Appendix E

Local Transportation Analysis –
9644 Betabel Road,
San Benito County, CA

LOCAL TRANSPORTATION ANALYSIS

9644 Betabel Road, San Benito County, CA

PREPARED FOR:

WR&D

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JULY 2022 | DRAFT

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1. INTRODUCTION

This report presents the Local Transportation Analysis (LTA) for the proposed Betabel Commercial (the "Project") located at 9644 Betabel Road, west side of US-101, in the San Benito County, California. The purpose of an LTA is to determine Project consistency with adopted policy and planning documents. This LTA is for informational purposes only to assist San Benito County (the "County") and other local jurisdictions in determining what improvements, if any, may be necessary to accommodate the Project while maintaining their transportation standards, goals and policies. Ultimate determination of required improvements is at the discretion of the County in negotiations with the Project applicant.

The project would develop 108,425 square feet (sf) of commercial space, consisting of a gas station with convenience store, a restaurant, amusement buildings with exhibits, a motel and banquet hall, with outdoor pool and outdoor movie screen, an outdoor event center, and trails. The design of the project would be reminiscent of the 1940s and 1950s American roadside.

Primary access to the Project site will be via Betabel Road, which will be accessed via the Betabel Road & US-101 interchange, Access to the Project site will be provided via six driveways on Betabel Road. The Project site plan is shown in **Figure 1**.

A 'Traffic Impact Analysis (TIA)' dated December 2019 was previously prepared by Pinnacle Traffic Engineering for the Project. The land uses for the proposed Project has been revised since the previous traffic study, and this LTA report presents an updated traffic and Vehicle Miles Traveled (VMT) analysis.

REPORT ORGANIZATION

The remainder of the report is divided into the following chapters for the transportation operations analysis:

- Chapter 2: Identifies study intersections for analysis, analysis scenarios and describes LOS methodology adopted for evaluating the study intersections.
- Chapter 3: Describes the existing conditions on the roadway network, transit system, pedestrian facilities, and bicycle facilities, as well as current operations at study intersections.
- Chapter 4: Discusses the Project's trip generation characteristics as well as methodologies and assumptions used to estimate trip credits and net Project traffic added to study intersections.
- Chapter 5: Describes Near Term (2024) Plus Project Conditions and analysis.
- Chapter 6: Describes the traffic conditions under Cumulative (2030) Conditions, without Project Conditions, with SVIP Project and With Project (Betabel Commercial) Conditions and analysis.
- Chapter 7: Recommended Improvements
- Chapter 8: Describes vehicle queuing analysis.
- Chapter 9: On-site access, circulation and parking supply and requirements for the project.
- Chapter 10: Describes the traffic conditions under Cumulative (2045) Conditions, with SVIP Project Buildout.
- Chapter 11: Discusses the presents CEQA Transportation Analysis which includes VMT (methodology, assumptions, analysis, and findings of the Project specific Vehicle Miles Traveled (VMT) evaluation).

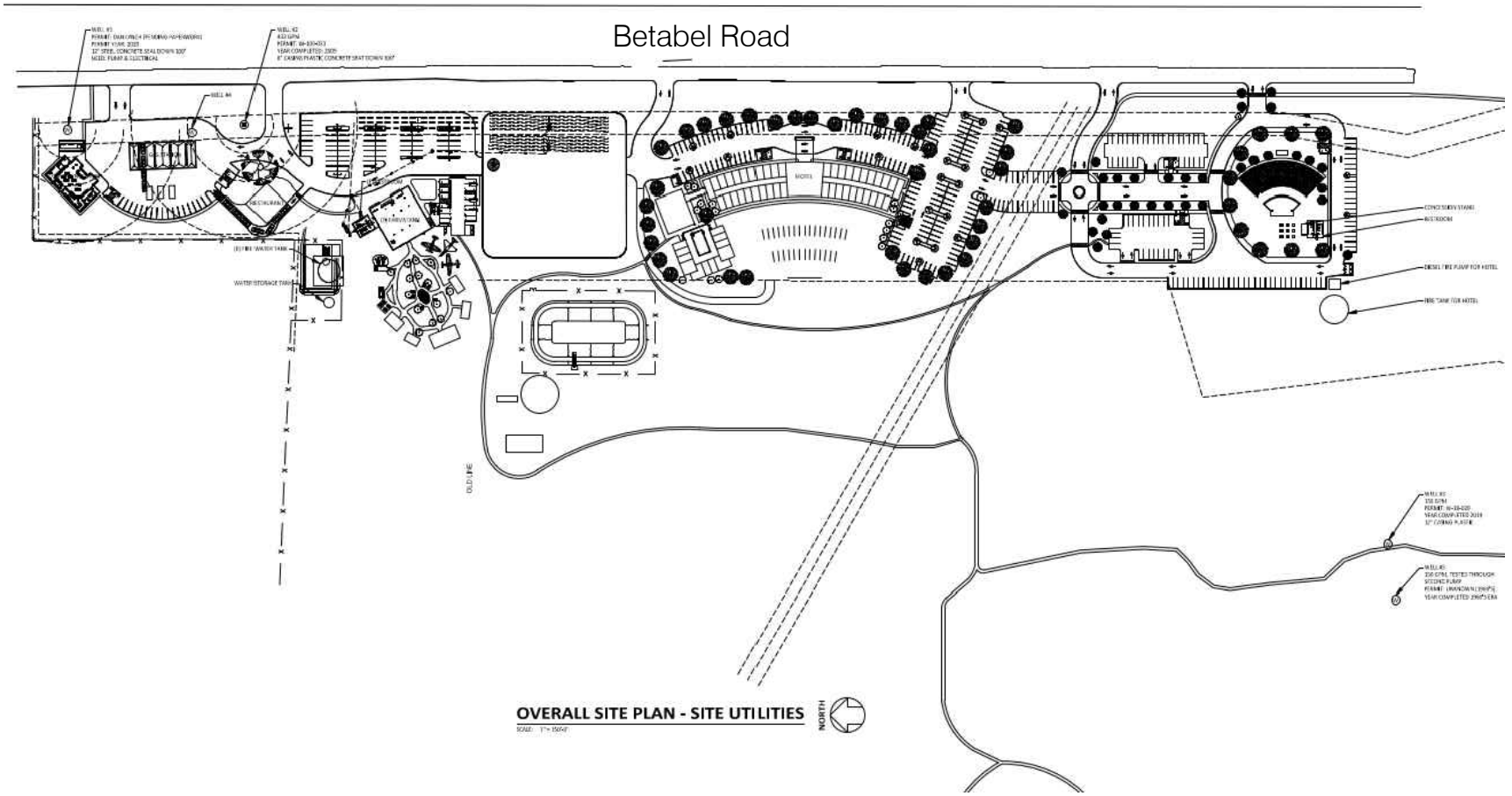

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FIGURE 1
SITE PLAN

BETABEL COMMERCIAL

2. LOCAL TRANSPORATION ANALYSIS METHODOLOGY

This chapter presents the methodology for the local transportation analysis to evaluate level of service, queuing, and site access and circulation.

STUDY INTERSECTIONS

The proposed project would generate new vehicular trips that would increase traffic volumes on the nearby street network. To assess changes in traffic conditions associated with the proposed project, the following intersections were evaluated:

- Betabel Rd. & Betabel Rd. Overpass
- SB US-101 Ramps & Betabel Rd. Overpass
- NB US-101 Ramps & Betabel Rd. Overpass
- Shore Rd. / Y Road & Betabel Rd. Overpass

The study intersections were selected in coordination with the County staff, based on the anticipated trip assignment and locations where Project caused deficiencies may potentially occur. The study intersections along with the Project location is shown in **Figure 2**.

ANALYSIS METHODOLOGY

Development Conditions

For intersection analysis, local agency guidelines were used to assess traffic operations, deficiencies, and improvements. Traffic analysis was conducted for weekday AM and PM peak hours and a typical weekend peak hour for each project scenario. The following conditions were analyzed:

LOS Scenario 1: Existing Conditions

Existing conditions were evaluated using the traffic count data from the December 2019 traffic study prepared for the Project for the weekday AM and PM peak hours. These counts were collected in August 2019 (prior to COVID-19 pandemic). For evaluating the existing condition on a weekend, traffic counts were collected in May 2022.

LOS Scenario 2: Near Term (2024) Plus Project Conditions

The Project is anticipated to be completed by 2024. Based on near term (2024) traffic volumes, roadway geometry, and traffic control, plus traffic generated by the Project is evaluated in this scenario.

LOS Scenario 3: Cumulative (2030) Conditions

Cumulative Conditions analysis was conducted for the year 2030. Based on traffic forecasted for developments anticipated to occur by the year 2030. These forecasts were calculated by using the latest San Benito's County travel demand model to forecast growth from existing conditions traffic volumes.

LOS Scenario 4: Cumulative (2030) Plus SVIP Project Conditions

The proposed Strada Verde Innovation Park (SVIP) project, located east of Betabel Interchange, was added to LOS Scenario 3 to study LOS deficiencies at the study intersections under this scenario.

LOS Scenario 5: Cumulative (2030) Plus Project Conditions

The proposed Project traffic was added to LOS Scenario 3 to study LOS deficiencies at the study intersections under this scenario.

LOS Scenario 6: Cumulative (2030) Plus SVIP + Project Conditions

The proposed SVIP project and the Betabel Project, are both added to LOS Scenario 3 to study LOS deficiencies at the study intersections under this scenario.

LEVEL OF SERVICE STANDARDS

Analysis of intersection deficiencies were based on the concept of LOS. The LOS of an intersection is a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity. Levels of service for this study were determined using methods defined in the *Highway Capacity Manual, 6th Edition* (HCM) within Synchro 11 analysis software for unsignalized intersections.

This analysis was prepared based on the standards and methodologies set forth by San Benito County (County) and Caltrans. The trip generation was based on County methodology, but also included Caltrans methodology for capping the pass-by and internal capture trip reductions since this provides a more conservative representation of the trip generation.

The HCM includes procedures for analyzing side street stop controlled (SSSC) and it defines LOS as a function of average control delay for the worst minor street movement. **Table 1** relates the operational characteristics associated with each LOS category for signalized and unsignalized intersections.

Table 1 - Intersection Level of Service Definitions

Level of Service	Description	Signalized (Avg. control delay per vehicle sec/veh.)	Unsignalized (Avg. control delay per vehicle sec/veh.)
A	Free flow with no delays. Users are virtually unaffected by others in the traffic stream	≤ 10	≤ 10
B	Stable traffic. Traffic flows smoothly with few delays.	> 10 – 20	> 10 – 15
C	Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.	> 20 – 35	> 15 – 25
D	Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak hours.	> 35 – 55	> 25 – 35
E	Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.	> 55 – 80	> 35 – 50
F	Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.	> 80	> 50

Sources: Transportation Research Board, Highway Capacity Manual 6th Edition, National Research Council, 2016.

Project deficiencies were determined by comparing conditions with the proposed project to those without the proposed project. The following criteria for deficiencies were determined for San Benito County and Caltrans intersections:

San Benito County

According to the San Benito County 2035 General Plan adopted in 2015, the County shall endeavor to maintain a General Plan target goal of LOS D at all locations.

Side-Street Stop Controlled Intersections

The Project would cause a deficiency if:

1. The delay on the worst approach at a one-or two-way stop-controlled intersection degrades from an acceptable LOS D or better under baseline conditions to an unacceptable LOS E or F under project conditions and the traffic volumes at the intersection under project conditions are high enough to satisfy the peak-hour volume traffic signal warrant published in the California Manual on Uniform Traffic Control Devices (CAMUTCD); or

2. The delay on the worst approach at a one-or two-way stop-controlled intersection is already at an unacceptable LOS E or F under baseline conditions and the traffic volumes at the intersection under project conditions are high enough to satisfy the CAMUTCD peak-hour volume traffic signal warrant and the addition of project traffic causes the delay on the worst stop-controlled approach to increase by more than four seconds beyond what it was without the Project.

Caltrans

Caltrans' *Guide for the Preparation of Traffic Impact Studies* no longer establishes a threshold for facility LOS. However, the San Benito County General Plan identifies deficiencies at Caltrans facilities as LOS D with some exceptions described below.

Project level deficiencies occur when the **signalized or unsignalized** study intersection degrades from LOS C or better to LOS D or worse with the addition of the Project, or when the intersection is at an unacceptable LOS D or worse under baseline conditions and the addition of the Project further increases delay. In addition, if an **unsignalized intersection** is LOS D or worse in baseline conditions and meets or exceeds the CAMUTCD peak hour signal warrant threshold, it is deficient.

Caltrans requires that an Intersection Control Evaluation (ICE) analysis be performed at study intersections that is located in their jurisdiction. For Roundabout analysis, the methodology used in this study follows the FHWA Roundabout Guidelines. Critical v/c for each entry movement is calculated and used as MOE for roundabouts.

Caltrans will work with local agencies to determine an acceptable LOS standard on a case-by-case basis when the study roadway or intersection facility is constrained, and the LOS C objective is infeasible. According to the *2035 San Benito County General Plan Update (2015),* within San Benito County, Caltrans identifies LOS D as the standard for operation along US 101. In addition, the *2035 San Benito County General Plan Update* proposes LOS D as the threshold for acceptable level of service on all Caltrans facilities in San Benito County, including SR 25 and SR 156 in accordance with General Plan Policy C-1.12.

Therefore, LOS D was used as the LOS standard for Caltrans facilities located in San Benito County and evaluated in this study.

A facility was considered deficient, as a result of project traffic, when the facility operates at LOS D or better under no project conditions and degrades to LOS E or LOS F in plus project conditions, or the facility was already operating at LOS E or LOS F in no project conditions and the Project degrades the LOS measure of effectiveness by more than one percent.

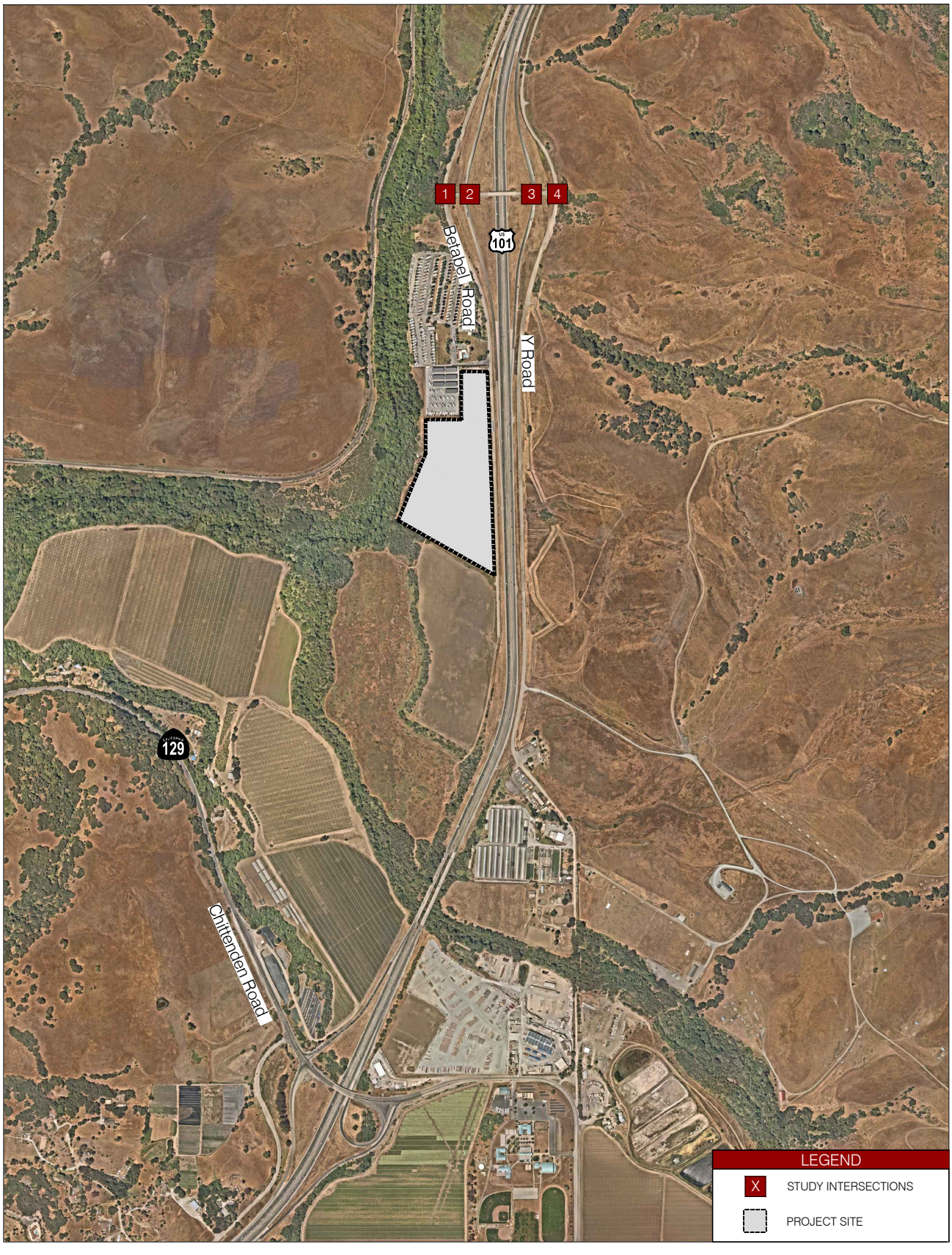

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FIGURE 2

PROJECT LOCATION AND STUDY INTERSECTIONS

3. EXISTING CONDITIONS

This chapter describes the existing conditions of the roadway network, transit service, pedestrian facilities, and bicycle facilities within the vicinity of the project site. The chapter also presents existing turning movement volumes and intersection levels of service.

EXISTING ROADWAY NETWORK

This section provides a description of the specific roadways included in this study.

US 101 is a north-south federal highway that extends north through San Jose and San Francisco and south through Salinas. US 101 has two-mixed flow lanes in each direction separated by a grassy median with guard rail/k-rail. The speed limit in the study area is 65 miles per hour (mph).

Betabel Road is primarily a two-lane, undivided, north-south, frontage road extending along the west side of US 101 in the Project vicinity. Betabel Road also extends east-west for a short distance where it crosses over the US 101 freeway, intersections US 101 freeway on and off ramps, and intersects Y Road. The Betabel RV Resort is located just south of the US 101 / Betabel Road Overcrossing. Aside from the RV resort, no other developed uses currently exist along Y Road. The proposed Project will be located south of the RV resort. The speed limit is assumed to be 30 miles per hour.

Y Road is a north-south two-lane undivided, frontage roadway that extends along the east side of US 101 near the Project site. Y Road intersects with Betabel Road near the Betabel Road / US 101 overcrossing. Aromas – San Juan Unified School District facilities are located along the west side of Y Road approximately one mile south of the Y Road & Betabel Road intersection, where Y Road is also known as San Juan Highway. Aside from the school district facilities and farmland, no other developed uses currently exist along Y Road. The speed limit is assumed to be 30 miles per hour.

EXISTING LANE CONFIGURATION AND TRAFFIC CONTROL

Existing intersection lane configuration and traffic controls are illustrated in **Figure 3**.

EXISTING PEAK-HOUR TURNING MOVEMENT VOLUMES

Weekday intersection turning movement counts dated August 2019 data from the previous traffic study prepared by 'Pinnacle Traffic Engineering' was used. The counts represent pre COVID-19 volumes, and no adjustments were made to the counts. The COVID-19 restrictions between March 2020 and September 2021 significantly changed travel patterns throughout the Country, with a significant portion of employees working from home. Our observations reveal that the travel patterns are getting back to pre-COVID conditions, however, a portion of the employees are still working from home at the time of this report. For the weekend analysis, traffic counts were collected during the month in May 2022, as no previous data was available. The weekend traffic counts were collected when local schools were in session and the weather was fair.

Intersection volume data sheets are provided in the **Appendix**. Peak hour turning movement volumes are shown in **Figure 4**.

EXISTING INTERSECTION LEVEL OF SERVICE

Traffic operations were evaluated at the study intersections based on existing conditions lane geometry, traffic control, and peak hour traffic volumes. LOS analysis results at the study intersections are presented in **Table 2** and locations operating unacceptably are bolded.

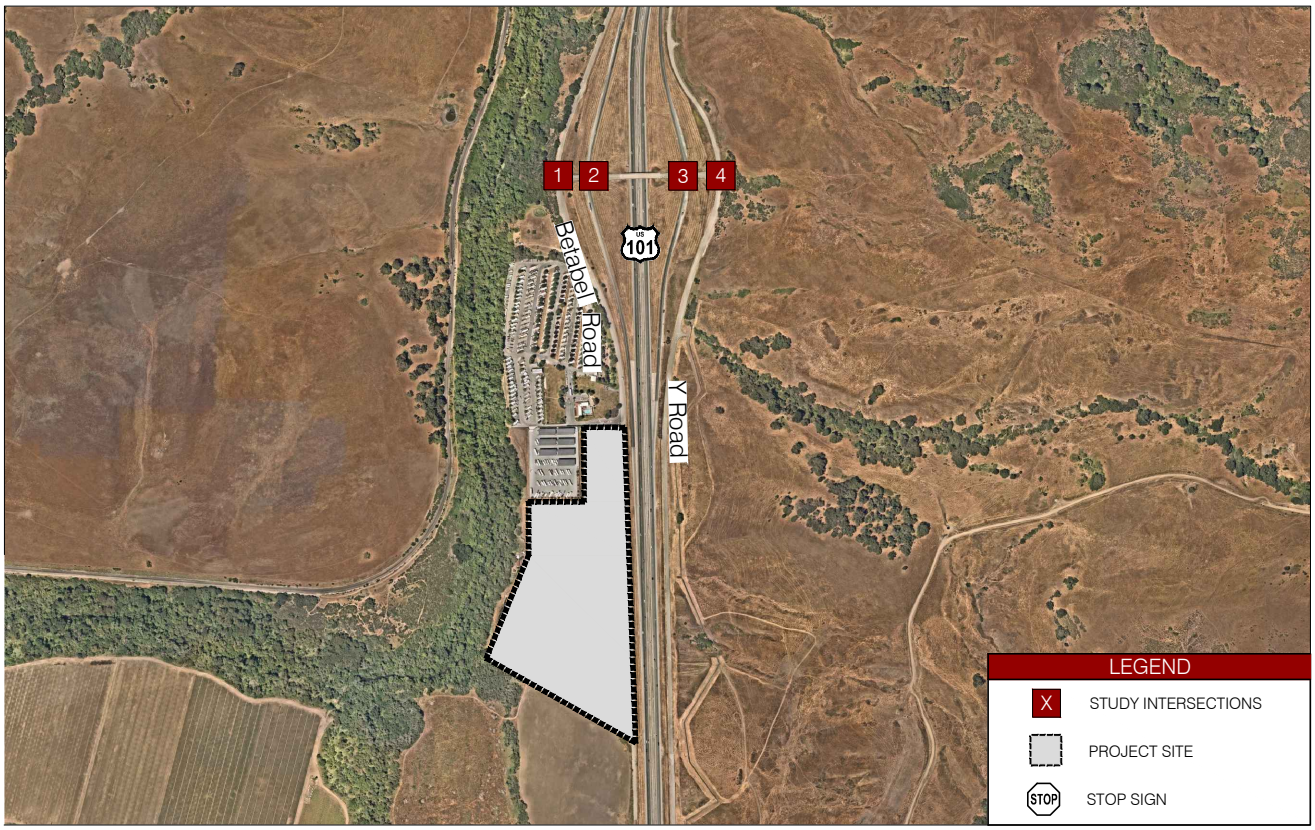
Under Existing Conditions, all study intersections operate at acceptable LOS during the AM, the PM and Weekend peak hour conditions. LOS analysis sheets for Existing Conditions are provided in the **Appendix**.

Table 2 - Existing Intersection Level of Service Summary

#	Intersection	LOS Criteria	Maintaining Agency[4,5]	Control Type[3]	Existing Conditions								
					AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
					Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]
1	Betabel Rd & Betabel Rd Overpass	D	County	SSSC	-	6.6	A	-	7.6	A	-	7.4	A
	Worst Approach				SB	8.7	A	SB	9.1	A	SB	9.1	A
2	SB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	-	3.1	A	-	4.2	A	-	4.3	A
	Worst Approach				SB	8.6	A	SB	8.6	A	SB	8.5	A
3	NB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	-	3.2	A	-	2.0	A	-	2.2	A
	Worst Approach				NB	7.2	A	NB	7.3	A	NB	7.2	A
4	Shore Rd / Y Rd & Betabel Rd Overpass	D	County	SSSC	-	3.4	A	-	7.0	A	-	3.7	A
	Worst Approach				NB	8.6	A	NB	8.8	A	NB	8.6	A

Notes:

1. Analysis performed using HCM 6th Edition methodologies
2. Delay indicated in seconds/vehicle.
3. SSSC = Side-Street Stop Control.
4. County = San Benito County; Caltrans = California Department of Transportation.
5. County LOS standard is D; Caltrans has no LOS standard.
6. Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold**.



