TRAFFIC IMPACT ANALYSIS

For

SR 20 / WESCOTT ROAD RETAIL CENTER

Colusa, CA

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Colusa, CA

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INTRODUCTION

This report summarizes **KD Anderson & Associates, Inc.** analysis of the potential short-term and long-term traffic impacts associated with development of **SR 20 / Wescott Road Retail Center** in Colusa, California. As currently proposed, the project involves development of an ARCO gasoline station with convenience market and car wash on a site located on the east side of State Route 20 near its intersection with Wescott Road in southeastern Colusa. The proposed ARCO project is the first piece of site development that will eventually include other adjoining convenience type uses, such as fast food restaurants and community oriented retail. Primary access to the site will occur on SR 20 opposite a relocated Wescott Road intersection, but reciprocal access to an adjoining retail center is planned. The project also includes a fast food restaurant on an adjacent parcel west of SR 20. This parcel will be created in conjunction with the planned realignment of Wescott Road.

The location of the project site is presented in Figure 1, while the project site plan is Figure 2. It is important to note that while the ARCO project would proceed initially the other retail uses are speculative and have been identified for the purpose of creating a "worst case" assessment of the impacts of site development.

Study Scope. This analysis updates our September 12, 2018 traffic impacts analysis. The report revision reflects the addition of an outlying retail parcel on the west side of SR 20 across from the original project. The updated analysis also addresses project changes made to address Caltrans comments on the original traffic study. The primary change was the elimination of a separate driveway on SR 20 south of the main access opposite the relocated Wescott Road intersection. The purpose of this analysis is to present an assessment of potential project specific and cumulative traffic impacts associated with the project, to suggest feasible measures for mitigating identified impacts and to support a subsequent encroachment permit for construction of improvements to the state highway. The analysis includes evaluation of existing circulation conditions in the area based on current weekday a.m. and p.m. peak hour traffic. The characteristics of the proposed project have been determined, including estimated trip generation, the directional distribution, and assignment of the project traffic. By superimposing project trips onto existing traffic volumes, the impacts of project traffic on the operating conditions of streets and intersections in the area have been identified. This report also considers the impacts of the project within the context of future traffic conditions. The background scenario assumes other growth in Colusa as suggested by the City's Transportation Master Plan.

Four (4) existing intersections were identified for investigation during the study scoping process. The study intersections include:

1. SR 20 (Bridge Street) / Carson Street
2. SR 20 / Sioc Street
3. SR 20 / Wescott Road
4. Wescott Road / Louis Lane

VICINITY MAP

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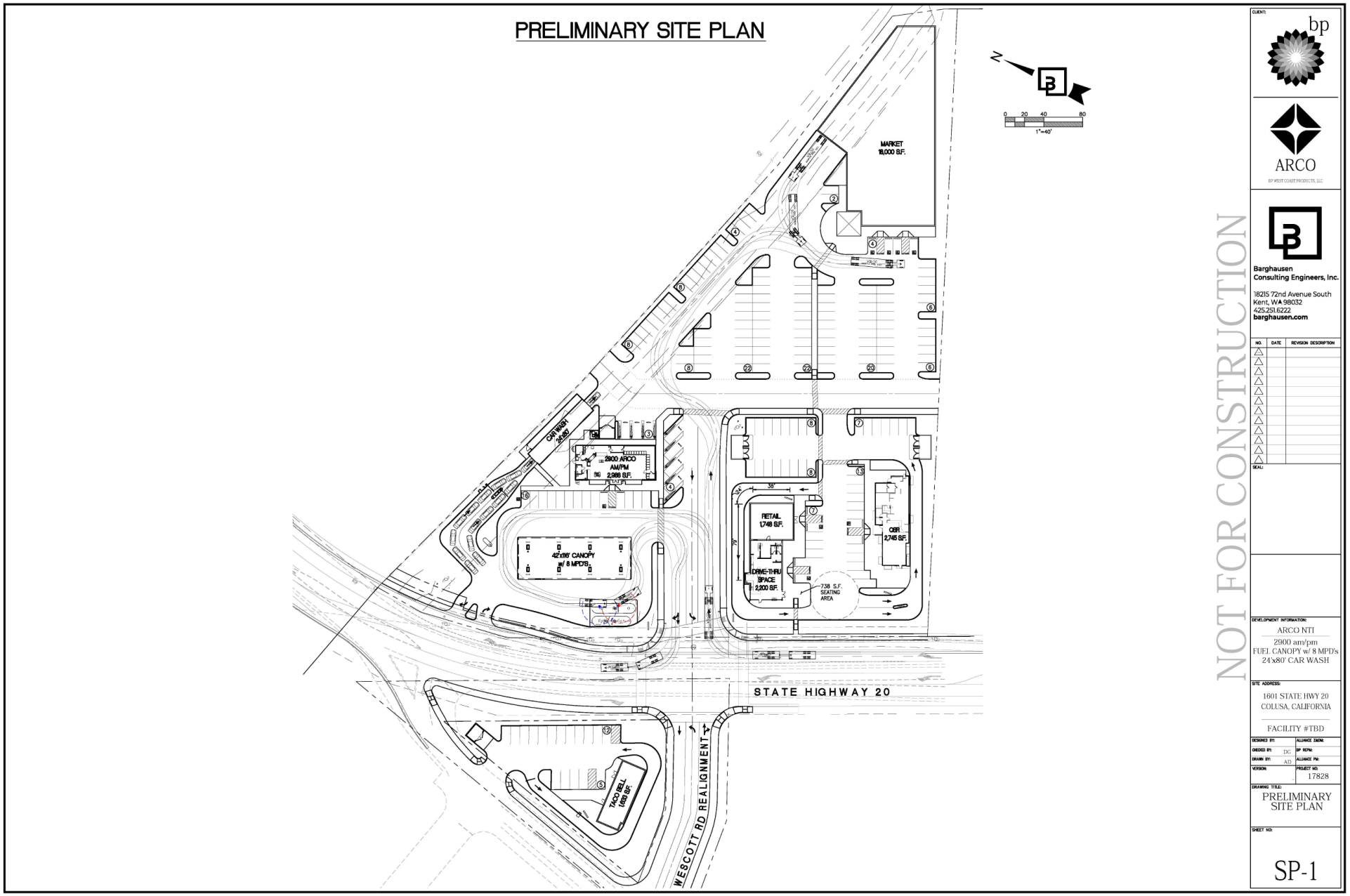
figure 1



SITE PLAN

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figure 2

EXECUTIVE SUMMARY / RECOMMENDATIONS

Existing Conditions. Under existing conditions, the operation of the study area street system meets minimum standards for Level of Service (i.e., LOS D on state highways through the City of Colusa) at most locations. However, the SR 20 (Bridge Street) / Sioc Street intersection operates at LOS E in the p.m. peak hour. Caltrans plans a rehabilitation project for SR 20 in the area, but the effects of this work on the operation of the signal are not known.

The Level of Service at the SR 20 / Wescott Road intersection meets minimum standards, but the intersection carries traffic volumes that satisfy peak hour traffic signal warrants (rural).

Project Characteristics. The proposed project includes an Arco Gasoline station with convenience store, car wash and 16 fueling positions. The remaining uses on the site are speculative at this time but the traffic analysis considers the impacts of a grocery store, fast food restaurants and a small office.

The plan generates 3,806 new daily trip ends (i.e., in and out are two trip ends). Of this total, 219 new trips are expected during the a.m. peak hour and 282 new trips are expected to occur during the p.m. peak hour.

Trips generated by the project will have destinations primarily in the City of Colusa, but a portion of the project traffic will be destined for locations south on SR 20.

The project includes circulation system improvements. The project plans a main access opposite a relocated Wescott Road intersection that is to be signalized, and a right-turn only driveway is proposed on SR 20 north of the traffic signal. A reciprocal access to the adjoining shopping center to the north is also included. With the relocation of Wescott Road access to SR 20 the existing segment between SR 20 and Louis Road will be reconstructed and limited to southbound traffic only. The fast food pad west of SR 20 will have access to Wescott Road at the Louis Lane intersection.

While a traffic signal is anticipated at the relocated Wescott Road intersection on SR 20, current Caltrans policy requires that an ***Intersection Control Evaluation (ICE)*** be prepared when it is determined that traffic on the state highway needs to be stopped. A preliminary assessment would consider the feasibility of all-way stop control, traffic signals or a roundabout intersection and illustrate the layout of each alternative. While a traffic signal could deliver adequate Level of Service and may be desirable to control pedestrian activity at this location, a decision regarding applicable traffic control will be made by Caltrans and the City.

Impacts of Project Alone. Trips generated by this project were superimposed onto current background traffic volumes, and "plus project" traffic conditions were identified to determine the significance of project impacts.

Project Impact at Intersections: Addition of project trips would have an incremental impact on traffic operations at the SR 20 (Bridge Street) intersections as development of the

project will increase the length of delays and exacerbate currently deficient conditions. Technically, it is possible to improve the Level of Service at that location by optimizing signal timing and the proposed project should contribute its fair share to the cost of this action. However, re-timing the signal would have a negative effect on peak period queue lengths and is subject to Caltrans control.

A traffic signal or roundabout at the relocated SR 20 / Wescott Road intersection would operate with Level of Service that meet minimum standards.

Project Impacts to Roadway Segment Level of Service. The addition of project trips will exacerbate conditions on segments of SR 20 near the project which are already deficient in terms of Level of Service based on City of Colusa General Plan LOS Standards. However, both the General Plan and City Transportation Master Plan have acknowledged that a four-lane facility through Colusa is not feasible. The project should contribute its fair share towards the cost of interconnecting the new Wescott Road signal and the SR 20 / Sioc Intersection signal in order to help improve traffic flow on SR 20.

Project Impact to Alternative Transportation Modes. Development of the project will create the need for adequate pedestrian and bicycle routes into Colusa. While the Caltrans SR 20 rehabilitation project will address this issue by installing sidewalk along the east side of SR 20 the project proponents should be responsible for restoring any work disrupted by the new site access to ensure that a sidewalk is available along the project frontage. The reciprocal access to the shopping center to the north should also provide a route for pedestrians. A crosswalk across SR 20 at the relocated Wescott Road intersection is also needed, and the pad on the west side of SR 20 will require standard frontage improvements, including sidewalks.

Long Term Cumulative Conditions. The cumulative impacts of the proposed project were assessed within the context of future traffic volumes created using the City's Transportation Master Plan travel demand forecasting model. At the direction of City staff the model's 20-year land use assumptions were modified to include the proposed project and to eliminate two projects that were previously approved but are no longer anticipated by the City of Colusa. These are:

- Brookins Ranch 609 SFR in southern Colusa
- Colusa Riverbend - Phase 1 397 SFR in north Colusa

A new application for the Colusa Riverbend site has been received but not yet approved by the City. The proposed Colusa Triple Crown is a cannabis research and development facility that will employ approximately 360 persons, and this use was also added.

Daily Traffic Volumes Updated future daily volume projections with and without the proposed project are similar to the original Transportation Master Plan estimates for 20 years. The SR 20 corridor through the study area is projected to carry volumes that are indicative of LOS F for a two-lane facility. A similar conclusion was reached in the Transportation Master Plan and General Plan EIR. However, the General Plan EIR reached the conclusion that a four-

lane SR 20 through Colusa was not feasible, and overall the changes resulting from the project would not alter the original Transportation Master Plan conclusions.

Intersection Levels of Service. In 20 years the p.m. peak hour level of Service at the SR 20 / Sioc Street intersection is projected to deteriorate to LOS F with and without the project. The Level of Service could be improved to LOS D by altering the existing signal timing with and without the project. However, the projected queue lengths created on SR 20 at the Sioc Street intersection would be relatively long during peak hours and would extend beyond the adjoining Carson Street intersection with and without the project. These queue lengths could increase as a result of signal timing optimization. Whether the project proceeds or not, it is likely that Caltrans would eventually elect to limit access to intersections affected by upstream queues, like Carson Street, by prohibiting cross traffic. Traffic signal coordination and separate right turn lanes at the project's driveways are measures that can be implemented since widening the highway to four lanes is not anticipated.

Other locations will operate adequately. The SR 20 / Wescott Road intersection will operate with Levels of Service that satisfy minimum Level of Service requirements, either with the proposed traffic signal or with a roundabout. The intersections on Wescott Road will operate at LOS C or better.

Other Mitigation. The project will contribute its fair share to the cost of citywide improvements by paying adopted traffic impact fees.

Site Design Review. The proposed project site plan includes an adequate throat on the approach to the SR 20 / Wescott Road intersection, as the separation between SR 20 and gasoline station access will provide storage for the anticipated peak period queues. The proposed access at the Wescott Road / Louis Lane is adequate based on satisfaction of sight distance standards and queue storage.

EXISTING SETTING

This report section describes the circulation facilities serving the project site, current traffic volume levels and accompanying traffic operations on the roadways and intersections within the study area.

Existing Street System

Regional access to the proposed project will be via State Route 20 to the north (Bridge Street) and south, as well as Wescott Road to the south and Sioc Street to the west. The text that follows describes these facilities.

State Route 20. State Route 20 (SR 20) is the primary regional access route to the Colusa area. SR 20 originates at an intersection on SR 1 in Mendocino County and continues easterly across northern California to its junction with Interstate 80 in Nevada County. In Colusa County, SR 20 provides access to Interstate 5 west of Colusa in Williams and links the City of Colusa with the Yuba City-Marysville area to the east. Locally, SR 20 is the main route through the City of Colusa as enters the west end of the community as 10th Street, continues easterly as Market Street to the project site then turns south as Bridge Street.

The most recent data available from the California Department of Transportation (Caltrans) reports that SR 20 carries an *Annual Average Daily Traffic (AADT)* volume of 12,000 to 15,000 vehicles per day between 10th Street and Bridge Street through downtown Colusa and 11,200 between Fremont Street and Sioc Street. The reported volume drops to 8,000 AADT north of Moonbend Road. Traffic counts made for this analysis indicated that the highway carried 13,770 between Carson Street and Sioc Street. Trucks comprise 7% of the daily traffic on SR 20 through Colusa.

Bridge Street (State Route 20). State Route 20 extends south from downtown Colusa as Bridge Street. This portion of the state highway is a two-lane road with auxiliary turn lanes at major intersections. Caltrans District 3 is pursuing a roadway rehabilitation project for Bridge Street that will improve the facility but not provide additional through travel lanes.

Carson Street is an east-west street across the City's grid system parallel to and one block north of Sioc Street. Carson Street extends east from extends east from Bridge Street and in the future may be constructed easterly to the City's planned new north-south collector street network. That work is not, however in the 20-year horizon anticipated under the City's Transportation Master Plan.

Sioc Street is an east-west street that link 10th Street (SR 20) and Bridge Street (SR 20) in the southern end of downtown Colusa. Sioc Street is a wide two-lane street that accommodates on-street parking, and direct residential frontage exists along much of the street.

Wescott Road is a collector street that links southern Colusa with SR 20 at the southern edge of the downtown area. Wescott Road also extends southerly into rural Colusa County. This two-

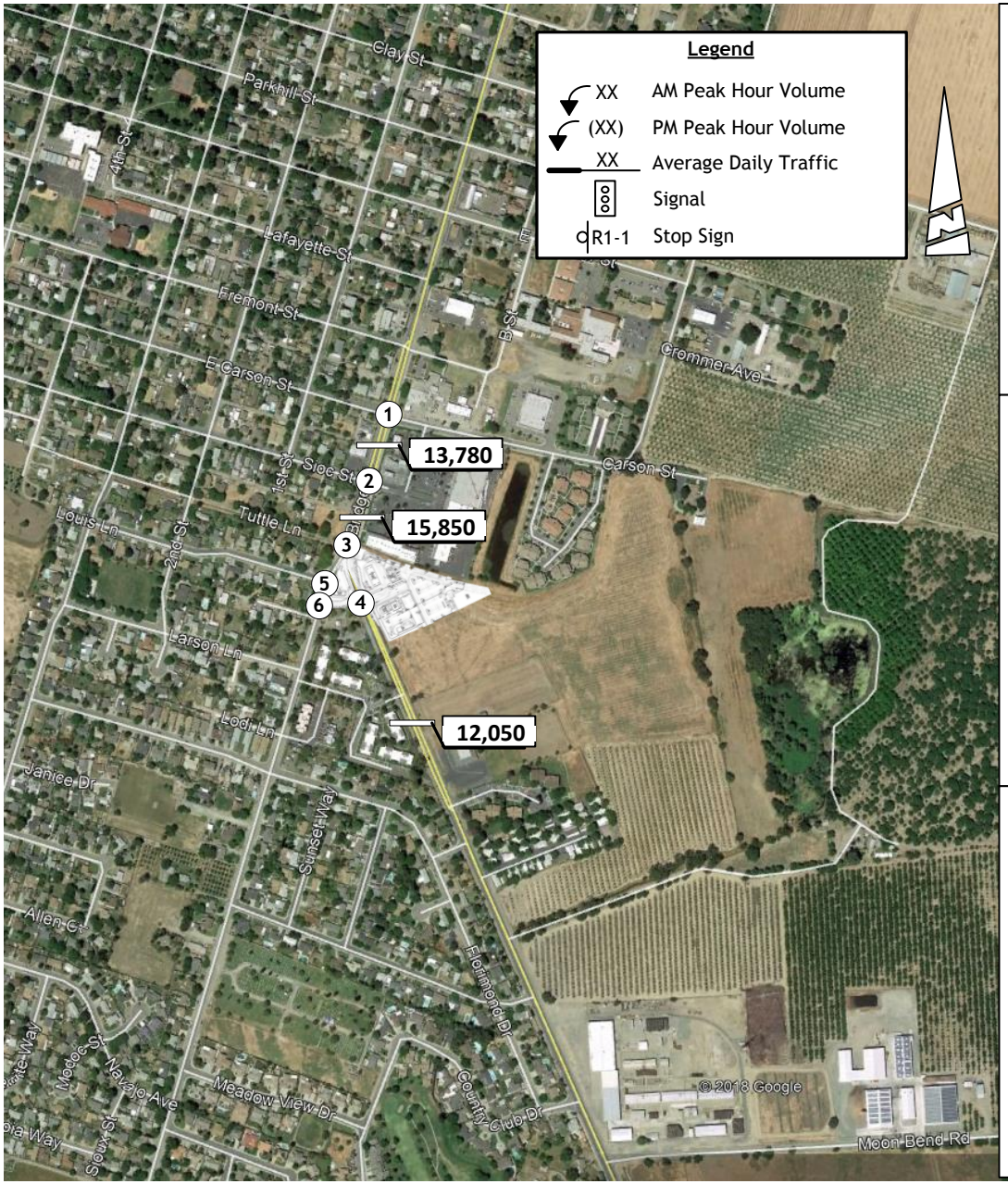
lane road varies in width, with limited shoulders available on the south end of the road but more urban features (i.e., wider shoulder and sidewalks) available near the intersection with SR 20.

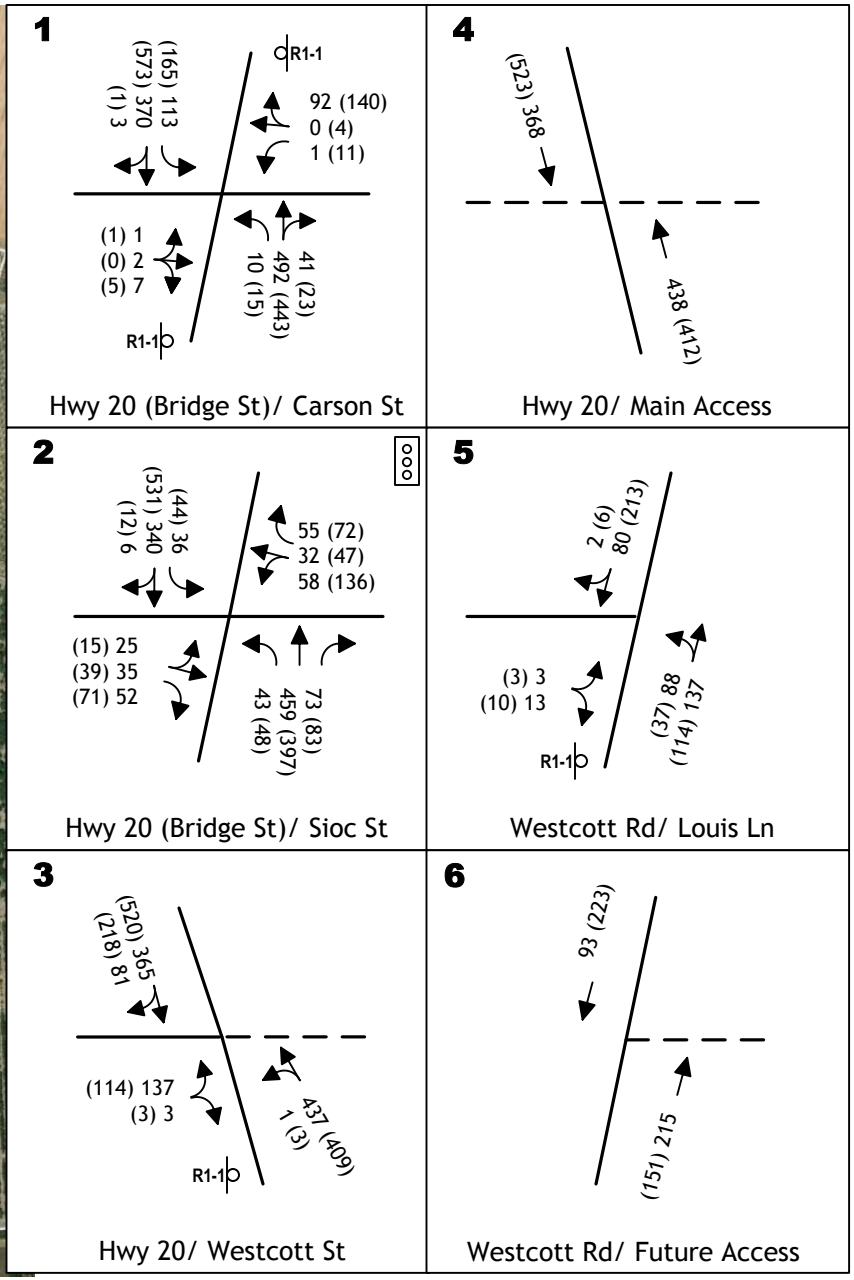
Louis Lane is a two-lane local street that intersects Wescott Road at a location immediately adjoining its intersection with SR 20.

Existing Traffic Volumes

Peak Hour Turning Movement Volumes. To quantify existing traffic conditions, a.m. and p.m. peak hour traffic counts were made by the consultant during April 2018 when local schools were in session. Traffic counts were conducted at the Wescott Road / Louis Lane intersection in January 2020. The a.m. and p.m. peak hours were selected as being representative of typical "worst case" background traffic conditions, based on review of daily traffic counts in Colusa and based on the highest hours of project trip generation. This approach is consistent with the analyses contained in the GPU EIR and the guidelines established by the City of Colusa for other traffic studies. Observed traffic volumes are presented in Figure 3.

Daily Traffic Volumes. As noted earlier, daily traffic volume information was assembled for study area streets. A new traffic count was conducted on Bridge Street between Sioc Street and Carson Street. This data is presented later in this report to describe roadway segment Level of Service.





EXISTING TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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Level of Service: Methodology and Standards

Definitions. To quantitatively evaluate traffic conditions and to provide a basis for comparison of operating conditions with and without project generated traffic, "Levels of Service" were determined at study area intersections and on individual roadway segments.

"Level of Service" (LOS) is a quantitative measure of traffic operating conditions whereby a letter grade "A" through "F" is assigned to an intersection. LOS "A" through "F" represents progressively worsening traffic conditions. The characteristics associated with the various LOS for intersections are presented in Table 1.

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. Delay ≤ 10.0 sec	Little or no delay. Delay ≤ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay > 10.0 sec and ≤ 20.0 sec	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 > 20.0 sec and ≤ 35.0 sec	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 > 35.0 sec and ≤ 55.0 sec	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 > 55.0 sec and ≤ 80.0 sec	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 > 80.0 sec	Intersection blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.

Sources: Highway Capacity Manual, 2010.

Minimum Level of Service / Standards of Significance. The City of Colusa General Plan establishes allowable Level of Service standard for roadways and intersections, while Caltrans has also established goals for state highways. For example, the City of Colusa GPU establishes LOS "C" as the applicable standard on city streets but accepts LOS D on state highways.

Caltrans strives to maintain LOS C at locations on state highways where new construction is anticipated, but the Transportation Concept Report (TCR) for State Route 20 indicates LOS D is the Concept Level of Service. For this analysis it has been assumed that LOS D is the minimum standard for al intersections.

The City's General Plan includes policies relating to the significance of traffic impacts, as noted below.

Implementing Action CIR-1.1.a: Streets and Roadways Master Plan

The City will prepare, adopt and periodically update a Streets and Roadways Master Plan that establishes LOS C as the minimum acceptable LOS for city streets and intersections. If conditions of LOS D or worse are already present, future proposed projects may not cause roadway volumes to increase by five percent or more and shall be accompanied by other mitigation measures intended to reduce trip generation. LOS D is the minimum standard for state highways.

Methodology. Levels of Service were calculated for different intersection control types and roadway segments using the applicable methodology contained in the 2010 Highway Capacity Manual.

Signalized Intersections. Procedures used for calculating Levels of Service at signalized intersections are as presented in the *Highway Capacity Manual, 6th Edition* (HCM) using Synchro software. In addition to traffic volume, these procedures make use of intersection geometric information (i.e., lane configurations) and traffic signal timing data to estimate delay by approach and overall intersection delay.

Unsignalized Intersections. Levels of Service at unsignalized intersections controlled by side street stop signs are indicative of the magnitude of the delay incurred by motorists turning at the intersection. The procedure for calculating the Level of Service at these intersections is based on the relative availability of gaps in traffic and the delay experienced for each movement that must yield the right-of-way. The number of gaps is a function of the volume and speed of conflicting traffic, type of control (stop or yield), and qualitative intersection geometrics. Unlike signalized intersections where overall traffic operation is described by one Level of Service grade, a Level of Service is calculated for the intersection but can also be calculated for each movement yielding the right-of-way to others.

Roadway Segments. For planning purposes, it is also possible to suggest the general Level of Service that is likely to occur on roadways based on the observed traffic volumes. The City of Colusa General Plan EIR introduces daily volume thresholds that can be used for identifying Levels of Service based on roadway segment traffic volumes. These guidelines are presented in Table 2.

TABLE 2 ROADWAY SEGMENT LEVEL OF SERVICE THRESHOLDS							
Street Classification	**Lanes**	**Control**	**Maximum Daily Traffic Volume at LOS**				
			A	**B**	**C**	**D**	**E**
Collector	2	Undivided	4,000	5,800	7,700	11,600	12,900
	2+	Undivided	4,600	7,000	9,200	13,700	15,450
Arterial	2+	Divided	6,500	9,000	11,200	15,400	16,300
	4+	Divided	13,800	19,000	26,000	32,700	34,200
	6+	Divided	20,700	28,500	40,300	49,200	51,800
+ includes center turn lane. Source: City of Colusa GPU EIR							

Current Levels of Service

Peak Hour Intersection Levels of Service. Current a.m. and p.m. peak hour Levels of Service were calculated at the study intersections (Refer to the Appendix for calculation worksheets) and are summarized in Table 3. Current Levels of Service were compared to adopted standards to determine whether existing conditions are satisfactory.

As shown the current Level of Service at the SR 20 / Sioc Street intersection is calculated to be LOS E. These results assume current signal timing plans. While decisions regarding signal timing must consider a variety of factors and is ultimately the responsibility of Caltrans, re-timing the signal could yield LOS D. Caltrans is understood to be planning work at this location as part of their rehabilitation project, although capacity enhancements are not anticipated.

The current Levels of Service at the SR 20 / Wescott Road intersection are within the City's minimum LOS D standard.

TABLE 3
EXISTING INTERSECTION LEVELS OF SERVICE

Location	Control	Peak Hour Level of Service				Traffic Signal Warranted?
		AM Peak Hour		PM Peak Hour		
		Average Delay	LOS	Average Delay	LOS	
Bridge Street / Carson Street						
Northbound left turn	EB-WB Stop	9	A	9	A	No
Southbound left turn		9	A	9	A	
Eastbound approach		18	C	23	B	
Westbound approach		14	B	18	C	
SR 20 (Bridge St) / Sioc St	Signal	19	B	**57**	**E**	n.a.
	retime			38	D	
SR 20 (Bridge St) / Wescott Rd						
Northbound left turn	EB Stop	8	A	9	A	**Yes**
Eastbound approach		26	D	30	D	
Wescott Road / Louis Lane						
Northbound left turn	EB Stop	8	A	8	A	No
Eastbound approach		10	A	10	B	

Bold is LOS in excess of standard.

Traffic Signal Warrants. While the individual turning movement Levels of Service at the SR 20 / Wescott Road intersection do not exceed the LOS D minimum, current traffic volumes were compared to peak hour traffic signal warrant thresholds under "rural" parameters. A.m. and p.m. volumes do reach the level that satisfies peak hour volume warrants for signalization under rural (i.e., >40 mh) conditions.

The Colusa General Plan assumes that at General Plan Buildout the community will become more "urban", speeds will be reduced on SR 20 and "urban" warrants will be applicable throughout Colusa. However, Caltrans comments on the GPU EIR suggested that "rural' warrants would be applicable under "near term conditions".

Roadway Segment Levels of Service. The current roadway segment Level of Service on study area streets is presented in Table 4. As shown, the recent traffic count on SR 20 between Sioc and Carson Streets revealed volumes that are indicative of LOS D. However, interpolating the results to the locations north of Carson Street and south of Sioc Street indicated that those locations likely carry traffic volumes that exceed the LOS D standard. These counts exceed the AADT reported by Caltrans in this area.

TABLE 4
EXISTING AVERAGE DAILY TRAFFIC VOLUMES AND RESULTING LEVEL OF SERVICE

Street	Location	Classification	ADT	Lanes	Level of Service
SR 20 (Bridge Street)	Clay Street to Carson Street	Arterial	16,570	2	F
	Carson Street to Sioc Street	Arterial	13,780	2+	D
	Sioc Street to Wescott Road	Arterial	15,850	2+	E
	Wescott Road and Cynthia Drive	Arterial	12,050	2+	D

BOLD is condition in excess of minimum standard.

APRIL COUNT other data interpolated from peak hour volumes

Alternative Transportation Modes

Travel by means other than the personal automobile is an important consideration in Colusa. The section which follows describes current pedestrian, bicycle and transit facilities serving the area of the project.

Pedestrian Facilities. Sidewalks exist on many of the streets that form Colusa's grid street system but are less prevalent on the streets that extend out from the grid. Sidewalk exists along most segments of Bridge Street (SR20) in the area north of the Sioc Street intersection and along the shopping center frontage between Sioc Street and the project's frontage. Sidewalk is also present along the west side of SR 20 in the immediate area of the Wescott Road intersection, and a separated asphalt pedestrian path links that location and Sioc Street. Sidewalk is absent elsewhere along SR 20 south of Sioc Street. Sidewalks exists on Louis Lane and are provided intermittently along the west side of Wescott Road south of Louis Lane. Caltrans planned rehabilitation project will address sidewalks. Crosswalks are striped at the SR 20 / Sioc Street intersection, but not across SR 20 at other study intersections.

Bicycle Facilities. While the streets that make up Colusa's grid circulation system, including SR 20 are wide enough to accommodate both automobiles and bicycles, dedicated bicycle lanes are limited. The Colusa County General Plan Circulation Element identifies regional Bicycle Facilities (their Figure CIRC-3), and SR 20 is a Class 3 route with 3 foot shoulders. The City of Colusa has designated a Class III route on Wescott Road. A paved path on top of the levee adjacent to downtown Colusa is used by bicycle as well as pedestrian traffic.

