h	104	240	938	479	559	535	411	312	172	12	239	240
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1787	1728	1777	1585	1781	1777	1761
Q Serve(g_s), s	5.9	14.1	18.9	27.0	31.4	31.4	13.3	7.9	10.0	0.8	15.0	15.3
Cycle Q Clear(g_c), s	5.9	14.1	18.9	27.0	31.4	31.4	13.3	7.9	10.0	0.8	15.0	15.3
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	294	309	971	637	669	639	487	1007	449	25	278	275
V/C Ratio(X)	0.35	0.78	0.97	0.75	0.84	0.84	0.84	0.31	0.38	0.49	0.86	0.87
Avail Cap(c_a), veh/h	294	309	971	757	794	759	673	1146	511	78	304	302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.3	45.7	39.1	32.3	33.7	33.7	47.9	32.2	33.0	56.0	47.0	47.2
Incr Delay (d2), s/veh	0.7	11.8	21.1	3.5	6.8	7.1	7.0	0.2	0.5	14.1	20.0	22.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.5	15.3	11.8	14.9	14.3	6.1	3.3	3.8	0.4	8.0	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	57.6	60.2	35.8	40.5	40.8	55.0	32.4	33.5	70.1	67.0	69.2
LnGrp LOS	D	E	E	D	D	D	D	C	C	E	E	E
Approach Vol, veh/h		1282			1573			895			491	
Approach Delay, s/veh		58.3			39.2			43.0			68.2	
Approach LOS		E			D			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	37.8		24.0	20.8	23.3		46.3				
Change Period (Y+Rc), s	4.7	5.4		5.1	* 4.7	5.4		5.4				
Max Green Setting (Gmax), s	5	36.9		18.9	* 22	19.6		48.6				
Max Q Clear Time (g_c+1), s	12.0	12.0		20.9	15.3	17.3		33.4				
Green Ext Time (p_c), s	0.0	2.5		0.0	0.9	0.6		7.5				

Intersection Summary

HCM 6th Ctrl Delay	49.1
HCM 6th LOS	D

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

HCM 6th Signalized Intersection Summary
9: Green Valley Rd & I-80 WB Ramp

Cumulative plus Project PM
07/11/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations			↖ ↗	↑	↓	↘
Traffic Volume (veh/h)	0	0	60	875	1163	873
Future Volume (veh/h)	0	0	60	875	1163	873
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach			No	No		
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			65	941	1251	939
Peak Hour Factor			0.93	0.93	0.93	0.93
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			229	1688	1416	1200
Arrive On Green			0.07	0.90	0.76	0.76
Sat Flow, veh/h			3456	1870	1870	1585
Grp Volume(v), veh/h			65	941	1251	939
Grp Sat Flow(s),veh/h/ln			1728	1870	1870	1585
Q Serve(g_s), s			1.1	5.9	29.2	21.0
Cycle Q Clear(g_c), s			1.1	5.9	29.2	21.0
Prop In Lane			1.00			1.00
Lane Grp Cap(c), veh/h			229	1688	1416	1200
V/C Ratio(X)			0.28	0.56	0.88	0.78
Avail Cap(c_a), veh/h			1161	2325	1539	1305
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(l)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			26.4	0.6	5.3	4.3
Incr Delay (d2), s/veh			0.7	0.3	6.1	2.9
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.4	0.1	5.8	3.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			27.1	0.9	11.4	7.2
LnGrp LOS			C	A	B	A
Approach Vol, veh/h				1006	2190	
Approach Delay, s/veh				2.6	9.6	
Approach LOS				A	A	
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		59.5			8.7	50.9
Change Period (Y+Rc), s		5.8			* 4.7	5.8
Max Green Setting (Gmax), s		74.0			* 20	49.0
Max Q Clear Time (g_c+l1), s		7.9			3.1	31.2
Green Ext Time (p_c), s		9.7			0.1	13.9
Intersection Summary						
HCM 6th Ctrl Delay			7.4			
HCM 6th LOS			A			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Intersection						
Int Delay, s/veh	1.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	20	554	106	28	360
Future Vol, veh/h	46	20	554	106	28	360
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	22	602	115	30	391

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1111	660	0	0	717
Stage 1	660	-	-	-	-
Stage 2	451	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	231	463	-	-	884
Stage 1	514	-	-	-	-
Stage 2	642	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	221	463	-	-	884
Mov Cap-2 Maneuver	221	-	-	-	-
Stage 1	514	-	-	-	-
Stage 2	614	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.7	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	263	884
HCM Lane V/C Ratio	-	-	0.273	0.034
HCM Control Delay (s)	-	-	23.7	9.2
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.1	0.1

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	498	7	24	338	4	13
Future Vol, veh/h	498	7	24	338	4	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	541	8	26	367	4	14

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	549	0	964
Stage 1	-	-	-	-	545
Stage 2	-	-	-	-	419
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1021	-	283
Stage 1	-	-	-	-	581
Stage 2	-	-	-	-	664
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1021	-	274
Mov Cap-2 Maneuver	-	-	-	-	274
Stage 1	-	-	-	-	581
Stage 2	-	-	-	-	643

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	13.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	439	-	-	1021	-
HCM Lane V/C Ratio	0.042	-	-	0.026	-
HCM Control Delay (s)	13.6	-	-	8.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

MOVEMENT SUMMARY

 Site: 2 [CPP PM Rd / Abernathy Rd (Site Folder: General)]

Cumulative plus Project PM

Site Category: (None)

Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist ft]				
South: Abernathy Rd														
3	L2	150	2.0	167	2.0	0.868	30.5	LOS C	17.5	445.0	1.00	1.60	2.62	24.9
8	T1	310	2.0	344	2.0	0.868	30.5	LOS C	17.5	445.0	1.00	1.60	2.62	24.9
18	R2	165	2.0	183	2.0	0.868	30.5	LOS C	17.5	445.0	1.00	1.60	2.62	24.4
Approach		625	2.0	694	2.0	0.868	30.5	LOS C	17.5	445.0	1.00	1.60	2.62	24.7
East: Rockville Rd														
1	L2	35	2.0	39	2.0	0.385	10.4	LOS B	2.0	50.2	0.69	0.74	0.83	32.2
6	T1	172	2.0	191	2.0	0.385	10.4	LOS B	2.0	50.2	0.69	0.74	0.83	32.1
16	R2	30	2.0	33	2.0	0.385	10.4	LOS B	2.0	50.2	0.69	0.74	0.83	31.3
Approach		237	2.0	263	2.0	0.385	10.4	LOS B	2.0	50.2	0.69	0.74	0.83	32.0
North: Abernathy Rd														
7	L2	70	2.0	78	2.0	0.360	8.1	LOS A	1.8	46.1	0.59	0.53	0.59	33.1
4	T1	175	2.0	194	2.0	0.360	8.1	LOS A	1.8	46.1	0.59	0.53	0.59	33.0
14	R2	45	2.0	50	2.0	0.360	8.1	LOS A	1.8	46.1	0.59	0.53	0.59	32.1
Approach		290	2.0	322	2.0	0.360	8.1	LOS A	1.8	46.1	0.59	0.53	0.59	32.9
West: Rockville Rd														
5	L2	130	2.0	144	2.0	0.600	12.0	LOS B	6.1	157.0	0.69	0.73	0.98	31.2
2	T1	248	7.0	276	7.0	0.600	12.2	LOS B	6.1	157.0	0.69	0.73	0.98	31.1
12	R2	148	2.0	164	2.0	0.600	12.0	LOS B	6.1	157.0	0.69	0.73	0.98	30.3
Approach		526	4.4	584	4.4	0.600	12.1	LOS B	6.1	157.0	0.69	0.73	0.98	30.9
All Vehicles		1678	2.7	1864	2.7	0.868	18.0	LOS B	17.5	445.0	0.79	1.02	1.50	28.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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




















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HCM 6th Signalized Intersection Summary
1: Suisun Valley Rd & Rockville Rd

Cumulative plus Project Saturday Inbound
07/11/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	138	36	175	137	77	39	215	149	85	232	30
Future Volume (veh/h)	30	138	36	175	137	77	39	215	149	85	232	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	157	41	199	156	0	44	244	169	97	264	34
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	219	186	253	431		60	331	559	118	321	41
Arrive On Green	0.03	0.12	0.12	0.14	0.23	0.00	0.21	0.21	0.21	0.26	0.26	0.26
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	284	1573	1585	447	1216	157
Grp Volume(v), veh/h	34	157	41	199	156	0	288	0	169	395	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1856	0	1585	1820	0	0
Q Serve(g_s), s	1.3	5.6	1.6	7.5	4.8	0.0	10.0	0.0	5.3	14.1	0.0	0.0
Cycle Q Clear(g_c), s	1.3	5.6	1.6	7.5	4.8	0.0	10.0	0.0	5.3	14.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.15		1.00	0.25		0.09
Lane Grp Cap(c), veh/h	62	219	186	253	431		391	0	559	481	0	0
V/C Ratio(X)	0.55	0.72	0.22	0.79	0.36		0.74	0.00	0.30	0.82	0.00	0.00
Avail Cap(c_a), veh/h	386	1216	1031	1158	1216		1207	0	1256	789	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	32.9	29.4	27.7	28.7	22.4	0.0	25.5	0.0	16.2	23.9	0.0	0.0
Incr Delay (d2), s/veh	2.8	1.6	0.2	5.3	1.1	0.0	2.7	0.0	0.3	3.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.6	0.6	3.5	2.2	0.0	4.6	0.0	1.9	6.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	31.1	27.9	34.0	23.4	0.0	28.2	0.0	16.5	27.5	0.0	0.0
LnGrp LOS	D	C	C	C	C		C	A	B	C	A	A
Approach Vol, veh/h		232			355			457			395	
Approach Delay, s/veh		31.2			29.3			23.9			27.5	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.4	12.7		22.9	6.6	20.6		19.2				
Change Period (Y+Rc), s	4.6	4.6		4.6	* 4.2	4.6		4.6				
Max Green Setting (Gmax), s	45.0	45.0		30.0	* 15	45.0		45.0				
Max Q Clear Time (g_c+I1), s	9.5	7.6		16.1	3.3	6.8		12.0				
Green Ext Time (p_c), s	0.6	0.7		2.2	0.0	1.9		2.5				

Intersection Summary

HCM 6th Ctrl Delay	27.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Cumulative plus Project Saturday Inbound
 07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗	↘	↕	↗	↘	↕	↕	↗	↘	↕
Traffic Volume (veh/h)	20	5	65	30	5	25	75	411	25	5	443	18
Future Volume (veh/h)	20	5	65	30	5	25	75	411	25	5	443	18
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	7	69	45	0	0	80	437	0	7	471	19
Peak Hour Factor	0.94	0.75	0.94	0.75	0.75	0.75	0.94	0.94	0.75	0.75	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	39	139	181	0	0	138	1266	0	17	1004	40
Arrive On Green	0.09	0.09	0.09	0.05	0.00	0.00	0.08	0.36	0.00	0.01	0.29	0.29
Sat Flow, veh/h	1352	451	1585	3563	0	1585	1781	3554	1585	1781	3482	140
Grp Volume(v), veh/h	28	0	69	45	0	0	80	437	0	7	240	250
Grp Sat Flow(s),veh/h/ln1803	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1845	
Q Serve(g_s), s	0.5	0.0	1.4	0.4	0.0	0.0	1.5	3.1	0.0	0.1	3.9	3.9
Cycle Q Clear(g_c), s	0.5	0.0	1.4	0.4	0.0	0.0	1.5	3.1	0.0	0.1	3.9	3.9
Prop In Lane	0.75		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	158	0	139	181	0	0	138	1266	0	17	512	532
V/C Ratio(X)	0.18	0.00	0.50	0.25	0.00	0.00	0.58	0.35	0.00	0.42	0.47	0.47
Avail Cap(c_a), veh/h	1040	0	914	4109	0	0	1027	4099	0	1541	2049	2128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	15.1	15.8	0.0	0.0	15.5	8.2	0.0	17.1	10.2	10.2
Incr Delay (d2), s/veh	0.2	0.0	1.0	0.7	0.0	0.0	1.4	0.2	0.0	6.1	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/lr0.2	0.0	0.0	0.5	0.2	0.0	0.0	0.5	0.8	0.0	0.1	1.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	0.0	16.1	16.5	0.0	0.0	16.9	8.4	0.0	23.1	10.8	10.8
LnGrp LOS	B	A	B	B	A	A	B	A	A	C	B	B
Approach Vol, veh/h		97			45			517			497	
Approach Delay, s/veh		15.8			16.5			9.7			11.0	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s6.9	14.6			6.0	4.5	17.0		7.2				
Change Period (Y+Rc), s* 4.2	4.6			* 4.2	* 4.2	4.6		4.2				
Max Green Setting (Gmax)20	40.0			* 40	* 30	40.0		20.0				
Max Q Clear Time (g_c+13,5	5.9			2.4	2.1	5.1		3.4				
Green Ext Time (p_c), s	0.1	3.0		0.1	0.0	3.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Notes

- User approved volume balancing among the lanes for turning movement.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
- Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Cumulative plus Project Saturday Inbound
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	67	25	65	35	60	25	45	433	15	18	440	60
Future Volume (veh/h)	67	25	65	35	60	25	45	433	15	18	440	60
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	27	71	38	65	27	49	471	16	20	478	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	69	180	78	306	120	95	1549	52	45	985	439
Arrive On Green	0.07	0.15	0.15	0.04	0.12	0.12	0.05	0.31	0.31	0.03	0.28	0.28
Sat Flow, veh/h	1781	456	1199	1781	2493	978	1781	5072	171	1781	3554	1585
Grp Volume(v), veh/h	73	0	98	38	45	47	49	315	172	20	478	65
Grp Sat Flow(s),veh/h/ln	1781	0	1655	1781	1777	1694	1781	1702	1839	1781	1777	1585
Q Serve(g_s), s	1.5	0.0	2.0	0.8	0.8	0.9	1.0	2.6	2.6	0.4	4.1	1.1
Cycle Q Clear(g_c), s	1.5	0.0	2.0	0.8	0.8	0.9	1.0	2.6	2.6	0.4	4.1	1.1
Prop In Lane	1.00		0.72	1.00		0.58	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	127	0	249	78	218	208	95	1040	562	45	985	439
V/C Ratio(X)	0.57	0.00	0.39	0.49	0.21	0.23	0.51	0.30	0.31	0.45	0.49	0.15
Avail Cap(c_a), veh/h	968	0	674	1210	724	690	968	3236	1749	968	3378	1507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	14.1	17.2	14.5	14.6	17.0	9.8	9.8	17.7	11.1	10.0
Incr Delay (d2), s/veh	4.0	0.0	1.0	4.7	0.5	0.5	4.2	0.2	0.4	2.6	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/lr	0.6	0.0	0.6	0.4	0.3	0.3	0.4	0.7	0.8	0.2	1.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.6	0.0	15.1	21.9	15.0	15.1	21.2	10.0	10.2	20.3	11.6	10.2
LnGrp LOS	C	A	B	C	B	B	C	A	B	C	B	B
Approach Vol, veh/h		171			130			536			563	
Approach Delay, s/veh		17.5			17.0			11.1			11.7	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.1	15.8	5.8	10.0	6.2	14.8	6.8	9.0				
Change Period (Y+Rc), s	4.2	4.6	* 4.2	4.5	* 4.2	4.6	* 4.2	4.5				
Max Green Setting (Gmax), s	20	35.0	* 25	15.0	* 20	35.0	* 20	15.0				
Max Q Clear Time (g_c+1), s	12.4	4.6	2.8	4.0	3.0	6.1	3.5	2.9				
Green Ext Time (p_c), s	0.0	3.7	0.1	0.3	0.1	4.1	0.1	0.3				