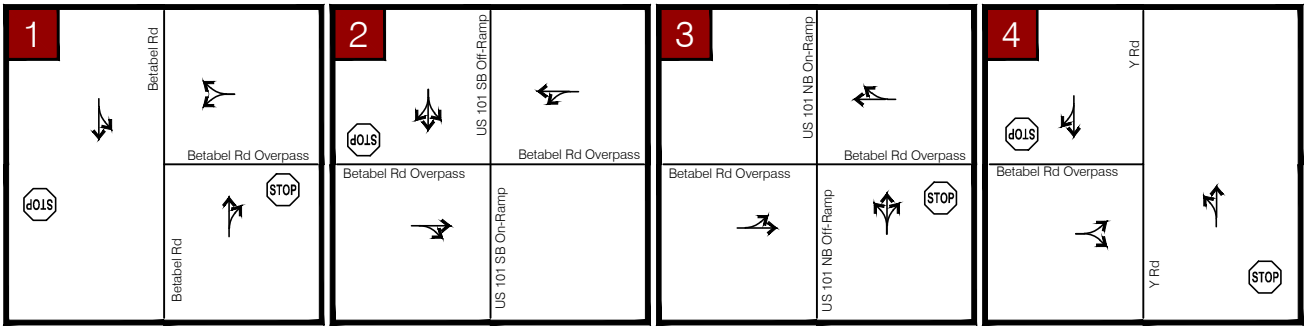


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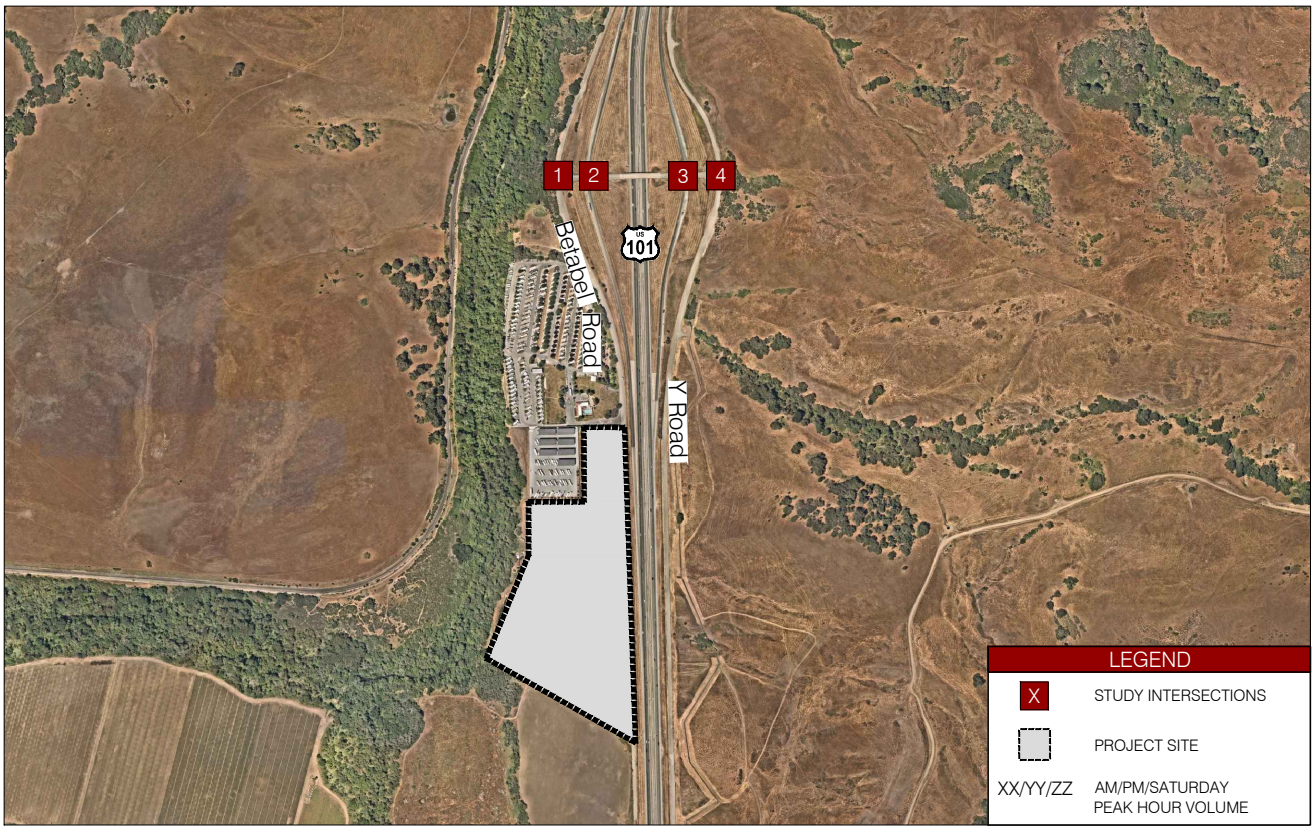
FIGURE 3
EXISTING CONDITION
LANE GEOMETRY AND TRAFFIC CONTROL



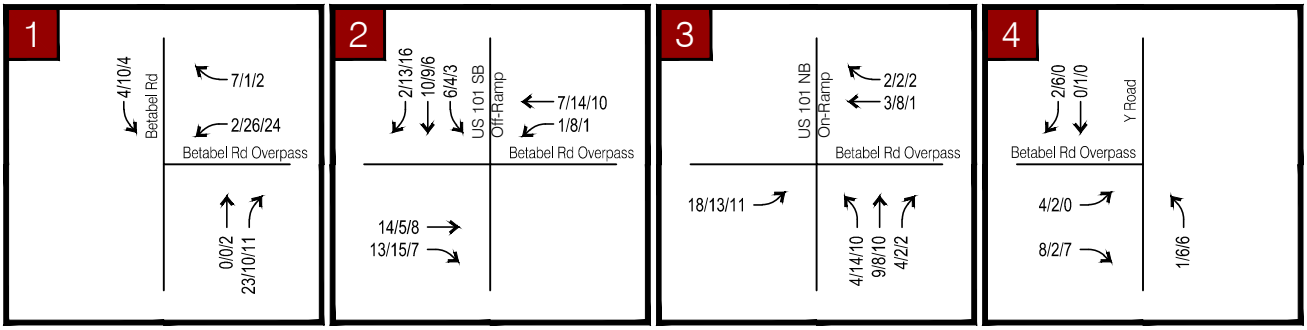


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FIGURE 4
EXISTING CONDITION
PEAK HOUR TURNING MOVEMENT COUNTS

BETABEL COMMERCIAL

4. PROPOSED PROJECT

This chapter presents a description of the proposed site use, trip generation, trip distribution, and trip assignment.

The Project would develop 108,425 square feet (sf) of commercial space, consisting of a gas station with convenience store (8 double sided fuel pumps and 5,000 SF convenience store), a fast-food restaurant with dine-in and drive through service (2,500 SF), amusement buildings with exhibits (3,125 SF), a motel (116 room and 9 villa rooms) with outdoor pool and outdoor movie screen, an outdoor event center (500 seats), and trails. The design of the project would be reminiscent of the 1940s and 1950s American roadside.

Primary access to the Project site will be via Betabel Road, which will be accessed via the Betabel Road & US-101 interchange, Access to the Project site will be provided via multiple driveways of Betabel Road.

TRIP GENERATION

Trip generation for projects is typically calculated based on information contained in the Institute of Transportation Engineer's (ITE) publication, *Trip Generation Manual, 11th Edition*[1]. The manual is a standard reference used by jurisdictions throughout the country for the estimation of trip generation potential of proposed projects. A trip is defined in the *Trip Generation Manual* as a single or one-directional vehicle movement with either the origin or destination at the project site. In other words, a trip can be either "to" or "from" the site and therefore, a single visitor to a site is counted as two trips.

For the purposes of determining the worst-case traffic congestion on the surrounding street network due to a combination of Project traffic generation potential and background traffic demand, Project trips are estimated between the weekday hours of 7:00-9:00 AM and 4:00-6:00 PM. While the Project itself could generate somewhat more traffic during other times of the day, the peak of "adjacent street traffic" represents the time period when the Project uses contribute to the greatest amount of congestion, and consequently effects.

For the weekend peak hour trips, the following assumptions were made:

- Convenience Store/Gas Station: The weekend peak hour trips were assumed to be same as weekday PM peak hour trips.
- Motel: The weekend peak hour trips were assumed to be same as weekday PM peak hour trips.

Analysis of traffic effects during these AM, PM and Weekend peak hours is consistent with, Caltrans and San Benito County guidance and requirements, as well as industry best-practices.

Internal Capture Reduction

With a multi-use development, there is potential for interaction among uses within the site. These types of trips are considered internal to the site and are "captured" within the site. The standard engineering reference for determining internal capture reductions for the proposed land uses is the ITE Trip Generation Handbook, 3rd Edition[2]. However, the *2002 Caltrans Guide for the Preparation of Traffic Impact Studies*,

[1] *Institute of Transportation Engineers*, Trip Generation Manual, 11th Edition, 2021

[2] *Trip Generation Handbook, 3rd Edition*, Institute of Transportation Engineers, 2017.

accepts a maximum internal capture of five (5) percent. Therefore, internal capture rates were capped at five (5) percent. ITE methodology does not include internal capture calculation for daily trips, therefore an average percentage of the AM, PM and Weekend peak was used.

Pass-By Reduction

No Pass-by trip reductions were assumed as part of this analysis for a worst-case scenario.

Table 3 presents the trip generation for the proposed project. The Project will generate 5,753 daily trips, 576 AM peak hour trips (287 In / 289 Out), 634 PM peak hour trips (374 In / 259 Out) and 686 Weekend peak hour trips (400 In / 286 Out).

Table 3 - Project Trip Generation

ITE Land Use Code	Land Use	Size	Units	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekend Peak Hour		
					Total	In	Out	Total	In	Out	Total	In	Out
Project Land Use Area 1													
945	Convenience Store/Gas Station	5.00	KSF	4,014	433	217	216	364	182	182	364	182	182
934	Fast-Food Restaurant with Drive-Through	2.5	KSF	1,169	112	57	55	83	43	40	138	70	68
822	Amusement Buildings	3.125	KSF	170	7	4	3	21	10	11	21	10	11
Project Land Use Area 2													
	Open Space/Overflow Parking[2]	0.5	acres	--	--	--	--	--	--	--	--	--	--
	Visitor Center[2]	0.35	KSF	--	--	--	--	--	--	--	--	--	--
320	Motel	125	Rooms	419	44	16	28	45	24	21	45	24	21
	Outdoor Event Area[3]	500	Seats	256	--	--	--	144	133	11	144	133	11
	Animal/Livestock Corral[4]	0.24	acres	28	10	8	2	10	2	8	10	2	8
	Gross Total Project Trips			6,056	606	302	304	667	394	273	722	421	301
	Internal Capture Trips[5]			-303	-30	-15	-15	-33	-20	-14	-36	-21	-15
	Net External Project Trips			***5,753***	***576***	***287***	***289***	***634***	***374***	***259***	***686***	***400***	***286***

Notes:
1. Trip Rates taken from ITE Trip Generation Manual, 11th Edition published by the Institute of Transportation Engineers.
2. On-Site amenity, no additional trips are estimated.
3. Assumed average vehicle occupancy of 2.25 with 60% arriving during the peak hour and 5% leaving during the peak hour.
4. San Diego Trip Generation Manual has 115 trips per acre for San Diego Zoo assumed 10 employees with 8 arriving/leavaving during the peak.
5. Internal capture rates as per 2002 Caltrans Guide for the Preparation of Traffic Impact Studies (a maximum of 5%).

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Project trip distribution for the proposed project was based on existing traffic count information, previous traffic studies within the study area, and the general orientation of population sources to the site. **Figure 5** presents the traffic distribution assumed for this analysis.

Based on the assumed trip distribution, the new vehicle trips generated by the project were assigned to the street network and the trip assignment is shown in **Figure 6.**

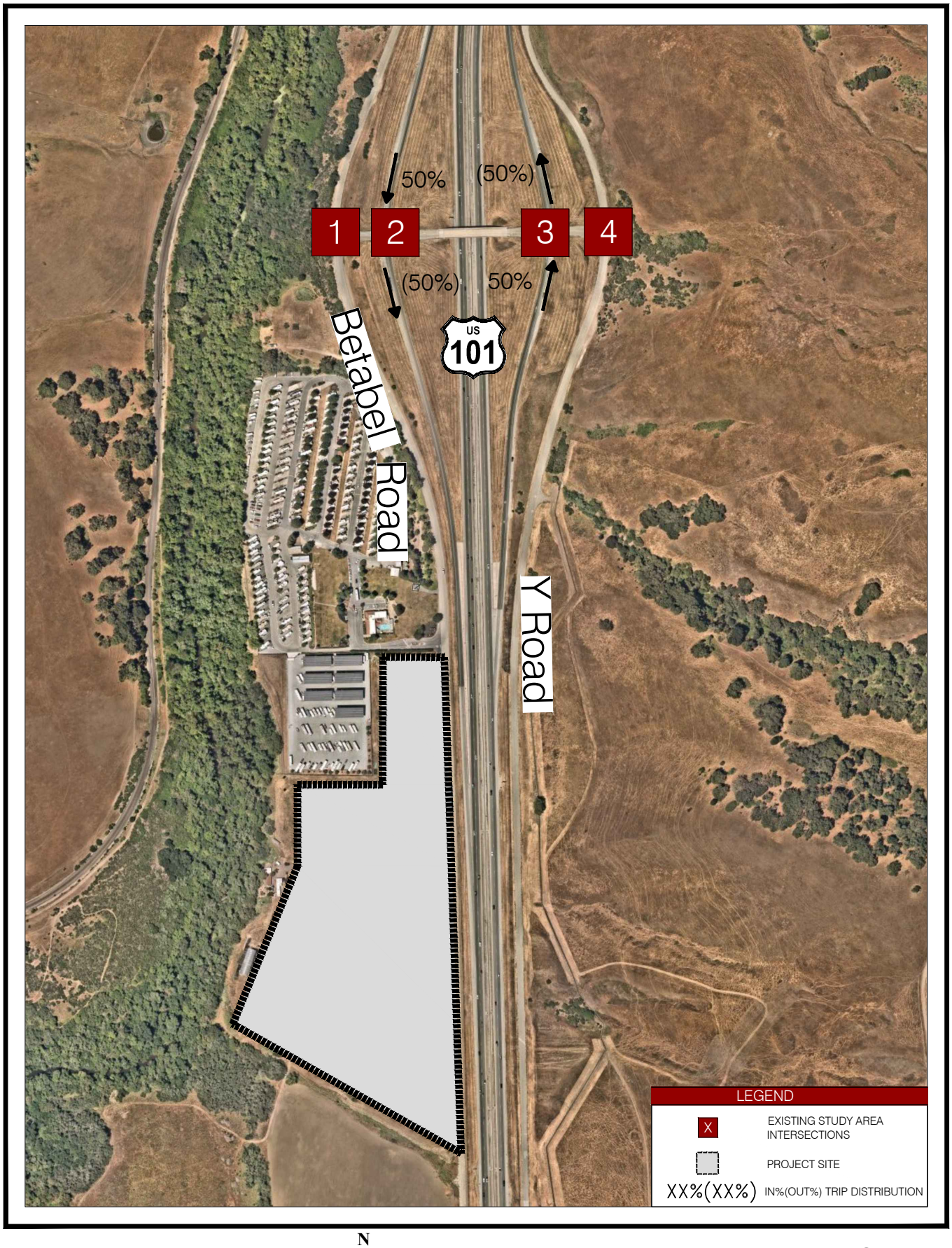

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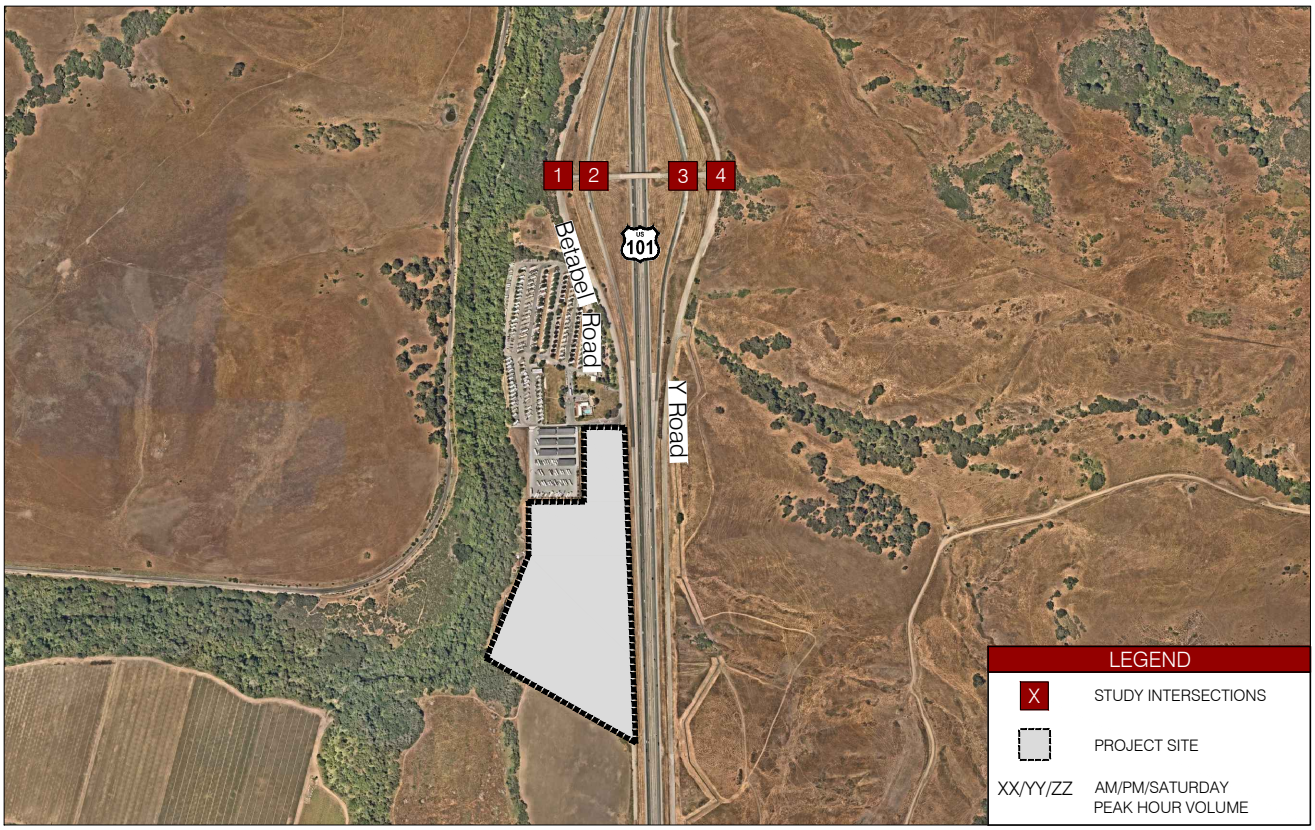
FIGURE 5
PROJECT TRIP DISTRIBUTION



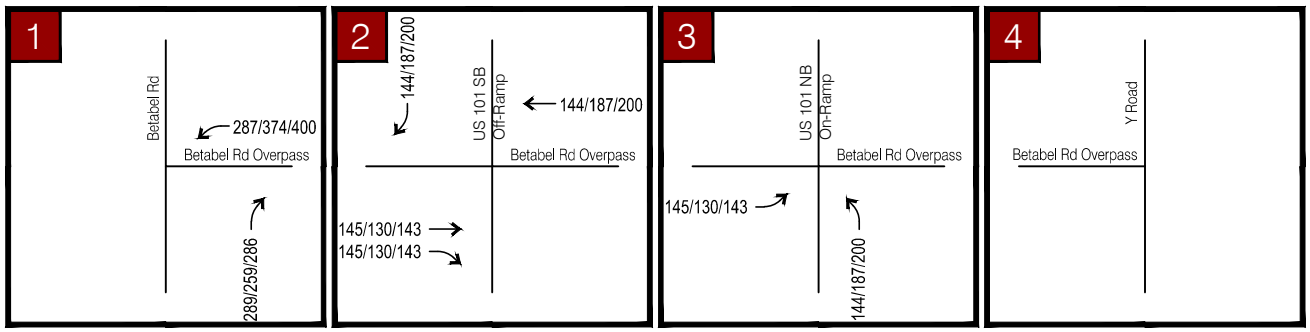


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FIGURE 6
PEAK HOUR PROJECT TRIPS

5. NEAR TERM (2024) PLUS BETABEL PROJECT CONDITIONS

The Project is anticipated to be completed by 2024. Traffic operations were evaluated at the study intersections for Near Term (2024) plus Project conditions. It should be noted that for near term (2024) conditions, minimal to negligible development within the vicinity of the Project Site is anticipated, therefore, 'Near Term (2024) Without Project Conditions' scenario is not analyzed.

NEAR TERM (2024) PLUS BETABEL PROJECT TRAFFIC VOLUMES

As mentioned above, for the near term (2024) conditions, minimal to negligible development within the vicinity of the Project site is anticipated, therefore, the Near Term (2024) plus Project turning movement volumes at the study intersections were derived by adding the vehicle trips generated by the project to the existing intersection turning movement volumes. Near Term (2024) Plus Project Conditions traffic volumes at study intersections are presented in **Figure 7**.

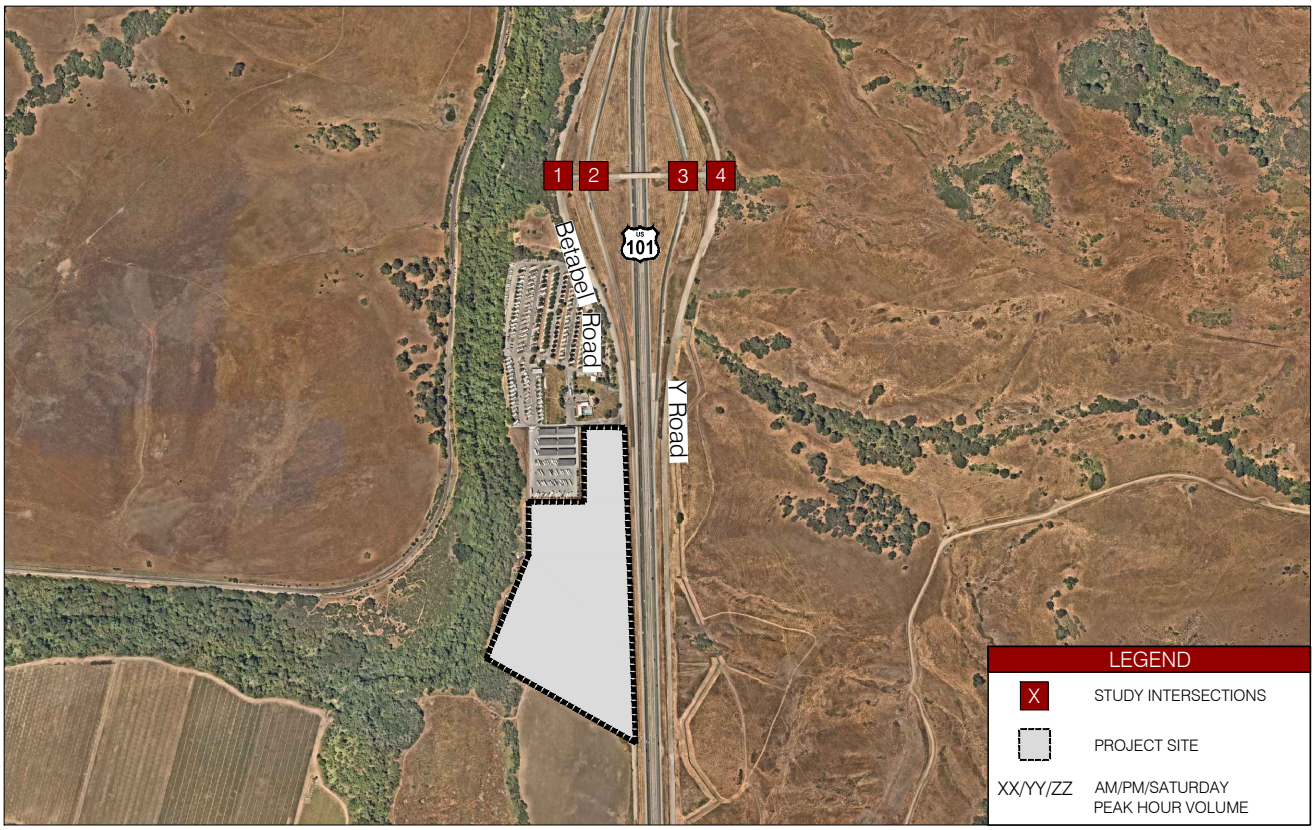
NEAR TERM (2024) PLUS BETABEL PROJECT INTERSECTION LOS

Near Term (2024) Plus Project traffic conditions were evaluated at the study intersections and are shown in **Figure 7**. LOS results are presented in **Table 4** and intersections operating unacceptably are bolded and project deficiencies are highlighted.

Under Near Term (2024) Plus Project traffic conditions, all study intersections operate at acceptable LOS during the AM, the PM and Weekend peak hour conditions.

The southbound (SB) approach for the Betabel Road / Betabel Road Overcrossing (Int. 1) operates at unacceptable LOS E and LOS F during the PM and weekend peak hours. The delay is for the minor street approach (southbound), which serves low peak hour volumes (10 & 5 vehicles during the PM and Weekend peaks). During PM and Weekend peak hours, gaps will be lower for the southbound left turning traffic, however, it is anticipated that the vehicles will be able to find gaps to access Betabel overcrossing.

LOS analysis sheets for the Near Term (2024) Plus Project traffic conditions are provided in the **Appendix**.



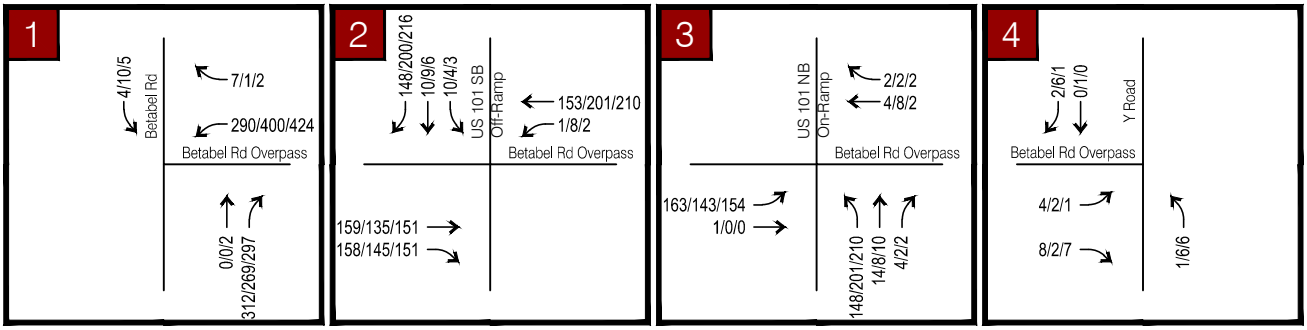


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FIGURE 7
NEAR TERM PLUS PROJECT CONDITIONS
PEAK HOUR TURNING MOVEMENT COUNTS

BETABEL COMMERCIAL

Table 4 - Near Term (2024) Plus Betabel Project Intersection Level of Service Summary

#	Intersection	LOS Criteria	Maintaining Agency[4,5]	Control Type[3]	Near-Term (2024) No Project Conditions								
					AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
					Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]
1	Betabel Rd & Betabel Rd Overpass	D	County	SSSC	-	9.0	A	-	9.0	A	-	9.8	A
	Worst Approach				SB	27.0	D	**SB**	**39.6**	**E**	**SB**	**67.5**	**F**
2	SB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	-	2.8	A	-	3.5	A	-	3.8	A
	Worst Approach				SB	10.4	B	SB	11.2	B	SB	12.3	B
3	NB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	-	10.9	B	-	3.0	A	-	3.0	A
	Worst Approach				NB	14.8	B	EB	7.6	A	EB	7.5	A
4	Shore Rd / Y Rd & Betabel Rd Overpass	D	County	SSSC	-	3.4	A	-	7.0	A	-	4.2	A
	Worst Approach				NB	8.6	A	NB	8.8	A	NB	8.6	A

Notes:

1. Analysis performed using HCM 6th Edition methodologies
2. Delay indicated in seconds/vehicle.
3. SSSC = Side-Street Stop Control.
4. County = San Benito County; Caltrans = California Department of Transportation.
5. County LOS standard is D; Caltrans has no LOS standard.
6. Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold**.

