

APPENDIX F

**TRAFFIC IMPACT ANALYSIS
FOR
LODI UNIFIED SCHOOL DISTRICT
JOE SERNA CHARTER SCHOOL RELOCATION PROJECT**

San Joaquin County, CA

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5245-01

Serna School Relocation

KD Anderson & Associates, Inc.
Transportation Engineers

**TRAFFIC IMPACT ANALYSIS FOR
JOE SERNA CHARTER SCHOOL RELOCATION PROJECT**
San Joaquin County, CA

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San Joaquin County, CA

INTRODUCTION

This Traffic Impact Analysis (TIA) report summarizes an analysis of the traffic-related effects of proposed changes to Lodi Unified School District (LUSD) school that will accommodate relocating Joe Serna Charter School to the District's Houston School campus in the unincorporated Jan Joaquin County community of Acampo. The Houston School site sits on the south side of Acampo Road immediately east of its interchange with State Route 99 (SR 99), as noted in Figure 1 (vicinity map).

Project Overview

Today Houston School serves 120-130 K-5 students on a traditional schedule. In the past enrollment was as high as 500 students. The project involves new classroom buildings and changes to access / on-site circulation are proposed to accommodate up to 360 students when Joe Serna School is operating. Figure 2 is the proposed site plan.

Today Houston School is primarily accessed via a driveway entrance on the East SR 99 frontage road, and nearly all traffic leaving the school exits at a driveway on Acampo Road opposite the northern leg of the East SR 99 Frontage Road. With the proposed project the areas for on-site drop-off will be lengthened, and new access locations will be created. Inbound access will remain off of the East SR 99 frontage road, but outbound traffic will also be allowed at this location. The existing exit onto Acampo Road will be closed. A new right-turn-in-only bus entrance will be created on Acampo Road, and a new exit will be created at the eastern end of the site.

Analysis Approach

Study Scenarios. This analysis considers the project's traffic impacts to the surrounding street system and evaluates the adequacy of site access under existing conditions and conditions occurring with proposed changes. Analysis of traffic operating conditions under the following scenarios is presented in this traffic impact study:

- ***Existing conditions***, based on current a.m. peak hour traffic volume counts.
- ***Existing Plus Project conditions*** assuming relocation of Joe Serna School students and completion of site improvements.
- ***Long Term future conditions*** assuming background growth in this area of San Joaquin County but no changes at Houston School.
- ***Long Term future conditions with the proposed Project***.

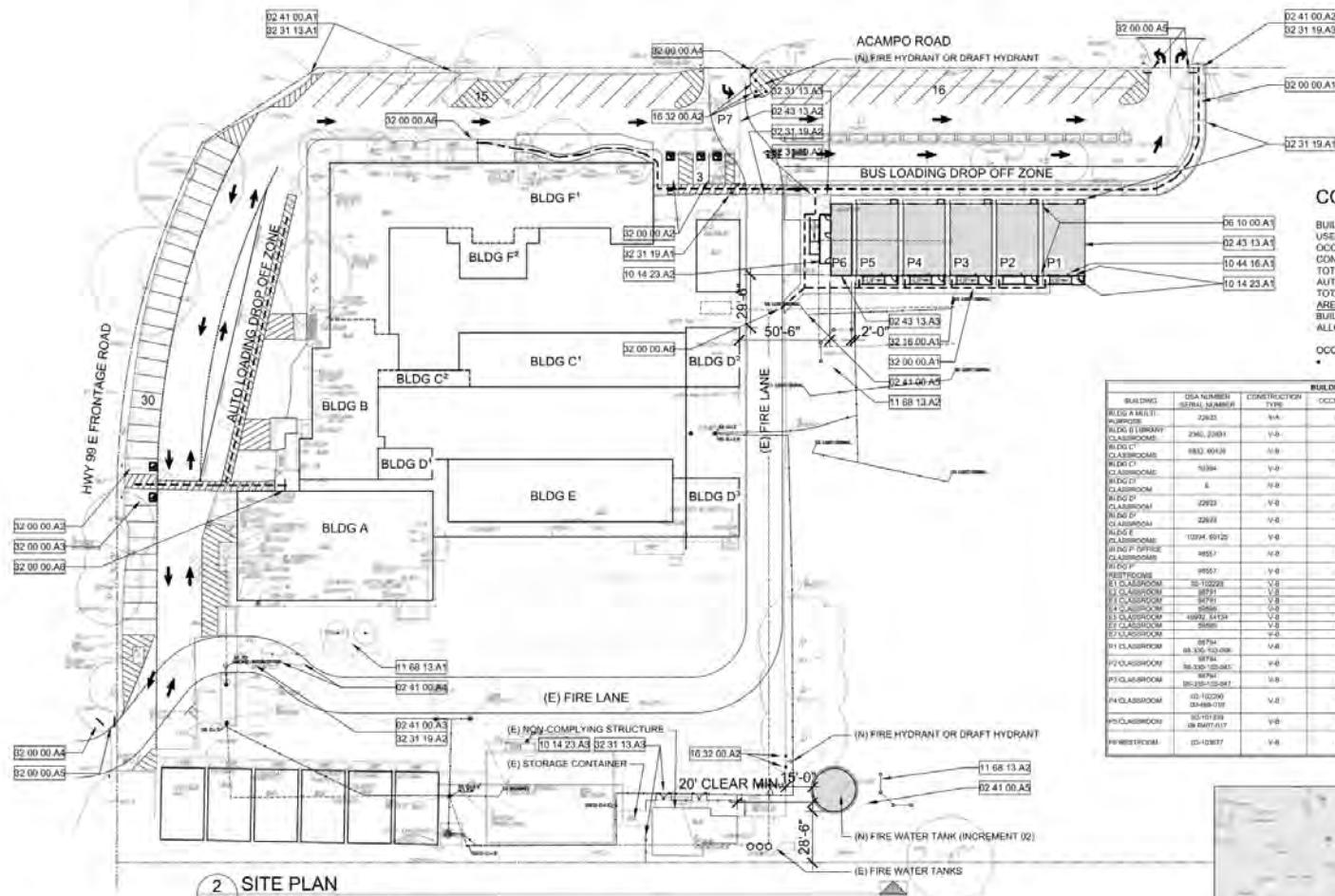


VICINITY MAP

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figure 1



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SITE PLAN



HOUSTON MIDDLE SCHOOL
4600 ACAMPO ROAD, ACAMPO, CA 95220

PROJECT NO. 19-0046	REVISIONS	BY
DATE 08/05/2015		
DRAWN SUH		
CHECKED: SUH		
SCALE		
CADFILE		
UPDATED:		
SHEET NO.		

A1.2

Study Area. The analysis is intended to evaluate the effects of the proposed project within the context of key local intersections. At most schools weekday a.m. peak hour traffic represents the “worst case” condition, and a.m. peak hour (7:00 to 9:15 a.m.) traffic volume data was collected on a regular school day at study intersections. The two schools will also generate traffic in the midafternoon when the school day ends. However, because the a.m. peak hour contains the highest volume of school traffic, midafternoon conditions were not evaluated quantitatively.

These locations were considered:

1. Acampo Road / West SR 99 Frontage Road
2. Acampo Road / Southbound SR 99 ramps
3. Acampo Road / East SR 99 Frontage Road – south leg
4. East SR 99 Frontage Road / Northbound SR 99 ramps
5. Acampo Road / East SR 99 Frontage Road / School exit
6. Acampo Road / existing central gated access
7. Acampo Road / existing eastern gated access
8. East SR 99 Frontage Road / Houston School Entrance

Summary Conclusions

- Current traffic conditions in the area of the schools are acceptable based on satisfaction of minimum San Joaquin County standards for intersection of Service, and no intersection carries traffic volumes that approach peak hour traffic signal warrant levels.
- The proposed project could add up to 360 students to the site. It is anticipated that these students will be bussed in the morning from the current Joe Serna School campus. Students leave the site in the afternoon at different times, roughly 10% exit at 2:30 p.m., while 60% to 70% will participate in after school programs and stay until 4:00 p.m. These students will be bussed. About 20 to 30% will stay until 5:30 p.m. and be picked up by their parents.
- In the morning Joe Serna School will begin its school day more than 30 minutes before Houston School.
- The amount of vehicular traffic associated with the project is dependent on the success of bussing. If no students were bussed, the Joe Serna Charter School would generate 500 trips in the a.m. peak hour with 212 inbound and 188 outbound. With implementation of bussing, the vehicular trip generation will likely be limited to 8-9 busses, a few parents and staff. Perhaps 60 inbound and 20 outbound trips would occur in the a.m. peak hour. This analysis evaluated a “worst case” condition without bussing.
- The proposed project includes two site accesses, and the traffic currently visiting Houston School will be redistributed to the new access. In general peak traffic before and after school will flow in from the East SR 99 frontage Road entrance and out the exit to Acampo Road at the east end of the site.

- Even with the “worst case” assumption of no bussing the addition of project trips to the redistributed background condition does not have significant impact on the adjoining circulation system based on the Levels of Service at study intersections.
- Localized delays on some intersection approaches will be created by implementation of the proposed circulation plan with and without bussing as a result of on-site queuing that might extend back from the loading area. LUSD should monitor peak conditions in this area to ensure that headways through the loading area are minimized and that access proceeds smoothly.
- Background traffic volumes on study area roads will increase slightly in the future. Based on forecast derived from SJCOG’s regional Tri-County traffic model, the anticipated No Project volumes will still provide Level of Service that satisfy the San Joaquin County minimum LOS C standard at intersections, traffic signal warrants will not be satisfied and the SJCOG minimum of LOS D for mainline SR 99.
- The addition of project trips in the future will increase the length of delays in the future, but San Joaquin County’s minimum LOS C standards will still be met at intersections, traffic signal warrants will not be satisfied and SJCOG’s minimum LOS D standard will be met on SR 99. No capacity improvements are required.

EXISTING SETTING

This section of the traffic study presents a description of existing traffic conditions in the study area. Information presented in this section of the study is based on on-site field observations in the morning, new traffic count data and other data available from local and state agencies.

This section of the traffic impact study also describes analysis methods applied for this study as well as the evaluation criteria used to determine the significance of project-related effects.

Circulation System

This study presents analyses of traffic operating conditions at intersections near the project that may be affected by the proposed project. The limits of the study area were identified based on review of comments received from the California Department of Transportation (Caltrans) and San Joaquin Council of Governments (SJCOCG) and our understanding of the study area.

The following is a description of roadways that provide regional access to the proposed project site.

State Route 99 (SR 99). SR 99 is north-south freeway that traverses the central valley and links Houston School with the Lodi-Stockton area to the south and the Galt – Elk Grove area to the north. In the area of the project SR 99 is a four-lane freeway with controlled access to local streets at Woodbridge Road, Acampo Road and Peltier Road. The *San Joaquin County General Plan Policy Document* (County of San Joaquin 2016) designates SR 99 as an Interstate freeway. SR 99 is also designated a Regional Congestion Management Program/ Regional Transportation Impact Fee (CMP/RTIF) Network facility.

The most recent daily traffic volume information available from the California Department of Transportation (Caltrans) indicated that in 2017 SR 99 carried an Annual Average Daily Traffic (AADT) volume of 66,000 vehicles per day (vpd) south and north of Acampo Road.

Acampo Road is a two-lane east-west rural roadway. The western terminus of Acampo Road is approximately eight miles west of the project site at an intersection on Thornton Road near I-5. Between I-5 and SR 99, Acampo Road is discontinuous at the Mokelumne River. The eastern terminus is at Elliot Road approximately four miles east of the project site. Acampo Road is not a designated facility in the *San Joaquin County General Plan Policy Document*.

East of the community of Acampo, the speed limit on Acampo Road is 55 mph. In the immediate vicinity of SR 99, the speed limit is 25 mph. Acampo Road has access to SR 99 via a freeway interchange.

Traffic volumes on Acampo Road for a 24-hour period during February 2018 were approximately 1,600 vpd the SR 99 East Frontage Road and Brandywine Road and approximately 1,350 vpd east of Brandywine Road.

SR 99 East Frontage Road and **SR 99 West Frontage Road** are undivided 2-lane frontage roads located immediately east and west of SR 99. The northern termini of the frontage roads are in the vicinity of Liberty Road. The southern termini are at an undercrossing of SR 99, north of the Mokelumne River.

The frontage roadways are designed to intercept, collect, and distribute traffic crossing, entering, or leaving the freeway, and to furnish access to property that otherwise would be isolated as a result of the controlled access freeway. SR 99 East Frontage Road and SR 99 West Frontage Road provide direct access to light industrial, commercial, and residential development. The speed limit on straight portions of SR 99 East Frontage Road and SR 99 West Frontage Road is unsigned, but a *prima facie* 55 mph limit could be enforced. Curved portions of the frontage roads, and the portion of SR 99 East Frontage Road near the Houston School are signed for 25 mph.

SR 99 East Frontage Road is offset at Acampo Road. The centerline of the south leg is approximately 150 feet west of the centerline of the north leg. This configuration results in two nearby intersections.

Study Area Intersections

This analysis focusses on the operation of the public road intersections that are already or may be affected by school traffic.

The **Acampo Road / West SR 99 Frontage Road intersection** is controlled by stop signs on the frontage road approaches.

The **Acampo Road / Southbound SR 99 ramps intersection** is controlled by a stop sign on the southbound off-ramp

The **Acampo Road / East SR 99 Frontage Road – South leg intersection** is controlled by a stop sign on the northbound approach.

The **Acampo Road / East SR 99 Frontage Road – North Leg / School exit intersection** is controlled by stop signs on the school exit and on the southbound frontage road approach.

Transit Services

Public Transit San Joaquin Regional Transit District (SJRTD) and the City of Lodi Transit Division provide public transit service to the Lodi area (San Joaquin Regional Transit District 2018, and City of Lodi 2018).

SJRTD provides Intercity Fixed Route Service by a route between Stockton and the Lodi Station in downtown Lodi connecting with Lodi Grape Line, Calaveras Transit, Delta Breeze, Sacramento South County Transit (SCT)/LINK buses.

The City of Lodi Transit Division provides service via the Grape Line Fixed Route system, Dial-A-Ride, and Vine Line Paratransit Service.

While SJRTD and the City of Lodi Transit Division provide public transit service to the Lodi area in general, the nearest service access is approximately two miles southwest of the project site.

LUSD Bussing. Today LUSD provides bussing for Houston School's special needs students. Busses enter from the East Frontage Road and during a.m. peak hour counts three busses were observed leaving the site at the far east driveway on Acampo Road.

The status of bussing for Joe Serna School students has been identified. LUSD anticipates offering bus service between the existing campus and the new Houston School site during the first year of school operation. To provide a "worst case" evaluation of capacity based traffic impacts this analysis assumes no Joe Serna School students are bussed.

Existing Pedestrian and Bicycle Facilities

Bicycle and pedestrian facilities are generally limited along San Joaquin County's rural roadways in the immediate vicinity of the project. A wide paved shoulder exists on Acampo Road adjoining the school and at various locations on the north side of the street. Sidewalk exists on the south side of the Acampo Road crossing over SR 99. School zone crosswalks are striped across the East SR 99 Frontage Road north of Acampo Road and across the eastern leg Acampo Road. That crossing is accompanied by SCHOOL ZONE CROSSING signs at and advance of the intersection.

Analysis Methodology

Level of Service Analysis Procedures. Level of Service (LOS) analysis provides a basis for describing existing traffic conditions and for evaluating the significance of project-related traffic impacts. Level of Service measures the quality of traffic flow and is represented by letter grade designations from A to F, with a grade of A referring to the best conditions, and F representing the worst conditions.

LOS was calculated for this traffic impact study using the methodology contained in the *Highway Capacity Manual, 6th Edition (HCM)* (Transportation Research Board 2018), and the *San Joaquin County General Plan Policy Document* (County of San Joaquin 2016).

Level of service for the following types of facilities was analyzed for this traffic impact study:

- intersections,
- freeway mainline segments.

Analysis methods used for each of these types of facilities are described below.

Intersections. As specified in the *San Joaquin County Traffic Study Guidelines - November 2008* (County of San Joaquin 2008), the LOS methodology used to analyze unsignalized intersections (i.e., intersections controlled by stop signs) is presented in the HCM. **Table 1** presents the ranges of vehicle delay associated with each LOS for unsignalized intersections. For two-way stop-sign controlled unsignalized intersections (or one-way stop-sign controlled “T” intersections), the HCM method considers gap acceptance and average delay of motorists on minor streets and in turn lanes to establish LOS. Level of Service is based on the length of the delay experienced by motorists on the worst single approach, rather than the intersection as a whole. It should be noted that overall intersection average LOS at unsignalized intersections is better, often much better, than LOS on the worst single approach.

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

Sources: 6th Edition Highway Capacity Manual, and Transportation Research Board (TRB) Special Report 209.

Freeway Mainline Segments. Freeway mainline segments are the portions of freeway facilities away from on-ramp merge areas and off-ramp diverge areas. Freeway mainline segments which are considered to be potentially affected by project-related traffic were analyzed for this traffic impact study. Freeway mainline segments were analyzed for this traffic impact study using methods described in Chapter 11 of the HCM. The HCM methods for freeway mainline segments involve calculating the density of vehicles on a freeway facility, expressed as passenger cars per mile per lane (pcpmpl). The LOS designation is based on the vehicle density. Table 2 presents the relationship of vehicle density to LOS for freeway mainline segments.

Freeway mainline segment operating conditions depend on peak hour traffic volumes, the free-flow speed of the freeway, and the number of lanes. LOS for freeway mainline segments are calculated separately for each direction of travel.

TABLE 2 LEVEL OF SERVICE CRITERIA FOR BASIC FREEWAY SEGMENTS	
Level of Service	Vehicle Density
A	Less than or equal to 11
B	Greater than 11. Less than or equal to 18
C	Greater than 18. Less than or equal to 26
D	Greater than 26. Less than or equal to 35
E	Greater than 35. Less than or equal to 45
F	Greater than 45 (demand exceeds capacity)

Note: Vehicle density is expressed as passenger car equivalents per mile per lane.
South: Transportation Research Board 2010.

Signal Warrants Evaluation Procedures. Traffic signal warrants are a series of standards which provide guidelines for determining if a traffic signal is appropriate. Signal warrant analyses are typically conducted at intersections of uncontrolled major streets and stop sign-controlled minor streets. If one or more signal warrants are met, signalization of the intersection may be appropriate. However, a signal should not be installed if none of the warrants are met, since the installation of signals would increase delays on the previously-uncontrolled major street, resulting in an undesirable increase in overall vehicle delay at the intersection. Signalization may also increase the occurrence of particular types of accidents. Therefore, if signals are installed where signal warrants are not met, the detriment of increased accidents and overall delay may be greater than the benefit in traffic operating conditions on the single worst movement at the intersection. Signal warrants, then, provide an industry-standard basis for identifying when the adverse effect on the worst movement is substantial enough to warrant signalization.

For the traffic analysis conducted for this traffic study, available data are limited to a.m. peak hour volumes. Thus, unsignalized intersections operating at poor LOS were evaluated using the Peak

Hour Warrant (Warrant Number 3) from the Caltrans document *California Manual on Uniform Traffic Control Devices 2014 Edition*) (California MUTCD) (California Department of Transportation 2014). This warrant was applied where the minor street experiences long delays in entering or crossing the major street for at least one hour of the day. The Peak Hour Warrant itself includes several components. Some of the components involve comparison of traffic volumes and vehicle delay to a series of standards. Another component involves comparison of traffic volumes to a nomograph.

Even if the Peak Hour Warrant is met, a more detailed signal warrant study is recommended before a signal is installed. The more detailed study should consider volumes during the eight highest hours of the day, volumes during the four highest hours of the day, pedestrian traffic, and accident histories.

Significance Thresholds

The following is a description of significance thresholds applied in this traffic impact study.

Level of Service. In this traffic impact study, the significance of the project's impact on traffic operating conditions is based on a determination of whether resulting intersection LOS is considered acceptable. A project's impact on traffic conditions is considered significant if implementation of the project would result in LOS changing from levels considered acceptable to levels considered unacceptable, or if the project would worsen already unacceptable LOS.

Policy TM-31, Roadway Provision, of the *San Joaquin County General Plan Policy Document* (County of San Joaquin 2016) states, in part:

“The County shall maintain Level of Service (LOS) standards consistent with the San Joaquin Council of Governments (SJCOCG) Congestion Management Program (CMP) for State highways and designated County roadways and intersections of regional significance. Per the CMP, all designated CMP roadways and intersections shall operate at an LOS D or better except for roadways with “grandfathered” LOS. LOS for State highways shall be maintained in cooperation with Caltrans. The County LOS standard for intersections is LOS “D” or better on Minor Arterials and roadways of higher classification and LOS “C” or better on all other non-CMP designated County roadways and intersections.”

The *San Joaquin County 2035 General Plan Environmental Impact Report* (County of San Joaquin 2014) states,

“For any RCMP designated roadway or intersection currently operating or expected to operate at LOS D or better under No Project conditions, the project would result in a significant impact if the project-added traffic would result in LOS E or F operating conditions. For RCMP intersections or roadways currently operating or expected to operate at LOS E or F under No Project conditions, the project would result in a significant impact if it would increase:

- “Average delay by 4 seconds or more (intersections); or
- “The volume-to-capacity (v/c) ratio by 1.0 or more.”