Intersection Summary

HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
5: Suisun Valley Rd & Business Center Dr

Cumulative plus Project Saturday Inbound
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔↔	↑↑↑		↔↔	↑↑		↔↔	↑↑	↔
Traffic Volume (veh/h)	144	595	120	20	140	10	200	340	105	25	174	307
Future Volume (veh/h)	144	595	120	20	140	10	200	340	105	25	174	307
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		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	157	647	130	22	152	11	217	370	114	27	189	334
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	1080	214	122	905	64	368	905	275	103	925	413
Arrive On Green	0.10	0.25	0.25	0.04	0.19	0.19	0.11	0.34	0.34	0.03	0.26	0.26
Sat Flow, veh/h	3456	4275	847	3456	4866	346	3456	2684	816	3456	3554	1585
Grp Volume(v), veh/h	157	513	264	22	105	58	217	243	241	27	189	334
Grp Sat Flow(s),veh/h/ln	1728	1702	1718	1728	1702	1808	1728	1777	1723	1728	1777	1585
Q Serve(g_s), s	2.7	8.5	8.7	0.4	1.7	1.7	3.9	6.8	6.9	0.5	2.7	12.7
Cycle Q Clear(g_c), s	2.7	8.5	8.7	0.4	1.7	1.7	3.9	6.8	6.9	0.5	2.7	12.7
Prop In Lane	1.00		0.49	1.00		0.19	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	353	860	434	122	633	336	368	599	581	103	925	413
V/C Ratio(X)	0.44	0.60	0.61	0.18	0.17	0.17	0.59	0.41	0.41	0.26	0.20	0.81
Avail Cap(c_a), veh/h	1074	1587	801	1074	1587	843	1074	690	670	1074	1381	616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	21.2	21.2	30.1	22.0	22.0	27.4	16.4	16.4	30.5	18.6	22.3
Incr Delay (d2), s/veh	1.1	0.8	1.7	0.8	0.1	0.3	1.8	0.5	0.6	1.6	0.1	5.6
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	1.1	3.1	3.3	0.2	0.6	0.7	1.6	2.5	2.5	0.2	1.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.2	22.0	22.9	31.0	22.2	22.3	29.2	16.9	17.0	32.1	18.7	27.9
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	B	C
Approach Vol, veh/h		934			185			701			550	
Approach Delay, s/veh		23.3			23.3			20.8			25.0	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.1	27.6	7.5	22.2	12.1	22.7	11.8	17.9				
Change Period (Y+Rc), s	5.2	5.9	* 5.2	5.9	* 5.2	5.9	* 5.2	5.9				
Max Green Setting (Gmax), s	20	25.0	* 20	30.0	* 20	25.0	* 20	30.0				
Max Q Clear Time (g_c+1), s	12.5	8.9	2.4	10.7	5.9	14.7	4.7	3.7				
Green Ext Time (p_c), s	0.0	2.9	0.0	5.5	0.7	2.1	0.5	1.0				

Intersection Summary

HCM 6th Ctrl Delay	22.9
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection

Intersection Delay, s/veh 14.8
Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔		↔				↔	↕↕		↔	↕↕	
Traffic Vol, veh/h	93	0	375	0	0	0	160	492	0	0	309	35
Future Vol, veh/h	93	0	375	0	0	0	160	492	0	0	309	35
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	104	0	421	0	0	0	180	553	0	0	347	39
Number of Lanes	2	0	1	0	0	0	1	2	0	1	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	3
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	3	3	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	13.4	15.1	16.1
HCM LOS	B	C	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	0%	100%	100%	75%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	0%	25%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	160	246	246	47	47	375	0	206	138
LT Vol	160	0	0	47	47	0	0	0	0
Through Vol	0	246	246	0	0	0	0	206	103
RT Vol	0	0	0	0	0	375	0	0	35
Lane Flow Rate	180	276	276	52	52	421	0	231	155
Geometry Grp	8	8	8	7	7	7	8	8	8
Degree of Util (X)	0.382	0.548	0.412	0.114	0.114	0.569	0	0.493	0.322
Departure Headway (Hd)	7.646	7.137	5.371	7.838	7.838	4.86	7.663	7.663	7.482
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	471	506	669	458	458	742	0	470	481
Service Time	5.389	4.88	3.114	5.57	5.57	2.591	5.414	5.414	5.233
HCM Lane V/C Ratio	0.382	0.545	0.413	0.114	0.114	0.567	0	0.491	0.322
HCM Control Delay	15.1	18.2	11.9	11.6	11.6	13.8	10.4	17.7	13.8
HCM Lane LOS	C	C	B	B	B	B	N	C	B
HCM 95th-tile Q	1.8	3.3	2	0.4	0.4	3.6	0	2.7	1.4

HCM 6th Signalized Intersection Summary
7: Pitman Rd & I-80 EB Off/I-80 EB On

Cumulative plus Project Saturday Inbound
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗					↑	↗	↘	↑	
Traffic Volume (veh/h)	152	5	485	0	0	0	0	465	685	69	650	0
Future Volume (veh/h)	152	5	485	0	0	0	0	465	685	69	650	0
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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	160	5	511				0	489	721	73	684	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	595	19	545				0	790	669	154	978	0
Arrive On Green	0.34	0.34	0.34				0.00	0.42	0.42	0.04	0.52	0.00
Sat Flow, veh/h	1730	54	1585				0	1870	1585	3456	1870	0
Grp Volume(v), veh/h	165	0	511				0	489	721	73	684	0
Grp Sat Flow(s),veh/h/ln	1784	0	1585				0	1870	1585	1728	1870	0
Q Serve(g_s), s	4.4	0.0	20.6				0.0	13.5	27.9	1.4	18.2	0.0
Cycle Q Clear(g_c), s	4.4	0.0	20.6				0.0	13.5	27.9	1.4	18.2	0.0
Prop In Lane	0.97		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	614	0	545				0	790	669	154	978	0
V/C Ratio(X)	0.27	0.00	0.94				0.00	0.62	1.08	0.47	0.70	0.00
Avail Cap(c_a), veh/h	696	0	619				0	790	669	382	1101	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.7	0.0	21.0				0.0	14.9	19.1	30.8	11.9	0.0
Incr Delay (d2), s/veh	0.1	0.0	19.7				0.0	1.1	57.5	0.8	1.3	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
%ile BackOfQ(50%),veh/ln	1.6	0.0	9.7				0.0	5.0	19.1	0.5	6.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	0.0	40.7				0.0	16.0	76.6	31.6	13.1	0.0
LnGrp LOS	B	A	D				A	B	F	C	B	A
Approach Vol, veh/h		676						1210			757	
Approach Delay, s/veh		34.6						52.1			14.9	
Approach LOS		C						D			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		39.2			6.7	32.5		26.9				
Change Period (Y+Rc), s		4.6			3.7	4.6		4.2				
Max Green Setting (Gmax), s		38.9			7.3	27.9		25.8				
Max Q Clear Time (g_c+I1), s		20.2			3.4	29.9		22.6				
Green Ext Time (p_c), s		0.6			0.0	0.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	37.0
HCM 6th LOS	D

Notes

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

HCM 6th Signalized Intersection Summary
8: Green Valley Rd & Business Center Dr

Cumulative plus Project Saturday Inbound
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗		↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	80	235	1005	696	505	131	425	215	140	19	350	70
Future Volume (veh/h)	80	235	1005	696	505	131	425	215	140	19	350	70
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	242	1036	458	885	135	438	222	144	20	361	72
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	336	1050	598	1065	162	523	985	439	37	434	86
Arrive On Green	0.18	0.18	0.18	0.34	0.34	0.34	0.15	0.28	0.28	0.02	0.15	0.15
Sat Flow, veh/h	1781	1870	3170	1781	3170	484	3456	3554	1585	1781	2958	584
Grp Volume(v), veh/h	82	242	1036	458	522	498	438	222	144	20	215	218
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1783	1728	1777	1585	1781	1777	1765
Q Serve(g_s), s	4.4	13.5	19.9	25.4	28.5	28.5	13.6	5.3	8.0	1.2	13.0	13.3
Cycle Q Clear(g_c), s	4.4	13.5	19.9	25.4	28.5	28.5	13.6	5.3	8.0	1.2	13.0	13.3
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	320	336	1050	598	628	599	523	985	439	37	260	259
V/C Ratio(X)	0.26	0.72	0.99	0.77	0.83	0.83	0.84	0.23	0.33	0.54	0.83	0.84
Avail Cap(c_a), veh/h	320	336	1050	718	754	719	790	1282	572	81	315	313
HCM Platoon Ratio	1.00	1.00	1.00	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	39.0	42.7	36.7	32.8	33.8	33.8	45.6	30.8	31.8	53.6	45.8	46.0
Incr Delay (d2), s/veh	0.4	7.3	24.4	4.1	6.7	7.0	5.0	0.1	0.4	11.7	14.1	15.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	6.8	16.8	11.2	13.5	13.0	6.1	2.2	3.0	0.7	6.6	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.4	50.0	61.2	36.9	40.5	40.9	50.6	30.9	32.2	65.4	59.9	61.7
LnGrp LOS	D	D	E	D	D	D	D	C	C	E	E	E
Approach Vol, veh/h		1360			1478			804			453	
Approach Delay, s/veh		57.9			39.5			41.9			61.0	
Approach LOS		E			D			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	36.1		25.0	21.4	21.6		42.6				
Change Period (Y+Rc), s	4.7	5.4		5.1	* 4.7	5.4		5.4				
Max Green Setting (Gmax), s	5	39.9		19.9	* 25	19.6		44.6				
Max Q Clear Time (g_c+1), s	13.2	10.0		21.9	15.6	15.3		30.5				
Green Ext Time (p_c), s	0.0	1.8		0.0	1.1	0.9		6.7				

Intersection Summary

HCM 6th Ctrl Delay	48.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
 9: Green Valley Rd & I-80 WB Ramp

Cumulative plus Project Saturday Inbound
 07/11/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations			↖ ↗	↑	↓	↘
Traffic Volume (veh/h)	0	0	25	800	1148	883
Future Volume (veh/h)	0	0	25	800	1148	883
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach			No	No		
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			26	833	1196	920
Peak Hour Factor			0.96	0.96	0.96	0.96
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			124	1668	1437	1218
Arrive On Green			0.04	0.89	0.77	0.77
Sat Flow, veh/h			3456	1870	1870	1585
Grp Volume(v), veh/h			26	833	1196	920
Grp Sat Flow(s),veh/h/ln			1728	1870	1870	1585
Q Serve(g_s), s			0.4	4.7	22.0	17.2
Cycle Q Clear(g_c), s			0.4	4.7	22.0	17.2
Prop In Lane			1.00			1.00
Lane Grp Cap(c), veh/h			124	1668	1437	1218
V/C Ratio(X)			0.21	0.50	0.83	0.76
Avail Cap(c_a), veh/h			1290	2582	1710	1449
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			25.1	0.6	4.0	3.4
Incr Delay (d2), s/veh			0.8	0.2	3.2	1.9
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.2	0.1	2.5	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			25.9	0.8	7.2	5.4
LnGrp LOS			C	A	A	A
Approach Vol, veh/h				859	2116	
Approach Delay, s/veh				1.6	6.4	
Approach LOS				A	A	
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		53.6			6.6	47.0
Change Period (Y+Rc), s		5.8			* 4.7	5.8
Max Green Setting (Gmax), s		74.0			* 20	49.0
Max Q Clear Time (g_c+I1), s		6.7			2.4	24.0
Green Ext Time (p_c), s		7.6			0.0	17.1
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Intersection						
Int Delay, s/veh	2.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	79	29	379	127	33	415
Future Vol, veh/h	79	29	379	127	33	415
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	32	412	138	36	451

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1004	481	0	0	550
Stage 1	481	-	-	-	-
Stage 2	523	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	268	585	-	-	1020
Stage 1	622	-	-	-	-
Stage 2	595	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	255	585	-	-	1020
Mov Cap-2 Maneuver	255	-	-	-	-
Stage 1	622	-	-	-	-
Stage 2	567	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.4	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	301	1020
HCM Lane V/C Ratio	-	-	0.39	0.035
HCM Control Delay (s)	-	-	24.4	8.7
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.8	0.1

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	358	9	29	383	6	21
Future Vol, veh/h	358	9	29	383	6	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	389	10	32	416	7	23

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	399	0	874 394
Stage 1	-	-	-	-	394 -
Stage 2	-	-	-	-	480 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1160	-	320 655
Stage 1	-	-	-	-	681 -
Stage 2	-	-	-	-	622 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1160	-	308 655
Mov Cap-2 Maneuver	-	-	-	-	308 -
Stage 1	-	-	-	-	681 -
Stage 2	-	-	-	-	600 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	524	-	-	1160	-
HCM Lane V/C Ratio	0.056	-	-	0.027	-
HCM Control Delay (s)	12.3	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

MOVEMENT SUMMARY

Site: 2 [CPP Sat In Rockville Rd / Abernathy Rd (Site Folder: General)]

Cumulative plus Project Saturday
 Special Event Inbound
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Abernathy Rd														
3	L2	188	2.0	209	2.0	0.608	12.5	LOS B	6.4	163.3	0.73	0.81	1.08	30.8
8	T1	215	2.0	239	2.0	0.608	12.5	LOS B	6.4	163.3	0.73	0.81	1.08	30.7
18	R2	120	2.0	133	2.0	0.608	12.5	LOS B	6.4	163.3	0.73	0.81	1.08	29.9
Approach		523	2.0	581	2.0	0.608	12.5	LOS B	6.4	163.3	0.73	0.81	1.08	30.6
East: Rockville Rd														
1	L2	45	2.0	50	2.0	0.326	8.3	LOS A	1.5	38.8	0.63	0.61	0.63	33.1
6	T1	159	2.0	177	2.0	0.326	8.3	LOS A	1.5	38.8	0.63	0.61	0.63	33.0
16	R2	30	2.0	33	2.0	0.326	8.3	LOS A	1.5	38.8	0.63	0.61	0.63	32.1
Approach		234	2.0	260	2.0	0.326	8.3	LOS A	1.5	38.8	0.63	0.61	0.63	32.9
North: Abernathy Rd														
7	L2	25	2.0	28	2.0	0.252	6.9	LOS A	1.1	29.2	0.56	0.51	0.56	34.0
4	T1	115	2.0	128	2.0	0.252	6.9	LOS A	1.1	29.2	0.56	0.51	0.56	33.9
14	R2	55	2.0	61	2.0	0.252	6.9	LOS A	1.1	29.2	0.56	0.51	0.56	32.9
Approach		195	2.0	217	2.0	0.252	6.9	LOS A	1.1	29.2	0.56	0.51	0.56	33.6
West: Rockville Rd														
5	L2	55	2.0	61	2.0	0.424	7.7	LOS A	2.5	63.6	0.48	0.35	0.48	33.4
2	T1	221	7.0	246	7.0	0.424	7.9	LOS A	2.5	63.6	0.48	0.35	0.48	33.3
12	R2	139	2.0	154	2.0	0.424	7.7	LOS A	2.5	63.6	0.48	0.35	0.48	32.4
Approach		415	4.7	461	4.7	0.424	7.8	LOS A	2.5	63.6	0.48	0.35	0.48	33.0
All Vehicles		1367	2.8	1519	2.8	0.608	9.5	LOS A	6.4	163.3	0.61	0.59	0.75	32.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).























Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCM 6th Signalized Intersection Summary
 1: Suisun Valley Rd & Rockville Rd

Cumulative plus Project Saturday Outbound
 07/11/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	135	36	175	138	79	40	221	149	85	223	30
Future Volume (veh/h)	30	135	36	175	138	79	40	221	149	85	223	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	153	41	199	157	0	45	251	169	97	253	34
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	215	182	254	427		61	340	568	119	310	42
Arrive On Green	0.03	0.11	0.11	0.14	0.23	0.00	0.22	0.22	0.22	0.26	0.26	0.26
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	282	1574	1585	459	1198	161
Grp Volume(v), veh/h	34	153	41	199	157	0	296	0	169	384	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1856	0	1585	1818	0	0
Q Serve(g_s), s	1.3	5.4	1.6	7.4	4.9	0.0	10.2	0.0	5.3	13.6	0.0	0.0
Cycle Q Clear(g_c), s	1.3	5.4	1.6	7.4	4.9	0.0	10.2	0.0	5.3	13.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.15		1.00	0.25		0.09
Lane Grp Cap(c), veh/h	62	215	182	254	427		401	0	568	470	0	0
V/C Ratio(X)	0.55	0.71	0.23	0.78	0.37		0.74	0.00	0.30	0.82	0.00	0.00
Avail Cap(c_a), veh/h	389	1227	1040	1168	1227		1218	0	1266	795	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	32.6	29.3	27.6	28.4	22.3	0.0	25.1	0.0	15.8	23.9	0.0	0.0
Incr Delay (d2), s/veh	2.8	1.6	0.2	5.3	1.1	0.0	2.7	0.0	0.3	3.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.5	0.6	3.4	2.2	0.0	4.6	0.0	1.9	6.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	30.9	27.8	33.7	23.4	0.0	27.8	0.0	16.1	27.4	0.0	0.0
LnGrp LOS	D	C	C	C	C		C	A	B	C	A	A
Approach Vol, veh/h		228			356			465			384	
Approach Delay, s/veh		31.0			29.2			23.5			27.4	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.4	12.5		22.3	6.6	20.3		19.4				
Change Period (Y+Rc), s	4.6	4.6		4.6	* 4.2	4.6		4.6				
Max Green Setting (Gmax), s	45.0	45.0		30.0	* 15	45.0		45.0				
Max Q Clear Time (g_c+I1), s	9.4	7.4		15.6	3.3	6.9		12.2				
Green Ext Time (p_c), s	0.6	0.7		2.1	0.0	1.9		2.6				

Intersection Summary

HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Cumulative plus Project Saturday Outbound

07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗	↖	↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	19	5	65	30	5	25	75	375	25	5	476	20
Future Volume (veh/h)	19	5	65	30	5	25	75	375	25	5	476	20
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	7	69	45	0	0	80	399	0	7	506	21
Peak Hour Factor	0.94	0.75	0.94	0.75	0.75	0.75	0.94	0.94	0.75	0.75	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	41	138	181	0	0	138	1267	0	17	1003	42
Arrive On Green	0.09	0.09	0.09	0.05	0.00	0.00	0.08	0.36	0.00	0.01	0.29	0.29
Sat Flow, veh/h	1336	468	1585	3563	0	1585	1781	3554	1585	1781	3477	144
Grp Volume(v), veh/h	27	0	69	45	0	0	80	399	0	7	258	269
Grp Sat Flow(s),veh/h/ln1804	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1844	
Q Serve(g_s), s	0.5	0.0	1.4	0.4	0.0	0.0	1.5	2.8	0.0	0.1	4.2	4.2
Cycle Q Clear(g_c), s	0.5	0.0	1.4	0.4	0.0	0.0	1.5	2.8	0.0	0.1	4.2	4.2
Prop In Lane	0.74		1.00	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	157	0	138	181	0	0	138	1267	0	17	513	532
V/C Ratio(X)	0.17	0.00	0.50	0.25	0.00	0.00	0.58	0.31	0.00	0.42	0.50	0.51
Avail Cap(c_a), veh/h	1041	0	915	4112	0	0	1028	4101	0	1542	2051	2129
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	15.1	15.8	0.0	0.0	15.4	8.1	0.0	17.1	10.3	10.3
Incr Delay (d2), s/veh	0.2	0.0	1.0	0.7	0.0	0.0	1.4	0.1	0.0	6.1	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.2	0.0	0.0	0.5	0.2	0.0	0.0	0.5	0.7	0.0	0.1	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	0.0	16.1	16.5	0.0	0.0	16.9	8.2	0.0	23.1	11.0	11.0
LnGrp LOS	B	A	B	B	A	A	B	A	A	C	B	B
Approach Vol, veh/h		96			45			479			534	
Approach Delay, s/veh		15.8			16.5			9.7			11.2	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s6.9	14.6			6.0	4.5	17.0		7.2				
Change Period (Y+Rc), s* 4.2	4.6			* 4.2	* 4.2	4.6		4.2				
Max Green Setting (Gmax)20	40.0			* 40	* 30	40.0		20.0				
Max Q Clear Time (g_c+13,5	6.2			2.4	2.1	4.8		3.4				
Green Ext Time (p_c), s	0.1	3.3		0.1	0.0	2.7		0.2				

Intersection Summary

HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Notes

- User approved volume balancing among the lanes for turning movement.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
- Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Cumulative plus Project Saturday Outbound
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	25	65	35	60	24	45	402	15	20	469	62
Future Volume (veh/h)	65	25	65	35	60	24	45	402	15	20	469	62
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	27	71	38	65	26	49	437	16	22	510	67
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	67	176	78	305	115	95	1593	58	49	1027	458
Arrive On Green	0.07	0.15	0.15	0.04	0.12	0.12	0.05	0.31	0.31	0.03	0.29	0.29
Sat Flow, veh/h	1781	456	1199	1781	2521	955	1781	5057	184	1781	3554	1585
Grp Volume(v), veh/h	71	0	98	38	45	46	49	293	160	22	510	67
Grp Sat Flow(s),veh/h/ln	1781	0	1655	1781	1777	1699	1781	1702	1837	1781	1777	1585
Q Serve(g_s), s	1.4	0.0	2.0	0.8	0.9	0.9	1.0	2.4	2.4	0.5	4.5	1.2
Cycle Q Clear(g_c), s	1.4	0.0	2.0	0.8	0.9	0.9	1.0	2.4	2.4	0.5	4.5	1.2
Prop In Lane	1.00		0.72	1.00		0.56	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	124	0	243	78	215	205	95	1072	579	49	1027	458
V/C Ratio(X)	0.57	0.00	0.40	0.49	0.21	0.23	0.52	0.27	0.28	0.45	0.50	0.15
Avail Cap(c_a), veh/h	951	0	663	1189	711	680	951	3181	1717	951	3320	1481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	0.0	14.5	17.5	14.8	14.9	17.3	9.6	9.6	17.9	11.1	9.9
Incr Delay (d2), s/veh	4.1	0.0	1.1	4.7	0.5	0.5	4.3	0.2	0.3	2.4	0.5	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/lr	0.6	0.0	0.7	0.4	0.3	0.3	0.4	0.6	0.7	0.2	1.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	0.0	15.6	22.2	15.3	15.4	21.5	9.8	9.9	20.4	11.5	10.1
LnGrp LOS	C	A	B	C	B	B	C	A	A	C	B	B
Approach Vol, veh/h		169			129			502			599	
Approach Delay, s/veh		17.8			17.4			11.0			11.7	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.2	16.4	5.8	10.0	6.2	15.4	6.8	9.0				
Change Period (Y+Rc), s	4.2	4.6	* 4.2	4.5	* 4.2	4.6	* 4.2	4.5				
Max Green Setting (Gmax), s	20	35.0	* 25	15.0	* 20	35.0	* 20	15.0				
Max Q Clear Time (g_c+1), s	12.5	4.4	2.8	4.0	3.0	6.5	3.4	2.9				
Green Ext Time (p_c), s	0.0	3.4	0.1	0.3	0.1	4.4	0.1	0.3				

Intersection Summary

HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
5: Suisun Valley Rd & Business Center Dr

Cumulative plus Project Saturday Outbound
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔↔	↑↑↑		↔↔	↑↑		↔↔	↑↑	↔
Traffic Volume (veh/h)	141	595	120	20	140	10	200	311	105	25	180	329
Future Volume (veh/h)	141	595	120	20	140	10	200	311	105	25	180	329
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		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	153	647	130	22	152	11	217	338	114	27	196	358
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	345	1069	212	122	903	64	360	912	303	102	971	433
Arrive On Green	0.10	0.25	0.25	0.04	0.19	0.19	0.10	0.35	0.35	0.03	0.27	0.27
Sat Flow, veh/h	3456	4275	847	3456	4866	346	3456	2621	870	3456	3554	1585
Grp Volume(v), veh/h	153	513	264	22	105	58	217	227	225	27	196	358
Grp Sat Flow(s),veh/h/ln	1728	1702	1718	1728	1702	1808	1728	1777	1714	1728	1777	1585
Q Serve(g_s), s	2.7	8.8	9.0	0.4	1.7	1.8	4.0	6.3	6.5	0.5	2.8	14.0
Cycle Q Clear(g_c), s	2.7	8.8	9.0	0.4	1.7	1.8	4.0	6.3	6.5	0.5	2.8	14.0
Prop In Lane	1.00		0.49	1.00		0.19	1.00		0.51	1.00		1.00
Lane Grp Cap(c), veh/h	345	851	430	122	631	335	360	618	596	102	971	433
V/C Ratio(X)	0.44	0.60	0.61	0.18	0.17	0.17	0.60	0.37	0.38	0.26	0.20	0.83
Avail Cap(c_a), veh/h	1050	1551	783	1050	1551	824	1050	675	651	1050	1349	602
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	21.8	21.9	30.8	22.5	22.6	28.2	16.1	16.1	31.2	18.4	22.5
Incr Delay (d2), s/veh	1.1	0.8	1.7	0.8	0.1	0.3	1.9	0.4	0.5	1.6	0.1	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.2	3.4	0.2	0.6	0.7	1.6	2.3	2.3	0.2	1.0	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	22.6	23.6	31.7	22.7	22.9	30.1	16.5	16.6	32.9	18.5	29.7
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	B	C
Approach Vol, veh/h		930			185			669			581	
Approach Delay, s/veh		24.0			23.8			20.9			26.1	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.1	28.8	7.5	22.4	12.1	23.9	11.8	18.1				
Change Period (Y+Rc), s	5.2	5.9	* 5.2	5.9	* 5.2	5.9	* 5.2	5.9				
Max Green Setting (Gmax), s	20	25.0	* 20	30.0	* 20	25.0	* 20	30.0				
Max Q Clear Time (g_c+I), s	12.5	8.5	2.4	11.0	6.0	16.0	4.7	3.8				
Green Ext Time (p_c), s	0.0	2.7	0.0	5.5	0.7	2.0	0.5	1.0				

Intersection Summary

HCM 6th Ctrl Delay	23.6
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Intersection Delay, s/veh	14.5											
Intersection LOS	B											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔		↔				↔	↕↕		↔	↕↕	
Traffic Vol, veh/h	87	0	375	0	0	0	160	468	0	0	313	37
Future Vol, veh/h	87	0	375	0	0	0	160	468	0	0	313	37
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	98	0	421	0	0	0	180	526	0	0	352	42
Number of Lanes	2	0	1	0	0	0	1	2	0	1	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	3
Conflicting Approach Left	SB		
Conflicting Lanes Left	3	3	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	13.3	14.6	16
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	0%	100%	100%	74%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	0%	26%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	160	234	234	44	44	375	0	209	141
LT Vol	160	0	0	44	44	0	0	0	0
Through Vol	0	234	234	0	0	0	0	209	104
RT Vol	0	0	0	0	0	375	0	0	37
Lane Flow Rate	180	263	263	49	49	421	0	234	159
Geometry Grp	8	8	8	7	7	7	8	8	8
Degree of Util (X)	0.381	0.52	0.391	0.106	0.106	0.568	0	0.494	0.326
Departure Headway (Hd)	7.626	7.117	5.352	7.799	7.799	4.854	7.584	7.584	7.397
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	471	507	670	460	460	750	0	476	486
Service Time	5.373	4.864	3.098	5.532	5.532	2.554	5.338	5.338	5.151
HCM Lane V/C Ratio	0.382	0.519	0.393	0.107	0.107	0.561	0	0.492	0.327
HCM Control Delay	15	17.4	11.5	11.5	11.5	13.7	10.3	17.6	13.7
HCM Lane LOS	B	C	B	B	B	B	N	C	B
HCM 95th-tile Q	1.8	3	1.9	0.4	0.4	3.6	0	2.7	1.4

HCM 6th Signalized Intersection Summary
7: Pitman Rd & I-80 EB Off/I-80 EB On

Cumulative plus Project Saturday Outbound

07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗					↑	↗	↘	↑	
Traffic Volume (veh/h)	128	5	485	0	0	0	0	465	685	73	650	0
Future Volume (veh/h)	128	5	485	0	0	0	0	465	685	73	650	0
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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	135	5	511				0	489	721	77	684	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	592	22	545				0	788	668	158	979	0
Arrive On Green	0.34	0.34	0.34				0.00	0.42	0.42	0.05	0.52	0.00
Sat Flow, veh/h	1721	64	1585				0	1870	1585	3456	1870	0
Grp Volume(v), veh/h	140	0	511				0	489	721	77	684	0
Grp Sat Flow(s),veh/h/ln	1784	0	1585				0	1870	1585	1728	1870	0
Q Serve(g_s), s	3.7	0.0	20.7				0.0	13.6	27.9	1.4	18.2	0.0
Cycle Q Clear(g_c), s	3.7	0.0	20.7				0.0	13.6	27.9	1.4	18.2	0.0
Prop In Lane	0.96		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	614	0	545				0	788	668	158	979	0
V/C Ratio(X)	0.23	0.00	0.94				0.00	0.62	1.08	0.49	0.70	0.00
Avail Cap(c_a), veh/h	696	0	618				0	788	668	381	1099	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.5	0.0	21.0				0.0	15.0	19.1	30.8	11.9	0.0
Incr Delay (d2), s/veh	0.1	0.0	19.8				0.0	1.1	58.1	0.9	1.3	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
%ile BackOfQ(50%),veh/ln	1.4	0.0	9.8				0.0	5.1	19.2	0.6	6.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.5	0.0	40.9				0.0	16.1	77.3	31.7	13.2	0.0
LnGrp LOS	B	A	D				A	B	F	C	B	A
Approach Vol, veh/h		651						1210			761	
Approach Delay, s/veh		35.4						52.5			15.0	
Approach LOS		D						D			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		39.2			6.7	32.5		27.0				
Change Period (Y+Rc), s		4.6			3.7	4.6		4.2				
Max Green Setting (Gmax), s		38.9			7.3	27.9		25.8				
Max Q Clear Time (g_c+I1), s		20.2			3.4	29.9		22.7				
Green Ext Time (p_c), s		0.6			0.0	0.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	37.4
HCM 6th LOS	D