6. CUMULATIVE TRAFFIC CONDITIONS

Traffic operations were evaluated for the following Cumulative (2030) Condition development scenarios:

- Cumulative (2030) No Project Conditions
- Cumulative (2030) Plus Strada Verde Innovation Park (SVIP) Project Conditions
- Cumulative (2030) Plus Betabel Project Conditions
- Cumulative (2030) Plus Betabel Project Plus SVIP Project Conditions

CUMULATIVE TRAFFIC VOLUMES

Interim volume growth in the study area was determined based on an evaluation of the County's pending, approved, and future projects. Latest County's travel demand model forecasts were also utilized to estimate future volume growth in the study area.

Year 2045 roadway link volumes from the latest County's Travel Demand Forecast model were obtained for Interim (2030) traffic volume growth estimates. The model was used to plot bidirectional AM and PM peak-hour traffic volumes on each segment along roadways within the study area. Model base year (2019) and horizon year (2045) forecast volumes were compared to determine the annual incremental growth in traffic volumes at study intersection approach and departure links. Model forecasted growth was then compared to projected volumes from previous state and county study documents to validate incremental growth estimates. Year 2030 turning movement volumes were calculated by adding the growth increment to the year (2018 and 2022) traffic count volumes to calculate the final adjusted roadway link forecast volume. Final adjusted forecast volumes were then converted to Interim (2030) intersection turning movement volumes using a process commonly referred to as the Furness method. The Furness method uses an iterative process to derive future turning movement volumes based on future year roadway link volumes and an initial estimate of turning percentages (obtained from the existing 2018 and 2022 intersection turning movement counts).

Weekend peak hour projected volumes were estimates by applying the ratio of existing PM volumes to existing Weekend volumes, to the projected PM peak hour volumes estimated.

The forecasted volumes used in this analysis were compared to the County's travel demand model and are in general, higher than the local system volumes estimated.

CUMULATIVE (2030) NO PROJECT CONDITIONS INTERSECTION LOS

Cumulative volumes were evaluated at the study intersections based on existing lane geometry and traffic control. Cumulative (2030) No Project Conditions traffic volumes at study intersections are presented in **Figure 8**. LOS results are presented in **Table 5** and locations operating unacceptably are bolded. All study intersections operate at acceptable LOS standards under Cumulative Conditions, during the AM, PM and Weekend Peak Hour.

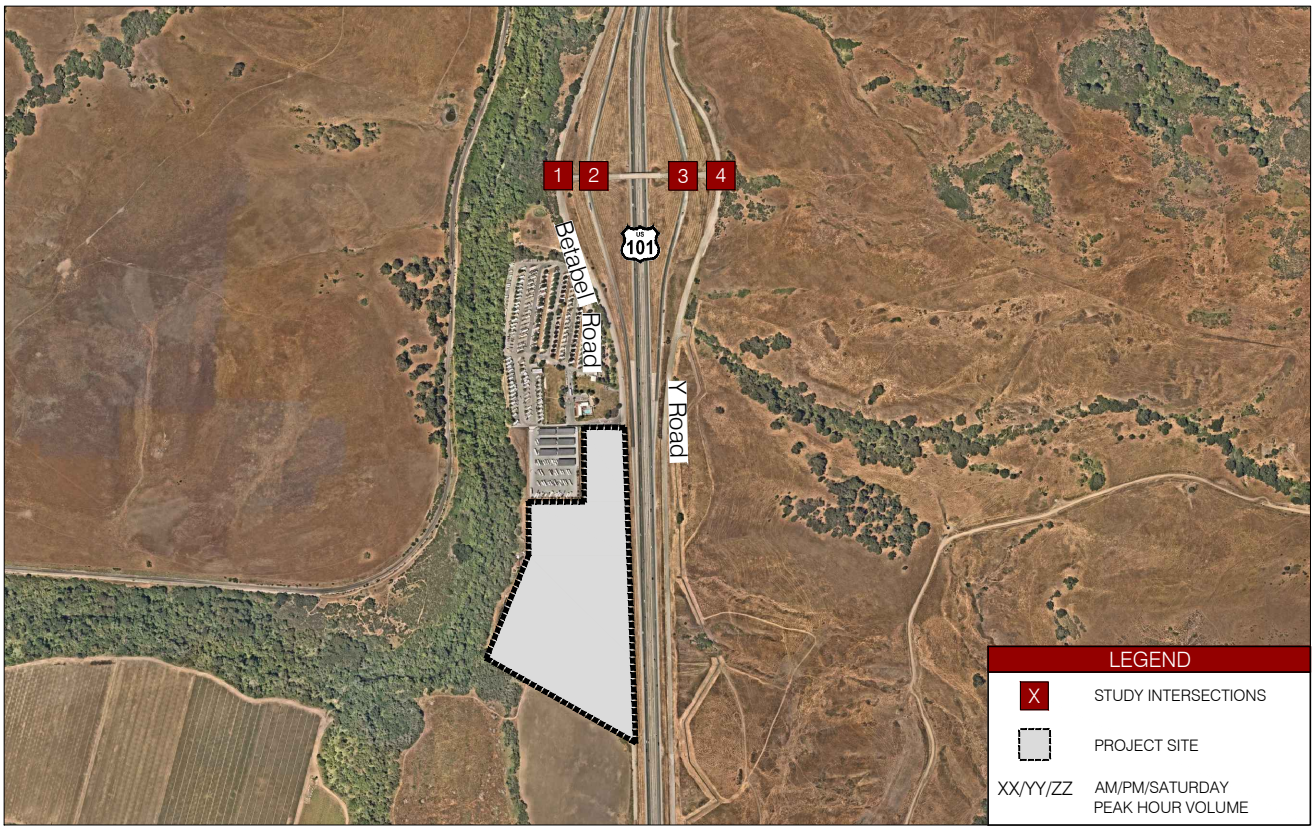
LOS analysis sheets for the Cumulative (2030) Conditions are provided in the **Appendix**.

Table 5 – Cumulative (2030) Intersection Level of Service Summary

#	Intersection	LOS Criteria	Maintaining Agency[4,5]	Control Type[3]	Cumulative (2030) No Project Conditions								
					AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
					Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]
1	Betabel Rd & Betabel Rd Overpass	D	County	SSSC	-	6.7	A	-	7.6	A	-	7.6	A
	Worst Approach				SB	8.8	A	SB	9.1	A	SB	9.1	A
2	SB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	-	4.3	A	-	4.2	A	-	4.3	A
	Worst Approach				SB	8.8	A	SB	8.6	A	SB	8.5	A
3	NB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	-	6.6	A	-	2.0	A	-	1.9	A
	Worst Approach				NB	8.8	A	EB	7.3	A	EB	7.2	A
4	Shore Rd / Y Rd & Betabel Rd Overpass	D	County	SSSC	-	3.4	A	-	7.0	A	-	5.4	A
	Worst Approach				NB	8.6	A	NB	8.8	A	NB	8.7	A

Notes:

1. Analysis performed using HCM 6th Edition methodologies
2. Delay indicated in seconds/vehicle.
3. SSSC = Side-Street Stop Control.
4. County = San Benito County; Caltrans = California Department of Transportation.
5. County LOS standard is D; Caltrans has no LOS standard.
6. Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold**.



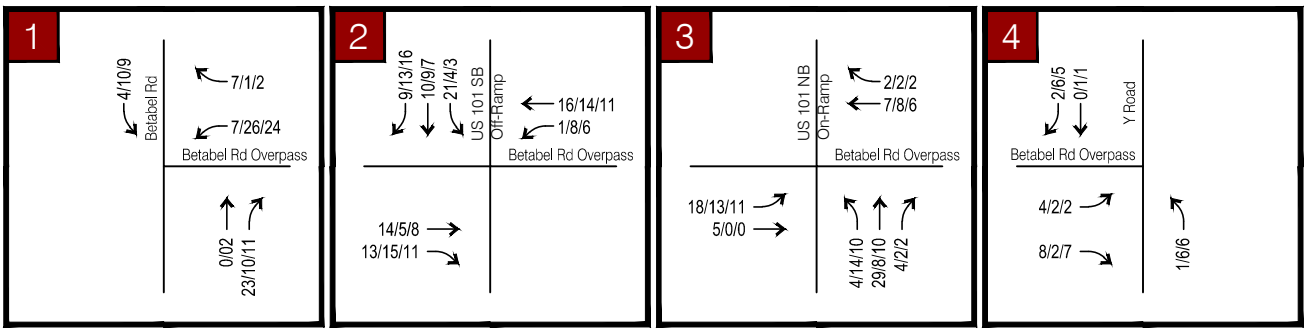


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FIGURE 8
CUMULATIVE 2030 CONDITIONS
PEAK HOUR TURNING MOVEMENT COUNTS

BETABEL COMMERCIAL

CUMULATIVE (2030) SVIP PROJECT CONDITIONS INTERSECTION LOS

Cumulative (2030) Plus Strada Verde Innovation Park traffic conditions were evaluated at the study intersections based on existing lane geometry and traffic control. The Cumulative (2030) Plus SVIP Project Conditions volumes are shown in **Figure 9**. LOS results are presented in **Table 6** and intersections operating unacceptably are bolded.

All study intersections operate at acceptable LOS standards under Cumulative (2030) Plus SVIP Conditions, during the AM, PM and Weekend Peak Hour.

The northbound (NB) approach for the Betabel Road / Betabel Road Overcrossing (Int. 4) operates at unacceptable LOS F during the AM peak hour and operates at LOS E during the PM peak hour. The delay is for the minor street approach (northbound), which serves low peak hour volumes (1 vehicle during the AM peak and 6 vehicles in the PM peak). During weekday AM and PM peak hours, gaps will be lower for the northbound left turning traffic, however, it is anticipated that the vehicles will be able to find gaps to access Betabel overcrossing.

LOS analysis sheets from Cumulative (2030) Plus SVIP Project conditions are provided in the **Appendix**.

CUMULATIVE (2030) PLUS BETABEL PROJECT CONDITIONS INTERSECTION LOS

Cumulative (2030) Plus Project (Betabel) traffic conditions were evaluated at the study intersections based on existing lane geometry and traffic control. The Cumulative (2030) Plus Project Conditions volumes are shown in **Figure 9**. LOS results are presented in **Table 7** and intersections operating unacceptably are bolded.

All study intersections operate at acceptable LOS standards under Cumulative (2030) Plus Project Conditions, during the AM, PM and Weekend Peak Hour.

The southbound (SB) approach for the Betabel Road / Betabel Road Overcrossing (Int. 1) operates at unacceptable LOS E and LOS F during the PM and Weekend peak hours. The delay is for the minor street approach (southbound), which serves low peak hour volumes (10 and 9 vehicles during the PM and Weekend peaks). During PM and Weekend peak hour, gaps will be lower for the southbound left turning traffic, however, it is anticipated that the vehicles will be able to find gaps to access Betabel overcrossing.

LOS analysis sheets from Cumulative (2030) Plus Project conditions are provided in the **Appendix.**

Table 6 - Cumulative Plus SVIP Project Intersection Level of Service Summary

#	Intersection	LOS Criteria	Maintaining Agency[4,5]	Control Type[3]	Cumulative (2030) Plus SVIP Project Conditions								
					AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
					Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]
1	Betabel Rd & Betabel Rd Overpass	D	County	SSSC	-	6.7	A	-	7.6	A	-	7.6	A
	Worst Approach				SB	8.8	A	SB	9.1	A	SB	9.1	A
2	SB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	-	16.7	C	-	10.1	B	-	5.0	A
	Worst Approach				SB	18.9	C	SB	15.0	C	SB	8.7	A
3	NB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	-	4.8	A	-	1.1	A	-	3.8	A
	Worst Approach				NB	17.6	C	NB	10.3	B	NB	8.9	A
4	Shore Rd / Y Rd & Betabel Rd Overpass	D	County	SSSC	-	9.5	A	-	12.1	B	-	7.3	A
	Worst Approach				**NB**	**90.9**	**F**	**NB**	**39.5**	**E**	NB	9.2	A

Table 7 - Cumulative Plus Betabel Project Intersection Level of Service Summary

#	Intersection	LOS Criteria	Maintaining Agency[4,5]	Control Type[3]	Cumulative (2030) Plus Betabel Project Conditions								
					AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
					Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]
1	Betabel Rd & Betabel Rd Overpass	D	County	SSSC	-	9.0	A	-	9.0	A	-	10.2	B
	Worst Approach				SB	27.6	D	**SB**	**39.6**	**E**	**SB**	**73.4**	**F**
2	SB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	-	3.0	A	-	3.5	A	-	3.8	A
	Worst Approach				SB	10.9	B	SB	11.2	B	SB	12.3	B
3	NB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	-	11.2	B	-	3.0	A	-	3.0	B
	Worst Approach				NB	15.4	C	EB	7.6	A	EB	7.5	A
4	Shore Rd / Y Rd & Betabel Rd Overpass	D	County	SSSC	-	3.4	A	-	7.0	A	-	5.4	A
	Worst Approach				NB	8.6	A	NB	8.8	A	NB	8.7	A

1. Analysis performed using HCM 6th Edition methodologies
2. Delay indicated in seconds/vehicle.
3. SSSC = Side-Street Stop Control.
4. County = San Benito County; Caltrans = California Department of Transportation.
5. County LOS standard is D; Caltrans has no LOS standard.
6. Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold**.

CUMULATIVE (2030) PLUS BETABEL PROJECT PLUS SVIP PROJECT CONDITIONS INTERSECTION LOS

Cumulative (2030) Plus Project (Betabel) traffic conditions were evaluated at the study intersections based on existing lane geometry and traffic control. The Cumulative (2030) Plus Project Plus SVIP Project volumes are shown in **Figure 9**. LOS results are presented in **Table 8** and intersections operating unacceptably are bolded and project deficiencies are highlighted.

As shown in **Table 8**, all study intersections operate at acceptable LOS standards under Cumulative (2030) Plus Project Conditions, during the AM, PM and Weekend Peak Hour, except for the following intersections, which operates at an unacceptable level of service:

- Intersection #2 – SB US 101 & Y Road/Betabel Rd Overpass (AM Peak Hour)
    - The overall intersection operates at unacceptable LOS F with overall delay of 116.1 seconds. The southbound approach operates at LOS F with delay of 206.9 seconds.
- Intersection #3 – NB US 101 & Y Road/Betabel Rd Overpass (AM Peak Hour)
    - The overall intersection operates at unacceptable LOS F with overall delay of 61.6 seconds. The southbound approach operates at LOS F with delay of 188.4 seconds.

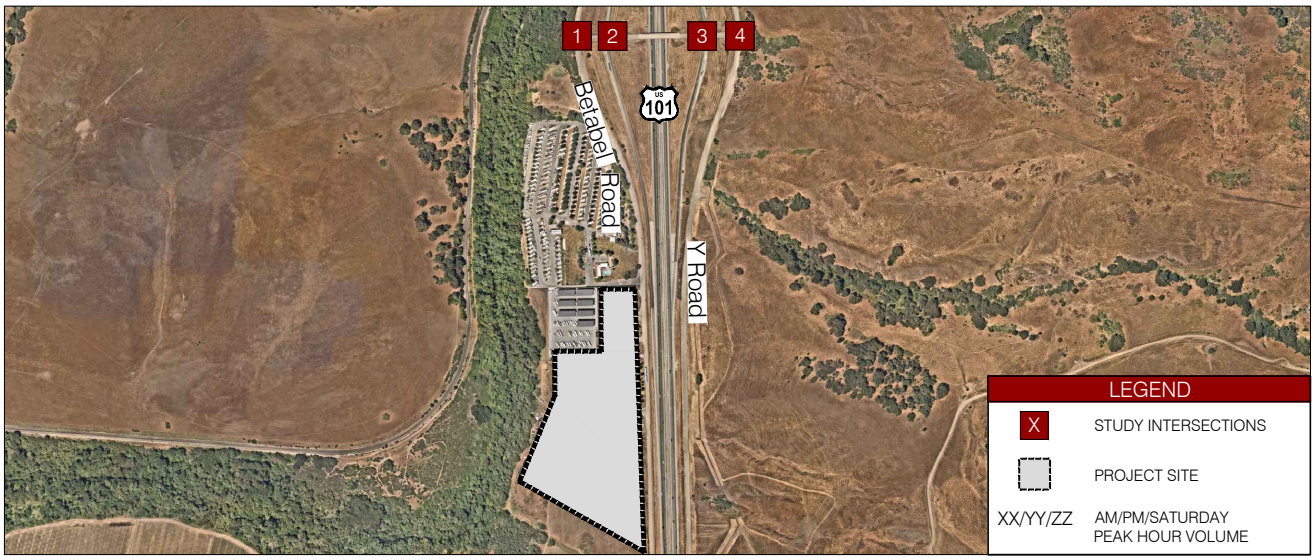
Intersection #1 - Betabel Road & Betabel Road Overpass, operates at acceptable overall LOS, during AM, PM and Weekend peak hours, however, the southbound approach operates at LOS E and LOS F with delay of 39.6 and 73.4 seconds during the PM and Weekend peak hours.

The delay is for the minor street approach (southbound), which serves low peak hour volumes (10 & 9 vehicles during the PM and Weekend peak hours). During PM and Weekend peak hours, gaps will be lower for the southbound left turning traffic, however, it is anticipated that the vehicles will be able to find gaps to access Betabel overcrossing.

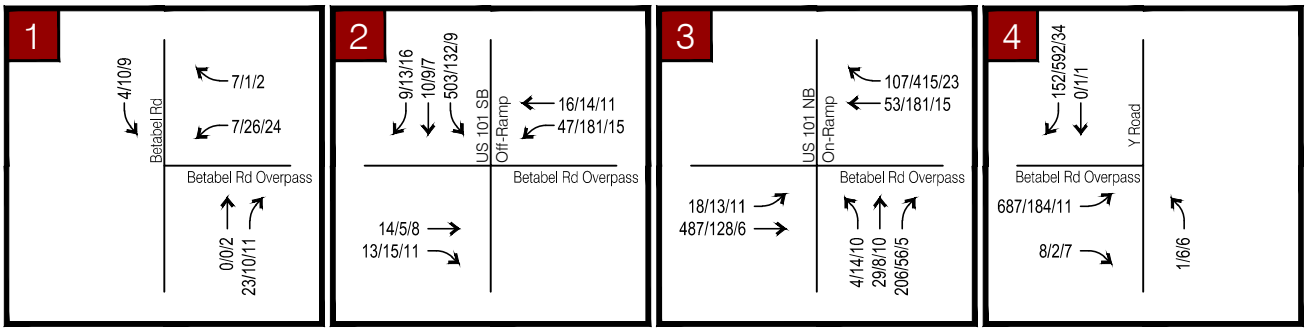
Intersection #4 - Shore Road/Y Road & Betabel Road Overpass, operates at acceptable overall LOS, during AM, PM and Weekend peak hours, however the northbound approach operates at LOS F with delay of 90.9 seconds during the AM peak hour and at LOS E with delay of 39.5 seconds during the PM peak hour.

The delay is for the minor street approach (northbound), which serves low peak hour volumes (1 & 6 vehicles during the AM and PM peak hours). During AM and PM peak hours, gaps will be lower for the southbound left turning traffic, however, it is anticipated that the vehicles will be able to find gaps to access Betabel overcrossing.

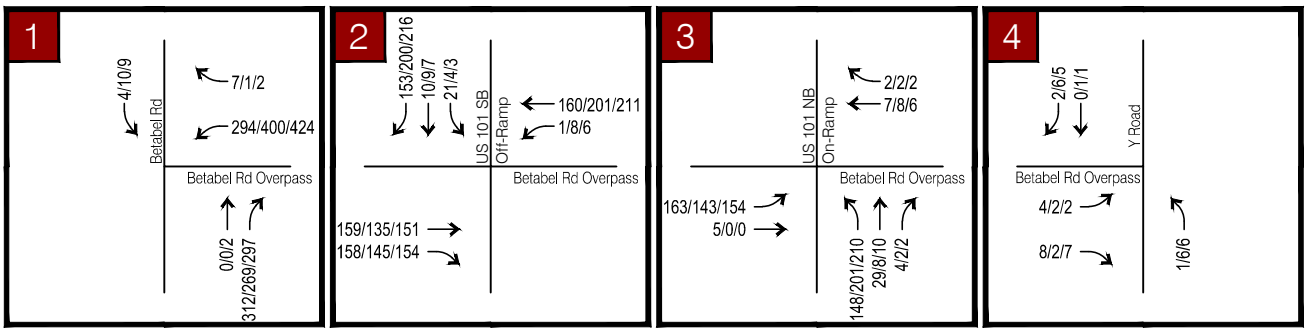
LOS analysis sheets for the Cumulative (2030) Plus Project Plus SVIP Conditions are provided in the **Appendix**.



Cumulative 2030 with SVIP Volumes



Cumulative 2030 Plus Project Volumes



Cumulative 2030 with SVIP Plus Project Volumes

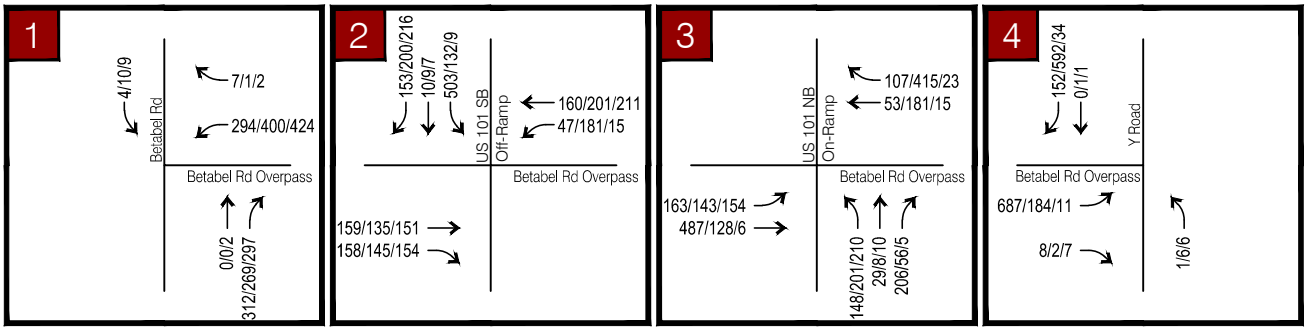


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FIGURE 9

CUMULATIVE 2030 PLUS PROJECT CONDITIONS
PEAK HOUR TURNING MOVEMENT COUNTS

Table 8 - Cumulative Plus Betabel Project Plus SVIP Project Intersection Level of Service Summary

#	Intersection	LOS Criteria	Maintaining Agency[4,5]	Control Type[3]	Cumulative (2030) Plus Betabel Project Plus SVIP Project Conditions								
					AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
					Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]
1	Betabel Rd & Betabel Rd Overpass	D	County	SSSC	-	9.0	A	-	9.0	A	-	10.2	B
	Worst Approach				SB	27.6	D	**SB**	**39.6**	**E**	**SB**	**73.4**	**F**
2	SB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	**-**	**116.1**	**F**	-	16.2	B	-	4.0	A
	Worst Approach				**SB**	**206.9**	**F**	**SB**	**43.0**	**E**	SB	12.6	B
3	NB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	**-**	**61.6**	**F**	-	20.9	C	-	15.9	C
	Worst Approach				**NB**	**188.4**	**F**	**NB**	**89.8**	**F**	NB	24.6	C
4	Shore Rd / Y Rd & Betabel Rd Overpass	D	County	SSSC	-	9.5	A	-	12.1	B	-	7.3	A
	Worst Approach				**NB**	**90.9**	**F**	**NB**	**39.5**	**E**	NB	9.2	A

Notes:

1. Analysis performed using HCM 6th Edition methodologies
2. Delay indicated in seconds/vehicle.
3. SSSC = Side-Street Stop Control.
4. County = San Benito County; Caltrans = California Department of Transportation.
5. County LOS standard is D; Caltrans has no LOS standard.
6. Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold**.

7. RECOMMENDED IMPROVEMENTS

This chapter documents the recommended improvements for the Cumulative (2030) Conditions at the impacted study intersections with the addition of Betabel Project and SVIP Project traffic.

The following improvements are recommended:

Intersection #2 – SB US 101 & Y Road/Betabel Rd Overpass: It is recommended to modify/widen the SB US-101 Off-Ramp lane geometry from one shared left-thru-right turn lane to one left / one thru / one right turn lane.