For this study, only SR 99 is designated an RCMP roadway. Therefore, based on the *San Joaquin County General Plan Policy Document* and the *San Joaquin County 2035 General Plan Environmental Impact Report*, LOS D is considered acceptable for study facilities along these two roadways. For other study facilities, LOS C is considered acceptable.

If the project would result in LOS at a study facility changing from acceptable LOS or better to unacceptable LOS or worse, the impact will be considered significant. Mitigation measures which would result in acceptable LOS at the study facility will be considered to reduce the impact to a less-than-significant level.

Consistent with the *San Joaquin County 2035 General Plan Environmental Impact Report*, if an RCMP study facility is already operating at an unacceptable LOS E or F under Existing conditions, or under Cumulative No Project conditions, increasing delay at an intersection by four seconds or more will be considered a significant impact.

Bicycle and Pedestrian Facilities. In this traffic impact study, a project is considered to have a significant impact on bicycle or pedestrian facilities if it would:

- eliminate or adversely affect an existing bikeway or pedestrian facility in a way that would discourage its use; or
- interfere with the implementation of a planned bikeway as shown in the San Joaquin County Bicycle Master Plan Update (County of San Joaquin 2010), or be in conflict with the Plan.

Public Transit. In this traffic impact study, a project is considered to have a significant impact on the public transit system if the project would generate ridership which, when added to existing or future ridership, exceeds available or planned system capacity.

Existing Traffic Volumes and Levels of Service

Intersection Traffic Volumes. A.m. peak hour intersection turning movement traffic volume counts conducted at many study intersections in February 2018 was available from another traffic study. Driveway traffic counts were conducted in March 2019 for this study. In both cases data was collected during the morning peak hour when school traffic would be heaviest. A summary of the traffic count data is presented in the technical appendix.

Seasonal Adjustment. The traffic studies for other projects in rural northern San Joaquin County have increased traffic volumes observed in the winter and spring to account for seasonal traffic variation caused by agricultural activity. The variation is roughly 10%. Non-school traffic has been increased accordingly for this analysis. Figure 3 presents the results of these seasonally

adjusted traffic counts. This figure also identifies current intersection lane geometry and traffic controls.

Intersection Levels of Service. Table 3 presents existing a.m. peak hour Levels of Service at the study area intersections. The worksheets presenting the calculation of LOS are included in the technical appendix.

As indicated, during the a.m. peak hour the Level of Service for motorists waiting to turn at these locations is very good (i.e., LOS A or B) based on HCM methods and roadway capacity. Longer delays can typically occur in the areas around school when through traffic is delayed by the flow of traffic at school driveways on-site queueing that extends out on the public street. Some degree of congestion and delay is expected near schools for short time periods within the peak hour. However, the HCM Level of Service at all locations satisfies the County's minimum LOS D goal. Overall traffic conditions are very good except on those days when events on SR 99 block the mainline freeway and the frontage road system carries regional traffic.

SR 99 Freeway Mainline. Table 4 identifies the current a.m. peak hour Level of Service on SR 99 north and south of the Acampo Road interchange. As indicated, northbound SR 99 approaching Acampo Road, which would carry the majority of project trips in the morning operates at LOS B in the a.m. peak hour, while in the same area southbound SR 99 operates at LOS C. Both satisfy the CMP minimum of LOS D.

Traffic Signal Warrants. No intersection carries traffic volumes that reach the level that might justify a traffic signal.



1	5
SR 99 West Frontage Rd/ Acampo Rd	SR 99 East Frontage Rd/ Northbound SR 99 Ramps
2	6
Southbound SR 99 Ramps/ Acampo Rd	N 99 Frontage Rd/ West School Entrance
3	7
SR 99 East Frontage Rd/ Acampo Rd	North School Entrance/ Acampo Rd
4	8
SR 99 East Frontage Rd/ Acampo Rd	North School Exit/ Acampo Rd

TABLE 3
EXISTING INTERSECTION LEVEL OF SERVICE

Intersection	Control	AM Peak Hour	
		Average Delay (sec/veh)	LOS
Acampo Road / West SR 99 Frontage Road	NB/SB Stop	10	B
Acampo Road / SB SR 99 ramps	SB Stop	10	B
Acampo Road / East SR 99 Frontage Road – South leg	NB Stop	9	A
Acampo Road / East SR 99 Frontage Road / School Exit	NB/SB Stop	12	B
East SR 99 Frontage Road / SR 99 NB ramps	EB Stop	9	A
Acampo Road / East Exit	NB Stop	8	A

TABLE 4
EXISTING MAINLINE SR 99 LEVEL OF SERVICE

Location	AM Peak Hour		
	Peak Hour Volume	Vehicle Density (vphpl)	LOS
<i>Northbound SR 99</i>			
South of Acampo Road	1,902	15	B
Acampo Road to Peltier Road	1,889	15	B
<i>Southbound SR 99</i>			
Peltier Road to Acampo Road	2,487	20	C
South of Acampo Road	2,526	20	C

SCHOOL PROJECT CHARACTERISTICS

The “project” consists of relocating 360 Serna Charter School students to the Houston School site

Traffic Characteristics

The amount of additional traffic on a particular section of the street network is dependent upon three factors:

- Trip Generation, the number of new trips generated by the project,
- Trip Distribution, the direction of travel for the new traffic, and
- Trip Assignment, the specific routes used by the new traffic.

Trip Generation. The potential a.m. peak hour trip generation associated with relocated Joe Serna School students has been estimated from “per student” trip generation rates developed from observation of other Charter Schools and presented in the Institute of Transportation Engineer (ITE) publication *Trip Generation Manual, 10th Edition*. These rates are shown in Table 5, and application of these rates suggests that without bussing the project could generate 400 new trips in the a.m. peak hour.

Some vehicular traffic will likely occur at the site even if bussing is provided. Travel to the site by staff, as well as busses will be on the road. In addition some parents will likely drive to the school anyway to facilitate medical appointments or other reasons. A conservative estimate would be automobile travel by 10% of the students. Under these assumptions the school could generate 88 trips in the a.m. peak hour.

**TABLE 5
PROJECT PEAK HOUR TRIP GENERATION**

Land Use		AM Peak Hour Rates per unit			AM Peak Hour Trips		
		In	Out	Total	In	Out	Total
<i>Forecast with no student bussing</i>							
Charter Elementary School (537)	student	53%	47%	1.11	212	188	400
Joe Serna Charter School	360 students						
Forecast with Anticipated Student Bussing							
Busses			vehicles		9	9	18
Staff			30 staff		30	0	30
Parents who wish to drop-off students (assume 10% of total enrollment)			10%		21	19	40
Total					60	28	88

Trip Distribution

Without bussing the directional distribution of school trips is predicated on student residences and, in the case of trips leaving the site, the location of employment and shopping opportunities

for parents who do not return directly home after dropping off their students. The distribution was based on information provided by LUSD which indicated that the vast majority of Joe Serna Students reside in Lodi. Because over time the school may attract students who live closer to the new site, information regarding Houston School was also considered. We also reviewed current travel patterns near Houston School to identify the various routes that are being used today to reach the school.

Outbound traffic will be slightly different. We assumed that $\frac{1}{2}$ the parents will return home and that the balance will continue to jobs or retail stores as a part of continuing commute or shopping trips.

Table 6 presents the directional orientation of new trips caused by Joe Serna School if bussing was not provided.

**TABLE 6
TRIP DISTRIBUTION**

Direction	Route	AM Trips			
		Inbound		Outbound	
		Trips	Percentage	Trips	Percentage
North	SR 99 to Galt / Elk Grove	4	2%	17	11%
	East SR 99 Frontage Road	4	2%	3	2%
East	Acampo Road	4	2%	9	6%
West	Acampo Road to Lodi via Lower Sacramento Road	53	30%	23	14%
South	West SR 99 Frontage Road	2	1%	1	<1%
	East SR 99 Rrontage Road to Woodbridge interchange	31	15%	20	13%
	SR 99 to Lodi	142	48%	83	53%
	Total	240	99.00%	156	100%

Trip Assignment

The new trips caused by Joe Serna School will enter and exit the site at the new access points being created with the project. In addition, the trips currently associated with travel to and from Houston School will be diverted to the new access as well.

Joe Serna Traffic Volumes. Figure 4 identifies the assignment of trips caused by Joe Serna School assuming no bussing.

Adjusted Houston School Traffic Volumes. Figure 5 indicates the assignment of current trips with redistribution to the new school access.



1	5
 SR 99 West Frontage Rd/ Acampo Rd	 SR 99 East Frontage Rd/ Northbound SR 99 Ramps
2	6
 Southbound SR 99 Ramps/ Acampo Rd	 N 99 Frontage Rd/ West School Entrance
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 SR 99 East Frontage Rd/ Acampo Rd	 North School Entrance/ Acampo Rd
4	8
 SR 99 East Frontage Rd/ Acampo Rd	 North School Exit/ Acampo Rd



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 SR 99 East Frontage Rd/ Acampo Rd	 North School Exit/ Acampo Rd

EXISTING WITH DIVERSION TRAFFIC VOLUMES AND LANE CONFIGURATIONS

EXISTING PLUS PROJECT IMPACTS

Traffic Volumes and Level of Service

The relative impacts of the project have been determined by creating these scenarios:

- Existing a.m. peak hour conditions without the project
- Existing peak hour conditions plus redistribution of Houston School traffic to new access, with 360 new students and no bussing (worst case)

Figure 6 presents the sum of redistributed existing traffic plus the trips caused by 360 students and no bussing.

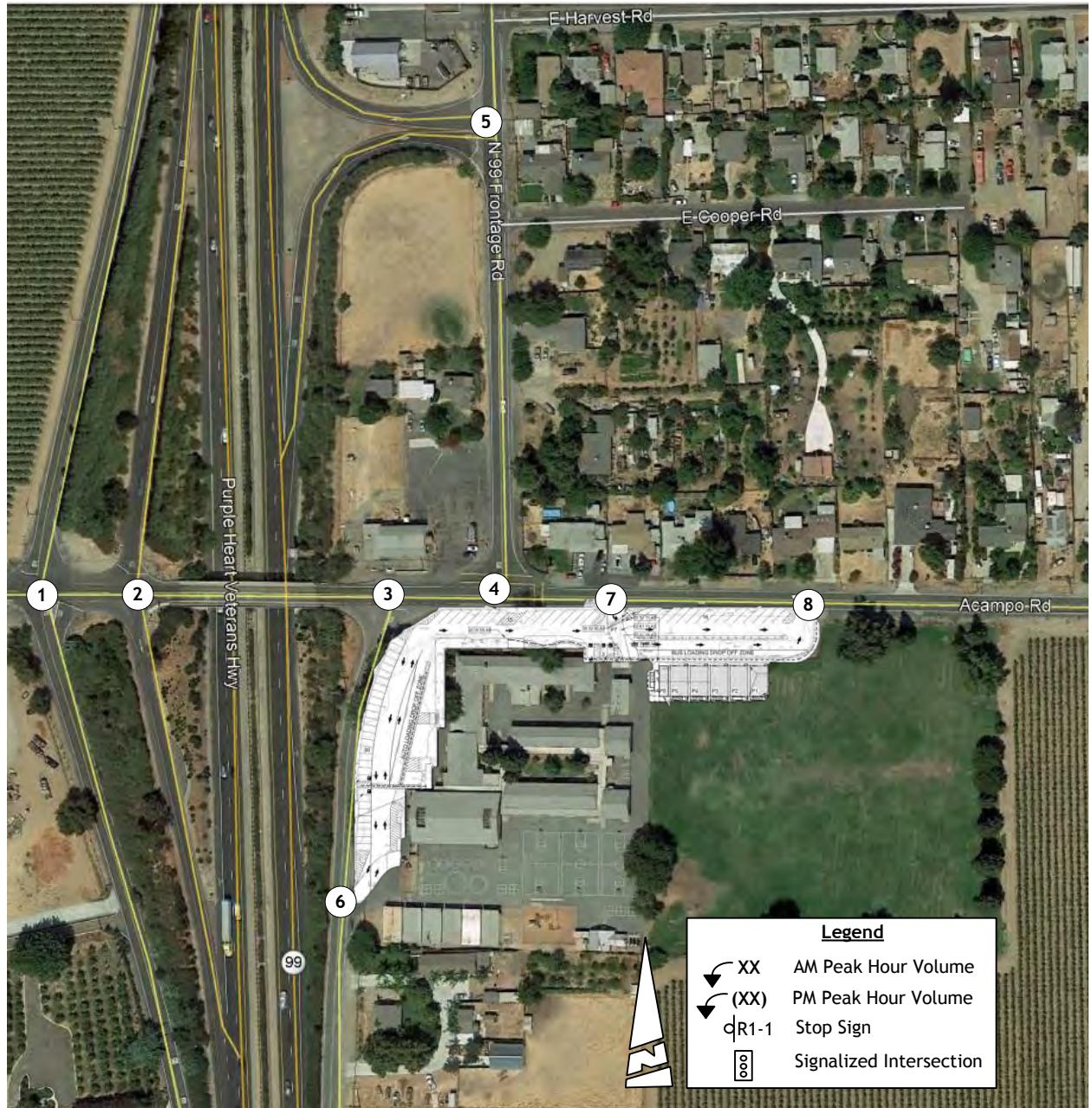
Intersection Levels of Service. Table 7 compares current and Existing Plus Project Levels of Service under a.m. peak hour conditions. As indicated, implementation of the project even with no bussing would not result in Levels of Service in excess of the County's minimum Level of Service C standards. Thus, from the standpoint of CEQA, the impacts of the project are not significant.

The most appreciable delays would occur for motorists trying to exit onto the East SR 99 Frontage Road when other traffic is entering the school. If the school were to operate without bussing, it is likely that LUSD would want to implement a "no exit" policy at the East SR 99 Frontage Road access during peak times.

As a practical matter, traffic conditions around any school are greatly influenced by the capacity of on-site drop-off and loading zones, as traffic queuing back from those locations can often extend back onto public streets. If Serna Charter School was to operate without bussing LUSD would likely need to use campus staff to "expedite" the flow of traffic through the drop-off zone to ensure that queuing was not an issue.

TABLE 7
EXISTING PLUS PROJECT NTERSECTION LEVEL OF SERVICE

Intersection	Control	AM Peak Hour			
		Existing		EX Plus Project	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
Acampo Road / West SR 99 Frontage Road	NB/SB Stop	10	B	11	B
Acampo Road / SB SR 99 ramps	SB Stop	10	A	13	B
Acampo Road / East SR 99 Frontage Road – South leg	NB Stop	9	A	16	C
Acampo Road / East SR 99 Frontage Road	NB/SB Stop	12	B	15	B
East SR 99 Frontage Road / SR 99 NB ramps	EB Stop	9	A	10	A
Acampo Road / East Exit	NB Stop	9	A	13	B
East SR 99 Frontage Road / School Entrance	WB Stop	8	A	19	C



EXISTING PLUS PROJECT (360 STUDENTS)
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

1	5
 99 West Frontage Rd/Acampo Rd	 SR 99 East Frontage Rd/Northbound SR 99 Ramps
2	6
 Southbound SR 99 Ramps/Acampo Rd	 N 99 Frontage Rd/West School Entrance
3	7
 99 East Frontage Rd (South)/Acampo Rd	 North School Entrance/Acampo Rd
4	8
 99 East Frontage Rd (North)/Acampo Rd	 North School Exit/Acampo Rd

SR 99 Mainline Level of Service. Table 8 compares mainline SR 99 Level of Service with and without the project is no bussing occurs. As indicated, the volume of traffic added by the school will not change the current Level of Service, and the SJCOG CMP minimum LOS D standard will be met.

TABLE 8 EXISTING PLUS PROJECT MAINLINE SR 99 LEVEL OF SERVICE						
Location	AM Peak Hour					
	Existing		Existing Plus Project			
Peak Hour Volume	Vehicle Density (vphpl)	LOS	Peak Hour Volume	Vehicle Density (vphpl)	LOS	
<i>Northbound SR 99</i>						
South of Acampo Rd	1,902	15	B	2,044	16	C
Acampo Rd to Peltier Rd	1,889	15	B	1,910	15	C
<i>Southbound SR 99</i>						
Peltier Rd to Acampo Rd	2,487	20	C	2,491	20	C
South of Acampo Rd	2,526	20	C	2,634	21	C

Pedestrian Impacts

The project is not likely to generate an appreciable number of new pedestrians, and the planned access changes will improve pedestrian safety. Relocating the school will not immediately result in additional students who reside local and might walk to the campus. While most students are expected to be bussed, a few students may dropped off along area roads and walk onto the site. However, eliminating the existing school access at the East SR 99 Frontage Road intersection will greatly reduce potential conflicts between pedestrians and automobiles in the vicinity of existing school crossings. The anticipated staggered schedule between Houston School and Joe Serna Charter School will also reduce the possibility of project traffic when Houston School students are present. While improved pedestrian features in Acampo may be desirable and might reasonably be pursued by San Joaquin County in the future as part of a Safe Routes to Schools grant application, the proposed project does not create a significant pedestrian impact that warrants mitigation.

CUMULATIVE IMPACTS

Cumulative Traffic Volumes

Basis for Volume Forecasts. Forecasts of background future year traffic volumes were developed for this traffic impact study based on methods employed for other recent traffic studies in the rural north San Joaquin County area. The SJCOG Three-County regional travel demand model was used to develop future year traffic volume forecasts for this traffic impact study. The SJCOG Three-County model study area is relatively large, and as a result, the model has large geographical units for land use data in the area of Acampo. The “course” nature of the model results in the travel model estimating unrealistically uneven traffic volumes along individual study roadways. To reduce the unevenness of traffic volumes, average growth factors were created. The following growth factors were applied to develop future year traffic volumes forecasts for this traffic impact study.

- for Acampo Road: a 1.11 growth factor (i.e., an 11% increase),
- for SR 99: a 1.21 growth factor.

To develop peak hour intersection turning movement traffic volumes, the growth factors listed above were applied to existing seasonal peak hour intersection turning movement traffic volumes, and the result were balance to account for school traffic that would not necessarily increase without the project. The individual forecasts were then rounded.

Assumed Improvements. Based on a review of SJCOG funding and programming documents (<http://www.sjcog.org/313/Funding-Programming>), and in consultation with staff of the San Joaquin County Public Works Department (Levers pers. comm.), no future roadway improvements are assumed in the study area for this traffic impact study. Existing lane geometrics were assumed for the analysis of cumulative conditions.

Traffic Volumes. Figures 7 and 8 present anticipated Cumulative and Cumulative Plus Project a.m. peak hour traffic volumes.



1	5
 R1-1	 R1-1
2	6
 R1-1	 R1-1
3	7
 R1-1	 R1-1
4	8
 R1-1	 R1-1

Location descriptions:

- SR 99 West Frontage Rd / Acampo Rd
- SR 99 East Frontage Rd / Northbound SR 99 Ramps
- Southbound SR 99 Ramps / Acampo Rd
- N 99 Frontage Rd / West School Entrance
- SR 99 East Frontage Rd / Acampo Rd
- North School Entrance / Acampo Rd
- SR 99 East Frontage Rd / Acampo Rd
- North School Exit / Acampo Rd

CUMULATIVE NO PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS



1	5																
<p>R1-1 →</p> <table> <tr><td>12</td><td>6</td></tr> <tr><td>10</td><td>23</td></tr> <tr><td>5</td><td>7</td></tr> <tr><td>113</td><td>0</td></tr> <tr><td>5</td><td>0</td></tr> </table> <p>SR 99 West Frontage Rd/ Acampo Rd</p>	12	6	10	23	5	7	113	0	5	0	<p>64 → R1-1</p> <table> <tr><td>10</td><td>53</td></tr> <tr><td>166</td><td>56</td></tr> <tr><td>10</td><td>53</td></tr> </table> <p>SR 99 East Frontage Rd/ Northbound SR 99 Ramps</p>	10	53	166	56	10	53
12	6																
10	23																
5	7																
113	0																
5	0																
10	53																
166	56																
10	53																
2	6																
<p>R1-1 →</p> <table> <tr><td>20</td><td>82</td></tr> <tr><td>5</td><td>169</td></tr> <tr><td>107</td><td>25</td></tr> <tr><td>25</td><td>0</td></tr> </table> <p>Southbound SR 99 Ramps/ Acampo Rd</p>	20	82	5	169	107	25	25	0	<p>240 → R1-1</p> <table> <tr><td>29</td><td>15</td></tr> <tr><td>29</td><td>25</td></tr> <tr><td>15</td><td>62</td></tr> <tr><td>15</td><td>15</td></tr> </table> <p>N 99 Frontage Rd/ West School Entrance</p>	29	15	29	25	15	62	15	15
20	82																
5	169																
107	25																
25	0																
29	15																
29	25																
15	62																
15	15																
3	7																
<p>R1-1 →</p> <table> <tr><td>35</td><td>241</td></tr> <tr><td>96</td><td>173</td></tr> <tr><td>35</td><td>14</td></tr> <tr><td>96</td><td>0</td></tr> </table> <p>North School Entrance/ Acampo Rd</p>	35	241	96	173	35	14	96	0	<p>310 ← R1-1</p> <table> <tr><td>59</td><td>7</td></tr> <tr><td>7</td><td>0</td></tr> </table> <p>North School Exit/ Acampo Rd</p>	59	7	7	0				
35	241																
96	173																
35	14																
96	0																
59	7																
7	0																
4	8																
<p>R1-1 →</p> <table> <tr><td>40</td><td>84</td></tr> <tr><td>190</td><td>226</td></tr> <tr><td>24</td><td>0</td></tr> <tr><td>26</td><td>0</td></tr> </table> <p>SR 99 East Frontage Rd/ Acampo Rd</p>	40	84	190	226	24	0	26	0	<p>114 ← R1-1</p> <table> <tr><td>59</td><td>25</td></tr> <tr><td>59</td><td>195</td></tr> <tr><td>25</td><td>0</td></tr> <tr><td>195</td><td>0</td></tr> </table> <p>SR 99 East Frontage Rd/ Acampo Rd</p>	59	25	59	195	25	0	195	0
40	84																
190	226																
24	0																
26	0																
59	25																
59	195																
25	0																
195	0																

CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

Cumulative Levels of Service

Intersection - No Project Conditions. The operating Levels of Service occurring under cumulative conditions were calculated, and the results are noted in Table 9. As indicated, the relatively low level of growth anticipated in this area results in traffic volumes that yield Level of Service that satisfy the minimum LOS C standard.