Notes

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

HCM 6th Signalized Intersection Summary
8: Green Valley Rd & Business Center Dr

Cumulative plus Project Saturday Outbound
07/11/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗		↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	80	235	1005	717	505	133	425	215	140	16	350	70
Future Volume (veh/h)	80	235	1005	717	505	133	425	215	140	16	350	70
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	242	1036	466	904	137	438	222	144	16	361	72
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	333	1044	606	1079	163	522	994	444	31	433	85
Arrive On Green	0.18	0.18	0.18	0.34	0.34	0.34	0.15	0.28	0.28	0.02	0.15	0.15
Sat Flow, veh/h	1781	1870	3170	1781	3173	481	3456	3554	1585	1781	2958	584
Grp Volume(v), veh/h	82	242	1036	466	533	508	438	222	144	16	215	218
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1784	1728	1777	1585	1781	1777	1765
Q Serve(g_s), s	4.4	13.6	19.9	26.1	29.4	29.4	13.8	5.4	8.0	1.0	13.1	13.4
Cycle Q Clear(g_c), s	4.4	13.6	19.9	26.1	29.4	29.4	13.8	5.4	8.0	1.0	13.1	13.4
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	317	333	1044	606	636	606	522	994	444	31	260	258
V/C Ratio(X)	0.26	0.73	0.99	0.77	0.84	0.84	0.84	0.22	0.32	0.51	0.83	0.84
Avail Cap(c_a), veh/h	317	333	1044	712	747	713	783	1270	566	80	312	310
HCM Platoon Ratio	1.00	1.00	1.00	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	39.5	43.3	37.3	32.9	34.0	34.0	46.1	30.9	31.8	54.4	46.3	46.4
Incr Delay (d2), s/veh	0.4	7.7	25.9	4.4	7.3	7.7	5.2	0.1	0.4	12.4	14.5	16.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	6.9	17.2	11.5	14.0	13.4	6.1	2.3	3.1	0.5	6.7	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.9	51.0	63.2	37.3	41.3	41.7	51.2	31.0	32.3	66.8	60.8	62.7
LnGrp LOS	D	D	E	D	D	D	D	C	C	E	E	E
Approach Vol, veh/h		1360			1507			804			449	
Approach Delay, s/veh		59.6			40.2			42.3			61.9	
Approach LOS		E			D			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	36.6		25.0	21.6	21.7		43.4				
Change Period (Y+Rc), s	4.7	5.4		5.1	* 4.7	5.4		5.4				
Max Green Setting (Gmax), s	5	39.9		19.9	* 25	19.6		44.6				
Max Q Clear Time (g_c+13), s	13	10.0		21.9	15.8	15.4		31.4				
Green Ext Time (p_c), s	0.0	1.8		0.0	1.1	0.9		6.6				

Intersection Summary

HCM 6th Ctrl Delay	49.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
9: Green Valley Rd & I-80 WB Ramp

Cumulative plus Project Saturday Outbound
07/11/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations			↖ ↗	↑	↓	↘
Traffic Volume (veh/h)	0	0	25	800	1159	894
Future Volume (veh/h)	0	0	25	800	1159	894
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach			No	No		
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			26	833	1207	931
Peak Hour Factor			0.96	0.96	0.96	0.96
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			124	1670	1441	1221
Arrive On Green			0.04	0.89	0.77	0.77
Sat Flow, veh/h			3456	1870	1870	1585
Grp Volume(v), veh/h			26	833	1207	931
Grp Sat Flow(s),veh/h/ln			1728	1870	1870	1585
Q Serve(g_s), s			0.4	4.7	22.6	17.7
Cycle Q Clear(g_c), s			0.4	4.7	22.6	17.7
Prop In Lane			1.00			1.00
Lane Grp Cap(c), veh/h			124	1670	1441	1221
V/C Ratio(X)			0.21	0.50	0.84	0.76
Avail Cap(c_a), veh/h			1276	2556	1692	1434
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			25.4	0.6	4.0	3.5
Incr Delay (d2), s/veh			0.8	0.2	3.4	2.1
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.2	0.1	2.6	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			26.2	0.8	7.4	5.6
LnGrp LOS			C	A	A	A
Approach Vol, veh/h				859	2138	
Approach Delay, s/veh				1.6	6.6	
Approach LOS				A	A	
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		54.2			6.6	47.5
Change Period (Y+Rc), s		5.8			* 4.7	5.8
Max Green Setting (Gmax), s		74.0			* 20	49.0
Max Q Clear Time (g_c+I1), s		6.7			2.4	24.6
Green Ext Time (p_c), s		7.6			0.0	17.1
Intersection Summary						
HCM 6th Ctrl Delay			5.2			
HCM 6th LOS			A			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Intersection						
Int Delay, s/veh	4.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T	T	T
Traffic Vol, veh/h	113	36	379	90	24	415
Future Vol, veh/h	113	36	379	90	24	415
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	123	39	412	98	26	451

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	964	461	0	0	510
Stage 1	461	-	-	-	-
Stage 2	503	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	283	600	-	-	1055
Stage 1	635	-	-	-	-
Stage 2	607	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	274	600	-	-	1055
Mov Cap-2 Maneuver	274	-	-	-	-
Stage 1	635	-	-	-	-
Stage 2	587	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.9	0	0.5
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	315	1055
HCM Lane V/C Ratio	-	-	0.514	0.025
HCM Control Delay (s)	-	-	27.9	8.5
HCM Lane LOS	-	-	D	A
HCM 95th %tile Q(veh)	-	-	2.8	0.1

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	358	6	20	383	9	31
Future Vol, veh/h	358	6	20	383	9	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	389	7	22	416	10	34

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	396	0	853 393
Stage 1	-	-	-	-	393 -
Stage 2	-	-	-	-	460 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1163	-	330 656
Stage 1	-	-	-	-	682 -
Stage 2	-	-	-	-	636 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1163	-	322 656
Mov Cap-2 Maneuver	-	-	-	-	322 -
Stage 1	-	-	-	-	682 -
Stage 2	-	-	-	-	620 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	12.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	532	-	-	1163	-
HCM Lane V/C Ratio	0.082	-	-	0.019	-
HCM Control Delay (s)	12.4	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

MOVEMENT SUMMARY

Site: 2 [CPP Sat Out Rockville Rd / Abernathy Rd (Site Folder: General)]

Cumulative plus Project Saturday
 Special Event Outbound
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] ft				
South: Abernathy Rd														
3	L2	182	2.0	202	2.0	0.603	12.3	LOS B	6.3	158.9	0.73	0.80	1.07	30.9
8	T1	215	2.0	239	2.0	0.603	12.3	LOS B	6.3	158.9	0.73	0.80	1.07	30.8
18	R2	120	2.0	133	2.0	0.603	12.3	LOS B	6.3	158.9	0.73	0.80	1.07	30.0
Approach		517	2.0	574	2.0	0.603	12.3	LOS B	6.3	158.9	0.73	0.80	1.07	30.6
East: Rockville Rd														
1	L2	45	2.0	50	2.0	0.320	8.2	LOS A	1.5	37.9	0.62	0.60	0.62	33.1
6	T1	156	2.0	173	2.0	0.320	8.2	LOS A	1.5	37.9	0.62	0.60	0.62	33.1
16	R2	30	2.0	33	2.0	0.320	8.2	LOS A	1.5	37.9	0.62	0.60	0.62	32.1
Approach		231	2.0	257	2.0	0.320	8.2	LOS A	1.5	37.9	0.62	0.60	0.62	33.0
North: Abernathy Rd														
7	L2	25	2.0	28	2.0	0.249	6.8	LOS A	1.1	28.9	0.56	0.50	0.56	34.0
4	T1	115	2.0	128	2.0	0.249	6.8	LOS A	1.1	28.9	0.56	0.50	0.56	33.9
14	R2	55	2.0	61	2.0	0.249	6.8	LOS A	1.1	28.9	0.56	0.50	0.56	33.0
Approach		195	2.0	217	2.0	0.249	6.8	LOS A	1.1	28.9	0.56	0.50	0.56	33.7
West: Rockville Rd														
5	L2	55	2.0	61	2.0	0.431	7.9	LOS A	2.5	65.3	0.49	0.35	0.49	33.4
2	T1	223	7.0	248	7.0	0.431	8.0	LOS A	2.5	65.3	0.49	0.35	0.49	33.2
12	R2	145	2.0	161	2.0	0.431	7.9	LOS A	2.5	65.3	0.49	0.35	0.49	32.4
Approach		423	4.6	470	4.6	0.431	7.9	LOS A	2.5	65.3	0.49	0.35	0.49	33.0
All Vehicles		1366	2.8	1518	2.8	0.603	9.5	LOS A	6.3	158.9	0.61	0.58	0.74	32.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

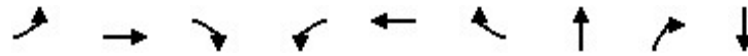
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Queues

Existing PM

1: Suisun Valley Rd & Rockville Rd

07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	21	138	37	153	182	44	293	300	297
v/c Ratio	0.19	0.56	0.13	0.56	0.33	0.09	0.70	0.39	0.56
Control Delay	53.2	51.2	0.9	48.4	31.4	4.7	45.5	9.7	36.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.2	51.2	0.9	48.4	31.4	4.7	45.5	9.7	36.8
Queue Length 50th (ft)	12	79	0	87	80	0	164	49	150
Queue Length 95th (ft)	42	159	0	172	175	16	286	113	296
Internal Link Dist (ft)		1454			543		254		1444
Turn Bay Length (ft)	110		110	240		150		75	
Base Capacity (vph)	283	895	807	850	1491	1279	885	1238	582
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.15	0.05	0.18	0.12	0.03	0.33	0.24	0.51

Intersection Summary

Queues
3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Existing PM
07/11/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	11	72	40	40	86	511	17	12	354
v/c Ratio	0.04	0.22	0.10	0.10	0.25	0.25	0.02	0.04	0.25
Control Delay	30.0	5.8	18.5	18.5	26.6	12.1	0.0	29.9	18.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.0	5.8	18.5	18.5	26.6	12.1	0.0	29.9	18.5
Queue Length 50th (ft)	3	0	10	10	21	41	0	3	43
Queue Length 95th (ft)	15	22	24	24	90	171	0	16	130
Internal Link Dist (ft)	974			823		1085			2523
Turn Bay Length (ft)			180		160			180	
Base Capacity (vph)	946	887	1385	1394	936	2916	1322	1271	3226
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.08	0.03	0.03	0.09	0.18	0.01	0.01	0.11

Intersection Summary

Queues
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Existing PM
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	192	157	63	80	55	490	30	397	99
v/c Ratio	0.42	0.26	0.19	0.11	0.17	0.21	0.11	0.28	0.14
Control Delay	33.4	21.1	36.5	16.3	37.0	18.4	40.4	23.3	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.4	21.1	36.5	16.3	37.0	18.4	40.4	23.3	2.8
Queue Length 50th (ft)	58	44	20	6	17	34	10	60	0
Queue Length 95th (ft)	#251	131	96	31	87	147	58	193	18
Internal Link Dist (ft)		828		952		920		1085	
Turn Bay Length (ft)	240		250		205		210		210
Base Capacity (vph)	824	863	941	1678	824	3370	824	2352	1098
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.18	0.07	0.05	0.07	0.15	0.04	0.17	0.09

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
5: Suisun Valley Rd & Business Center Dr

Existing PM
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	177	849	36	183	607	453	8	177	210
v/c Ratio	0.41	0.53	0.12	0.19	0.71	0.29	0.03	0.31	0.48
Control Delay	42.0	17.1	45.7	29.1	38.4	16.2	48.9	33.0	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.0	17.1	45.7	29.1	38.4	16.2	48.9	33.0	8.6
Queue Length 50th (ft)	40	76	8	25	132	63	2	41	0
Queue Length 95th (ft)	114	170	34	65	#457	174	12	88	53
Internal Link Dist (ft)		1814		1587		624		920	
Turn Bay Length (ft)	300		300		240		245		
Base Capacity (vph)	850	2015	850	1918	850	1588	850	1197	674
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.42	0.04	0.10	0.71	0.29	0.01	0.15	0.31

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

Existing PM

7: Pitman Rd & I-80 EB Off/I-80 EB On

07/11/2022



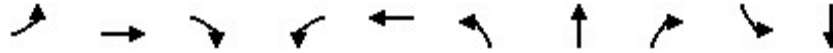
Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	343	387	445	492	229	553
v/c Ratio	0.74	0.66	0.70	0.57	0.53	0.54
Control Delay	27.0	12.5	23.4	5.0	26.7	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.0	12.5	23.4	5.0	26.7	10.9
Queue Length 50th (ft)	81	32	97	0	28	78
Queue Length 95th (ft)	194	120	#312	62	82	256
Internal Link Dist (ft)	1288		1245			1196
Turn Bay Length (ft)					155	
Base Capacity (vph)	1141	1102	639	866	1177	1397
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	0.30	0.35	0.70	0.57	0.19	0.40

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues
8: Green Valley Rd & Business Center Dr

Existing PM
07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	124	199	729	320	647	404	272	89	4	411
v/c Ratio	0.37	0.57	0.67	0.72	0.71	1.00	0.23	0.15	0.04	0.63
Control Delay	38.8	43.3	13.2	45.3	38.1	91.5	28.0	7.8	59.2	40.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.8	43.3	13.2	45.3	38.1	91.5	28.0	7.8	59.2	40.0
Queue Length 50th (ft)	68	113	64	180	176	123	58	0	2	107
Queue Length 95th (ft)	152	235	140	#469	387	#391	151	42	17	222
Internal Link Dist (ft)		1261			1089		822			911
Turn Bay Length (ft)	250		250			265		265	250	
Base Capacity (vph)	816	855	1093	642	1319	403	1485	717	95	1229
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	0.15	0.23	0.67	0.50	0.49	1.00	0.18	0.12	0.04	0.33

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
9: Green Valley Rd & I-80 WB Ramp

Existing PM
07/11/2022



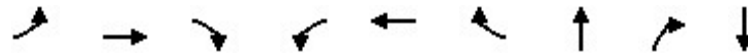
Lane Group	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	189	789	892	584
v/c Ratio	0.34	0.42	0.76	0.51
Control Delay	25.0	0.7	11.6	3.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	25.0	0.7	11.6	3.0
Queue Length 50th (ft)	28	0	158	18
Queue Length 95th (ft)	66	0	312	53
Internal Link Dist (ft)		932	822	
Turn Bay Length (ft)	280			315
Base Capacity (vph)	1331	1863	1624	1433
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.14	0.42	0.55	0.41
Intersection Summary				

Queues

Existing Saturday

1: Suisun Valley Rd & Rockville Rd

07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	35	122	39	190	149	88	225	116	321
v/c Ratio	0.28	0.54	0.14	0.62	0.29	0.18	0.65	0.17	0.55
Control Delay	51.6	50.8	1.1	47.1	31.5	7.8	46.3	6.8	33.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.6	50.8	1.1	47.1	31.5	7.8	46.3	6.8	33.7
Queue Length 50th (ft)	20	69	0	105	74	0	125	11	154
Queue Length 95th (ft)	57	141	0	197	141	36	224	43	307
Internal Link Dist (ft)		1454			543		254		1444
Turn Bay Length (ft)	110		110	240		150		75	
Base Capacity (vph)	284	898	809	853	1504	1295	891	1161	585
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.14	0.05	0.22	0.10	0.07	0.25	0.10	0.55

Intersection Summary

Queues
3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Existing Saturday
07/11/2022



Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	10	46	11	11	16	48	279	24	4	405
v/c Ratio	0.02	0.10	0.02	0.02	0.03	0.10	0.12	0.02	0.01	0.20
Control Delay	27.3	0.4	16.1	16.1	0.1	23.8	10.6	0.1	28.7	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.3	0.4	16.1	16.1	0.1	23.8	10.6	0.1	28.7	13.6
Queue Length 50th (ft)	1	0	1	1	0	4	8	0	1	13
Queue Length 95th (ft)	17	0	12	12	0	59	94	0	10	142
Internal Link Dist (ft)	974		823			1085			2523	
Turn Bay Length (ft)			180		200		160		180	
Base Capacity (vph)	1296	1134	1450	1462	1380	1232	3054	1380	1411	3222
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	0.01	0.04	0.01	0.01	0.01	0.04	0.09	0.02	0.00	0.13