In 1992, Colusa County prepared a Bicycle Plan. The Bicycle Plan outlines general design criteria for bicycle facilities and designates bikeways for the County and its incorporated cities, including Colusa. According to information from the Bicycle Plan, Class III bicycle routes are proposed within the City of Colusa along Highways 20 and 45, including Market Street and

Tenth Street (since established). Class III routes are also proposed along Wescott Road (since established) and Wilson Avenue. The Bicycle Plan has not been updated, so no new bikeways or changes to previously designated routes have been proposed.

Transit Facilities. Colusa County Transit Agency operates a demand responsive service with fixed times routes wherein the bus departs Colusa at a set time and travels throughout the destination service area. These services are offered from 7 a.m. to 5 p.m., Monday through Friday on a "flex route" schedule where the bus will deviate throughout a corridor surrounding a basic route. These services are currently provided in and between Colusa, Williams, Arbuckle, Princeton, Maxwell, Stonyford, Sites and Grimes / Meridian.

PROJECT CHARACTERISTICS

The Colusa SR 20 Retail Center combines gasolines sales, a convenience store and various retail uses. The gasoline sale provides 16 fueling positions. The development plan includes primary access opposite the relocated Wescott Road intersection, and two points of right-turn only access to SR 20 that are also evaluated in this analysis.

With the exception of the gasoline station, the land uses indicated on the balance of the site are speculative. A "worst case" site plan based on typical high generating uses has been evaluated.

Traffic Parameters

Trip Generation Rates. The number of vehicle trips that are expected to be generated by development of the proposed project has been estimated using trip generation rates based on the nature and size of project land uses. Data compiled by the Institute of Transportation Engineers (ITE) and presented in the publication *Trip Generation, 10th Edition* (Institute of Transportation Engineers 2017) is the source of trip generation rates for the uses within the proposed project. The trip generation rates available for this analysis are presented in Table 5.

Trip Generation Forecasts. Table 6 identifies the results of applying the identified trip generation rates to the proposed project. As shown roughly 10% of the project's trips will remain internal as trips made between complimentary uses. Thus, 7,065 daily, 451 and 540 trips will leave the site.

A share of external trips generated by retail uses will be "pass-by" trips drawn from the stream of traffic passing the site. The share of trips for a gasoline sales with convenience store are presented in the *ITE Trip Generation Handbook, 3rd Edition*. These shares are also noted in Table 7. Similarly, pass-by percentages are available for the assumed fast food restaurants and the grocery market. While pass-by trips will be present at the project's driveways and may be locally diverted based on access limitations, pass-by trips do not affect locations beyond the immediate area of the project. After discount for pass-by trips, the proposed project could be expected to result in 3,806 new trips on a daily basis, with 210 new trips in the a.m. peak hour and 282 new trips in the p.m. peak hour.

TABLE 5
TRIP GENERATION RATES

ITE Code	Description	Unit Quantity	Trips per Unit						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
110	Gasoline Station / w. C-store	Fueling Position	172.01	50%	50%	10.28	50%	50%	14.03
934	Fast Food Restaurant	ksf	470.95	51%	49%	40.19	52%	48%	30.67
850	Supermarket	ksf	106.78	60%	40%	3.82	51%	49%	9.24
820	General Retail	ksf	37.75	62%	38%	0.87	48%	52%	3.81

TABLE 6
TRIP GENERATION FORECASTS

ITE Code	Description	Unit Quantity	Trips per Unit						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
110	Gasoline Station / w. C-store	16 Fueling Position	2,752	82	82	164	112	112	224
	Internal Trips	10%	275	8	8	16	11	11	22
	External Trips	90%	2,477	74	74	148	101	101	202
	Pass-by Trips	50%-62%-56%	1,238	46	46	92	57	57	114
	Net New External Trips		1,239	28	28	56	44	44	88
934	Fast Food Restaurants	6.6 ksf	3,108	135	130	265	105	97	202
	Internal	10%	311	13	13	26	10	10	20
	External	90%	2,797	122	117	239	95	87	182
	Pass-by Trips	50%	1,398	59	59	118	45	45	90
	Net New External		1,399	63	58	121	50	42	92
850	Supermarket	18.0 ksf	1,922	41	28	69	85	81	166
	Internal	10%	192	4	3	7	9	8	17
	External	90%	1,730	37	25	62	76	73	149
	Pass-by Trips	36%	623	11	11	22	27	27	54
	Net New External Trips		1,107	26	14	40	49	46	95
820	General Retail	1.8 ksf	68	1	1	2	3	4	7
	Internal	10%	7	0	0	0	0	0	0
	Net External Trips		61	1	1	2	3	4	7
	Total Trips		7,850	259	241	500	305	294	599
	Internal		785	25	24	49	30	29	59
	External		7,065	234	217	451	275	265	540
	Pass-by Trips		3,259	116	116	232	129	129	258
			3,806	118	101	219	146	146	282

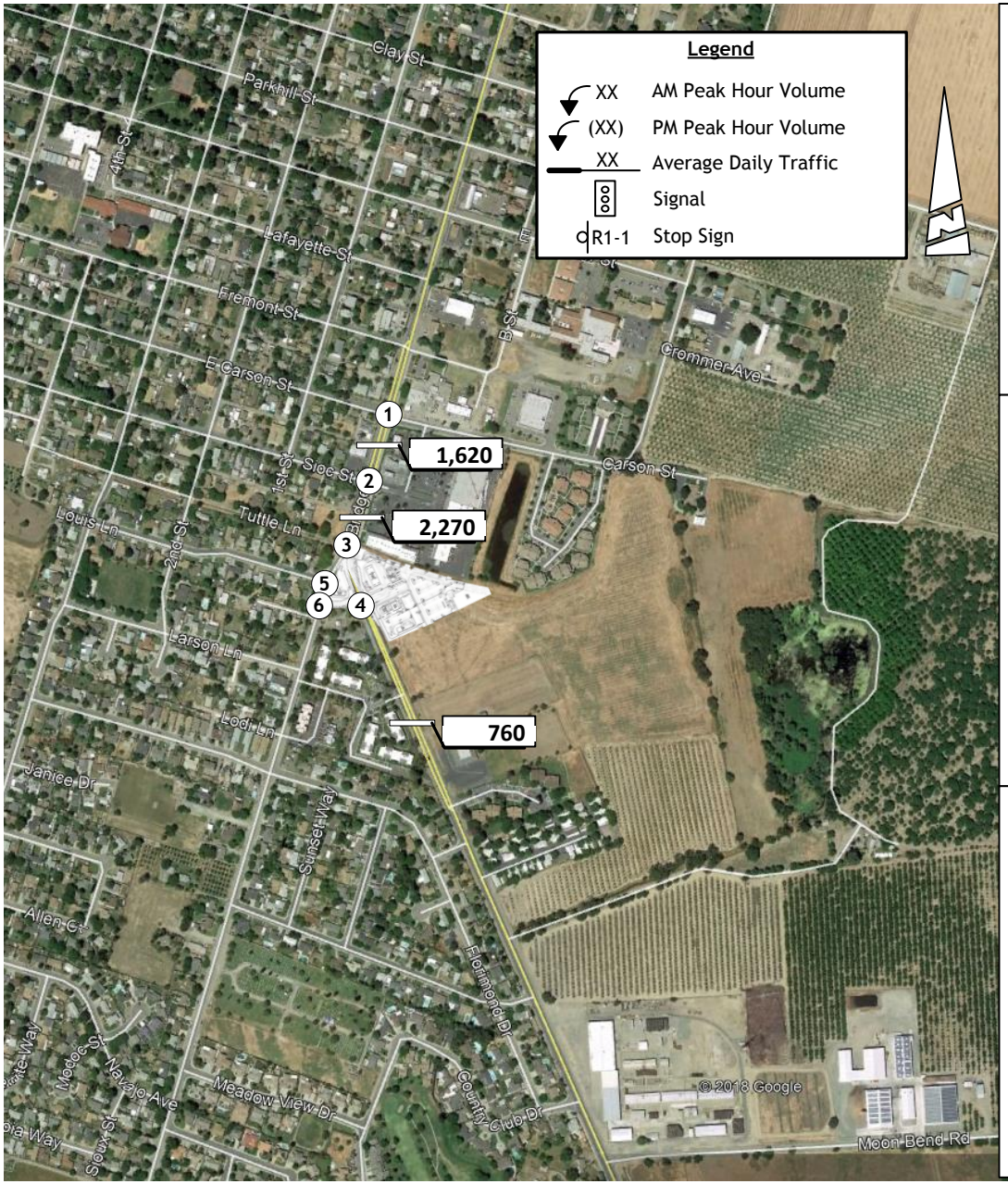
Trip Distribution. The geographical distribution of project trips has been determined for new and pass-by trips. The distribution of new vehicle trips associated with the proposed project has been determined from review of the locations of residences and business in the Colusa as well as the locations of competing gasoline station. Based on these factors we expect the project's new trips to be allocated as noted in Table 7.

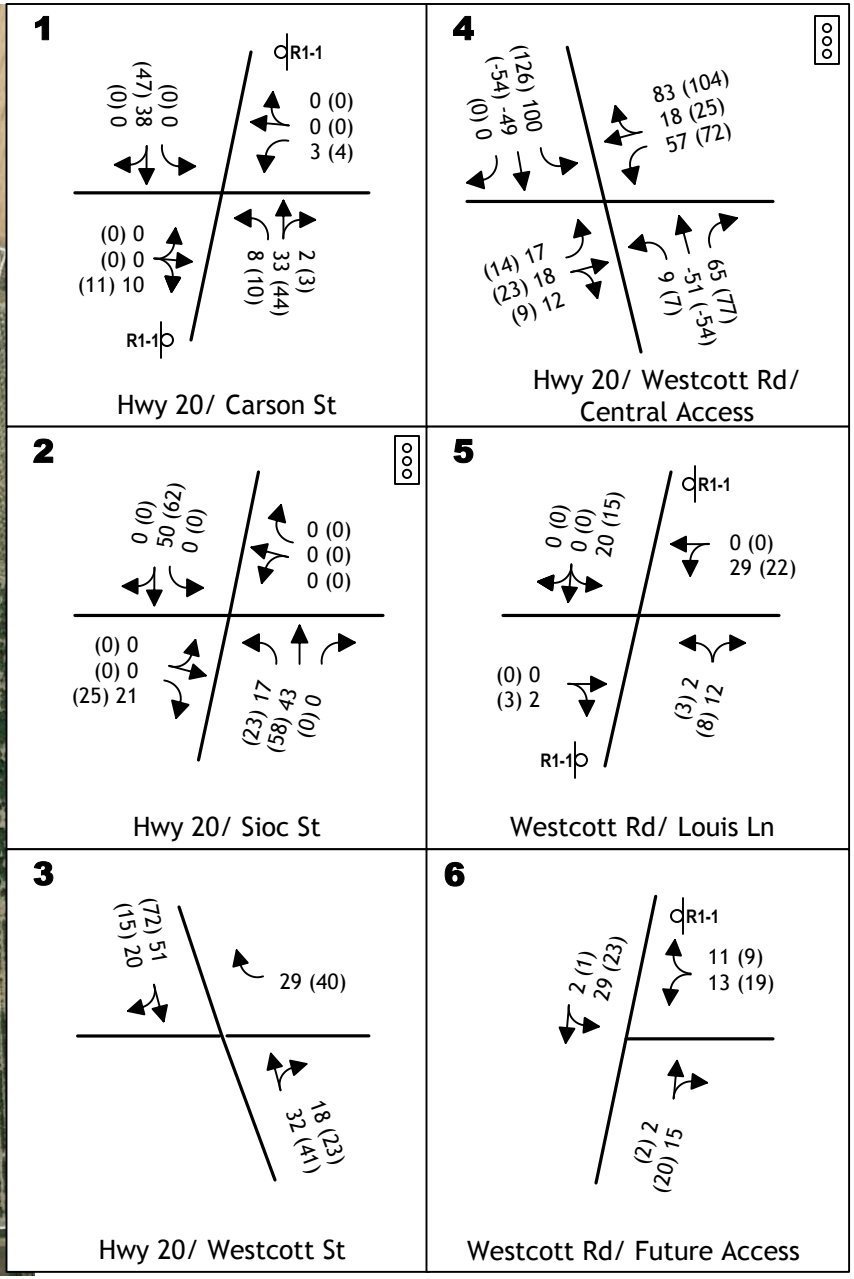
Pass-by trips are expected to be drawn from the volume of traffic passing along the site on SR 20, and the shares will be greater in the northbound direction adjoining the site. The share drawn from each traffic stream is also presented in Table 7.

TABLE 7
TRIP DISTRIBUTION ASSUMPTIONS

Direction	**Route**	**Percentage of Trips**	
New Trips			
		ARCO	**Other**
North	Bridge Street north of Carson Street	38%	30%
	Connection to adjoining retail	5%	2.5%
East	Carson Street	2.5%	2.5%
West	Carson Street	2.5%	10%
	Sioc Street	10%	20%
	Louis Lane	2%	2%
South	Wescott Road	20%	13%
	SR 20 east of Colusa	20%	20%
Total		100.00%	100.00%
Pass-by Trips			
Direction		**Percentage of Trips**	
		Taco Bell	**Balance of Project**
Northbound on SR 20		40%	60%
Southbound on SR 20		60%	40%

Trip Assignment. Figure 4 illustrates the trip distribution and shows "project only" trips through study area intersections and at project driveways under the distribution percentages noted above with access as proposed.





PROJECT ONLY TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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figure 4

Wescott Road Relocation

The site plan assumes that Wescott Road will be relocated to a new location on SR 20 to address current operation constraints relating to its proximity to the Sioc Street intersection. The General Plan and Colusa Transportation Master Plan acknowledge that this correction is needed in order to accommodate alternative traffic controls (i.e., traffic signal or roundabout) that were expected to be needed. The plan accommodates the intersection improvements typically associated with a new signalized intersection:

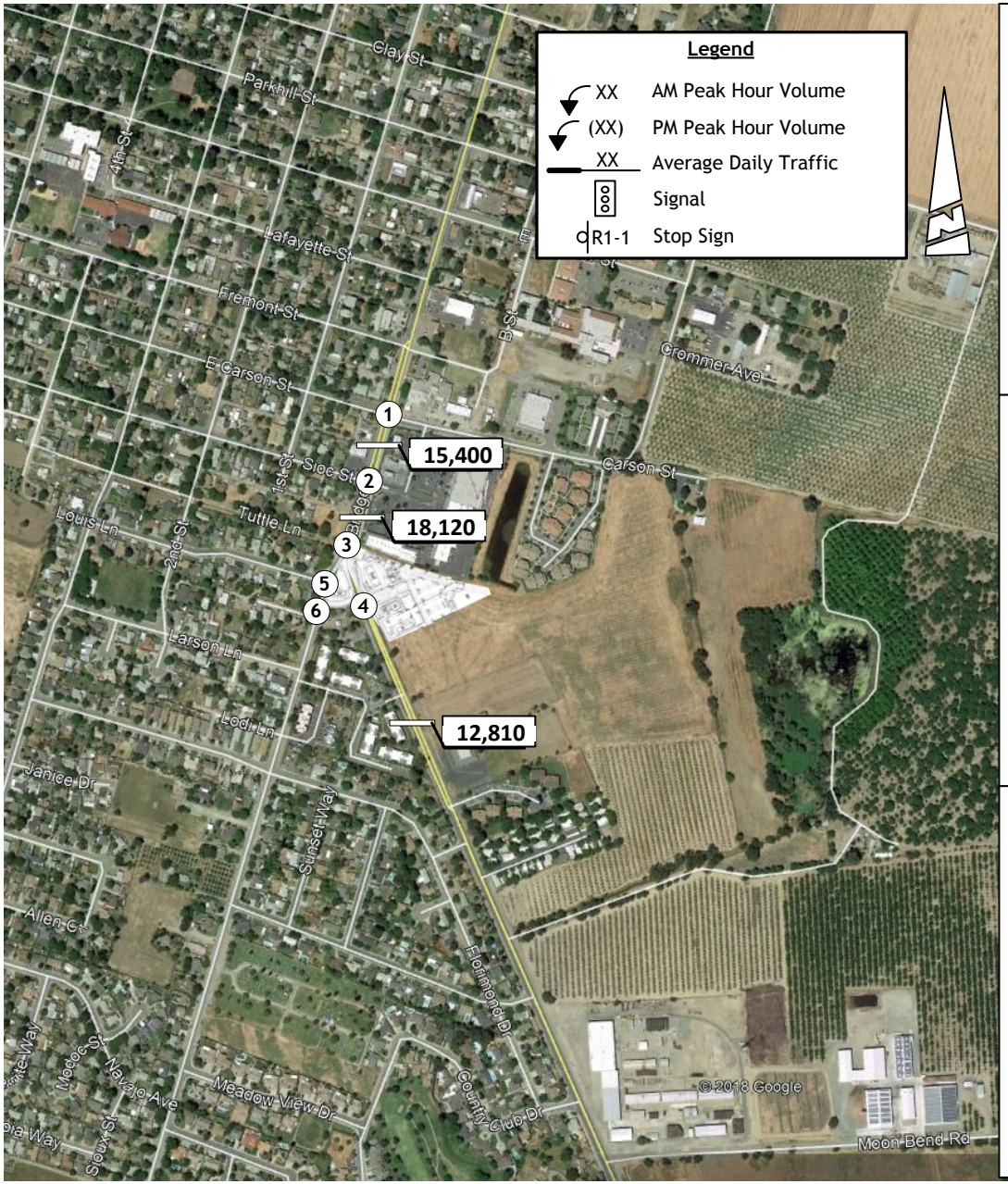
- Separate left turn and right turn lanes on both SR 20 approaches
- Separate left turn lane on the Wescott Road approach
- Separate left turn lane on the project's approach
- Limiting adjoining driveway on SR 20 to right turns only

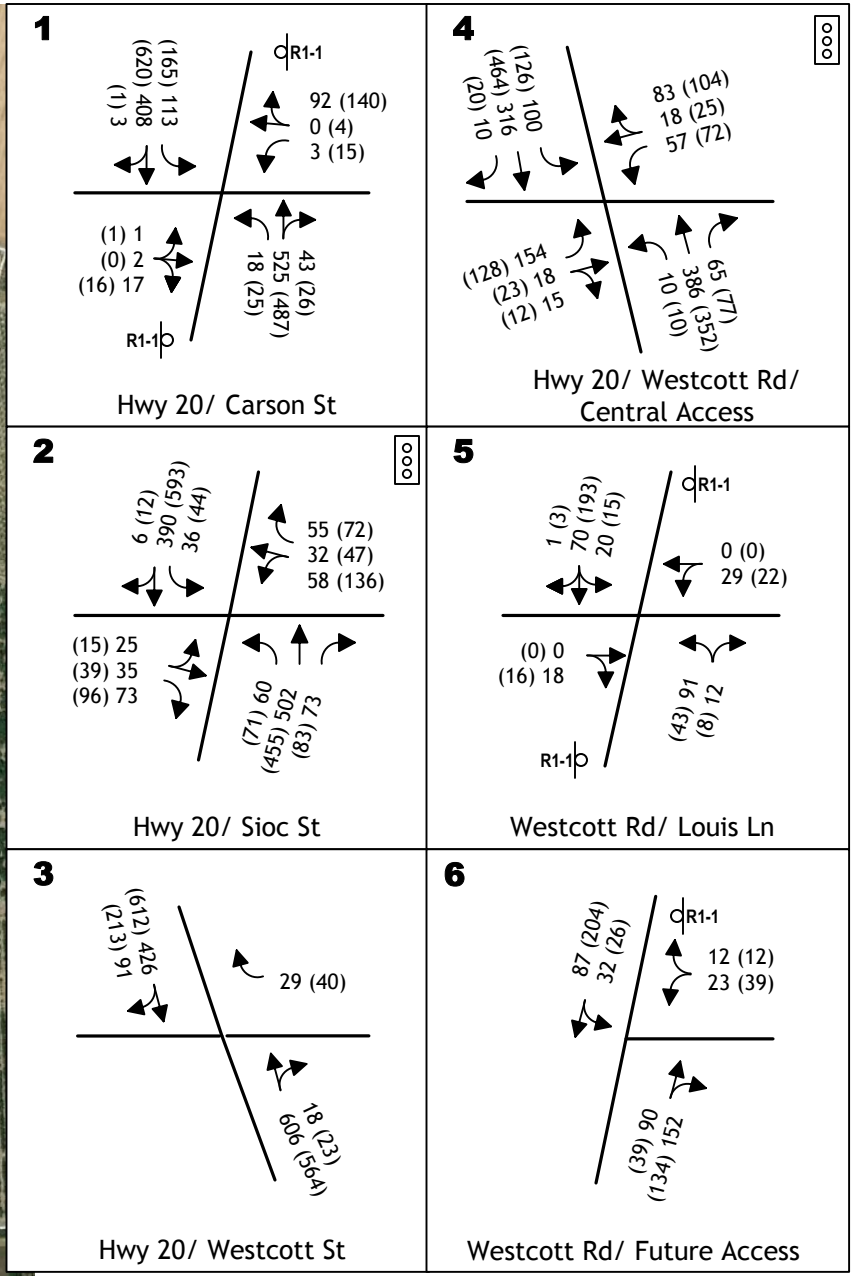
The proposed Wescott Road relocation is accompanied by changes to Wescott Road in the area between SR 20 and Louis Lane. With the introduction of a new signaled intersection on SR 20 it will not be possible to make left turns at the existing SR 20 / Wescott Road intersection. While it might theoretically be possible to retain access for right turns from northbound Wescott Road onto southbound SR 20, the number of vehicles making this turn is very slight. Adding this access would also create the potential for weaving issues in the area between the intersection and the new signal. Making Wescott Road one-way southbound from SR 20 to Louis Lane is a preferred solution.

Project Traffic Impacts

Existing Plus Project Volumes. Using the trip generation and distribution described above, project generated automobile trips were superimposed onto current background traffic, as indicated in Figure 5. Resulting "Existing Plus Project" Levels of Service were calculated for the study intersection under these conditions. The results of these calculations are shown in Table 8.

Daily traffic volumes associated with the project were added to existing daily counts, and resulting "Existing Plus Project" volumes are summarized in Table 9.





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EXISTING PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

figure 5

TABLE 8
EXISTING PLUS PROJECT LEVELS OF SERVICE

Location	Control	Peak Hour Level of Service							
		AM Peak Hour				PM Peak Hour			
		Existing		EX plus Project		Existing		Existing Plus Project	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay Sec/veh)	LOS	Average Delay (sec/veh)	LOS
SR 20 (Bridge Street) / Carson Street									
Northbound left turn	EB-WB Stop	8	A	8	A	9	A	9	A
Southbound left turn		9	A	9	A	9	A	9	A
Eastbound approach		18	C	16	C	23	C	19	C
Westbound approach		14	B	15	C	18	C	22	C
SR 20 (Bridge St) / Sioc St	Signal	19	C	27	C	**57**	**E**	**69**	**E**
	Optimize timing					38	D	49	D
SR 20 / Wescott / North Access									
Eastbound approach	EB/WB Stop	26	D	-	-	30	D	-	-
Westbound right turn		-	-	13	B	-	-	13	B
SR 20 / Main Access / Relocated Wescott Rd	Signal	-		19	B	-		18	B
	Roundabout	-		8	A	-		9	A
Wescott Road / Louis Lane / Access									
Westbound approach	WB/EB Stop	-		13	B	-		10	B
Eastbound approach				9	A			12	B
Wescott Road / Extension									
Westbound approach	WB Stop	-		11	B-			11	B

Bold is LOS in excess of standard.

TABLE 9
EXISTING PLUS PROJECT ONLY
AVERAGE DAILY TRAFFIC VOLUMES AND RESULTING LEVEL OF SERVICE

Street	Location	Classification	Existing			Existing Plus Project		
						Daily Volume		
			Daily Volume	Lanes	Level of Service	Project Only	Total	Level of Service
SR 20 (Bridge St)	Clay Street to Carson Street	Arterial	16,570	2	**F**	1,240	17,810	**F**
	Carson Street to Sioc Street	Arterial	13,780	2+	D	1,620	15,400	**F**
	Sioc Street to Wescott Road	Arterial	15,850	2+	**E**	2,265	18,115	**F**
	Wescott Rd and Cynthia Dr	Arterial	12,050	2+	D	760	12,810	D

Project Traffic Impact 1: Addition of project trips would have an incremental impact on traffic operations at the study intersections as development of the project will increase the length of delays and reduce the Level of Service at study intersections. While resulting Levels of Service will remain within the City's adopted standards at most locations, conditions in excess of minimum City standards are forecast at the following locations.

Impact / Mitigation 1. At the ***Bridge Street (SR 20) / Sioc Street intersection*** the addition of project traffic would increase the length of delays experienced by motorists waiting to turn onto SR 20. P.m. peak hour conditions would continue to be LOS E, but the length of delays would increase. Traffic signal timing optimization could improve the operation of this intersection. ***The proposed project should contribute its fair share to the cost of a retiming the traffic signal.***

Project Traffic Impact 2. The addition of project trips would have an incremental impact on traffic operations on study area roadway segments. Current traffic volumes that are indicative of LOS D-E conditions could increase to levels that are indicative of LOS F under City GP thresholds.

Impact / Mitigation 2. The addition of project trips will exacerbate overall traffic flow conditions on SR 20. While the Colusa General Plan speaks to the need for a 4 lane road, this level of improvements is not likely to be feasible through the developed Colusa area, and the CP identified the development of new north-south streets to the east of Bridge Street as a long term strategy. In the interim time measure such as traffic signal interconnect and creation of auxiliary turn lanes is an applicable short-term solution. ***The project should contribute its fair share to the cost of interconnecting the new Wescott Road signal and the Sioc Street signal and shall install auxiliary right turn lanes at the project access driveways on SR 20.***

Impacts to Non - Automotive Circulation

Project Traffic Impact-3: The development of the project in eastern Colusa will incrementally increase demand for the area's non-automotive transportation facilities. When the project is completed, some new **pedestrian and bicycle activity** will occur between the site and the balance of Colusa. While sidewalks are not uniformly present today, the Caltrans rehabilitation project will be addressing that issue. However, the project's frontage improvements could alter Caltrans improvements. The project's site plan includes a northern connection to the adjoining shopping center, and pedestrians may use that route.

Mitigation 3. To mitigate this impact measures need to be taken to ensure viable pedestrian facilities between the project and the balance of Colusa. This work will include:

- Provide sidewalk along the SR 20 frontage to supplement any improvements made by Caltrans that could be changed by the project.
- Provide sidewalks along the Taco Bell frontage
- Provide crosswalks at the realigned SR 20 / Wescott Road intersection.
- Provide applicable pedestrian facilities along the connection to the adjoining shopping center.

The project will incrementally create additional demand for the **transit services** in the Colusa area. However, it is unlikely that development of this project would by itself create the need to modify existing routes or expand current services. Impacts to transit services would be less than significant.

LONG TERM CUMULATIVE CONDITIONS

The relative impacts of the proposed project were also assessed within the context of future traffic conditions occurring with foreseeable development in the City of Colusa and continuing regional growth The future traffic volumes presented herein are based on long term traffic volume forecasts crated using the City's Transportation Master Plan traffic model.

Background Assumptions

Land Use. The proposed project involves development of land uses that are not already included in the Transportation Master Plan's 20 year land use forecasts. Thus, it was necessary to add the project. Alternatively, the model assumes development of two projects that were previously approved but are no longer anticipated by the City of Colusa. These are:

- Brookins Ranch 609 SFR in southern Colusa
- Colusa Riverbend - Phase 1 397 SFR in north Colusa.

A new application for the Colusa Riverbend site has been received but not yet approved by the City. Colusa Triple Crown is a cannabis research and development facility that will employ approximately 360 persons.

Traffic Model Forecasts. The travel demand forecasting model employed for the City's Transportation Master Plan was acquired and employed for this analysis The model's 20 year future land use assumption were modified to address the three land use changes noted above and to add the proposed project. The model was then run under three scenarios:

- Baseline No development (current conditions)
- 20 year future without project
- 20 year future with proposed project

An incremental approach was taken to creating future volumes for analysis at intersections and on roadway segments. First the results of each model were identified in terms of roadway segment volume and intersection turning movement volumes. Base year and future forecasts were compared and the incremental difference was identified. These differences were the applied to current daily and peak hour intersection volumes to create adjusted future volumes forecasts, but in no case were the increments permitted to reduce an existing turning movement. The results at intersections were then rounded to the nearest 5 vehicles.

Cumulative Daily Traffic Volume Forecasts

Daily traffic volumes under Cumulative traffic conditions are summarized in Table 10. The projections identify the volume of traffic forecast under the original Transportation Master Plan, the daily volumes now projected with the adjusted traffic model but no project development and the forecasts for 20 years if the project proceeds.

As indicated the updated future daily volume projections with and without the proposed project are similar to the original Transportation Master Plan estimates at those locations north of Wescott Road where published data was available. The new forecasts are slightly greater on SR 20 south of Wescott Road with and without the project. As indicated, the SR 20 corridor through the study area is projected to carry volumes that are indicative of LOS F for a two-lane facility. A similar conclusion was reached in the Transportation Master Plan and General Plan EIR. However, the General Plan EIR reached the conclusion that a four-lane SR 20 through Colusa was not feasible.

The specific difference in traffic volumes resulting from implementation of the project can be determined by comparing the incremental change from Year 2018 volumes to the difference in 20 Year forecasts with and without the project. As shown, the daily volume north of Carson Street is 275 ADT greater in 20 years with the project, the volume between Carson Street and Sioc is 950 ADT greater as a result of the project. These changes are less than the project specific estimates presented under Existing Plus Project conditions since the approach taken to produce short term forecasts does not assume any redistribution of retail trips to the site by current residents.

Overall the change resulting from the project would not alter the original Transportation Master Plan conclusions.

TABLE 10
20 YEAR FUTURE PLUS PROJECT
AVERAGE DAILY TRAFFIC VOLUMES AND RESULTING LEVEL OF SERVICE

Street	Location	Year 2030 Existing Transportation Master Plan Report			Updated 20 Future Cumulative					
					No Project			With Project		
					Daily Volume			Daily Volume		
		Daily Volume	Lanes	LOS	Increment over Year 2018	Total	LOS	Increment over Year 2018	Total	LOS
SR 20 (Bridge St)	Clay Street to Carson Street	Not Reported	2	**F**	1,200	17,770	**F**	**1,475**	**18,045**	**F**
	Carson Street to Sioc Street	15,900	2+	**D**	2,125	15,905	**F**	**2,175**	**15,955**	**F**
	Sioc Street to Wescott Road	Not Reported	2+	**E**	3,800	19,650	**F**	**4,600**	**20,450**	**F**
	Wescott Rd and Cynthia Dr	14,200	2+	D	4,550	16,600	**F**	4,800	16,850	**F**

Cumulative Peak Hour Traffic Conditions

Traffic Volumes. Figures 6 and 7 present 20-year future intersection traffic volumes with and without the proposed project. These volumes were used to determine operating Level of Service.

Improvements. The General Plan Circulation Element assumes that Wescott Road will be relocated to a new intersection on SR 20 to address long term problems that would be associated with the current intersection's proximity to Sioc Street. This improvement is assumed under the Cumulative No Project condition.

Intersection Levels of Service. Table 11 identifies peak hour Levels of Service at study area intersections assuming the SR 20 / Wescott Road intersection is relocated / signalized, the proposed project frontage improvements are made but no improvements are made elsewhere. These calculations assume current traffic signal timing plans remain implemented at the SR 20 (Bridge Street) / Sioc Street intersection.