Intersection - Plus Project Conditions. Implementation of the project even with no bussing would not result in future Levels of Service in excess of the County's minimum Level of Service C standard. Thus, from the standpoint of CEQA, the impacts of the project are not significant.

TABLE 9 CUMULATIVE PLUS PROJECT INTERSECTION LEVEL OF SERVICE					
Intersection	Control	AM Peak Hour			
		Cumulative		Cumulative Plus Project	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
Acampo Road / West SR 99 Frontage Road	NB/SB Stop	10	A	11	B
Acampo Road / SB SR 99 ramps	SB Stop	11	B	16	C
Acampo Road / East SR 99 Frontage Road – South leg	NB Stop	10	A	18	C
Acampo Road / East SR 99 Frontage Road	NB/SB Stop	12	B	20	C
East SR 99 Frontage Road / SR 99 NB ramps	EB Stop	9	A	11	B
Acampo Road / East Exit	NB Stop	9	A	14	B
East SR 99 Frontage Road / School Entrance	WB Stop	9	A	19	C

SR 99 Mainline Level of Service. Table 10 compares mainline SR 99 Level of Service in the future with and without the project is no bussing occurs. As indicated, background growth the volume of traffic added by the school will not change the current Level of Service, and the SJCOG CMP minimum LOS D standard will be met.

TABLE 10
EXISTING PLUS PROJECT MAINLINE SR 99 LEVEL OF SERVICE

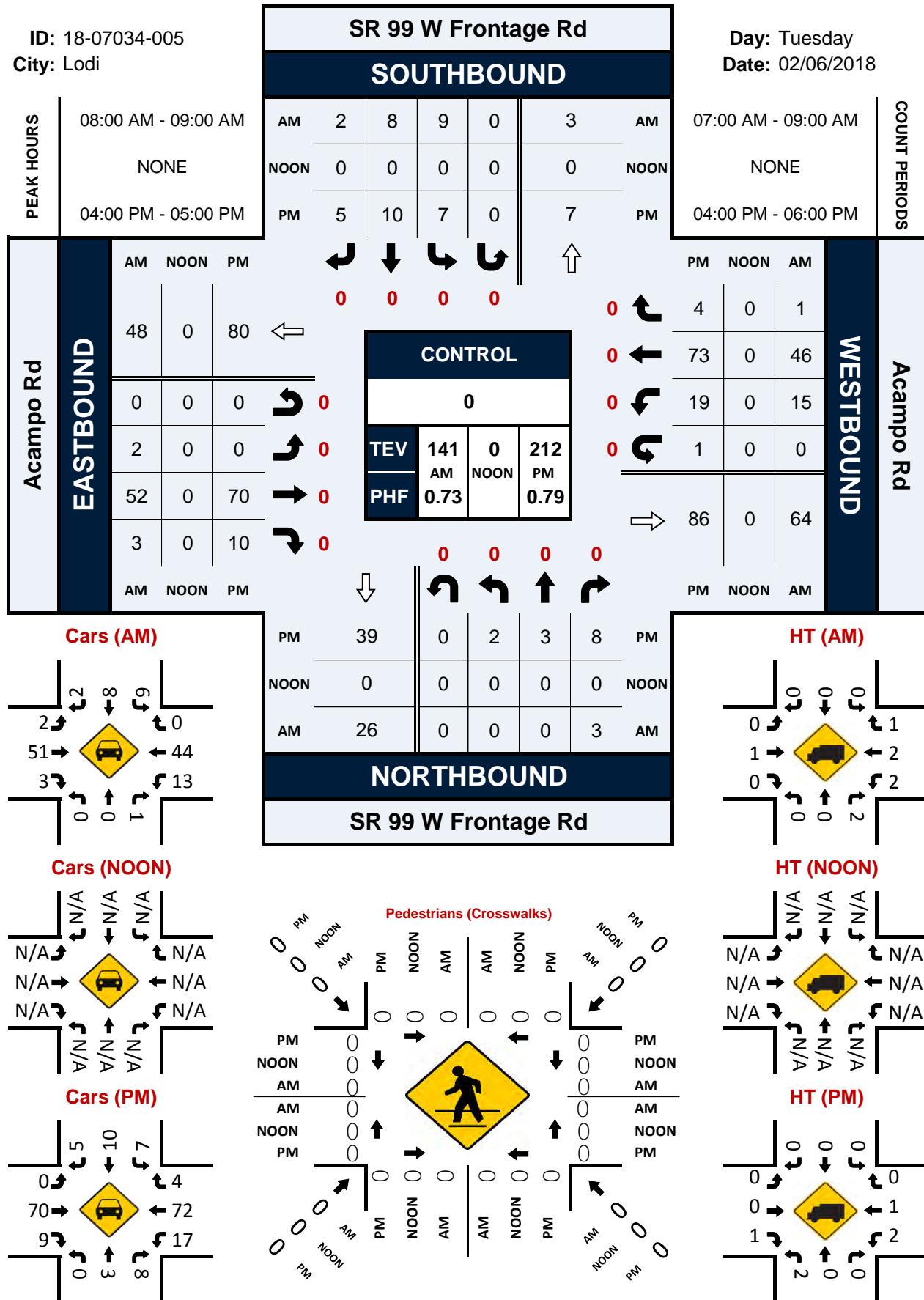
Location	AM Peak Hour					
	Cumulative			Cumulative Plus Project		
	Peak Hour Volume	Vehicle Density (vphpl)	LOS	Peak Hour Volume	Vehicle Density (vphpl)	LOS
<i>Northbound SR 99</i>						
South of Acampo Road	2,394	19	C	2,586	21	C
Acampo Road to Peltier Road	2,286	18	C	2,307	18	C
<i>Southbound SR 99</i>						
Peltier Road to Acampo Road	3,009	25	C	3,013	25	C
South of Acampo Road	3,097	26	C	3,205	27	D

APPENDICES

Traffic Counts / LOS Cales

SR 99 W Frontage Rd & Acampo Rd**Peak Hour Turning Movement Count**

ID: 18-07034-005
City: Lodi



National Data & Surveying Services
Intersection Turning Movement Count

Location: SR 99 W Frontage Rd & Acampo Rd
City: Lodi
Control:

Project ID: 18-07034-005
Date: 2/6/2018

NS/EW Streets:	Total																
	SR 99 W Frontage Rd				Acampo Rd				Acampo Rd								
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
7:00 AM	0	0	2	0	1	1	0	0	1	14	0	0	7	5	0	1	32
7:15 AM	0	0	0	0	0	1	0	0	0	7	0	0	5	7	1	0	21
7:30 AM	0	1	0	0	0	0	0	0	0	15	2	0	4	12	1	0	35
7:45 AM	0	0	5	0	0	3	2	0	0	13	0	0	9	8	2	0	42
8:00 AM	0	0	2	0	4	4	1	0	0	6	1	0	1	9	0	0	28
8:15 AM	0	0	1	0	1	0	0	0	1	11	1	0	4	7	0	0	26
8:30 AM	0	0	0	0	2	4	0	0	0	15	1	0	3	13	1	0	39
8:45 AM	0	0	0	0	2	0	1	0	1	20	0	0	7	17	0	0	48
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1	10	0	10	13	4	0	3	101	5	0	40	78	5	1	271
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	3	0	9	8	2	0	2	52	3	0	15	46	1	0	141
PEAK HR FACTOR :	0.000	0.000	0.375	0.000	0.563	0.500	0.500	0.000	0.500	0.650	0.750	0.000	0.536	0.676	0.250	0.000	0.734
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	0	3	0	1	3	2	0	0	28	3	0	4	21	2	0	67
4:15 PM	1	1	0	0	4	3	2	0	0	17	2	0	2	13	0	0	45
4:30 PM	1	0	4	0	1	1	1	0	0	15	3	0	3	22	2	1	54
4:45 PM	0	2	1	0	1	3	0	0	0	10	2	0	10	17	0	0	46
5:00 PM	0	0	1	0	0	5	0	0	0	7	4	0	2	21	0	0	40
5:15 PM	0	1	1	0	1	2	0	0	0	12	2	0	4	18	0	0	41
5:30 PM	0	0	1	0	0	2	0	0	0	15	0	0	2	13	1	0	34
5:45 PM	0	0	1	0	0	3	2	0	1	12	1	0	2	14	0	0	36
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	2	4	12	0	8	22	7	0	1	116	17	0	29	139	5	1	363
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	2	3	8	0	7	10	5	0	0	70	10	0	19	73	4	1	212
PEAK HR FACTOR :	0.500	0.375	0.500	0.000	0.438	0.833	0.625	0.000	0.000	0.625	0.833	0.000	0.475	0.830	0.500	0.250	0.791

National Data & Surveying Services
Intersection Turning Movement Count

Location: SR 99 W Frontage Rd & Acampo Rd
City: Lodi
Control: 0

Project ID: 18-07034-005
Date: 2/6/2018

Cars																	
NS/EW Streets:	SR 99 W Frontage Rd				SR 99 W Frontage Rd				Acampo Rd				Acampo Rd				
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	
7:00 AM	0	0	1	0	1	1	0	0	1	13	0	0	7	5	0	1	30
7:15 AM	0	0	0	0	0	1	0	0	0	7	0	0	5	7	1	0	21
7:30 AM	0	1	0	0	0	0	0	0	0	15	2	0	4	10	1	0	33
7:45 AM	0	0	3	0	0	3	2	0	0	12	0	0	9	8	2	0	39
8:00 AM	0	0	1	0	4	4	1	0	0	6	1	0	1	9	0	0	27
8:15 AM	0	0	0	0	1	0	0	0	1	11	1	0	3	5	0	0	22
8:30 AM	0	0	0	0	2	4	0	0	0	15	1	0	2	13	0	0	37
8:45 AM	0	0	0	0	2	0	1	0	1	19	0	0	7	17	0	0	47
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1	5	0	10	13	4	0	3	98	5	0	38	74	4	1	256
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	1	0	9	8	2	0	2	51	3	0	13	44	0	0	133
PEAK HR FACTOR :	0.00	0.000	0.250	0.000	0.563	0.500	0.500	0.000	0.500	0.671	0.750	0.000	0.464	0.647	0.000	0.000	0.707
	0.250				0.528				0.700				0.594				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
4:00 PM	0	0	3	0	1	3	2	0	0	28	3	0	3	21	2	0	66
4:15 PM	0	1	0	0	4	3	2	0	0	17	2	0	2	12	0	0	43
4:30 PM	0	0	4	0	1	1	1	0	0	15	2	0	3	22	2	1	52
4:45 PM	0	2	1	0	1	3	0	0	0	10	2	0	9	17	0	0	45
5:00 PM	0	0	1	0	0	4	0	0	0	7	4	0	2	21	0	0	39
5:15 PM	0	1	1	0	1	1	0	0	0	11	2	0	4	18	0	0	39
5:30 PM	0	0	1	0	0	2	0	0	0	15	0	0	2	13	1	0	34
5:45 PM	0	0	1	0	0	3	2	0	1	12	1	0	2	14	0	0	36
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	4	12	0	8	20	7	0	1	115	16	0	27	138	5	1	354
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	3	8	0	7	10	5	0	0	70	9	0	17	72	4	1	206
PEAK HR FACTOR :	0.00	0.375	0.500	0.000	0.438	0.833	0.625	0.000	0.000	0.625	0.750	0.000	0.472	0.818	0.500	0.250	0.780
	0.688				0.611				0.637				0.839				

National Data & Surveying Services
Intersection Turning Movement Count

Location: SR 99 W Frontage Rd & Acampo Rd
City: Lodi
Control: 0

Project ID: 18-07034-005
Date: 2/6/2018

HT																
NS/EW Streets:	SR 99 W Frontage Rd				SR 99 W Frontage Rd				Acampo Rd				Acampo Rd			
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
7:00 AM	0	0	1	0	0	0	0	0	0	1	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
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
7:45 AM	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	2	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
TOTAL VOLUMES :	NL 0	NT 0	NR 5	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 3	ER 0	EU 0	WL 2	WT 4	WR 1	WU 0
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	28.57%	57.14%	14.29%	0.00%
PEAK HR :	08:00 AM - 09:00 AM															
PEAK HR VOL :	0	0	2	0	0	0	0	0	0	1	0	0	2	2	1	0
PEAK HR FACTOR :	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.500	0.250	0.250	0.000
														0.417		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
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
4:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
4:30 PM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	0	1	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
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL 2	NT 0	NR 0	NU 0	SL 0	ST 2	SR 0	SU 0	EL 0	ET 1	ER 1	EU 0	WL 2	WT 1	WR 0	WU 0
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	66.67%	33.33%	0.00%	0.00%
PEAK HR :	04:00 PM - 05:00 PM															
PEAK HR VOL :	2	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0
PEAK HR FACTOR :	0.50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.250	0.000	0.750

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 99 W Frontage Rd & Acampo Rd
City: Lodi
Control: 0

Project ID: 18-07034-005
Date: 2/6/2018

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 99 W Frontage Rd & Acampo Rd
City: Lodi

Project ID: 18-07034-005
Date: 2/6/2018

Pedestrians (Crosswalks)

NS/EW Streets:	SR 99 W Frontage Rd		SR 99 W Frontage Rd		Acampo Rd		Acampo Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
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	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
	0	0	0	0	0	0	0	0	0
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

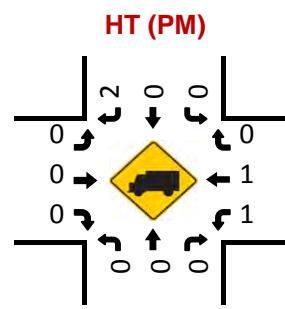
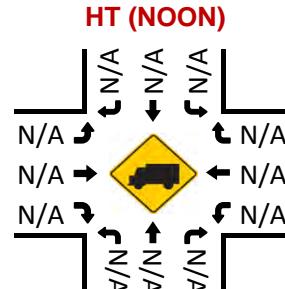
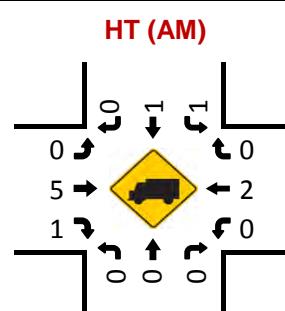
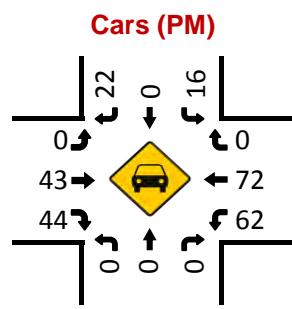
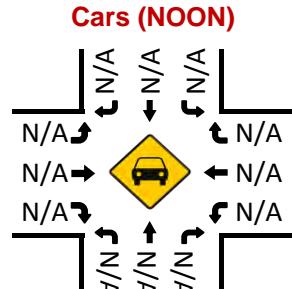
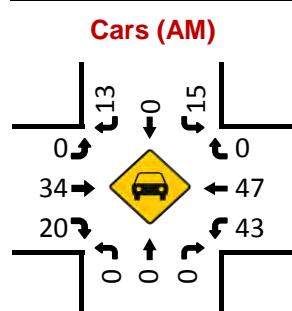
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
	0	0	0	0	0	0	0	0	0
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

SB SR 99 Ramps & Acampo Rd

Peak Hour Turning Movement Count

ID: 18-07034-006
City: Lodi

		SB SR 99 Ramps							
		SOUTHBOUND							
PEAK HOURS	07:00 AM - 08:00 AM	AM	13	1	16	0	0	AM	07:00 AM - 09:00 AM
	NONE	NOON	0	0	0	0	0	NOON	NONE
	04:00 PM - 05:00 PM	PM	24	0	16	0	0	PM	04:00 PM - 06:00 PM
	AM NOON PM						PM NOON AM		
	62 0 97		0 0 0	0 0 0	0	0 0 0	0 0 0	0 0 0	
	0 0 0			0	0	0 0 0	0 0 0	0 0 0	
	0 0 0			0	0	0 0 0	0 0 0	0 0 0	
	39 0 43			0	0	0 0 0	0 0 0	0 0 0	
	21 0 44			0	0	0 0 0	0 0 0	0 0 0	
	AM NOON PM					0 0 0	PM NOON AM		
Acampo Rd	EASTBOUND	CONTROL						WESTBOUND	Acampo Rd
		TEV	182	0	263				
		AM		NOON	PM				
		PHF	0.78		0.78				



National Data & Surveying Services
Intersection Turning Movement Count

Location: SB SR 99 Ramps & Acampo Rd
City: Lodi
Control:

Project ID: 18-07034-006
Date: 2/6/2018

NS/EW Streets:	Total																
	SB SR 99 Ramps				Acampo Rd				Acampo Rd								
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
7:00 AM	0	0	0	0	2	1	4	0	0	14	7	0	9	9	0	0	46
7:15 AM	0	0	0	0	1	0	2	0	0	2	5	0	8	11	0	0	29
7:30 AM	0	0	0	0	3	0	5	0	0	9	6	0	14	12	0	0	49
7:45 AM	0	0	0	0	10	0	2	0	0	14	3	0	12	17	0	0	58
8:00 AM	0	0	0	0	4	0	4	0	0	7	5	0	6	6	0	0	32
8:15 AM	0	0	0	0	1	0	1	0	0	9	4	0	5	12	0	0	32
8:30 AM	0	0	0	0	7	0	3	0	0	17	1	0	12	14	0	0	54
8:45 AM	0	0	0	0	4	0	3	0	0	9	12	0	13	21	0	0	62
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	32	1	24	0	0	81	43	0	79	102	0	0	362
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	16	1	13	0	0	39	21	0	43	49	0	0	182
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.400	0.250	0.650	0.000	0.000	0.696	0.750	0.000	0.768	0.721	0.000	0.000	0.784
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	0	0	0	2	0	5	0	0	14	19	0	22	22	0	0	84
4:15 PM	0	0	0	0	9	0	5	0	0	10	11	0	12	10	0	0	57
4:30 PM	0	0	0	0	4	0	6	0	0	10	11	0	19	22	0	0	72
4:45 PM	0	0	0	0	1	0	8	0	0	9	3	0	10	19	0	0	50
5:00 PM	0	0	0	0	4	0	5	0	0	6	2	0	13	18	0	0	48
5:15 PM	0	0	0	0	3	1	4	0	0	8	5	0	8	18	0	0	47
5:30 PM	0	0	0	0	9	0	3	0	0	14	3	0	11	13	0	1	54
5:45 PM	0	0	0	0	6	0	0	0	0	8	5	0	10	16	0	0	45
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	38	1	36	0	0	79	59	0	105	138	0	1	457
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	16	0	24	0	0	43	44	0	63	73	0	0	263
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.444	0.000	0.750	0.000	0.000	0.768	0.579	0.000	0.716	0.830	0.000	0.000	0.783