Intersection Summary

Queues
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Existing Saturday
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	36	81	42	77	55	325	14	384	49
v/c Ratio	0.08	0.11	0.09	0.05	0.11	0.09	0.04	0.19	0.05
Control Delay	32.8	10.0	31.9	16.5	30.8	11.4	36.7	17.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.8	10.0	31.9	16.5	30.8	11.4	36.7	17.4	0.1
Queue Length 50th (ft)	7	4	8	5	10	8	3	32	0
Queue Length 95th (ft)	62	44	69	33	83	89	32	172	0
Internal Link Dist (ft)		828		952		920		1085	
Turn Bay Length (ft)	240		250		205		210		210
Base Capacity (vph)	1084	1031	1177	2254	1084	3940	1084	2731	1252
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.08	0.04	0.03	0.05	0.08	0.01	0.14	0.04
Intersection Summary									

Queues
5: Suisun Valley Rd & Business Center Dr

Existing Saturday
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	99	285	40	167	149	296	11	257	218
v/c Ratio	0.22	0.19	0.10	0.16	0.30	0.20	0.03	0.34	0.43
Control Delay	36.2	13.0	38.3	24.1	35.3	14.9	41.3	25.2	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	13.0	38.3	24.1	35.3	14.9	41.3	25.2	6.8
Queue Length 50th (ft)	16	12	6	16	24	32	2	43	0
Queue Length 95th (ft)	70	60	36	55	96	114	15	114	54
Internal Link Dist (ft)		1814		1587		624		920	
Turn Bay Length (ft)	300		300		240		245		
Base Capacity (vph)	1131	2477	1131	2532	1131	1602	1131	1567	822
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.12	0.04	0.07	0.13	0.18	0.01	0.16	0.27

Intersection Summary

Queues

Existing Saturday

7: Pitman Rd & I-80 EB Off/I-80 EB On

07/11/2022

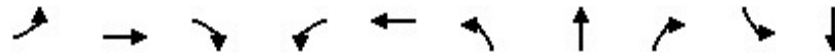


Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	177	394	312	557	156	520
v/c Ratio	0.42	0.69	0.48	0.61	0.35	0.54
Control Delay	17.0	12.4	16.0	5.1	22.2	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.0	12.4	16.0	5.1	22.2	10.1
Queue Length 50th (ft)	30	22	46	0	13	48
Queue Length 95th (ft)	95	107	180	64	59	237
Internal Link Dist (ft)	1288		1245			1196
Turn Bay Length (ft)					155	
Base Capacity (vph)	1411	1312	821	1009	1532	1632
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	0.13	0.30	0.38	0.55	0.10	0.32

Intersection Summary

Queues
8: Green Valley Rd & Business Center Dr

Existing Saturday
07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	113	168	843	229	605	449	166	46	4	362
v/c Ratio	0.42	0.60	0.66	0.55	0.70	0.77	0.13	0.07	0.04	0.62
Control Delay	38.3	43.3	7.6	32.7	31.7	45.5	20.8	0.2	43.2	31.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.3	43.3	7.6	32.7	31.7	45.5	20.8	0.2	43.2	31.4
Queue Length 50th (ft)	54	84	38	109	147	114	28	0	2	72
Queue Length 95th (ft)	122	171	84	212	236	#243	69	0	14	133
Internal Link Dist (ft)		1261			1089		822			911
Turn Bay Length (ft)	250		250			265		265	250	
Base Capacity (vph)	379	398	1269	577	1199	581	1311	670	110	871
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	0.30	0.42	0.66	0.40	0.50	0.77	0.13	0.07	0.04	0.42

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
 9: Green Valley Rd & I-80 WB Ramp

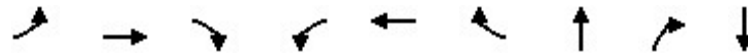
Existing Saturday
 07/11/2022



Lane Group	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	135	673	782	568
v/c Ratio	0.21	0.36	0.60	0.45
Control Delay	22.1	0.5	7.6	1.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	22.1	0.5	7.6	1.7
Queue Length 50th (ft)	15	0	113	2
Queue Length 95th (ft)	50	0	219	26
Internal Link Dist (ft)		932	822	
Turn Bay Length (ft)	280			315
Base Capacity (vph)	1762	1863	1721	1504
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.08	0.36	0.45	0.38
Intersection Summary				

Queues
1: Suisun Valley Rd & Rockville Rd

Existing plus Project PM
07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	21	146	38	153	183	45	307	298	322
v/c Ratio	0.20	0.59	0.13	0.58	0.34	0.09	0.73	0.39	0.58
Control Delay	55.2	53.6	1.0	50.9	32.6	5.0	48.3	10.4	38.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.2	53.6	1.0	50.9	32.6	5.0	48.3	10.4	38.1
Queue Length 50th (ft)	13	88	0	91	85	0	181	55	170
Queue Length 95th (ft)	42	171	0	175	178	17	304	117	333
Internal Link Dist (ft)		1454			543		254		1444
Turn Bay Length (ft)	110		110	240		150		75	
Base Capacity (vph)	268	848	769	805	1420	1222	838	1196	553
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.17	0.05	0.19	0.13	0.04	0.37	0.25	0.58
Intersection Summary									

Queues
3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Existing plus Project PM
07/11/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	15	72	40	40	76	607	17	12	398
v/c Ratio	0.05	0.22	0.10	0.10	0.23	0.30	0.02	0.04	0.28
Control Delay	29.8	5.8	18.8	18.7	26.8	12.6	0.0	30.1	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.8	5.8	18.8	18.7	26.8	12.6	0.0	30.1	18.6
Queue Length 50th (ft)	4	0	10	10	19	50	0	3	48
Queue Length 95th (ft)	18	22	24	24	82	208	0	16	146
Internal Link Dist (ft)	974			823		1085			2523
Turn Bay Length (ft)			180		160			180	
Base Capacity (vph)	941	885	1378	1387	934	2902	1316	1223	3219
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.08	0.03	0.03	0.08	0.21	0.01	0.01	0.12

Intersection Summary

Queues
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Existing plus Project PM
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	199	157	60	85	55	580	27	435	102
v/c Ratio	0.43	0.25	0.19	0.12	0.17	0.25	0.11	0.30	0.14
Control Delay	33.5	21.2	37.0	15.8	37.4	18.6	41.3	23.4	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.5	21.2	37.0	15.8	37.4	18.6	41.3	23.4	3.1
Queue Length 50th (ft)	62	45	19	7	18	42	9	67	0
Queue Length 95th (ft)	#265	131	93	31	87	174	53	212	20
Internal Link Dist (ft)		828		952		920		1085	
Turn Bay Length (ft)	240		250		205		210		210
Base Capacity (vph)	815	859	930	1655	815	3333	815	2321	1085
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.18	0.06	0.05	0.07	0.17	0.03	0.19	0.09

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
5: Suisun Valley Rd & Business Center Dr

Existing plus Project PM
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	185	849	36	183	607	536	8	186	241
v/c Ratio	0.43	0.53	0.12	0.19	0.72	0.34	0.03	0.31	0.52
Control Delay	42.2	17.2	46.1	29.5	38.9	17.1	49.3	33.0	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.2	17.2	46.1	29.5	38.9	17.1	49.3	33.0	8.6
Queue Length 50th (ft)	42	76	8	25	133	78	2	43	0
Queue Length 95th (ft)	119	170	35	65	#459	213	12	93	56
Internal Link Dist (ft)		1814		1587		624		920	
Turn Bay Length (ft)	300		300		240		245		
Base Capacity (vph)	845	2007	845	1906	845	1597	845	1190	692
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.42	0.04	0.10	0.72	0.34	0.01	0.16	0.35

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

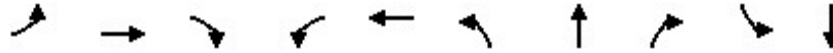


Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	406	387	445	492	235	553
v/c Ratio	0.80	0.62	0.72	0.58	0.54	0.56
Control Delay	29.8	11.3	25.6	5.2	27.7	11.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.8	11.3	25.6	5.2	27.7	11.8
Queue Length 50th (ft)	101	32	107	0	31	90
Queue Length 95th (ft)	237	121	#314	63	84	255
Internal Link Dist (ft)	1288		1245			1196
Turn Bay Length (ft)					155	
Base Capacity (vph)	1092	1066	614	852	1128	1341
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	0.37	0.36	0.72	0.58	0.21	0.41

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
8: Green Valley Rd & Business Center Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	120	198	729	329	668	404	272	89	11	411
v/c Ratio	0.36	0.57	0.68	0.72	0.71	1.02	0.23	0.15	0.12	0.63
Control Delay	39.0	43.7	14.2	45.1	38.2	94.8	28.4	7.8	60.3	40.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.0	43.7	14.2	45.1	38.2	94.8	28.4	7.8	60.3	40.5
Queue Length 50th (ft)	66	114	70	186	185	~126	59	0	6	108
Queue Length 95th (ft)	147	234	150	#491	403	#391	151	42	33	222
Internal Link Dist (ft)		1261			1089		822			911
Turn Bay Length (ft)	250		250			265		265	250	
Base Capacity (vph)	805	845	1074	634	1301	398	1466	709	94	1214
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	0.15	0.23	0.68	0.52	0.51	1.02	0.19	0.13	0.12	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
 9: Green Valley Rd & I-80 WB Ramp

Existing plus Project PM
 07/11/2022



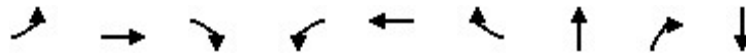
Lane Group	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	189	789	906	598
v/c Ratio	0.34	0.42	0.76	0.52
Control Delay	25.5	0.7	11.8	3.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	25.5	0.7	11.8	3.1
Queue Length 50th (ft)	29	0	166	20
Queue Length 95th (ft)	66	0	322	56
Internal Link Dist (ft)		932	822	
Turn Bay Length (ft)	280			315
Base Capacity (vph)	1308	1863	1605	1421
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.14	0.42	0.56	0.42
Intersection Summary				

Queues

Existing plus Project Saturday Inbound

1: Suisun Valley Rd & Rockville Rd

07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	35	131	40	190	151	90	247	115	352
v/c Ratio	0.28	0.56	0.15	0.62	0.29	0.18	0.68	0.16	0.62
Control Delay	53.6	52.2	1.1	48.4	32.0	7.8	47.4	7.5	37.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.6	52.2	1.1	48.4	32.0	7.8	47.4	7.5	37.2
Queue Length 50th (ft)	21	77	0	109	77	0	141	14	181
Queue Length 95th (ft)	58	154	0	202	146	38	249	47	#354
Internal Link Dist (ft)		1454			543		254		1444
Turn Bay Length (ft)	110		110	240		150		75	
Base Capacity (vph)	276	874	790	831	1465	1264	868	1153	571
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.15	0.05	0.23	0.10	0.07	0.28	0.10	0.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues
3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Existing plus Project Saturday Inbound

07/11/2022



Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	15	46	11	11	16	38	397	24	4	480
v/c Ratio	0.04	0.11	0.02	0.02	0.03	0.10	0.17	0.02	0.01	0.23
Control Delay	27.5	0.5	16.8	16.8	0.1	25.3	10.6	0.1	29.3	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.5	0.5	16.8	16.8	0.1	25.3	10.6	0.1	29.3	13.5
Queue Length 50th (ft)	2	0	1	1	0	4	12	0	1	15
Queue Length 95th (ft)	23	0	12	12	0	50	133	0	10	170
Internal Link Dist (ft)	974		823			1085			2523	
Turn Bay Length (ft)			180		200		160		180	
Base Capacity (vph)	1274	1116	1434	1445	1366	1211	3020	1366	1398	3218
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	0.01	0.04	0.01	0.01	0.01	0.03	0.13	0.02	0.00	0.15

Intersection Summary

Queues
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Existing plus Project Saturday Inbound

07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	43	81	42	83	55	431	12	449	54
v/c Ratio	0.09	0.11	0.09	0.06	0.11	0.12	0.03	0.22	0.06
Control Delay	32.5	10.1	32.5	16.2	31.3	11.3	37.5	17.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.5	10.1	32.5	16.2	31.3	11.3	37.5	17.3	0.1
Queue Length 50th (ft)	8	4	8	6	11	11	2	39	0
Queue Length 95th (ft)	70	44	69	34	83	117	30	202	0
Internal Link Dist (ft)		828		952		920		1085	
Turn Bay Length (ft)	240		250		205		210		210
Base Capacity (vph)	1069	1022	1160	2205	1069	3879	1069	2681	1232
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.08	0.04	0.04	0.05	0.11	0.01	0.17	0.04

Intersection Summary

Queues
5: Suisun Valley Rd & Business Center Dr

Existing plus Project Saturday Inbound

07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	108	285	40	167	147	393	11	272	270
v/c Ratio	0.24	0.19	0.10	0.16	0.30	0.26	0.03	0.35	0.48
Control Delay	36.4	13.0	38.6	24.4	35.7	15.6	41.5	25.3	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.4	13.0	38.6	24.4	35.7	15.6	41.5	25.3	6.8
Queue Length 50th (ft)	18	13	6	17	25	45	2	45	0
Queue Length 95th (ft)	75	60	36	55	95	153	15	121	60
Internal Link Dist (ft)		1814		1587		624		920	
Turn Bay Length (ft)	300		300		240		245		
Base Capacity (vph)	1119	2455	1119	2506	1119	1598	1119	1551	845
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.12	0.04	0.07	0.13	0.25	0.01	0.18	0.32

Intersection Summary

Queues

Existing plus Project Saturday Inbound

7: Pitman Rd & I-80 EB Off/I-80 EB On

07/11/2022



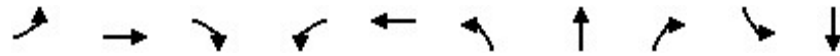
Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	252	394	312	557	165	520
v/c Ratio	0.56	0.66	0.50	0.62	0.37	0.55
Control Delay	19.3	11.4	16.7	5.2	22.8	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.3	11.4	16.7	5.2	22.8	10.6
Queue Length 50th (ft)	45	23	51	0	15	57
Queue Length 95th (ft)	133	107	181	64	62	237
Internal Link Dist (ft)	1288		1245			1196
Turn Bay Length (ft)					155	
Base Capacity (vph)	1411	1312	798	997	1487	1598
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	0.18	0.30	0.39	0.56	0.11	0.33

Intersection Summary

Queues
8: Green Valley Rd & Business Center Dr

Existing plus Project Saturday Inbound

07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	110	167	843	270	616	449	166	46	13	362
v/c Ratio	0.42	0.60	0.69	0.64	0.69	0.78	0.13	0.07	0.12	0.62
Control Delay	38.4	43.6	9.4	35.3	31.5	46.3	21.0	0.2	45.0	31.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.4	43.6	9.4	35.3	31.5	46.3	21.0	0.2	45.0	31.7
Queue Length 50th (ft)	54	85	49	134	150	117	29	0	7	73
Queue Length 95th (ft)	118	171	101	252	241	#243	69	0	28	133
Internal Link Dist (ft)		1261			1089		822			911
Turn Bay Length (ft)	250		250			265		265	250	
Base Capacity (vph)	376	394	1217	572	1188	576	1300	665	109	863
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	0.29	0.42	0.69	0.47	0.52	0.78	0.13	0.07	0.12	0.42