As indicated the PM Peak Hour Level of Service at the SR 20 / Sioc Street intersection is projected to deteriorate to LOS F in 20 years with and without the project. The Level of Service could be improved by altering the existing signal timing to LOS D with and without the project.

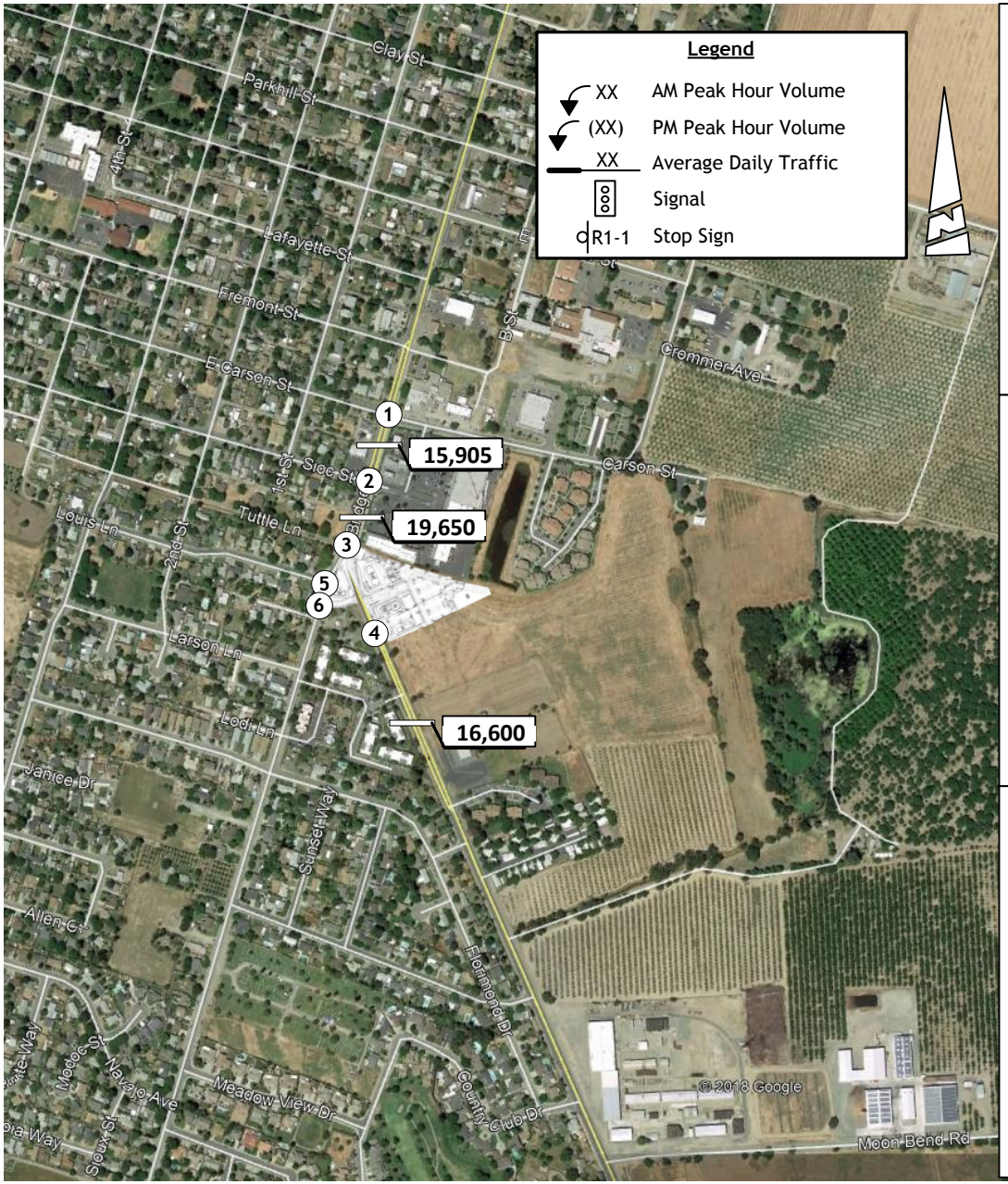
Intersection Queues. In 20 years the projected length of queues at signaled intersection on SR 20 will be an issue. As noted in Table 12, the length of peak period queues are noteworthy at these locations:

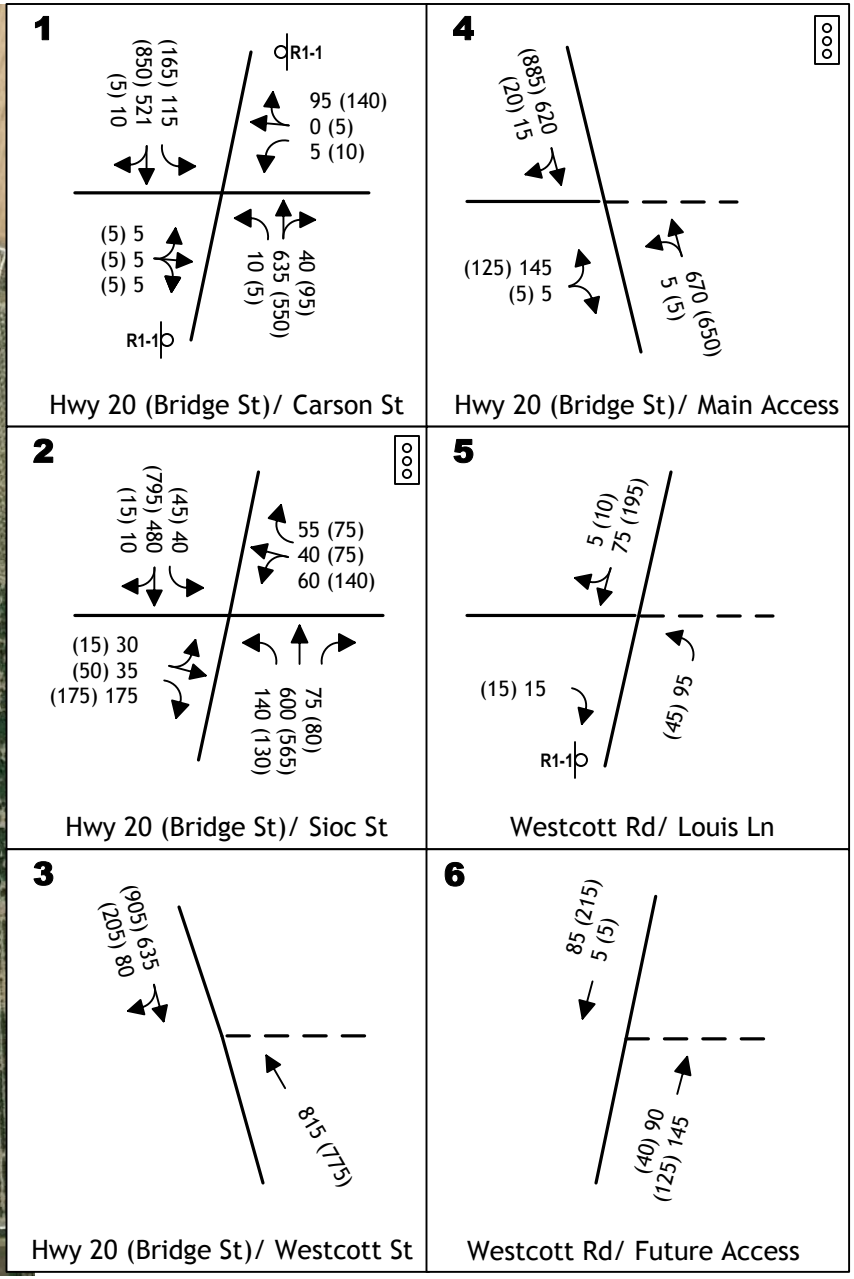
Mainline SR 20 queues. The projected queue lengths created at the Sioc Street intersection on SR 20 would be relatively long during peak hours and would extend beyond the adjoin Carson Street intersection with and without the project. The queue lengths could lengthen as a result of signal timing optimization. Whether the project proceeds or not it is likely that Caltrans would eventually elect to limit intersections affected by upstream queues, like Carson Street, by prohibiting cross traffic.

Measures to address queue length were considered. While it is technically possible to widen SR 20 to four lanes in the immediate area of the project, if additional through lanes are not possible at the Sioc Street intersection, as suggested by the General Plan, then the northbound queue would not be affected. This issue is also justification for provide separate right turn lanes at the project's driveways to reduce the number of turning vehicles caught in these queues.

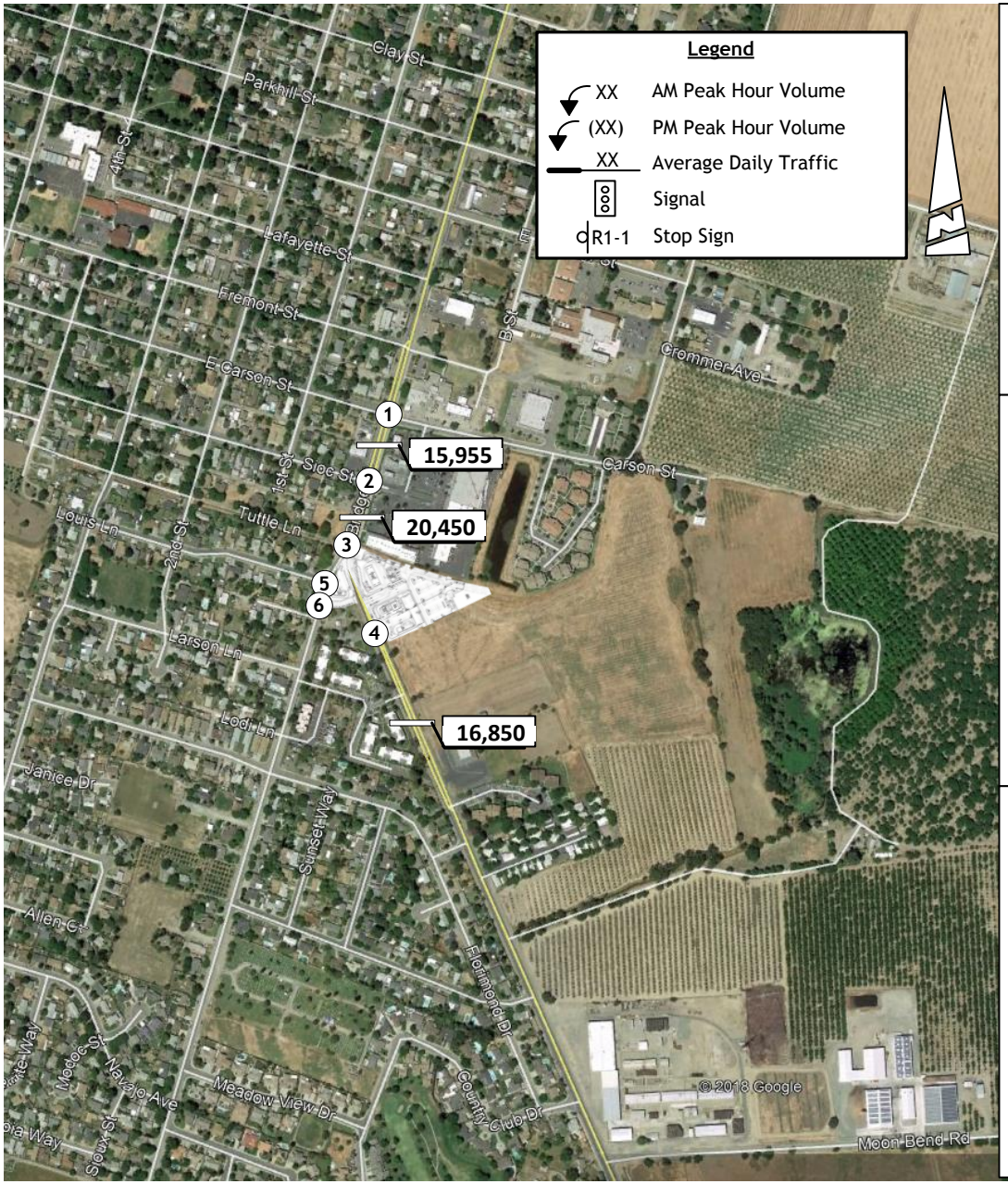
The northbound queue approaching Sioc Street could become long enough to reach the relocated Wescott Road intersection. This will be an issue to be addressed when timing the Sioc signal in the future.

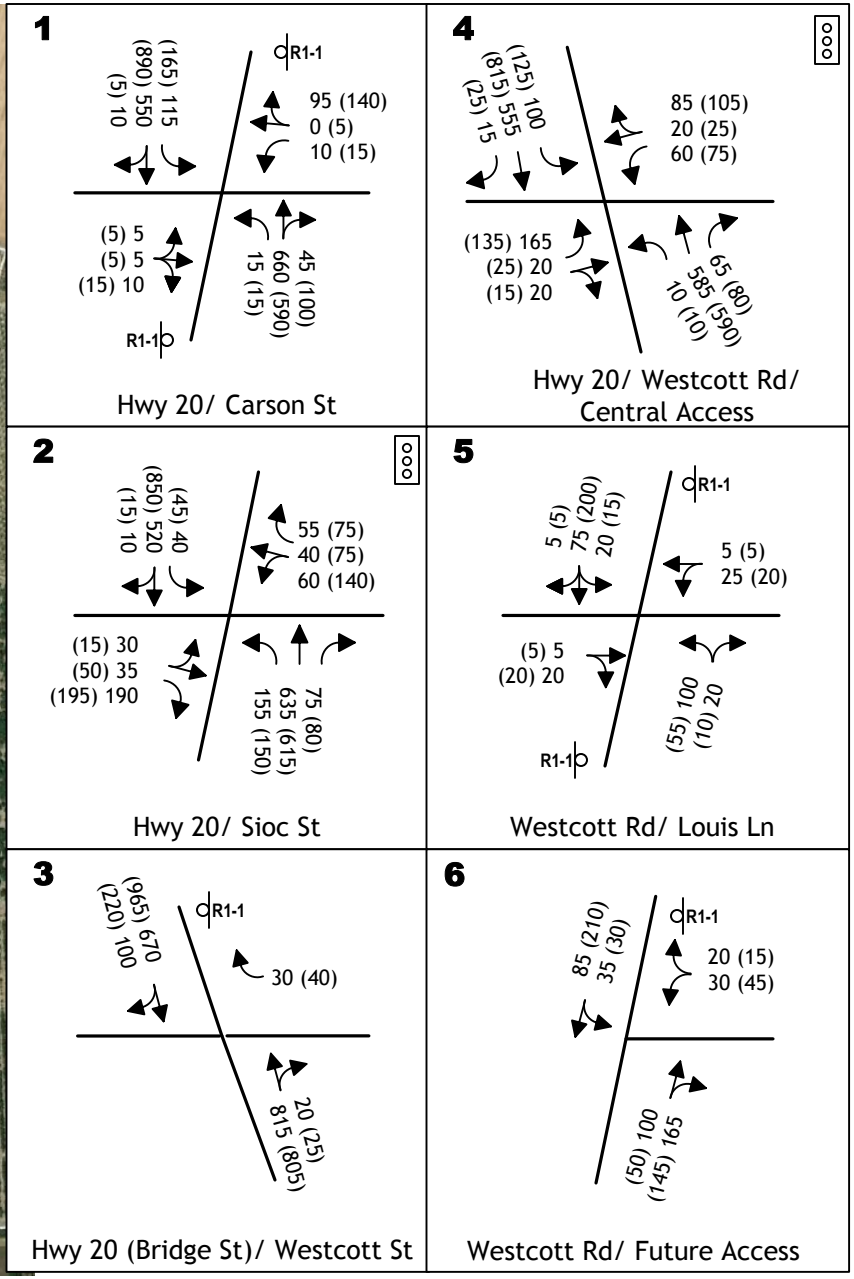
Relocated Wescott Road intersection. The projected queues at the relocated Wescott Road intersection can be accommodated. The southbound left turn queue can be accommodated by a typical left turn lane. However, the area between the southbound turn lane and the corresponding northbound left turn lane at Sioc Street may need to be configured as a Two-Way Left-Turn (TWLT) land in order to maximize the area available for deceleration. The project's northern access driveway design proposes a "pork chop" island to preclude left turns without needing a center raised median in SR 20.





CUMULATIVE WITHOUT PROJECT
TRAFFIC VOLUMES AND LANE CONFIGURATIONS





CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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7126-001 RA 1/14/2020

figure 7

TABLE 11
20 YEAR PEAK HOUR INTERSECTION LEVELS OF SERVICE

Location	Control	Peak Hour Level of Service							
		AM Peak Hour				PM Peak Hour			
		Cumulative		Cumulative plus Project		Cumulative		Cumulative Plus Project	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay Sec/veh)	LOS	Average Delay (sec/veh)	LOS
Bridge Street / Carson Street									
Northbound left turn	EB-WB Stop	9	A	9	A	10	A	10	B
Southbound left turn		10	A	10	A	10	A	10	B
Eastbound approach		**48**	**E**	46	E	125	F	123	F
Westbound approach		18	C	22	C	30	D	46	E
SR 20 (Bridge St) / Sioc St	Signal	30	C	33	C	**141**	**F**	**149**	**F**
	Mitigated	23	C	24	C	41	D	49	D
SR 20 / Wescott Road / Access Westbound right turn	WB Stop	-		17	C	-		17	C
SR 20 (Bridge St) / Main Access / Relocated Wescott Rd	Signal	8	A	22	B	9	A	29	C
	Roundabout			14	B			20	B
Wescott Road / Louis lane	WB/EB Stop								
Westbound approach		-	-	14	B	-	-	12	B
Eastbound approach		9	A	10	B	10	A	10	B
Wescott Road / Extension Westbound approach	WB Stop	11	B	12	B	11	B	12	B

Bold is LOS in excess of standard.

TABLE 12
20 YEAR PEAK HOUR INTERSECTION QUEUE LENGTHS

Location	Direction	Lane	Length	20 Year Peak Hour Level of Service							
				AM Peak Hour				PM Peak Hour			
				No Project		With Project		No Project		With Project	
				Peak Hour Volume (vph)	95th % Queue Length (feet)	Peak Hour Volume (vph)	95th % Queue length (feet)	Peak Hour Volume (vph)	95th % Queue Length (feet)	Peak Hour Volume (vph)	95th % Queue length (feet)
Current Settings											
SR 20 (Bridge St) / Sioc Street	NB	Left	150	140	135	155	150	130	**195**	**150**	**230**
		Thru	600[1]	600	525	635	570	565	385	615	435
	SB	Left	100	40	55	40	55	45	70	45	70
		Thru	280[2]	490	430	530	490	810	815	865	900
	EB	Thru+left	340[3]	65	60	65	60	65	70	65	70
		Right	60	175	45	190	45	175	50	195	55
	WB	Thru+left	120	100	85	95	85	215	220	215	220
		right	120	55	<25	155	<25	75	35	75	35
Mitigated											
SR 20 (Bridge St)/ Sioc Street	NB	Left	150	140	190	155	210	130	260	150	300
		Thru	600[1]	600	570	635	625	565	555	615	635
	SB	Left	100	40	75	40	75	45	85	45	85
		Thru	280[2]	490	505	530	565	810	1,100	865	1,210
	EB	Thru+left	340[3]	65	90	65	90	65	95	65	95
		Right	60	175	45	190	45	175	90	195	120
	WB	Thru+left	120	100	150	95	150	215	400	215	400
		Right	120	55	<25	155	<25	75	30	75	30
Proposed											
SR 20 / Wescott Ext / Access	NB	Left	Unknown	5	<25	10	25	5	<25	10	25
		Thru	Unknown	670	600	585	685	650	555	590	690
	SB	Left	Unknown	0	0	100	135	0	0	125	185
		Thru	600[1]	620	690	555	535	885	1,110	815	995
	EB	Left	Unknown	145	180	165	215	125	155	135	165
		Thru	Unknown	5	<25	40	40	5	<25	40	40
	WB	Left	120	0	0	60	105	0	0	75	140
		Thru	120	0	0	105	60	0	0	130	65

Bold is LOS in excess of standard

[1] approximate distance separating Sioc Street and relocated Wescott Road intersection. [2] approximate distance separating Sioc Street and Carson Street. [3] approximate distance separating 1st Street and Bridge Street.

Design Issues for Site Plan (Relocated SR 20 / Wescott Road intersection)

The long-term traffic analysis reveals information which has a bearing on the design of the relocated SR 20 / Wescott Road intersection and the project. The length of westbound queues approaching SR 20 is projected to be 140 feet under cumulative conditions. The proposed site plan provides about 80 feet of storage between SR 20 and the gasoline station access. As a result, there would be occasions during peak periods when lefts into the gasoline station could be blocked by a queue. Because alternative access from SR 20 is also available, the proposed plan is workable. The access to the other retail uses is further from SR 20 (i.e., about 200 feet) and should not be affected by on-site queues.

TECHNICAL APPENDIX

Prepared by National Data & Surveying Services

Wescott Rd & Louis Ln

Peak Hour Turning Movement Count

ID: 20-07008-001
City: Colusa

Day: Tuesday
Date: 01/07/2020

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:30 PM - 05:30 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

SOUTHBOUND (Wescott Rd)

AM	2	83	0	0	130	AM
NOON	0	0	0	0	0	NOON
PM	6	227	0	0	120	PM

EASTBOUND (Louis Ln)

AM	NOON	PM	
90	0	43	⇦
0	0	0	↶ 0
3	0	3	↱ 0
0	0	0	→ 0
13	0	10	↴ 0
AM	NOON	PM	

WESTBOUND (Louis Ln)

PM	NOON	AM	
0	0	0	0 ↰
0	0	0	0 ←
0	0	0	0 ↙
0	0	0	0 ↲
0	0	0	⇨
PM	NOON	AM	

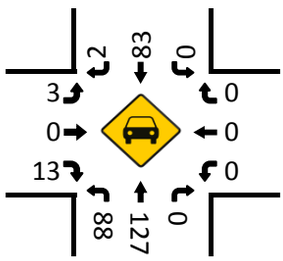
CONTROL: One-Way Stop (EB)

	AM	NOON	PM
TEV	316	0	400
PHF	0.73		0.88

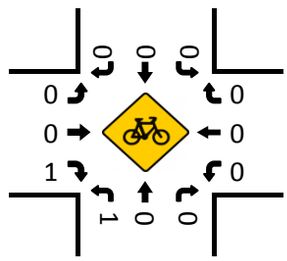
NORTHBOUND (Wescott Rd)

PM	237	0	37	117	0	PM
NOON	0	0	0	0	0	NOON
AM	96	0	88	127	0	AM

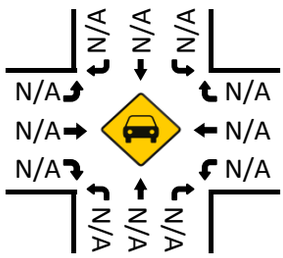
Total Vehicles (AM)



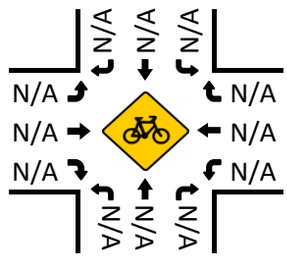
Bikes (AM)



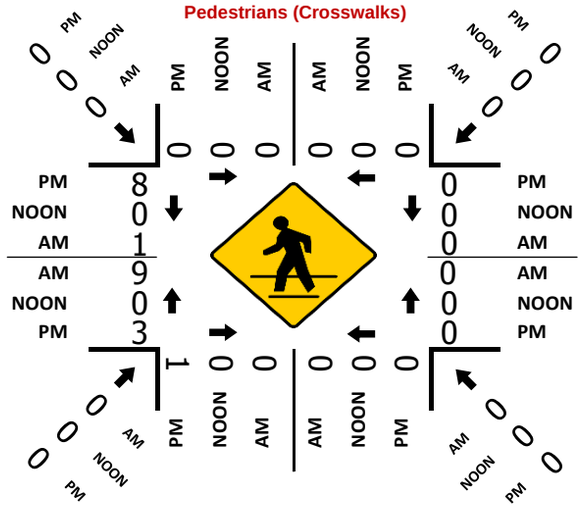
Total Vehicles (Noon)



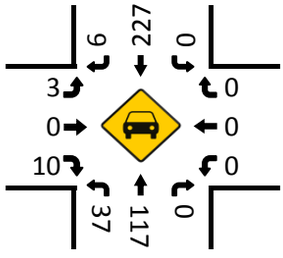
Bikes (NOON)



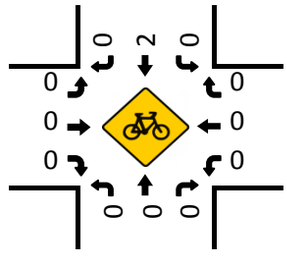
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Wescott Rd & Louis Ln
City: Colusa
Control: One-Way Stop (EB)

Project ID: 20-07008-001
Date: 1/7/2020

Total

NS/EW Streets:	Wescott Rd				Wescott Rd				Louis Ln				Louis Ln				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	23	0	0	0	8	1	0	1	0	1	0	0	0	0	0	38
7:15 AM	6	19	0	0	0	9	1	0	0	0	0	0	0	0	0	0	35
7:30 AM	13	27	0	0	0	9	0	0	1	0	1	0	0	0	0	0	51
7:45 AM	47	41	0	0	0	17	1	0	0	0	2	0	0	0	0	0	108
8:00 AM	25	31	0	0	0	31	1	0	2	0	6	0	0	0	0	0	96
8:15 AM	3	28	0	0	0	26	0	0	0	0	4	0	0	0	0	0	61
8:30 AM	1	21	0	0	0	14	0	0	1	0	0	0	0	0	0	0	37
8:45 AM	4	24	0	0	0	11	0	0	2	0	1	0	0	0	0	0	42
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	103	214	0	0	0	125	4	0	7	0	15	0	0	0	0	0	468
APPROACH %'s :	32.49%	67.51%	0.00%	0.00%	0.00%	96.90%	3.10%	0.00%	31.82%	0.00%	68.18%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	88	127	0	0	0	83	2	0	3	0	13	0	0	0	0	0	316
PEAK HR FACTOR :	0.468	0.774	0.000	0.000	0.000	0.669	0.500	0.000	0.375	0.000	0.542	0.000	0.000	0.000	0.000	0.000	0.731
	0.611				0.664				0.500								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	20	0	0	0	49	0	0	1	0	1	0	0	0	0	0	74
4:15 PM	10	26	0	0	0	51	0	0	1	0	1	0	0	0	0	0	89
4:30 PM	5	25	0	0	0	52	2	0	1	0	3	0	0	0	0	0	88
4:45 PM	10	32	0	0	0	55	0	0	1	0	2	0	0	0	0	0	100
5:00 PM	14	33	0	0	0	63	1	0	1	0	2	0	0	0	0	0	114
5:15 PM	8	27	0	0	0	57	3	0	0	0	3	0	0	0	0	0	98
5:30 PM	7	28	0	0	0	45	1	0	0	0	1	0	0	0	0	0	82
5:45 PM	7	19	0	0	0	45	1	0	2	0	1	0	0	0	0	0	75
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	64	210	0	0	0	417	8	0	7	0	14	0	0	0	0	0	720
APPROACH %'s :	23.36%	76.64%	0.00%	0.00%	0.00%	98.12%	1.88%	0.00%	33.33%	0.00%	66.67%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	37	117	0	0	0	227	6	0	3	0	10	0	0	0	0	0	400
PEAK HR FACTOR :	0.661	0.886	0.000	0.000	0.000	0.901	0.500	0.000	0.750	0.000	0.833	0.000	0.000	0.000	0.000	0.000	0.877
	0.819				0.910				0.813								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Wescott Rd & Louis Ln
City: Colusa
Control: One-Way Stop (EB)

Project ID: 20-07008-001
Date: 1/7/2020

Bikes

NS/EW Streets:	Wescott Rd				Wescott Rd				Louis Ln				Louis Ln				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
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	0.250
		0.250								0.250							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	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	3	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	4	0	0	0	2	0	0	1	0	3	0	0	0	0	0	11
APPROACH %'s :	20.00%	80.00%	0.00%	0.00%	0.00%	100.00%	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	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.00	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
						0.500											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Wescott Rd & Louis Ln
City: Colusa

Project ID: 20-07008-001
Date: 1/7/2020

Pedestrians (Crosswalks)

NS/EW Streets:	Wescott Rd		Wescott Rd		Louis Ln		Louis Ln		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	1	1	3
7:30 AM	0	0	0	0	0	0	2	1	3
7:45 AM	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	0	0	6	0	6
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	2	0	0	0	0	2	4
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	3	0	0	0	11	4	18
APPROACH %'s :			100.00%	0.00%			73.33%	26.67%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	9	1	10
PEAK HR FACTOR :							0.375	0.250	0.417
							0.417		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	2	5	7
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	1	1	3
5:15 PM	0	0	0	0	0	0	0	2	2
5:30 PM	0	0	0	0	0	0	1	1	2
5:45 PM	0	0	0	0	0	0	0	1	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	5	10	16
APPROACH %'s :			100.00%	0.00%			33.33%	66.67%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	1	0	0	0	3	8	12
PEAK HR FACTOR :			0.250				0.375	0.400	0.429
			0.250				0.393		

Prepared by National Data & Surveying Services

SR 20 & Carson St

Peak Hour Turning Movement Count

ID: 18-07148-001
City: Colusa

Day: Tuesday
Date: 04/24/2018

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

SR 20 — SOUTHBOUND

AM	3	370	113	0	585	AM
NOON	0	0	0	0	0	NOON
PM	1	573	165	0	584	PM

Carson St — EASTBOUND

AM	NOON	PM	
13	0	20	
0	0	0	0
1	0	1	0
2	0	0	0
7	0	5	0
AM	NOON	PM	

WESTBOUND — Carson St

PM	NOON	AM	
140	0	92	0
4	0	0	0
11	0	1	0
0	0	0	0
188	0	156	
PM	NOON	AM	

CONTROL

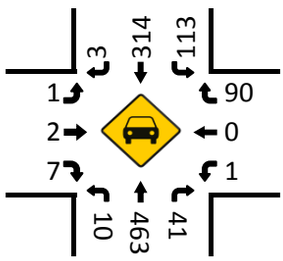
0

TEV	1132	0	1381
	AM	NOON	PM
PHF	0.92		0.97

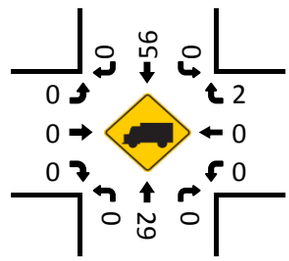
SR 20 — NORTHBOUND

PM	589	0	15	443	23	PM
NOON	0	0	0	0	0	NOON
AM	378	0	10	492	41	AM

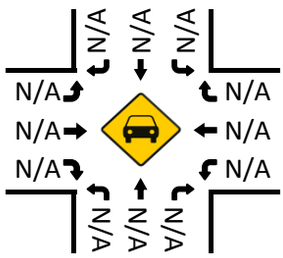
Cars (AM)



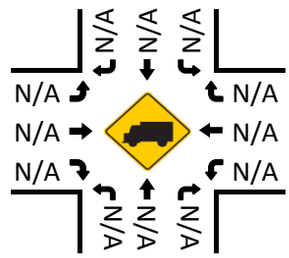
HT (AM)