National Data & Surveying Services

Intersection Turning Movement Count

Location: SB SR 99 Ramps & Acampo Rd
City: Lodi
Control: 0

Project ID: 18-07034-006
Date: 2/6/2018

Cars																	
NS/EW Streets:	SB SR 99 Ramps				SB SR 99 Ramps				Acampo Rd				Acampo Rd				
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	
7:00 AM	0	0	0	0	2	0	4	0	0	12	6	0	9	9	0	0	
	0	0	0	0	1	0	2	0	0	2	5	0	8	11	0	0	
	0	0	0	0	3	0	5	0	0	9	6	0	14	10	0	0	
	0	0	0	0	9	0	2	0	0	11	3	0	12	17	0	0	
	0	0	0	0	4	0	4	0	0	6	5	0	6	6	0	0	
	0	0	0	0	1	0	1	0	0	8	4	0	5	9	0	0	
	0	0	0	0	7	0	3	0	0	17	1	0	12	12	0	0	
	0	0	0	0	4	0	3	0	0	9	12	0	11	20	0	0	
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 0	NR 0	NU 0	SL 31	ST 0	SR 24	SU 0	EL 0	ET 74	ER 42	EU 0	WL 77	WT 94	WR 0	WU 0	TOTAL 342
					56.36%	0.00%	43.64%	0.00%	0.00%	63.79%	36.21%	0.00%	45.03%	54.97%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
	0	0	0	0	15	0	13	0	0	34	20	0	43	47	0	0	172
PEAK HR VOL : PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.417	0.000	0.650	0.000	0.000	0.708	0.833	0.000	0.768	0.691	0.000	0.000	0.796
					0.636					0.750				0.776			
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
4:00 PM	0	0	0	0	2	0	4	0	0	14	19	0	21	22	0	0	82
	0	0	0	0	9	0	5	0	0	10	11	0	12	9	0	0	56
	0	0	0	0	4	0	6	0	0	10	11	0	19	22	0	0	72
	0	0	0	0	1	0	7	0	0	9	3	0	10	19	0	0	49
	0	0	0	0	4	0	5	0	0	6	2	0	12	18	0	0	47
	0	0	0	0	3	0	4	0	0	8	4	0	8	18	0	0	45
	0	0	0	0	9	0	3	0	0	14	3	0	11	13	0	1	54
	0	0	0	0	6	0	0	0	0	8	5	0	10	16	0	0	45
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 0	NR 0	NU 0	SL 38	ST 0	SR 34	SU 0	EL 0	ET 79	ER 58	EU 0	WL 103	WT 137	WR 0	WU 1	TOTAL 450
					52.78%	0.00%	47.22%	0.00%	0.00%	57.66%	42.34%	0.00%	42.74%	56.85%	0.00%	0.41%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
	0	0	0	0	16	0	22	0	0	43	44	0	62	72	0	0	259
PEAK HR VOL : PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.444	0.000	0.786	0.000	0.000	0.768	0.579	0.000	0.738	0.818	0.000	0.000	0.790
					0.679					0.659				0.779			

National Data & Surveying Services
Intersection Turning Movement Count

Location: SB SR 99 Ramps & Acampo Rd
City: Lodi
Control: 0

Project ID: 18-07034-006
Date: 2/6/2018

HT																
NS/EW Streets:	SB SR 99 Ramps				SB SR 99 Ramps				Acampo Rd				Acampo Rd			
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
7:00 AM	0	0	0	0	0	1	0	0	0	2	1	0	0	0	0	0
7:15 AM	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	2	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 0	NR 0	NU 0	SL 1	ST 1	SR 0	SU 0	EL 0	ET 7	ER 1	EU 0	WL 2	WT 8	WR 0	WU 0
PEAK HR :	07:00 AM - 08:00 AM															
PEAK HR VOL :	0	0	0	0	1	1	0	0	0	5	1	0	0	2	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.417	0.250	0.000	0.000	0.250	0.000	0.250
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
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
4:30 PM	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	1	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
5:30 PM	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
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 0	NR 0	NU 0	SL 0	ST 1	SR 2	SU 0	EL 0	ET 0	ER 1	EU 0	WL 2	WT 1	WR 0	WU 0
PEAK HR :	04:00 PM - 05:00 PM															
PEAK HR VOL :	0	0	0	0	0	0	2	0	0	0	0	0	1	1	0	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000

National Data & Surveying Services

Intersection Turning Movement Count

Location: SB SR 99 Ramps & Acampo Rd
City: Lodi
Control: 0

Project ID: 18-07034-006
Date: 2/6/2018

National Data & Surveying Services

Intersection Turning Movement Count

Location: SB SR 99 Ramps & Acampo Rd
City: Lodi

Project ID: 18-07034-006
Date: 2/6/2018

Pedestrians (Crosswalks)

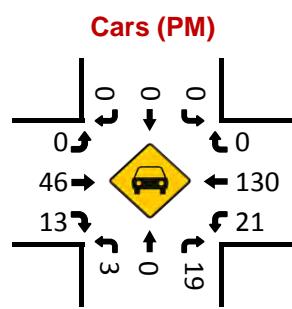
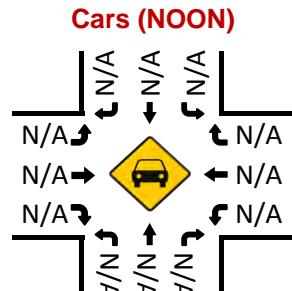
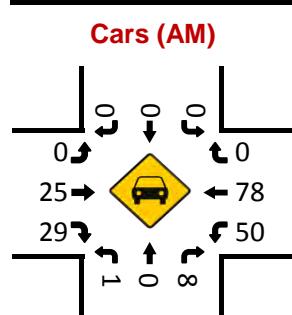
NS/EW Streets:	SB SR 99 Ramps		SB SR 99 Ramps		Acampo Rd		Acampo Rd		TOTAL
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
AM	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0
PEAK HR :	07:00 AM - 08:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	1	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	1	1	50.00%	50.00%	0	0	2
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	1	1	0.250	0.250	0	0	2
PEAK HR FACTOR :									0.250

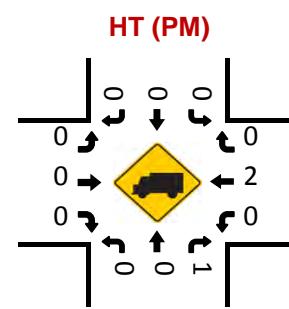
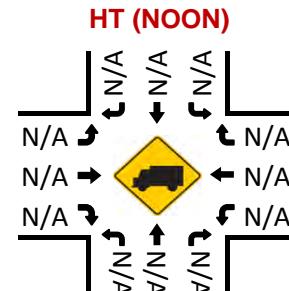
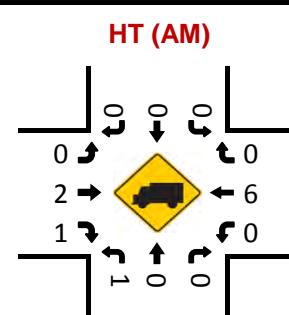
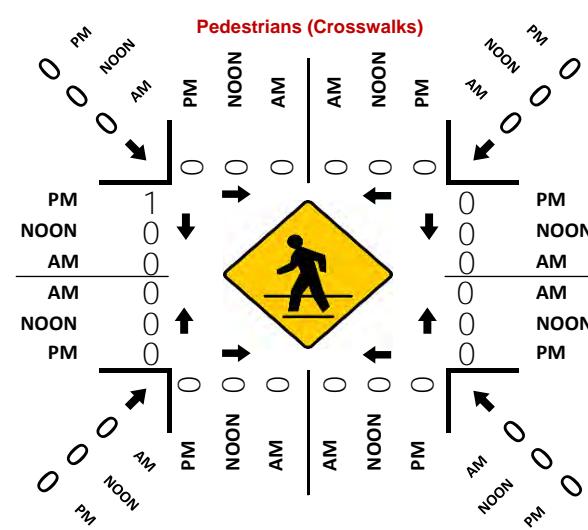
SR 99 E Frontage Rd & Acampo Rd

Peak Hour Turning Movement Count

ID: 18-07034-007



PM	34	0	3	0	20	PM
NOON	0	0	0	0	0	NOON
AM	80	0	2	0	8	AM



National Data & Surveying Services
Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & Acampo Rd
City: Lodi
Control:

Project ID: 18-07034-007
Date: 2/6/2018

NS/EW Streets:	Total																
	SR 99 E Frontage Rd				Acampo Rd				Acampo Rd								
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
7:00 AM	0	0	0	0	0	0	0	0	0	13	2	0	1	17	0	0	33
7:15 AM	1	0	3	0	0	0	0	0	0	3	0	0	3	19	0	0	29
7:30 AM	1	0	1	0	0	0	0	0	0	12	0	0	1	25	0	0	40
7:45 AM	0	0	1	0	0	0	0	0	0	22	2	0	0	28	0	0	53
8:00 AM	0	0	4	0	0	0	0	0	0	7	4	0	1	12	0	0	28
8:15 AM	0	0	0	0	0	0	0	0	0	3	6	0	3	14	0	0	26
8:30 AM	1	0	3	0	0	0	0	0	0	10	14	0	24	25	0	0	77
8:45 AM	1	0	1	0	0	0	0	0	0	7	6	0	22	33	0	0	70
TOTAL VOLUMES :	NL 4	NT 0	NR 13	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 77	ER 34	EU 0	WL 55	WT 173	WR 0	WU 0	TOTAL 356
APPROACH %'s :	23.53%	0.00%	76.47%	0.00%					0.00%	69.37%	30.63%	0.00%	24.12%	75.88%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM															TOTAL	
PEAK HR VOL :	2	0	8	0					0	27	30	0	50	84	0	0	201
PEAK HR FACTOR :	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.675	0.536	0.000	0.521	0.636	0.000	0.000	0.653
												0.594					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
4:00 PM	0	0	6	0	0	0	0	0	0	13	3	0	6	43	0	0	71
4:15 PM	1	0	5	0	0	0	0	0	0	14	5	0	3	23	0	0	51
4:30 PM	0	0	4	0	0	0	0	0	0	12	2	0	3	40	0	0	61
4:45 PM	2	0	5	0	0	0	0	0	0	7	3	0	9	26	0	0	52
5:00 PM	0	0	5	0	0	0	0	0	0	8	1	0	4	31	0	0	49
5:15 PM	3	0	6	0	0	0	0	0	0	9	10	0	3	23	0	0	54
5:30 PM	0	0	0	0	0	0	0	0	0	9	8	0	2	22	0	0	41
5:45 PM	0	0	4	0	0	0	0	0	0	11	3	0	5	26	0	0	49
TOTAL VOLUMES :	NL 6	NT 0	NR 35	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 83	ER 35	EU 0	WL 35	WT 234	WR 0	WU 0	TOTAL 428
APPROACH %'s :	14.63%	0.00%	85.37%	0.00%					0.00%	70.34%	29.66%	0.00%	13.01%	86.99%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM															TOTAL	
PEAK HR VOL :	3	0	20	0					0	46	13	0	21	132	0	0	235
PEAK HR FACTOR :	0.375	0.000	0.833	0.000	0.000	0.000	0.000	0.000	0.000	0.821	0.650	0.000	0.583	0.767	0.000	0.000	0.827
												0.776					

National Data & Surveying Services
Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & Acampo Rd
City: Lodi
Control: 0

Project ID: 18-07034-007
Date: 2/6/2018

Cars																
NS/EW Streets:	SR 99 E Frontage Rd				SR 99 E Frontage Rd				Acampo Rd				Acampo Rd			
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
7:00 AM	0	0	0	0	0	0	0	0	0	12	1	0	1	17	0	0
7:15 AM	1	0	3	0	0	0	0	0	0	3	0	0	3	18	0	0
7:30 AM	0	0	1	0	0	0	0	0	0	12	0	0	1	25	0	0
7:45 AM	0	0	1	0	0	0	0	0	0	18	2	0	0	28	0	0
8:00 AM	0	0	4	0	0	0	0	0	0	7	3	0	1	12	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	2	6	0	3	12	0	0
8:30 AM	0	0	3	0	0	0	0	0	0	10	14	0	24	23	0	0
8:45 AM	1	0	1	0	0	0	0	0	0	6	6	0	22	31	0	0
TOTAL VOLUMES :	NL 2	NT 0	NR 13	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 70	ER 32	EU 0	WL 55	WT 166	WR 0	WU 0
APPROACH %'s :	13.33%	0.00%	86.67%	0.00%					0.00%	68.63%	31.37%	0.00%	24.89%	75.11%	0.00%	0.00%
PEAK HR :	08:00 AM - 09:00 AM														TOTAL	
PEAK HR VOL :	1	0	8	0	0	0	0	0	0	25	29	0	50	78	0	0
PEAK HR FACTOR :	0.25	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.518	0.000	0.521	0.629	0.000	0.000
												0.563			0.604	
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
4:00 PM	0	0	6	0	0	0	0	0	0	13	3	0	6	42	0	0
4:15 PM	1	0	4	0	0	0	0	0	0	14	5	0	3	22	0	0
4:30 PM	0	0	4	0	0	0	0	0	0	12	2	0	3	40	0	0
4:45 PM	2	0	5	0	0	0	0	0	0	7	3	0	9	26	0	0
5:00 PM	0	0	5	0	0	0	0	0	0	8	1	0	4	30	0	0
5:15 PM	3	0	6	0	0	0	0	0	0	9	10	0	3	23	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	9	8	0	2	22	0	0
5:45 PM	0	0	4	0	0	0	0	0	0	11	3	0	5	26	0	0
TOTAL VOLUMES :	NL 6	NT 0	NR 34	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 83	ER 35	EU 0	WL 35	WT 231	WR 0	WU 0
APPROACH %'s :	15.00%	0.00%	85.00%	0.00%					0.00%	70.34%	29.66%	0.00%	13.16%	86.84%	0.00%	0.00%
PEAK HR :	04:00 PM - 05:00 PM														TOTAL	
PEAK HR VOL :	3	0	19	0	0	0	0	0	0	46	13	0	21	130	0	0
PEAK HR FACTOR :	0.38	0.000	0.792	0.000	0.000	0.000	0.000	0.000	0.000	0.821	0.650	0.000	0.583	0.774	0.000	0.000
												0.776			0.786	

National Data & Surveying Services
Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & Acampo Rd
City: Lodi
Control: 0

Project ID: 18-07034-007
Date: 2/6/2018

HT																	
NS/EW Streets:	SR 99 E Frontage Rd				SR 99 E Frontage Rd				Acampo Rd				Acampo Rd				
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	
7:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
7:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:45 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	
8:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	
TOTAL VOLUMES :	NL 2	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 7	ER 2	EU 0	WL 0	WT 7	WR 0	WU 0	TOTAL 18
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	77.78%	22.22%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	2	1	0	0	6	0	0	10
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.750	0.000	0.750	0.833
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL 0	NT 0	NR 1	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 3	WR 0	WU 0	TOTAL 4
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	0.000	0.500	0.000	0.500	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	3
PEAK HR FACTOR :	0.00	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.375

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & Acampo Rd
City: Lodi
Control: 0

Project ID: 18-07034-007
Date: 2/6/2018

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & Acampo Rd
City: Lodi

Project ID: 18-07034-007
Date: 2/6/2018

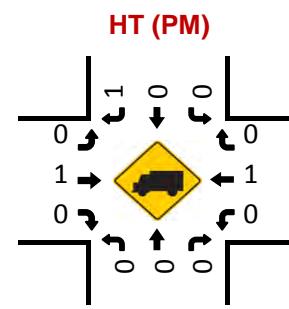
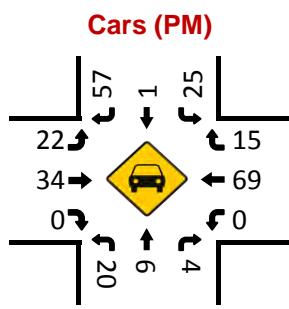
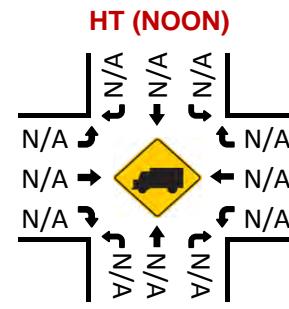
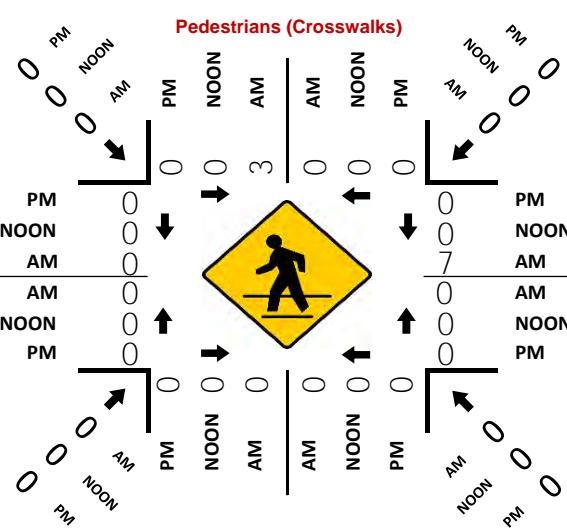
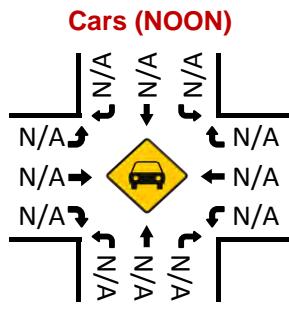
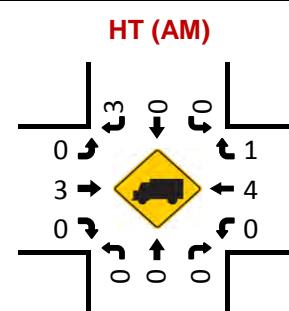
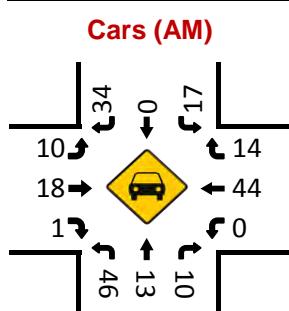
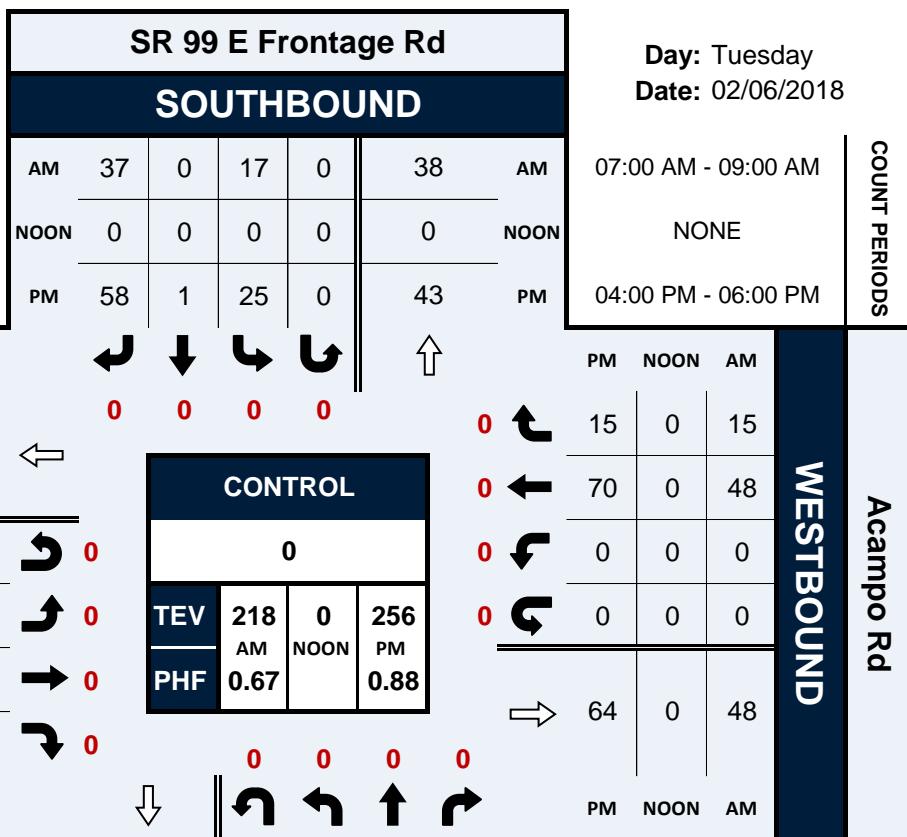
Pedestrians (Crosswalks)

NS/EW Streets:	SR 99 E Frontage Rd		SR 99 E Frontage Rd		Acampo Rd		Acampo Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
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	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
	0	0	0	0	0	0	0	0	0
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

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	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	1	1
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
	0	0	0	0	0	0	0	1	1
APPROACH %'s :							0.00% 100.00%		
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	1	1
PEAK HR FACTOR :							0.250 0.250		0.250

SR 99 E Frontage Rd & Acampo Rd**Peak Hour Turning Movement Count**

ID: 18-07034-008
City: Lodi



National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & Acampo Rd
City: Lodi
Control:

Project ID: 18-07034-008
Date: 2/6/2018

NS/EW Streets:	SR 99 E Frontage Rd				SR 99 E Frontage Rd				Acampo Rd				Acampo Rd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	5	0	7	0	4	7	0	0	0	9	2	0	34
	7:00 AM	0	0	0	0	4	0	7	0	3	1	1	0	0	12	2	0
	7:15 AM	0	0	0	0	3	0	6	0	4	9	0	0	0	18	2	0
	7:30 AM	1	0	1	0	5	1	7	0	7	12	1	0	0	21	1	0
	7:45 AM	0	0	0	0	2	0	6	0	4	7	0	0	0	7	6	0
	8:00 AM	0	0	0	0	5	0	7	0	0	2	0	0	0	4	1	0
	8:15 AM	4	1	1	0	7	0	7	0	3	6	1	0	0	22	3	0
	8:30 AM	20	6	5	0	7	0	7	0	3	6	1	0	0	0	0	80
	8:45 AM	22	6	4	0	3	0	17	0	3	6	0	0	0	15	5	0
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s :	47	13	11	0	34	1	64	0	28	50	3	0	0	108	22	0	381
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	46	13	10	0	17	0	37	0	10	21	1	0	0	48	15	0	218
PEAK HR FACTOR :	0.523	0.542	0.500	0.000	0.607	0.000	0.544	0.000	0.625	0.750	0.250	0.000	0.000	0.545	0.625	0.000	0.673
0.539					0.675				0.727				0.630				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
TOTAL VOLUMES :	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
	4:00 PM	8	0	1	0	5	0	17	0	8	8	0	0	0	21	5	0
	4:15 PM	5	1	0	0	8	0	7	0	6	11	0	0	0	15	4	0
	4:30 PM	4	3	0	0	7	0	19	0	6	8	0	0	0	17	1	0
	4:45 PM	3	2	3	0	5	1	15	0	2	8	0	0	0	17	5	0
	5:00 PM	4	0	1	0	9	0	18	0	4	6	0	0	0	12	1	0
	5:15 PM	5	2	0	0	9	0	10	0	2	11	0	0	0	10	2	0
	5:30 PM	6	4	1	0	10	0	15	0	8	14	0	0	0	10	5	0
	5:45 PM	3	2	1	0	6	0	15	0	8	8	0	0	0	11	1	0
APPROACH %'s :	38	14	7	0	59	1	116	0	44	74	0	0	0	113	24	0	490
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	20	6	4	0	25	1	58	0	22	35	0	0	0	70	15	0	256
PEAK HR FACTOR :	0.625	0.500	0.333	0.000	0.781	0.250	0.763	0.000	0.688	0.795	0.000	0.000	0.000	0.833	0.750	0.000	0.877
0.833					0.808				0.838				0.817				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & Acampo Rd
City: Lodi
Control: 0

Project ID: 18-07034-008
Date: 2/6/2018

Cars																	
NS/EW Streets:	SR 99 E Frontage Rd				SR 99 E Frontage Rd				Acampo Rd				Acampo Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	5	0	7	0	3	7	0	0	0	9	2	0	33
	0	0	0	0	4	0	7	0	3	1	1	0	0	12	2	0	30
	1	0	0	0	3	0	6	0	4	9	0	0	0	18	2	0	43
	0	0	0	0	5	1	7	0	5	11	1	0	0	21	1	0	52
	0	0	0	0	2	0	6	0	4	7	0	0	0	7	6	0	32
	4	1	1	0	5	0	6	0	0	1	0	0	0	3	1	0	22
	20	6	5	0	7	0	6	0	3	6	1	0	0	21	2	0	77
	22	6	4	0	3	0	16	0	3	4	0	0	0	13	5	0	76
TOTAL VOLUMES : APPROACH %'s :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	47	13	10	0	34	1	61	0	25	46	3	0	0	104	21	0	365
	67.14%	18.57%	14.29%	0.00%	35.42%	1.04%	63.54%	0.00%	33.78%	62.16%	4.05%	0.00%	0.00%	83.20%	16.80%	0.00%	
PEAK HR : PEAK HR VOL : PEAK HR FACTOR :	08:00 AM - 09:00 AM																TOTAL
	46	13	10	0	17	0	34	0	10	18	1	0	0	44	14	0	207
	0.52	0.542	0.500	0.000	0.607	0.000	0.531	0.000	0.625	0.643	0.250	0.000	0.000	0.524	0.583	0.000	0.672
					0.539		0.671							0.630			
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	8	0	1	0	5	0	16	0	8	8	0	0	0	21	5	0	72
	5	1	0	0	8	0	7	0	6	10	0	0	0	14	4	0	55
	4	3	0	0	7	0	19	0	6	8	0	0	0	17	1	0	65
	3	2	3	0	5	1	15	0	2	8	0	0	0	17	5	0	61
	4	0	1	0	9	0	18	0	4	6	0	0	0	11	1	0	54
	5	2	0	0	9	0	10	0	2	11	0	0	0	10	2	0	51
	6	4	1	0	10	0	15	0	8	14	0	0	0	10	5	0	73
	3	2	1	0	6	0	15	0	8	8	0	0	0	11	1	0	55
TOTAL VOLUMES : APPROACH %'s :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	38	14	7	0	59	1	115	0	44	73	0	0	0	111	24	0	486
	64.41%	23.73%	11.86%	0.00%	33.71%	0.57%	65.71%	0.00%	37.61%	62.39%	0.00%	0.00%	0.00%	82.22%	17.78%	0.00%	
PEAK HR : PEAK HR VOL : PEAK HR FACTOR :	04:00 PM - 05:00 PM																TOTAL
	20	6	4	0	25	1	57	0	22	34	0	0	0	69	15	0	253
	0.63	0.500	0.333	0.000	0.781	0.250	0.750	0.000	0.688	0.850	0.000	0.000	0.000	0.821	0.750	0.000	0.878
					0.833		0.798							0.808			

National Data & Surveying Services
Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & Acampo Rd
City: Lodi
Control: 0

Project ID: 18-07034-008
Date: 2/6/2018

HT																	
NS/EW Streets:	SR 99 E Frontage Rd				SR 99 E Frontage Rd				Acampo Rd				Acampo Rd				
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	
7:00 AM	0	0	0	0	0	0	0	0	1	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	
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:45 AM	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	
8:00 AM	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	1	0	0	0	1	0	0	
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	
8:45 AM	0	0	0	0	0	0	1	0	0	2	0	0	0	2	0	5	
TOTAL VOLUMES :	NL 0	NT 0	NR 1	NU 0	SL 0	ST 0	SR 3	SU 0	EL 3	ET 4	ER 0	EU 0	WL 0	WT 4	WR 1	WU 0	TOTAL 16
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	42.86%	57.14%	0.00%	0.00%	0.00%	80.00%	20.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	3	0	0	3	0	0	0	4	1	0	11
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.375	0.000	0.000	0.000	0.500	0.250	0.000	0.550
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 1	SU 0	EL 0	ET 1	ER 0	EU 0	WL 0	WT 2	WR 0	WU 0	TOTAL 4
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	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 :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	3
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.375

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & Acampo Rd
City: Lodi
Control: 0

Project ID: 18-07034-008
Date: 2/6/2018

National Data & Surveying Services

Intersection Turning Movement Count

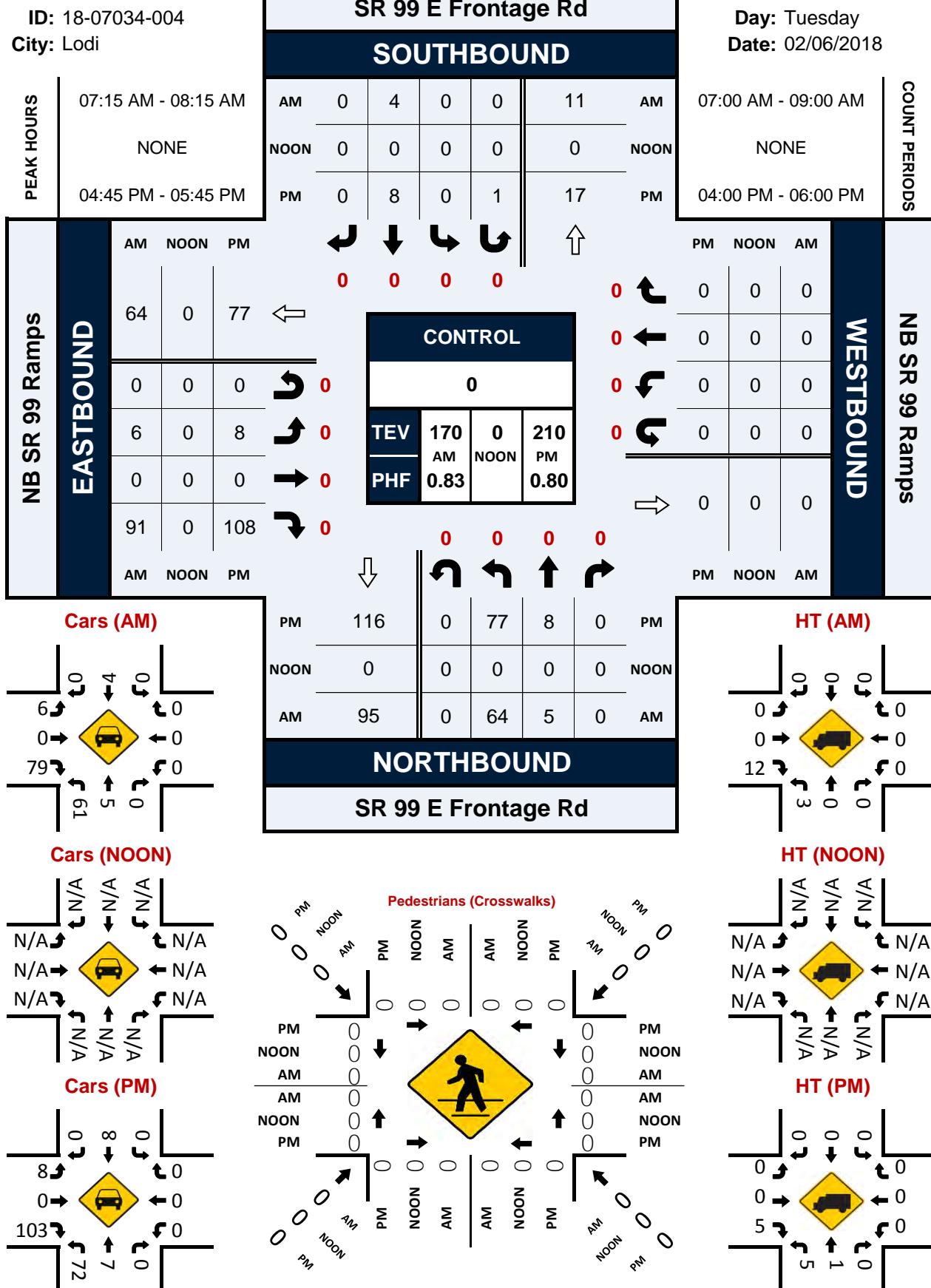
Location: SR 99 E Frontage Rd & Acampo Rd
City: Lodi

Project ID: 18-07034-008
Date: 2/6/2018

Pedestrians (Crosswalks)

NS/EW Streets:	SR 99 E Frontage Rd		SR 99 E Frontage Rd		Acampo Rd		Acampo Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	1	0	0	0	0	0	0	0	1
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	3	0	0	0	0	5	0	0	8
8:30 AM	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	1	0	0	1
TOTAL VOLUMES :	EB 4	WB 0	EB 0	WB 0	NB 0	SB 7	NB 0	SB 0	TOTAL 11
APPROACH %'s :	100.00%	0.00%			0.00%	100.00%			
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	3	0			0	7	0	0	10
PEAK HR FACTOR :	0.250	0.250			0.350	0.350			0.313

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	2	2	0	2	0	0	0	6
TOTAL VOLUMES :	EB 0	WB 2	EB 2	WB 0	NB 2	SB 0	NB 0	SB 0	TOTAL 6
APPROACH %'s :	0.00%	100.00%	100.00%	0.00%	100.00%	0.00%			
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0			0	0	0	0	0
PEAK HR FACTOR :									TOTAL 0

SR 99 E Frontage Rd & NB SR 99 Ramps**Peak Hour Turning Movement Count**

National Data & Surveying Services
Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & NB SR 99 Ramps
City: Lodi
Control:

Project ID: 18-07034-004
Date: 2/6/2018

Total																	
NS/EW Streets:	SR 99 E Frontage Rd				SR 99 E Frontage Rd				NB SR 99 Ramps				NB SR 99 Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
7:00 AM	17	1	0	0	0	1	0	0	0	0	14	0	0	0	0	0	33
7:15 AM	21	0	0	0	0	1	0	0	2	0	21	0	0	0	0	0	45
7:30 AM	23	3	0	0	0	1	0	0	3	0	21	0	0	0	0	0	51
7:45 AM	8	1	0	0	0	2	0	0	1	0	28	0	0	0	0	0	40
8:00 AM	12	1	0	0	0	0	0	0	0	0	21	0	0	0	0	0	34
8:15 AM	10	0	0	0	0	0	0	0	1	0	24	0	0	0	0	0	35
8:30 AM	15	2	0	0	0	0	0	0	2	0	17	0	0	0	0	0	36
8:45 AM	18	0	0	0	0	2	0	0	1	0	20	0	0	0	0	0	41
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	124	8	0	0	0	7	0	0	10	0	166	0	0	0	0	0	315
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	64	5	0	0	0	4	0	0	6	0	91	0	0	0	0	0	170
PEAK HR FACTOR :	0.696	0.417	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.813	0.000	0.000	0.000	0.000	0.833	
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
4:00 PM	20	3	0	0	0	4	1	0	2	0	30	0	0	0	0	0	60
4:15 PM	15	4	0	0	0	4	1	0	1	0	25	0	0	0	0	0	50
4:30 PM	17	2	0	0	0	4	1	0	3	0	22	0	0	0	0	0	49
4:45 PM	10	3	0	0	0	1	0	0	2	0	26	0	0	0	0	0	42
5:00 PM	18	0	0	0	0	3	0	0	4	0	25	0	0	0	0	0	50
5:15 PM	20	2	0	0	0	2	0	0	0	0	28	0	0	0	0	0	52
5:30 PM	29	3	0	0	0	2	0	1	2	0	29	0	0	0	0	0	66
5:45 PM	10	0	0	0	0	4	0	0	1	0	22	0	0	0	0	0	37
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	139	17	0	0	0	24	3	1	15	0	207	0	0	0	0	0	406
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	77	8	0	0	0	8	0	1	8	0	108	0	0	0	0	0	210
PEAK HR FACTOR :	0.664	0.667	0.000	0.000	0.000	0.667	0.000	0.250	0.500	0.000	0.931	0.000	0.000	0.000	0.000	0.795	

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & NB SR 99 Ramps
City: Lodi
Control: 0

Project ID: 18-07034-004
Date: 2/6/2018

Cars																	
NS/EW Streets:	SR 99 E Frontage Rd				SR 99 E Frontage Rd				NB SR 99 Ramps				NB SR 99 Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
	7:00 AM	16	1	0	0	0	1	0	0	0	0	13	0	0	0	0	31
	7:15 AM	20	0	0	0	0	1	0	0	2	0	19	0	0	0	0	42
	7:30 AM	21	3	0	0	0	1	0	0	3	0	17	0	0	0	0	45
	7:45 AM	8	1	0	0	0	2	0	0	1	0	25	0	0	0	0	37
	8:00 AM	12	1	0	0	0	0	0	0	0	0	18	0	0	0	0	31
	8:15 AM	8	0	0	0	0	0	0	0	1	0	23	0	0	0	0	32
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	116	8	0	0	0	7	0	0	10	0	149	0	0	0	0	0	
	93.55%	6.45%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	6.29%	0.00%	93.71%	0.00%	0	0	0	0	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	61	5	0	0	0	4	0	0	6	0	79	0	0	0	0	0	155
PEAK HR FACTOR :	0.73	0.417	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.790	0.000	0.000	0.000	0.000	0.861	
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
	4:00 PM	18	3	0	0	0	4	1	0	2	0	29	0	0	0	0	57
	4:15 PM	15	4	0	0	0	4	1	0	1	0	21	0	0	0	0	46
	4:30 PM	17	2	0	0	0	4	1	0	3	0	22	0	0	0	0	49
	4:45 PM	10	3	0	0	0	1	0	0	2	0	24	0	0	0	0	40
	5:00 PM	15	0	0	0	0	3	0	0	4	0	25	0	0	0	0	47
	5:15 PM	19	1	0	0	0	2	0	0	0	0	26	0	0	0	0	48
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	132	16	0	0	0	24	3	1	15	0	197	0	0	0	0	0	
	89.19%	10.81%	0.00%	0.00%	0.00%	85.71%	10.71%	3.57%	7.08%	0.00%	92.92%	0.00%	0	0	0	0	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	72	7	0	0	0	8	0	1	8	0	103	0	0	0	0	0	199
PEAK HR FACTOR :	0.64	0.583	0.000	0.000	0.000	0.667	0.000	0.250	0.500	0.000	0.920	0.000	0.000	0.000	0.000	0.777	
	0.637				0.750				0.925								

National Data & Surveying Services
Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & NB SR 99 Ramps
City: Lodi
Control: 0

Project ID: 18-07034-004
Date: 2/6/2018

HT																	
NS/EW Streets:	SR 99 E Frontage Rd				SR 99 E Frontage Rd				NB SR 99 Ramps				NB SR 99 Ramps				
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	
7:00 AM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	
7:15 AM	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	
7:30 AM	2	0	0	0	0	0	0	0	0	0	4	0	0	0	0	6	
7:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	
8:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	
8:15 AM	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	
8:30 AM	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	
8:45 AM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
APPROACH %'s :	8 100.00%	0 0.00%	0 0.00%	0 0.00%	0 0	0 0	0 0	0 0	0 0.00%	0 0.00%	17 100.00%	0 0.00%	0 0	0 0	0 0	0 0	TOTAL 25
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	3	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	15
PEAK HR FACTOR :	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.625	
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	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	
4:00 PM	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	
4:30 PM	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	2	0	0	0	0	2	
5:00 PM	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
5:15 PM	1	1	0	0	0	0	0	0	0	0	2	0	0	0	0	4	
5:30 PM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL 18
APPROACH %'s :	7 87.50%	1 12.50%	0 0.00%	0 0.00%	0 0	0 0	0 0	0 0	0 0.00%	0 0.00%	10 100.00%	0 0.00%	0 0	0 0	0 0	0 0	TOTAL 18
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	5	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	11
PEAK HR FACTOR :	0.42	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.688	

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & NB SR 99 Ramps
City: Lodi
Control: 0

Project ID: 18-07034-004
Date: 2/6/2018

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 99 E Frontage Rd & NB SR 99 Ramps
City: Lodi

Project ID: 18-07034-004
Date: 2/6/2018

Pedestrians (Crosswalks)

NS/EW Streets:	SR 99 E Frontage Rd		SR 99 E Frontage Rd		NB SR 99 Ramps		NB SR 99 Ramps		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
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	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
	0	0	0	0	0	0	0	0	0
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

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	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
	0	0	0	0	0	0	0	0	0
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

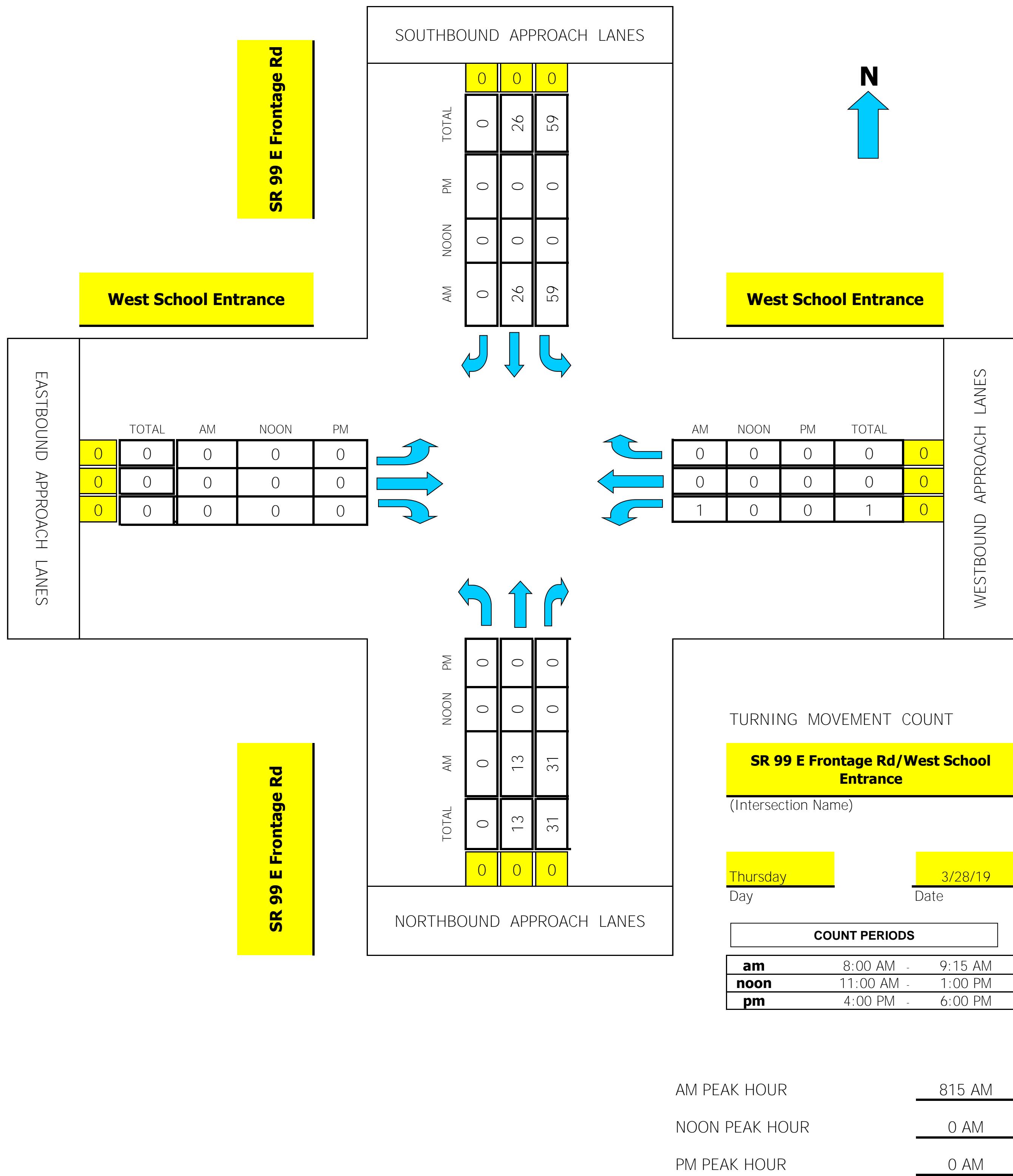
Intersection Turning Movement

Prepared by:

KD Anderson Associates, Inc.