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
 9: Green Valley Rd & I-80 WB Ramp

Existing plus Project Saturday Inbound
 07/11/2022



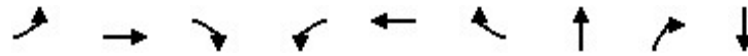
Lane Group	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	135	673	806	592
v/c Ratio	0.22	0.36	0.61	0.46
Control Delay	22.8	0.5	7.7	1.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	22.8	0.5	7.7	1.8
Queue Length 50th (ft)	17	0	120	4
Queue Length 95th (ft)	50	0	232	30
Internal Link Dist (ft)		932	822	
Turn Bay Length (ft)	280			315
Base Capacity (vph)	1724	1863	1708	1497
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.08	0.36	0.47	0.40
Intersection Summary				

Queues

Existing plus Project Saturday Outbound

1: Suisun Valley Rd & Rockville Rd

07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	35	127	40	190	152	92	254	115	342
v/c Ratio	0.28	0.56	0.15	0.62	0.30	0.18	0.68	0.16	0.60
Control Delay	53.6	52.4	1.1	48.5	32.4	7.7	47.5	7.8	36.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.6	52.4	1.1	48.5	32.4	7.7	47.5	7.8	36.8
Queue Length 50th (ft)	21	74	0	109	78	0	145	15	175
Queue Length 95th (ft)	58	150	0	203	148	38	255	48	344
Internal Link Dist (ft)		1454			543		254		1444
Turn Bay Length (ft)	110		110	240		150		75	
Base Capacity (vph)	276	873	789	829	1462	1262	866	1156	569
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.15	0.05	0.23	0.10	0.07	0.29	0.10	0.60

Intersection Summary

Queues

Existing plus Project Saturday Outbound

3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

07/11/2022



Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	14	46	11	11	16	38	359	24	4	517
v/c Ratio	0.04	0.11	0.02	0.02	0.03	0.10	0.15	0.02	0.01	0.24
Control Delay	27.8	0.5	17.0	17.0	0.1	25.4	10.5	0.1	29.3	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.8	0.5	17.0	17.0	0.1	25.4	10.5	0.1	29.3	13.5
Queue Length 50th (ft)	2	0	1	1	0	4	11	0	1	17
Queue Length 95th (ft)	21	0	12	12	0	50	120	0	10	183
Internal Link Dist (ft)	974		823			1085			2523	
Turn Bay Length (ft)			180		200	160		180		
Base Capacity (vph)	1256	1101	1431	1442	1363	1193	3013	1363	1396	3216
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	0.01	0.04	0.01	0.01	0.01	0.03	0.12	0.02	0.00	0.16

Intersection Summary

Queues
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Existing plus Project Saturday Outbound

07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	41	81	42	82	55	397	14	480	57
v/c Ratio	0.09	0.11	0.09	0.06	0.11	0.11	0.04	0.23	0.06
Control Delay	32.8	10.2	32.6	16.3	31.4	11.3	37.3	17.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.8	10.2	32.6	16.3	31.4	11.3	37.3	17.3	0.1
Queue Length 50th (ft)	8	4	8	6	11	10	3	42	0
Queue Length 95th (ft)	67	44	69	34	83	108	32	216	0
Internal Link Dist (ft)		828		952		920		1085	
Turn Bay Length (ft)	240		250		205		210		210
Base Capacity (vph)	1066	1019	1155	2201	1066	3855	1066	2668	1227
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.08	0.04	0.04	0.05	0.10	0.01	0.18	0.05

Intersection Summary

Queues
5: Suisun Valley Rd & Business Center Dr

Existing plus Project Saturday Outbound

07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	104	285	40	167	147	362	11	278	293
v/c Ratio	0.23	0.19	0.10	0.16	0.30	0.24	0.03	0.35	0.50
Control Delay	36.7	13.2	38.7	24.5	35.8	15.3	41.7	25.1	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.7	13.2	38.7	24.5	35.8	15.3	41.7	25.1	6.7
Queue Length 50th (ft)	18	13	6	17	25	41	2	46	0
Queue Length 95th (ft)	72	60	36	55	95	140	15	123	61
Internal Link Dist (ft)		1814		1587		624		920	
Turn Bay Length (ft)	300		300		240		245		
Base Capacity (vph)	1115	2445	1115	2497	1115	1606	1115	1545	856
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.12	0.04	0.07	0.13	0.23	0.01	0.18	0.34

Intersection Summary

Queues
7: Pitman Rd & I-80 EB Off/I-80 EB On

Existing plus Project Saturday Outbound

07/11/2022

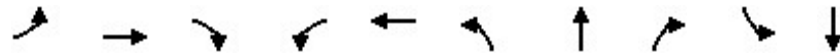


Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	227	394	312	557	169	520
v/c Ratio	0.52	0.67	0.49	0.61	0.37	0.54
Control Delay	18.6	11.8	16.5	5.2	22.5	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.6	11.8	16.5	5.2	22.5	10.3
Queue Length 50th (ft)	40	23	50	0	15	54
Queue Length 95th (ft)	121	108	182	64	63	237
Internal Link Dist (ft)	1288		1245			1196
Turn Bay Length (ft)					155	
Base Capacity (vph)	1384	1292	807	1001	1505	1614
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	0.16	0.30	0.39	0.56	0.11	0.32
Intersection Summary						

Queues
8: Green Valley Rd & Business Center Dr

Existing plus Project Saturday Outbound

07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	110	167	843	290	620	449	166	46	10	362
v/c Ratio	0.42	0.61	0.71	0.67	0.69	0.78	0.13	0.07	0.09	0.63
Control Delay	38.7	44.1	10.3	36.6	31.3	46.9	21.3	0.2	44.8	32.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.7	44.1	10.3	36.6	31.3	46.9	21.3	0.2	44.8	32.0
Queue Length 50th (ft)	54	86	53	146	152	117	29	0	5	73
Queue Length 95th (ft)	118	171	107	272	243	#243	69	0	23	133
Internal Link Dist (ft)		1261			1089		822			911
Turn Bay Length (ft)	250		250			265		265	250	
Base Capacity (vph)	374	392	1194	569	1179	573	1294	663	109	859
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	0.29	0.43	0.71	0.51	0.53	0.78	0.13	0.07	0.09	0.42

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
9: Green Valley Rd & I-80 WB Ramp

Existing plus Project Saturday Outbound

07/11/2022



Lane Group	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	135	673	818	603
v/c Ratio	0.22	0.36	0.61	0.47
Control Delay	23.1	0.5	7.8	1.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	23.1	0.5	7.8	1.9
Queue Length 50th (ft)	17	0	123	5
Queue Length 95th (ft)	50	0	238	31
Internal Link Dist (ft)		932	822	
Turn Bay Length (ft)	280			315
Base Capacity (vph)	1712	1863	1699	1491
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.08	0.36	0.48	0.40

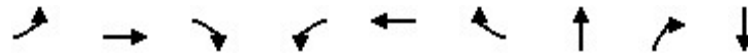
Intersection Summary

Queues

Cumulative PM

1: Suisun Valley Rd & Rockville Rd

07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	23	155	40	155	184	46	322	328	344
v/c Ratio	0.21	0.61	0.14	0.58	0.36	0.10	0.75	0.42	0.64
Control Delay	56.9	54.9	1.0	52.3	35.0	5.4	49.1	11.1	41.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.9	54.9	1.0	52.3	35.0	5.4	49.1	11.1	41.1
Queue Length 50th (ft)	15	96	0	95	102	0	195	66	192
Queue Length 95th (ft)	47	183	0	181	183	18	324	135	#390
Internal Link Dist (ft)		1454			543		254		1444
Turn Bay Length (ft)	110		110	240		150		75	
Base Capacity (vph)	262	829	754	788	1390	1196	820	1193	540
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.19	0.05	0.20	0.13	0.04	0.39	0.27	0.64

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues
3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Cumulative PM
07/11/2022



Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	19	85	50	50	8	106	537	33	25	367
v/c Ratio	0.07	0.26	0.13	0.12	0.02	0.30	0.28	0.04	0.09	0.27
Control Delay	30.7	8.3	19.9	19.9	0.0	27.8	13.3	0.1	30.3	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.7	8.3	19.9	19.9	0.0	27.8	13.3	0.1	30.3	20.2
Queue Length 50th (ft)	5	0	13	13	0	27	44	0	7	46
Queue Length 95th (ft)	21	32	29	29	0	107	186	0	26	140
Internal Link Dist (ft)	974			823			1085			2523
Turn Bay Length (ft)			180		200	160			180	
Base Capacity (vph)	889	831	1315	1329	1261	869	2768	1260	1127	3180
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	0.02	0.10	0.04	0.04	0.01	0.12	0.19	0.03	0.02	0.12

Intersection Summary

Queues
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Cumulative PM
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	208	151	62	78	51	522	264	433	107
v/c Ratio	0.62	0.38	0.29	0.15	0.26	0.46	0.68	0.29	0.14
Control Delay	44.2	28.7	44.0	18.8	44.4	29.0	42.8	21.5	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.2	28.7	44.0	18.8	44.4	29.0	42.8	21.5	3.2
Queue Length 50th (ft)	80	53	24	7	20	69	99	71	0
Queue Length 95th (ft)	#313	140	100	32	87	174	#431	209	22
Internal Link Dist (ft)		828		952		920		1085	
Turn Bay Length (ft)	240		250		205		210		210
Base Capacity (vph)	539	508	674	1141	539	2703	539	1931	925
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.30	0.09	0.07	0.09	0.19	0.49	0.22	0.12

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
5: Suisun Valley Rd & Business Center Dr

Cumulative PM
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	205	1057	28	170	636	506	11	159	250
v/c Ratio	0.45	0.61	0.09	0.18	0.76	0.33	0.04	0.28	0.54
Control Delay	42.6	23.1	47.8	29.8	41.1	16.9	50.4	33.8	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.6	23.1	47.8	29.8	41.1	16.9	50.4	33.8	9.0
Queue Length 50th (ft)	43	113	6	24	131	62	2	34	0
Queue Length 95th (ft)	130	295	29	62	#493	194	15	82	57
Internal Link Dist (ft)		1814		1587		624		920	
Turn Bay Length (ft)	300		300		240		245		
Base Capacity (vph)	837	1946	837	1890	837	1556	837	1178	694
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.54	0.03	0.09	0.76	0.33	0.01	0.13	0.36

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	239	516	630	652	141	707
v/c Ratio	0.48	0.86	0.79	0.62	0.42	0.69
Control Delay	21.5	27.3	26.7	4.6	33.0	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.5	27.3	26.7	4.6	33.0	15.0
Queue Length 50th (ft)	72	103	190	0	25	157
Queue Length 95th (ft)	145	#252	#469	63	60	365
Internal Link Dist (ft)	1288		1245			1196
Turn Bay Length (ft)					155	
Base Capacity (vph)	804	834	942	1123	813	1358
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	0.30	0.62	0.67	0.58	0.17	0.52

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
8: Green Valley Rd & Business Center Dr

Cumulative PM
07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	94	250	938	467	939	411	313	172	5	479
v/c Ratio	0.32	0.80	0.90	0.88	0.86	0.70	0.25	0.25	0.07	0.84
Control Delay	51.8	72.6	35.9	60.7	50.4	60.4	33.1	6.1	73.0	67.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.8	72.6	35.9	60.7	50.4	60.4	33.1	6.1	73.0	67.1
Queue Length 50th (ft)	75	221	253	379	372	167	95	0	4	201
Queue Length 95th (ft)	144	355	332	#851	#728	#335	187	59	22	323
Internal Link Dist (ft)		1261			1089		822			911
Turn Bay Length (ft)	250		250			265		265	250	
Base Capacity (vph)	296	311	1041	602	1230	589	1268	677	68	588
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	0.32	0.80	0.90	0.78	0.76	0.70	0.25	0.25	0.07	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
 9: Green Valley Rd & I-80 WB Ramp

Cumulative PM
 07/11/2022



Lane Group	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	65	941	1237	925
v/c Ratio	0.17	0.51	0.79	0.64
Control Delay	27.8	1.0	11.6	2.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	27.8	1.0	11.6	2.9
Queue Length 50th (ft)	12	0	285	12
Queue Length 95th (ft)	29	0	#722	43
Internal Link Dist (ft)		932	822	
Turn Bay Length (ft)	280			315
Base Capacity (vph)	1118	1863	1496	1425
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.06	0.51	0.83	0.65

Intersection Summary

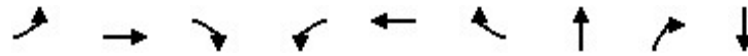
95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

Cumulative Saturday

1: Suisun Valley Rd & Rockville Rd

07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	34	148	40	199	153	85	267	170	364
v/c Ratio	0.29	0.60	0.14	0.64	0.28	0.16	0.70	0.23	0.67
Control Delay	56.5	54.4	1.0	50.6	32.1	7.7	49.3	8.3	41.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.5	54.4	1.0	50.6	32.1	7.7	49.3	8.3	41.4
Queue Length 50th (ft)	21	90	0	119	80	0	159	25	202
Queue Length 95th (ft)	60	177	0	221	151	36	280	66	#428
Internal Link Dist (ft)		1454			543		254		1444
Turn Bay Length (ft)	110		110	240		150		75	
Base Capacity (vph)	266	840	762	798	1408	1217	834	1143	547
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.18	0.05	0.25	0.11	0.07	0.32	0.15	0.67

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues
3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Cumulative Saturday
07/11/2022



Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	23	69	23	24	33	80	319	33	7	415
v/c Ratio	0.10	0.20	0.06	0.06	0.07	0.24	0.16	0.03	0.03	0.29
Control Delay	30.2	4.9	19.2	19.3	0.3	27.1	11.9	0.1	30.8	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.2	4.9	19.2	19.3	0.3	27.1	11.9	0.1	30.8	18.7
Queue Length 50th (ft)	6	0	6	6	0	20	23	0	2	51
Queue Length 95th (ft)	31	19	21	22	0	87	110	0	14	155
Internal Link Dist (ft)	974			823			1085			2523
Turn Bay Length (ft)			180		200	160			180	
Base Capacity (vph)	760	881	1372	1394	1311	930	2888	1310	1218	3194
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	0.03	0.08	0.02	0.02	0.03	0.09	0.11	0.03	0.01	0.13

Intersection Summary

Queues
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Cumulative Saturday
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	65	98	38	87	49	380	16	413	60
v/c Ratio	0.18	0.18	0.11	0.10	0.14	0.14	0.06	0.27	0.08
Control Delay	32.7	9.7	34.9	17.6	33.7	13.6	38.5	19.9	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.7	9.7	34.9	17.6	33.7	13.6	38.5	19.9	0.2
Queue Length 50th (ft)	17	5	10	8	13	21	4	55	0
Queue Length 95th (ft)	95	49	65	35	77	107	37	190	0
Internal Link Dist (ft)		828		952		920		1085	
Turn Bay Length (ft)	240		250		205		210		210
Base Capacity (vph)	956	898	1107	1987	956	3692	956	2556	1182
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.11	0.03	0.04	0.05	0.10	0.02	0.16	0.05