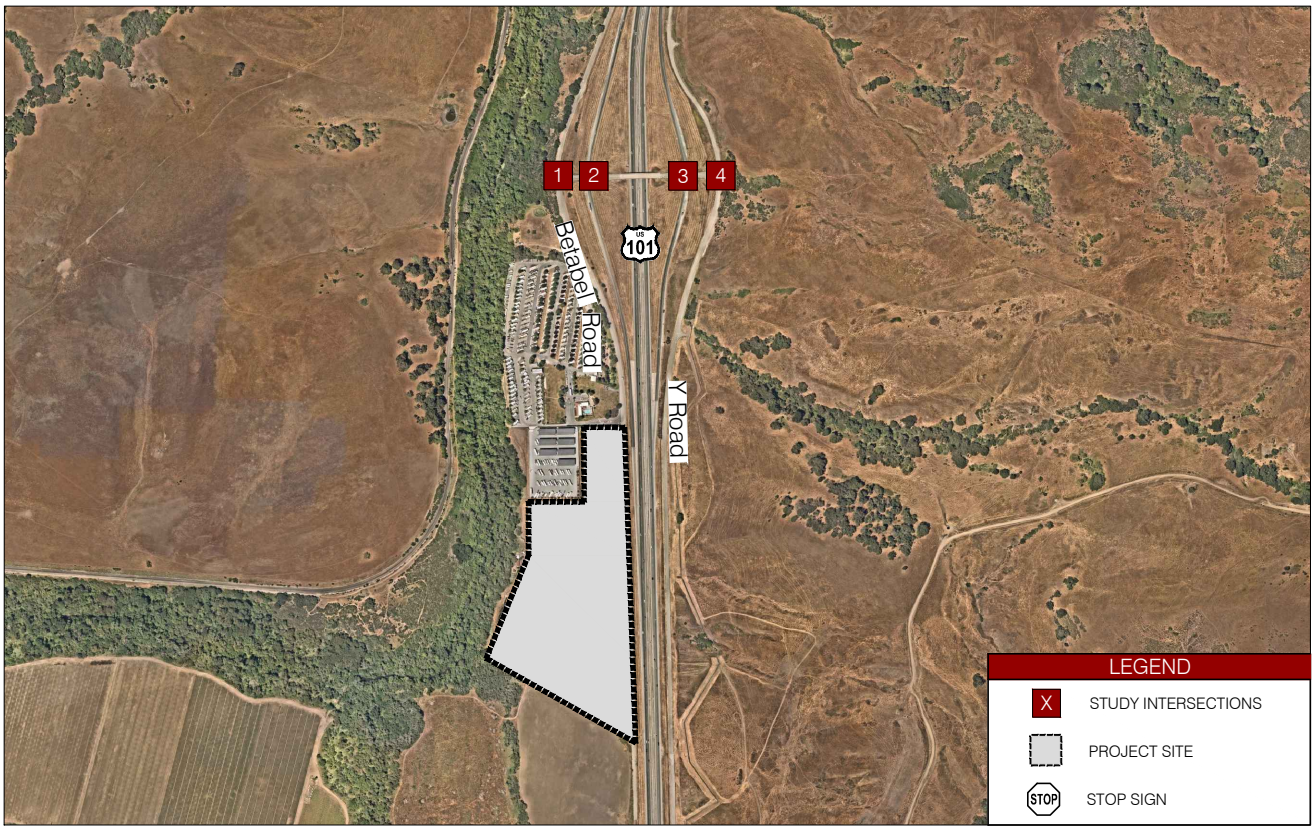
Intersection #3 – NB US 101 & Y Road/Betabel Rd Overpass: It is recommended to modify/widen the NB US-101 Off-Ramp lane geometry from one shared left-thru-right turn lane to one left & one thru-right turn lane.

No improvements are recommended for the minor approach delay at Intersection #1 – Betabel Road & Betabel Road Overpass and Intersection #4 – Shore Road/Y Road & Betabel Road Overpass. The minor street approaches serve low peak hour volume, and it is anticipated that the vehicles will be able to find gaps to access Betabel Overcrossing.

LOS results with the recommended improvements are shown in **Table 9**. As shown in **Table 9**, all study intersections operate at acceptable LOS during AM, PM and Weekend Peak Hours.

Note: The recommended improvements at Intersection #2 – SB US 101 & Y Road/Betabel Rd Overpass and Intersection #3 – NB US 101 & Y Road/Betabel Rd Overpass are at Caltrans controlled intersections and therefore any improvements at these intersections should be closely coordinated with Caltrans. Additionally, these recommended improvements are needed with the addition of both Betabel Project and SVIP Project traffic and are not needed with the addition of individual project traffic. Therefore, it is recommended that a fair share calculation for Betabel Project and SVIP Project, towards the cost of recommended improvements is estimated.

Intersection lane configuration and traffic controls with recommended improvement are illustrated in **Figure 10**.



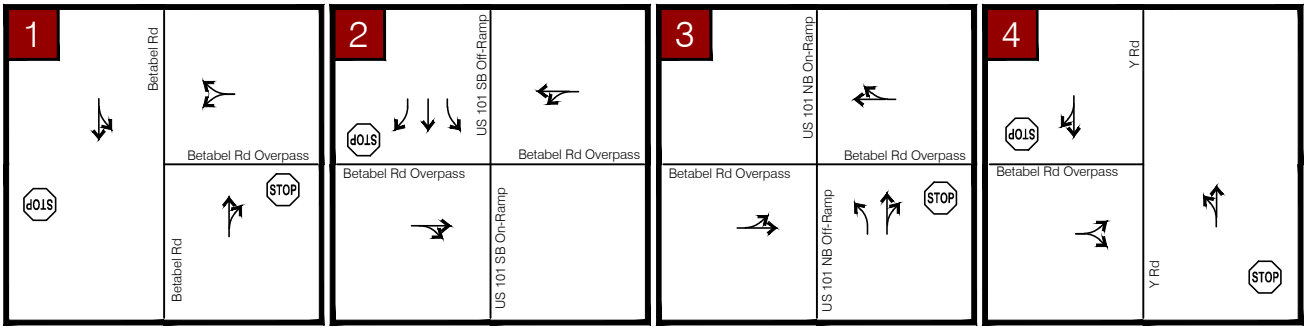


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FIGURE 10

CUMULATIVE CONDITIONS - RECOMMENDED IMPROVEMENTS LANE GEOMETRY AND TRAFFIC CONTROL

Table 9 - Cumulative Plus Betabel Project Plus SVIP Project + Improvements - Intersection Level of Service Summary

#	Intersection	LOS Criteria	Maintaining Agency[4,5]	Control Type[3]	Cumulative (2030) Plus Project Plus SVIP Conditions + Improvements								
					AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
					Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]	Approach	Delay[2]	LOS[1,6]
1	Betabel Rd & Betabel Rd Overpass	D	County	SSSC	-	9.0	A	-	9.0	A	-	10.2	A
	Worst Approach				SB	27.6	D	**SB**	**39.6**	**E**	**SB**	**73.4**	**F**
2	SB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	-	0.3	A	-	1.6	A	-	0.1	A
	Worst Approach				WB	1.8	A	WB	4.1	A	WB	0.5	A
3	NB US 101 & Y Rd/Betabel Rd Overpass	D	Caltrans	SSSC	-	12.8	B	-	14.3	B	-	14.7	B
	Worst Approach				**NB**	**36.4**	**E**	**NB**	**55.9**	**F**	EB	22.3	C
4	Shore Rd / Y Rd & Betabel Rd Overpass	D	County	SSSC	-	9.5	A	-	12.1	B	-	7.3	A
	Worst Approach				**NB**	**90.9**	**F**	**NB**	**39.5**	**E**	NB	9.2	A

Notes:

1. Analysis performed using HCM 6th Edition methodologies
2. Delay indicated in seconds/vehicle.
3. SSSC = Side-Street Stop Control.
4. County = San Benito County; Caltrans = California Department of Transportation.
5. County LOS standard is D; Caltrans has no LOS standard.
6. Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold**.

8. VEHICLE QUEUING

Primary access to the Project site will be from Betabel Road, which will be accessed via the Betabel Road & US 101 interchange. Vehicle safety assessment was conducted for external roadways leading to the Project site. For external roadways which includes Caltrans facilities, a significant impact is caused if the Project traffic would:

- Result in off-ramp queueing that is greater than the storage capacity

Queue lengths were determined for the off-ramps and compared against the available storage length along the off-ramps. Synchro software calculates the 95th percentile queues based on Synchro software. The 95th percentile queue is used to account for fluctuations in traffic and represents a condition where 95 percent of the time during the peak period, traffic volumes will be less than or equal to the queue determined by the analysis. It is used as a benchmark for determining deficiencies as a standard transportation engineering practice. A typical vehicle length of 25 feet was used in the queuing analysis.

Intersection #2 - US-101 SB Ramps/Betabel Rd. Overpass and Intersection #3 - US-101 NB Ramps/Betabel Rd. Overpass were analyzed. The 95th percentile off-ramp queues at ramp intersections at Betabel Interchange with and without Betabel Project/SVIP Project trips shown in **Table 10** below.

Table 10 - Peak Hour Freeway Ramp Termini Queuing

Intersection Name / Scenario	MVMT	Available Storage Length (ft)*	AM Peak Hour	PM Peak Hour	Weekend Peak Hour
			95th % Queue (ft)	95th % Queue (ft)	95th % Queue (ft)
Int. #2 - US-101 SB Ramps/Betabel Rd. Overpass					
Existing Conditions	SBR	1700	10	10	10
Near Term (2024) Plus Betabel Project	SBR	1700	15	30	35
Cumulative (2030) Plus SVIP Project	SBR	1700	150	35	10
Cumulative (2030) Plus Betabel Project	SBR	1700	25	30	35
Cumulative (2030) Plus Betabel Plus SVIP Project	SBR	1700	850	210	45
Cumulative (2030) Plus Betabel Plus SVIP Project + Improvements	SBR	1700	530	105	45
Int. #3 - US-101 NB Ramps/Betabel Rd. Overpass					
Existing Conditions	NBR	1630	-	-	-
Near Term (2024) Plus Betabel Project	NBR	1630	35	30	50
Cumulative (2030) Plus SVIP Project	NBR	1630	65	10	10
Cumulative (2030) Plus Betabel Project	NBR	1630	45	10	50
Cumulative (2030) Plus Betabel Plus SVIP Project	NBR	1630	500	250	110
Cumulative (2030) Plus Betabel Plus SVIP Project + Improvements	NBR	1630	205	195	100

As shown in **Table 10**, all the off-ramps are able to fully contain the queues without vehicles spilling back into the freeway during AM, PM and Weekend peak hours. Additionally, all the on-ramp queues are also within the available storage length and full deceleration occurs on the ramp before the back of the queue. Therefore, no vehicle related safety impacts are identified at the Caltrans facilities.

9. SITE ACCESS, CIRCULATION AND PARKING

SITE ACCESS AND CIRCULATION

As shown in **Figure 1** of the site plan, the proposed development will be accessible from six driveways along Betabel Road. It is assumed that the project access at all driveways will be unsignalized and will provide full access. The project driveways are located south of the Betabel RV Park access road on Betabel Road located approximately 1500 feet from the southbound ramps. The access road for the Betabel RV Park and the Project site are 400 feet apart with adequate storage for vehicles arriving at the RV Park.

The eastbound traffic at the RV Park access road and Betabel Road is controlled by a Stop sign. Therefore, vehicles making eastbound left-turn out of the RV Park access road does not have a conflict with vehicles traveling in and out of the Project site on Betabel Road. Also, it is anticipated that the traffic coming out of the RV Park would not be significant during the Project park hours of operation as the arrivals and departures at the RV Park does not have a specific peak time of day.

There are currently no Class I, II, III, or IV bike facilities located within ½ mile from the Project site and the Project does not provide any bicycle facilities within the Project site. There are no sidewalks on Betabel Road proposed with the Project. As the Project site is not located within any residential or office land use, negligible active mobility is anticipated to access the Project site. No bus stops are located within walking distance (¼ miles) of the Project site.

ON-SITE PARKING

Development will need to comply with the parking requirements specified in San Benito County Municipal Code (25.31.020). **Table 11** below summarizes these requirements. All parking is anticipated to be included with the development footprint and no provisions are anticipated for onstreet parking. Approximately 416 new parking spaces would serve the site, including electric vehicle (EV) recharging stations. The exact number of EV recharging stations will be determined based on the final building development submittals. The majority of parking spaces are concentrated between the motel and the outdoor event area; three access driveways are located in this area, with a roundabout to provide traffic calming.

Table 11 - Required On-Site Parking

Development	Land Use Type	Building Size	County Parking Requirements
Project Land Use Area 1			
Gas Station & Convenience Store	25.31.024 Retail and Commercial	5.664 ksf	One stall for each employee on largest shift, plus one stall for each company-owned vehicle, plus six stalls, plus adequate truck loading and parking area
Restaurant		2.5 ksf	
Amusement Buildings		3.125 ksf	

Development	Land Use Type	Building Size	County Parking Requirements
Project Land Use Area 2			
Open Space (for flea market, antique shows, small musical performances, food trucks, crafts fair)	25.31.021 Recreation	65.3 ksf	One stall for every four persons or maximum occupancy of the facility, plus one space for each regular employee (private club without overnight accommodations)
Visitor Center		0.35 ksf	
Outdoor Event Area		500 seats	
Motel	25.31.024 Retail and Commercial	60.3 ksf (116 rooms)	One stall for each guest room, plus four stalls, plus one stall for each shift employee

10. CUMULATIVE (2045) PLUS PROJECT WITH SVIP BUILDOUT CONDITIONS – QUALITATIVE ASSESSMENT

This section of the report provides a qualitative assessment of Cumulative (2045) Plus Betabel Project With Strada Verde Innovation Park Buildout Conditions. If the SVIP Project Buildout is not implemented by the year 2045, it is assumed that the traffic conditions in the year 2045 will be similar to the traffic conditions in the year 2030 with Betabel Project analyzed in this study, as minimal to negligible development within the vicinity of the Project Site is anticipated.

The following assessment is based on the qualitative analysis conducted for the SVIP Project Buildout Conditions:

1. The SVIP Buildout Project in 2045 will add approximately 1,800 and 1,610 AM and PM peak hour trips to the Betabel Interchange. The following improvements may be required as part of the SVIP Project Buildout, if extensive TDM measures are not implemented:

    a. The Betabel Interchange would require a widened or new bridge across the freeway and ramp improvements.

    b. The SVIP Project will be required to implement extensive TDM measures to reduce the peak hour trips to not justify widening of US-101.

2. The non-peak demand flow generated by the Betabel/SVIP Buildout Project is not anticipated to require freeway improvements along US-101 and SR-25 (SBCOG assumed widening to be implemented).

3. It is also not anticipated that SR-156 (assumed to be widened per the current Caltrans project) would require further improvements with Betabel/SVIP Buildout Project.

4. The induced VMT due to freeway improvements will be mitigated per CEQA requirements, which may include additional implementation of multi-modal projects and/or payments into a future regional VMT Banking Fee program.

11. CEQA TRANSPORTATION ANALYSIS

Senate Bill 743 (SB 743) was approved by California legislature in September 2013. SB 743 requires changes to California Environmental Quality Act (CEQA), specifically directing the Governor's Office of Planning and Research (OPR) to develop alternative metrics to the use of vehicular "Level of Service" (LOS) for evaluating transportation projects.

SB 743 is part of a long-standing policy effort by the California legislature to improve California's sustainability and reduce greenhouse gas emissions through denser infill development, a reduction in single occupancy vehicles, improved mass transit, and other actions. Recognizing that the current environmental analysis techniques are, at times, encouraging development that is inconsistent with this vision, the legislature has taken the extraordinary step to change the basis of environmental analysis for transportation impacts from Level of Service (LOS) to Vehicle Miles Travelled (VMT). VMT is understood to be a good proxy for evaluating air quality and other transportation related impacts that the State is actively trying to address. While the use of VMT to determine significant transportation impacts has only been considered recently, it is by no means a new performance metric and has long been used as a basis for transportation system evaluations and as an important metric for evaluating the performance of travel demand models.

This chapter documents SB 743 compliant analysis completed for the Betabel Commercial Project within San Benito County, California. As San Benito County has recently established its own specific analysis guidelines and/or thresholds the analysis completed within this chapter is based on the draft San Benito County SB 743 Implementation Policy as well as most recent CEQA guidance as prepared by the Governor's Office of Planning and Research (OPR guidelines3).

VMT THRESHOLDS

Thresholds of significance, as currently adopted by San Benito County, are summarized in **Table 12**. Since the proposed project falls under the category of retail and other costumer-based land use type, the threshold of significance is based on the net increase in total VMT.

Table 12 – VMT Analysis Inputs

Land Use	VMT Threshold	Basis
Residential	19.6 VMT/capita	15% below existing county-wide average VMT per capita.
Employment-Based	10.4 Work VMT/Employee	15% below existing county-wide average Work VMT per employee
Retail	Net regional change	Using the county geographical area as the basis
Other Customer	Net regional change	Using the county or another geography deemed appropriate by San Benito County as the basis

[3] Technical Advisory on Evaluating Transportation Impacts in CEQA, Governor's Office of Planning and Research, State of California, December 2018

Methodology and Assumption Overview

While travel demand models are broadly considered to be amongst the most accurate of available tools to assess VMT, their use is not always an ideal fit depending on the unique characteristics, data available, and planned land uses of a Project being evaluated. For this project it was determined that along with **quantitative VMT analysis** incorporating the use of the new San Benito County Travel Demand Model (SBCM), a **qualitative VMT analysis** is appropriate for evaluating some of the land uses included within the Project description.

San Benito County recently developed a new travel demand model which includes data from the Association of Monterey Bay Area Government (AMBAG) travel demand model, current San Benito projections for base (2019) and future (2045) year input data, as well as being expanded to include Santa Clara County. The VMT analysis performed, and summarized herein, relied both on the base year model as well as the future year model. To represent the Project, adjustments to employment data were made to the traffic analysis zone (TAZ) covering the Project. Since the primary source of VMT for the Project is retail, employment input for the project TAZ was adjusted for retail employment in such as way that total vehicle trips generated from the TAZ were equivalent to the trip generation estimates derived for the traffic analysis. **Table 13** shows the trip generation estimates for the Project. The table also includes the analysis categories that were considered as the basis for the assessment of VMT impacts.

Table 13 – VMT Analysis Inputs

Land Use Area	Daily Weekday Trips	Analysis Category
Project Land Use Parcel 1		
Convenience Store/Gas Station	4,014	Retail
Fast-Food Restaurant with Drive-Through	1,169	Retail
Amusement Buildings	170	Customer Based
Project Land Use Parcel 2		
Motel	419	Customer Based
Outdoor Event Area	256	Customer Based
Animal/Livestock Corral	28	Customer Based
Total After Internal Capture	**5,753**	

Note: Daily Trips are based on ITE Trip Generation Manual 11th Edition and were matched in SBC Model.

The analysis categories shown in **Table 13** were established based on the primary source of a given land uses' VMT. Since all the proposed land uses have the primary source of VMT as customers they are identified as either "Retail" or "Customer Based". These categories are assessed based on the net regional change in VMT with the project. Given that the SBCM does not distinguish retail trip length based on specific land use type, it is appropriate for the purposes of analysis to aggregate all uses together. Furthermore, it is recognized that any identified impacts would rely on similar mitigation strategies further underscoring the appropriateness of aggregating these land uses. These land uses collectively were quantitively analyzed using the SBCM in a process that is described in the next section, VMT Quantitative Analysis.

The VMT analysis includes the following scenarios:

- Existing Conditions – Analysis representative of conditions as they currently exist.
- Existing with Project Conditions – Analysis representative of conditions as they currently exist with the addition of the Project.
- 2045 No Project Conditions – 2045 conditions without the Project. Specifically, this scenario considers the land use distribution and allocation provided within the 2045 SBCM.
- 2045 With Project Conditions – 2045 conditions with the addition of the Project. Specifically, this scenario considers the effect on the land use distribution and allocation provided within the 2045 SBCM travel demand model. For this scenario, TAZ that include the geographic boundaries of the Project was updated to reflect the Project's land uses.

VMT Quantitative Analysis

VMT significance thresholds are based on land use type, broadly categorized as efficiency metrics and net change. Efficiency metrics include VMT/capita (Residential) and Work VMT/employee (Employee-Based VMT) whereas net change include regional change in total VMT. Since the proposed Project includes retail and customer-based land uses as primary source of VMT, the Project's VMT impact were evaluated based on the Countywide net change in total VMT. To determine the net change in total VMT for the San Benito County with the proposed project, the VMT calculation were made using the SBCM. Calculations were made using the daily vehicle trip matrices, and then multiplying them by the distance skim matrix to determine VMT. The distance skim matrix calculates the shortest distance between each TAZ origin-destination. For those trips that either originate from, or are destined to, areas outside the County (internal-external or external-internal trips), the length of the trip outside of the County is estimated based on data located within the SBCM. Trips that both originate and terminate outside of the County (external-external trips) are not included in the VMT calculation. Countywide VMT for the No Project and With Project scenarios was calculated to determine the Net Change in VMT. The VMT analysis results were compared to the threshold established for the San Benito County specific "Net Change" category. **Table 14** shows the VMT results for the analysis scenarios.

Table 14 – Countywide Net Change VMT Results

Jurisdiction	Existing Countywide VMT	Existing With Project Countywide VMT	2045 No Project Countywide VMT	2045 With Project Countywide VMT	Significant Impact
San Benito County	1,696,438	1,660,039	2,158,115	2,097,949	-
San Benito County Threshold	**Countywide Net Change in VMT < 0**				-
Net Change With Betabel	-	-36,399 (-2.1%)	-	-60,166 (-2.8%)	No

Note: VMT results reflect the current draft San Benito County CEQA Guidelines

As shown in **Table 14**, the proposed project will result in a reduction of total VMT in San Benito County under both the Existing and Future conditions. This result is not unexpected as it shows that the Project draws retail and other customer-based trips from nearby neighborhoods within the San Benito County, that otherwise would be provided by similar markets in other Cities, which in many instances may be further

away. While some part of the reduction may be attributable to model fluctuations, the change is still significant enough that the Project would reduce countywide VMT when considered in totality.

To further evaluate the regional impact of the Project, some of the land uses (Outdoor Event Area and Motel) were analyzed qualitatively as well as based on other GIS based techniques given that their primary source of VMT is not typical retail customers and have unique travel characteristics which are not well represented in the SBCM travel demand model. The basis of their analysis methodology is consistent with the most recent OPR guidelines. The analysis of "Outdoor Event Area" and "Motel" are discussed in the VMT Qualitative Analysis section below.

VMT Qualitative Analysis

The "Outdoor Event Area" and "Motel" land uses of the Project were analyzed qualitatively since these land uses have unique travel characteristics which are not well represented in the SBCM travel demand model. The OPR guidelines recommend that the threshold for significance for these land uses be "Net Change" in VMT. While the focus of the OPR guidelines is retail land uses, it does expand the definition to cover all customer-focused land uses such that are locally-serving in several key passages.

From an analysis standpoint, the threshold for these land uses is reliant on the question as to whether the addition of these uses and their proximity to other land uses will reduce overall VMT. Given that the primary source of VMT is not employee commute VMT, but rather the customer's VMT, these land uses are considered from the standpoint of their proximity to potential customers.

In lieu of using a TDM, other data sources and assumptions were used as the basis for estimating the VMT for the Outdoor Event Area and Motel. The following sections discuss the VMT analysis techniques for each of the two land uses.

Outdoor Event Area

The outdoor events area providing entertainment and outdoor events such educational presentations, cultural events, music, and live performances, was separately evaluated quantitatively based on net change in VMT which was principally determined using two distinct data sources, locations of existing similar markets and travel behavior at these markets based on a Big Data source licensed to Kimley-Horn. Three existing similar markets with outdoor activities in the project vicinity were identified and it is assumed that the existing customers visiting these markets are expected to be the potential customers at the new outdoor event area. The basis of the net change in VMT is the additional VMT from these potential customers to the new outdoor event area.

As part of traffic analysis efforts and project descriptions, it was determined that the proposed Outdoor Event Area would generate approximately 256 daily vehicle trips on a typical weekday as well as weekend.

Big Data, identifying origins and destinations, for select trip purposes (retail, food, recreational) for three similar markets was obtained from Replica. Big Data utilized for this project included origins and destination at the Census Blockgroup level for Saturdays in September-November 2019. Note that this dataset is representative of conditions prior to the onset of the effects of COVID-19 including any resulting governmental restrictions and as such represents more normal travel behavior than is what currently being identified using Big Data sources. This database was utilized for the probable origins of customers based on trip purpose and proximity to the Project site. To determine the distance each customer would travel to the proposed outdoor event area, the Geographical Information System ("GIS") functions in the TransCAD software modeling package were used. TransCAD is the most widely-used travel demand modeling/routing

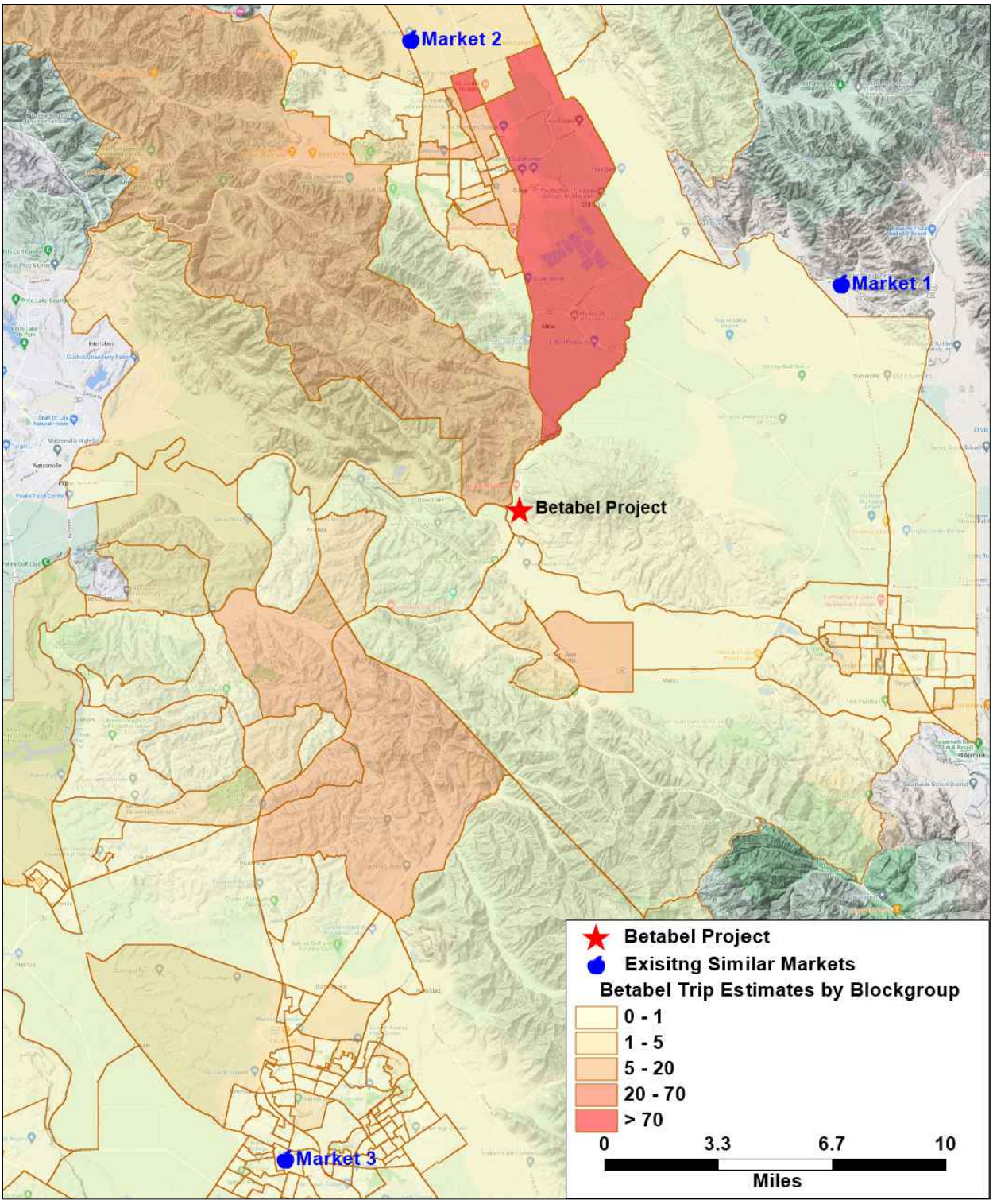
software package by Metropolitan Planning Organizations ("MPOs") in the United States. Trips were assigned to the Project site based on the proximity to the new site and magnitude of trips to the existing similar markets. Assigning these trips from each of the blockgroup to the Project site, VMT was calculated for the proposed Outdoor Event Area. **Figure 11** shows potential customers at Blockgroup level that are assumed to visit the proposed Project site.