TMC Summary of SR 99 E Frontage Rd/West School Entrance

Project #: 5245-01



Intersection Turning Movement

Prepared by:

N-S STREET: SR 99 E Frontage Road

DATE: 3/28/19

LOCATION: Lodi

E-W STREET: West School Entrance

DAY: Thursday

PROJECT# 5245-01

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM													
7:15 AM													
7:30 AM													
7:45 AM													
8:00 AM	1	0	2	1						0	0	0	4
8:15 AM	1	3	6	4						0	0	0	14
8:30 AM	3	13	28	8						0	0	0	52
8:45 AM	5	11	25	9						0	0	0	50
9:00 AM	4	4	0	5						1	0	0	14
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	0	14	31	61	27	0	0	0	0	1	0	0	134

AM Peak Hr Begins at: 815 AM

PEAK VOLUMES =	0	13	31	59	26	0	0	0	0	1	0	0	130
PEAK HR. FACTOR:		0.688			0.590			0.000			0.250		0.625

CONTROL:

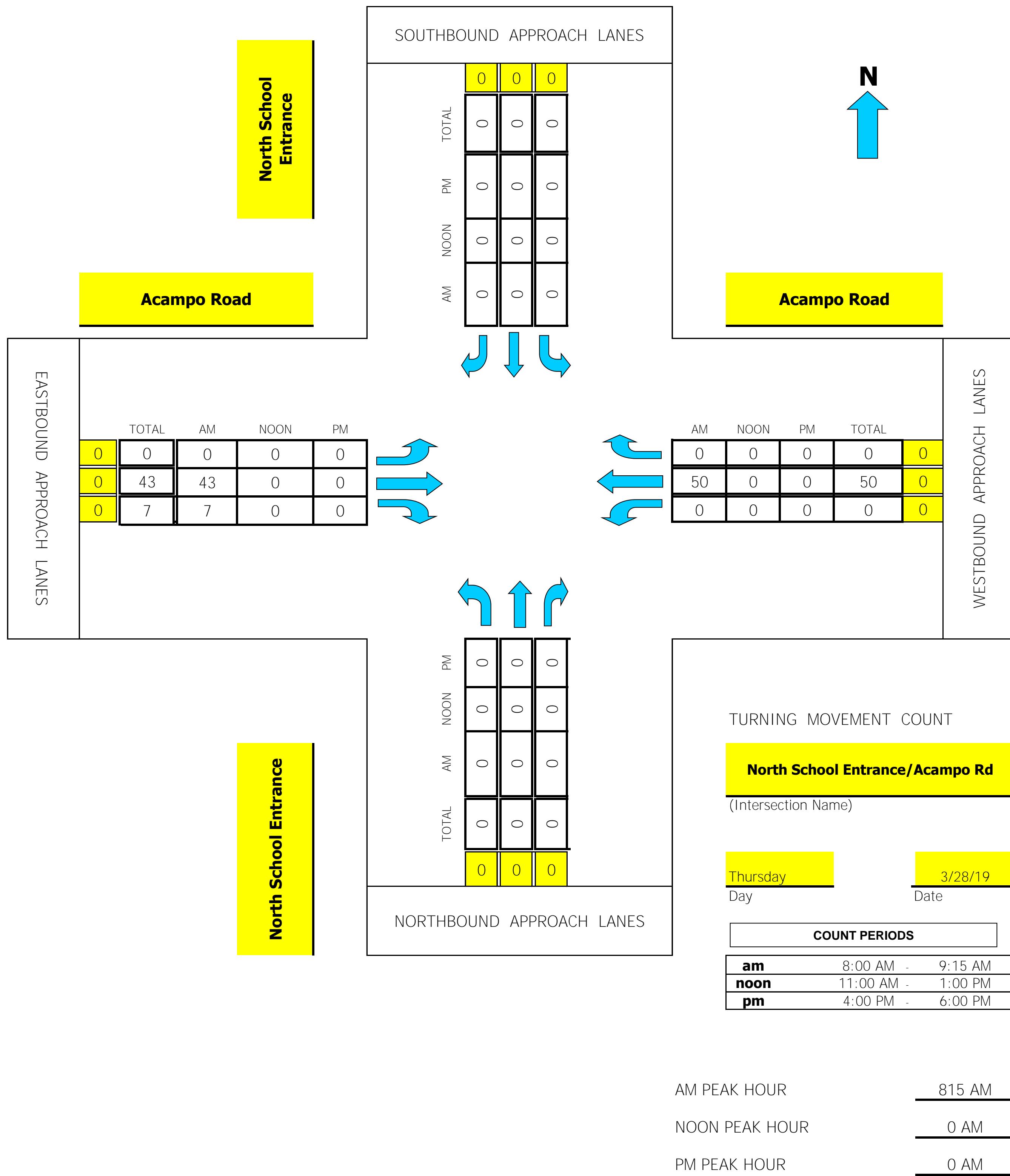
Intersection Turning Movement

Prepared by:

KD Anderson Associates, Inc.

TMC Summary of North School Entrance/Acampo Road

Project #: 5245-01



Intersection Turning Movement

Prepared by:

N-S STREET: Acampo Road

DATE: 3/28/19

LOCATION: Lodi

E-W STREET: North School Entrance

DAY: Thursday

PROJECT# 5245-01

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM													
7:15 AM													
7:30 AM													
7:45 AM													
8:00 AM	0			0				6	0	0	16		22
8:15 AM	0			0				9	1	0	11		21
8:30 AM	0			0				8	3	0	12		23
8:45 AM	0			0				12	3	0	18		33
9:00 AM	0			0				14	0	0	9		23
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	0	0	0	0	0	0	0	49	7	0	66	0	122

AM Peak Hr Begins at: 8:15 AM

PEAK VOLUMES =	0	0	0	0	0	0	0	43	7	0	50	0	100
PEAK HR. FACTOR:	0.000			0.000			0.833		0.694		0.758		

CONTROL:

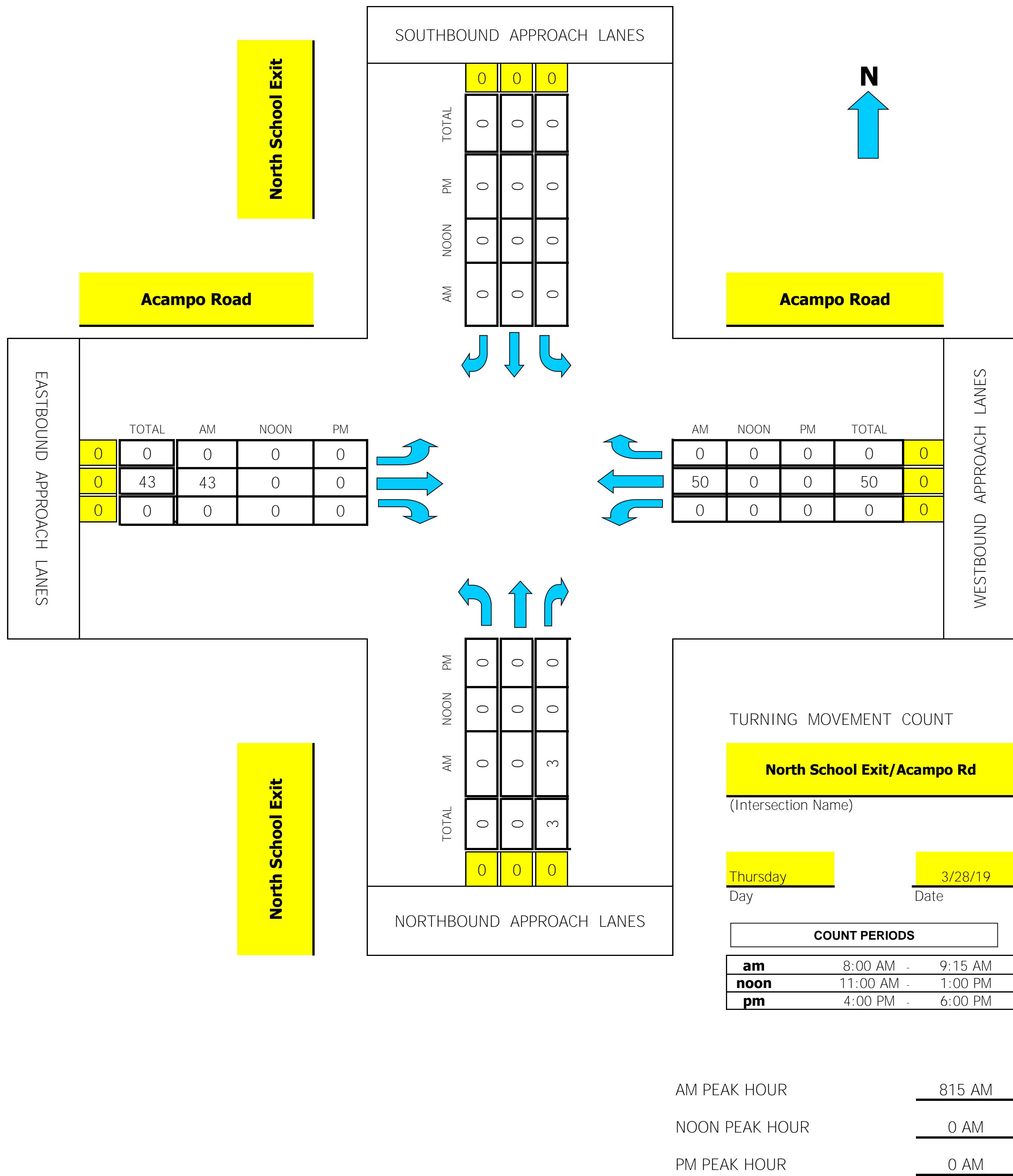
Intersection Turning Movement

Prepared by:

KD Anderson Associates, Inc.

TMC Summary of North School Exit/Acampo Road

Project #: 5245-01



Intersection Turning Movement

Prepared by:

N-S STREET: Acampo Road

DATE: 3/28/19

LOCATION: Lodi

E-W STREET: North School Exit

DAY: Thursday

PROJECT# 5245-01

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM													
7:15 AM													
7:30 AM													
7:45 AM													
8:00 AM	0		0				6		0	0	16		22
8:15 AM	0		0				9		0	0	11		20
8:30 AM	0		0				8		0	0	12		20
8:45 AM	0		3				12		0	0	18		33
9:00 AM	0		0				14		0	0	9		23
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	0	0	3	0	0	0	0	49	0	0	66	0	118

AM Peak Hr Begins at: 8:15 AM

PEAK VOLUMES =	0	0	3	0	0	0	0	43	0	0	50	0	96
PEAK HR. FACTOR:			0.250			0.000		0.768			0.694		0.727

CONTROL:

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Acampo Rd Bet. SR 99 E Frontage Rd & Brandywine Rd

Day: Tuesday
Date: 2/6/2018

City: Lodi
Project #: CA18 7035 003

3910-04

DAILY TOTALS				NB 0	SB 0	EB 728	WB 701					Total 1,429		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	0	0	1	0	1	12:00	0	0	15	13	28			
00:15	0	0	1	1	2	12:15	0	0	12	12	24			
00:30	0	0	1	0	1	12:30	0	0	10	10	20			
00:45	0	0	0	3	1	12:45	0	0	10	47	8	43	18	90
01:00	0	0	3	0	3	13:00	0	0	14	9	23			
01:15	0	0	0	1	1	13:15	0	0	10	8	18			
01:30	0	0	0	0	0	13:30	0	0	9	13	22			
01:45	0	0	0	3	1	13:45	0	0	10	43	13	43	23	86
02:00	0	0	0	1	1	14:00	0	0	13	12	25			
02:15	0	0	1	1	2	14:15	0	0	12	13	25			
02:30	0	0	0	0	0	14:30	0	0	15	23	38			
02:45	0	0	0	1	0	14:45	0	0	13	53	11	59	24	112
03:00	0	0	0	0	0	15:00	0	0	12	16	28			
03:15	0	0	0	1	1	15:15	0	0	22	15	37			
03:30	0	0	1	1	2	15:30	0	0	18	14	32			
03:45	0	0	0	1	1	15:45	0	0	17	69	10	55	27	124
04:00	0	0	0	2	2	16:00	0	0	14	25	39			
04:15	0	0	0	1	1	16:15	0	0	16	18	34			
04:30	0	0	0	2	2	16:30	0	0	13	18	31			
04:45	0	0	2	2	4	16:45	0	0	16	59	20	81	36	140
05:00	0	0	1	1	2	17:00	0	0	15	12	27			
05:15	0	0	1	3	4	17:15	0	0	19	13	32			
05:30	0	0	3	3	6	17:30	0	0	22	16	38			
05:45	0	0	4	9	6	17:45	0	0	13	69	10	51	23	120
06:00	0	0	10	9	19	18:00	0	0	9	8	17			
06:15	0	0	11	6	17	18:15	0	0	10	9	19			
06:30	0	0	20	10	30	18:30	0	0	9	4	13			
06:45	0	0	22	63	13	18:45	0	0	13	41	7	28	20	69
07:00	0	0	12	10	22	19:00	0	0	4	4	8			
07:15	0	0	12	12	24	19:15	0	0	8	3	11			
07:30	0	0	11	19	30	19:30	0	0	4	6	10			
07:45	0	0	13	48	21	19:45	0	0	2	18	5	18	7	36
08:00	0	0	9	12	21	20:00	0	0	4	6	10			
08:15	0	0	11	9	20	20:15	0	0	7	2	9			
08:30	0	0	17	20	37	20:30	0	0	11	2	13			
08:45	0	0	10	47	15	20:45	0	0	5	27	2	12	7	39
09:00	0	0	5	8	13	21:00	0	0	3	0	3			
09:15	0	0	7	11	18	21:15	0	0	1	2	3			
09:30	0	0	6	8	14	21:30	0	0	3	0	3			
09:45	0	0	7	25	7	21:45	0	0	1	8	4	3	12	
10:00	0	0	10	15	25	22:00	0	0	3	0	3			
10:15	0	0	8	5	13	22:15	0	0	4	1	5			
10:30	0	0	6	15	21	22:30	0	0	2	2	4			
10:45	0	0	8	32	6	22:45	0	0	1	10	1	4	2	14
11:00	0	0	14	15	29	23:00	0	0	2	2	4			
11:15	0	0	12	4	16	23:15	0	0	1	2	3			
11:30	0	0	9	6	15	23:30	0	0	1	4	5			
11:45	0	0	10	45	9	23:45	0	0	1	5	1	9	2	14
TOTALS			279	294	573	TOTALS			449	407	856			

SPLIT %	48.7%	51.3%	40.1%	SPLIT %	52.5%	47.5%	59.9%
DAILY TOTALS	NB	SB	EB	WB	Total		
	6	6	722	721		1,429	

AM Peak Hour	06:30	07:15	07:45	PM Peak Hour		16:45	16:00	16:00		
AM Pk Volume	66	64	112	PM Pk Volume		72	81	140		
Pk Hr Factor	0.750	0.762	0.757	Pk Hr Factor		0.818	0.810	0.897		
7 - 9 Volume	0	0	95	118	213	4 - 6 Volume	0	128	132	260
7 - 9 Peak Hour			07:45	07:15	07:45	4 - 6 Peak Hour		16:45	16:00	16:00
7 - 9 Pk Volume	0	0	50	64	112	4 - 6 Pk Volume	0	72	81	140
Pk Hr Factor	0.000	0.000	0.735	0.762	0.757	Pk Hr Factor	0.000	0.818	0.810	0.897

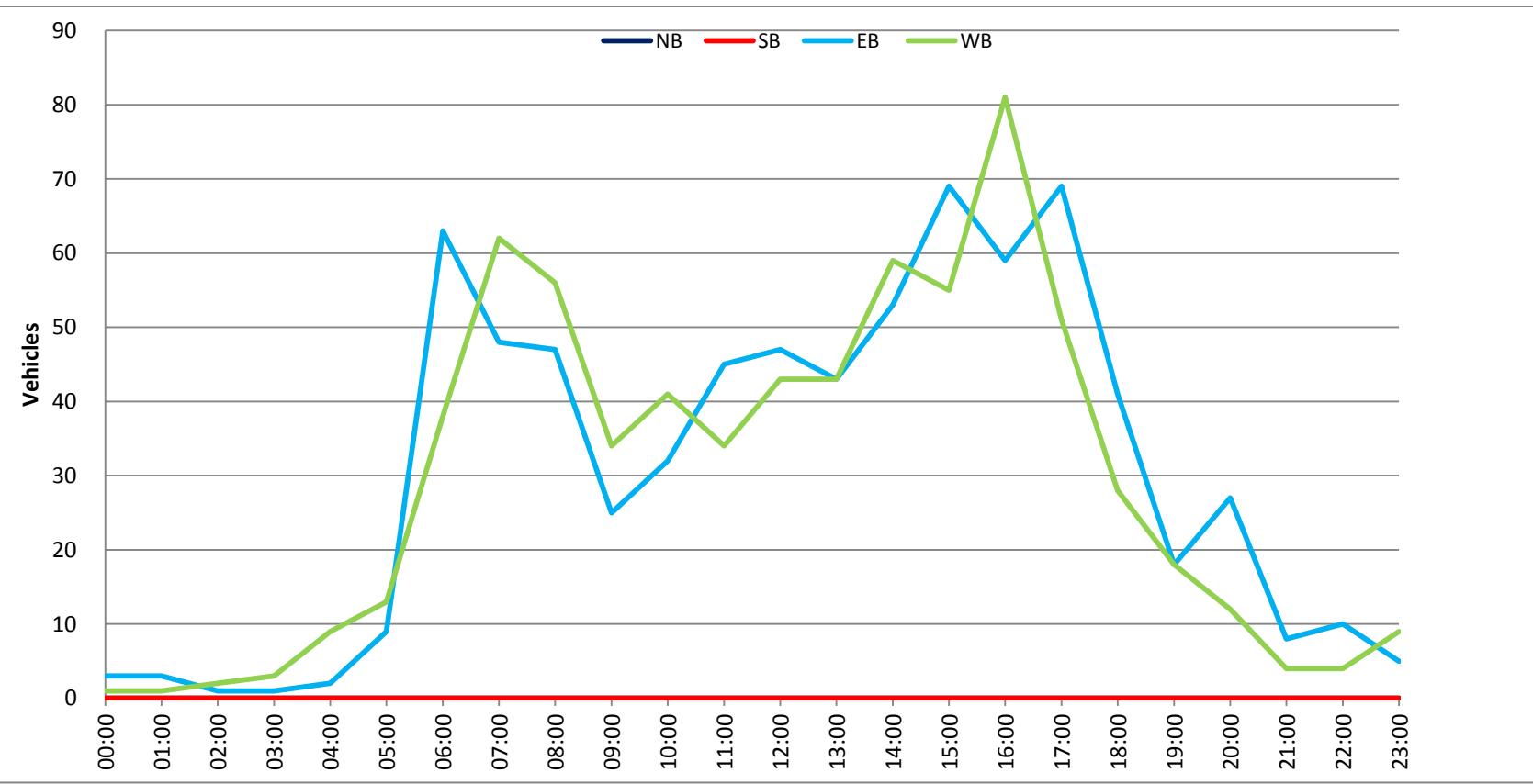
Prepared by NDS/ATD

Project #: CA18_7035_003

City: Lodi

Location: Acampo Rd Bet. SR 99 E Frontage Rd &

Date: 2/6/2018



VOLUME

Acampo Rd Bet. Brandywine Rd & Dustin Rd

Day: Tuesday
Date: 2/6/2018City: Lodi
Project #: CA18_7035_004

3910-04

DAILY TOTALS				NB 0	SB 0	EB 601	WB 620					Total 1,221
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AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0	0	0	0		12:00	0	0	7	8	15
00:15	0	0	0	0		12:15	0	0	10	7	17
00:30	0	0	1	0	1	12:30	0	0	6	6	12
00:45	0	0	0	1	1	12:45	0	0	4	27	30
01:00	0	0	3	0	3	13:00	0	0	11	10	21
01:15	0	0	0	1	1	13:15	0	0	11	9	20
01:30	0	0	0	0		13:30	0	0	5	11	16
01:45	0	0	0	3	3	13:45	0	0	9	36	44
02:00	0	0	0	0		14:00	0	0	7	10	17
02:15	0	0	0	1	1	14:15	0	0	9	12	21
02:30	0	0	0	0		14:30	0	0	17	11	28
02:45	0	0	0	0	1	14:45	0	0	11	44	44
03:00	0	0	0	0		15:00	0	0	10	18	28
03:15	0	0	0	2	2	15:15	0	0	14	19	33
03:30	0	0	0	2	2	15:30	0	0	15	13	28
03:45	0	0	0	2	6	15:45	0	0	15	54	64
04:00	0	0	0	1	1	16:00	0	0	11	22	33
04:15	0	0	0	1	1	16:15	0	0	14	14	28
04:30	0	0	0	2	2	16:30	0	0	11	13	24
04:45	0	0	0	4	8	16:45	0	0	14	50	64
05:00	0	0	0	1	1	17:00	0	0	14	12	26
05:15	0	0	1	2	3	17:15	0	0	14	13	27
05:30	0	0	3	4	7	17:30	0	0	17	15	32
05:45	0	0	3	7	11	17:45	0	0	11	56	50
06:00	0	0	5	6	11	18:00	0	0	10	7	17
06:15	0	0	4	7	11	18:15	0	0	6	9	15
06:30	0	0	24	13	37	18:30	0	0	9	4	13
06:45	0	0	19	52	9	18:45	0	0	8	33	4
07:00	0	0	15	8	23	19:00	0	0	4	3	7
07:15	0	0	11	10	21	19:15	0	0	8	3	11
07:30	0	0	10	21	31	19:30	0	0	7	4	11
07:45	0	0	13	49	17	19:45	0	0	2	21	15
08:00	0	0	13	16	29	20:00	0	0	2	2	4
08:15	0	0	10	12	22	20:15	0	0	3	1	4
08:30	0	0	15	18	33	20:30	0	0	8	3	11
08:45	0	0	10	48	16	20:45	0	0	5	18	1
09:00	0	0	6	7	13	21:00	0	0	2	1	3
09:15	0	0	4	9	13	21:15	0	0	3	1	4
09:30	0	0	5	4	9	21:30	0	0	1	1	2
09:45	0	0	6	21	4	21:45	0	0	1	7	4
10:00	0	0	8	9	17	22:00	0	0	2	0	2
10:15	0	0	6	4	10	22:15	0	0	3	1	4
10:30	0	0	7	9	16	22:30	0	0	1	1	2
10:45	0	0	7	28	9	22:45	0	0	1	7	4
11:00	0	0	11	9	20	23:00	0	0	3	1	4
11:15	0	0	11	4	15	23:15	0	0	0	1	1
11:30	0	0	7	7	14	23:30	0	0	1	4	5
11:45	0	0	5	34	9	23:45	0	0	1	5	6
TOTALS		243	264		507	TOTALS			358	356	714
SPLIT %		47.9%	52.1%		41.5%	SPLIT %			50.1%	49.9%	58.5%