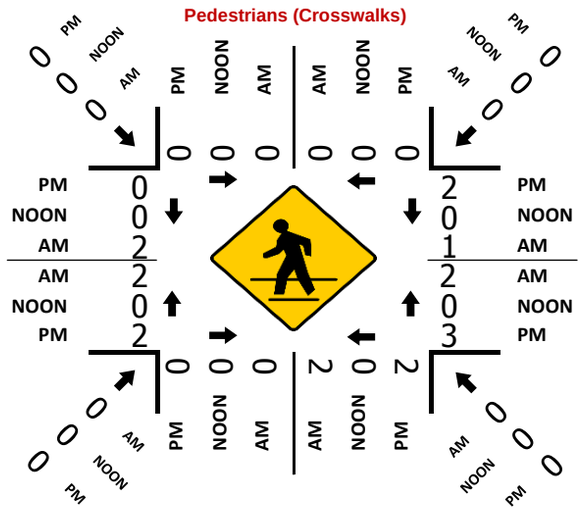
Cars (NOON)



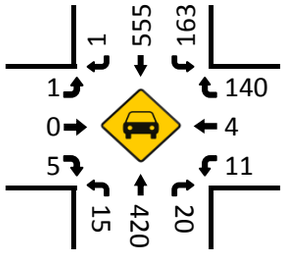
HT (NOON)



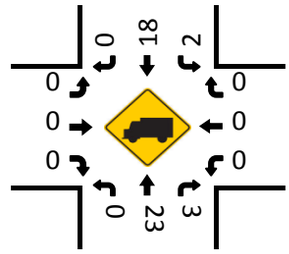
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



7126-001

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Carson St
City: Colusa
Control:

Project ID: 18-07148-001
Date: 4/24/2018

Total

NS/EW Streets:	SR 20				SR 20				Carson St				Carson St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
7:00 AM	1	84	3	0	17	65	0	0	1	0	0	0	1	0	15	0	187
7:15 AM	0	82	3	0	15	70	0	0	0	0	1	0	5	0	13	0	189
7:30 AM	2	134	10	0	18	86	0	0	0	0	4	0	0	0	17	0	271
7:45 AM	4	135	16	0	24	91	2	0	1	1	1	0	0	0	27	0	302
8:00 AM	1	121	9	0	40	105	1	0	0	1	2	0	1	0	25	0	306
8:15 AM	3	102	6	0	31	88	0	0	0	0	0	0	0	0	23	0	253
8:30 AM	0	116	4	0	20	70	0	0	0	0	0	0	1	0	23	0	234
8:45 AM	2	101	6	0	21	67	0	0	1	0	0	0	2	0	17	0	217
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	13	875	57	0	186	642	3	0	3	2	8	0	10	0	160	0	1959
APPROACH %'s :	1.38%	92.59%	6.03%	0.00%	22.38%	77.26%	0.36%	0.00%	23.08%	15.38%	61.54%	0.00%	5.88%	0.00%	94.12%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	10	492	41	0	113	370	3	0	1	2	7	0	1	0	92	0	1132
PEAK HR FACTOR :	0.625	0.911	0.641	0.000	0.706	0.881	0.375	0.000	0.250	0.500	0.438	0.000	0.250	0.000	0.852	0.000	0.925
		0.876				0.832				0.625				0.861			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
4:00 PM	2	95	3	0	36	127	1	0	0	0	3	0	5	0	39	0	311
4:15 PM	2	112	4	0	37	139	0	0	0	0	1	0	3	1	28	0	327
4:30 PM	4	110	7	0	52	140	0	0	0	0	3	0	3	1	32	0	352
4:45 PM	2	114	8	0	38	135	1	0	1	0	0	0	2	0	44	0	345
5:00 PM	7	107	4	0	38	159	0	0	0	0	1	0	3	2	36	0	357
5:15 PM	3	96	5	0	38	120	0	0	0	1	1	0	3	1	23	0	291
5:30 PM	2	102	6	0	36	121	1	0	0	0	1	0	4	1	29	0	303
5:45 PM	4	106	3	0	32	90	2	0	0	0	1	0	5	0	29	0	272
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	26	842	40	0	307	1031	5	0	1	1	11	0	28	6	260	0	2558
APPROACH %'s :	2.86%	92.73%	4.41%	0.00%	22.86%	76.77%	0.37%	0.00%	7.69%	7.69%	84.62%	0.00%	9.52%	2.04%	88.44%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	15	443	23	0	165	573	1	0	1	0	5	0	11	4	140	0	1381
PEAK HR FACTOR :	0.536	0.971	0.719	0.000	0.793	0.901	0.250	0.000	0.250	0.000	0.417	0.000	0.917	0.500	0.795	0.000	0.967
		0.970				0.938				0.500				0.842			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Carson St
City: Colusa
Control: 0

Project ID: 18-07148-001
Date: 4/24/2018

Cars

NS/EW Streets:	SR 20				SR 20				Carson St				Carson St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
7:00 AM	1	68	3	0	17	59	0	0	1	0	0	0	1	0	14	0	164
7:15 AM	0	71	2	0	14	60	0	0	0	0	1	0	5	0	13	0	166
7:30 AM	2	122	10	0	18	65	0	0	0	0	4	0	0	0	17	0	238
7:45 AM	4	132	16	0	24	86	2	0	1	1	1	0	0	0	26	0	293
8:00 AM	1	115	9	0	40	88	1	0	0	1	2	0	1	0	24	0	282
8:15 AM	3	94	6	0	31	75	0	0	0	0	0	0	0	0	23	0	232
8:30 AM	0	102	4	0	20	57	0	0	0	0	0	0	1	0	23	0	207
8:45 AM	2	92	6	0	20	57	0	0	1	0	0	0	2	0	17	0	197
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	13	796	56	0	184	547	3	0	3	2	8	0	10	0	157	0	1779
APPROACH %'s :	1.50%	92.02%	6.47%	0.00%	25.07%	74.52%	0.41%	0.00%	23.08%	15.38%	61.54%	0.00%	5.99%	0.00%	94.01%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	10	463	41	0	113	314	3	0	1	2	7	0	1	0	90	0	1045
PEAK HR FACTOR :	0.63	0.877	0.641	0.000	0.706	0.892	0.375	0.000	0.250	0.500	0.438	0.000	0.250	0.000	0.865	0.000	0.892
		0.845				0.833				0.625				0.875			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
4:00 PM	2	89	3	0	36	120	1	0	0	0	3	0	5	0	39	0	298
4:15 PM	2	104	4	0	37	135	0	0	0	0	1	0	3	1	28	0	315
4:30 PM	4	106	5	0	51	134	0	0	0	0	3	0	3	1	32	0	339
4:45 PM	2	108	7	0	37	132	1	0	1	0	0	0	2	0	44	0	334
5:00 PM	7	102	4	0	38	154	0	0	0	0	1	0	3	2	36	0	347
5:15 PM	3	92	5	0	38	115	0	0	0	1	1	0	3	1	21	0	280
5:30 PM	2	99	6	0	36	119	1	0	0	0	1	0	4	1	29	0	298
5:45 PM	4	105	3	0	32	86	2	0	0	0	1	0	5	0	29	0	267
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	26	805	37	0	305	995	5	0	1	1	11	0	28	6	258	0	2478
APPROACH %'s :	3.00%	92.74%	4.26%	0.00%	23.37%	76.25%	0.38%	0.00%	7.69%	7.69%	84.62%	0.00%	9.59%	2.05%	88.36%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	15	420	20	0	163	555	1	0	1	0	5	0	11	4	140	0	1335
PEAK HR FACTOR :	0.54	0.972	0.714	0.000	0.799	0.901	0.250	0.000	0.250	0.000	0.417	0.000	0.917	0.500	0.795	0.000	0.962
		0.972				0.936				0.500				0.842			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Carson St
City: Colusa
Control: 0

Project ID: 18-07148-001
Date: 4/24/2018

HT

NS/EW Streets:	SR 20				SR 20				Carson St				Carson St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
7:00 AM	0	16	0	0	0	6	0	0	0	0	0	0	0	0	1	0	23
7:15 AM	0	11	1	0	1	10	0	0	0	0	0	0	0	0	0	0	23
7:30 AM	0	12	0	0	0	21	0	0	0	0	0	0	0	0	0	0	33
7:45 AM	0	3	0	0	0	5	0	0	0	0	0	0	0	0	1	0	9
8:00 AM	0	6	0	0	0	17	0	0	0	0	0	0	0	0	1	0	24
8:15 AM	0	8	0	0	0	13	0	0	0	0	0	0	0	0	0	0	21
8:30 AM	0	14	0	0	0	13	0	0	0	0	0	0	0	0	0	0	27
8:45 AM	0	9	0	0	1	10	0	0	0	0	0	0	0	0	0	0	20
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	79	1	0	2	95	0	0	0	0	0	0	0	0	3	0	180
APPROACH %'s :	0.00%	98.75%	1.25%	0.00%	2.06%	97.94%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	**07:30 AM - 08:30 AM**																TOTAL
PEAK HR VOL :	0	29	0	0	0	56	0	0	0	0	0	0	0	0	2	0	87
PEAK HR FACTOR :	0.000	0.604	0.000	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.659
		0.604				0.667								0.500			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
4:00 PM	0	6	0	0	0	7	0	0	0	0	0	0	0	0	0	0	13
4:15 PM	0	8	0	0	0	4	0	0	0	0	0	0	0	0	0	0	12
4:30 PM	0	4	2	0	1	6	0	0	0	0	0	0	0	0	0	0	13
4:45 PM	0	6	1	0	1	3	0	0	0	0	0	0	0	0	0	0	11
5:00 PM	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	10
5:15 PM	0	4	0	0	0	5	0	0	0	0	0	0	0	0	2	0	11
5:30 PM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	37	3	0	2	36	0	0	0	0	0	0	0	0	2	0	80
APPROACH %'s :	0.00%	92.50%	7.50%	0.00%	5.26%	94.74%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	**04:15 PM - 05:15 PM**																TOTAL
PEAK HR VOL :	0	23	3	0	2	18	0	0	0	0	0	0	0	0	0	0	46
PEAK HR FACTOR :	0.00	0.719	0.375	0.000	0.500	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.885
		0.813				0.714											

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Carson St
City: Colusa
Control: 0

Project ID: 18-07148-001
Date: 4/24/2018

Bikes

NS/EW Streets:	SR 20				SR 20				Carson St				Carson St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	2	0	0	0	1	0	0	0	1	0	0	4
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	**07:30 AM - 08:30 AM**																TOTAL
PEAK HR VOL :	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.375
						0.500				0.250							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
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	0	0	0	0
4:30 PM	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
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	1	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
APPROACH %'s :									0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	**04:15 PM - 05:15 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	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	0.250
											0.250						

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Carson St
City: Colusa
Project ID: 18-07148-001
Date: 4/24/2018

Pedestrians (Crosswalks)

NS/EW Streets:	SR 20		SR 20		Carson St		Carson St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	2	1	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	2	1	0	2	5
8:00 AM	0	0	0	2	0	0	2	0	4
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	2	4	4	2	2	14
APPROACH %'s :			0.00%	100.00%	50.00%	50.00%	50.00%	50.00%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	2	2	1	2	2	9
PEAK HR FACTOR :				0.250	0.250	0.250	0.250	0.250	0.450
			0.250		0.250		0.500		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	2	1	1	0	0	4
4:30 PM	0	0	0	0	1	0	1	0	2
4:45 PM	0	0	0	0	0	1	1	0	2
5:00 PM	0	0	0	0	1	0	0	0	1
5:15 PM	0	0	0	3	0	3	0	0	6
5:30 PM	0	0	1	0	0	0	3	0	4
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	5	3	5	5	0	19
APPROACH %'s :			16.67%	83.33%	37.50%	62.50%	100.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	0	0	2	3	2	2	0	9
PEAK HR FACTOR :				0.250	0.750	0.500	0.500		0.563
			0.250		0.625		0.500		

Prepared by National Data & Surveying Services

SR 20 & Sioc St

Peak Hour Turning Movement Count

ID: 18-07148-002
City: Colusa

Day: Tuesday
Date: 04/24/2018

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

SR 20 — SOUTHBOUND

AM	6	340	36	0	539	AM
NOON	0	0	0	0	0	NOON
PM	12	531	44	0	484	PM

Sioc St — EASTBOUND

AM	NOON	PM	
81	0	107	
0	0	0	0
25	0	15	0
35	0	39	0
52	0	71	0
AM	NOON	PM	

WESTBOUND — Sioc St

PM	NOON	AM	
72	0	55	0
47	0	32	0
136	0	58	0
0	0	0	0
166	0	144	
PM	NOON	AM	

CONTROL

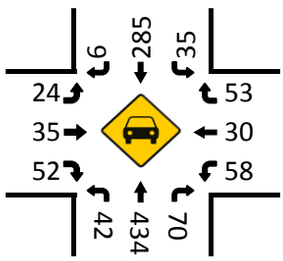
0

TEV	1214	0	1495
	AM	NOON	PM
PHF	0.88		0.95

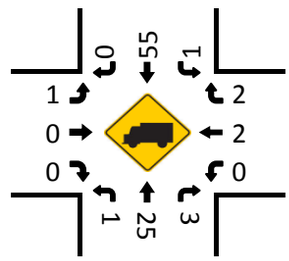
PM	738	0	48	397	83	PM
NOON	0	0	0	0	0	NOON
AM	450	0	43	459	73	AM

NORTHBOUND — SR 20

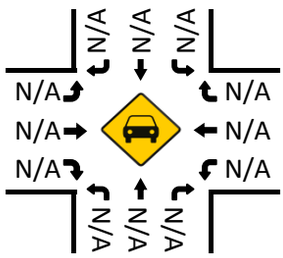
Cars (AM)



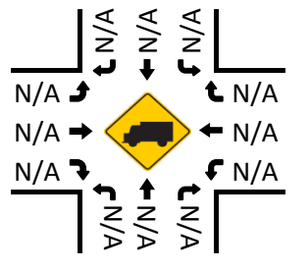
HT (AM)



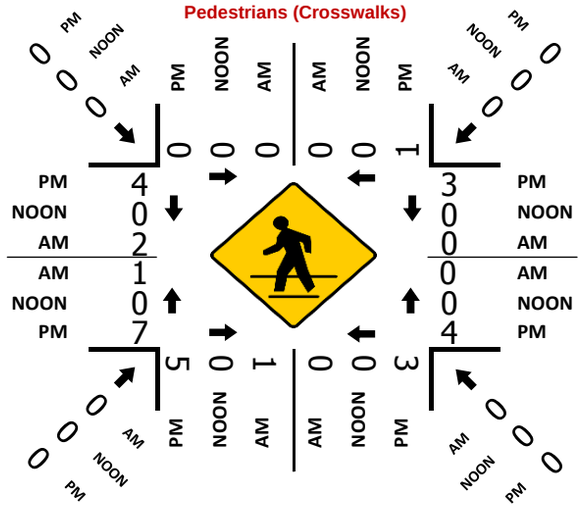
Cars (NOON)



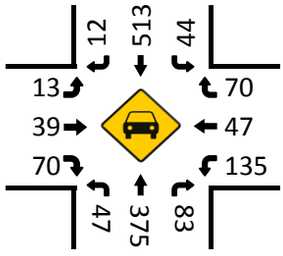
HT (NOON)



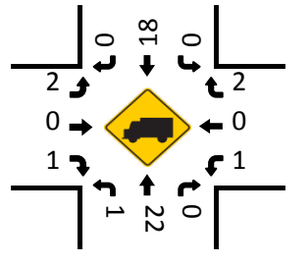
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Sioc St
City: Colusa
Control:

Project ID: 18-07148-002
Date: 4/24/2018

Total

NS/EW Streets:	SR 20				SR 20				Sioc St				Sioc St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
7:00 AM	8	78	11	0	7	57	0	0	1	5	7	0	11	4	4	0	193
7:15 AM	14	86	16	0	9	66	0	0	0	6	5	0	15	6	5	0	228
7:30 AM	13	126	19	0	7	84	2	0	5	6	10	0	15	6	14	0	307
7:45 AM	16	135	23	0	9	80	3	0	10	14	13	0	10	14	17	0	344
8:00 AM	9	104	14	0	14	90	0	0	8	12	16	0	18	5	11	0	301
8:15 AM	5	94	17	0	6	86	1	0	2	3	13	0	15	7	13	0	262
8:30 AM	5	114	13	0	5	66	0	0	1	3	7	0	11	2	11	0	238
8:45 AM	8	87	9	0	6	54	0	0	8	6	8	0	9	9	6	0	210
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	78	824	122	0	63	583	6	0	35	55	79	0	104	53	81	0	2083
APPROACH %'s :	7.62%	80.47%	11.91%	0.00%	9.66%	89.42%	0.92%	0.00%	20.71%	32.54%	46.75%	0.00%	43.70%	22.27%	34.03%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	43	459	73	0	36	340	6	0	25	35	52	0	58	32	55	0	1214
PEAK HR FACTOR :	0.672	0.850	0.793	0.000	0.643	0.944	0.500	0.000	0.625	0.625	0.813	0.000	0.806	0.571	0.809	0.000	0.882
		0.826				0.918				0.757				0.884			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
4:00 PM	11	83	26	0	13	118	2	0	5	7	22	0	33	8	14	0	342
4:15 PM	14	109	20	0	10	126	3	0	3	10	10	0	30	6	12	0	353
4:30 PM	13	94	23	0	12	134	3	0	5	13	20	0	43	15	20	0	395
4:45 PM	9	101	17	0	12	121	3	0	3	7	18	0	38	13	19	0	361
5:00 PM	12	93	23	0	10	150	3	0	4	9	23	0	25	13	21	0	386
5:15 PM	11	85	14	0	8	106	4	0	5	9	17	0	29	12	13	0	313
5:30 PM	9	93	14	0	14	107	2	0	3	8	9	0	37	10	15	0	321
5:45 PM	8	97	19	0	7	85	4	0	3	6	9	0	19	8	15	0	280
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	87	755	156	0	86	947	24	0	31	69	128	0	254	85	129	0	2751
APPROACH %'s :	8.72%	75.65%	15.63%	0.00%	8.14%	89.59%	2.27%	0.00%	13.60%	30.26%	56.14%	0.00%	54.27%	18.16%	27.56%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	48	397	83	0	44	531	12	0	15	39	71	0	136	47	72	0	1495
PEAK HR FACTOR :	0.857	0.911	0.902	0.000	0.917	0.885	1.000	0.000	0.750	0.750	0.772	0.000	0.791	0.783	0.857	0.000	0.946
		0.923				0.900				0.822				0.817			

7126-001

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Sioc St
City: Colusa
Control: 0

Project ID: 18-07148-002
Date: 4/24/2018

Cars

NS/EW Streets:	SR 20				SR 20				Sioc St				Sioc St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
7:00 AM	8	62	11	0	7	50	0	0	1	5	7	0	11	4	4	0	170
7:15 AM	14	73	16	0	8	57	0	0	0	6	5	0	13	6	5	0	203
7:30 AM	13	116	19	0	6	63	2	0	5	6	10	0	15	6	13	0	274
7:45 AM	15	130	22	0	9	74	3	0	10	14	13	0	10	12	17	0	329
8:00 AM	9	99	14	0	14	74	0	0	7	12	16	0	18	5	11	0	279
8:15 AM	5	89	15	0	6	74	1	0	2	3	13	0	15	7	12	0	242
8:30 AM	5	99	13	0	5	51	0	0	1	3	7	0	11	2	11	0	208
8:45 AM	8	80	9	0	6	46	0	0	7	5	6	0	8	7	6	0	188
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	77	748	119	0	61	489	6	0	33	54	77	0	101	49	79	0	1893
APPROACH %'s :	8.16%	79.24%	12.61%	0.00%	10.97%	87.95%	1.08%	0.00%	20.12%	32.93%	46.95%	0.00%	44.10%	21.40%	34.50%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	42	434	70	0	35	285	6	0	24	35	52	0	58	30	53	0	1124
PEAK HR FACTOR :	0.70	0.835	0.795	0.000	0.625	0.963	0.500	0.000	0.600	0.625	0.813	0.000	0.806	0.625	0.779	0.000	0.854
		0.817				0.926				0.750				0.904			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
4:00 PM	11	77	26	0	12	112	2	0	5	7	21	0	33	8	14	0	328
4:15 PM	14	103	20	0	10	121	3	0	2	10	10	0	30	6	11	0	340
4:30 PM	12	90	23	0	12	128	3	0	4	13	20	0	42	15	19	0	381
4:45 PM	9	93	17	0	12	119	3	0	3	7	18	0	38	13	19	0	351
5:00 PM	12	89	23	0	10	145	3	0	4	9	22	0	25	13	21	0	376
5:15 PM	11	81	14	0	8	101	4	0	5	9	17	0	29	12	13	0	304
5:30 PM	9	90	14	0	14	105	2	0	3	8	9	0	37	10	15	0	316
5:45 PM	8	96	19	0	7	81	4	0	3	6	8	0	19	8	15	0	274
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	86	719	156	0	85	912	24	0	29	69	125	0	253	85	127	0	2670
APPROACH %'s :	8.95%	74.82%	16.23%	0.00%	8.33%	89.32%	2.35%	0.00%	13.00%	30.94%	56.05%	0.00%	54.41%	18.28%	27.31%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	47	375	83	0	44	513	12	0	13	39	70	0	135	47	70	0	1448
PEAK HR FACTOR :	0.84	0.910	0.902	0.000	0.917	0.884	1.000	0.000	0.813	0.750	0.795	0.000	0.804	0.783	0.833	0.000	0.950
		0.922				0.900				0.824				0.829			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Sioc St
City: Colusa
Control: 0

Project ID: 18-07148-002
Date: 4/24/2018

HT

NS/EW Streets:	SR 20				SR 20				Sioc St				Sioc St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
7:00 AM	0	16	0	0	0	7	0	0	0	0	0	0	0	0	0	0	23
7:15 AM	0	13	0	0	1	9	0	0	0	0	0	0	2	0	0	0	25
7:30 AM	0	10	0	0	1	21	0	0	0	0	0	0	0	0	1	0	33
7:45 AM	1	5	1	0	0	6	0	0	0	0	0	0	0	2	0	0	15
8:00 AM	0	5	0	0	0	16	0	0	1	0	0	0	0	0	0	0	22
8:15 AM	0	5	2	0	0	12	0	0	0	0	0	0	0	0	1	0	20
8:30 AM	0	15	0	0	0	15	0	0	0	0	0	0	0	0	0	0	30
8:45 AM	0	7	0	0	0	8	0	0	1	1	2	0	1	2	0	0	22
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	76	3	0	2	94	0	0	2	1	2	0	3	4	2	0	190
APPROACH %'s :	1.25%	95.00%	3.75%	0.00%	2.08%	97.92%	0.00%	0.00%	40.00%	20.00%	40.00%	0.00%	33.33%	44.44%	22.22%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	25	3	0	1	55	0	0	1	0	0	0	0	2	2	0	90
PEAK HR FACTOR :	0.250	0.625	0.375	0.000	0.250	0.655	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.682
		0.725				0.636				0.250				0.500			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
4:00 PM	0	6	0	0	1	6	0	0	0	0	1	0	0	0	0	0	14
4:15 PM	0	6	0	0	0	5	0	0	1	0	0	0	0	0	1	0	13
4:30 PM	1	4	0	0	0	6	0	0	1	0	0	0	1	0	1	0	14
4:45 PM	0	8	0	0	0	2	0	0	0	0	0	0	0	0	0	0	10
5:00 PM	0	4	0	0	0	5	0	0	0	0	1	0	0	0	0	0	10
5:15 PM	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	9
5:30 PM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	1	0	0	0	4	0	0	0	0	1	0	0	0	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	36	0	0	1	35	0	0	2	0	3	0	1	0	2	0	81
APPROACH %'s :	2.70%	97.30%	0.00%	0.00%	2.78%	97.22%	0.00%	0.00%	40.00%	0.00%	60.00%	0.00%	33.33%	0.00%	66.67%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	1	22	0	0	0	18	0	0	2	0	1	0	1	0	2	0	47
PEAK HR FACTOR :	0.25	0.688	0.000	0.000	0.000	0.750	0.000	0.000	0.500	0.000	0.250	0.000	0.250	0.000	0.500	0.000	0.839
		0.719				0.750				0.750				0.375			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Sioc St
City: Colusa
Control: 0

Project ID: 18-07148-002
Date: 4/24/2018

Bikes

NS/EW Streets:	SR 20				SR 20				Sioc St				Sioc St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
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%					0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	3
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	0.250	0.000	0.000	0.750
						0.500								0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
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	0	0	0	0
4:30 PM	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	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	1	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
APPROACH %'s :					50.00%	0.00%	50.00%	0.00%									
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	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	0.000	0.250
						0.250											

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Sioc St
City: Colusa
Project ID: 18-07148-002
Date: 4/24/2018

Pedestrians (Crosswalks)

NS/EW Streets:	SR 20		SR 20		Sioc St		Sioc St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	1	2
7:45 AM	0	0	0	0	0	0	0	1	1
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0	1
8:30 AM	0	1	0	0	0	0	0	0	1
8:45 AM	0	0	1	0	1	0	0	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	1	2	0	1	0	1	2	7
APPROACH %'s :	0.00%	100.00%	100.00%	0.00%	100.00%	0.00%	33.33%	66.67%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	1	0	0	0	1	2	4
PEAK HR FACTOR :			0.250				0.250	0.500	0.500
			0.250				0.375		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	1	0	0	1	1	3
4:15 PM	0	1	0	0	2	0	0	0	3
4:30 PM	0	0	2	0	2	0	3	2	9
4:45 PM	0	0	3	2	0	3	3	2	13
5:00 PM	0	0	0	1	0	0	1	0	2
5:15 PM	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	1	0	0	1	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	1	5	6	4	4	9	5	34
APPROACH %'s :	0.00%	100.00%	45.45%	54.55%	50.00%	50.00%	64.29%	35.71%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	1	5	3	4	3	7	4	27
PEAK HR FACTOR :		0.250	0.417	0.375	0.500	0.250	0.583	0.500	0.519
		0.250	0.400		0.583		0.550		

Prepared by National Data & Surveying Services

SR 20 & Wescott Rd

Peak Hour Turning Movement Count

ID: 18-07148-003
City: Colusa

Day: Tuesday
Date: 04/24/2018

	PEAK HOURS	COUNT PERIODS
AM	07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:15 PM - 05:15 PM	04:00 PM - 06:00 PM

SR 20 — SOUTHBOUND

	Right	Thru	Left	U-turn	Exiting
AM	81	365	0	0	574
NOON	0	0	0	0	0
PM	218	520	0	0	523
Bikes	0	0	0	0	

Wescott Rd — EASTBOUND

	AM	NOON	PM	Bikes
Exiting	82	0	221	
U-turn	0	0	0	0
Left	137	0	114	0
Thru	0	0	0	0
Right	3	0	3	0

Wescott Rd — WESTBOUND

	PM	NOON	AM	Bikes
Right	0	0	0	0
Thru	0	0	0	0
Left	0	0	0	0
U-turn	0	0	0	0
Exiting	0	0	0	

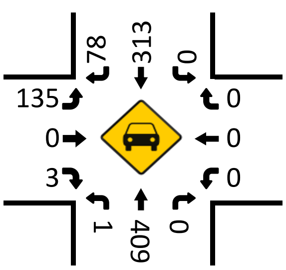
SR 20 — NORTHBOUND

	Exiting	U-turn	Left	Thru	Right
Bikes		0	0	0	0
PM	523	0	3	409	0
NOON	0	0	0	0	0
AM	368	0	1	437	0

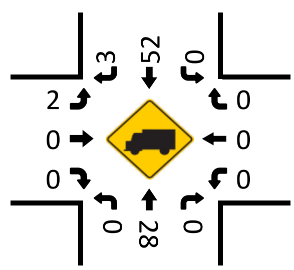
CONTROL: 0

	AM	NOON	PM
TEV	1024	0	1267
PHF	0.94		0.97

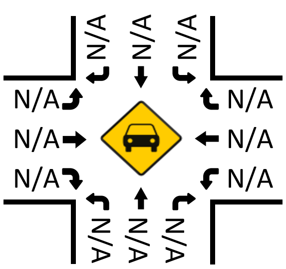
Cars (AM)



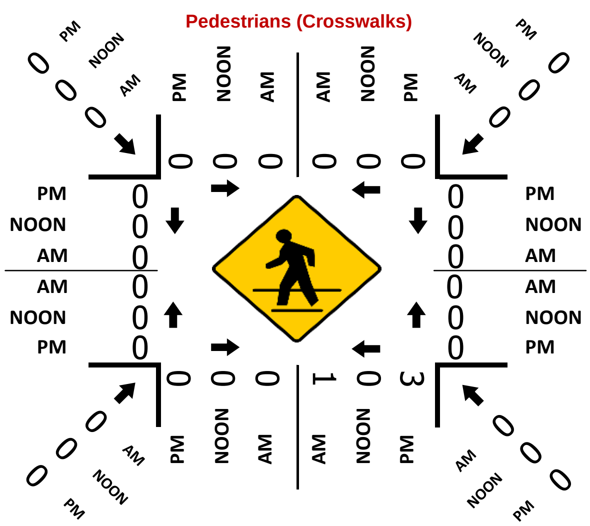
HT (AM)



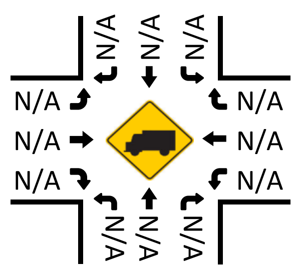
Cars (NOON)



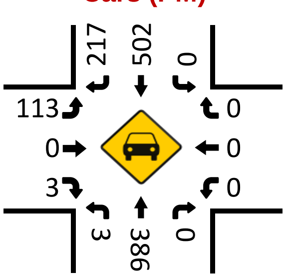
Pedestrians (Crosswalks)



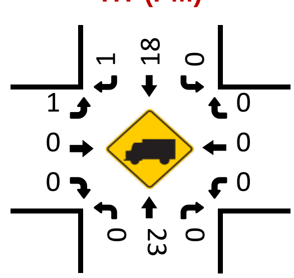
HT (NOON)



Cars (PM)



HT (PM)



7126-001

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Wescott Rd
City: Colusa
Control:

Project ID: 18-07148-003
Date: 4/24/2018

Total

NS/EW Streets:	SR 20				SR 20				Wescott Rd				Wescott Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	77	0	0	0	70	8	0	21	0	0	0	0	0	0	0	176
7:15 AM	1	81	0	0	0	66	20	0	31	0	0	0	0	0	0	0	199
7:30 AM	0	133	0	0	0	96	12	0	31	0	0	0	0	0	0	0	272
7:45 AM	0	136	0	0	0	88	11	0	36	0	1	0	0	0	0	0	272
8:00 AM	1	85	0	0	0	97	31	0	37	0	2	0	0	0	0	0	253
8:15 AM	0	83	0	0	0	84	27	0	33	0	0	0	0	0	0	0	227
8:30 AM	1	110	0	0	0	66	15	0	21	0	1	0	0	0	0	0	214
8:45 AM	2	83	0	0	0	65	13	0	28	0	1	0	0	0	0	0	192
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	788	0	0	0	632	137	0	238	0	5	0	0	0	0	0	1805
APPROACH %'s :	0.63%	99.37%	0.00%	0.00%	0.00%	82.18%	17.82%	0.00%	97.94%	0.00%	2.06%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	437	0	0	0	365	81	0	137	0	3	0	0	0	0	0	1024
PEAK HR FACTOR :	0.250	0.803	0.000	0.000	0.000	0.941	0.653	0.000	0.926	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.941
		0.805				0.871				0.897							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	96	0	0	0	123	53	0	27	0	2	0	0	0	0	0	302
4:15 PM	1	107	0	0	0	124	47	0	35	0	1	0	0	0	0	0	315
4:30 PM	1	100	0	0	0	139	54	0	26	0	0	0	0	0	0	0	320
4:45 PM	0	106	0	0	0	115	58	0	25	0	0	0	0	0	0	0	304
5:00 PM	1	96	0	0	0	142	59	0	28	0	2	0	0	0	0	0	328
5:15 PM	0	79	0	0	0	101	55	0	32	0	0	0	0	0	0	0	267
5:30 PM	0	103	0	0	0	98	55	0	15	0	0	0	0	0	0	0	271
5:45 PM	0	93	0	0	0	71	41	0	27	0	0	0	0	0	0	0	232
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	780	0	0	0	913	422	0	215	0	5	0	0	0	0	0	2339
APPROACH %'s :	0.51%	99.49%	0.00%	0.00%	0.00%	68.39%	31.61%	0.00%	97.73%	0.00%	2.27%	0.00%					
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	3	409	0	0	0	520	218	0	114	0	3	0	0	0	0	0	1267
PEAK HR FACTOR :	0.750	0.956	0.000	0.000	0.000	0.915	0.924	0.000	0.814	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.966
		0.954				0.918				0.813							