Table 15 summarizes the total daily VMT for the Outdoor Event Area. Note that trips were aggregated to zip code level from blockgroup to simplify the VMT results. As shown in the table, the Outdoor Event Area is assumed to have a net increase in total regional VMT. It should be noted that this assumption could be overestimating the net change in VMT as the analysis assumed full occupancy for the outdoor events and peak conditions. If no special event occurs and lower trips are generated to the outdoor event area during the off-peak seasons, the VMT change would still be a net increase and continue to cause a significant and unavoidable transportation impact.

Table 15 – Daily Trips and VMT Estimates for Outdoor Event Area

Zip Code	Average Distance to Betabel	Potential Betabel Trips	Project VMT
95045	8.3	6	48
95004	9.5	7	71
95020	9.7	119	1,040
95076	15.5	11	164
95023	15.8	18	272
95046	15.9	1	9
93907	17.2	29	376
95037	18.5	36	653
95012	18.7	2	35
93906	19.2	12	229
95039	19.3	3	49
93901	22.6	1	13
93905	22.7	4	98
93908	23.2	1	13
93933	26.2	0	0
95138	28.3	4	107
93955	29.0	0	0
95119	29.8	3	94
Total		**256**	**+ 3,271**

Notes: Project trips are estimated based origins closer to Betabel as well as existing similar Markets trips.
Trips and VMT results are aggregated from Census Blockgroups to Zip Code levels.



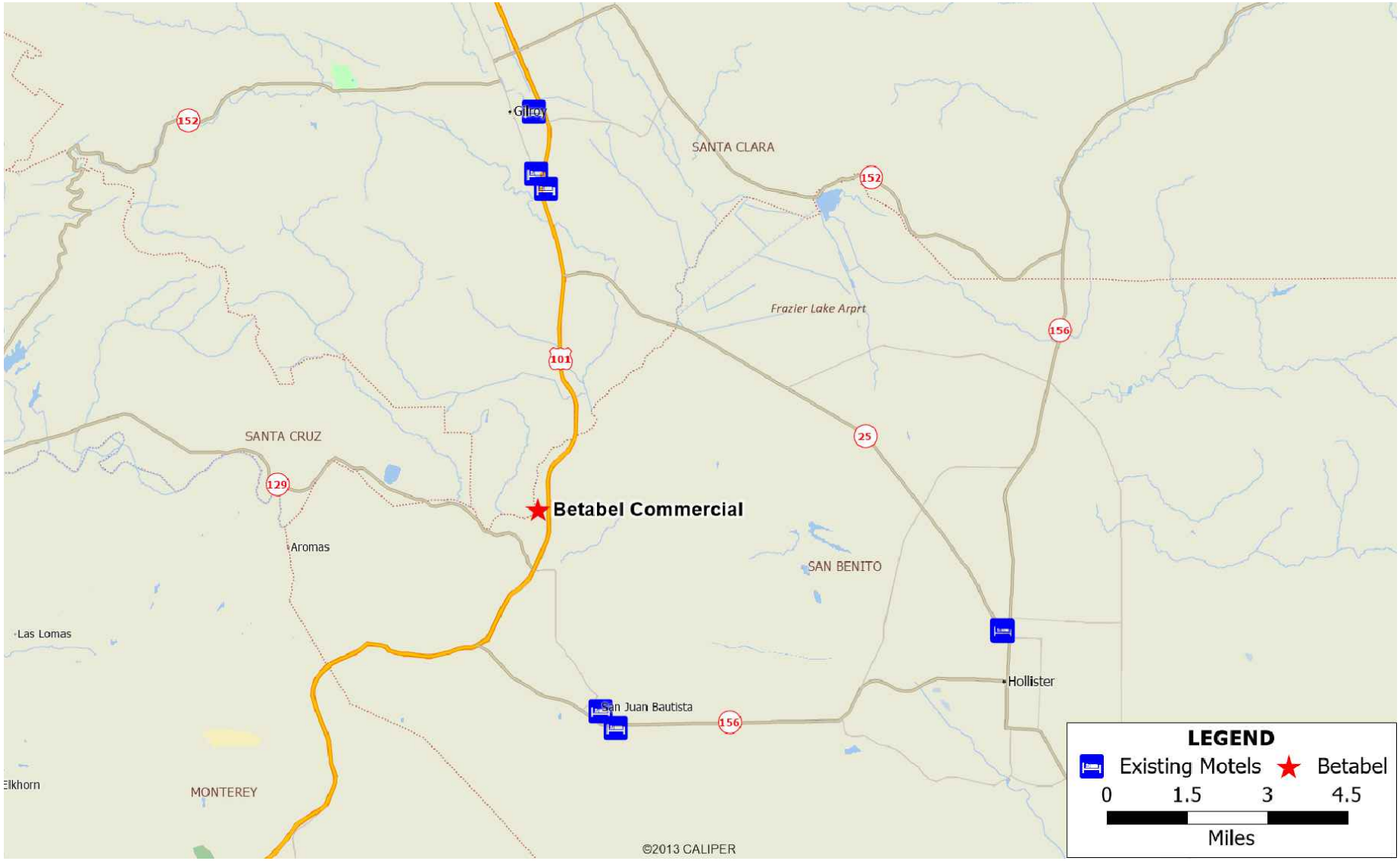
N

NOT TO SCALE

FIGURE 11
BETABEL WEEKEND TRIP ESTIMATES FOR FARMER MARKET

Motel

Motel uses are like local retail uses in that they primarily serve pre-existing needs (i.e., they do not generate new trips so much as meet demand) especially when they are located near a freeway exit/entry. Because of this, most often they can be presumed to reduce trip lengths when a new facility is introduced. This is particularly true when they are in a location where there is the need for overnight travel or a passby trip to attend an event as is anticipated to be the case for the Project. Most often this means that the impact to the transportation system would be negligible or reduced by the introduction of a new motel to an area where people are already traveling unless the motel significantly affects the local supply, becomes a destination unto itself, or introduces significant new attractions. However, none of these exceptions are anticipated to occur with the introduction of the Project's model. **Figure 12** displays existing available motels near the Project. As shown in the figure, none of the existing motels are immediately within the Project's vicinity. Therefore, without the Project's motel, visitors to the Project would be traveling further, increasing the region's VMT due to having to stay at one of the existing motels further away from the Project. Thus, the introduction of the Project's motel results in a finding of a less than significant impact for VMT analysis purposes.



N

NOT TO SCALE

FIGURE 12

EXISTING MOTELS WITHIN PROJECT VICINITY

VMT ANALYSIS FINDINGS AND CONCLUSION

Based on the quantitative and qualitative VMT analyses conducted for the Project and summarized above, the findings of the analysis are summarized in **Table 16** below.

Table 16 – CEQA Transportation Analysis Results by Land Use Category

Land Use Category	Existing With Project	2045 With Project
Convenience Store/Gas Station	Less than Significant Impact	Less than Significant Impact
Fast-Food Restaurant with Drive-Through	Less than Significant Impact	Less than Significant Impact
Amusement Buildings	Less than Significant Impact	Less than Significant Impact
Motel	Less than Significant Impact	Less than Significant Impact
Outdoor Event Area	Less than Significant Impact	**Significant Impact**
Animal/Livestock Corral	Less than Significant Impact	Less than Significant Impact

As shown in the table, the Outdoor Event Area is assumed to have a significant impact with net increase in regional VMT. It should be noted that this assumption could be overestimating the net change in VMT as the analysis assumed full occupancy for the outdoor events and peak conditions. If no special event occurs and lower trips are generated to the outdoor event area during the off-peak seasons, the VMT change would still be a net increase and continue to cause a significant and unavoidable transportation impact. There are no feasible mitigation measures for this remote site. The implementation of potential shuttle service will be cost prohibitive and will most likely be terminated after the first year.

APPENDIX

A – TURNING MOVEMENT COUNTS

B – EXISTING TRAFFIC CONDITIONS

C – NEAR TERM (2024) PLUS PROJECT TRAFFIC CONDITIONS

D – CUMULATIVE (2030) TRAFFIC CONDITIONS

E – CUMULATIVE (2030) PLUS SVIP PROJECT TRAFFIC CONDITIONS

F – CUMULATIVE (2030) PLUS BETABEL PROJECT TRAFFIC CONDITIONS

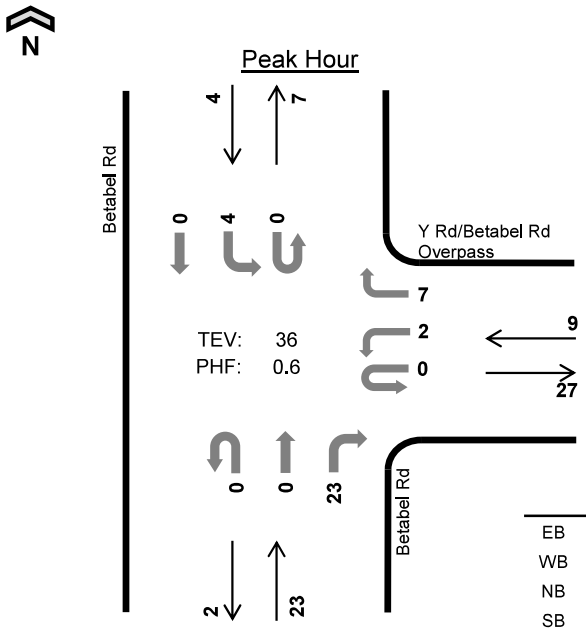
G – CUMULATIVE (2030) PLUS BETALBEL PLUS SVIP PROJECT TRAFFIC CONDITIONS

H – CUMULATIVE (2030) PLUS BETALBEL PLUS SVIP PROJECT TRAFFIC CONDITIONS + RECOMMENDED IMPROVEMENTS

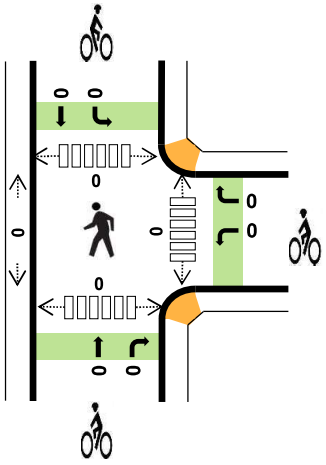
A – Turning Movement Counts

Betabel Rd
Y Rd/Betabel Rd Overpass

Date: 08-20-2019
Count Period: 6:00 AM to 8:00 AM
Peak Hour: 6:00 AM to 7:00 AM



	HV %:	PHF
EB	-	-
WB	11.1%	0.45
NB	4.3%	0.64
SB	0.0%	0.50
TOTAL	5.6%	0.60



Two-Hour Count Summaries

Interval Start	n/a				Y Rd/Betabel Rd Overpass				Betabel Rd				Betabel Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**2**	**0**	**0**	**8**	0
6:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**9**	**0**	**1**	**0**	**0**	**15**	0
6:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**1**	**0**	**0**	**7**	0
6:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**6**	**36**
7:00 AM	0	0	0	0	0	2	0	1	0	0	0	5	0	0	0	0	8	36
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	10	0	0	0	0	11	32
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	31
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	7	0	0	0	0	8	33
Count Total	0	0	0	0	0	5	0	9	0	0	0	51	0	4	0	0	69	0
Peak Hour **All**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**7**	**0**	**0**	**0**	**23**	**0**	**4**	**0**	**0**	**36**	**0**
Peak Hour **HV**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**
Peak Hour **HV%**	**-**	**-**	**-**	**-**	**-**	**50%**	**-**	**0%**	**-**	**-**	**-**	**4%**	**-**	**0%**	**-**	**-**	**6%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
6:15 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
6:30 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
6:45 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	2	1	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**0**	**1**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	n/a				Y Rd/Betabel Rd Overpass				Betabel Rd				Betabel Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
6:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	0
6:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
7:30 AM	0	0	0	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	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**

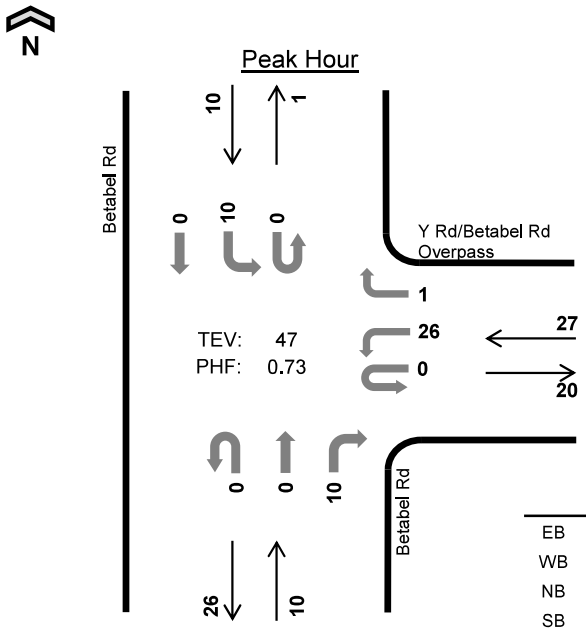
Two-Hour Count Summaries - Bikes

Interval Start	n/a			Y Rd/Betabel Rd Overpass			Betabel Rd			Betabel Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

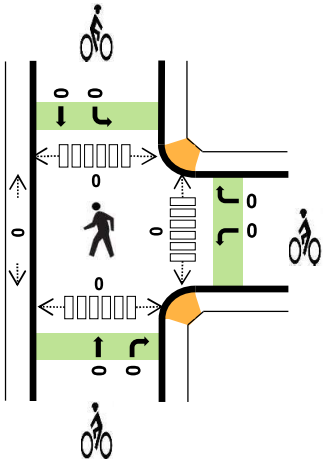
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Betabel Rd
Y Rd/Betabel Rd Overpass

Date: 08-20-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	-	-
WB	0.0%	0.56
NB	0.0%	0.63
SB	10.0%	0.50
TOTAL	2.1%	0.73



Two-Hour Count Summaries

Interval Start	n/a				Y Rd/Betabel Rd Overpass				Betabel Rd				Betabel Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	4	0
4:15 PM	0	0	0	0	0	9	0	0	0	0	0	3	0	0	0	0	12	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**11**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	**0**	**0**	**10**	37
5:00 PM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**0**	**0**	**10**	43
5:15 PM	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**16**	**47**
5:30 PM	0	0	0	0	0	4	0	0	0	0	0	1	0	0	0	0	5	41
5:45 PM	0	0	0	0	0	11	0	0	0	0	0	3	0	0	0	0	14	45
Count Total	0	0	0	0	0	53	0	1	0	0	0	18	0	10	0	0	82	0
Peak Hour **All**	**0**	**0**	**0**	**0**	**0**	**26**	**0**	**1**	**0**	**0**	**0**	**10**	**0**	**10**	**0**	**0**	**47**	**0**
Peak Hour **HV**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**
Peak Hour **HV%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**-**	**0%**	**-**	**10%**	**-**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**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*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	n/a				Y Rd/Betabel Rd Overpass				Betabel Rd				Betabel Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**

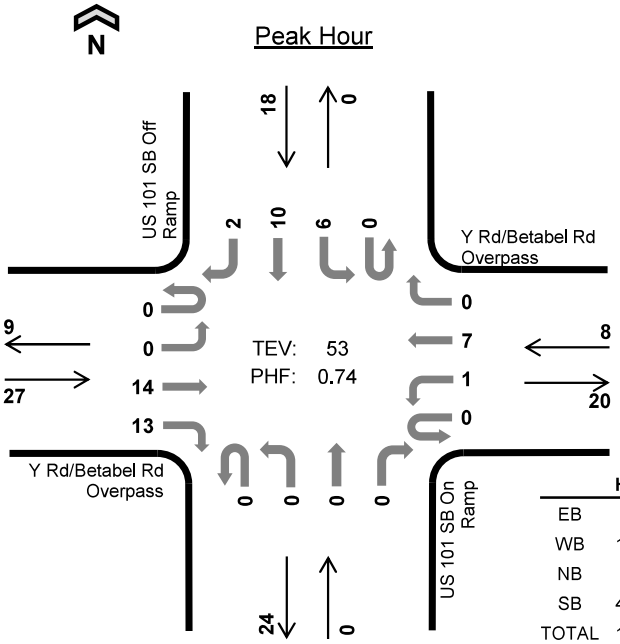
Two-Hour Count Summaries - Bikes

Interval Start	n/a			Y Rd/Betabel Rd Overpass			Betabel Rd			Betabel Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**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
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	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
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

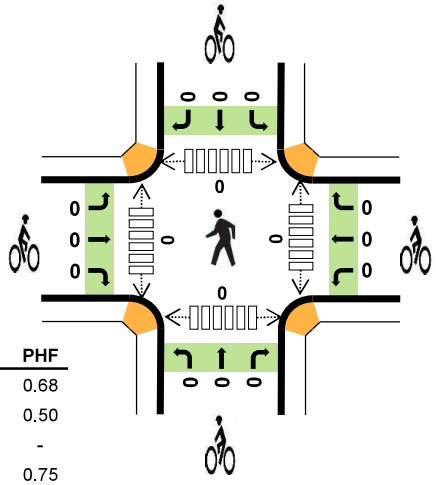
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US 101 SB Ramps
Y Rd/Betabel Rd Overpass

Date: 08-20-2019
Count Period: 6:00 AM to 8:00 AM
Peak Hour: 6:00 AM to 7:00 AM



	HV %:	PHF
EB	3.7%	0.68
WB	12.5%	0.50
NB	-	-
SB	44.4%	0.75
TOTAL	18.9%	0.74



Two-Hour Count Summaries

Interval Start	Y Rd/Betabel Rd Overpass Eastbound				Y Rd/Betabel Rd Overpass Westbound				US 101 SB On Ramp Northbound				US 101 SB Off Ramp Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	**0**	**0**	**3**	**2**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**14**	0
6:15 AM	**0**	**0**	**5**	**5**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**2**	**18**	0
6:30 AM	**0**	**0**	**3**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**9**	0
6:45 AM	**0**	**0**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**	**12**	**53**
7:00 AM	0	0	2	3	0	1	1	0	0	0	0	0	0	0	1	2	10	49
7:15 AM	0	0	6	4	0	0	1	0	0	0	0	0	0	0	2	0	13	44
7:30 AM	0	0	2	4	0	2	0	0	0	0	0	0	0	3	1	0	12	47
7:45 AM	0	0	3	4	0	1	1	0	0	0	0	0	0	2	1	0	12	47
Count Total	0	0	27	28	0	5	10	0	0	0	0	0	0	11	15	4	100	0
Peak Hour All	**0**	**0**	**14**	**13**	**0**	**1**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**10**	**2**	**53**	**0**
Peak Hour HV	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**10**	**0**
Peak Hour HV%	**-**	**-**	**0%**	**8%**	**-**	**0%**	**14%**	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**80%**	**0%**	**19%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	**0**	**1**	**0**	**2**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
6:15 AM	**1**	**0**	**0**	**2**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
6:30 AM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
6:45 AM	**0**	**0**	**0**	**3**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:00 AM	0	1	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	1	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	3	0	12	*16*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**1**	**1**	**0**	**8**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Y Rd/Betabel Rd Overpass Eastbound				Y Rd/Betabel Rd Overpass Westbound				US 101 SB On Ramp Northbound				US 101 SB Off Ramp Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	0
6:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	0
6:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
6:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**10**
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	9
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2	8
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	8
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	6
Count Total	0	0	0	1	0	1	2	0	0	0	0	0	0	0	12	0	16	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**10**	**0**

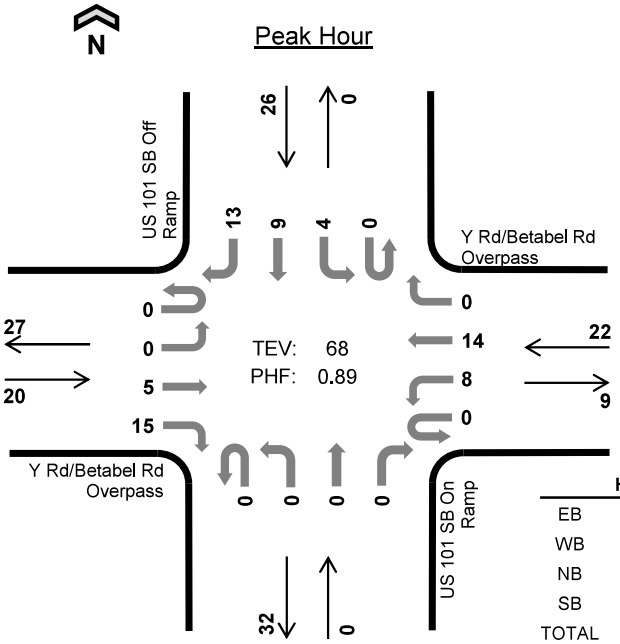
Two-Hour Count Summaries - Bikes

Interval Start	Y Rd/Betabel Rd Overpass Eastbound			Y Rd/Betabel Rd Overpass Westbound			US 101 SB On Ramp Northbound			US 101 SB Off Ramp Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

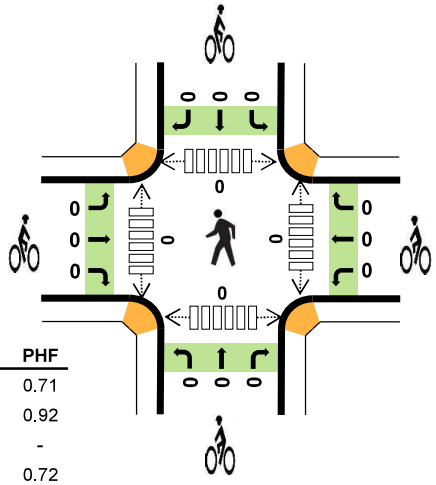
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US 101 SB Ramps
Y Rd/Betabel Rd Overpass

Date: 08-20-2019
Count Period: 4:30 PM to 6:30 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	5.0%	0.71
WB	4.5%	0.92
NB	-	-
SB	7.7%	0.72
TOTAL	5.9%	0.89



Two-Hour Count Summaries

Interval Start	Y Rd/Betabel Rd Overpass Eastbound				Y Rd/Betabel Rd Overpass Westbound				US 101 SB On Ramp Northbound				US 101 SB Off Ramp Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM	**0**	**0**	**1**	**2**	**0**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**14**	0
4:45 PM	**0**	**0**	**3**	**4**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**2**	**18**	0
5:00 PM	**0**	**0**	**0**	**6**	**0**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**2**	**17**	0
5:15 PM	**0**	**0**	**1**	**3**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**6**	**19**	**68**
5:30 PM	0	0	1	0	0	1	1	0	0	0	0	0	0	2	2	3	10	64
5:45 PM	0	0	2	1	0	3	3	0	0	0	0	0	0	0	2	8	19	65
6:00 PM	0	0	1	3	0	1	3	0	0	0	0	0	0	0	2	9	19	67
6:15 PM	0	0	0	1	0	0	2	0	0	0	0	0	0	1	4	3	11	59
Count Total	0	0	9	20	0	13	23	0	0	0	0	0	0	7	19	36	127	0
Peak Hour All	**0**	**0**	**5**	**15**	**0**	**8**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**9**	**13**	**68**	**0**
Peak Hour HV	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**4**	**0**
Peak Hour HV%	**-**	**-**	**0%**	**7%**	**-**	**13%**	**0%**	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**22%**	**0%**	**6%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:30 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**1**	**1**	**0**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	2	0	3	*6*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**1**	**1**	**0**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Y Rd/Betabel Rd Overpass Eastbound				Y Rd/Betabel Rd Overpass Westbound				US 101 SB On Ramp Northbound				US 101 SB Off Ramp Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	1	0	2	0	0	0	0	0	0	0	0	3	0	6	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**4**	**0**

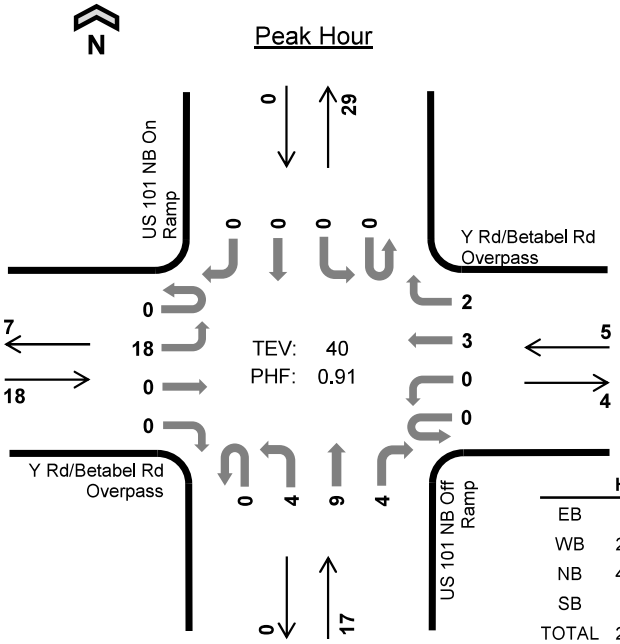
Two-Hour Count Summaries - Bikes

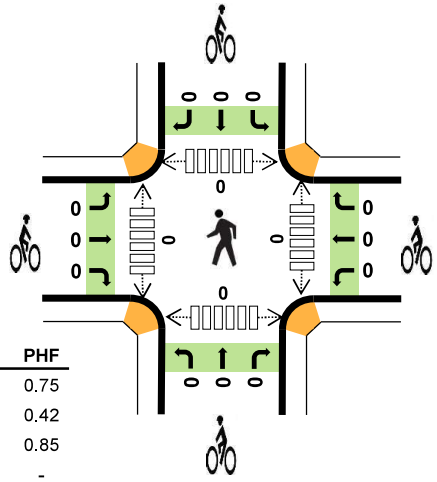
Interval Start	Y Rd/Betabel Rd Overpass Eastbound			Y Rd/Betabel Rd Overpass Westbound			US 101 SB On Ramp Northbound			US 101 SB Off Ramp Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	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
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US 101 NB Ramps
Y Rd/Betabel Rd Overpass