DAILY TOTALS				NB 0	SB 0	EB 601	WB 620				Total 1,221
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AM Peak Hour	06:30	07:30	07:45	PM Peak Hour				16:45	15:15	15:15	
AM Pk Volume	69	66	114	PM Pk Volume				59	68	123	
Pk Hr Factor	0.719	0.786	0.864	Pk Hr Factor				0.868	0.773	0.932	
7 - 9 Volume	0	0	97	215	4 - 6 Volume	0	0	106	114	220	
7 - 9 Peak Hour			07:45	07:30	07:45			16:45	16:00	16:00	
7 - 9 Pk Volume	0	0	51	66	114	4 - 6 Pk Volume	0	0	59	64	114
Pk Hr Factor	0.000	0.000	0.850	0.786	0.864	Pk Hr Factor	0.000	0.000	0.868	0.727	0.864

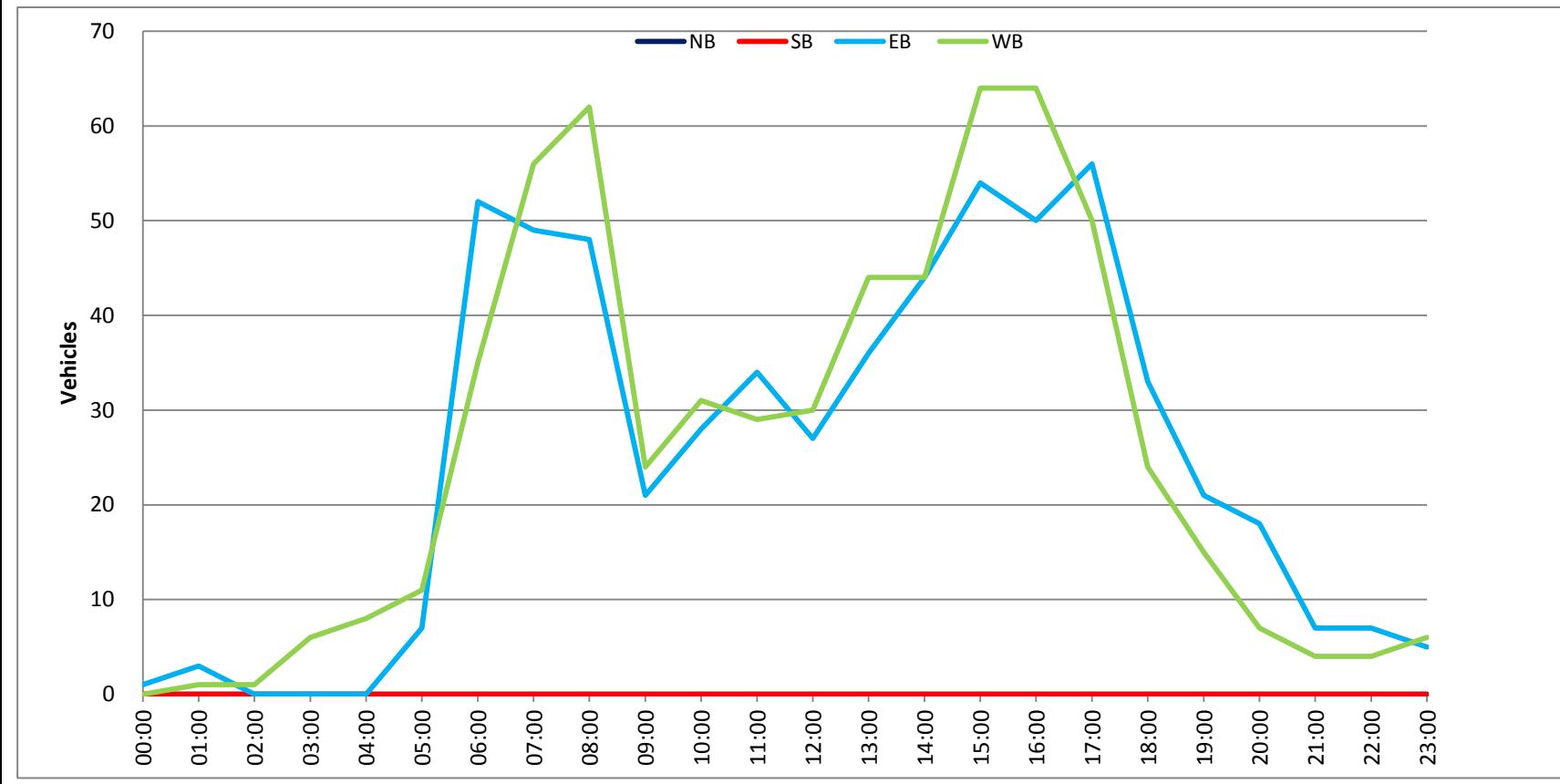
Prepared by NDS/ATD

Project #: CA18_7035_004

City: Lodi

Location: Acampo Rd Bet. Brandywine Rd & Dustin Rd

Date: 2/6/2018



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	2	58	3	17	51	1	0	0	3	10	9	2
Future Vol, veh/h	2	58	3	17	51	1	0	0	3	10	9	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	30	-	-	-
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	3	79	4	23	70	1	0	0	4	14	12	3

Major/Minor	Major1	Major2		Minor1		Minor2						
Conflicting Flow All	71	0	0	83	0	0	211	204	81	206	206	71
Stage 1	-	-	-	-	-	-	87	87	-	117	117	-
Stage 2	-	-	-	-	-	-	124	117	-	89	89	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1529	-	-	1514	-	-	746	692	979	752	691	991
Stage 1	-	-	-	-	-	-	921	823	-	888	799	-
Stage 2	-	-	-	-	-	-	880	799	-	918	821	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1529	-	-	1514	-	-	724	680	979	738	679	991
Mov Cap-2 Maneuver	-	-	-	-	-	-	724	680	-	738	679	-
Stage 1	-	-	-	-	-	-	919	821	-	886	786	-
Stage 2	-	-	-	-	-	-	850	786	-	912	819	-

Approach	EB	WB		NB		SB					
HCM Control Delay, s	0.2	1.8		8.7		10.1					
HCM LOS				A		B					
<hr/>											
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	-	979	1529	-	-	1514	-	-	729		
HCM Lane V/C Ratio	-	0.004	0.002	-	-	0.015	-	-	0.039		
HCM Control Delay (s)	0	8.7	7.4	0	-	7.4	0	-	10.1		
HCM Lane LOS	A	A	A	A	-	A	A	-	B		
HCM 95th %tile Q(veh)	-	0	0	-	-	0	-	-	0.1		

Intersection

Int Delay, s/veh 3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	43	23	48	54	0	0	0	0	18	1	14
Future Vol, veh/h	0	43	23	48	54	0	0	0	0	18	1	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	55	29	62	69	0	0	0	0	23	1	18

Major/Minor	Major1	Major2				Minor2		
Conflicting Flow All	-	0	0	84	0	0	263 277	
Stage 1	-	-	-	-	-	-	193	193
Stage 2	-	-	-	-	-	-	70	84
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018
Pot Cap-1 Maneuver	0	-	-	1513	-	0	726	631
Stage 1	0	-	-	-	-	0	840	741
Stage 2	0	-	-	-	-	0	953	825
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1513	-	-	695	0
Mov Cap-2 Maneuver	-	-	-	-	-	-	695	0
Stage 1	-	-	-	-	-	-	840	0
Stage 2	-	-	-	-	-	-	912	0

Approach	EB	WB				SB
HCM Control Delay, s	0	3.5		9.8		
HCM LOS				A		
<hr/>						
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	
Capacity (veh/h)	-	-	1513	-	800	
HCM Lane V/C Ratio	-	-	0.041	-	0.053	
HCM Control Delay (s)	-	-	7.5	0	9.8	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	-	0.2	

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	0	30	33	55	93	0	2	0	9	0	0	0
Future Vol, veh/h	0	30	33	55	93	0	2	0	9	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	45	49	82	139	0	3	0	13	0	0	0

Major/Minor	Major1	Major2		Minor1				
Conflicting Flow All	-	0	0	94	0	0	373	373
Stage 1	-	-	-	-	-	-	70	70
Stage 2	-	-	-	-	-	-	303	303
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018
Pot Cap-1 Maneuver	0	-	-	1500	-	0	628	557
Stage 1	0	-	-	-	-	0	953	837
Stage 2	0	-	-	-	-	0	749	664
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1500	-	-	591	0
Mov Cap-2 Maneuver	-	-	-	-	-	-	591	0
Stage 1	-	-	-	-	-	0	953	0
Stage 2	-	-	-	-	-	0	705	0

Approach	EB	WB		NB	
HCM Control Delay, s	0	2.8		9.1	
HCM LOS		A			
<hr/>					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	884	-	-	1500	-
HCM Lane V/C Ratio	0.019	-	-	0.055	-
HCM Control Delay (s)	9.1	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-

Intersection

Int Delay, s/veh 4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	24	0	0	53	93	51	14	11	19	0	41
Future Vol, veh/h	11	24	0	0	53	93	51	14	11	19	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	37	0	0	82	143	78	22	17	29	0	63

Major/Minor	Major1	Major2			Minor1		Minor2					
Conflicting Flow All	225	0	-	-	-	0	256	296	37	245	225	154
Stage 1	-	-	-	-	-	-	71	71	-	154	154	-
Stage 2	-	-	-	-	-	-	185	225	-	91	71	-
Critical Hdwy	4.12	-	-	-	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	-	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1344	-	0	0	-	-	697	616	1035	709	674	892
Stage 1	-	-	0	0	-	-	939	836	-	848	770	-
Stage 2	-	-	0	0	-	-	817	718	-	916	836	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1344	-	-	-	-	-	641	608	1035	672	665	892
Mov Cap-2 Maneuver	-	-	-	-	-	-	641	608	-	672	665	-
Stage 1	-	-	-	-	-	-	927	825	-	837	770	-
Stage 2	-	-	-	-	-	-	759	718	-	866	825	-

Approach	EB	WB			NB		SB				
HCM Control Delay, s	2.4	0			11.5		10				
HCM LOS					B		B				
<hr/>											
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1					
Capacity (veh/h)	671	1344	-	-	-	808					
HCM Lane V/C Ratio	0.174	0.013	-	-	-	0.114					
HCM Control Delay (s)	11.5	7.7	0	-	-	10					
HCM Lane LOS	B	A	A	-	-	B					
HCM 95th %tile Q(veh)	0.6	0	-	-	-	0.4					

Intersection

Int Delay, s/veh 5.1

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations



Traffic Vol, veh/h 7 35 25 17 22 3

Future Vol, veh/h 7 35 25 17 22 3

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 69 69 69 69 69 69

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 10 51 36 25 32 4

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 131 34 36 0 - 0

Stage 1 34 - - - - -

Stage 2 97 - - - - -

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 863 1039 1575 - - -

Stage 1 988 - - - - -

Stage 2 927 - - - - -

Platoon blocked, % - - - - - -

Mov Cap-1 Maneuver 843 1039 1575 - - -

Mov Cap-2 Maneuver 843 - - - - -

Stage 1 965 - - - - -

Stage 2 927 - - - - -

Approach EB NB SB

HCM Control Delay, s 8.8 4.4 0

HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1575 - 1000 - -

HCM Lane V/C Ratio 0.023 - 0.061 - -

HCM Control Delay (s) 7.3 0 8.8 - -

HCM Lane LOS A A A - -

HCM 95th %tile Q(veh) 0.1 - 0.2 - -

Intersection

Int Delay, s/veh 3.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	B	B		A	
Traffic Vol, veh/h	0	0	11	31	59	29
Future Vol, veh/h	0	0	11	31	59	29
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	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	18	50	95	47

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	280	43	0	0	68
Stage 1	43	-	-	-	-
Stage 2	237	-	-	-	-
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	710	1027	-	-	1533
Stage 1	979	-	-	-	-
Stage 2	802	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	665	1027	-	-	1533
Mov Cap-2 Maneuver	665	-	-	-	-
Stage 1	979	-	-	-	-
Stage 2	751	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1533	-
HCM Lane V/C Ratio	-	-	-	0.062	-
HCM Control Delay (s)	-	-	0	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	-	0.2	-

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	Y	
Traffic Vol, veh/h	47	7	0	90	0	0
Future Vol, veh/h	47	7	0	90	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	11	0	145	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	227 82
Stage 1	-	-	-	-	82 -
Stage 2	-	-	-	-	145 -
Critical Hdwy	-	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	0	-	761 978
Stage 1	-	-	0	-	941 -
Stage 2	-	-	0	-	882 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	761 978
Mov Cap-2 Maneuver	-	-	-	-	761 -
Stage 1	-	-	-	-	941 -
Stage 2	-	-	-	-	882 -

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection							
Int Delay, s/veh	0.2						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑			↑	↔		
Traffic Vol, veh/h	54	0	0	90	0	3	
Future Vol, veh/h	54	0	0	90	0	3	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	0	-	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	62	62	62	62	62	62	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	87	0	0	145	0	5	
Major/Minor	Major1	Major2	Minor1				
Conflicting Flow All	0	-	-	-	232	87	
Stage 1	-	-	-	-	87	-	
Stage 2	-	-	-	-	145	-	
Critical Hdwy	-	-	-	-	6.42	6.22	
Critical Hdwy Stg 1	-	-	-	-	5.42	-	
Critical Hdwy Stg 2	-	-	-	-	5.42	-	
Follow-up Hdwy	-	-	-	-	3.518	3.318	
Pot Cap-1 Maneuver	-	0	0	-	756	971	
Stage 1	-	0	0	-	936	-	
Stage 2	-	0	0	-	882	-	
Platoon blocked, %	-						
Mov Cap-1 Maneuver	-	-	-	-	756	971	
Mov Cap-2 Maneuver	-	-	-	-	756	-	
Stage 1	-	-	-	-	936	-	
Stage 2	-	-	-	-	882	-	
Approach	EB	WB	NB				
HCM Control Delay, s	0	0	8.7				
HCM LOS			A				
Minor Lane/Major Mvmt	NBLn1	EBT	WBT				
Capacity (veh/h)	971	-	-				
HCM Lane V/C Ratio	0.005	-	-				
HCM Control Delay (s)	8.7	-	-				
HCM Lane LOS	A	-	-				
HCM 95th %tile Q(veh)	0	-	-				

Intersection

Int Delay, s/veh 1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	111	3	15	75	2	0	0	5	12	9	2
Future Vol, veh/h	2	111	3	15	75	2	0	0	5	12	9	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	30	-	-	-
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	3	152	4	21	103	3	0	0	7	16	12	3

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	106	0	0	156	0	0	314	308	154	311	309	105
Stage 1	-	-	-	-	-	-	160	160	-	147	147	-
Stage 2	-	-	-	-	-	-	154	148	-	164	162	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1485	-	-	1424	-	-	639	606	892	642	605	949
Stage 1	-	-	-	-	-	-	842	766	-	856	775	-
Stage 2	-	-	-	-	-	-	848	775	-	838	764	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1485	-	-	1424	-	-	619	595	892	629	594	949
Mov Cap-2 Maneuver	-	-	-	-	-	-	619	595	-	629	594	-
Stage 1	-	-	-	-	-	-	840	764	-	854	763	-
Stage 2	-	-	-	-	-	-	819	763	-	830	762	-

Approach	EB	WB			NB			SB			
HCM Control Delay, s	0.1	1.2			9.1			11			
HCM LOS					A			B			
<hr/>											
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	-	892	1485	-	-	1424	-	-	633		
HCM Lane V/C Ratio	-	0.008	0.002	-	-	0.014	-	-	0.05		
HCM Control Delay (s)	0	9.1	7.4	0	-	7.6	0	-	11		
HCM Lane LOS	A	A	A	A	-	A	A	-	B		
HCM 95th %tile Q(veh)	-	0	0	-	-	0	-	-	0.2		

Intersection

Int Delay, s/veh 4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	100	23	157	76	0	0	0	0	22	1	14
Future Vol, veh/h	0	100	23	157	76	0	0	0	0	22	1	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	128	29	201	97	0	0	0	0	28	1	18

Major/Minor	Major1	Major2				Minor2		
Conflicting Flow All	-	0	0	157	0	0	642 656	
Stage 1	-	-	-	-	-	-	499	499
Stage 2	-	-	-	-	-	-	143	157
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018
Pot Cap-1 Maneuver	0	-	-	1423	-	0	438	385
Stage 1	0	-	-	-	-	0	610	544
Stage 2	0	-	-	-	-	0	884	768
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1423	-	-	373	0
Mov Cap-2 Maneuver	-	-	-	-	-	-	373	0
Stage 1	-	-	-	-	-	-	610	0
Stage 2	-	-	-	-	-	-	752	0

Approach	EB	WB	SB
HCM Control Delay, s	0	5.4	13.2
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1423	-	489
HCM Lane V/C Ratio	-	-	0.141	-	0.097
HCM Control Delay (s)	-	-	7.9	0	13.2
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0.5	-	0.3

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	0	30	94	168	214	0	12	0	13	0	0	0
Future Vol, veh/h	0	30	94	168	214	0	12	0	13	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	45	140	251	319	0	18	0	19	0	0	0

Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	-	0	0	185	0	0
Stage 1	-	-	-	-	-	115
Stage 2	-	-	-	-	-	821
Critical Hdwy	-	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	-	5.52
Follow-up Hdwy	-	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	0	-	-	1390	-	4.018
Stage 1	0	-	-	-	-	910
Stage 2	0	-	-	-	-	800
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1390	-	0
Mov Cap-2 Maneuver	-	-	-	-	-	937
Stage 1	-	-	-	-	-	0
Stage 2	-	-	-	-	-	-

Approach	EB	WB		NB	
HCM Control Delay, s	0	3.6		15.6	
HCM LOS				C	
<hr/>					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	377	-	-	1390	-
HCM Lane V/C Ratio	0.099	-	-	0.18	-
HCM Control Delay (s)	15.6	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.7	-

Intersection

Int Delay, s/veh 5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	25	0	0	224	46	0	0	0	19	0	156
Future Vol, veh/h	15	25	0	0	224	46	0	0	0	19	0	156
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	38	0	0	345	71	0	0	0	29	0	240

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	416	0	-	-	-	0	585	500	38	465	465	381
Stage 1	-	-	-	-	-	-	84	84	-	381	381	-
Stage 2	-	-	-	-	-	-	501	416	-	84	84	-
Critical Hdwy	4.12	-	-	-	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	-	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1143	-	0	0	-	-	422	473	1034	508	495	666
Stage 1	-	-	0	0	-	-	924	825	-	641	613	-
Stage 2	-	-	0	0	-	-	552	592	-	924	825	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1143	-	-	-	-	-	265	463	1034	500	485	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	265	463	-	500	485	-
Stage 1	-	-	-	-	-	-	905	808	-	628	613	-
Stage 2	-	-	-	-	-	-	353	592	-	905	808	-