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Wescott Rd
City: Colusa
Control: 0

Project ID: 18-07148-003
Date: 4/24/2018

Cars

NS/EW Streets:	SR 20				SR 20				Wescott Rd				Wescott Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	61	0	0	0	63	8	0	21	0	0	0	0	0	0	0	153
7:15 AM	1	69	0	0	0	58	17	0	31	0	0	0	0	0	0	0	176
7:30 AM	0	123	0	0	0	76	11	0	30	0	0	0	0	0	0	0	240
7:45 AM	0	129	0	0	0	84	10	0	36	0	1	0	0	0	0	0	260
8:00 AM	1	80	0	0	0	80	31	0	37	0	2	0	0	0	0	0	231
8:15 AM	0	77	0	0	0	73	26	0	32	0	0	0	0	0	0	0	208
8:30 AM	1	96	0	0	0	53	15	0	20	0	1	0	0	0	0	0	186
8:45 AM	2	76	0	0	0	52	13	0	28	0	1	0	0	0	0	0	172
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	711	0	0	0	539	131	0	235	0	5	0	0	0	0	0	1626
APPROACH %'s :	0.70%	99.30%	0.00%	0.00%	0.00%	80.45%	19.55%	0.00%	97.92%	0.00%	2.08%	0.00%					
PEAK HR :	**07:30 AM - 08:30 AM**																TOTAL
PEAK HR VOL :	1	409	0	0	0	313	78	0	135	0	3	0	0	0	0	0	939
PEAK HR FACTOR :	0.25	0.793	0.000	0.000	0.000	0.932	0.629	0.000	0.912	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.903
		0.795				0.881				0.885							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	90	0	0	0	115	53	0	27	0	2	0	0	0	0	0	288
4:15 PM	1	101	0	0	0	120	47	0	35	0	1	0	0	0	0	0	305
4:30 PM	1	96	0	0	0	133	53	0	25	0	0	0	0	0	0	0	308
4:45 PM	0	98	0	0	0	113	58	0	25	0	0	0	0	0	0	0	294
5:00 PM	1	91	0	0	0	136	59	0	28	0	2	0	0	0	0	0	317
5:15 PM	0	77	0	0	0	96	55	0	31	0	0	0	0	0	0	0	259
5:30 PM	0	100	0	0	0	96	55	0	15	0	0	0	0	0	0	0	266
5:45 PM	0	93	0	0	0	66	41	0	26	0	0	0	0	0	0	0	226
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	746	0	0	0	875	421	0	212	0	5	0	0	0	0	0	2263
APPROACH %'s :	0.53%	99.47%	0.00%	0.00%	0.00%	67.52%	32.48%	0.00%	97.70%	0.00%	2.30%	0.00%					
PEAK HR :	**04:15 PM - 05:15 PM**																TOTAL
PEAK HR VOL :	3	386	0	0	0	502	217	0	113	0	3	0	0	0	0	0	1224
PEAK HR FACTOR :	0.75	0.955	0.000	0.000	0.000	0.923	0.919	0.000	0.807	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.965
		0.953				0.922				0.806							

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Wescott Rd
City: Colusa
Control: 0

Project ID: 18-07148-003
Date: 4/24/2018

HT

NS/EW Streets:	SR 20				SR 20				Wescott Rd				Wescott Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	16	0	0	0	7	0	0	0	0	0	0	0	0	0	0	23
7:15 AM	0	12	0	0	0	8	3	0	0	0	0	0	0	0	0	0	23
7:30 AM	0	10	0	0	0	20	1	0	1	0	0	0	0	0	0	0	32
7:45 AM	0	7	0	0	0	4	1	0	0	0	0	0	0	0	0	0	12
8:00 AM	0	5	0	0	0	17	0	0	0	0	0	0	0	0	0	0	22
8:15 AM	0	6	0	0	0	11	1	0	1	0	0	0	0	0	0	0	19
8:30 AM	0	14	0	0	0	13	0	0	1	0	0	0	0	0	0	0	28
8:45 AM	0	7	0	0	0	13	0	0	0	0	0	0	0	0	0	0	20
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	77	0	0	0	93	6	0	3	0	0	0	0	0	0	0	179
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	93.94%	6.06%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	**07:30 AM - 08:30 AM**																TOTAL
PEAK HR VOL :	0	28	0	0	0	52	3	0	2	0	0	0	0	0	0	0	85
PEAK HR FACTOR :	0.000	0.700	0.000	0.000	0.000	0.650	0.750	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.664
		0.700				0.655				0.500							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	6	0	0	0	8	0	0	0	0	0	0	0	0	0	0	14
4:15 PM	0	6	0	0	0	4	0	0	0	0	0	0	0	0	0	0	10
4:30 PM	0	4	0	0	0	6	1	0	1	0	0	0	0	0	0	0	12
4:45 PM	0	8	0	0	0	2	0	0	0	0	0	0	0	0	0	0	10
5:00 PM	0	5	0	0	0	6	0	0	0	0	0	0	0	0	0	0	11
5:15 PM	0	2	0	0	0	5	0	0	1	0	0	0	0	0	0	0	8
5:30 PM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	0	0	0	0	5	0	0	1	0	0	0	0	0	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	34	0	0	0	38	1	0	3	0	0	0	0	0	0	0	76
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	97.44%	2.56%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	**04:15 PM - 05:15 PM**																TOTAL
PEAK HR VOL :	0	23	0	0	0	18	1	0	1	0	0	0	0	0	0	0	43
PEAK HR FACTOR :	0.00	0.719	0.000	0.000	0.000	0.750	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.896
		0.719				0.679				0.250							

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Wescott Rd
City: Colusa
Control: 0

Project ID: 18-07148-003
Date: 4/24/2018

Bikes

NS/EW Streets:	SR 20				SR 20				Wescott Rd				Wescott Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%									
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	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	0.500
							0.500										

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
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	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
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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.00	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	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 20 & Wescott Rd
City: Colusa
Project ID: 18-07148-003
Date: 4/24/2018

Pedestrians (Crosswalks)

NS/EW Streets:	SR 20		SR 20		Wescott Rd		Wescott Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	1	0	0	0	0	2
APPROACH %'s :			50.00%	50.00%					
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	1	0	0	0	0	1
PEAK HR FACTOR :				0.250					0.250
			0.250						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	3	0	0	0	0	0	3
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	3	0	0	0	0	3
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
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	3	4	0	0	0	0	7
APPROACH %'s :			42.86%	57.14%					
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	0	0	3	0	0	0	0	3
PEAK HR FACTOR :				0.250					0.250
			0.250						

7126-001

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

SR 20 Bet. Sioc St & E Carson St

Day: Tuesday
Date: 4/24/2018

City: Colusa
Project #: CA18_7147_001

DAILY TOTALS	NB	SB	EB	WB	Total
	7,037	6,731	0	0	13,768

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	3		13		0	0	16		**12:00**	131		142		0	0	273	
00:15	10		4		0	0	14		**12:15**	125		104		0	0	229	
00:30	3		5		0	0	8		**12:30**	125		104		0	0	229	
00:45	8	24	13	35	0	0	21	59	**12:45**	122	503	115	465	0	0	237	968
01:00	3		3		0	0	6		**13:00**	141		98		0	0	239	
01:15	7		5		0	0	12		**13:15**	122		105		0	0	227	
01:30	4		9		0	0	13		**13:30**	109		100		0	0	209	
01:45	6	20	9	26	0	0	15	46	**13:45**	133	505	103	406	0	0	236	911
02:00	3		11		0	0	14		**14:00**	117		151		0	0	268	
02:15	2		8		0	0	10		**14:15**	121		128		0	0	249	
02:30	4		4		0	0	8		**14:30**	122		121		0	0	243	
02:45	2	11	5	28	0	0	7	39	**14:45**	132	492	154	554	0	0	286	1046
03:00	4		6		0	0	10		**15:00**	103		161		0	0	264	
03:15	2		6		0	0	8		**15:15**	140		122		0	0	262	
03:30	6		10		0	0	16		**15:30**	127		115		0	0	242	
03:45	5	17	14	36	0	0	19	53	**15:45**	106	476	156	554	0	0	262	1030
04:00	8		10		0	0	18		**16:00**	123		142		0	0	265	
04:15	20		24		0	0	44		**16:15**	120		137		0	0	257	
04:30	22		23		0	0	45		**16:30**	123		134		0	0	257	
04:45	18	68	36	93	0	0	54	161	**16:45**	118	484	152	565	0	0	270	1049
05:00	30		28		0	0	58		**17:00**	103		193		0	0	296	
05:15	51		25		0	0	76		**17:15**	137		122		0	0	259	
05:30	55		31		0	0	86		**17:30**	107		122		0	0	229	
05:45	101	237	32	116	0	0	133	353	**17:45**	113	460	121	558	0	0	234	1018
06:00	98		33		0	0	131		**18:00**	116		105		0	0	221	
06:15	122		66		0	0	188		**18:15**	90		91		0	0	181	
06:30	148		72		0	0	220		**18:30**	68		95		0	0	163	
06:45	130	498	75	246	0	0	205	744	**18:45**	78	352	85	376	0	0	163	728
07:00	79		61		0	0	140		**19:00**	75		73		0	0	148	
07:15	80		65		0	0	145		**19:15**	66		74		0	0	140	
07:30	131		71		0	0	202		**19:30**	55		73		0	0	128	
07:45	156	446	90	287	0	0	246	733	**19:45**	56	252	64	284	0	0	120	536
08:00	131		90		0	0	221		**20:00**	46		64		0	0	110	
08:15	107		80		0	0	187		**20:15**	55		63		0	0	118	
08:30	112		102		0	0	214		**20:30**	42		62		0	0	104	
08:45	106	456	93	365	0	0	199	821	**20:45**	45	188	52	241	0	0	97	429
09:00	120		85		0	0	205		**21:00**	28		40		0	0	68	
09:15	153		92		0	0	245		**21:15**	37		42		0	0	79	
09:30	123		83		0	0	206		**21:30**	35		27		0	0	62	
09:45	117	513	96	356	0	0	213	869	**21:45**	25	125	28	137	0	0	53	262
10:00	91		94		0	0	185		**22:00**	22		21		0	0	43	
10:15	75		93		0	0	168		**22:15**	25		20		0	0	45	
10:30	113		89		0	0	202		**22:30**	17		23		0	0	40	
10:45	88	367	101	377	0	0	189	744	**22:45**	13	77	21	85	0	0	34	162
11:00	92		87		0	0	179		**23:00**	10		22		0	0	32	
11:15	89		123		0	0	212		**23:15**	9		16		0	0	25	
11:30	147		107		0	0	254		**23:30**	7		21		0	0	28	
11:45	104	432	144	461	0	0	248	893	**23:45**	8	34	21	80	0	0	29	114
TOTALS		3089		2426				**5515**	**TOTALS**		3948		4305				**8253**
SPLIT %		56.0%		44.0%				**40.1%**	**SPLIT %**		47.8%		52.2%				**59.9%**

DAILY TOTALS	NB	SB	EB	WB	Total
	7,037	6,731	0	0	13,768

AM Peak Hour	07:30	11:15					**11:30**	**PM Peak Hour**	12:15	16:15					**16:30**
AM Pk Volume	525	516					**1004**	**PM Pk Volume**	513	616					**1082**
Pk Hr Factor	0.841	0.896					**0.919**	**Pk Hr Factor**	0.910	0.798					**0.914**
7 - 9 Volume	902	652	0	0			**1554**	**4 - 6 Volume**	944	1123	0	0			**2067**
7 - 9 Peak Hour	07:30	08:00					**07:45**	**4 - 6 Peak Hour**	16:00	16:15					**16:30**
7 - 9 Pk Volume	525	365	0	0			**868**	**4 - 6 Pk Volume**	484	616	0	0			**1082**
Pk Hr Factor	0.841	0.895	0.000	0.000			**0.882**	**Pk Hr Factor**	0.984	0.798	0.000	0.000			**0.914**

Prepared by National Data & Surveying Services

CLASSIFICATION

SR 20 Bet. Sioc St & E Carson St

Day: Tuesday
Date: 4/24/2018

City: Colusa
Project #: CA18_7147_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	15	1	0	0	0	0	0	0	0	0	0	0	16
00:15	0	12	0	0	2	0	0	0	0	0	0	0	0	14
00:30	0	5	2	0	1	0	0	0	0	0	0	0	0	8
00:45	0	17	1	0	2	0	0	1	0	0	0	0	0	21
01:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6
01:15	0	10	0	0	0	0	0	1	0	0	1	0	0	12
01:30	0	11	1	1	0	0	0	0	0	0	0	0	0	13
01:45	0	12	2	0	0	0	0	1	0	0	0	0	0	15
02:00	0	8	1	0	4	0	0	1	0	0	0	0	0	14
02:15	0	6	1	0	3	0	0	0	0	0	0	0	0	10
02:30	0	5	1	0	2	0	0	0	0	0	0	0	0	8
02:45	0	4	0	0	2	0	0	1	0	0	0	0	0	7
03:00	0	7	2	0	1	0	0	0	0	0	0	0	0	10
03:15	0	7	0	0	1	0	0	0	0	0	0	0	0	8
03:30	0	9	0	0	4	1	0	1	1	0	0	0	0	16
03:45	0	7	3	0	7	0	0	1	0	0	1	0	0	19
04:00	0	14	3	0	1	0	0	0	0	0	0	0	0	18
04:15	0	23	10	1	9	1	0	0	0	0	0	0	0	44
04:30	0	30	7	0	8	0	0	0	0	0	0	0	0	45
04:45	0	36	11	0	4	0	0	2	0	0	1	0	0	54
05:00	0	31	8	0	13	0	0	5	1	0	0	0	0	58
05:15	0	37	16	0	17	0	0	6	0	0	0	0	0	76
05:30	0	43	16	0	23	0	0	1	0	0	3	0	0	86
05:45	0	56	10	1	57	0	0	5	0	0	4	0	0	133
06:00	0	55	19	0	54	0	0	0	2	0	1	0	0	131
06:15	0	62	42	1	75	1	0	2	1	0	4	0	0	188
06:30	0	79	45	0	91	0	0	1	0	0	4	0	0	220
06:45	1	93	32	0	68	1	0	4	3	0	3	0	0	205
07:00	0	39	28	2	63	1	0	4	2	0	1	0	0	140
07:15	0	68	22	0	44	1	0	5	0	0	5	0	0	145
07:30	0	106	34	2	49	3	0	3	4	0	1	0	0	202
07:45	5	115	42	1	71	2	0	4	5	0	1	0	0	246
08:00	0	108	43	0	59	3	1	4	3	0	0	0	0	221
08:15	2	85	33	3	53	0	1	4	4	0	2	0	0	187
08:30	0	79	31	1	85	5	2	6	4	0	1	0	0	214
08:45	1	76	36	1	74	2	0	3	3	0	3	0	0	199
09:00	0	101	34	2	60	2	0	4	1	0	1	0	0	205
09:15	1	113	32	0	76	3	1	6	6	0	7	0	0	245
09:30	3	100	29	3	60	4	0	1	2	0	4	0	0	206
09:45	0	104	29	1	72	1	0	1	0	1	4	0	0	213
10:00	1	80	33	1	61	2	0	4	3	0	0	0	0	185
10:15	0	77	37	0	46	1	0	5	2	0	0	0	0	168
10:30	0	107	37	1	48	2	0	0	6	0	1	0	0	202
10:45	1	82	45	1	52	2	0	4	2	0	0	0	0	189
11:00	2	87	21	0	56	3	0	7	2	0	1	0	0	179
11:15	1	87	35	2	67	4	0	9	2	0	5	0	0	212
11:30	1	121	45	3	67	3	0	3	7	0	4	0	0	254
11:45	1	115	35	0	80	3	0	5	5	0	4	0	0	248
12:00 PM	1	140	32	1	80	4	0	5	5	0	5	0	0	273
12:15	2	113	43	1	58	0	1	3	4	0	4	0	0	229
12:30	2	102	41	0	73	0	0	2	2	0	7	0	0	229
12:45	1	120	34	1	66	5	0	4	5	0	1	0	0	237
13:00	0	125	45	0	56	3	0	3	6	0	1	0	0	239
13:15	2	109	39	3	57	1	0	6	5	0	5	0	0	227
13:30	0	93	38	1	64	2	1	5	3	0	2	0	0	209
13:45	2	129	36	3	53	4	0	5	4	0	0	0	0	236
14:00	1	136	44	2	71	2	0	6	4	0	2	0	0	268
14:15	2	122	34	2	71	2	1	8	4	0	3	0	0	249
14:30	1	129	35	1	68	0	0	6	0	0	3	0	0	243
14:45	0	147	37	3	84	2	0	9	1	0	3	0	0	286
15:00	2	116	44	2	84	4	0	5	7	0	0	0	0	264
15:15	2	116	60	3	69	1	0	5	3	0	3	0	0	262
15:30	0	124	38	1	71	0	1	5	2	0	0	0	0	242
15:45	0	127	44	2	77	1	0	6	2	1	2	0	0	262
16:00	1	144	46	1	61	1	0	8	2	0	1	0	0	265
16:15	1	138	39	2	64	1	0	6	3	0	3	0	0	257
16:30	0	129	47	0	70	1	0	5	4	0	1	0	0	257
16:45	1	149	53	0	57	2	0	3	2	0	3	0	0	270
17:00	0	170	45	3	65	0	0	8	2	0	3	0	0	296
17:15	3	137	49	2	61	1	0	3	3	0	0	0	0	259
17:30	1	128	40	0	51	0	0	4	3	0	2	0	0	229
17:45	0	113	46	0	74	0	0	1	0	0	0	0	0	234
18:00	0	135	35	1	47	1	0	1	1	0	0	0	0	221
18:15	2	96	34	0	46	0	0	1	2	0	0	0	0	181
18:30	2	94	29	1	34	0	0	2	1	0	0	0	0	163
18:45	2	89	32	0	38	1	0	1	0	0	0	0	0	163
19:00	2	78	30	0	34	4	0	0	0	0	0	0	0	148
19:15	0	83	22	0	31	0	0	2	2	0	0	0	0	140
19:30	1	69	27	0	31	0	0	0	0	0	0	0	0	128
19:45	1	75	22	0	20	0	0	1	0	0	1	0	0	120
20:00	1	60	22	0	25	0	0	1	1	0	0	0	0	110
20:15	0	69	16	0	30	1	0	1	1	0	0	0	0	118
20:30	0	57	17	1	27	0	0	2	0	0	0	0	0	104
20:45	0	58	21	0	16	0	0	1	1	0	0	0	0	97
21:00	1	41	9	1	14	0	0	1	1	0	0	0	0	68
21:15	0	55	8	0	16	0	0	0	0	0	0	0	0	79
21:30	0	39	11	0	11	0	0	0	1	0	0	0	0	62
21:45	0	32	13	0	8	0	0	0	0	0	0	0	0	53
22:00	1	30	5	0	7	0	0	0	0	0	0	0	0	43
22:15	0	35	7	1	2	0	0	0	0	0	0	0	0	45
22:30	0	34	4	0	2	0	0	0	0	0	0	0	0	40
22:45	0	24	5	1	3	0	0	0	0	0	1	0	0	34
23:00	0	23	5	0	3	0	0	1	0	0	0	0	0	32
23:15	0	19	3	0	3	0	0	0	0	0	0	0	0	25
23:30	0	17	5	0	5	1	0	0	0	0	0	0	0	28
23:45	0	19	8	0	1	0	0	1	0	0	0	0	0	29
Totals	**58**	**6935**	**2315**	**68**	**3752**	**96**	**9**	**252**	**158**	**2**	**123**			**13768**
% of Totals	0%	50%	17%	0%	27%	1%	0%	2%	1%	0%	1%			100%

AM Volumes	20	2548	916	28	1693	51	5	115	71	1	67	0	0	5515
% AM	0%	19%	7%	0%	12%	0%	0%	1%	1%	0%	0%			40%
AM Peak Hour	07:30	11:30	11:30	08:15	06:15	11:15	07:45	11:00	11:30	09:00	11:45			11:30
Volume	7	489	155	7	297	14	4	24	21	1	20			1004
PM Volumes	38	4387	1399	40	2059	45	4	137	87	1	56	0	0	8253
% PM	0%	32%	10%	0%	15%	0%	0%	1%	1%	0%	0%			60%
PM Peak Hour	18:15	16:15	16:30	13:15	14:45	12:45	13:30	14:00	12:45	15:00	12:00			16:30
Volume	8	586	194	9	308	11	2	29	19	1	17			1082

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	1554		11%	1879		14%	2067		15%	8268		60%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

SR 20 Bet. Sioc St & E Carson St

Day: Tuesday
Date: 4/24/2018

City: Colusa
Project #: CA18_7147_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	49	4	0	5	0	0	1	0	0	0	0	0	**59**
01:00	0	37	4	1	1	0	0	2	0	0	1	0	0	**46**
02:00	0	23	3	0	11	0	0	2	0	0	0	0	0	**39**
03:00	0	30	5	0	13	1	0	2	1	0	1	0	0	**53**
04:00	0	103	31	1	22	1	0	2	0	0	1	0	0	**161**
05:00	0	167	50	1	110	0	0	17	1	0	7	0	0	**353**
06:00	1	289	138	1	288	2	0	7	6	0	12	0	0	**744**
07:00	5	328	126	5	227	7	0	16	11	0	8	0	0	**733**
08:00	3	348	143	5	271	10	4	17	14	0	6	0	0	**821**
09:00	4	418	124	6	268	10	1	12	9	1	16	0	0	**869**
10:00	2	346	152	3	207	7	0	13	13	0	1	0	0	**744**
11:00	5	410	136	5	270	13	0	24	16	0	14	0	0	**893**
12:00 PM	6	475	150	3	277	9	1	14	16	0	17	0	0	**968**
13:00	4	456	158	7	230	10	1	19	18	0	8	0	0	**911**
14:00	4	534	150	8	294	6	1	29	9	0	11	0	0	**1046**
15:00	4	483	186	8	301	6	1	21	14	1	5	0	0	**1030**
16:00	3	560	185	3	252	5	0	22	11	0	8	0	0	**1049**
17:00	4	548	180	5	251	1	0	16	8	0	5	0	0	**1018**
18:00	6	414	130	2	165	2	0	5	4	0	0	0	0	**728**
19:00	4	305	101	0	116	4	0	3	2	0	1	0	0	**536**
20:00	1	244	76	1	98	1	0	5	3	0	0	0	0	**429**
21:00	1	167	41	1	49	0	0	1	2	0	0	0	0	**262**
22:00	1	123	21	2	14	0	0	0	0	0	1	0	0	**162**
23:00	0	78	21	0	12	1	0	2	0	0	0	0	0	**114**
Totals	**58**	**6935**	**2315**	**68**	**3752**	**96**	**9**	**252**	**158**	**2**	**123**			**13768**
% of Totals	0%	50%	17%	0%	27%	1%	0%	2%	1%	0%	1%			100%

AM Volumes	20	2548	916	28	1693	51	5	115	71	1	67	0	0	5515
% AM	0%	19%	7%	0%	12%	0%	0%	1%	1%	0%	0%			40%
AM Peak Hour	07:00	09:00	10:00	09:00	06:00	11:00	08:00	11:00	11:00	09:00	09:00			11:00
Volume	5	418	152	6	288	13	4	24	16	1	16			893
PM Volumes	38	4387	1399	40	2059	45	4	137	87	1	56	0	0	8253
% PM	0%	32%	10%	0%	15%	0%	0%	1%	1%	0%	0%			60%
PM Peak Hour	12:00	16:00	15:00	14:00	15:00	13:00	12:00	14:00	13:00	15:00	12:00			16:00
Volume	6	560	186	8	301	10	1	29	18	1	17			1049

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	1554		11%	1879		14%	2067		15%	8268		60%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

7126-001

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

E Carson St E/O Shopping Center

Day: Tuesday
Date: 4/24/2018

City: Colusa
Project #: CA18_7147_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	779	750	1,529

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0	0	2	1	3	12:00	0	0	17	21	38
00:15	0	0	0	1	1	12:15	0	0	8	14	22
00:30	0	0	0	1	1	12:30	0	0	13	12	25
00:45	0	0	1	3	1	4	2	7	12:45	0	0	15	53	10	57	25	110
01:00	0	0	0	0		13:00	0	0	8	13	21
01:15	0	0	1	0	1	13:15	0	0	9	11	20
01:30	0	0	0	0		13:30	0	0	18	10	28
01:45	0	0	0	1	0		1	13:45	0	0	10	45	13	47	23	92
02:00	0	0	1	0	1	14:00	0	0	9	15	24
02:15	0	0	0	0		14:15	0	0	10	10	20
02:30	0	0	0	0		14:30	0	0	16	19	35
02:45	0	0	1	2	0	1	2	14:45	0	0	17	52	10	54	27	106
03:00	0	0	0	0		15:00	0	0	13	15	28
03:15	0	0	0	0		15:15	0	0	12	10	22
03:30	0	0	0	0		15:30	0	0	13	19	32
03:45	0	0	2	2	2	2	4	4	15:45	0	0	15	53	12	56	27	109
04:00	0	0	0	1	1	16:00	0	0	15	16	31
04:15	0	0	1	1	2	16:15	0	0	17	12	29
04:30	0	0	1	1	2	16:30	0	0	8	28	36
04:45	0	0	2	4	8	11	10	15	16:45	0	0	11	51	16	72	27	123
05:00	0	0	2	1	3	17:00	0	0	20	19	39
05:15	0	0	2	5	7	17:15	0	0	13	11	24
05:30	0	0	2	6	8	17:30	0	0	12	12	24
05:45	0	0	2	8	2	14	4	22	17:45	0	0	21	66	8	50	29	116
06:00	0	0	3	8	11	18:00	0	0	13	17	30
06:15	0	0	5	6	11	18:15	0	0	13	12	25
06:30	0	0	7	11	18	18:30	0	0	12	13	25
06:45	0	0	11	26	9	34	20	60	18:45	0	0	15	53	11	53	26	106
07:00	0	0	7	8	15	19:00	0	0	10	6	16
07:15	0	0	5	8	13	19:15	0	0	6	7	13
07:30	0	0	8	11	19	19:30	0	0	9	8	17
07:45	0	0	25	45	17	44	42	89	19:45	0	0	7	32	5	26	12	58
08:00	0	0	26	22	48	20:00	0	0	16	10	26
08:15	0	0	23	9	32	20:15	0	0	12	5	17
08:30	0	0	8	8	16	20:30	0	0	10	4	14
08:45	0	0	14	71	6	45	20	116	20:45	0	0	15	53	7	26	22	79
09:00	0	0	8	9	17	21:00	0	0	7	7	14
09:15	0	0	10	7	17	21:15	0	0	11	10	21
09:30	0	0	10	9	19	21:30	0	0	9	4	13
09:45	0	0	9	37	12	37	21	74	21:45	0	0	6	33	5	26	11	59
10:00	0	0	7	4	11	22:00	0	0	3	2	5
10:15	0	0	10	8	18	22:15	0	0	7	3	10
10:30	0	0	8	8	16	22:30	0	0	3	4	7
10:45	0	0	7	32	9	29	16	61	22:45	0	0	2	15	2	11	4	26
11:00	0	0	10	9	19	23:00	0	0	0	0	
11:15	0	0	8	18	26	23:15	0	0	0	0	
11:30	0	0	12	9	21	23:30	0	0	1	2	3	
11:45	0	0	10	40	12	48	22	88	23:45	0	0	1	2	2	4	3	6
TOTALS			271	268	539	TOTALS			508	482	990
SPLIT %			50.3%	49.7%	35.3%	SPLIT %			51.3%	48.7%	64.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	779	750	1,529

AM Peak Hour			07:30	11:15	07:30	PM Peak Hour			17:00	16:15	16:15
AM Pk Volume			82	60	141	PM Pk Volume			66	75	131
Pk Hr Factor			0.788	0.714	0.734	Pk Hr Factor			0.786	0.670	0.840
7 - 9 Volume	0	0	116	89	205	4 - 6 Volume	0	0	117	122	239
7 - 9 Peak Hour			07:30	07:30	07:30	4 - 6 Peak Hour			17:00	16:15	16:15
7 - 9 Pk Volume	0	0	82	59	141	4 - 6 Pk Volume	0	0	66	75	131
Pk Hr Factor	0.000	0.000	0.788	0.670	0.734	Pk Hr Factor	0.000	0.000	0.786	0.670	0.840