Date: 08-20-2019
Count Period: 6:00 AM to 8:00 AM
Peak Hour: 7:00 AM to 8:00 AM





	HV %:	PHF
EB	0.0%	0.75
WB	20.0%	0.42
NB	41.2%	0.85
SB	-	-
TOTAL	20.0%	0.91

Two-Hour Count Summaries

Interval Start	Y Rd/Betabel Rd Overpass Eastbound				Y Rd/Betabel Rd Overpass Westbound				US 101 NB Off Ramp Northbound				US 101 NB On Ramp Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	4	2	0	0	0	2	0	0	2	0	1	0	0	0	0	11	0
6:15 AM	0	6	0	0	0	0	0	0	0	3	0	1	0	0	0	0	10	0
6:30 AM	0	3	1	0	0	0	0	0	0	1	0	2	0	0	0	0	7	0
6:45 AM	0	3	1	0	0	0	0	1	0	0	1	4	0	0	0	0	10	38
7:00 AM	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**8**	35
7:15 AM	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**1**	**0**	**0**	**0**	**0**	**11**	36
7:30 AM	**0**	**5**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**2**	**1**	**0**	**0**	**0**	**0**	**10**	39
7:45 AM	**0**	**5**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**3**	**1**	**0**	**0**	**0**	**0**	**11**	**40**
Count Total	0	34	4	0	0	0	5	3	0	10	10	12	0	0	0	0	78	0
Peak Hour All	**0**	**18**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**4**	**9**	**4**	**0**	**0**	**0**	**0**	**40**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**6**	**0**	**0**	**0**	**0**	**0**	**8**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**-**	**-**	**-**	**33%**	**0%**	**-**	**25%**	**67%**	**0%**	**-**	**-**	**-**	**-**	**20%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 AM	**0**	**1**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**0**	**0**	**4**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	0	2	8	0	*10*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**1**	**7**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Y Rd/Betabel Rd Overpass				Y Rd/Betabel Rd Overpass				US 101 NB Off Ramp				US 101 NB On Ramp				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	3
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**4**	7
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**8**
Count Total	0	0	0	0	0	0	2	0	0	1	6	1	0	0	0	0	10	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**6**	**0**	**0**	**0**	**0**	**0**	**8**	**0**

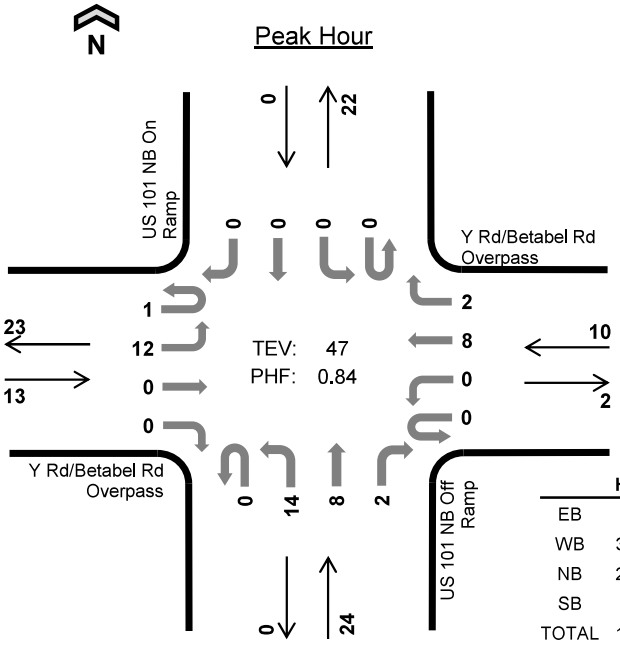
Two-Hour Count Summaries - Bikes

Interval Start	Y Rd/Betabel Rd Overpass			Y Rd/Betabel Rd Overpass			US 101 NB Off Ramp			US 101 NB On Ramp			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

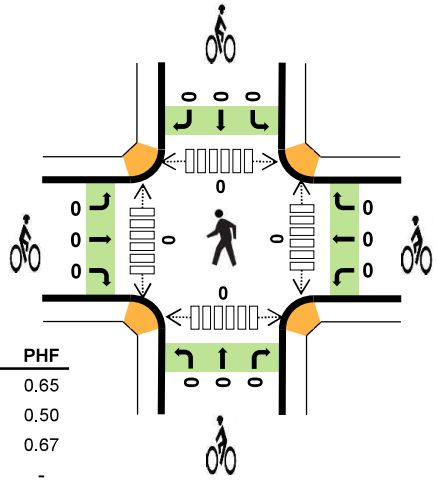
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US 101 NB Ramps
Y Rd/Betabel Rd Overpass

Date: 08-20-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	7.7%	0.65
WB	30.0%	0.50
NB	20.8%	0.67
SB	-	-
TOTAL	19.1%	0.84



Two-Hour Count Summaries

Interval Start	Y Rd/Betabel Rd Overpass Eastbound				Y Rd/Betabel Rd Overpass Westbound				US 101 NB Off Ramp Northbound				US 101 NB On Ramp Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**3**	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**2**	**2**	**2**	**0**	**0**	**0**	**0**	**14**	0
4:15 PM	**1**	**3**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**12**	0
4:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**3**	**0**	**0**	**0**	**0**	**0**	**10**	0
4:45 PM	**0**	**5**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**11**	**47**
5:00 PM	0	1	1	0	0	0	4	1	0	2	0	1	0	0	0	0	10	43
5:15 PM	0	1	0	0	0	0	0	1	0	6	3	1	0	0	0	0	12	43
5:30 PM	0	3	0	0	0	0	0	1	0	2	1	1	0	0	0	0	8	41
5:45 PM	0	2	0	0	0	0	2	1	0	4	1	2	0	0	0	0	12	42
Count Total	1	19	1	0	0	0	14	6	0	28	13	7	0	0	0	0	89	0
Peak Hour All	**1**	**12**	**0**	**0**	**0**	**0**	**8**	**2**	**0**	**14**	**8**	**2**	**0**	**0**	**0**	**0**	**47**	**0**
Peak Hour HV	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**9**	**0**
Peak Hour HV%	**0%**	**8%**	**-**	**-**	**-**	**-**	**25%**	**50%**	**-**	**0%**	**63%**	**0%**	**-**	**-**	**-**	**-**	**19%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**0**	**1**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:15 PM	**1**	**1**	**1**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**1**	**2**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	3	7	0	*11*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**1**	**3**	**5**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Y Rd/Betabel Rd Overpass Eastbound				Y Rd/Betabel Rd Overpass Westbound				US 101 NB Off Ramp Northbound				US 101 NB On Ramp Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**3**	**9**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
Count Total	0	1	0	0	0	0	2	1	0	1	6	0	0	0	0	0	11	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**9**	**0**

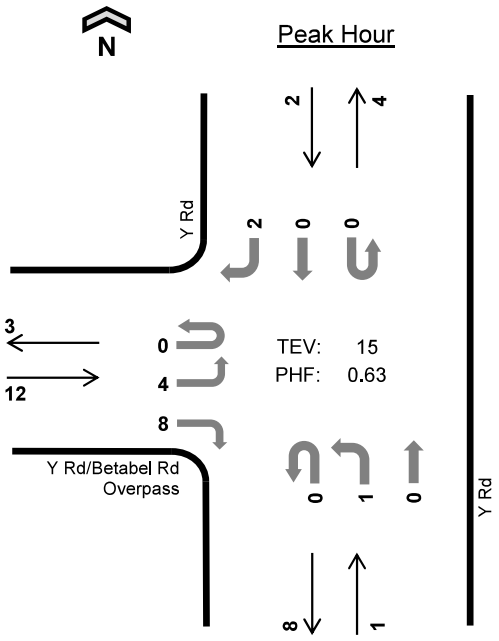
Two-Hour Count Summaries - Bikes

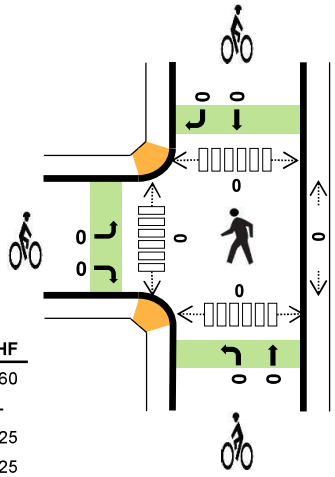
Interval Start	Y Rd/Betabel Rd Overpass Eastbound			Y Rd/Betabel Rd Overpass Westbound			US 101 NB Off Ramp Northbound			US 101 NB On Ramp Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**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**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	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
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Y Rd
Y Rd/Betabel Rd Overpass

Date: 08-20-2019
Count Period: 6:00 AM to 8:00 AM
Peak Hour: 6:00 AM to 7:00 AM





	HV %:	PHF
EB	8.3%	0.60
WB	-	-
NB	0.0%	0.25
SB	50.0%	0.25
TOTAL	13.3%	0.63

Two-Hour Count Summaries

Interval Start	Y Rd/Betabel Rd Overpass				n/a				Y Rd				Y Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**5**	0
6:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
6:30 AM	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
6:45 AM	**0**	**2**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**15**
7:00 AM	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	2	5	15
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	15
7:30 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2	14
7:45 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2	10
Count Total	0	5	0	11	0	0	0	0	0	4	0	0	1	0	0	4	25	0
Peak Hour **All**	**0**	**4**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**15**	**0**
Peak Hour **HV**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**
Peak Hour **HV%**	**-**	**25%**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**50%**	**13%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
6:15 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
6:30 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
6:45 AM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:00 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	0	1	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**1**	**0**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Y Rd/Betabel Rd Overpass				n/a				Y Rd				Y Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	0
6:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**

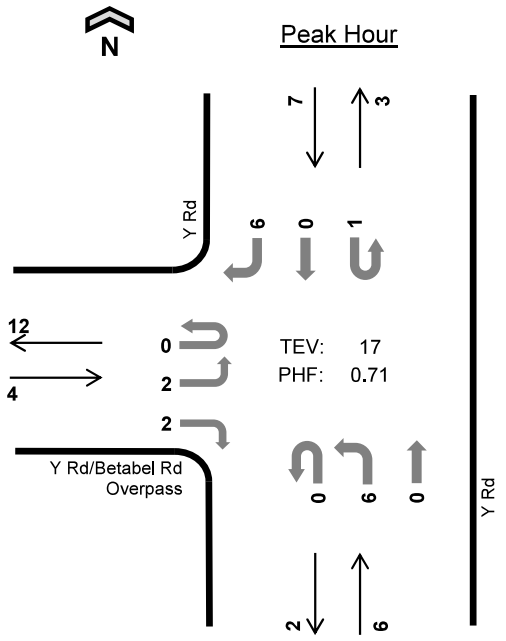
Two-Hour Count Summaries - Bikes

Interval Start	Y Rd/Betabel Rd Overpass			n/a			Y Rd			Y Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

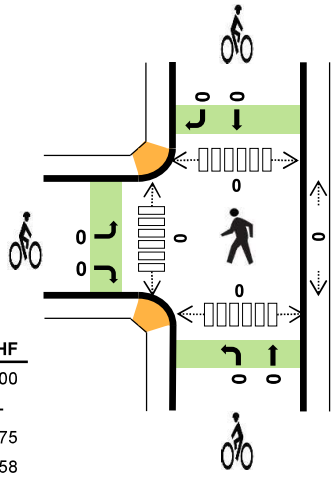
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Y Rd
Y Rd/Betabel Rd Overpass

Date: 08-20-2019
Count Period: 3:00 PM to 5:00 PM
Peak Hour: 3:00 PM to 4:00 PM



	HV %:	PHF
EB	50.0%	1.00
WB	-	-
NB	16.7%	0.75
SB	0.0%	0.58
TOTAL	17.6%	0.71



Two-Hour Count Summaries

Interval Start	Y Rd/Betabel Rd Overpass				n/a				Y Rd				Y Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**2**	**6**	0
3:15 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	0
3:30 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**4**	0
3:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**17**
4:00 PM	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0	2	6	17
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2	15
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	3	11
Count Total	1	3	0	2	0	0	0	0	0	10	0	0	1	0	0	11	28	0
Peak Hour **All**	**0**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**1**	**0**	**0**	**6**	**17**	**0**
Peak Hour **HV**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**
Peak Hour **HV%**	**-**	**100%**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**17%**	**-**	**-**	**0%**	**-**	**-**	**0%**	**18%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
3:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
3:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
3:45 PM	**1**	**0**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:00 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	2	0	2	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**2**	**0**	**1**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Y Rd/Betabel Rd Overpass				n/a				Y Rd				Y Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
3:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3
Count Total	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	2	6	0
Peak Hour	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Y Rd/Betabel Rd Overpass			n/a			Y Rd			Y Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	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
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Prepared by National Data & Surveying Services

Betabel Rd & Lomerias Overcrossing (US 101 overcrossing)

Peak Hour Turning Movement Count

ID: 22-080164-001
City: San Juan Bautista

Day: Saturday
Date: 5/14/2022

PEAK HOURS	COUNT PERIODS
NONE	NONE
01:00 PM - 02:00 PM	12:00 PM - 02:00 PM
NONE	NONE

Betabel Rd

SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	4	0	4	NOON
PM	0	0	0	0	0	PM

EASTBOUND

AM	NOON	PM
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
AM	NOON	PM

WESTBOUND

PM	NOON	AM
0	2	0
0	0	0
0	24	0
0	0	0
0	15	0
PM	NOON	AM

CONTROL

2 Way Stop(NB/SB)

TEV	0 AM	43 NOON	0 PM
PHF		0.77	

NORTHBOUND

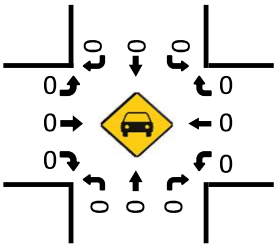
PM	0	0	0	0	0	PM
NOON	24	0	0	2	11	NOON
AM	0	0	0	0	0	AM

Betabel Rd

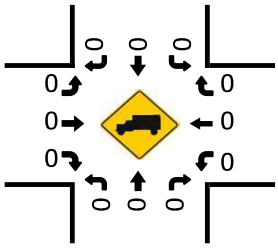
Lomerias Overcrossing (US 101 overcrossing)

Lomerias Overcrossing (US 101 overcrossing)

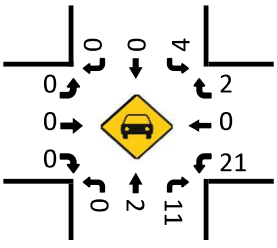
Cars (AM)



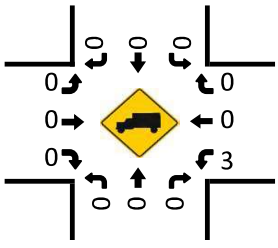
HT (AM)



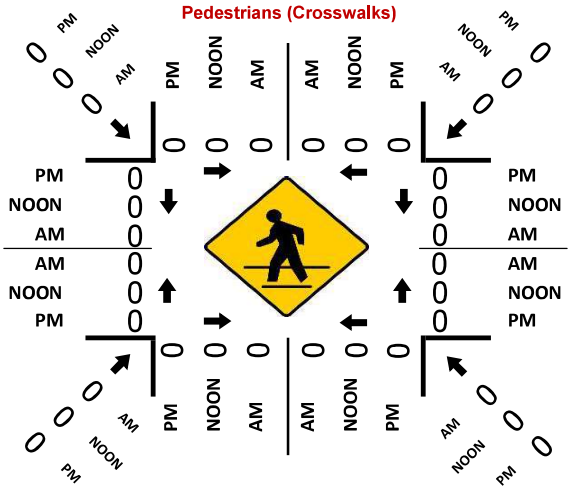
Cars (NOON)



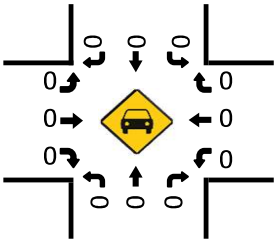
HT (NOON)



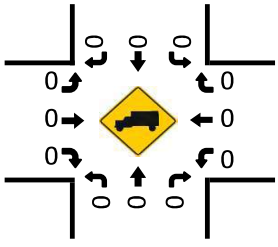
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Betabel Rd & Lomerias Overcrossing (US 101 overcrossing)
City: San Juan Bautista
Control: 2 Way Stop(NB/SB)

Project ID: 22-080164-001
Date: 5/14/2022

Data - Total

NS/EW Streets:	Betabel Rd				Betabel Rd				Lomerias Overcrossing (US 101 overcrossing)				Lomerias Overcrossing (US 101 overcrossing)				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	0	0	3	0	1	0	0	0	0	0	0	0	1	0	2	0	7
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	1	0	1	0	4
12:45 PM	0	0	4	0	0	0	0	0	0	0	0	0	2	0	0	0	6
1:00 PM	0	2	1	0	2	0	0	0	0	0	0	0	4	0	1	0	10
1:15 PM	0	0	3	0	2	0	0	0	0	0	0	0	8	0	1	0	14
1:30 PM	0	0	4	0	0	0	0	0	0	0	0	0	5	0	0	0	9
1:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	7	0	0	0	10
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	19	0	7	0	0	0	0	0	0	0	28	0	5	0	61
APPROACH %'s :	0.00%	9.52%	90.48%	0.00%	100.00%	0.00%	0.00%	0.00%					84.85%	0.00%	15.15%	0.00%	
PEAK HR :	01:00 PM - 02:00 PM																TOTAL
PEAK HR VOL :	0	2	11	0	4	0	0	0	0	0	0	0	24	0	2	0	43
PEAK HR FACTOR :	0.000	0.250	0.688	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.500	0.000	0.768
	0.813				0.500								0.722				

Prepared by National Data & Surveying Services

US 101 SB Ramps & Lomerias Overcrossing (US 101 overcrossing)

Peak Hour Turning Movement Count

ID: 22-080164-002
City: San Juan Bautista

Day: Saturday
Date: 5/14/2022

PEAK HOURS		COUNT PERIODS
NONE		NONE
01:00 PM - 02:00 PM		12:00 PM - 02:00 PM
NONE		NONE

SOUTHBOUND

US 101 SB Ramps

AM	0	0	0	0	0	AM
NOON	16	6	3	0	0	NOON
PM	0	0	0	0	0	PM
	0	1	0	0		

EASTBOUND

Lomerias Overcrossing (US 101 overcrossing)

AM	NOON	PM	
0	26	0	
0	0	0	0
0	0	0	0
0	8	0	1
0	7	0	0
AM	NOON	PM	

WESTBOUND

Lomerias Overcrossing (US 101 overcrossing)

	PM	NOON	AM
0	0	0	0
1	0	10	0
0	0	1	0
0	0	0	0
	0	11	0
	PM	NOON	AM

CONTROL

1 Way Stop(SB)

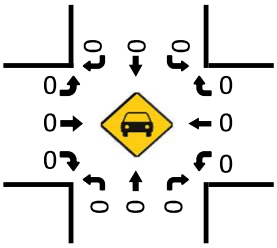
	AM	NOON	PM
TEV	0	51	0
PHF		0.80	

NORTHBOUND

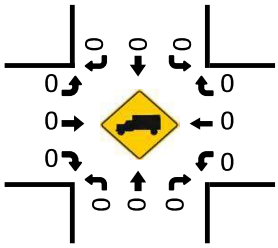
US 101 SB Ramps

		0	0	0	0	
PM	0	0	0	0	0	PM
NOON	14	0	0	0	0	NOON
AM	0	0	0	0	0	AM

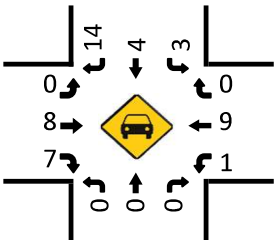
Cars (AM)



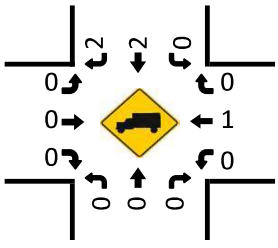
HT (AM)



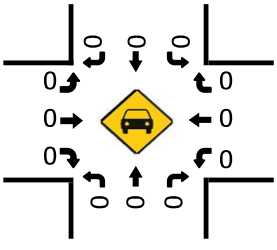
Cars (NOON)



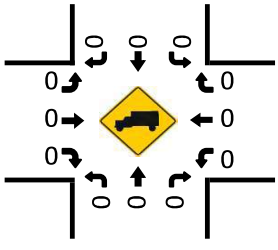
HT (NOON)



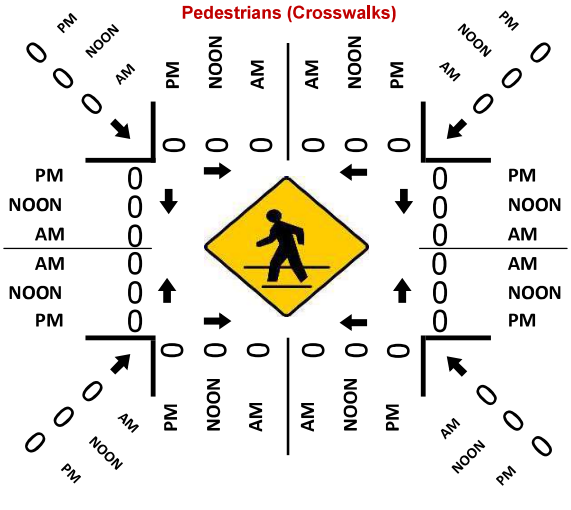
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: US 101 SB Ramps & Lomerias Overcrossing (US 101 overcrossing)
City: San Juan Bautista
Control: 1 Way Stop(SB)

Project ID: 22-080164-002
Date: 5/14/2022

Data - Total

NS/EW Streets:	US 101 SB Ramps				US 101 SB Ramps				Lomerias Overcrossing (US 101 overcrossing)				Lomerias Overcrossing (US 101 overcrossing)				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	0	0	0	0	0	2	3	0	0	2	2	0	1	0	0	0	10
12:15 PM	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	4
12:30 PM	0	0	0	0	3	2	2	0	0	0	2	0	2	0	0	0	11
12:45 PM	0	0	0	0	0	2	0	0	0	1	3	0	1	2	0	0	9
1:00 PM	0	0	0	0	1	2	3	0	0	1	2	0	0	2	0	0	11
1:15 PM	0	0	0	0	1	1	7	0	0	2	3	0	0	2	0	0	16
1:30 PM	0	0	0	0	0	1	2	0	0	3	1	0	1	3	0	0	11
1:45 PM	0	0	0	0	1	2	4	0	0	2	1	0	0	3	0	0	13
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	9	12	21	0	0	12	14	0	5	12	0	0	85
APPROACH %'s :					21.43%	28.57%	50.00%	0.00%	0.00%	46.15%	53.85%	0.00%	29.41%	70.59%	0.00%	0.00%	
PEAK HR :	01:00 PM - 02:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	3	6	16	0	0	8	7	0	1	10	0	0	51
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.750	0.750	0.571	0.000	0.000	0.667	0.583	0.000	0.250	0.833	0.000	0.000	0.797
					0.694				0.750				0.688				

Prepared by National Data & Surveying Services

US 101 NB Ramps & Lomerias Overcrossing (US 101 overcrossing)

Peak Hour Turning Movement Count

ID: 22-080164-003
City: San Juan Bautista

Day: Saturday
Date: 5/14/2022

PEAK HOURS		COUNT PERIODS
NONE		NONE
01:00 PM - 02:00 PM		12:00 PM - 02:00 PM
NONE		NONE

SOUTHBOUND — US 101 NB Ramps

AM	0	0	0	0	0	AM
NOON	0	0	0	0	23	NOON
PM	0	0	0	0	0	PM

EASTBOUND — Lomerias Overcrossing (US 101 overcrossing)

AM	NOON	PM	
0	11	0	
0	0	0	0
0	11	0	0
0	0	0	1
0	0	0	0
AM	NOON	PM	

WESTBOUND — Lomerias Overcrossing (US 101 overcrossing)

	PM	NOON	AM
0	0	2	0
1	0	1	0
0	0	0	0
0	0	0	0
	0	2	0
	PM	NOON	AM

CONTROL

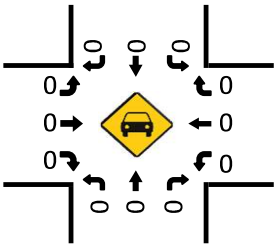
1 Way Stop(NB)

	AM	NOON	PM
TEV	0	36	0
PHF		0.75	

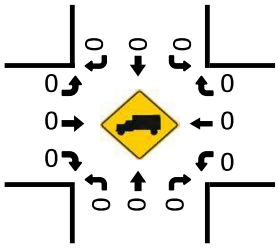
NORTHBOUND — US 101 NB Ramps

PM	0	0	0	0	0	PM
NOON	0	0	10	10	2	NOON
AM	0	0	0	0	0	AM

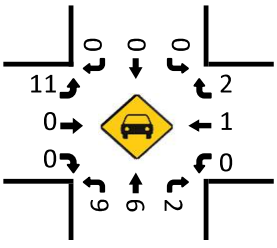
Cars (AM)



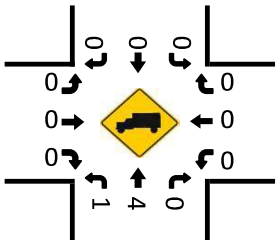
HT (AM)



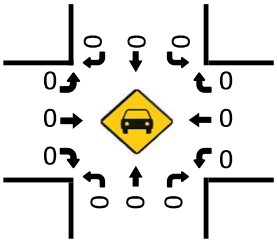
Cars (NOON)



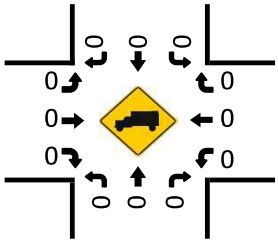
HT (NOON)