Approach	EB	WB			NB	SB		
HCM Control Delay, s	3.1	0			0	14.6		
HCM LOS					A	B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	1143	-	-	-	643
HCM Lane V/C Ratio	-	0.02	-	-	-	0.419
HCM Control Delay (s)	0	8.2	0	-	-	14.6
HCM Lane LOS	A	A	A	-	-	B
HCM 95th %tile Q(veh)	-	0.1	-	-	-	2.1

Intersection

Int Delay, s/veh 7.4

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations



Traffic Vol, veh/h 7 146 46 15 26 3

Future Vol, veh/h 7 146 46 15 26 3

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 69 69 69 69 69 69

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 10 212 67 22 38 4

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 196 40 42 0 - 0

Stage 1 40 - - - - -

Stage 2 156 - - - - -

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 793 1031 1567 - - -

Stage 1 982 - - - - -

Stage 2 872 - - - - -

Platoon blocked, % - - - - - -

Mov Cap-1 Maneuver 759 1031 1567 - - -

Mov Cap-2 Maneuver 759 - - - - -

Stage 1 940 - - - - -

Stage 2 872 - - - - -

Approach EB NB SB

HCM Control Delay, s 9.5 5.6 0

HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1567 - 1014 - -

HCM Lane V/C Ratio 0.043 - 0.219 - -

HCM Control Delay (s) 7.4 0 9.5 - -

HCM Lane LOS A A A - -

HCM 95th %tile Q(veh) 0.1 - 0.8 - -

Intersection

Int Delay, s/veh 7.3

Movement WBL WBR NBT NBR SBL SBT

Lane Configurations						
Traffic Vol, veh/h	25	15	11	62	240	23
Future Vol, veh/h	25	15	11	62	240	23
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	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	24	18	100	387	37

Major/Minor Minor1 Major1 Major2

Conflicting Flow All	879	68	0	0	118	0
Stage 1	68	-	-	-	-	-
Stage 2	811	-	-	-	-	-
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	318	995	-	-	1470	-
Stage 1	955	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	232	995	-	-	1470	-
Mov Cap-2 Maneuver	232	-	-	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	319	-	-	-	-	-

Approach WB NB SB

HCM Control Delay, s 18.7 0 7.6

HCM LOS C

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	326	1470	-
HCM Lane V/C Ratio	-	-	0.198	0.263	-
HCM Control Delay (s)	-	-	18.7	8.3	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	1.1	-

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
----------	-----	-----	-----	-----	-----	-----

Lane Configurations						
Traffic Vol, veh/h	36	7	0	290	0	0
Future Vol, veh/h	36	7	0	290	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	11	0	468	0	0

Major/Minor	Major1	Major2	Minor1
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Conflicting Flow All	0	0	-	-	532	64
Stage 1	-	-	-	-	64	-
Stage 2	-	-	-	-	468	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	508	1000
Stage 1	-	-	0	-	959	-
Stage 2	-	-	0	-	630	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	508	1000
Mov Cap-2 Maneuver	-	-	-	-	508	-
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	630	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
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Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection

Int Delay, s/veh 8.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Vol, veh/h	43	0	0	94	195	25
Future Vol, veh/h	43	0	0	94	195	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	0	0	152	315	40

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	-	221 69
Stage 1	-	-	-	-	69 -
Stage 2	-	-	-	-	152 -
Critical Hdwy	-	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	-	0 0	-	767 994	
Stage 1	-	0 0	-	954 -	
Stage 2	-	0 0	-	876 -	
Platoon blocked, %	-				
Mov Cap-1 Maneuver	-	-	-	767 994	
Mov Cap-2 Maneuver	-	-	-	767 -	
Stage 1	-	-	-	954 -	
Stage 2	-	-	-	876 -	

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	787	-	-
HCM Lane V/C Ratio	0.451	-	-
HCM Control Delay (s)	13.3	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	2.4	-	-

Intersection

Int Delay, s/veh 3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	60	5	25	0	5	0	0	5	10	10	5
Future Vol, veh/h	5	60	5	25	0	5	0	0	5	10	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	30	-	-	-
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	7	82	7	34	0	7	0	0	7	14	14	7

Major/Minor	Major1	Major2		Minor1		Minor2						
Conflicting Flow All	7	0	0	89	0	0	182	175	86	175	175	4
Stage 1	-	-	-	-	-	-	100	100	-	72	72	-
Stage 2	-	-	-	-	-	-	82	75	-	103	103	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1614	-	-	1506	-	-	779	718	973	788	718	1080
Stage 1	-	-	-	-	-	-	906	812	-	938	835	-
Stage 2	-	-	-	-	-	-	926	833	-	903	810	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1614	-	-	1506	-	-	746	698	973	766	698	1080
Mov Cap-2 Maneuver	-	-	-	-	-	-	746	698	-	766	698	-
Stage 1	-	-	-	-	-	-	901	808	-	933	816	-
Stage 2	-	-	-	-	-	-	884	814	-	892	806	-

Approach	EB	WB		NB		SB					
HCM Control Delay, s	0.5	6.2		8.7		9.8					
HCM LOS				A		A					
<hr/>											
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	-	973	1614	-	-	1506	-	-	781		
HCM Lane V/C Ratio	-	0.007	0.004	-	-	0.023	-	-	0.044		
HCM Control Delay (s)	0	8.7	7.2	0	-	7.4	0	-	9.8		
HCM Lane LOS	A	A	A	A	-	A	A	-	A		
HCM 95th %tile Q(veh)	-	0	0	-	-	0.1	-	-	0.1		

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	0	50	25	60	60	0	0	0	0	45	5	20
Future Vol, veh/h	0	50	25	60	60	0	0	0	0	45	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	64	32	77	77	0	0	0	0	58	6	26
Major/Minor	Major1	Major2					Minor2					
Conflicting Flow All	-	0	0	96	0	0				311	327	77
Stage 1	-	-	-	-	-	-				231	231	-
Stage 2	-	-	-	-	-	-				80	96	-
Critical Hdwy	-	-	-	4.12	-	-				6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-				5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-				3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1498	-	0				681	591	984
Stage 1	0	-	-	-	-	0				807	713	-
Stage 2	0	-	-	-	-	0				943	815	-
Platoon blocked, %	-	-	-	-	-	-						
Mov Cap-1 Maneuver	-	-	-	1498	-	-				644	0	984
Mov Cap-2 Maneuver	-	-	-	-	-	-				644	0	-
Stage 1	-	-	-	-	-	-				807	0	-
Stage 2	-	-	-	-	-	-				892	0	-
Approach	EB	WB					SB					
HCM Control Delay, s	0		3.8					10.7				
HCM LOS								B				
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1498	-	721							
HCM Lane V/C Ratio	-	-	0.051	-	0.124							
HCM Control Delay (s)	-	-	7.5	0	10.7							
HCM Lane LOS	-	-	A	A	B							
HCM 95th %tile Q(veh)	-	-	0.2	-	0.4							

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	0	35	35	60	120	0	5	0	10	0	0	0
Future Vol, veh/h	0	35	35	60	120	0	5	0	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	52	52	90	179	0	7	0	15	0	0	0

Major/Minor	Major1	Major2		Minor1				
Conflicting Flow All	-	0	0	104	0	0	437	437
Stage 1	-	-	-	-	-	-	78	78
Stage 2	-	-	-	-	-	-	359	359
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018
Pot Cap-1 Maneuver	0	-	-	1488	-	0	577	513
Stage 1	0	-	-	-	-	0	945	830
Stage 2	0	-	-	-	-	0	707	627
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1488	-	-	538	0
Mov Cap-2 Maneuver	-	-	-	-	-	-	538	0
Stage 1	-	-	-	-	-	0	945	0
Stage 2	-	-	-	-	-	0	660	0

Approach	EB	WB		NB	
HCM Control Delay, s	0	2.5		9.8	
HCM LOS		A			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	771	-	-	1488	-
HCM Lane V/C Ratio	0.029	-	-	0.06	-
HCM Control Delay (s)	9.8	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-

Intersection

Int Delay, s/veh 6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	25	0	0	55	55	51	14	11	40	0	75
Future Vol, veh/h	20	25	0	0	55	55	51	14	11	40	0	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	38	0	0	85	85	78	22	17	62	0	115

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	170	0	-	-	-	0	285	270	38	248	228	128
Stage 1	-	-	-	-	-	-	100	100	-	128	128	-
Stage 2	-	-	-	-	-	-	185	170	-	120	100	-
Critical Hdwy	4.12	-	-	-	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	-	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1407	-	0	0	-	-	667	636	1034	706	671	922
Stage 1	-	-	0	0	-	-	906	812	-	876	790	-
Stage 2	-	-	0	0	-	-	817	758	-	884	812	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1407	-	-	-	-	-	573	621	1034	664	656	922
Mov Cap-2 Maneuver	-	-	-	-	-	-	573	621	-	664	656	-
Stage 1	-	-	-	-	-	-	885	793	-	856	790	-
Stage 2	-	-	-	-	-	-	715	758	-	826	793	-

Approach	EB	WB			NB			SB			
HCM Control Delay, s	3.4	0			12.1			10.7			
HCM LOS					B			B			
<hr/>											
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1					
Capacity (veh/h)	622	1407	-	-	-	812					
HCM Lane V/C Ratio	0.188	0.022	-	-	-	0.218					
HCM Control Delay (s)	12.1	7.6	0	-	-	10.7					
HCM Lane LOS	B	A	A	-	-	B					
HCM 95th %tile Q(veh)	0.7	0.1	-	-	-	0.8					

Intersection

Int Delay, s/veh 3.9

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations



Traffic Vol, veh/h 10 55 35 55 60 10

Future Vol, veh/h 10 55 35 55 60 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 69 69 69 69 69 69

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 14 80 51 80 87 14

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 276 94 101 0 - 0

Stage 1 94 - - - - -

Stage 2 182 - - - - -

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 714 963 1491 - - -

Stage 1 930 - - - - -

Stage 2 849 - - - - -

Platoon blocked, % - - - - - -

Mov Cap-1 Maneuver 688 963 1491 - - -

Mov Cap-2 Maneuver 688 - - - - -

Stage 1 897 - - - - -

Stage 2 849 - - - - -

Approach EB NB SB

HCM Control Delay, s 9.4 2.9 0

HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1491 - 907 - -

HCM Lane V/C Ratio 0.034 - 0.104 - -

HCM Control Delay (s) 7.5 0 9.4 - -

HCM Lane LOS A A A - -

HCM 95th %tile Q(veh) 0.1 - 0.3 - -

Intersection

Int Delay, s/veh 2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	B	B			
Traffic Vol, veh/h	0	31	59	35	0	0
Future Vol, veh/h	0	31	59	35	0	0
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	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	50	95	56	0	0

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	125	123	0	0	151
Stage 1	123	-	-	-	-
Stage 2	2	-	-	-	-
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	870	928	-	-	1430
Stage 1	902	-	-	-	-
Stage 2	1021	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	870	928	-	-	1430
Mov Cap-2 Maneuver	870	-	-	-	-
Stage 1	902	-	-	-	-
Stage 2	1021	-	-	-	-

Approach WB NB SB

HCM Control Delay, s 9.1 0 0

HCM LOS A

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	928	1430	-
HCM Lane V/C Ratio	-	-	0.054	-	-
HCM Control Delay (s)	-	-	9.1	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Vol, veh/h	70	7	0	110	0	0
Future Vol, veh/h	70	7	0	110	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	113	11	0	177	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	296 119
Stage 1	-	-	-	-	119 -
Stage 2	-	-	-	-	177 -
Critical Hdwy	-	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	0	-	695 933
Stage 1	-	-	0	-	906 -
Stage 2	-	-	0	-	854 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	695 933
Mov Cap-2 Maneuver	-	-	-	-	695 -
Stage 1	-	-	-	-	906 -
Stage 2	-	-	-	-	854 -

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Vol, veh/h	70	0	0	110	0	3
Future Vol, veh/h	70	0	0	110	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	113	0	0	177	0	5

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	290	113
Stage 1	-	-	-	113	-
Stage 2	-	-	-	177	-
Critical Hdwy	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	701	940
Stage 1	-	0	0	912	-
Stage 2	-	0	0	854	-
Platoon blocked, %	-				
Mov Cap-1 Maneuver	-	-	-	701	940
Mov Cap-2 Maneuver	-	-	-	701	-
Stage 1	-	-	-	912	-
Stage 2	-	-	-	854	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	940	-	-
HCM Lane V/C Ratio	0.005	-	-
HCM Control Delay (s)	8.9	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Intersection

Int Delay, s/veh 2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	113	5	23	74	6	0	0	7	12	10	5
Future Vol, veh/h	5	113	5	23	74	6	0	0	7	12	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	30	-	-	-
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	7	155	7	32	101	8	0	0	10	16	14	7

Major/Minor	Major1	Major2		Minor1		Minor2						
Conflicting Flow All	109	0	0	162	0	0	353	346	159	347	345	105
Stage 1	-	-	-	-	-	-	173	173	-	169	169	-
Stage 2	-	-	-	-	-	-	180	173	-	178	176	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1481	-	-	1417	-	-	602	577	886	607	578	949
Stage 1	-	-	-	-	-	-	829	756	-	833	759	-
Stage 2	-	-	-	-	-	-	822	756	-	824	753	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1481	-	-	1417	-	-	574	560	886	587	561	949
Mov Cap-2 Maneuver	-	-	-	-	-	-	574	560	-	587	561	-
Stage 1	-	-	-	-	-	-	825	752	-	829	741	-
Stage 2	-	-	-	-	-	-	782	738	-	811	749	-

Approach	EB	WB		NB		SB					
HCM Control Delay, s	0.3	1.7		9.1		11.2					
HCM LOS				A		B					
<hr/>											
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	-	886	1481	-	-	1417	-	-	620		
HCM Lane V/C Ratio	-	0.011	0.005	-	-	0.022	-	-	0.06		
HCM Control Delay (s)	0	9.1	7.4	0	-	7.6	0	-	11.2		
HCM Lane LOS	A	A	A	A	-	A	A	-	B		
HCM 95th %tile Q(veh)	-	0	0	-	-	0.1	-	-	0.2		

Intersection

Int Delay, s/veh 5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	107	25	169	82	0	0	0	0	49	5	20
Future Vol, veh/h	0	107	25	169	82	0	0	0	0	49	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	169	74	-	-	0
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	137	32	217	105	0	0	0	0	63	6	26

Major/Minor	Major1	Major2				Minor2		
Conflicting Flow All	-	0	0	169	0	0	692	
Stage 1	-	-	-	-	-	-	539	539
Stage 2	-	-	-	-	-	-	153	169
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018
Pot Cap-1 Maneuver	0	-	-	1409	-	0	410	360
Stage 1	0	-	-	-	-	0	585	522
Stage 2	0	-	-	-	-	0	875	759
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1409	-	-	343	0
Mov Cap-2 Maneuver	-	-	-	-	-	-	343	0
Stage 1	-	-	-	-	-	-	585	0
Stage 2	-	-	-	-	-	-	732	0

Approach	EB	WB				SB
HCM Control Delay, s	0	5.4				16
HCM LOS						C
<hr/>						
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	
Capacity (veh/h)	-	-	1409	-	421	
HCM Lane V/C Ratio	-	-	0.154	-	0.225	
HCM Control Delay (s)	-	-	8	0	16	
HCM Lane LOS	-	-	A	A	C	
HCM 95th %tile Q(veh)	-	-	0.5	-	0.9	

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	0	35	96	173	241	0	15	0	14	0	0	0
Future Vol, veh/h	0	35	96	173	241	0	15	0	14	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	52	143	258	360	0	22	0	21	0	0	0

Major/Minor	Major1	Major2		Minor1				
Conflicting Flow All	-	0	0	195	0	0	1000	1000
Stage 1	-	-	-	-	-	-	124	124
Stage 2	-	-	-	-	-	-	876	876
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018
Pot Cap-1 Maneuver	0	-	-	1378	-	0	270	243
Stage 1	0	-	-	-	-	0	902	793
Stage 2	0	-	-	-	-	0	407	367
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1378	-	-	207	0
Mov Cap-2 Maneuver	-	-	-	-	-	-	207	0
Stage 1	-	-	-	-	-	-	902	0
Stage 2	-	-	-	-	-	-	312	0

Approach	EB	WB		NB	
HCM Control Delay, s	0	3.4		17.5	
HCM LOS				C	
<hr/>					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	331	-	-	1378	-
HCM Lane V/C Ratio	0.131	-	-	0.187	-
HCM Control Delay (s)	17.5	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.7	-

Intersection

Int Delay, s/veh 7.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	26	0	0	226	84	0	0	0	40	0	190
Future Vol, veh/h	24	26	0	0	226	84	0	0	0	40	0	190
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	40	0	0	348	129	0	0	0	62	0	292

Major/Minor	Major1	Major2			Minor1		Minor2					
Conflicting Flow All	477	0	-	-	-	0	673	591	40	527	527	413
Stage 1	-	-	-	-	-	-	114	114	-	413	413	-
Stage 2	-	-	-	-	-	-	559	477	-	114	114	-
Critical Hdwy	4.12	-	-	-	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	-	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1085	-	0	0	-	-	369	420	1031	462	456	639
Stage 1	-	-	0	0	-	-	891	801	-	616	594	-
Stage 2	-	-	0	0	-	-	513	556	-	891	801	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1085	-	-	-	-	-	195	405	1031	450	440	639
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	405	-	450	440	-
Stage 1	-	-	-	-	-	-	860	773	-	594	594	-
Stage 2	-	-	-	-	-	-	278	556	-	860	773	-

Approach	EB	WB			NB	SB		
HCM Control Delay, s	4	0			0	19.5		
HCM LOS					A	C		
<hr/>								
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	1085	-	-	-	596		
HCM Lane V/C Ratio	-	0.034	-	-	-	0.594		
HCM Control Delay (s)	0	8.4	0	-	-	19.5		
HCM Lane LOS	A	A	A	-	-	C		
HCM 95th %tile Q(veh)	-	0.1	-	-	-	3.9		

Intersection

Int Delay, s/veh 6.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		A	B		
Traffic Vol, veh/h	10	166	56	53	64	10
Future Vol, veh/h	10	166	56	53	64	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	69	69	69	69	69	69
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	241	81	77	93	14

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	339	100	107	0	-
Stage 1	100	-	-	-	-
Stage 2	239	-	-	-	-
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	657	956	1484	-	-
Stage 1	924	-	-	-	-
Stage 2	801	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	620	956	1484	-	-
Mov Cap-2 Maneuver	620	-	-	-	-
Stage 1	871	-	-	-	-
Stage 2	801	-	-	-	-

Approach EB NB SB

HCM Control Delay, s 10.4 3.9 0

HCM LOS B

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1484	-	927	-	-
HCM Lane V/C Ratio	0.055	-	0.275	-	-
HCM Control Delay (s)	7.6	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.1	-	-

Intersection

Int Delay, s/veh 7.1

Movement WBL WBR NBT NBR SBL SBT

Lane Configurations						
Traffic Vol, veh/h	25	15	15	62	240	29
Future Vol, veh/h	25	15	15	62	240	29
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	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	24	24	100	387	47

Major/Minor Minor1 Major1 Major2

Conflicting Flow All	895	74	0	0	124	0
Stage 1	74	-	-	-	-	-
Stage 2	821	-	-	-	-	-
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	311	988	-	-	1463	-
Stage 1	949	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	226	988	-	-	1463	-
Mov Cap-2 Maneuver	226	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	314	-	-	-	-	-

Approach WB NB SB

HCM Control Delay, s 19.2 0 7.4

HCM LOS C

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	318	1463	-
HCM Lane V/C Ratio	-	-	0.203	0.265	-
HCM Control Delay (s)	-	-	19.2	8.3	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	1.1	-

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Vol, veh/h	59	7	0	310	0	0
Future Vol, veh/h	59	7	0	310	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	11	0	500	0	0

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	601	101
Stage 1	-	-	-	-	101	-
Stage 2	-	-	-	-	500	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	463	954
Stage 1	-	-	0	-	923	-
Stage 2	-	-	0	-	609	-
Platoon blocked, %	-	-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	463	954
Mov Cap-2 Maneuver	-	-	-	-	463	-
Stage 1	-	-	-	-	923	-
Stage 2	-	-	-	-	609	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection

Int Delay, s/veh 8.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Vol, veh/h	59	0	0	114	195	25
Future Vol, veh/h	59	0	0	114	195	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	0	0	184	315	40

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	-	279 95
Stage 1	-	-	-	-	95 -
Stage 2	-	-	-	-	184 -
Critical Hdwy	-	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	-	0	0	-	711 962
Stage 1	-	0	0	-	929 -
Stage 2	-	0	0	-	848 -
Platoon blocked, %	-				-
Mov Cap-1 Maneuver	-	-	-	-	711 962
Mov Cap-2 Maneuver	-	-	-	-	711 -
Stage 1	-	-	-	-	929 -
Stage 2	-	-	-	-	848 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	733	-	-
HCM Lane V/C Ratio	0.484	-	-
HCM Control Delay (s)	14.4	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	2.7	-	-