Prepared by National Data & Surveying Services

CLASSIFICATION

E Carson St E/O Shopping Center

Day: Tuesday
Date: 4/24/2018

City: Colusa
Project #: CA18_7147_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
00:15	0	0	0	0	1	0	0	0	0	0	0	0	0	1
00:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
00:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2
04:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:45	0	10	0	0	0	0	0	0	0	0	0	0	0	10
05:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
05:15	0	3	4	0	0	0	0	0	0	0	0	0	0	7
05:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8
05:45	0	2	1	0	1	0	0	0	0	0	0	0	0	4
06:00	0	8	3	0	0	0	0	0	0	0	0	0	0	11
06:15	0	6	4	0	1	0	0	0	0	0	0	0	0	11
06:30	0	13	4	0	1	0	0	0	0	0	0	0	0	18
06:45	0	20	0	0	0	0	0	0	0	0	0	0	0	20
07:00	0	10	1	0	4	0	0	0	0	0	0	0	0	15
07:15	0	10	1	0	2	0	0	0	0	0	0	0	0	13
07:30	0	15	1	0	3	0	0	0	0	0	0	0	0	19
07:45	0	28	6	0	8	0	0	0	0	0	0	0	0	42
08:00	0	43	2	0	3	0	0	0	0	0	0	0	0	48
08:15	0	23	6	0	3	0	0	0	0	0	0	0	0	32
08:30	0	13	3	0	0	0	0	0	0	0	0	0	0	16
08:45	1	12	6	0	1	0	0	0	0	0	0	0	0	20
09:00	0	12	1	0	3	0	0	1	0	0	0	0	0	17
09:15	0	15	1	0	1	0	0	0	0	0	0	0	0	17
09:30	0	14	2	0	3	0	0	0	0	0	0	0	0	19
09:45	0	18	2	0	1	0	0	0	0	0	0	0	0	21
10:00	0	9	1	0	1	0	0	0	0	0	0	0	0	11
10:15	0	16	1	0	1	0	0	0	0	0	0	0	0	18
10:30	0	12	1	0	3	0	0	0	0	0	0	0	0	16
10:45	0	14	2	0	0	0	0	0	0	0	0	0	0	16
11:00	0	13	3	0	3	0	0	0	0	0	0	0	0	19
11:15	0	19	4	0	3	0	0	0	0	0	0	0	0	26
11:30	0	16	4	0	0	1	0	0	0	0	0	0	0	21
11:45	0	16	3	0	3	0	0	0	0	0	0	0	0	22
12:00 PM	0	27	4	0	7	0	0	0	0	0	0	0	0	38
12:15	0	19	1	0	2	0	0	0	0	0	0	0	0	22
12:30	0	16	4	0	4	1	0	0	0	0	0	0	0	25
12:45	0	19	2	0	2	1	0	1	0	0	0	0	0	25
13:00	0	17	2	0	1	1	0	0	0	0	0	0	0	21
13:15	0	16	3	0	1	0	0	0	0	0	0	0	0	20
13:30	0	23	4	0	1	0	0	0	0	0	0	0	0	28
13:45	0	18	3	0	1	1	0	0	0	0	0	0	0	23
14:00	0	19	3	0	1	1	0	0	0	0	0	0	0	24
14:15	0	12	4	0	4	0	0	0	0	0	0	0	0	20
14:30	0	28	5	0	2	0	0	0	0	0	0	0	0	35
14:45	0	21	4	0	2	0	0	0	0	0	0	0	0	27
15:00	0	20	5	0	3	0	0	0	0	0	0	0	0	28
15:15	0	17	1	0	4	0	0	0	0	0	0	0	0	22
15:30	0	28	3	0	1	0	0	0	0	0	0	0	0	32
15:45	0	22	2	0	3	0	0	0	0	0	0	0	0	27
16:00	0	26	3	0	2	0	0	0	0	0	0	0	0	31
16:15	0	23	5	0	0	0	0	1	0	0	0	0	0	29
16:30	0	33	0	0	3	0	0	0	0	0	0	0	0	36
16:45	0	20	2	0	5	0	0	0	0	0	0	0	0	27
17:00	0	36	3	0	0	0	0	0	0	0	0	0	0	39
17:15	0	16	3	0	5	0	0	0	0	0	0	0	0	24
17:30	0	18	3	0	3	0	0	0	0	0	0	0	0	24
17:45	0	23	3	0	3	0	0	0	0	0	0	0	0	29
18:00	2	26	1	0	1	0	0	0	0	0	0	0	0	30
18:15	0	22	0	0	3	0	0	0	0	0	0	0	0	25
18:30	0	22	0	0	3	0	0	0	0	0	0	0	0	25
18:45	0	26	0	0	0	0	0	0	0	0	0	0	0	26
19:00	0	14	1	0	1	0	0	0	0	0	0	0	0	16
19:15	0	10	0	0	3	0	0	0	0	0	0	0	0	13
19:30	0	12	2	0	3	0	0	0	0	0	0	0	0	17
19:45	0	11	0	0	1	0	0	0	0	0	0	0	0	12
20:00	0	19	7	0	0	0	0	0	0	0	0	0	0	26
20:15	0	16	1	0	0	0	0	0	0	0	0	0	0	17
20:30	0	11	3	0	0	0	0	0	0	0	0	0	0	14
20:45	0	17	4	0	1	0	0	0	0	0	0	0	0	22
21:00	0	14	0	0	0	0	0	0	0	0	0	0	0	14
21:15	0	18	1	0	2	0	0	0	0	0	0	0	0	21
21:30	0	12	1	0	0	0	0	0	0	0	0	0	0	13
21:45	0	9	1	0	1	0	0	0	0	0	0	0	0	11
22:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
22:15	0	8	0	0	2	0	0	0	0	0	0	0	0	10
22:30	0	6	1	0	0	0	0	0	0	0	0	0	0	7
22:45	0	2	0	0	2	0	0	0	0	0	0	0	0	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	1	0	0	2	0	0	0	0	0	0	0	0	3
23:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Totals	**3**	**1216**	**165**		**136**	**6**		**3**						**1529**
% of Totals	0%	80%	11%		9%	0%		0%						100%

AM Volumes	1	416	69	0	51	1	0	1	0	0	0	0	0	539
% AM	0%	27%	5%		3%	0%		0%						35%
AM Peak Hour	08:00	07:30	07:45		07:00	10:45		08:15						07:30
Volume	1	109	17		17	1		1						141
PM Volumes	2	800	96	0	85	5	0	2	0	0	0	0	0	990
% PM	0%	52%	6%		6%	0%		0%						65%
PM Peak Hour	17:15	16:15	14:15		12:00	12:15		12:00						16:15
Volume	2	112	18		15	3		1						131

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	205		13%	202		13%	239		16%	883		58%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

E Carson St E/O Shopping Center

Day: Tuesday
Date: 4/24/2018

City: Colusa
Project #: CA18_7147_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	5	1	0	1	0	0	0	0	0	0	0	0	7
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
03:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	14	1	0	0	0	0	0	0	0	0	0	0	15
05:00	0	16	5	0	1	0	0	0	0	0	0	0	0	22
06:00	0	47	11	0	2	0	0	0	0	0	0	0	0	60
07:00	0	63	9	0	17	0	0	0	0	0	0	0	0	89
08:00	1	91	17	0	7	0	0	0	0	0	0	0	0	116
09:00	0	59	6	0	8	0	0	1	0	0	0	0	0	74
10:00	0	51	5	0	5	0	0	0	0	0	0	0	0	61
11:00	0	64	14	0	9	1	0	0	0	0	0	0	0	88
12:00 PM	0	81	11	0	15	2	0	1	0	0	0	0	0	110
13:00	0	74	12	0	4	2	0	0	0	0	0	0	0	92
14:00	0	80	16	0	9	1	0	0	0	0	0	0	0	106
15:00	0	87	11	0	11	0	0	0	0	0	0	0	0	109
16:00	0	102	10	0	10	0	0	1	0	0	0	0	0	123
17:00	0	93	12	0	11	0	0	0	0	0	0	0	0	116
18:00	2	96	1	0	7	0	0	0	0	0	0	0	0	106
19:00	0	47	3	0	8	0	0	0	0	0	0	0	0	58
20:00	0	63	15	0	1	0	0	0	0	0	0	0	0	79
21:00	0	53	3	0	3	0	0	0	0	0	0	0	0	59
22:00	0	20	2	0	4	0	0	0	0	0	0	0	0	26
23:00	0	4	0	0	2	0	0	0	0	0	0	0	0	6
Totals	**3**	**1216**	**165**		**136**	**6**		**3**						**1529**
% of Totals	0%	80%	11%		9%	0%		0%						100%

AM Volumes	1	416	69	0	51	1	0	1	0	0	0	0	0	539
% AM	0%	27%	5%		3%	0%		0%						35%
AM Peak Hour	08:00	08:00	08:00		07:00	11:00		09:00						08:00
Volume	1	91	17		17	1		1						116
PM Volumes	2	800	96	0	85	5	0	2	0	0	0	0	0	990
% PM	0%	52%	6%		6%	0%		0%						65%
PM Peak Hour	18:00	16:00	14:00		12:00	12:00		12:00						16:00
Volume	2	102	16		15	2		1						123

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	205		13%	202		13%	239		16%	883		58%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	2	7	1	0	92	10	492	41	113	370	3
Future Vol, veh/h	1	2	7	1	0	92	10	492	41	113	370	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	75	-	-	65	-	-	65	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	2	8	1	0	100	11	535	45	123	402	3

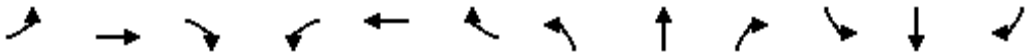
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1280	1252	404	1235	1231	558	405	0	0	580	0	0
Stage 1	650	650	-	580	580	-	-	-	-	-	-	-
Stage 2	630	602	-	655	651	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	143	172	647	153	177	529	1154	-	-	994	-	-
Stage 1	458	465	-	500	500	-	-	-	-	-	-	-
Stage 2	470	489	-	455	465	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	104	149	647	134	153	529	1154	-	-	994	-	-
Mov Cap-2 Maneuver	104	149	-	134	153	-	-	-	-	-	-	-
Stage 1	453	407	-	495	495	-	-	-	-	-	-	-
Stage 2	378	484	-	392	407	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.7	13.6	0.2	2.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1154	-	-	295	134	529	994	-	-
HCM Lane V/C Ratio	0.009	-	-	0.037	0.008	0.189	0.124	-	-
HCM Control Delay (s)	8.1	-	-	17.7	32.1	13.4	9.1	-	-
HCM Lane LOS	A	-	-	C	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0.7	0.4	-	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	68	59	102	63	49	522	83	41	393
v/c Ratio	0.16	0.12	0.26	0.12	0.13	0.50	0.09	0.11	0.41
Control Delay	18.6	3.3	19.8	3.9	25.3	14.5	4.6	25.8	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.6	3.3	19.8	3.9	25.3	14.5	4.6	25.8	14.8
Queue Length 50th (ft)	14	0	22	0	11	65	1	9	83
Queue Length 95th (ft)	51	14	71	16	52	325	27	47	232
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	886	935	807	935	810	1331	1153	810	1327
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	0.06	0.13	0.07	0.06	0.39	0.07	0.05	0.30

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	35	52	58	32	55	43	459	73	36	340	6
Future Volume (veh/h)	25	35	52	58	32	55	43	459	73	36	340	6
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	28	40	59	66	36	62	49	522	83	41	386	7
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	99	106	576	121	45	576	99	635	538	88	609	11
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.06	0.34	0.34	0.05	0.33	0.33
Sat Flow, veh/h	21	293	1585	40	123	1585	1781	1870	1585	1781	1831	33
Grp Volume(v), veh/h	68	0	59	102	0	62	49	522	83	41	0	393
Grp Sat Flow(s),veh/h/ln	314	0	1585	162	0	1585	1781	1870	1585	1781	0	1864
Q Serve(g_s), s	0.6	0.0	1.4	0.8	0.0	1.4	1.5	14.2	2.0	1.2	0.0	9.9
Cycle Q Clear(g_c), s	20.2	0.0	1.4	20.2	0.0	1.4	1.5	14.2	2.0	1.2	0.0	9.9
Prop In Lane	0.41		1.00	0.65		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	205	0	576	166	0	576	99	635	538	88	0	620
V/C Ratio(X)	0.33	0.00	0.10	0.62	0.00	0.11	0.49	0.82	0.15	0.47	0.00	0.63
Avail Cap(c_a), veh/h	217	0	587	177	0	587	481	1010	856	481	0	1006
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	11.7	20.6	0.0	11.7	25.5	16.8	12.8	25.7	0.0	15.7
Incr Delay (d2), s/veh	0.9	0.0	0.1	5.7	0.0	0.1	3.7	3.1	0.1	3.8	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.4	1.5	0.0	0.5	0.7	5.8	0.7	0.6	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.2	0.0	11.8	26.3	0.0	11.8	29.2	19.9	12.9	29.5	0.0	16.8
LnGrp LOS	B	A	B	C	A	B	C	B	B	C	A	B
Approach Vol, veh/h		127			164			654			434	
Approach Delay, s/veh		13.6			20.8			19.7			18.0	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	23.8		25.0	6.9	24.2		25.0				
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6				
Max Green Setting (Gmax), s	15.0	30.0		20.6	15.0	30.0		20.6				
Max Q Clear Time (g_c+I1), s	3.5	11.9		22.2	3.2	16.2		22.2				
Green Ext Time (p_c), s	0.1	2.3		0.0	0.0	3.1		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			18.7									
HCM 6th LOS			B									

Notes

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

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	137	3	1	437	365	81
Future Vol, veh/h	137	3	1	437	365	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Free
Storage Length	0	-	-	-	-	60
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	149	3	1	475	397	88

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	874	397	397	0	-	0
Stage 1	397	-	-	-	-	-
Stage 2	477	-	-	-	-	-
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	320	652	1162	-	-	0
Stage 1	679	-	-	-	-	0
Stage 2	624	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	320	652	1162	-	-	-
Mov Cap-2 Maneuver	320	-	-	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	624	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25.6	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT
Capacity (veh/h)	1162	-	324	-
HCM Lane V/C Ratio	0.001	-	0.47	-
HCM Control Delay (s)	8.1	0	25.6	-
HCM Lane LOS	A	A	D	-
HCM 95th %tile Q(veh)	0	-	2.4	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	13	88	137	80	2
Future Vol, veh/h	3	13	88	137	80	2
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	73	73	73	73	73	25
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	18	121	188	110	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	543	113	116	0	-	0
Stage 1	113	-	-	-	-	-
Stage 2	430	-	-	-	-	-
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	501	940	1473	-	-	-
Stage 1	912	-	-	-	-	-
Stage 2	656	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	455	940	1473	-	-	-
Mov Cap-2 Maneuver	455	-	-	-	-	-
Stage 1	828	-	-	-	-	-
Stage 2	656	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1473	-	783	-	-
HCM Lane V/C Ratio	0.082	-	0.028	-	-
HCM Control Delay (s)	7.7	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.1	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	5	11	4	140	15	443	23	165	573	1
Future Vol, veh/h	1	0	5	11	4	140	15	443	23	165	573	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	75	-	-	65	-	-	65	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	5	12	4	152	16	482	25	179	623	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1587	1521	624	1511	1509	495	624	0	0	507	0	0
Stage 1	982	982	-	527	527	-	-	-	-	-	-	-
Stage 2	605	539	-	984	982	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	87	118	485	99	120	575	957	-	-	1058	-	-
Stage 1	300	327	-	535	528	-	-	-	-	-	-	-
Stage 2	485	522	-	299	327	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	53	96	485	84	98	575	957	-	-	1058	-	-
Mov Cap-2 Maneuver	53	96	-	84	98	-	-	-	-	-	-	-
Stage 1	295	272	-	526	519	-	-	-	-	-	-	-
Stage 2	348	513	-	246	272	-	-	-	-	-	-	-

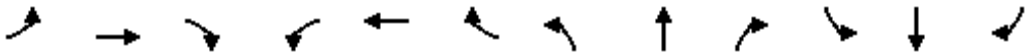
Approach	EB	WB	NB	SB
HCM Control Delay, s	23	18	0.3	2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	957	-	-	206	84	507	1058	-	-
HCM Lane V/C Ratio	0.017	-	-	0.032	0.142	0.309	0.17	-	-
HCM Control Delay (s)	8.8	-	-	23	54.8	15.2	9.1	-	-
HCM Lane LOS	A	-	-	C	F	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.5	1.3	0.6	-	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	58	77	199	78	52	432	90	48	590
v/c Ratio	0.13	0.16	0.54	0.16	0.20	0.55	0.13	0.19	0.75
Control Delay	19.7	5.5	26.5	5.6	30.1	17.7	5.4	30.2	24.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.7	5.5	26.5	5.6	30.1	17.7	5.4	30.2	24.0
Queue Length 50th (ft)	17	0	67	0	18	115	2	17	177
Queue Length 95th (ft)	46	25	139	26	56	267	32	53	#451
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	742	747	613	747	553	1156	1012	553	1151
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	0.10	0.32	0.10	0.09	0.37	0.09	0.09	0.51

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	39	71	136	47	72	48	397	83	44	531	12
Future Volume (veh/h)	15	39	71	136	47	72	48	397	83	44	531	12
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	42	77	148	51	78	52	432	90	48	577	13
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	76	157	541	104	21	541	103	701	594	98	678	15
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.06	0.37	0.37	0.05	0.37	0.37
Sat Flow, veh/h	0	460	1585	0	63	1585	1781	1870	1585	1781	1822	41
Grp Volume(v), veh/h	58	0	77	199	0	78	52	432	90	48	0	590
Grp Sat Flow(s),veh/h/ln	460	0	1585	63	0	1585	1781	1870	1585	1781	0	1863
Q Serve(g_s), s	0.0	0.0	2.0	0.0	0.0	2.1	1.7	11.3	2.3	1.6	0.0	17.6
Cycle Q Clear(g_c), s	20.6	0.0	2.0	20.6	0.0	2.1	1.7	11.3	2.3	1.6	0.0	17.6
Prop In Lane	0.28		1.00	0.74		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	233	0	541	125	0	541	103	701	594	98	0	693
V/C Ratio(X)	0.25	0.00	0.14	1.59	0.00	0.14	0.50	0.62	0.15	0.49	0.00	0.85
Avail Cap(c_a), veh/h	233	0	541	125	0	541	443	930	788	443	0	926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	13.7	26.7	0.0	13.8	27.6	15.3	12.5	27.7	0.0	17.4
Incr Delay (d2), s/veh	0.6	0.0	0.1	298.4	0.0	0.1	3.8	0.9	0.1	3.8	0.0	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.7	12.1	0.0	0.7	0.8	4.4	0.7	0.7	0.0	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	0.0	13.9	325.1	0.0	13.9	31.4	16.2	12.6	31.4	0.0	23.3
LnGrp LOS	B	A	B	F	A	B	C	B	B	C	A	C
Approach Vol, veh/h		135			277			574			638	
Approach Delay, s/veh		14.8			237.4			17.0			23.9	
Approach LOS		B			F			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	27.5		25.2	7.4	27.7		25.2				
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6				
Max Green Setting (Gmax), s	15.0	30.0		20.6	15.0	30.0		20.6				
Max Q Clear Time (g_c+I1), s	3.7	19.6		22.6	3.6	13.3		22.6				
Green Ext Time (p_c), s	0.1	2.9		0.0	0.1	2.8		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		57.1	
HCM 6th LOS		E	

Notes

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

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	114	3	3	409	520	218
Future Vol, veh/h	114	3	3	409	520	218
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Free
Storage Length	0	-	-	-	-	60
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	124	3	3	445	565	237

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1016	565	565	0	-	0
Stage 1	565	-	-	-	-	-
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	264	524	1007	-	-	0
Stage 1	569	-	-	-	-	0
Stage 2	642	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	263	524	1007	-	-	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	642	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.3	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT
Capacity (veh/h)	1007	-	266	-
HCM Lane V/C Ratio	0.003	-	0.478	-
HCM Control Delay (s)	8.6	0	30.3	-
HCM Lane LOS	A	A	D	-
HCM 95th %tile Q(veh)	0	-	2.4	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	10	37	114	213	6
Future Vol, veh/h	3	10	37	114	213	6
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	11	42	130	242	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	460	246	249	0	-	0
Stage 1	246	-	-	-	-	-
Stage 2	214	-	-	-	-	-
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	559	793	1317	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	822	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	540	793	1317	-	-	-
Mov Cap-2 Maneuver	540	-	-	-	-	-
Stage 1	768	-	-	-	-	-
Stage 2	822	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	1.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1317	-	716	-	-
HCM Lane V/C Ratio	0.032	-	0.021	-	-
HCM Control Delay (s)	7.8	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	2	17	3	0	92	18	525	43	113	408	3
Future Vol, veh/h	1	2	17	3	0	92	18	525	43	113	408	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	75	-	-	65	-	-	65	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	2	18	3	0	100	20	571	47	123	443	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1376	1349	445	1336	1327	595	446	0	0	618	0	0
Stage 1	691	691	-	635	635	-	-	-	-	-	-	-
Stage 2	685	658	-	701	692	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	122	151	613	130	155	504	1114	-	-	962	-	-
Stage 1	435	446	-	467	472	-	-	-	-	-	-	-
Stage 2	438	461	-	429	445	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	87	129	613	111	133	504	1114	-	-	962	-	-
Mov Cap-2 Maneuver	87	129	-	111	133	-	-	-	-	-	-	-
Stage 1	427	389	-	459	464	-	-	-	-	-	-	-
Stage 2	345	453	-	361	388	-	-	-	-	-	-	-

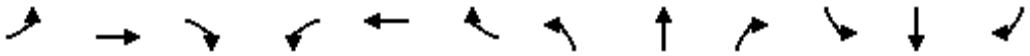
Approach	EB	WB	NB	SB
HCM Control Delay, s	15.5	14.7	0.3	2
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1114	-	-	365	111	504	962	-	-
HCM Lane V/C Ratio	0.018	-	-	0.06	0.029	0.198	0.128	-	-
HCM Control Delay (s)	8.3	-	-	15.5	38.4	13.9	9.3	-	-
HCM Lane LOS	A	-	-	C	E	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	0.7	0.4	-	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	68	83	102	63	68	570	83	41	677
v/c Ratio	0.19	0.20	0.32	0.15	0.23	0.48	0.08	0.15	0.62
Control Delay	22.7	6.6	24.8	4.2	29.0	13.7	4.3	29.6	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.7	6.6	24.8	4.2	29.0	13.7	4.3	29.6	19.0
Queue Length 50th (ft)	22	0	35	0	23	75	1	14	185
Queue Length 95th (ft)	52	27	74	17	67	#365	26	47	#546
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	754	812	689	812	614	1198	1045	614	1108
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	0.10	0.15	0.08	0.11	0.48	0.08	0.07	0.61

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	35	73	58	32	55	60	502	73	36	590	6
Future Volume (veh/h)	25	35	73	58	32	55	60	502	73	36	590	6
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	28	40	83	66	36	62	68	570	83	41	670	7
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	79	82	503	92	32	503	116	705	598	165	747	8
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.07	0.38	0.38	0.09	0.40	0.40
Sat Flow, veh/h	0	259	1585	1	99	1585	1781	1870	1585	1781	1848	19
Grp Volume(v), veh/h	68	0	83	102	0	62	68	570	83	41	0	677
Grp Sat Flow(s),veh/h/ln	259	0	1585	100	0	1585	1781	1870	1585	1781	0	1867
Q Serve(g_s), s	0.0	0.0	2.4	0.0	0.0	1.8	2.4	17.7	2.2	1.4	0.0	22.0
Cycle Q Clear(g_c), s	20.6	0.0	2.4	20.6	0.0	1.8	2.4	17.7	2.2	1.4	0.0	22.0
Prop In Lane	0.41		1.00	0.65		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	161	0	503	123	0	503	116	705	598	165	0	755
V/C Ratio(X)	0.42	0.00	0.16	0.83	0.00	0.12	0.58	0.81	0.14	0.25	0.00	0.90
Avail Cap(c_a), veh/h	161	0	504	123	0	504	412	865	733	412	0	864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	15.9	26.2	0.0	15.7	29.5	18.1	13.3	27.3	0.0	18.1
Incr Delay (d2), s/veh	1.8	0.0	0.2	35.1	0.0	0.1	4.6	4.7	0.1	0.8	0.0	11.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.9	2.8	0.0	0.6	1.1	7.6	0.7	0.6	0.0	10.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	0.0	16.1	61.4	0.0	15.8	34.0	22.8	13.4	28.1	0.0	29.1
LnGrp LOS	B	A	B	E	A	B	C	C	B	C	A	C
Approach Vol, veh/h		151			164			721			718	
Approach Delay, s/veh		17.8			44.2			22.8			29.1	
Approach LOS		B			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	31.3		25.2	10.1	29.6		25.2				
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6				
Max Green Setting (Gmax), s	15.0	30.0		20.6	15.0	30.0		20.6				
Max Q Clear Time (g_c+I1), s	4.4	24.0		22.6	3.4	19.7		22.6				
Green Ext Time (p_c), s	0.1	2.3		0.0	0.0	2.8		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		26.9	
HCM 6th LOS		C	

Notes

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

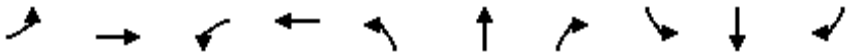
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	29	0	606	18	0	426	91
Future Vol, veh/h	0	0	0	0	0	29	0	606	18	0	426	91
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	32	0	659	20	0	463	99

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	669	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	458	0	-	-	0	-	-
Stage 1	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	-	-	0	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	-	0	458	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.4	0	0
HCM LOS	B		

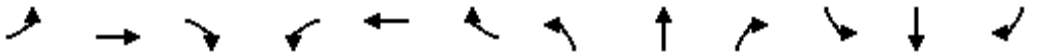
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	458	-	-
HCM Lane V/C Ratio	-	-	0.069	-	-
HCM Control Delay (s)	-	-	13.4	-	-
HCM Lane LOS	-	-	B	-	-
HCM 95th %tile Q(veh)	-	-	0.2	-	-



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	167	36	62	110	11	420	71	109	343	11
v/c Ratio	0.41	0.07	0.17	0.29	0.04	0.49	0.08	0.31	0.31	0.01
Control Delay	35.6	18.3	36.8	13.1	40.7	24.4	0.2	37.1	14.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.6	18.3	36.8	13.1	40.7	24.4	0.2	37.1	14.5	0.0
Queue Length 50th (ft)	62	8	17	8	4	147	0	41	74	0
Queue Length 95th (ft)	#188	34	#97	56	26	358	0	132	258	0
Internal Link Dist (ft)		562		472		288			170	
Turn Bay Length (ft)	90		90		90			90		60
Base Capacity (vph)	663	734	394	383	271	1146	1058	538	1267	1130
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	0.25	0.05	0.16	0.29	0.04	0.37	0.07	0.20	0.27	0.01

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	18	15	57	18	83	10	386	65	100	316	10
Future Volume (veh/h)	154	18	15	57	18	83	10	386	65	100	316	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	167	20	16	62	20	90	11	420	71	109	343	11
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	219	162	130	124	34	153	30	567	480	168	712	603
Arrive On Green	0.12	0.17	0.17	0.07	0.11	0.11	0.02	0.30	0.30	0.09	0.38	0.38
Sat Flow, veh/h	1781	962	770	1781	296	1334	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	167	0	36	62	0	110	11	420	71	109	343	11
Grp Sat Flow(s),veh/h/ln	1781	0	1732	1781	0	1630	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.5	0.0	0.9	1.6	0.0	3.1	0.3	9.9	1.6	2.9	6.8	0.2
Cycle Q Clear(g_c), s	4.5	0.0	0.9	1.6	0.0	3.1	0.3	9.9	1.6	2.9	6.8	0.2
Prop In Lane	1.00		0.44	1.00		0.82	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	219	0	292	124	0	187	30	567	480	168	712	603
V/C Ratio(X)	0.76	0.00	0.12	0.50	0.00	0.59	0.36	0.74	0.15	0.65	0.48	0.02
Avail Cap(c_a), veh/h	576	0	529	250	0	199	218	1439	1219	431	1663	1410
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	17.3	22.0	0.0	20.6	23.9	15.4	12.5	21.5	11.5	9.5
Incr Delay (d2), s/veh	5.4	0.0	0.2	3.1	0.0	4.0	7.1	1.9	0.1	4.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.3	0.7	0.0	1.3	0.2	3.9	0.5	1.3	2.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.2	0.0	17.5	25.1	0.0	24.6	31.0	17.3	12.6	25.6	12.1	9.5
LnGrp LOS	C	A	B	C	A	C	C	B	B	C	B	A
Approach Vol, veh/h		203			172			502			463	
Approach Delay, s/veh		24.7			24.8			17.0			15.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	20.0	7.5	12.9	4.9	23.8	10.2	10.2
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6
Max Green Setting (Gmax), s	11.9	37.8	6.9	15.0	6.0	43.7	15.9	6.0
Max Q Clear Time (g_c+I1), s	4.9	11.9	3.6	2.9	2.3	8.8	6.5	5.1
Green Ext Time (p_c), s	0.1	3.0	0.0	0.1	0.0	2.3	0.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	12	90	152	32	87
Future Vol, veh/h	12	12	90	152	32	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	16	123	208	44	119

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	434	227	0	0	331	0
Stage 1	227	-	-	-	-	-
Stage 2	207	-	-	-	-	-
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	579	812	-	-	1228	-
Stage 1	811	-	-	-	-	-
Stage 2	828	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	557	812	-	-	1228	-
Mov Cap-2 Maneuver	557	-	-	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	797	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	2.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	661	1228	-
HCM Lane V/C Ratio	-	-	0.05	0.036	-
HCM Control Delay (s)	-	-	10.7	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	18	29	0	0	91	0	12	20	70	1
Future Vol, veh/h	0	0	18	29	0	0	91	0	12	20	70	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	73	73	73	73	73	73	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	25	40	0	0	125	0	16	27	96	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	409	417	97	421	409	8	97	0	0	16	0	0
Stage 1	151	151	-	258	258	-	-	-	-	-	-	-
Stage 2	258	266	-	163	151	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	553	527	959	543	532	1074	1496	-	-	1602	-	-
Stage 1	851	772	-	747	694	-	-	-	-	-	-	-
Stage 2	747	689	-	839	772	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	510	474	959	488	479	1074	1496	-	-	1602	-	-
Mov Cap-2 Maneuver	510	474	-	488	479	-	-	-	-	-	-	-
Stage 1	780	758	-	684	636	-	-	-	-	-	-	-
Stage 2	684	631	-	803	758	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	13	6.7	1.6
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1496	-	-	959	488	1602	-	-
HCM Lane V/C Ratio	0.083	-	-	0.026	0.081	0.017	-	-
HCM Control Delay (s)	7.6	0	-	8.9	13	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	16	15	4	140	25	487	26	165	620	1
Future Vol, veh/h	1	0	16	15	4	140	25	487	26	165	620	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	75	-	-	65	-	-	65	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	17	16	4	152	27	529	28	179	674	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1708	1644	675	1638	1630	543	675	0	0	557	0	0
Stage 1	1033	1033	-	597	597	-	-	-	-	-	-	-
Stage 2	675	611	-	1041	1033	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	72	100	454	80	102	540	916	-	-	1014	-	-
Stage 1	281	310	-	490	491	-	-	-	-	-	-	-
Stage 2	444	484	-	278	310	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	42	80	454	65	81	540	916	-	-	1014	-	-
Mov Cap-2 Maneuver	42	80	-	65	81	-	-	-	-	-	-	-
Stage 1	273	255	-	476	477	-	-	-	-	-	-	-
Stage 2	307	470	-	220	255	-	-	-	-	-	-	-

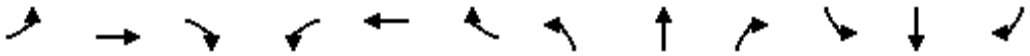
Approach	EB	WB	NB	SB
HCM Control Delay, s	18.4	22.3	0.4	2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	916	-	-	288	65	467	1014	-	-
HCM Lane V/C Ratio	0.03	-	-	0.064	0.251	0.335	0.177	-	-
HCM Control Delay (s)	9.1	-	-	18.4	78	16.5	9.3	-	-
HCM Lane LOS	A	-	-	C	F	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.9	1.5	0.6	-	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	61	109	208	82	81	517	94	50	688
v/c Ratio	0.15	0.24	0.63	0.19	0.34	0.56	0.11	0.24	0.82
Control Delay	21.8	6.2	32.9	6.2	33.3	17.6	5.5	33.1	29.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.8	6.2	32.9	6.2	33.3	17.6	5.5	33.1	29.7
Queue Length 50th (ft)	20	0	79	0	31	151	3	19	239
Queue Length 95th (ft)	49	32	146	27	77	323	32	55	#568
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	581	623	481	608	433	1002	887	433	909
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	0.17	0.43	0.13	0.19	0.52	0.11	0.12	0.76