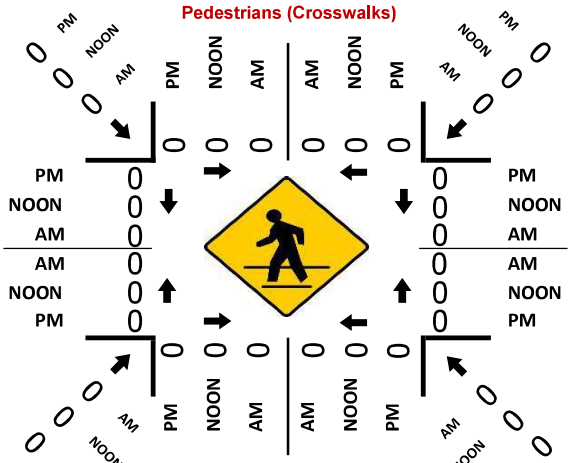
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: US 101 NB Ramps & Lomerias Overcrossing (US 101 overcrossing)
City: San Juan Bautista
Control: 1 Way Stop(NB)

Project ID: 22-080164-003
Date: 5/14/2022

Data - Total

NS/EW Streets:	US 101 NB Ramps				US 101 NB Ramps				Lomerias Overcrossing (US 101 overcrossing)				Lomerias Overcrossing (US 101 overcrossing)				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
12:00 PM	0	0	1	0	0	0	0	0	2	0	0	0	0	1	1	0	5
12:15 PM	0	0	1	0	0	0	0	0	3	1	0	0	0	0	1	0	6
12:30 PM	1	1	3	0	0	0	0	0	1	1	0	0	0	1	2	0	10
12:45 PM	3	0	1	0	0	0	0	0	2	0	0	0	0	0	1	0	7
1:00 PM	2	2	1	0	0	0	0	0	2	0	0	0	0	0	2	0	9
1:15 PM	2	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	6
1:30 PM	3	4	1	0	0	0	0	0	3	0	0	0	0	1	0	0	12
1:45 PM	3	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	9
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	14	11	8	0	0	0	0	0	19	2	0	0	0	3	7	0	64
APPROACH %'s :	42.42%	33.33%	24.24%	0.00%					90.48%	9.52%	0.00%	0.00%	0.00%	30.00%	70.00%	0.00%	
PEAK HR :	01:00 PM - 02:00 PM																TOTAL
PEAK HR VOL :	10	10	2	0	0	0	0	0	11	0	0	0	0	1	2	0	36
PEAK HR FACTOR :	0.833	0.625	0.500	0.000	0.000	0.000	0.000	0.000	0.917	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.750
	0.688								0.917				0.375				

Prepared by National Data & Surveying Services

Y Rd & Lomerias Overcrossing (US 101 overcrossing)

Peak Hour Turning Movement Count

ID: 22-080164-004
City: San Juan Bautista

Day: Saturday
Date: 5/14/2022

PEAK HOURS		COUNT PERIODS
NONE		NONE
12:15 PM - 01:15 PM		12:00 PM - 02:00 PM
NONE		NONE

Y Rd

SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

0 1 0 0

EASTBOUND — Lomerias Overcrossing (US 101 overcrossing)

AM	NOON	PM	
0	7	0	
0	1	0	0
0	0	0	0
0	0	0	1
0	7	0	0
AM	NOON	PM	

WESTBOUND — Lomerias Overcrossing (US 101 overcrossing)

	PM	NOON	AM
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
	0	0	0
	PM	NOON	AM

CONTROL

2 Way Stop(NB/SB)

TEV	0 AM	14 NOON	0 PM
PHF		0.58	

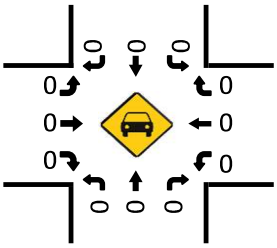
0 0 1 0

PM	0	0	0	0	0	PM
NOON	7	0	6	0	0	NOON
AM	0	0	0	0	0	AM

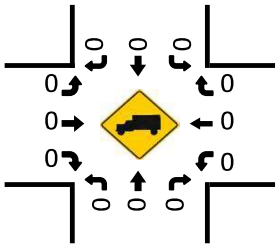
NORTHBOUND

Y Rd

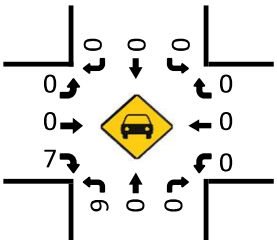
Cars (AM)



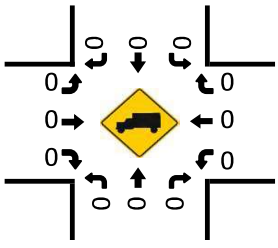
HT (AM)



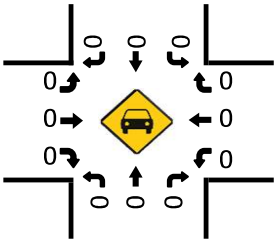
Cars (NOON)



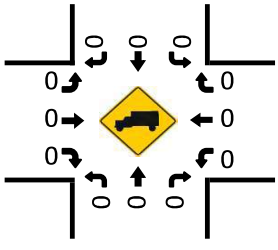
HT (NOON)



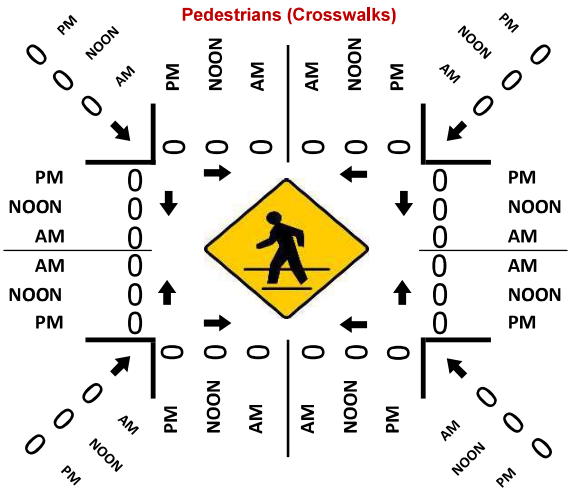
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Y Rd & Lomerias Overcrossing (US 101 overcrossing)
City: San Juan Bautista
Control: 2 Way Stop(NB/SB)

Project ID: 22-080164-004
Date: 5/14/2022

Data - Total

NS/EW Streets:	Y Rd				Y Rd				Lomerias Overcrossing (US 101 overcrossing)				Lomerias Overcrossing (US 101 overcrossing)				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
12:15 PM	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3
12:30 PM	2	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	6
12:45 PM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
1:00 PM	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	8	0	0	0	0	0	0	0	0	0	8	2	0	0	0	0	18
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	0.00%	80.00%	20.00%					
PEAK HR :	12:15 PM - 01:15 PM																TOTAL
PEAK HR VOL :	6	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	14
PEAK HR FACTOR :	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.583	0.250	0.000	0.000	0.000	0.000	0.583
	0.750								0.500								

B - Existing Traffic Conditions

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	2	0	7	0	0	23	4	0	0
Future Vol, veh/h	0	0	0	2	0	7	0	0	23	4	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	2	0	8	0	0	26	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	8	0	0	1	0	0	-	13	1	22	9	-
Stage 1	-	-	-	-	-	-	-	1	-	8	8	-
Stage 2	-	-	-	-	-	-	-	12	-	14	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1531	-	-	1540	-	-	0	885	1078	995	890	0
Stage 1	-	-	-	-	-	-	0	899	-	1019	893	0
Stage 2	-	-	-	-	-	-	0	890	-	1011	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1531	-	-	1540	-	-	-	884	1078	971	889	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	884	-	971	889	-
Stage 1	-	-	-	-	-	-	-	899	-	1019	892	-
Stage 2	-	-	-	-	-	-	-	889	-	987	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.6	8.4	8.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1078	1531	-	-	1540	-	-	971
HCM Lane V/C Ratio	0.024	-	-	-	0.001	-	-	0.005
HCM Control Delay (s)	8.4	0	-	-	7.3	0	-	8.7
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	14	13	1	7	0	0	0	0	6	10	2
Future Vol, veh/h	0	14	13	1	7	0	0	0	0	6	10	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	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	16	14	1	8	0	0	0	0	7	11	2

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	30	0	0	33	40	8
Stage 1	-	-	-	-	-	-	10	10	-
Stage 2	-	-	-	-	-	-	23	30	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1596	-	0	986	827	1080
Stage 1	0	-	-	-	-	0	1018	862	-
Stage 2	0	-	-	-	-	0	1005	845	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1596	-	-	985	0	1080
Mov Cap-2 Maneuver	-	-	-	-	-	-	985	0	-
Stage 1	-	-	-	-	-	-	1018	0	-
Stage 2	-	-	-	-	-	-	1004	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.9	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1596	-	1007
HCM Lane V/C Ratio	-	-	0.001	-	0.02
HCM Control Delay (s)	-	-	7.3	0	8.6
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	0	0	0	3	2	4	9	4	0	0	0
Future Vol, veh/h	18	0	0	0	3	2	4	9	4	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	20	0	0	0	3	2	4	10	4	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	5	0	-	-	-	0	44	45	0
Stage 1	-	-	-	-	-	-	40	40	-
Stage 2	-	-	-	-	-	-	4	5	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1630	-	0	0	-	-	935	822	-
Stage 1	-	-	0	0	-	-	950	837	-
Stage 2	-	-	0	0	-	-	986	866	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1630	-	-	-	-	-	924	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	924	0	-
Stage 1	-	-	-	-	-	-	939	0	-
Stage 2	-	-	-	-	-	-	986	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.2	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	1630	-	-	-
HCM Lane V/C Ratio	-	0.012	-	-	-
HCM Control Delay (s)	-	7.2	0	-	-
HCM Lane LOS	-	A	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-

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	4	0	8	0	0	0	1	0	0	0	0	2
Future Vol, veh/h	4	0	8	0	0	0	1	0	0	0	0	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	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	4	0	9	0	0	0	1	0	0	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	9	0	0	15	14	-	-	18	1
Stage 1	-	-	-	-	-	-	13	13	-	-	1	-
Stage 2	-	-	-	-	-	-	2	1	-	-	17	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1540	-	-	1530	-	-	1006	884	0	0	880	1047
Stage 1	-	-	-	-	-	-	1013	889	0	0	899	-
Stage 2	-	-	-	-	-	-	1026	899	0	0	885	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1530	-	-	1002	881	-	-	877	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	1002	881	-	-	877	-
Stage 1	-	-	-	-	-	-	1010	886	-	-	899	-
Stage 2	-	-	-	-	-	-	1024	899	-	-	882	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0	8.6	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1002	1540	-	-	1530	-	-	1047
HCM Lane V/C Ratio	0.001	0.003	-	-	-	-	-	0.002
HCM Control Delay (s)	8.6	7.3	0	-	0	-	-	8.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	26	0	1	0	0	10	10	0	0
Future Vol, veh/h	0	0	0	26	0	1	0	0	10	10	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	0	15	0	15	0	0	10	0	15
Mvmt Flow	0	0	0	29	0	1	0	0	11	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	1	0	0	-	60	1	66	60	-
Stage 1	-	-	-	-	-	-	-	1	-	59	59	-
Stage 2	-	-	-	-	-	-	-	59	-	7	1	-
Critical Hdwy	4.25	-	-	4.1	-	-	-	6.5	6.2	7.2	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Follow-up Hdwy	2.335	-	-	2.2	-	-	-	4	3.3	3.59	4	-
Pot Cap-1 Maneuver	1540	-	-	1635	-	-	0	835	1090	908	835	0
Stage 1	-	-	-	-	-	-	0	899	-	933	850	0
Stage 2	-	-	-	-	-	-	0	850	-	994	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1635	-	-	-	820	1090	886	820	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	820	-	886	820	-
Stage 1	-	-	-	-	-	-	-	899	-	933	835	-
Stage 2	-	-	-	-	-	-	-	835	-	984	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7	8.3	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1540	-	-	1635	-	-	886
HCM Lane V/C Ratio	0.01	-	-	-	0.018	-	-	0.013
HCM Control Delay (s)	8.3	0	-	-	7.2	0	-	9.1
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	5	15	8	14	0	0	0	0	4	9	13
Future Vol, veh/h	0	5	15	8	14	0	0	0	0	4	9	13
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	7	13	0	0	0	0	0	0	15	0
Mvmt Flow	0	6	17	9	16	0	0	0	0	4	10	14

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	23	0	0	49	57	16
Stage 1	-	-	-	-	-	-	34	34	-
Stage 2	-	-	-	-	-	-	15	23	-
Critical Hdwy	-	-	-	4.23	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.317	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1524	-	0	965	810	1069
Stage 1	0	-	-	-	-	0	994	842	-
Stage 2	0	-	-	-	-	0	1013	851	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1524	-	-	959	0	1069
Mov Cap-2 Maneuver	-	-	-	-	-	-	959	0	-
Stage 1	-	-	-	-	-	-	994	0	-
Stage 2	-	-	-	-	-	-	1007	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	2.7	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1524	-	1041
HCM Lane V/C Ratio	-	-	0.006	-	0.028
HCM Control Delay (s)	-	-	7.4	0	8.6
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	0	0	0	8	2	14	8	2	0	0	0
Future Vol, veh/h	13	0	0	0	8	2	14	8	2	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	8	0	0	0	15	15	0	15	0	0	0	0
Mvmt Flow	14	0	0	0	9	2	16	9	2	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	11	0	-	-	-	0	38	39	0
Stage 1	-	-	-	-	-	-	28	28	-
Stage 2	-	-	-	-	-	-	10	11	-
Critical Hdwy	4.18	-	-	-	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	2.272	-	-	-	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	1570	-	0	0	-	-	979	828	-
Stage 1	-	-	0	0	-	-	1000	847	-
Stage 2	-	-	0	0	-	-	1018	861	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1570	-	-	-	-	-	970	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	970	0	-
Stage 1	-	-	-	-	-	-	991	0	-
Stage 2	-	-	-	-	-	-	1018	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.3	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	1570	-	-	-
HCM Lane V/C Ratio	-	0.009	-	-	-
HCM Control Delay (s)	-	7.3	0	-	-
HCM Lane LOS	-	A	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	2	0	0	0	6	0	0	0	1	6
Future Vol, veh/h	2	0	2	0	0	0	6	0	0	0	1	6
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	17	0	15	15	0	0
Mvmt Flow	2	0	2	0	0	0	7	0	0	0	1	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	2	0	0	10	6	-	-	7	1
Stage 1	-	-	-	-	-	-	5	5	-	-	1	-
Stage 2	-	-	-	-	-	-	5	1	-	-	6	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.27	6.5	-	-	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.653	4	-	-	4	3.3
Pot Cap-1 Maneuver	1540	-	-	1539	-	-	971	893	0	0	892	1090
Stage 1	-	-	-	-	-	-	979	896	0	0	899	-
Stage 2	-	-	-	-	-	-	979	899	0	0	895	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1539	-	-	963	892	-	-	891	1090
Mov Cap-2 Maneuver	-	-	-	-	-	-	963	892	-	-	891	-
Stage 1	-	-	-	-	-	-	978	895	-	-	899	-
Stage 2	-	-	-	-	-	-	972	899	-	-	894	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.7	0	8.8	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	963	1540	-	-	1539	-	-	1056
HCM Lane V/C Ratio	0.007	0.001	-	-	-	-	-	0.007
HCM Control Delay (s)	8.8	7.3	0	-	0	-	-	8.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	24	0	2	0	2	11	4	0	0
Future Vol, veh/h	0	0	0	24	0	2	0	2	11	4	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	31	0	3	0	3	14	5	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	3	0	0	1	0	0	-	66	1	74	65	-
Stage 1	-	-	-	-	-	-	-	1	-	64	64	-
Stage 2	-	-	-	-	-	-	-	65	-	10	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1538	-	-	1540	-	-	0	829	1078	921	830	0
Stage 1	-	-	-	-	-	-	0	899	-	952	846	0
Stage 2	-	-	-	-	-	-	0	845	-	1016	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1538	-	-	1540	-	-	-	812	1078	892	813	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	812	-	892	813	-
Stage 1	-	-	-	-	-	-	-	899	-	952	829	-
Stage 2	-	-	-	-	-	-	-	828	-	1000	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	6.8	8.6	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1026	1538	-	-	1540	-	-	892
HCM Lane V/C Ratio	0.016	-	-	-	0.02	-	-	0.006
HCM Control Delay (s)	8.6	0	-	-	7.4	0	-	9.1
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	8	7	1	10	0	0	0	0	3	6	16
Future Vol, veh/h	0	8	7	1	10	0	0	0	0	3	6	16
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	10	9	1	13	0	0	0	0	4	8	20

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	19	0	0	30	34	13
Stage 1	-	-	-	-	-	-	15	15	-
Stage 2	-	-	-	-	-	-	15	19	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1611	-	0	989	834	1073
Stage 1	0	-	-	-	-	0	1013	858	-
Stage 2	0	-	-	-	-	0	1013	854	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1611	-	-	988	0	1073
Mov Cap-2 Maneuver	-	-	-	-	-	-	988	0	-
Stage 1	-	-	-	-	-	-	1013	0	-
Stage 2	-	-	-	-	-	-	1012	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.7	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1611	-	1059
HCM Lane V/C Ratio	-	-	0.001	-	0.03
HCM Control Delay (s)	-	-	7.2	0	8.5
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.1

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	11	0	0	0	1	2	10	10	2	0	0	0
Future Vol, veh/h	11	0	0	0	1	2	10	10	2	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	15	0	0	0	1	3	13	13	3	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	4	0	-	-	-	0	33	34	0
Stage 1	-	-	-	-	-	-	30	30	-
Stage 2	-	-	-	-	-	-	3	4	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1631	-	0	0	-	-	948	834	-
Stage 1	-	-	0	0	-	-	960	845	-
Stage 2	-	-	0	0	-	-	987	867	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1631	-	-	-	-	-	939	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	939	0	-
Stage 1	-	-	-	-	-	-	951	0	-
Stage 2	-	-	-	-	-	-	987	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.2	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	1631	-	-	-
HCM Lane V/C Ratio	-	0.009	-	-	-
HCM Control Delay (s)	-	7.2	0	-	-
HCM Lane LOS	-	A	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↰			↱	
Traffic Vol, veh/h	0	0	7	0	0	0	6	0	0	0	0	0
Future Vol, veh/h	0	0	7	0	0	0	6	0	0	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	59	59	59	59	59	59	59	59	59	59	59	59
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	0	0	12	0	0	0	10	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2	0	0	12	0	0	8	8	-	-	14	2
Stage 1	-	-	-	-	-	-	6	6	-	-	2	-
Stage 2	-	-	-	-	-	-	2	2	-	-	12	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1539	-	-	1526	-	-	1016	891	0	0	884	1045
Stage 1	-	-	-	-	-	-	1021	895	0	0	898	-
Stage 2	-	-	-	-	-	-	1026	898	0	0	890	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1539	-	-	1526	-	-	1016	891	-	-	884	1045
Mov Cap-2 Maneuver	-	-	-	-	-	-	1016	891	-	-	884	-
Stage 1	-	-	-	-	-	-	1021	895	-	-	898	-
Stage 2	-	-	-	-	-	-	1026	898	-	-	890	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	8.6	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1016	1539	-	-	1526	-	-	-
HCM Lane V/C Ratio	0.01	-	-	-	-	-	-	-
HCM Control Delay (s)	8.6	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-

C – Near Term (2024) Plus Project Traffic Conditions

Intersection	
Int Delay, s/veh	9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	290	0	7	0	0	312	4	0	0
Future Vol, veh/h	0	0	0	290	0	7	0	0	312	4	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	322	0	8	0	0	347	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	8	0	0	1	0	0	-	653	1	823	649	-
Stage 1	-	-	-	-	-	-	-	1	-	648	648	-
Stage 2	-	-	-	-	-	-	-	652	-	175	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1531	-	-	1540	-	-	0	389	1078	295	391	0
Stage 1	-	-	-	-	-	-	0	899	-	462	469	0
Stage 2	-	-	-	-	-	-	0	467	-	832	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1531	-	-	1540	-	-	-	307	1078	168	309	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	307	-	168	309	-
Stage 1	-	-	-	-	-	-	-	899	-	462	371	-
Stage 2	-	-	-	-	-	-	-	369	-	564	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.8	9.9	27
HCM LOS			A	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1078	1531	-	-	1540	-	-	168
HCM Lane V/C Ratio	0.322	-	-	-	0.209	-	-	0.026
HCM Control Delay (s)	9.9	0	-	-	8	0	-	27
HCM Lane LOS	A	A	-	-	A	A	-	D
HCM 95th %tile Q(veh)	1.4	0	-	-	0.8	-	-	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	159	158	1	153	0	0	0	0	10	10	148
Future Vol, veh/h	0	159	158	1	153	0	0	0	0	10	10	148
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	177	176	1	170	0	0	0	0	11	11	164

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	353	0	0	437	525	170
Stage 1	-	-	-	-	-	-	172	172	-
Stage 2	-	-	-	-	-	-	265	353	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1217	-	0	581	440	879
Stage 1	0	-	-	-	-	0	863	732	-
Stage 2	0	-	-	-	-	0	784	609	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1217	-	-	580	0	879
Mov Cap-2 Maneuver	-	-	-	-	-	-	580	0	-
Stage 1	-	-	-	-	-	-	863	0	-
Stage 2	-	-	-	-	-	-	783	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.1	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1217	-	851
HCM Lane V/C Ratio	-	-	0.001	-	0.219
HCM Control Delay (s)	-	-	8	0	10.4
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0	-	0.8

Intersection	
Int Delay, s/veh	10.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	1	0	0	4	2	148	14	4	0	0	0
Future Vol, veh/h	163	1	0	0	4	2	148	14	4	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	179	1	0	0	4	2	163	15	4	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	6	0	-	-	-	0	364	365	1
Stage 1	-	-	-	-	-	-	359	359	-
Stage 2	-	-	-	-	-	-	5	6	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1628	-	0	0	-	-	610	543	1090
Stage 1	-	-	0	0	-	-	679	605	-
Stage 2	-	-	0	0	-	-	985	865	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1628	-	-	-	-	-	543	0	1090
Mov Cap-2 Maneuver	-	-	-	-	-	-	543	0	-
Stage 1	-	-	-	-	-	-	604	0	-
Stage 2	-	-	-	-	-	-	985	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.4	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	550	1628	-	-	-
HCM Lane V/C Ratio	0.332	0.11	-	-	-
HCM Control Delay (s)	14.8	7.5	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	1.4	0.4	-	-	-

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	4	0	8	0	0	0	1	0	0	0	0	2
Future Vol, veh/h	4	0	8	0	0	0	1	0	0	0	0	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	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	4	0	9	0	0	0	1	0	0	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	9	0	0	15	14	-	-	18	1
Stage 1	-	-	-	-	-	-	13	13	-	-	1	-
Stage 2	-	-	-	-	-	-	2	1	-	-	17	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1540	-	-	1530	-	-	1006	884	0	0	880	1047
Stage 1	-	-	-	-	-	-	1013	889	0	0	899	-
Stage 2	-	-	-	-	-	-	1026	899	0	0	885	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1530	-	-	1002	881	-	-	877	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	1002	881	-	-	877	-
Stage 1	-	-	-	-	-	-	1010	886	-	-	899	-
Stage 2	-	-	-	-	-	-	1024	899	-	-	882	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0	8.6	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1002	1540	-	-	1530	-	-	1047
HCM Lane V/C Ratio	0.001	0.003	-	-	-	-	-	0.002
HCM Control Delay (s)	8.6	7.3	0	-	0	-	-	8.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	400	0	1	0	0	269	10	0	0
Future Vol, veh/h	0	0	0	400	0	1	0	0	269	10	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	0	15	0	15	0	0	10	0	15
Mvmt Flow	0	0	0	444	0	1	0	0	299	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	1	0	0	-	890	1	1040	890	-
Stage 1	-	-	-	-	-	-	-	1	-	889	889	-
Stage 2	-	-	-	-	-	-	-	889	-	151	1	-
Critical Hdwy	4.25	-	-	4.1	-	-	-	6.5	6.2	7.2	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Follow-up Hdwy	2.335	-	-	2.2	-	-	-	4	3.3	3.59	4	-
Pot Cap-1 Maneuver	1540	-	-	1635	-	-	0	284	1090	201	284	0
Stage 1	-	-	-	-	-	-	0	899	-	327	364	0
Stage 2	-	-	-	-	-	-	0	364	-	833	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1635	-	-	-	207	1090	115	207	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	207	-	115	207	-
Stage 1	-	-	-	-	-	-	-	899	-	327	265	-
Stage 2	-	-	-	-	-	-	-	265	-	605	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8	9.5	39.6
HCM LOS			A	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1540	-	-	1635	-	-	115
HCM Lane V/C Ratio	0.274	-	-	-	0.272	-	-	0.097
HCM Control Delay (s)	9.5	0	-	-	8	0	-	39.6
HCM Lane LOS	A	A	-	-	A	A	-	E
HCM 95th %tile Q(veh)	1.1	0	-	-	1.1	-	-	0.3

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	135	145	8	201	0	0	0	0	4	9	200
Future Vol, veh/h	0	135	145	8	201	0	0	0	0	4	9	200
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	7	13	0	0	0	0	0	0	15	0
Mvmt Flow	0	150	161	9	223	0	0	0	0	4	10	222

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	311	0	0	472	552	223
Stage 1	-	-	-	-	-	-	241	241	-
Stage 2	-	-	-	-	-	-	231	311	-
Critical Hdwy	-	-	-	4.23	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.317	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1190	-	0	554	424	822
Stage 1	0	-	-	-	-	0	804	683	-
Stage 2	0	-	-	-	-	0	812	635	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1190	-	-	549	0	822
Mov Cap-2 Maneuver	-	-	-	-	-	-	549	0	-
Stage 1	-	-	-	-	-	-	804	0	-
Stage 2	-	-	-	-	-	-	805	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.3	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1190	-	814
HCM Lane V/C Ratio	-	-	0.007	-	0.291
HCM Control Delay (s)	-	-	8	0	11.2
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0	-	1.2

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	143	0	0	0	8	2	201	8	2	0	0	0
Future Vol, veh/h	143	0	0	0	8	2	201	8	2	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	8	0	0	0	15	15	0	15	0	0	0	0
Mvmt Flow	159	0	0	0	9	2	223	9	2	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	11	0	-	-	-	0	328	329	0
Stage 1	-	-	-	-	-	-	318	318	-
Stage 2	-	-	-	-	-	-	10	11	-
Critical Hdwy	4.18	-	-	-	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	2.272	-	-	-	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	1570	-	0	0	-	-	671	569	-
Stage 1	-	-	0	0	-	-	742	631	-
Stage 2	-	-	0	0	-	-	1018	861	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1570	-	-	-	-	-	603	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	603	0	-
Stage 1	-	-	-	-	-	-	667	0	-
Stage 2	-	-	-	-	-	-	1018	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.6	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	1570	-	-	-
HCM Lane V/C Ratio	-	0.101	-	-	-
HCM Control Delay (s)	-	7.6	0	-	-
HCM Lane LOS	-	A	A	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-	-