Intersection Summary

Queues
5: Suisun Valley Rd & Business Center Dr

Cumulative Saturday
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	147	777	22	163	217	386	27	174	283
v/c Ratio	0.33	0.43	0.06	0.16	0.42	0.31	0.08	0.27	0.54
Control Delay	37.9	21.2	43.4	25.7	36.4	17.9	42.8	28.1	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.9	21.2	43.4	25.7	36.4	17.9	42.8	28.1	8.1
Queue Length 50th (ft)	24	65	3	17	36	40	4	30	0
Queue Length 95th (ft)	99	238	24	58	135	143	28	86	63
Internal Link Dist (ft)		1814		1587		624		920	
Turn Bay Length (ft)	300		300		240		245		
Base Capacity (vph)	1014	2309	1014	2279	1014	1427	1014	1410	801
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.34	0.02	0.07	0.21	0.27	0.03	0.12	0.35

Intersection Summary

Queues

Cumulative Saturday

7: Pitman Rd & I-80 EB Off/I-80 EB On

07/11/2022



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	89	511	489	721	63	684
v/c Ratio	0.17	0.83	0.66	0.68	0.18	0.76
Control Delay	14.7	22.7	19.5	5.2	28.1	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.7	22.7	19.5	5.2	28.1	17.5
Queue Length 50th (ft)	17	71	115	0	8	129
Queue Length 95th (ft)	57	238	283	64	32	349
Internal Link Dist (ft)	1288		1245			1196
Turn Bay Length (ft)					155	
Base Capacity (vph)	1121	1072	1242	1295	615	1491
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	0.08	0.48	0.39	0.56	0.10	0.46

Intersection Summary

Queues
8: Green Valley Rd & Business Center Dr

Cumulative Saturday
07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	74	250	1036	435	885	438	222	144	10	433
v/c Ratio	0.28	0.91	0.95	0.83	0.83	0.62	0.17	0.21	0.14	0.83
Control Delay	51.3	87.0	38.6	54.1	45.7	50.6	27.9	5.7	64.9	64.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.3	87.0	38.6	54.1	45.7	50.6	27.9	5.7	64.9	64.7
Queue Length 50th (ft)	58	222	275	361	360	177	64	0	8	182
Queue Length 95th (ft)	109	#392	#390	#514	447	235	106	49	28	#257
Internal Link Dist (ft)		1261			1089		822			911
Turn Bay Length (ft)	250		250			265		265	250	
Base Capacity (vph)	271	284	1094	582	1192	704	1329	684	72	560
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	0.27	0.88	0.95	0.75	0.74	0.62	0.17	0.21	0.14	0.77

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
9: Green Valley Rd & I-80 WB Ramp

Cumulative Saturday
07/11/2022



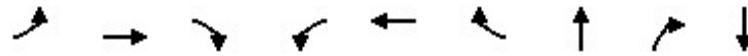
Lane Group	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	26	833	1172	896
v/c Ratio	0.07	0.45	0.70	0.59
Control Delay	26.6	0.8	7.3	2.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	26.6	0.8	7.3	2.0
Queue Length 50th (ft)	4	0	0	0
Queue Length 95th (ft)	15	0	#639	22
Internal Link Dist (ft)		932	822	
Turn Bay Length (ft)	280			315
Base Capacity (vph)	1167	1863	1562	1472
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.45	0.75	0.61

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
1: Suisun Valley Rd & Rockville Rd

Cumulative plus Project PM
07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	23	163	41	155	185	47	335	325	370
v/c Ratio	0.22	0.62	0.14	0.59	0.36	0.10	0.75	0.42	0.70
Control Delay	58.5	56.0	1.0	53.8	35.6	5.7	49.5	11.5	44.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.5	56.0	1.0	53.8	35.6	5.7	49.5	11.5	44.6
Queue Length 50th (ft)	15	103	0	97	104	0	207	69	217
Queue Length 95th (ft)	47	197	0	187	189	19	339	139	#458
Internal Link Dist (ft)		1454			543		254		1444
Turn Bay Length (ft)	110		110	240		150		75	
Base Capacity (vph)	257	814	741	773	1363	1175	804	1188	531
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.20	0.06	0.20	0.14	0.04	0.42	0.27	0.70

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

Cumulative plus Project PM
07/11/2022



Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	23	85	50	50	8	106	634	33	25	410
v/c Ratio	0.09	0.26	0.13	0.13	0.02	0.30	0.35	0.04	0.09	0.30
Control Delay	31.7	8.4	21.0	21.0	0.0	28.5	15.5	0.1	31.5	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.7	8.4	21.0	21.0	0.0	28.5	15.5	0.1	31.5	20.4
Queue Length 50th (ft)	6	0	13	13	0	28	55	0	7	54
Queue Length 95th (ft)	25	33	30	30	0	109	225	0	26	157
Internal Link Dist (ft)	974			823			1085			2523
Turn Bay Length (ft)			180		200	160			180	
Base Capacity (vph)	869	817	1284	1298	1234	853	2703	1233	1102	3126
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	0.03	0.10	0.04	0.04	0.01	0.12	0.23	0.03	0.02	0.13

Intersection Summary

Queues
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Cumulative plus Project PM
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	215	151	62	83	51	612	266	471	110
v/c Ratio	0.64	0.38	0.30	0.16	0.26	0.51	0.69	0.31	0.15
Control Delay	45.3	29.3	45.2	18.5	45.6	29.8	44.2	21.6	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.3	29.3	45.2	18.5	45.6	29.8	44.2	21.6	3.5
Queue Length 50th (ft)	87	55	26	8	21	86	105	79	0
Queue Length 95th (ft)	#328	140	100	32	87	206	#435	228	25
Internal Link Dist (ft)		828		952		920		1085	
Turn Bay Length (ft)	240		250		205		210		210
Base Capacity (vph)	520	494	650	1103	520	2610	520	1864	898
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.31	0.10	0.08	0.10	0.23	0.51	0.25	0.12

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
5: Suisun Valley Rd & Business Center Dr

Cumulative plus Project PM
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	213	1057	28	170	636	589	11	168	281
v/c Ratio	0.46	0.61	0.09	0.18	0.76	0.38	0.04	0.29	0.57
Control Delay	42.7	23.1	48.1	30.0	41.3	18.1	50.5	34.0	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.7	23.1	48.1	30.0	41.3	18.1	50.5	34.0	9.1
Queue Length 50th (ft)	45	113	6	24	132	78	2	36	0
Queue Length 95th (ft)	135	295	29	63	#495	236	15	86	60
Internal Link Dist (ft)		1814		1587		624		920	
Turn Bay Length (ft)	300		300		240		245		
Base Capacity (vph)	834	1942	834	1882	834	1559	834	1174	713
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.54	0.03	0.09	0.76	0.38	0.01	0.14	0.39

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

Cumulative plus Project PM

7: Pitman Rd & I-80 EB Off/I-80 EB On

07/11/2022



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	302	516	630	652	147	707
v/c Ratio	0.60	0.86	0.79	0.62	0.43	0.69
Control Delay	24.3	27.3	26.9	4.6	33.1	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.3	27.3	26.9	4.6	33.1	15.0
Queue Length 50th (ft)	95	104	191	0	27	158
Queue Length 95th (ft)	185	#252	#472	63	62	365
Internal Link Dist (ft)	1288		1245			1196
Turn Bay Length (ft)					155	
Base Capacity (vph)	803	833	941	1122	812	1356
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	0.38	0.62	0.67	0.58	0.18	0.52

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues
8: Green Valley Rd & Business Center Dr

Cumulative plus Project PM
07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	94	250	938	475	962	411	313	172	13	479
v/c Ratio	0.32	0.81	0.91	0.88	0.87	0.70	0.26	0.26	0.19	0.84
Control Delay	52.1	73.5	37.5	61.1	51.1	60.9	35.1	6.5	76.5	67.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.1	73.5	37.5	61.1	51.1	60.9	35.1	6.5	76.5	67.8
Queue Length 50th (ft)	76	224	263	387	385	170	96	0	11	204
Queue Length 95th (ft)	144	355	336	#872	#758	#335	187	59	41	323
Internal Link Dist (ft)		1261			1089		822			911
Turn Bay Length (ft)	250		250			265		265	250	
Base Capacity (vph)	295	309	1031	599	1222	586	1208	653	67	585
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	0.32	0.81	0.91	0.79	0.79	0.70	0.26	0.26	0.19	0.82

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
9: Green Valley Rd & I-80 WB Ramp

Cumulative plus Project PM
07/11/2022



Lane Group	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	65	941	1251	939
v/c Ratio	0.17	0.51	0.80	0.65
Control Delay	27.8	1.0	12.1	3.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	27.8	1.0	12.1	3.1
Queue Length 50th (ft)	12	0	295	13
Queue Length 95th (ft)	29	0	#734	45
Internal Link Dist (ft)		932	822	
Turn Bay Length (ft)	280			315
Base Capacity (vph)	1118	1863	1496	1425
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.06	0.51	0.84	0.66

Intersection Summary

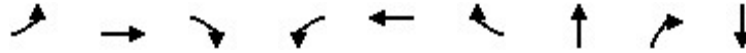
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

Cumulative plus Project Saturday Inbound

1: Suisun Valley Rd & Rockville Rd

07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	34	157	41	199	156	88	288	169	395
v/c Ratio	0.29	0.62	0.14	0.65	0.29	0.17	0.72	0.23	0.74
Control Delay	58.4	55.9	1.0	52.2	32.8	7.7	50.4	9.0	46.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.4	55.9	1.0	52.2	32.8	7.7	50.4	9.0	46.3
Queue Length 50th (ft)	22	99	0	123	84	0	177	28	234
Queue Length 95th (ft)	62	191	0	228	157	38	307	70	#512
Internal Link Dist (ft)		1454			543		254		1444
Turn Bay Length (ft)	110		110	240		150		75	
Base Capacity (vph)	259	818	745	777	1371	1188	811	1137	533
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.19	0.06	0.26	0.11	0.07	0.36	0.15	0.74

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

Cumulative plus Project Saturday Inbound

3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

07/11/2022



Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	28	69	23	24	33	80	437	33	7	490
v/c Ratio	0.12	0.20	0.06	0.06	0.07	0.24	0.21	0.03	0.03	0.33
Control Delay	31.2	4.9	20.8	20.8	0.3	28.4	11.8	0.1	32.6	18.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.2	4.9	20.8	20.8	0.3	28.4	11.8	0.1	32.6	18.8
Queue Length 50th (ft)	7	0	6	6	0	21	34	0	2	62
Queue Length 95th (ft)	36	19	22	23	0	89	150	0	15	186
Internal Link Dist (ft)	974			823			1085			2523
Turn Bay Length (ft)			180		200	160			180	
Base Capacity (vph)	728	861	1339	1361	1282	905	2820	1282	1181	3135
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	0.04	0.08	0.02	0.02	0.03	0.09	0.15	0.03	0.01	0.16

Intersection Summary

Queues
4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

Cumulative plus Project Saturday Inbound

07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	73	98	38	92	49	487	20	478	65
v/c Ratio	0.20	0.18	0.11	0.11	0.14	0.18	0.07	0.30	0.08
Control Delay	33.0	9.8	35.7	17.4	34.6	13.9	38.8	20.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	9.8	35.7	17.4	34.6	13.9	38.8	20.1	0.2
Queue Length 50th (ft)	21	5	11	10	14	29	6	66	0
Queue Length 95th (ft)	104	49	66	36	78	139	43	222	0
Internal Link Dist (ft)		828		952		920		1085	
Turn Bay Length (ft)	240		250		205		210		210
Base Capacity (vph)	934	886	1079	1933	934	3631	934	2514	1164
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.11	0.04	0.05	0.05	0.13	0.02	0.19	0.06

Intersection Summary

Queues
5: Suisun Valley Rd & Business Center Dr

Cumulative plus Project Saturday Inbound
07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	157	777	22	163	217	484	27	189	334
v/c Ratio	0.34	0.43	0.06	0.16	0.42	0.38	0.08	0.28	0.58
Control Delay	38.4	21.6	44.0	26.4	37.1	19.7	43.7	28.2	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.4	21.6	44.0	26.4	37.1	19.7	43.7	28.2	8.0
Queue Length 50th (ft)	27	69	3	18	37	56	4	33	0
Queue Length 95th (ft)	105	238	25	59	136	191	28	93	67
Internal Link Dist (ft)		1814		1587		624		920	
Turn Bay Length (ft)	300		300		240		245		
Base Capacity (vph)	995	2271	995	2237	995	1410	995	1385	823
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.34	0.02	0.07	0.22	0.34	0.03	0.14	0.41

Intersection Summary

Queues
7: Pitman Rd & I-80 EB Off/I-80 EB On

Cumulative plus Project Saturday Inbound

07/11/2022



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	165	511	489	721	73	684
v/c Ratio	0.30	0.82	0.67	0.68	0.20	0.77
Control Delay	15.9	22.3	19.8	5.3	28.1	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.9	22.3	19.8	5.3	28.1	17.6
Queue Length 50th (ft)	33	71	115	0	9	129
Queue Length 95th (ft)	97	238	285	64	36	349
Internal Link Dist (ft)	1288		1245			1196
Turn Bay Length (ft)					155	
Base Capacity (vph)	1112	1066	1231	1290	611	1489
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	0.15	0.48	0.40	0.56	0.12	0.46

Intersection Summary

Queues
8: Green Valley Rd & Business Center Dr

Cumulative plus Project Saturday Inbound

07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	74	250	1036	452	922	438	222	144	20	433
v/c Ratio	0.28	0.91	0.96	0.86	0.85	0.63	0.18	0.23	0.28	0.83
Control Delay	51.5	88.4	42.3	56.1	47.2	51.1	31.2	6.1	70.9	65.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	88.4	42.3	56.1	47.2	51.1	31.2	6.1	70.9	65.1
Queue Length 50th (ft)	58	222	281	381	382	177	72	0	17	182
Queue Length 95th (ft)	109	#392	#401	#569	472	235	106	49	45	#257
Internal Link Dist (ft)		1261			1089		822			911
Turn Bay Length (ft)	250		250			265		265	250	
Base Capacity (vph)	268	282	1076	576	1180	697	1214	637	71	556
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	0.28	0.89	0.96	0.78	0.78	0.63	0.18	0.23	0.28	0.78

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
9: Green Valley Rd & I-80 WB Ramp

Cumulative plus Project Saturday Inbound
07/11/2022



Lane Group	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	26	833	1196	920
v/c Ratio	0.07	0.45	0.72	0.61
Control Delay	26.6	0.8	7.8	2.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	26.6	0.8	7.8	2.1
Queue Length 50th (ft)	4	0	0	0
Queue Length 95th (ft)	15	0	#661	22
Internal Link Dist (ft)		932	822	
Turn Bay Length (ft)	280			315
Base Capacity (vph)	1167	1863	1562	1475
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.45	0.77	0.62

Intersection Summary

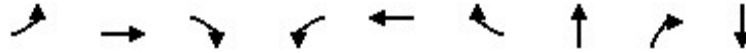
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

Cumulative plus Project Saturday Outbound

1: Suisun Valley Rd & Rockville Rd

07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBT
Lane Group Flow (vph)	34	153	41	199	157	90	296	169	384
v/c Ratio	0.29	0.61	0.14	0.64	0.29	0.17	0.73	0.23	0.72
Control Delay	58.8	56.2	1.0	52.4	33.1	7.7	50.4	9.0	45.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.8	56.2	1.0	52.4	33.1	7.7	50.4	9.0	45.6
Queue Length 50th (ft)	22	97	0	123	85	0	183	29	227
Queue Length 95th (ft)	62	188	0	229	159	38	315	71	#495
Internal Link Dist (ft)		1454			543		254		1444
Turn Bay Length (ft)	110		110	240		150		75	
Base Capacity (vph)	258	815	743	774	1366	1185	808	1139	532
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.19	0.06	0.26	0.11	0.08	0.37	0.15	0.72