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	39	96	136	47	72	71	455	83	44	593	12
Future Volume (veh/h)	15	39	96	136	47	72	71	455	83	44	593	12
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	17	44	109	155	53	82	81	517	94	50	674	14
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	70	142	495	95	19	495	125	724	614	162	745	15
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.07	0.39	0.39	0.09	0.41	0.41
Sat Flow, veh/h	0	454	1585	0	62	1585	1781	1870	1585	1781	1826	38
Grp Volume(v), veh/h	61	0	109	208	0	82	81	517	94	50	0	688
Grp Sat Flow(s),veh/h/ln	454	0	1585	62	0	1585	1781	1870	1585	1781	0	1864
Q Serve(g_s), s	0.0	0.0	3.3	0.0	0.0	2.5	2.9	15.4	2.5	1.7	0.0	22.8
Cycle Q Clear(g_c), s	20.6	0.0	3.3	20.6	0.0	2.5	2.9	15.4	2.5	1.7	0.0	22.8
Prop In Lane	0.28		1.00	0.75		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	212	0	495	115	0	495	125	724	614	162	0	760
V/C Ratio(X)	0.29	0.00	0.22	1.81	0.00	0.17	0.65	0.71	0.15	0.31	0.00	0.91
Avail Cap(c_a), veh/h	212	0	495	115	0	495	405	851	721	405	0	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	16.7	29.5	0.0	16.4	29.8	17.1	13.2	28.0	0.0	18.3
Incr Delay (d2), s/veh	0.7	0.0	0.2	398.2	0.0	0.2	5.5	2.3	0.1	1.1	0.0	12.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.2	14.5	0.0	0.9	1.4	6.3	0.8	0.7	0.0	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.7	0.0	17.0	427.7	0.0	16.6	35.3	19.4	13.3	29.1	0.0	30.7
LnGrp LOS	B	A	B	F	A	B	D	B	B	C	A	C
Approach Vol, veh/h		170			290			692			738	
Approach Delay, s/veh		17.6			311.5			20.5			30.6	
Approach LOS		B			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	32.0		25.2	10.1	30.6		25.2				
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6				
Max Green Setting (Gmax), s	15.0	30.0		20.6	15.0	30.0		20.6				
Max Q Clear Time (g_c+I1), s	4.9	24.8		22.6	3.7	17.4		22.6				
Green Ext Time (p_c), s	0.1	2.0		0.0	0.1	2.9		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		68.8	
HCM 6th LOS		E	

Notes

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

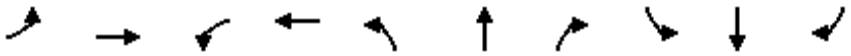
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	40	0	564	23	0	612	213
Future Vol, veh/h	0	0	0	0	0	40	0	564	23	0	612	213
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	43	0	613	25	0	665	232

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	626	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	484	0	-	-	0	-	-
Stage 1	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	-	-	0	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	-	0	484	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.2	0	0
HCM LOS	B		

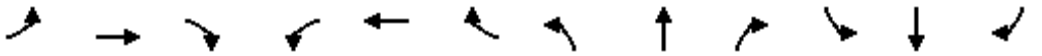
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	484	-	-
HCM Lane V/C Ratio	-	-	0.09	-	-
HCM Control Delay (s)	-	-	13.2	-	-
HCM Lane LOS	-	-	B	-	-
HCM 95th %tile Q(veh)	-	-	0.3	-	-



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	139	38	78	140	11	383	84	129	512	237
v/c Ratio	0.45	0.09	0.26	0.41	0.06	0.62	0.13	0.45	0.58	0.28
Control Delay	36.7	19.6	37.2	14.4	40.0	27.1	0.4	38.7	18.2	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.7	19.6	37.2	14.4	40.0	27.1	0.4	38.7	18.2	5.9
Queue Length 50th (ft)	49	9	20	10	4	128	0	45	119	12
Queue Length 95th (ft)	157	36	#131	66	26	321	0	#170	418	84
Internal Link Dist (ft)		562		472		288			170	
Turn Bay Length (ft)	90		90		90		250	90		50
Base Capacity (vph)	525	592	307	339	198	1176	1080	393	1301	1156
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	0.26	0.06	0.25	0.41	0.06	0.33	0.08	0.33	0.39	0.21

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	23	12	72	25	104	10	352	77	119	471	218
Future Volume (veh/h)	128	23	12	72	25	104	10	352	77	119	471	218
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	139	25	13	78	27	113	11	383	84	129	512	237
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	190	171	89	145	39	162	30	538	456	185	700	593
Arrive On Green	0.11	0.15	0.15	0.08	0.12	0.12	0.02	0.29	0.29	0.10	0.37	0.37
Sat Flow, veh/h	1781	1159	603	1781	315	1318	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	139	0	38	78	0	140	11	383	84	129	512	237
Grp Sat Flow(s),veh/h/ln	1781	0	1762	1781	0	1633	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.6	0.0	0.9	2.0	0.0	3.9	0.3	8.7	1.9	3.3	11.1	5.2
Cycle Q Clear(g_c), s	3.6	0.0	0.9	2.0	0.0	3.9	0.3	8.7	1.9	3.3	11.1	5.2
Prop In Lane	1.00		0.34	1.00		0.81	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	0	261	145	0	200	30	538	456	185	700	593
V/C Ratio(X)	0.73	0.00	0.15	0.54	0.00	0.70	0.36	0.71	0.18	0.70	0.73	0.40
Avail Cap(c_a), veh/h	600	0	560	260	0	208	226	1498	1269	449	1732	1468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	0.0	17.5	20.8	0.0	19.9	22.9	15.1	12.6	20.4	12.7	10.9
Incr Delay (d2), s/veh	5.4	0.0	0.3	3.1	0.0	9.5	7.1	1.8	0.2	4.7	1.5	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	1.6	0.0	0.3	0.9	0.0	1.9	0.2	3.4	0.6	1.5	4.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	0.0	17.8	23.9	0.0	29.4	30.0	16.8	12.8	25.1	14.2	11.3
LnGrp LOS	C	A	B	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		177			218			478			878	
Approach Delay, s/veh		24.1			27.4			16.4			15.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	18.7	7.9	11.6	4.9	22.8	9.1	10.4
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6
Max Green Setting (Gmax), s	11.9	37.8	6.9	15.0	6.0	43.7	15.9	6.0
Max Q Clear Time (g_c+I1), s	5.3	10.7	4.0	2.9	2.3	13.1	5.6	5.9
Green Ext Time (p_c), s	0.2	2.7	0.0	0.1	0.0	4.5	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.9
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	39	12	39	134	26	204
Future Vol, veh/h	39	12	39	134	26	204
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	42	13	42	146	28	222

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	393	115	0	0	188	0
Stage 1	115	-	-	-	-	-
Stage 2	278	-	-	-	-	-
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	611	937	-	-	1386	-
Stage 1	910	-	-	-	-	-
Stage 2	769	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	597	937	-	-	1386	-
Mov Cap-2 Maneuver	597	-	-	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	751	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	653	1386	-
HCM Lane V/C Ratio	-	-	0.085	0.02	-
HCM Control Delay (s)	-	-	11	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	16	22	0	0	43	0	8	15	193	3
Future Vol, veh/h	0	0	16	22	0	0	43	0	8	15	193	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	18	25	0	0	49	0	9	17	219	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	358	362	221	367	359	5	222	0	0	9	0	0
Stage 1	255	255	-	103	103	-	-	-	-	-	-	-
Stage 2	103	107	-	264	256	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	597	565	819	589	568	1078	1347	-	-	1611	-	-
Stage 1	749	696	-	903	810	-	-	-	-	-	-	-
Stage 2	903	807	-	741	696	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	575	537	819	555	540	1078	1347	-	-	1611	-	-
Mov Cap-2 Maneuver	575	537	-	555	540	-	-	-	-	-	-	-
Stage 1	721	688	-	870	780	-	-	-	-	-	-	-
Stage 2	870	777	-	716	688	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	11.8	6.6	0.5
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1347	-	-	819	555	1611	-	-
HCM Lane V/C Ratio	0.036	-	-	0.022	0.045	0.011	-	-
HCM Control Delay (s)	7.8	0	-	9.5	11.8	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	61	109	208	82	81	517	94	50	688
v/c Ratio	0.14	0.22	0.58	0.17	0.36	0.63	0.12	0.22	0.85
Control Delay	18.2	5.2	26.4	3.0	33.1	18.1	3.5	30.3	28.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.2	5.2	26.4	3.0	33.1	18.1	3.5	30.3	28.0
Queue Length 50th (ft)	18	0	70	0	28	132	0	17	202
Queue Length 95th (ft)	41	27	124	15	#86	300	22	53	#509
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	512	565	424	565	229	1083	964	225	1077
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	0.19	0.49	0.15	0.35	0.48	0.10	0.22	0.64

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	39	96	136	47	72	71	455	83	44	593	12
Future Volume (veh/h)	15	39	96	136	47	72	71	455	83	44	593	12
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	44	109	155	53	82	81	517	94	50	674	14
Adj No. of Lanes	0	1	1	0	1	1	1	1	1	1	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	158	378	117	20	378	139	729	620	199	773	16
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.08	0.39	0.39	0.11	0.42	0.42
Sat Flow, veh/h	0	660	1583	0	83	1583	1774	1863	1583	1774	1818	38
Grp Volume(v), veh/h	61	0	109	208	0	82	81	517	94	50	0	688
Grp Sat Flow(s),veh/h/ln	660	0	1583	83	0	1583	1774	1863	1583	1774	0	1856
Q Serve(g_s), s	0.0	0.0	3.0	0.0	0.0	2.2	2.4	12.5	2.1	1.4	0.0	18.1
Cycle Q Clear(g_c), s	12.8	0.0	3.0	12.8	0.0	2.2	2.4	12.5	2.1	1.4	0.0	18.1
Prop In Lane	0.28		1.00	0.75		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	244	0	378	137	0	378	139	729	620	199	0	789
V/C Ratio(X)	0.25	0.00	0.29	1.52	0.00	0.22	0.58	0.71	0.15	0.25	0.00	0.87
Avail Cap(c_a), veh/h	244	0	378	137	0	378	202	953	810	199	0	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	16.7	25.0	0.0	16.4	23.8	13.7	10.5	21.7	0.0	14.1
Incr Delay (d2), s/veh	0.5	0.0	0.4	266.2	0.0	0.3	3.8	1.7	0.1	0.7	0.0	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.3	12.1	0.0	1.0	1.3	6.7	0.9	0.7	0.0	10.9
LnGrp Delay(d),s/veh	17.2	0.0	17.1	291.2	0.0	16.6	27.6	15.4	10.7	22.4	0.0	21.9
LnGrp LOS	B		B	F		B	C	B	B	C		C
Approach Vol, veh/h		170			290			692			738	
Approach Delay, s/veh		17.1			213.5			16.2			22.0	
Approach LOS		B			F			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	27.9		17.4	10.1	26.1		17.4
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6
Max Green Setting (Gmax), s	6.1	27.3		12.8	6.0	27.4		12.8
Max Q Clear Time (g_c+I1), s	4.4	20.1		14.8	3.4	14.5		14.8
Green Ext Time (p_c), s	0.0	2.6		0.0	0.0	2.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.8
HCM 2010 LOS	D

Notes

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

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	5	5	5	0	95	10	635	40	115	521	10
Future Vol, veh/h	5	5	5	5	0	95	10	635	40	115	521	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	75	-	-	65	-	-	65	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	5	5	5	0	103	11	690	43	125	566	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1607	1577	572	1561	1561	712	577	0	0	733	0	0
Stage 1	822	822	-	734	734	-	-	-	-	-	-	-
Stage 2	785	755	-	827	827	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	85	110	520	91	112	432	996	-	-	872	-	-
Stage 1	368	388	-	412	426	-	-	-	-	-	-	-
Stage 2	386	417	-	366	386	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	57	93	520	76	95	432	996	-	-	872	-	-
Mov Cap-2 Maneuver	57	93	-	76	95	-	-	-	-	-	-	-
Stage 1	364	333	-	407	421	-	-	-	-	-	-	-
Stage 2	290	412	-	305	331	-	-	-	-	-	-	-

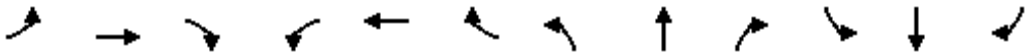
Approach	EB	WB	NB	SB
HCM Control Delay, s	48.4	17.9	0.1	1.7
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	996	-	-	99	76	432	872	-	-
HCM Lane V/C Ratio	0.011	-	-	0.165	0.072	0.239	0.143	-	-
HCM Control Delay (s)	8.7	-	-	48.4	56	15.9	9.8	-	-
HCM Lane LOS	A	-	-	E	F	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.2	0.9	0.5	-	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	74	199	113	63	159	682	85	45	556
v/c Ratio	0.24	0.42	0.40	0.17	0.49	0.71	0.10	0.20	0.70
Control Delay	24.6	6.9	27.6	4.5	31.9	19.9	4.5	31.6	23.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.6	6.9	27.6	4.5	31.9	19.9	4.5	31.6	23.6
Queue Length 50th (ft)	24	0	38	0	53	187	1	15	160
Queue Length 95th (ft)	59	43	85	17	134	#523	27	52	#431
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	601	738	561	668	485	1078	949	485	1019
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	0.27	0.20	0.09	0.33	0.63	0.09	0.09	0.55

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	35	175	60	40	55	140	600	75	40	480	10
Future Volume (veh/h)	30	35	175	60	40	55	140	600	75	40	480	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	34	40	199	68	45	62	159	682	85	45	545	11
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	78	65	483	85	37	483	202	753	638	158	690	14
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.11	0.40	0.40	0.09	0.38	0.38
Sat Flow, veh/h	0	213	1585	0	120	1585	1781	1870	1585	1781	1827	37
Grp Volume(v), veh/h	74	0	199	113	0	62	159	682	85	45	0	556
Grp Sat Flow(s),veh/h/ln	213	0	1585	120	0	1585	1781	1870	1585	1781	0	1864
Q Serve(g_s), s	0.0	0.0	6.8	0.0	0.0	1.9	5.9	23.2	2.3	1.6	0.0	17.9
Cycle Q Clear(g_c), s	20.6	0.0	6.8	20.6	0.0	1.9	5.9	23.2	2.3	1.6	0.0	17.9
Prop In Lane	0.46		1.00	0.60		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	143	0	483	122	0	483	202	753	638	158	0	704
V/C Ratio(X)	0.52	0.00	0.41	0.93	0.00	0.13	0.79	0.91	0.13	0.28	0.00	0.79
Avail Cap(c_a), veh/h	143	0	483	122	0	483	395	830	703	395	0	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.5	0.0	18.7	27.4	0.0	17.0	29.2	19.0	12.8	28.8	0.0	18.7
Incr Delay (d2), s/veh	3.3	0.0	0.6	59.2	0.0	0.1	6.6	12.7	0.1	1.0	0.0	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	0.9	0.0	2.4	3.8	0.0	0.7	2.7	11.4	0.7	0.7	0.0	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	0.0	19.3	86.6	0.0	17.1	35.8	31.7	12.8	29.8	0.0	23.1
LnGrp LOS	C	A	B	F	A	B	D	C	B	C	A	C
Approach Vol, veh/h		273			175			926			601	
Approach Delay, s/veh		20.2			62.0			30.7			23.6	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	30.6		25.2	10.1	32.3		25.2				
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6				
Max Green Setting (Gmax), s	15.0	30.0		20.6	15.0	30.0		20.6				
Max Q Clear Time (g_c+I1), s	7.9	19.9		22.6	3.6	25.2		22.6				
Green Ext Time (p_c), s	0.2	2.5		0.0	0.0	2.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		29.9	
HCM 6th LOS		C	

Notes

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

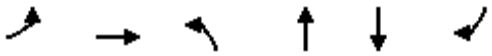
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	815	0	0	635	80
Future Vol, veh/h	0	0	0	0	0	0	0	815	0	0	635	80
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	886	0	0	690	87

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	886	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	343	0	-	-	0	-	-
Stage 1	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	-	-	0	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	-	0	343	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

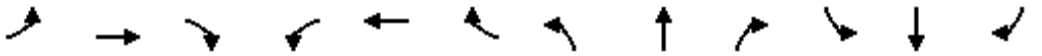
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	-	-
HCM Lane LOS	-	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-



Lane Group	EBL	EBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	161	6	6	744	689	17
v/c Ratio	0.47	0.01	0.03	0.70	0.67	0.02
Control Delay	32.1	0.0	36.4	16.1	17.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.1	0.0	36.4	16.1	17.8	0.1
Queue Length 50th (ft)	41	0	2	117	104	0
Queue Length 95th (ft)	180	0	18	602	#691	0
Internal Link Dist (ft)		562		288	170	
Turn Bay Length (ft)	90		90			60
Base Capacity (vph)	544	808	205	1405	1503	1310
Starvation Cap Reductn	0	0	0	0	15	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	0.01	0.03	0.53	0.46	0.01

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	0	5	0	0	0	5	670	0	0	620	15
Future Volume (veh/h)	145	0	5	0	0	0	5	670	0	0	620	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	161	0	6	0	0	0	6	744	0	0	689	17
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	231	0	208	5	5	0	17	1145	970	5	924	783
Arrive On Green	0.13	0.00	0.13	0.00	0.00	0.00	0.01	0.61	0.00	0.00	0.49	0.49
Sat Flow, veh/h	1781	0	1585	1781	1870	0	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	161	0	6	0	0	0	6	744	0	0	689	17
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.3	0.0	0.1	0.0	0.0	0.0	0.1	9.7	0.0	0.0	11.2	0.2
Cycle Q Clear(g_c), s	3.3	0.0	0.1	0.0	0.0	0.0	0.1	9.7	0.0	0.0	11.2	0.2
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	231	0	208	5	5	0	17	1145	970	5	924	783
V/C Ratio(X)	0.70	0.00	0.03	0.00	0.00	0.00	0.35	0.65	0.00	0.00	0.75	0.02
Avail Cap(c_a), veh/h	749	0	629	325	297	0	283	1870	1585	561	2162	1832
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	15.8	0.0	14.3	0.0	0.0	0.0	18.6	4.7	0.0	0.0	7.7	4.9
Incr Delay (d2), s/veh	3.8	0.0	0.1	0.0	0.0	0.0	11.5	0.6	0.0	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	0.0	0.0	0.0	0.1	1.7	0.0	0.0	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	0.0	14.4	0.0	0.0	0.0	30.1	5.3	0.0	0.0	8.9	4.9
LnGrp LOS	B	A	B	A	A	A	C	A	A	A	A	A
Approach Vol, veh/h		167			0			750			706	
Approach Delay, s/veh		19.4			0.0			5.5			8.8	
Approach LOS		B						A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	28.2	0.0	9.6	4.5	23.8	9.0	0.6
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6
Max Green Setting (Gmax), s	11.9	37.8	6.9	15.0	6.0	43.7	15.9	6.0
Max Q Clear Time (g_c+I1), s	0.0	11.7	0.0	2.1	2.1	13.2	5.3	0.0
Green Ext Time (p_c), s	0.0	5.9	0.0	0.0	0.0	5.5	0.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Notes

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

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	15	95	0	75	5
Future Vol, veh/h	0	15	95	0	75	5
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	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	20	127	0	100	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	358	104	107	0	-	0
Stage 1	104	-	-	-	-	-
Stage 2	254	-	-	-	-	-
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	640	951	1484	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	788	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	585	951	1484	-	-	-
Mov Cap-2 Maneuver	585	-	-	-	-	-
Stage 1	841	-	-	-	-	-
Stage 2	788	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	7.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1484	-	951	-	-
HCM Lane V/C Ratio	0.085	-	0.021	-	-
HCM Control Delay (s)	7.7	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	5	90	145	5	85
Future Vol, veh/h	15	5	90	145	5	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	7	120	193	7	113

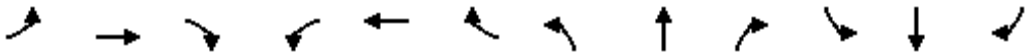
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	344	217	0	0	313	0
Stage 1	217	-	-	-	-	-
Stage 2	127	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	652	823	-	-	1247	-
Stage 1	819	-	-	-	-	-
Stage 2	899	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	648	823	-	-	1247	-
Mov Cap-2 Maneuver	648	-	-	-	-	-
Stage 1	819	-	-	-	-	-
Stage 2	894	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	684	1247	-
HCM Lane V/C Ratio	-	-	0.039	0.005	-
HCM Control Delay (s)	-	-	10.5	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	74	199	113	63	159	682	85	45	556
v/c Ratio	0.28	0.31	0.44	0.18	0.52	0.62	0.09	0.25	0.76
Control Delay	40.1	5.0	46.5	1.1	44.6	21.2	2.2	48.4	32.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.1	5.0	46.5	1.1	44.6	21.3	2.2	48.4	32.1
Queue Length 50th (ft)	35	0	53	0	74	286	0	22	242
Queue Length 95th (ft)	90	43	147	0	189	568	16	74	505
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	296	796	357	437	505	1384	1204	194	1191
Starvation Cap Reductn	0	0	0	0	0	54	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	0.25	0.25	0.32	0.14	0.31	0.51	0.07	0.23	0.47

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	35	175	60	40	55	140	600	75	40	480	10
Future Volume (veh/h)	30	35	175	60	40	55	140	600	75	40	480	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	34	40	199	68	45	51	159	682	85	45	545	11
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	102	120	374	99	65	143	203	811	688	155	743	15
Arrive On Green	0.12	0.12	0.12	0.09	0.09	0.09	0.11	0.43	0.43	0.09	0.41	0.41
Sat Flow, veh/h	840	988	1585	1093	723	1585	1781	1870	1585	1781	1827	37
Grp Volume(v), veh/h	74	0	199	113	0	51	159	682	85	45	0	556
Grp Sat Flow(s),veh/h/ln	1828	0	1585	1816	0	1585	1781	1870	1585	1781	0	1864
Q Serve(g_s), s	2.6	0.0	7.6	4.2	0.0	2.1	6.0	22.4	2.2	1.6	0.0	17.4
Cycle Q Clear(g_c), s	2.6	0.0	7.6	4.2	0.0	2.1	6.0	22.4	2.2	1.6	0.0	17.4
Prop In Lane	0.46		1.00	0.60		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	223	0	374	164	0	143	203	811	688	155	0	758
V/C Ratio(X)	0.33	0.00	0.53	0.69	0.00	0.36	0.78	0.84	0.12	0.29	0.00	0.73
Avail Cap(c_a), veh/h	223	0	374	327	0	285	463	1587	1345	178	0	1284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.7	0.0	23.0	30.4	0.0	29.5	29.7	17.4	11.7	29.5	0.0	17.3
Incr Delay (d2), s/veh	0.9	0.0	1.4	5.1	0.0	1.5	6.5	2.4	0.1	1.0	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	2.9	2.0	0.0	0.8	2.8	8.9	0.7	0.7	0.0	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.6	0.0	24.5	35.5	0.0	31.0	36.2	19.8	11.8	30.5	0.0	18.7
LnGrp LOS	C	A	C	D	A	C	D	B	B	C	A	B
Approach Vol, veh/h		273			164			926			601	
Approach Delay, s/veh		25.6			34.1			21.9			19.6	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	33.1		10.8	10.1	35.0		13.0				
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6				
Max Green Setting (Gmax), s	17.9	47.5		12.4	6.9	58.5		8.4				
Max Q Clear Time (g_c+I1), s	8.0	19.4		6.2	3.6	24.4		9.6				
Green Ext Time (p_c), s	0.3	3.8		0.4	0.0	5.5		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		22.7	
HCM 6th LOS		C	

Notes

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

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	5	5	10	5	140	5	550	95	165	850	5
Future Vol, veh/h	5	5	5	10	5	140	5	550	95	165	850	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	75	-	-	65	-	-	65	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	5	5	11	5	152	5	598	103	179	924	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2023	1996	927	1950	1947	650	929	0	0	701	0	0
Stage 1	1285	1285	-	660	660	-	-	-	-	-	-	-
Stage 2	738	711	-	1290	1287	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	43	60	325	48	65	469	736	-	-	896	-	-
Stage 1	202	235	-	452	460	-	-	-	-	-	-	-
Stage 2	410	436	-	201	235	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	23	48	325	36	52	469	736	-	-	896	-	-
Mov Cap-2 Maneuver	23	48	-	36	52	-	-	-	-	-	-	-
Stage 1	201	188	-	449	457	-	-	-	-	-	-	-
Stage 2	272	433	-	154	188	-	-	-	-	-	-	-

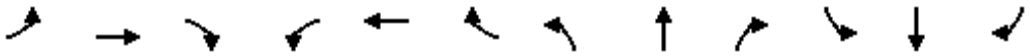
Approach	EB	WB	NB	SB
HCM Control Delay, s	124.9	29.8	0.1	1.6
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	736	-	-	45	36	367	896	-	-
HCM Lane V/C Ratio	0.007	-	-	0.362	0.302	0.429	0.2	-	-
HCM Control Delay (s)	9.9	-	-	124.9	143.5	22	10	-	-
HCM Lane LOS	A	-	-	F	F	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.3	1	2.1	0.7	-	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	74	199	244	85	148	642	91	51	920
v/c Ratio	0.21	0.41	0.83	0.22	0.75	0.57	0.09	0.38	0.95
Control Delay	31.7	7.3	58.1	9.1	64.3	14.3	4.0	50.2	41.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Total Delay	31.7	7.3	58.1	9.1	64.3	14.7	4.0	50.2	41.0
Queue Length 50th (ft)	36	0	138	1	83	213	4	28	439
Queue Length 95th (ft)	71	49	218	36	#194	383	28	68	#813
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	357	494	301	402	207	1170	1021	137	1063
Starvation Cap Reductn	0	0	0	0	0	175	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	0.40	0.81	0.21	0.71	0.65	0.09	0.37	0.87

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	50	175	140	75	75	130	565	80	45	795	15
Future Volume (veh/h)	15	50	175	140	75	75	130	565	80	45	795	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	17	57	199	159	85	85	148	642	91	51	903	17
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	53	133	318	71	0	318	182	1053	893	128	974	18
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.10	0.56	0.56	0.07	0.53	0.53
Sat Flow, veh/h	0	663	1585	0	0	1585	1781	1870	1585	1781	1830	34
Grp Volume(v), veh/h	74	0	199	244	0	85	148	642	91	51	0	920
Grp Sat Flow(s),veh/h/ln	663	0	1585	0	0	1585	1781	1870	1585	1781	0	1864
Q Serve(g_s), s	0.0	0.0	9.6	0.0	0.0	3.8	6.8	19.1	2.2	2.3	0.0	38.2
Cycle Q Clear(g_c), s	16.8	0.0	9.6	16.8	0.0	3.8	6.8	19.1	2.2	2.3	0.0	38.2
Prop In Lane	0.23		1.00	0.65		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	186	0	318	71	0	318	182	1053	893	128	0	993
V/C Ratio(X)	0.40	0.00	0.63	3.44	0.00	0.27	0.81	0.61	0.10	0.40	0.00	0.93
Avail Cap(c_a), veh/h	186	0	318	71	0	318	215	1176	997	142	0	1097
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	30.6	41.9	0.0	28.3	36.8	12.2	8.5	37.2	0.0	18.1
Incr Delay (d2), s/veh	1.4	0.0	3.8	1131.9	0.0	0.4	18.0	0.8	0.0	2.0	0.0	12.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	4.0	23.8	0.0	1.5	3.8	7.1	0.7	1.0	0.0	17.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.0	0.0	34.5	1173.8	0.0	28.7	54.8	12.9	8.5	39.2	0.0	30.6
LnGrp LOS	C	A	C	F	A	C	D	B	A	D	A	C
Approach Vol, veh/h		273			329			881			971	
Approach Delay, s/veh		33.2			878.0			19.5			31.0	
Approach LOS		C			F			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.7	49.7		21.4	10.1	52.3		21.4				
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6				
Max Green Setting (Gmax), s	10.1	49.3		16.8	6.7	52.7		16.8				
Max Q Clear Time (g_c+I1), s	8.8	40.2		18.8	4.3	21.1		18.8				
Green Ext Time (p_c), s	0.0	4.4		0.0	0.0	5.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		140.7	
HCM 6th LOS		F	

Notes

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

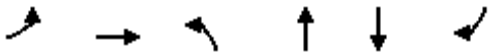
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	775	0	0	905	205
Future Vol, veh/h	0	0	0	0	0	0	0	775	0	0	905	205
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	842	0	0	984	223

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	842	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	364	0	-	-	0	-	-
Stage 1	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	-	-	0	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	-	0	364	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

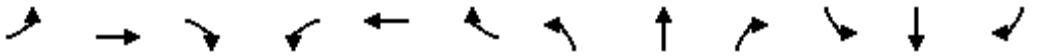
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	-	-
HCM Lane LOS	-	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-



Lane Group	EBL	EBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	136	5	5	707	962	22
v/c Ratio	0.50	0.01	0.03	0.53	0.74	0.02
Control Delay	38.1	0.0	38.8	11.8	18.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.0
Total Delay	38.1	0.0	38.8	11.8	19.0	0.1
Queue Length 50th (ft)	48	0	2	106	185	0
Queue Length 95th (ft)	154	0	16	554	#1112	0
Internal Link Dist (ft)		562		288	170	
Turn Bay Length (ft)	90		90			50
Base Capacity (vph)	434	689	163	1331	1297	1153
Starvation Cap Reductn	0	0	0	0	59	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.01	0.03	0.53	0.78	0.02

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	0	5	0	0	0	5	650	0	0	885	20
Future Volume (veh/h)	125	0	5	0	0	0	5	650	0	0	885	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	136	0	5	0	0	0	5	707	0	0	962	22
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	181	0	163	4	4	0	14	1315	1115	4	1147	972
Arrive On Green	0.10	0.00	0.10	0.00	0.00	0.00	0.01	0.70	0.00	0.00	0.61	0.61
Sat Flow, veh/h	1781	0	1585	1781	1870	0	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	136	0	5	0	0	0	5	707	0	0	962	22
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.7	0.0	0.1	0.0	0.0	0.0	0.1	9.0	0.0	0.0	20.5	0.3
Cycle Q Clear(g_c), s	3.7	0.0	0.1	0.0	0.0	0.0	0.1	9.0	0.0	0.0	20.5	0.3
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	0	163	4	4	0	14	1315	1115	4	1147	972
V/C Ratio(X)	0.75	0.00	0.03	0.00	0.00	0.00	0.35	0.54	0.00	0.00	0.84	0.02
Avail Cap(c_a), veh/h	566	0	475	246	224	0	213	1412	1197	423	1633	1384
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	20.2	0.0	0.0	0.0	24.7	3.5	0.0	0.0	7.7	3.8
Incr Delay (d2), s/veh	6.1	0.0	0.1	0.0	0.0	0.0	13.9	0.3	0.0	0.0	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.1	0.0	0.0	0.0	0.1	1.5	0.0	0.0	5.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.0	0.0	20.3	0.0	0.0	0.0	38.6	3.9	0.0	0.0	10.5	3.8
LnGrp LOS	C	A	C	A	A	A	D	A	A	A	B	A
Approach Vol, veh/h		141			0			712			984	
Approach Delay, s/veh		27.7			0.0			4.1			10.4	
Approach LOS		C						A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	40.3	0.0	9.8	4.5	35.8	9.2	0.6
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6
Max Green Setting (Gmax), s	11.9	37.8	6.9	15.0	6.0	43.7	15.9	6.0
Max Q Clear Time (g_c+I1), s	0.0	11.0	0.0	2.1	2.1	22.5	5.7	0.0
Green Ext Time (p_c), s	0.0	5.5	0.0	0.0	0.0	8.2	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Notes

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

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	15	45	0	195	10
Future Vol, veh/h	0	15	45	0	195	10
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	0	16	49	0	212	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	316	218	223	0	-	0
Stage 1	218	-	-	-	-	-
Stage 2	98	-	-	-	-	-
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	677	822	1346	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	653	822	1346	-	-	-
Mov Cap-2 Maneuver	653	-	-	-	-	-
Stage 1	789	-	-	-	-	-
Stage 2	926	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	7.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1346	-	822	-	-
HCM Lane V/C Ratio	0.036	-	0.02	-	-
HCM Control Delay (s)	7.8	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	5	40	125	5	215
Future Vol, veh/h	20	5	40	125	5	215
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	22	5	43	136	5	234

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	355	111	0	0	179	0
Stage 1	111	-	-	-	-	-
Stage 2	244	-	-	-	-	-
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	643	942	-	-	1397	-
Stage 1	914	-	-	-	-	-
Stage 2	797	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	640	942	-	-	1397	-
Mov Cap-2 Maneuver	640	-	-	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	794	-	-	-	-	-

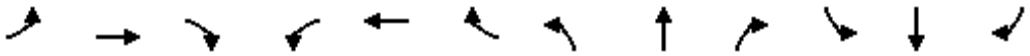
Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	684	1397	-
HCM Lane V/C Ratio	-	-	0.04	0.004	-
HCM Control Delay (s)	-	-	10.5	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	74	199	244	85	148	642	91	51	920
v/c Ratio	0.45	0.45	0.90	0.26	0.80	0.61	0.10	0.40	0.97
Control Delay	58.1	14.7	83.1	7.9	81.3	21.6	3.0	62.5	51.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
Total Delay	58.1	14.7	83.1	7.9	81.3	22.6	3.0	62.5	51.1
Queue Length 50th (ft)	53	32	176	0	105	293	0	35	581
Queue Length 95th (ft)	96	89	#398	30	#257	556	23	85	#1097
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	164	453	271	328	194	1108	982	145	1054
Starvation Cap Reductn	0	0	0	0	0	237	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	0.45	0.44	0.90	0.26	0.76	0.74	0.09	0.35	0.87

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	50	175	140	75	75	130	565	80	45	795	15
Future Volume (veh/h)	15	50	175	140	75	75	130	565	80	45	795	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	17	57	199	159	85	74	148	642	91	51	903	17
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	25	83	250	175	93	235	177	1057	895	100	955	18
Arrive On Green	0.06	0.06	0.06	0.15	0.15	0.15	0.10	0.56	0.56	0.06	0.52	0.52
Sat Flow, veh/h	425	1424	1585	1180	631	1585	1781	1870	1585	1781	1830	34
Grp Volume(v), veh/h	74	0	199	244	0	74	148	642	91	51	0	920
Grp Sat Flow(s),veh/h/ln	1849	0	1585	1811	0	1585	1781	1870	1585	1781	0	1864
Q Serve(g_s), s	4.2	0.0	6.2	14.1	0.0	4.4	8.7	24.3	2.8	3.0	0.0	49.7
Cycle Q Clear(g_c), s	4.2	0.0	6.2	14.1	0.0	4.4	8.7	24.3	2.8	3.0	0.0	49.7
Prop In Lane	0.23		1.00	0.65		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	107	0	250	268	0	235	177	1057	895	100	0	973
V/C Ratio(X)	0.69	0.00	0.80	0.91	0.00	0.32	0.84	0.61	0.10	0.51	0.00	0.95
Avail Cap(c_a), veh/h	107	0	250	268	0	235	192	1094	927	144	0	1040
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.3	0.0	43.3	44.7	0.0	40.6	47.2	15.4	10.7	48.9	0.0	24.1
Incr Delay (d2), s/veh	16.9	0.0	16.4	32.2	0.0	0.8	24.8	0.9	0.0	4.0	0.0	16.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	6.2	8.8	0.0	1.8	5.0	9.8	1.0	1.4	0.0	24.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.2	0.0	59.7	76.9	0.0	41.3	72.0	16.3	10.8	52.8	0.0	40.1
LnGrp LOS	E	A	E	E	A	D	E	B	B	D	A	D
Approach Vol, veh/h		273			318			881			971	
Approach Delay, s/veh		61.4			68.7			25.1			40.7	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.7	60.7		20.4	10.1	65.3		10.8				
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6				
Max Green Setting (Gmax), s	11.5	59.5		15.8	8.6	62.4		6.2				
Max Q Clear Time (g_c+I1), s	10.7	51.7		16.1	5.0	26.3		8.2				
Green Ext Time (p_c), s	0.0	4.0		0.0	0.0	5.1		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		41.0
HCM 6th LOS		D

Notes

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

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	5	10	10	0	95	15	660	45	115	550	10
Future Vol, veh/h	5	5	10	10	0	95	15	660	45	115	550	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	75	-	-	65	-	-	65	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	5	11	11	0	103	16	717	49	125	598	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1679	1652	604	1636	1633	742	609	0	0	766	0	0
Stage 1	854	854	-	774	774	-	-	-	-	-	-	-
Stage 2	825	798	-	862	859	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	75	98	498	81	101	416	970	-	-	847	-	-
Stage 1	353	375	-	391	408	-	-	-	-	-	-	-
Stage 2	367	398	-	350	373	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	49	82	498	66	85	416	970	-	-	847	-	-
Mov Cap-2 Maneuver	49	82	-	66	85	-	-	-	-	-	-	-
Stage 1	347	320	-	385	401	-	-	-	-	-	-	-
Stage 2	271	392	-	287	318	-	-	-	-	-	-	-

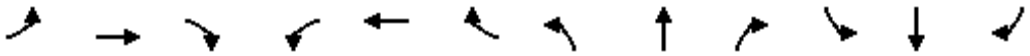
Approach	EB	WB	NB	SB
HCM Control Delay, s	46.1	21.6	0.2	1.7
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	970	-	-	109	66	416	847	-	-
HCM Lane V/C Ratio	0.017	-	-	0.199	0.165	0.248	0.148	-	-
HCM Control Delay (s)	8.8	-	-	46.1	70	16.5	10	-	-
HCM Lane LOS	A	-	-	E	F	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.5	1	0.5	-	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	74	216	113	63	176	722	85	45	602
v/c Ratio	0.26	0.46	0.42	0.17	0.56	0.71	0.09	0.21	0.80
Control Delay	25.4	7.2	28.9	4.6	34.0	20.0	4.4	32.5	28.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.4	7.2	28.9	4.6	34.0	20.0	4.4	32.5	28.3
Queue Length 50th (ft)	25	0	40	0	62	206	1	16	184
Queue Length 95th (ft)	59	45	85	17	148	#570	27	52	#488
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	541	696	506	612	436	1023	904	436	917
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	0.31	0.22	0.10	0.40	0.71	0.09	0.10	0.66

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	35	190	60	40	55	155	635	75	40	520	10
Future Volume (veh/h)	30	35	190	60	40	55	155	635	75	40	520	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	34	40	216	68	45	62	176	722	85	45	591	11
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	76	64	473	83	36	473	221	777	658	155	692	13
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.12	0.42	0.42	0.09	0.38	0.38
Sat Flow, veh/h	0	213	1585	0	120	1585	1781	1870	1585	1781	1830	34
Grp Volume(v), veh/h	74	0	216	113	0	62	176	722	85	45	0	602
Grp Sat Flow(s),veh/h/ln	213	0	1585	120	0	1585	1781	1870	1585	1781	0	1864
Q Serve(g_s), s	0.0	0.0	7.6	0.0	0.0	2.0	6.6	25.4	2.3	1.6	0.0	20.5
Cycle Q Clear(g_c), s	20.6	0.0	7.6	20.6	0.0	2.0	6.6	25.4	2.3	1.6	0.0	20.5
Prop In Lane	0.46		1.00	0.60		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	140	0	473	119	0	473	221	777	658	155	0	705
V/C Ratio(X)	0.53	0.00	0.46	0.95	0.00	0.13	0.80	0.93	0.13	0.29	0.00	0.85
Avail Cap(c_a), veh/h	140	0	473	119	0	473	387	812	688	387	0	810
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	19.7	28.2	0.0	17.7	29.4	19.2	12.5	29.5	0.0	19.7
Incr Delay (d2), s/veh	3.8	0.0	0.7	65.8	0.0	0.1	6.5	16.6	0.1	1.0	0.0	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.8	4.0	0.0	0.7	3.1	13.1	0.7	0.7	0.0	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.9	0.0	20.4	94.0	0.0	17.8	35.9	35.8	12.6	30.6	0.0	27.7
LnGrp LOS	C	A	C	F	A	B	D	D	B	C	A	C
Approach Vol, veh/h		290			175			983			647	
Approach Delay, s/veh		21.3			67.0			33.8			27.9	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.7	31.2		25.2	10.1	33.8		25.2				
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6				
Max Green Setting (Gmax), s	15.0	30.0		20.6	15.0	30.0		20.6				
Max Q Clear Time (g_c+I1), s	8.6	22.5		22.6	3.6	27.4		22.6				
Green Ext Time (p_c), s	0.2	2.3		0.0	0.0	1.3		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		33.0	
HCM 6th LOS		C	

Notes

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

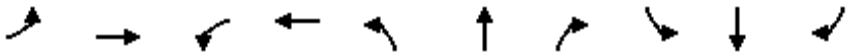
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	30	0	815	20	0	670	100
Future Vol, veh/h	0	0	0	0	0	30	0	815	20	0	670	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	33	0	886	22	0	728	109

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	897	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	339	0	-	-	0	-	-
Stage 1	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	-	-	0	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	-	0	339	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.7	0	0
HCM LOS	C		

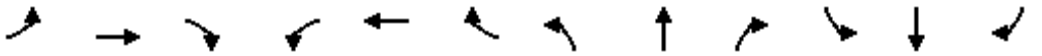
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	339	-	-
HCM Lane V/C Ratio	-	-	0.096	-	-
HCM Control Delay (s)	-	-	16.7	-	-
HCM Lane LOS	-	-	C	-	-
HCM 95th %tile Q(veh)	-	-	0.3	-	-



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	179	44	65	114	11	636	71	109	603	16
v/c Ratio	0.49	0.10	0.28	0.34	0.05	0.66	0.08	0.37	0.51	0.02
Control Delay	41.3	18.1	45.8	15.0	44.7	28.1	0.2	42.8	17.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay	41.3	18.1	45.8	15.0	44.7	28.1	0.2	42.8	17.5	0.0
Queue Length 50th (ft)	87	10	33	11	5	282	0	54	171	0
Queue Length 95th (ft)	#215	37	#104	59	26	#682	0	132	#534	0
Internal Link Dist (ft)		562		472		288			170	
Turn Bay Length (ft)	90		90		90		250	90		50
Base Capacity (vph)	584	642	253	340	220	1028	972	436	1199	1079
Starvation Cap Reductn	0	0	0	0	0	0	0	0	126	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	0.31	0.07	0.26	0.34	0.05	0.62	0.07	0.25	0.56	0.01

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	20	20	60	20	85	10	585	65	100	555	15
Future Volume (veh/h)	165	20	20	60	20	85	10	585	65	100	555	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	179	22	22	65	22	92	11	636	71	109	603	16
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	228	137	137	116	30	127	30	760	644	146	882	747
Arrive On Green	0.13	0.16	0.16	0.07	0.10	0.10	0.02	0.41	0.41	0.08	0.47	0.47
Sat Flow, veh/h	1781	858	858	1781	315	1318	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	179	0	44	65	0	114	11	636	71	109	603	16
Grp Sat Flow(s),veh/h/ln	1781	0	1716	1781	0	1633	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	6.1	0.0	1.4	2.2	0.0	4.2	0.4	19.0	1.7	3.7	15.7	0.3
Cycle Q Clear(g_c), s	6.1	0.0	1.4	2.2	0.0	4.2	0.4	19.0	1.7	3.7	15.7	0.3
Prop In Lane	1.00		0.50	1.00		0.81	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	228	0	273	116	0	157	30	760	644	146	882	747
V/C Ratio(X)	0.79	0.00	0.16	0.56	0.00	0.72	0.37	0.84	0.11	0.75	0.68	0.02
Avail Cap(c_a), veh/h	455	0	413	197	0	157	172	1135	962	340	1313	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	0.0	22.6	28.2	0.0	27.3	30.3	16.6	11.5	28.0	12.8	8.8
Incr Delay (d2), s/veh	5.9	0.0	0.3	4.2	0.0	15.2	7.5	3.6	0.1	7.5	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.5	1.0	0.0	2.2	0.2	7.9	0.6	1.8	5.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	0.0	22.9	32.4	0.0	42.6	37.8	20.2	11.6	35.4	13.8	8.8
LnGrp LOS	C	A	C	C	A	D	D	C	B	D	B	A
Approach Vol, veh/h		223			179			718			728	
Approach Delay, s/veh		30.4			38.9			19.6			16.9	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	30.4	8.2	14.5	5.1	34.5	12.1	10.6
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6
Max Green Setting (Gmax), s	11.9	37.8	6.9	15.0	6.0	43.7	15.9	6.0
Max Q Clear Time (g_c+I1), s	5.7	21.0	4.2	3.4	2.4	17.7	8.1	6.2
Green Ext Time (p_c), s	0.1	4.3	0.0	0.1	0.0	4.4	0.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	20	100	165	35	85
Future Vol, veh/h	30	20	100	165	35	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	27	133	220	47	113

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	450	243	0	0	353	0
Stage 1	243	-	-	-	-	-
Stage 2	207	-	-	-	-	-
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	567	796	-	-	1206	-
Stage 1	797	-	-	-	-	-
Stage 2	828	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	543	796	-	-	1206	-
Mov Cap-2 Maneuver	543	-	-	-	-	-
Stage 1	797	-	-	-	-	-
Stage 2	793	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	2.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	622	1206	-
HCM Lane V/C Ratio	-	-	0.107	0.039	-
HCM Control Delay (s)	-	-	11.5	8.1	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	5	20	25	5	0	100	0	20	20	75	5
Future Vol, veh/h	0	5	20	25	5	0	100	0	20	20	75	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	7	27	33	7	0	133	0	27	27	100	7

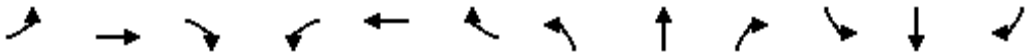
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	451	104	455	441	-	107	0	0	27	0	0
Stage 1	-	158	-	280	280	-	-	-	-	-	-	-
Stage 2	-	293	-	175	161	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	504	951	515	510	0	1484	-	-	1587	-	-
Stage 1	0	767	-	727	679	0	-	-	-	-	-	-
Stage 2	0	670	-	827	765	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	450	951	454	455	-	1484	-	-	1587	-	-
Mov Cap-2 Maneuver	-	450	-	454	455	-	-	-	-	-	-	-
Stage 1	-	753	-	661	617	-	-	-	-	-	-	-
Stage 2	-	609	-	782	751	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	13.7	6.4	1.5
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1484	-	-	778	454	1587	-	-
HCM Lane V/C Ratio	0.09	-	-	0.043	0.088	0.017	-	-
HCM Control Delay (s)	7.7	0	-	9.8	13.7	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	0.3	0.1	-	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	74	216	113	63	176	722	85	45	602
v/c Ratio	0.29	0.33	0.46	0.18	0.57	0.63	0.08	0.26	0.79
Control Delay	42.1	5.0	48.8	1.1	46.9	21.4	2.2	50.3	33.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Total Delay	42.1	5.0	48.8	1.1	46.9	21.5	2.2	50.3	33.7
Queue Length 50th (ft)	38	0	57	0	88	315	0	23	281
Queue Length 95th (ft)	90	44	147	0	207	623	16	74	563
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	283	777	339	422	479	1333	1163	184	1149
Starvation Cap Reductn	0	0	0	0	0	68	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	0.28	0.33	0.15	0.37	0.57	0.07	0.24	0.52

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	35	190	60	40	55	155	635	75	40	520	10
Future Volume (veh/h)	30	35	190	60	40	55	155	635	75	40	520	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	34	40	216	68	45	51	176	722	85	45	591	11
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	98	116	382	98	65	142	221	849	719	149	756	14
Arrive On Green	0.12	0.12	0.12	0.09	0.09	0.09	0.12	0.45	0.45	0.08	0.41	0.41
Sat Flow, veh/h	840	988	1585	1093	723	1585	1781	1870	1585	1781	1830	34
Grp Volume(v), veh/h	74	0	216	113	0	51	176	722	85	45	0	602
Grp Sat Flow(s),veh/h/ln	1828	0	1585	1816	0	1585	1781	1870	1585	1781	0	1864
Q Serve(g_s), s	2.7	0.0	8.4	4.3	0.0	2.2	6.9	24.7	2.2	1.7	0.0	20.1
Cycle Q Clear(g_c), s	2.7	0.0	8.4	4.3	0.0	2.2	6.9	24.7	2.2	1.7	0.0	20.1
Prop In Lane	0.46		1.00	0.60		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	214	0	382	163	0	142	221	849	719	149	0	770
V/C Ratio(X)	0.35	0.00	0.57	0.70	0.00	0.36	0.80	0.85	0.12	0.30	0.00	0.78
Avail Cap(c_a), veh/h	214	0	382	314	0	274	444	1524	1291	171	0	1233
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.2	0.0	23.9	31.7	0.0	30.8	30.6	17.5	11.3	30.9	0.0	18.3
Incr Delay (d2), s/veh	1.0	0.0	1.9	5.3	0.0	1.5	6.4	2.5	0.1	1.1	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	3.3	2.1	0.0	0.9	3.2	9.8	0.7	0.7	0.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	0.0	25.9	37.0	0.0	32.3	37.0	20.0	11.4	32.1	0.0	20.0
LnGrp LOS	C	A	C	D	A	C	D	B	B	C	A	C
Approach Vol, veh/h		290			164			983			647	
Approach Delay, s/veh		27.0			35.5			22.3			20.9	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	34.8		11.0	10.1	37.7		13.0				
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6				
Max Green Setting (Gmax), s	17.9	47.5		12.4	6.9	58.5		8.4				
Max Q Clear Time (g_c+I1), s	8.9	22.1		6.3	3.7	26.7		10.4				
Green Ext Time (p_c), s	0.3	4.1		0.3	0.0	5.9		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		23.5	
HCM 6th LOS		C	

Notes

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

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	5	15	15	5	140	15	590	100	165	890	5
Future Vol, veh/h	5	5	15	15	5	140	15	590	100	165	890	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	75	-	-	65	-	-	65	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	5	16	16	5	152	16	641	109	179	967	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2134	2110	970	2066	2058	696	972	0	0	750	0	0
Stage 1	1328	1328	-	728	728	-	-	-	-	-	-	-
Stage 2	806	782	-	1338	1330	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	36	51	307	40	55	442	709	-	-	859	-	-
Stage 1	191	224	-	415	429	-	-	-	-	-	-	-
Stage 2	376	405	-	189	224	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	18	39	307	28	43	442	709	-	-	859	-	-
Mov Cap-2 Maneuver	18	39	-	28	43	-	-	-	-	-	-	-
Stage 1	187	177	-	405	419	-	-	-	-	-	-	-
Stage 2	238	396	-	137	177	-	-	-	-	-	-	-

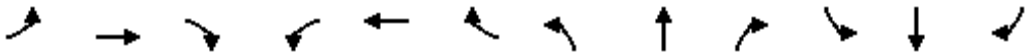
Approach	EB	WB	NB	SB
HCM Control Delay, s	122.5	45.6	0.2	1.6
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	709	-	-	55	28	335	859	-	-
HCM Lane V/C Ratio	0.023	-	-	0.494	0.582	0.47	0.209	-	-
HCM Control Delay (s)	10.2	-	-	122.5	245.8	24.9	10.3	-	-
HCM Lane LOS	B	-	-	F	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.9	1.8	2.4	0.8	-	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	74	222	244	85	170	699	91	51	983
v/c Ratio	0.22	0.45	0.86	0.22	0.86	0.60	0.09	0.40	0.99
Control Delay	32.2	7.3	62.6	9.0	79.2	15.1	4.0	51.4	49.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	32.2	7.3	62.6	9.0	79.2	15.7	4.0	51.4	49.2
Queue Length 50th (ft)	36	0	138	1	97	243	5	28	502
Queue Length 95th (ft)	71	52	218	36	#229	436	29	68	#901
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	332	499	287	388	197	1156	1009	130	1010
Starvation Cap Reductn	0	0	0	0	0	166	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	0.44	0.85	0.22	0.86	0.71	0.09	0.39	0.97

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	50	195	140	75	75	150	615	80	45	850	15
Future Volume (veh/h)	15	50	195	140	75	75	150	615	80	45	850	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	17	57	222	159	85	85	170	699	91	51	966	17
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	50	125	298	67	0	298	201	1104	936	120	998	18
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.11	0.59	0.59	0.07	0.54	0.54
Sat Flow, veh/h	0	663	1585	0	0	1585	1781	1870	1585	1781	1832	32
Grp Volume(v), veh/h	74	0	222	244	0	85	170	699	91	51	0	983
Grp Sat Flow(s),veh/h/ln	663	0	1585	0	0	1585	1781	1870	1585	1781	0	1865
Q Serve(g_s), s	0.0	0.0	11.8	0.0	0.0	4.1	8.4	21.8	2.2	2.5	0.0	45.4
Cycle Q Clear(g_c), s	16.8	0.0	11.8	16.8	0.0	4.1	8.4	21.8	2.2	2.5	0.0	45.4
Prop In Lane	0.23		1.00	0.65		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	174	0	298	67	0	298	201	1104	936	120	0	1015
V/C Ratio(X)	0.42	0.00	0.74	3.67	0.00	0.29	0.84	0.63	0.10	0.43	0.00	0.97
Avail Cap(c_a), veh/h	174	0	298	67	0	298	201	1104	936	134	0	1029
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.3	0.0	34.2	44.7	0.0	31.1	38.9	12.0	8.0	40.0	0.0	19.6
Incr Delay (d2), s/veh	1.6	0.0	9.7	1236.0	0.0	0.5	26.6	1.2	0.0	2.4	0.0	20.6
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	1.4	0.0	5.3	24.3	0.0	1.6	5.0	8.2	0.7	1.1	0.0	22.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	0.0	44.0	1280.6	0.0	31.6	65.4	13.2	8.0	42.4	0.0	40.2
LnGrp LOS	C	A	D	F	A	C	E	B	A	D	A	D
Approach Vol, veh/h		296			329			960			1034	
Approach Delay, s/veh		41.2			957.9			21.9			40.3	
Approach LOS		D			F			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.2	53.7		21.4	10.1	57.8		21.4				
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6				
Max Green Setting (Gmax), s	10.1	49.3		16.8	6.7	52.7		16.8				
Max Q Clear Time (g_c+I1), s	10.4	47.4		18.8	4.5	23.8		18.8				
Green Ext Time (p_c), s	0.0	1.3		0.0	0.0	5.6		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		149.0
HCM 6th LOS		F

Notes

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

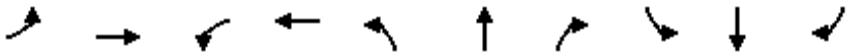
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	40	0	805	25	0	965	220
Future Vol, veh/h	0	0	0	0	0	40	0	805	25	0	965	220
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	43	0	875	27	0	1049	239

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	889	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	342	0	-	-	0	-	-
Stage 1	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	-	-	0	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	-	0	342	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.1	0	0
HCM LOS	C		

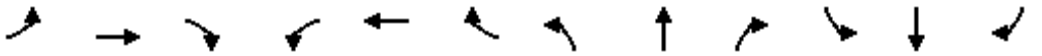
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	342	-	-
HCM Lane V/C Ratio	-	-	0.127	-	-
HCM Control Delay (s)	-	-	17.1	-	-
HCM Lane LOS	-	-	C	-	-
HCM 95th %tile Q(veh)	-	-	0.4	-	-



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	147	43	82	141	11	641	87	136	886	27
v/c Ratio	0.59	0.12	0.39	0.50	0.08	0.87	0.11	0.61	0.86	0.03
Control Delay	46.6	21.4	47.1	17.4	45.2	38.6	0.3	51.1	28.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0
Total Delay	46.6	21.4	47.1	17.4	45.2	38.6	0.3	51.1	30.8	0.0
Queue Length 50th (ft)	72	13	42	14	6	285	0	67	307	0
Queue Length 95th (ft)	165	39	#138	66	26	#690	0	#183	#994	0
Internal Link Dist (ft)		562		472		288			170	
Turn Bay Length (ft)	90		90		90		250	90		50
Base Capacity (vph)	351	419	217	283	132	880	863	263	1092	998
Starvation Cap Reductn	0	0	0	0	0	0	0	0	108	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	0.42	0.10	0.38	0.50	0.08	0.73	0.10	0.52	0.90	0.03

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	25	15	75	25	105	10	590	80	125	815	25
Future Volume (veh/h)	135	25	15	75	25	105	10	590	80	125	815	25
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	27	16	82	27	114	11	641	87	136	886	27
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	189	136	81	123	27	115	29	841	713	174	993	841
Arrive On Green	0.11	0.12	0.12	0.07	0.09	0.09	0.02	0.45	0.45	0.10	0.53	0.53
Sat Flow, veh/h	1781	1101	652	1781	313	1320	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	147	0	43	82	0	141	11	641	87	136	886	27
Grp Sat Flow(s),veh/h/ln	1781	0	1753	1781	0	1633	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	5.5	0.0	1.5	3.1	0.0	5.9	0.4	19.8	2.2	5.1	29.1	0.6
Cycle Q Clear(g_c), s	5.5	0.0	1.5	3.1	0.0	5.9	0.4	19.8	2.2	5.1	29.1	0.6
Prop In Lane	1.00		0.37	1.00		0.81	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	189	0	217	123	0	142	29	841	713	174	993	841
V/C Ratio(X)	0.78	0.00	0.20	0.67	0.00	0.99	0.37	0.76	0.12	0.78	0.89	0.03
Avail Cap(c_a), veh/h	411	0	381	178	0	142	155	1026	869	307	1186	1005
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	27.1	31.3	0.0	31.4	33.5	15.9	11.0	30.4	14.4	7.7
Incr Delay (d2), s/veh	6.8	0.0	0.4	6.1	0.0	73.0	7.7	2.8	0.1	7.4	7.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.6	1.5	0.0	5.1	0.2	8.1	0.7	2.5	12.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.8	0.0	27.6	37.4	0.0	104.4	41.2	18.6	11.1	37.8	22.2	7.7
LnGrp LOS	D	A	C	D	A	F	D	B	B	D	C	A
Approach Vol, veh/h		190			223			739			1049	
Approach Delay, s/veh		34.7			79.8			18.1			23.9	
Approach LOS		C			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	36.1	8.9	13.1	5.2	41.7	11.4	10.6
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6
Max Green Setting (Gmax), s	11.9	37.8	6.9	15.0	6.0	43.7	15.9	6.0
Max Q Clear Time (g_c+I1), s	7.1	21.8	5.1	3.5	2.4	31.1	7.5	7.9
Green Ext Time (p_c), s	0.1	4.3	0.0	0.1	0.0	5.5	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	15	50	145	30	210
Future Vol, veh/h	45	15	50	145	30	210
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	49	16	54	158	33	228

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	427	133	0	0	212	0
Stage 1	133	-	-	-	-	-
Stage 2	294	-	-	-	-	-
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	584	916	-	-	1358	-
Stage 1	893	-	-	-	-	-
Stage 2	756	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	568	916	-	-	1358	-
Mov Cap-2 Maneuver	568	-	-	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	735	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	628	1358	-
HCM Lane V/C Ratio	-	-	0.104	0.024	-
HCM Control Delay (s)	-	-	11.4	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	5	20	20	5	0	55	0	10	15	200	5
Future Vol, veh/h	0	5	20	20	5	0	55	0	10	15	200	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	Free
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	5	22	22	5	0	60	0	11	16	217	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	372	369	217	383	369	0	217	0	-	0	0	0
Stage 1	249	249	-	120	120	-	-	-	-	-	-	-
Stage 2	123	120	-	263	249	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	585	560	823	575	560	-	1353	-	0	-	-	0
Stage 1	755	701	-	884	796	-	-	-	0	-	-	0
Stage 2	881	796	-	742	701	-	-	-	0	-	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	535	823	537	535	-	1353	-	-	-	-	-
Mov Cap-2 Maneuver	-	535	-	537	535	-	-	-	-	-	-	-
Stage 1	722	701	-	845	761	-	-	-	-	-	-	-
Stage 2	836	761	-	717	701	-	-	-	-	-	-	-

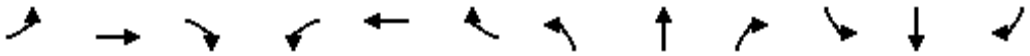
Approach	EB	WB	NB	SB
HCM Control Delay, s			7.8	
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	1353	-	-	-	-	-
HCM Lane V/C Ratio	0.044	-	-	-	-	-
HCM Control Delay (s)	7.8	0	-	-	-	-
HCM Lane LOS	A	A	-	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	-

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	74	222	244	85	170	699	91	51	983
v/c Ratio	0.47	0.51	0.96	0.27	0.93	0.65	0.09	0.42	1.00
Control Delay	59.1	20.0	96.4	8.0	103.7	22.6	2.9	63.9	58.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
Total Delay	59.1	20.0	96.4	8.0	103.7	24.4	2.9	63.9	58.0
Queue Length 50th (ft)	53	56	176	0	123	334	0	35	666
Queue Length 95th (ft)	96	120	#398	30	#301	634	23	85	#1211
Internal Link Dist (ft)	428		687			267			260
Turn Bay Length (ft)				95	145		105	95	
Base Capacity (vph)	157	432	255	314	182	1083	962	136	990
Starvation Cap Reductn	0	0	0	0	0	225	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	0.47	0.51	0.96	0.27	0.93	0.81	0.09	0.38	0.99

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	50	195	140	75	75	150	615	80	45	850	15
Future Volume (veh/h)	15	50	195	140	75	75	150	615	80	45	850	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	17	57	222	159	85	74	170	699	91	51	966	17
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	24	79	252	167	89	225	184	1091	925	96	979	17
Arrive On Green	0.06	0.06	0.06	0.14	0.14	0.14	0.10	0.58	0.58	0.05	0.53	0.53
Sat Flow, veh/h	425	1424	1585	1180	631	1585	1781	1870	1585	1781	1832	32
Grp Volume(v), veh/h	74	0	222	244	0	74	170	699	91	51	0	983
Grp Sat Flow(s),veh/h/ln	1849	0	1585	1811	0	1585	1781	1870	1585	1781	0	1865
Q Serve(g_s), s	4.4	0.0	6.2	14.9	0.0	4.7	10.5	27.7	2.8	3.1	0.0	57.9
Cycle Q Clear(g_c), s	4.4	0.0	6.2	14.9	0.0	4.7	10.5	27.7	2.8	3.1	0.0	57.9
Prop In Lane	0.23		1.00	0.65		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	103	0	252	257	0	225	184	1091	925	96	0	996
V/C Ratio(X)	0.72	0.00	0.88	0.95	0.00	0.33	0.92	0.64	0.10	0.53	0.00	0.99
Avail Cap(c_a), veh/h	103	0	252	257	0	225	184	1091	925	138	0	996
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	45.8	47.4	0.0	43.0	49.5	15.4	10.3	51.3	0.0	25.6
Incr Delay (d2), s/veh	21.4	0.0	28.3	42.4	0.0	0.8	45.3	1.3	0.0	4.5	0.0	25.3
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	2.7	0.0	8.0	9.8	0.0	1.9	6.9	11.3	1.0	1.5	0.0	30.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.2	0.0	74.1	89.8	0.0	43.9	94.8	16.7	10.3	55.8	0.0	50.9
LnGrp LOS	E	A	E	F	A	D	F	B	B	E	A	D
Approach Vol, veh/h		296			318			960			1034	
Approach Delay, s/veh		73.9			79.1			29.9			51.1	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.6	64.6		20.4	10.1	70.1		10.8				
Change Period (Y+Rc), s	4.1	5.1		4.6	4.1	5.1		4.6				
Max Green Setting (Gmax), s	11.5	59.5		15.8	8.6	62.4		6.2				
Max Q Clear Time (g_c+I1), s	12.5	59.9		16.9	5.1	29.7		8.2				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	5.7		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		49.3	
HCM 6th LOS		D	

Notes

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