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

Cumulative plus Project Saturday Outbound

3: Suisun Valley Rd & Oakwood Dr/Solano College Rd

07/11/2022



Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	27	69	23	24	33	80	399	33	7	527
v/c Ratio	0.12	0.20	0.06	0.06	0.07	0.24	0.19	0.03	0.03	0.35
Control Delay	32.0	4.8	21.4	21.4	0.3	28.9	11.5	0.1	33.4	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.0	4.8	21.4	21.4	0.3	28.9	11.5	0.1	33.4	18.7
Queue Length 50th (ft)	7	0	6	7	0	22	31	0	2	68
Queue Length 95th (ft)	35	19	23	23	0	90	136	0	15	200
Internal Link Dist (ft)	974			823			1085			2523
Turn Bay Length (ft)			180		200	160			180	
Base Capacity (vph)	721	852	1323	1345	1268	894	2786	1268	1165	3111
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	0.04	0.08	0.02	0.02	0.03	0.09	0.14	0.03	0.01	0.17

Intersection Summary

Queues

Cumulative plus Project Saturday Outbound

4: Suisun Valley Rd & Westamerica Dr/Kaiser Dr

07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	71	98	38	91	49	453	22	510	67
v/c Ratio	0.19	0.18	0.11	0.11	0.14	0.16	0.08	0.31	0.08
Control Delay	33.5	10.0	36.1	17.8	35.0	13.8	39.0	20.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.5	10.0	36.1	17.8	35.0	13.8	39.0	20.1	0.2
Queue Length 50th (ft)	20	6	11	10	14	27	7	72	0
Queue Length 95th (ft)	102	49	66	36	78	130	46	236	0
Internal Link Dist (ft)		828		952		920		1085	
Turn Bay Length (ft)	240		250		205		210		210
Base Capacity (vph)	915	873	1056	1900	915	3603	915	2497	1157
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.11	0.04	0.05	0.05	0.13	0.02	0.20	0.06

Intersection Summary

Queues
5: Suisun Valley Rd & Business Center Dr

Cumulative plus Project Saturday Outbound

07/11/2022



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	153	777	22	163	217	452	27	196	358
v/c Ratio	0.34	0.43	0.06	0.16	0.42	0.36	0.08	0.29	0.60
Control Delay	38.3	21.6	43.8	26.2	37.0	19.2	43.4	28.1	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.3	21.6	43.8	26.2	37.0	19.2	43.4	28.1	8.1
Queue Length 50th (ft)	26	69	3	18	37	51	4	34	0
Queue Length 95th (ft)	102	238	25	59	135	175	28	96	70
Internal Link Dist (ft)		1814		1587		624		920	
Turn Bay Length (ft)	300		300		240		245		
Base Capacity (vph)	997	2275	997	2243	997	1412	997	1388	838
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.34	0.02	0.07	0.22	0.32	0.03	0.14	0.43

Intersection Summary

Queues

Cumulative plus Project Saturday Outbound

7: Pitman Rd & I-80 EB Off/I-80 EB On

07/11/2022



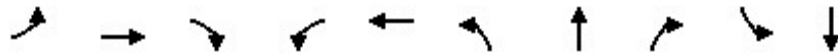
Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	140	511	489	721	77	684
v/c Ratio	0.26	0.82	0.67	0.68	0.21	0.77
Control Delay	15.5	22.3	19.9	5.3	28.1	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	22.3	19.9	5.3	28.1	17.6
Queue Length 50th (ft)	28	71	115	0	10	129
Queue Length 95th (ft)	83	238	286	64	37	349
Internal Link Dist (ft)	1288		1245			1196
Turn Bay Length (ft)					155	
Base Capacity (vph)	1112	1065	1230	1290	610	1488
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	0.13	0.48	0.40	0.56	0.13	0.46

Intersection Summary

Queues
8: Green Valley Rd & Business Center Dr

Cumulative plus Project Saturday Outbound

07/11/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	74	250	1036	466	931	438	222	144	16	433
v/c Ratio	0.28	0.91	0.97	0.87	0.85	0.63	0.18	0.22	0.23	0.83
Control Delay	51.8	89.4	44.4	58.1	47.2	51.5	30.0	6.0	68.4	65.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.8	89.4	44.4	58.1	47.2	51.5	30.0	6.0	68.4	65.5
Queue Length 50th (ft)	58	222	283	397	387	177	64	0	13	182
Queue Length 95th (ft)	109	#392	#406	#600	479	235	106	49	39	#257
Internal Link Dist (ft)		1261			1089		822			911
Turn Bay Length (ft)	250		250			265		265	250	
Base Capacity (vph)	267	280	1067	573	1174	693	1261	657	70	553
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	0.28	0.89	0.97	0.81	0.79	0.63	0.18	0.22	0.23	0.78

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues
9: Green Valley Rd & I-80 WB Ramp

Cumulative plus Project Saturday Outbound

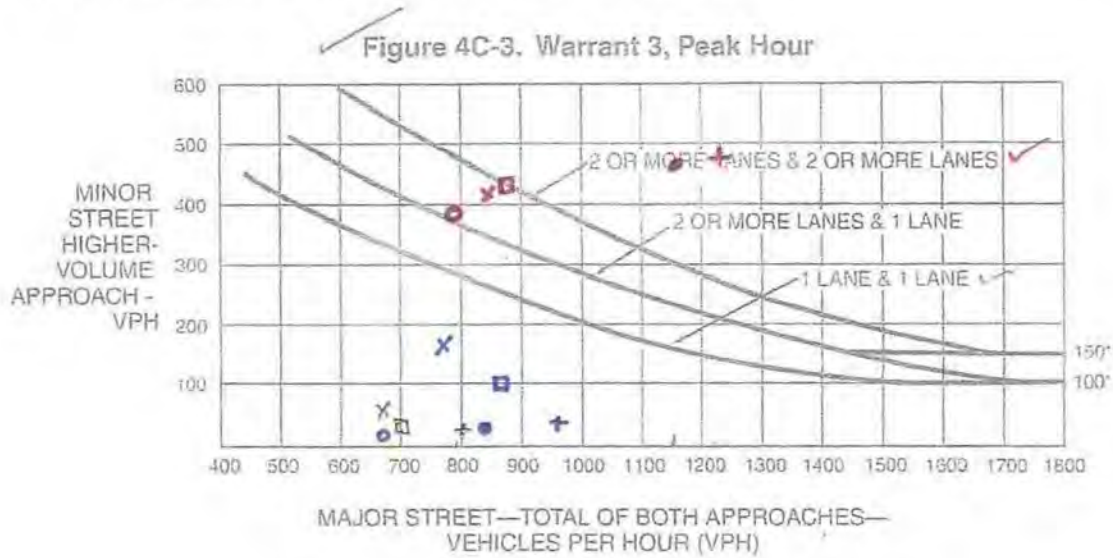
07/11/2022



Lane Group	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	26	833	1207	931
v/c Ratio	0.07	0.45	0.72	0.61
Control Delay	26.6	0.8	8.0	2.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	26.6	0.8	8.0	2.2
Queue Length 50th (ft)	4	0	0	0
Queue Length 95th (ft)	15	0	#671	22
Internal Link Dist (ft)		932	822	
Turn Bay Length (ft)	280			315
Base Capacity (vph)	1167	1863	1562	1477
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.45	0.77	0.63

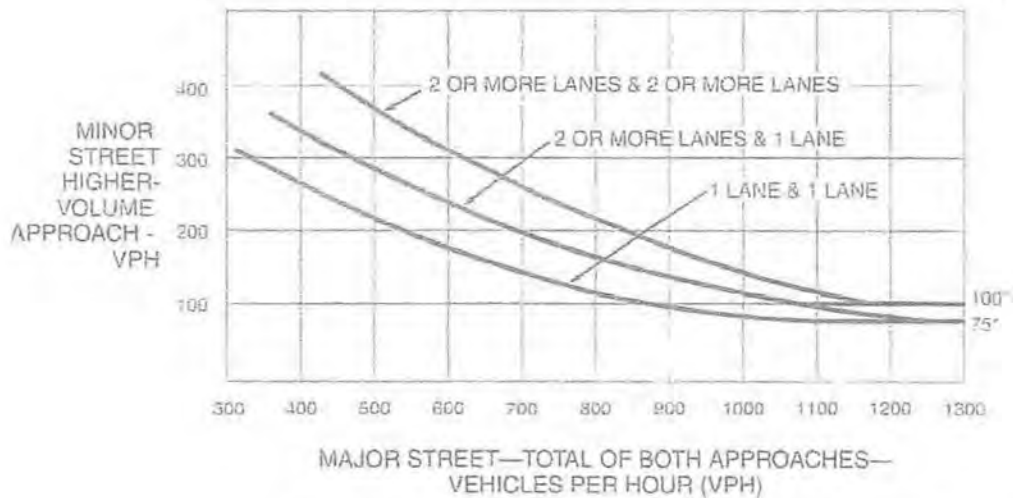
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

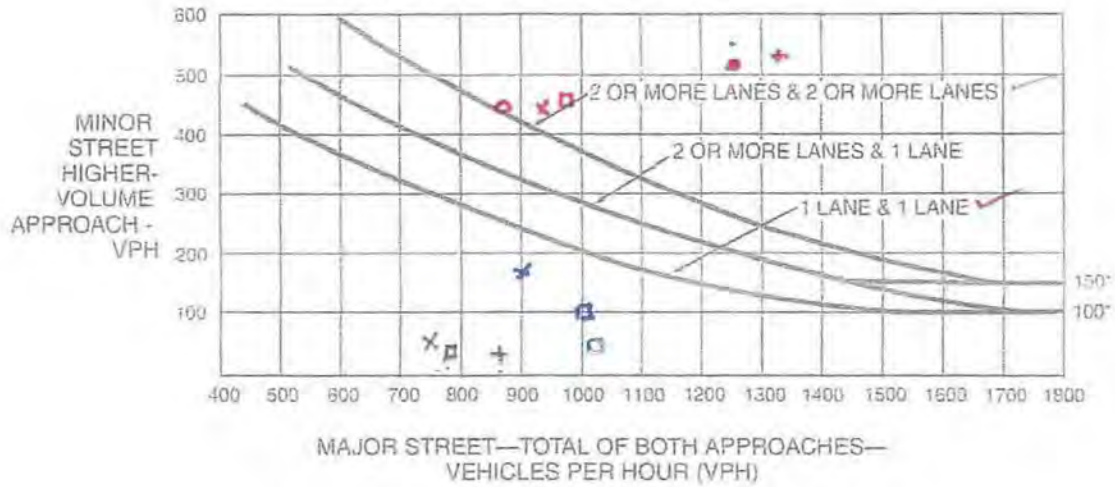
Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

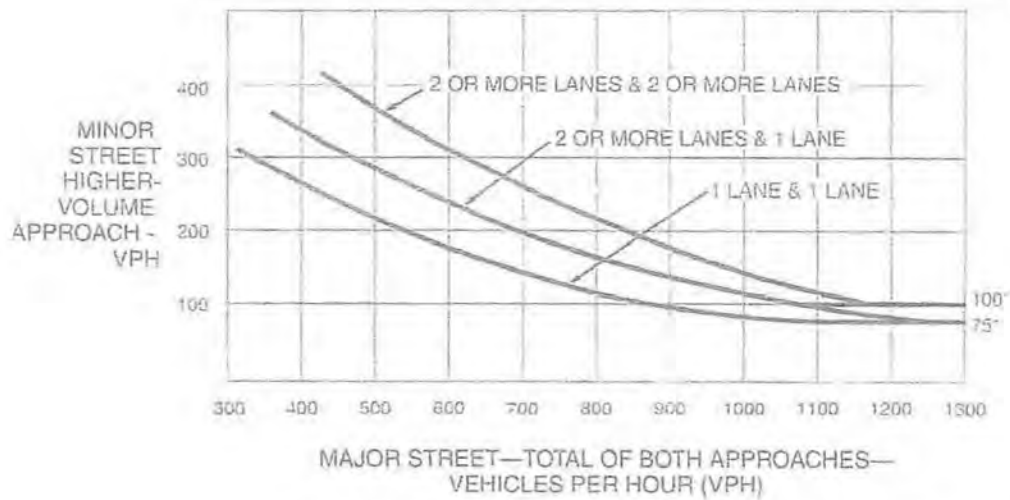
	<u>SV / NEITZELL</u>	<u>SV / SUISSON CT</u>	<u>ROCKVILLE / DW</u>
EXIST PM	●	●	—
EXIST SAT	+	+	—
EPP PM	□	□	+
EPP SAT INBND	×	×	+
EPP SAT OUTBND	×	×	×

✓ Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

		<u>SV/NEITZELL</u>	<u>SV/SUISUN CT</u>	<u>ROCKVILLE/DW</u>
CUM	PM	●		—
CUM	SAT	○		—
CPP	PM	+	+	+
CPP	SAT INBND	□	□	□
CPP	SAT OUTBND	x	x	x

Attachment A

Winery Traffic Information / Trip Generation Sheet

Traffic during a Typical Weekday

Number of FT employees: 1 x 3.05 one-way trips per employee = 3 daily trips.
 Number of PT employees: 3 x 1.90 one-way trips per employee = 6 daily trips.
 Average number of weekday visitors: 60 / 2.6 visitors per vehicle x 2 one-way trips = 46 daily trips.
 Gallons of production: — / 1,000 x .009 truck trips daily³ x 2 one-way trips = — daily trips.
 Total = 55 daily trips.
 Number of total weekday trips x .38 = 21 PM peak trips.

per tasting room

Traffic during a Typical Saturday

Number of FT employees (on Saturdays): 1 x 3.05 one-way trips per employee = 3 daily trips.
 Number of PT employees (on Saturdays): 3 x 1.90 one-way trips per employee = 6 daily trips.
 Average number of weekend visitors: 80 / 2.8 visitors per vehicle x 2 one-way trips = 57 daily trips.
 Total = 66 daily trips.
 Number of total Saturday trips x .57 = 38 PM peak trips.

per tasting room

Traffic during a Crush Saturday

Number of FT employees (during crush): _____ x 3.05 one-way trips per employee = _____ daily trips.
 Number of PT employees (during crush): _____ x 1.90 one-way trips per employee = _____ daily trips.
 Average number of weekend visitors: _____ / 2.8 visitors per vehicle x 2 one-way trips = _____ daily trips.
 Gallons of production: _____ / 1,000 x .009 truck trips daily x 2 one-way trips = _____ daily trips.
 Avg. annual tons of grape on-haul: _____ x .11 truck trips daily⁴ x 2 one-way trips = _____ daily trips.
 Total = _____ daily trips.
 Number of total Saturday trips x .57 = _____ PM peak trips.

SATURDAY - USE OF MULTIPURPOSE ROOM FOR WINE EVENT
 Largest Marketing Event- Additional Traffic

Number of event staff (largest event): 8 x 2 one-way trips per staff person = 16 trips.
 Number of visitors (largest event): 100 / 2.8 visitors per vehicle x 2 one-way trips = 72 trips.
 Number of special event truck trips (largest event): _____ x 2 one-way trips = 88 trips.

for multipurpose room (round trip)

³ Assumes 1.47 materials & supplies trips + 0.8 case goods trips per 1,000 gallons of production / 250 days per year (see Traffic Information Sheet Addendum for reference).

⁴ Assumes 4 tons per trip / 36 crush days per year (see Traffic Information Sheet Addendum for reference).