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	2	0	0	0	6	0	0	0	1	6
Future Vol, veh/h	2	0	2	0	0	0	6	0	0	0	1	6
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	17	0	15	15	0	0
Mvmt Flow	2	0	2	0	0	0	7	0	0	0	1	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	2	0	0	10	6	-	-	7	1
Stage 1	-	-	-	-	-	-	5	5	-	-	1	-
Stage 2	-	-	-	-	-	-	5	1	-	-	6	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.27	6.5	-	-	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.653	4	-	-	4	3.3
Pot Cap-1 Maneuver	1540	-	-	1539	-	-	971	893	0	0	892	1090
Stage 1	-	-	-	-	-	-	979	896	0	0	899	-
Stage 2	-	-	-	-	-	-	979	899	0	0	895	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1539	-	-	963	892	-	-	891	1090
Mov Cap-2 Maneuver	-	-	-	-	-	-	963	892	-	-	891	-
Stage 1	-	-	-	-	-	-	978	895	-	-	899	-
Stage 2	-	-	-	-	-	-	972	899	-	-	894	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.7	0	8.8	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	963	1540	-	-	1539	-	-	1056
HCM Lane V/C Ratio	0.007	0.001	-	-	-	-	-	0.007
HCM Control Delay (s)	8.8	7.3	0	-	0	-	-	8.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	9.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	424	0	2	0	2	297	5	0	0
Future Vol, veh/h	0	0	0	424	0	2	0	2	297	5	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	551	0	3	0	3	386	6	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	3	0	0	1	0	0	-	1106	1	1300	1105	-
Stage 1	-	-	-	-	-	-	-	1	-	1104	1104	-
Stage 2	-	-	-	-	-	-	-	1105	-	196	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1538	-	-	1540	-	-	0	212	1078	140	213	0
Stage 1	-	-	-	-	-	-	0	899	-	258	289	0
Stage 2	-	-	-	-	-	-	0	289	-	810	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1538	-	-	1540	-	-	-	136	1078	64	137	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	136	-	64	137	-
Stage 1	-	-	-	-	-	-	-	899	-	258	186	-
Stage 2	-	-	-	-	-	-	-	186	-	519	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.6	10.6	67.5
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1030	1538	-	-	1540	-	-	64
HCM Lane V/C Ratio	0.377	-	-	-	0.358	-	-	0.101
HCM Control Delay (s)	10.6	0	-	-	8.6	0	-	67.5
HCM Lane LOS	B	A	-	-	A	A	-	F
HCM 95th %tile Q(veh)	1.8	0	-	-	1.6	-	-	0.3

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	151	151	2	210	0	0	0	0	3	6	216
Future Vol, veh/h	0	151	151	2	210	0	0	0	0	3	6	216
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	189	189	3	263	0	0	0	0	4	8	270

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	378	0	0	553	647	263
Stage 1	-	-	-	-	-	-	269	269	-
Stage 2	-	-	-	-	-	-	284	378	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1192	-	0	498	373	781
Stage 1	0	-	-	-	-	0	781	664	-
Stage 2	0	-	-	-	-	0	769	593	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1192	-	-	497	0	781
Mov Cap-2 Maneuver	-	-	-	-	-	-	497	0	-
Stage 1	-	-	-	-	-	-	781	0	-
Stage 2	-	-	-	-	-	-	767	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.1	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1192	-	775
HCM Lane V/C Ratio	-	-	0.002	-	0.363
HCM Control Delay (s)	-	-	8	0	12.3
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0	-	1.7

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	154	0	0	0	2	2	210	10	2	0	0	0
Future Vol, veh/h	154	0	0	0	2	2	210	10	2	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	205	0	0	0	3	3	280	13	3	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	6	0	-	-	-	0	415	416	0
Stage 1	-	-	-	-	-	-	410	410	-
Stage 2	-	-	-	-	-	-	5	6	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1628	-	0	0	-	-	570	508	-
Stage 1	-	-	0	0	-	-	643	574	-
Stage 2	-	-	0	0	-	-	985	865	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1628	-	-	-	-	-	498	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	498	0	-
Stage 1	-	-	-	-	-	-	562	0	-
Stage 2	-	-	-	-	-	-	985	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.5	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	1628	-	-	-
HCM Lane V/C Ratio	-	0.126	-	-	-
HCM Control Delay (s)	-	7.5	0	-	-
HCM Lane LOS	-	A	A	-	-
HCM 95th %tile Q(veh)	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	7	0	0	0	6	0	0	0	0	1
Future Vol, veh/h	1	0	7	0	0	0	6	0	0	0	0	1
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	59	59	59	59	59	59	59	59	59	59	59	59
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	2	0	12	0	0	0	10	0	0	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2	0	0	12	0	0	13	12	-	-	18	2
Stage 1	-	-	-	-	-	-	10	10	-	-	2	-
Stage 2	-	-	-	-	-	-	3	2	-	-	16	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1539	-	-	1526	-	-	1009	887	0	0	880	1045
Stage 1	-	-	-	-	-	-	1016	891	0	0	898	-
Stage 2	-	-	-	-	-	-	1025	898	0	0	886	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1539	-	-	1526	-	-	1007	886	-	-	879	1045
Mov Cap-2 Maneuver	-	-	-	-	-	-	1007	886	-	-	879	-
Stage 1	-	-	-	-	-	-	1015	890	-	-	898	-
Stage 2	-	-	-	-	-	-	1023	898	-	-	885	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	8.6	8.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1007	1539	-	-	1526	-	-	1045
HCM Lane V/C Ratio	0.01	0.001	-	-	-	-	-	0.002
HCM Control Delay (s)	8.6	7.3	0	-	0	-	-	8.5
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

D – Cumulative (2030) Traffic Conditions

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	0	0	0	7	0	7	0	0	23	4	0	0
Future Vol, veh/h	0	0	0	7	0	7	0	0	23	4	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	8	0	8	0	0	26	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	8	0	0	1	0	0	-	25	1	34	21	-
Stage 1	-	-	-	-	-	-	-	1	-	20	20	-
Stage 2	-	-	-	-	-	-	-	24	-	14	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1531	-	-	1540	-	-	0	872	1078	978	877	0
Stage 1	-	-	-	-	-	-	0	899	-	1004	883	0
Stage 2	-	-	-	-	-	-	0	879	-	1011	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1531	-	-	1540	-	-	-	868	1078	952	873	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	868	-	952	873	-
Stage 1	-	-	-	-	-	-	-	899	-	1004	879	-
Stage 2	-	-	-	-	-	-	-	875	-	987	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.7	8.4	8.8
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1078	1531	-	-	1540	-	-	952
HCM Lane V/C Ratio	0.024	-	-	-	0.005	-	-	0.005
HCM Control Delay (s)	8.4	0	-	-	7.3	0	-	8.8
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	14	13	1	16	0	0	0	0	21	10	9
Future Vol, veh/h	0	14	13	1	16	0	0	0	0	21	10	9
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	16	14	1	18	0	0	0	0	23	11	10

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	30	0	0			43	50	18
Stage 1	-	-	-	-	-	-			20	20	-
Stage 2	-	-	-	-	-	-			23	30	-
Critical Hdwy	-	-	-	4.1	-	-			6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-			5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-			3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1596	-	0			973	817	1066
Stage 1	0	-	-	-	-	0			1008	853	-
Stage 2	0	-	-	-	-	0			1005	845	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	1596	-	-			972	0	1066
Mov Cap-2 Maneuver	-	-	-	-	-	-			972	0	-
Stage 1	-	-	-	-	-	-			1008	0	-
Stage 2	-	-	-	-	-	-			1004	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.4	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1596	-	998
HCM Lane V/C Ratio	-	-	0.001	-	0.045
HCM Control Delay (s)	-	-	7.3	0	8.8
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	5	0	0	7	2	4	29	4	0	0	0
Future Vol, veh/h	18	5	0	0	7	2	4	29	4	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	20	5	0	0	8	2	4	32	4	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	10	0	-	-	-	0	54	55	5
Stage 1	-	-	-	-	-	-	45	45	-
Stage 2	-	-	-	-	-	-	9	10	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1623	-	0	0	-	-	922	812	1084
Stage 1	-	-	0	0	-	-	945	832	-
Stage 2	-	-	0	0	-	-	981	862	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1623	-	-	-	-	-	911	0	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	911	0	-
Stage 1	-	-	-	-	-	-	934	0	-
Stage 2	-	-	-	-	-	-	981	0	-

Approach	EB	WB	NB
HCM Control Delay, s	5.7	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	990	1623	-	-	-
HCM Lane V/C Ratio	0.041	0.012	-	-	-
HCM Control Delay (s)	8.8	7.2	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

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	4	0	8	0	0	0	1	0	0	0	0	2
Future Vol, veh/h	4	0	8	0	0	0	1	0	0	0	0	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	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	4	0	9	0	0	0	1	0	0	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	9	0	0	15	14	-	-	18	1
Stage 1	-	-	-	-	-	-	13	13	-	-	1	-
Stage 2	-	-	-	-	-	-	2	1	-	-	17	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1540	-	-	1530	-	-	1006	884	0	0	880	1047
Stage 1	-	-	-	-	-	-	1013	889	0	0	899	-
Stage 2	-	-	-	-	-	-	1026	899	0	0	885	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1530	-	-	1002	881	-	-	877	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	1002	881	-	-	877	-
Stage 1	-	-	-	-	-	-	1010	886	-	-	899	-
Stage 2	-	-	-	-	-	-	1024	899	-	-	882	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0	8.6	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1002	1540	-	-	1530	-	-	1047
HCM Lane V/C Ratio	0.001	0.003	-	-	-	-	-	0.002
HCM Control Delay (s)	8.6	7.3	0	-	0	-	-	8.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	26	0	1	0	0	10	10	0	0
Future Vol, veh/h	0	0	0	26	0	1	0	0	10	10	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	0	15	0	15	0	0	10	0	15
Mvmt Flow	0	0	0	29	0	1	0	0	11	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	1	0	0	-	60	1	66	60	-
Stage 1	-	-	-	-	-	-	-	1	-	59	59	-
Stage 2	-	-	-	-	-	-	-	59	-	7	1	-
Critical Hdwy	4.25	-	-	4.1	-	-	-	6.5	6.2	7.2	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Follow-up Hdwy	2.335	-	-	2.2	-	-	-	4	3.3	3.59	4	-
Pot Cap-1 Maneuver	1540	-	-	1635	-	-	0	835	1090	908	835	0
Stage 1	-	-	-	-	-	-	0	899	-	933	850	0
Stage 2	-	-	-	-	-	-	0	850	-	994	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1635	-	-	-	820	1090	886	820	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	820	-	886	820	-
Stage 1	-	-	-	-	-	-	-	899	-	933	835	-
Stage 2	-	-	-	-	-	-	-	835	-	984	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7	8.3	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1540	-	-	1635	-	-	886
HCM Lane V/C Ratio	0.01	-	-	-	0.018	-	-	0.013
HCM Control Delay (s)	8.3	0	-	-	7.2	0	-	9.1
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	5	15	8	14	0	0	0	0	4	9	13
Future Vol, veh/h	0	5	15	8	14	0	0	0	0	4	9	13
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	7	13	0	0	0	0	0	0	15	0
Mvmt Flow	0	6	17	9	16	0	0	0	0	4	10	14

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	23	0	0	49	57	16
Stage 1	-	-	-	-	-	-	34	34	-
Stage 2	-	-	-	-	-	-	15	23	-
Critical Hdwy	-	-	-	4.23	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.317	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1524	-	0	965	810	1069
Stage 1	0	-	-	-	-	0	994	842	-
Stage 2	0	-	-	-	-	0	1013	851	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1524	-	-	959	0	1069
Mov Cap-2 Maneuver	-	-	-	-	-	-	959	0	-
Stage 1	-	-	-	-	-	-	994	0	-
Stage 2	-	-	-	-	-	-	1007	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	2.7	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1524	-	1041
HCM Lane V/C Ratio	-	-	0.006	-	0.028
HCM Control Delay (s)	-	-	7.4	0	8.6
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	0	0	0	8	2	14	8	2	0	0	0
Future Vol, veh/h	13	0	0	0	8	2	14	8	2	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	8	0	0	0	15	15	0	15	0	0	0	0
Mvmt Flow	14	0	0	0	9	2	16	9	2	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	11	0	-	-	-	0	38	39	0
Stage 1	-	-	-	-	-	-	28	28	-
Stage 2	-	-	-	-	-	-	10	11	-
Critical Hdwy	4.18	-	-	-	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	2.272	-	-	-	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	1570	-	0	0	-	-	979	828	-
Stage 1	-	-	0	0	-	-	1000	847	-
Stage 2	-	-	0	0	-	-	1018	861	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1570	-	-	-	-	-	970	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	970	0	-
Stage 1	-	-	-	-	-	-	991	0	-
Stage 2	-	-	-	-	-	-	1018	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.3	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	1570	-	-	-
HCM Lane V/C Ratio	-	0.009	-	-	-
HCM Control Delay (s)	-	7.3	0	-	-
HCM Lane LOS	-	A	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	2	0	0	0	6	0	0	0	1	6
Future Vol, veh/h	2	0	2	0	0	0	6	0	0	0	1	6
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	17	0	15	15	0	0
Mvmt Flow	2	0	2	0	0	0	7	0	0	0	1	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	2	0	0	10	6	-	-	7	1
Stage 1	-	-	-	-	-	-	5	5	-	-	1	-
Stage 2	-	-	-	-	-	-	5	1	-	-	6	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.27	6.5	-	-	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.653	4	-	-	4	3.3
Pot Cap-1 Maneuver	1540	-	-	1539	-	-	971	893	0	0	892	1090
Stage 1	-	-	-	-	-	-	979	896	0	0	899	-
Stage 2	-	-	-	-	-	-	979	899	0	0	895	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1539	-	-	963	892	-	-	891	1090
Mov Cap-2 Maneuver	-	-	-	-	-	-	963	892	-	-	891	-
Stage 1	-	-	-	-	-	-	978	895	-	-	899	-
Stage 2	-	-	-	-	-	-	972	899	-	-	894	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.7	0	8.8	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	963	1540	-	-	1539	-	-	1056
HCM Lane V/C Ratio	0.007	0.001	-	-	-	-	-	0.007
HCM Control Delay (s)	8.8	7.3	0	-	0	-	-	8.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	24	0	2	0	2	11	9	0	0
Future Vol, veh/h	0	0	0	24	0	2	0	2	11	9	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	31	0	3	0	3	14	12	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	3	0	0	1	0	0	-	66	1	74	65	-
Stage 1	-	-	-	-	-	-	-	1	-	64	64	-
Stage 2	-	-	-	-	-	-	-	65	-	10	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1538	-	-	1540	-	-	0	829	1078	921	830	0
Stage 1	-	-	-	-	-	-	0	899	-	952	846	0
Stage 2	-	-	-	-	-	-	0	845	-	1016	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1538	-	-	1540	-	-	-	812	1078	892	813	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	812	-	892	813	-
Stage 1	-	-	-	-	-	-	-	899	-	952	829	-
Stage 2	-	-	-	-	-	-	-	828	-	1000	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	6.8	8.6	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1026	1538	-	-	1540	-	-	892
HCM Lane V/C Ratio	0.016	-	-	-	0.02	-	-	0.013
HCM Control Delay (s)	8.6	0	-	-	7.4	0	-	9.1
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	8	11	6	11	0	0	0	0	3	7	16
Future Vol, veh/h	0	8	11	6	11	0	0	0	0	3	7	16
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	10	14	8	14	0	0	0	0	4	9	20

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	24	0	0	47	54	14
Stage 1	-	-	-	-	-	-	30	30	-
Stage 2	-	-	-	-	-	-	17	24	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1604	-	0	968	813	1072
Stage 1	0	-	-	-	-	0	998	845	-
Stage 2	0	-	-	-	-	0	1011	850	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1604	-	-	963	0	1072
Mov Cap-2 Maneuver	-	-	-	-	-	-	963	0	-
Stage 1	-	-	-	-	-	-	998	0	-
Stage 2	-	-	-	-	-	-	1006	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	2.6	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1604	-	1053
HCM Lane V/C Ratio	-	-	0.005	-	0.031
HCM Control Delay (s)	-	-	7.3	0	8.5
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	0	0	6	2	10	10	2	0	0	0
Future Vol, veh/h	11	0	0	0	6	2	10	10	2	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	15	0	0	0	8	3	13	13	3	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	11	0	-	-	-	0	40	41	0
Stage 1	-	-	-	-	-	-	30	30	-
Stage 2	-	-	-	-	-	-	10	11	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1621	-	0	0	-	-	940	826	-
Stage 1	-	-	0	0	-	-	960	845	-
Stage 2	-	-	0	0	-	-	980	861	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1621	-	-	-	-	-	932	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	932	0	-
Stage 1	-	-	-	-	-	-	951	0	-
Stage 2	-	-	-	-	-	-	980	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.2	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	1621	-	-	-
HCM Lane V/C Ratio	-	0.009	-	-	-
HCM Control Delay (s)	-	7.2	0	-	-
HCM Lane LOS	-	A	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	7	0	0	0	6	0	0	0	1	5
Future Vol, veh/h	2	0	7	0	0	0	6	0	0	0	1	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	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	59	59	59	59	59	59	59	59	59	59	59	59
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	3	0	12	0	0	0	10	0	0	0	2	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2	0	0	12	0	0	19	14	-	-	20	2
Stage 1	-	-	-	-	-	-	12	12	-	-	2	-
Stage 2	-	-	-	-	-	-	7	2	-	-	18	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1539	-	-	1526	-	-	1000	884	0	0	878	1045
Stage 1	-	-	-	-	-	-	1014	890	0	0	898	-
Stage 2	-	-	-	-	-	-	1020	898	0	0	884	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1539	-	-	1526	-	-	989	882	-	-	876	1045
Mov Cap-2 Maneuver	-	-	-	-	-	-	989	882	-	-	876	-
Stage 1	-	-	-	-	-	-	1012	888	-	-	898	-
Stage 2	-	-	-	-	-	-	1010	898	-	-	882	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	8.7	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	989	1539	-	-	1526	-	-	1012
HCM Lane V/C Ratio	0.01	0.002	-	-	-	-	-	0.01
HCM Control Delay (s)	8.7	7.3	0	-	0	-	-	8.6
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

E – Cumulative (2030) Plus SVIP Project Traffic Conditions

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	0	0	0	7	0	7	0	0	23	4	0	0
Future Vol, veh/h	0	0	0	7	0	7	0	0	23	4	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	8	0	8	0	0	26	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	8	0	0	1	0	0	-	25	1	34	21	-
Stage 1	-	-	-	-	-	-	-	1	-	20	20	-
Stage 2	-	-	-	-	-	-	-	24	-	14	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1531	-	-	1540	-	-	0	872	1078	978	877	0
Stage 1	-	-	-	-	-	-	0	899	-	1004	883	0
Stage 2	-	-	-	-	-	-	0	879	-	1011	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1531	-	-	1540	-	-	-	868	1078	952	873	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	868	-	952	873	-
Stage 1	-	-	-	-	-	-	-	899	-	1004	879	-
Stage 2	-	-	-	-	-	-	-	875	-	987	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.7	8.4	8.8
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1078	1531	-	-	1540	-	-	952
HCM Lane V/C Ratio	0.024	-	-	-	0.005	-	-	0.005
HCM Control Delay (s)	8.4	0	-	-	7.3	0	-	8.8
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	16.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	14	13	47	16	0	0	0	0	503	10	9
Future Vol, veh/h	0	14	13	47	16	0	0	0	0	503	10	9
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	16	14	52	18	0	0	0	0	559	11	10

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	30	0	0			145	152	18
Stage 1	-	-	-	-	-	-			122	122	-
Stage 2	-	-	-	-	-	-			23	30	-
Critical Hdwy	-	-	-	4.1	-	-			6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-			5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-			3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1596	-	0			852	717	1066
Stage 1	0	-	-	-	-	0			908	770	-
Stage 2	0	-	-	-	-	0			1005	845	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	1596	-	-			824	0	1066
Mov Cap-2 Maneuver	-	-	-	-	-	-			824	0	-
Stage 1	-	-	-	-	-	-			908	0	-
Stage 2	-	-	-	-	-	-			972	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	5.5	18.9
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1596	-	827
HCM Lane V/C Ratio	-	-	0.033	-	0.701
HCM Control Delay (s)	-	-	7.3	0	18.9
HCM Lane LOS	-	-	A	A	C
HCM 95th %tile Q(veh)	-	-	0.1	-	5.9

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	487	0	0	53	107	4	29	206	0	0	0
Future Vol, veh/h	18	487	0	0	53	107	4	29	206	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	20	535	0	0	58	118	4	32	226	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	176	0	-	-	-	0	692	751	535
Stage 1	-	-	-	-	-	-	575	575	-
Stage 2	-	-	-	-	-	-	117	176	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1412	-	0	0	-	-	391	325	549
Stage 1	-	-	0	0	-	-	538	482	-
Stage 2	-	-	0	0	-	-	877	729	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1412	-	-	-	-	-	383	0	549
Mov Cap-2 Maneuver	-	-	-	-	-	-	383	0	-
Stage 1	-	-	-	-	-	-	527	0	-
Stage 2	-	-	-	-	-	-	877	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.3	0	17.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	545	1412	-	-	-
HCM Lane V/C Ratio	0.482	0.014	-	-	-
HCM Control Delay (s)	17.6	7.6	0	-	-
HCM Lane LOS	C	A	A	-	-
HCM 95th %tile Q(veh)	2.6	0	-	-	-

Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	687	0	8	0	0	0	1	0	0	0	0	152
Future Vol, veh/h	687	0	8	0	0	0	1	0	0	0	0	152
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	763	0	9	0	0	0	1	0	0	0	0	169

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	9	0	0	1617	1532	-	-	1536	1
Stage 1	-	-	-	-	-	-	1531	1531	-	-	1	-
Stage 2	-	-	-	-	-	-	86	1	-	-	1535	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1540	-	-	1530	-	-	84	118	0	0	117	1047
Stage 1	-	-	-	-	-	-	148	181	0	0	899	-
Stage 2	-	-	-	-	-	-	927	899	0	0	180	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1530	-	-	43	59	-	-	59	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	43	59	-	-	59	-
Stage 1	-	-	-	-	-	-	74	91	-	-	899	-
Stage 2	-	-	-	-	-	-	777	899	-	-	90	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	0	90.9	9.1
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	43	1540	-	-	1530	-	-	1047
HCM Lane V/C Ratio	0.026	0.496	-	-	-	-	-	0.161
HCM Control Delay (s)	90.9	9.6	0	-	0	-	-	9.1
HCM Lane LOS	F	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	2.9	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	26	0	1	0	0	10	10	0	0
Future Vol, veh/h	0	0	0	26	0	1	0	0	10	10	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	0	15	0	15	0	0	10	0	15
Mvmt Flow	0	0	0	29	0	1	0	0	11	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	1	0	0	-	60	1	66	60	-
Stage 1	-	-	-	-	-	-	-	1	-	59	59	-
Stage 2	-	-	-	-	-	-	-	59	-	7	1	-
Critical Hdwy	4.25	-	-	4.1	-	-	-	6.5	6.2	7.2	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Follow-up Hdwy	2.335	-	-	2.2	-	-	-	4	3.3	3.59	4	-
Pot Cap-1 Maneuver	1540	-	-	1635	-	-	0	835	1090	908	835	0
Stage 1	-	-	-	-	-	-	0	899	-	933	850	0
Stage 2	-	-	-	-	-	-	0	850	-	994	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1635	-	-	-	820	1090	886	820	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	820	-	886	820	-
Stage 1	-	-	-	-	-	-	-	899	-	933	835	-
Stage 2	-	-	-	-	-	-	-	835	-	984	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7	8.3	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1540	-	-	1635	-	-	886
HCM Lane V/C Ratio	0.01	-	-	-	0.018	-	-	0.013
HCM Control Delay (s)	8.3	0	-	-	7.2	0	-	9.1
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	10.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	5	15	181	14	0	0	0	0	132	9	13
Future Vol, veh/h	0	5	15	181	14	0	0	0	0	132	9	13
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	7	13	0	0	0	0	0	0	15	0
Mvmt Flow	0	6	17	201	16	0	0	0	0	147	10	14

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	23	0	0	433	441	16
Stage 1	-	-	-	-	-	-	418	418	-
Stage 2	-	-	-	-	-	-	15	23	-
Critical Hdwy	-	-	-	4.23	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.317	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1524	-	0	584	491	1069
Stage 1	0	-	-	-	-	0	669	569	-
Stage 2	0	-	-	-	-	0	1013	851	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1524	-	-	506	0	1069
Mov Cap-2 Maneuver	-	-	-	-	-	-	506	0	-
Stage 1	-	-	-	-	-	-	669	0	-
Stage 2	-	-	-	-	-	-	878	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	7.2	15
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1524	-	531
HCM Lane V/C Ratio	-	-	0.132	-	0.322
HCM Control Delay (s)	-	-	7.7	0	15
HCM Lane LOS	-	-	A	A	C
HCM 95th %tile Q(veh)	-	-	0.5	-	1.4

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	128	0	0	181	415	14	8	56	0	0	0
Future Vol, veh/h	13	128	0	0	181	415	14	8	56	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	8	0	0	0	15	15	0	15	0	0	0	0
Mvmt Flow	14	142	0	0	201	461	16	9	62	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	662	0	-	-	-	0	602	832	142
Stage 1	-	-	-	-	-	-	170	170	-
Stage 2	-	-	-	-	-	-	432	662	-
Critical Hdwy	4.18	-	-	-	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	2.272	-	-	-	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	899	-	0	0	-	-	466	291	911
Stage 1	-	-	0	0	-	-	865	734	-
Stage 2	-	-	0	0	-	-	659	440	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	899	-	-	-	-	-	458	0	911
Mov Cap-2 Maneuver	-	-	-	-	-	-	458	0	-
Stage 1	-	-	-	-	-	-	850	0	-
Stage 2	-	-	-	-	-	-	659	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.8	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	761	899	-	-	-
HCM Lane V/C Ratio	0.114	0.016	-	-	-
HCM Control Delay (s)	10.3	9.1	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-	-

Intersection	
Int Delay, s/veh	12.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↰			↱	
Traffic Vol, veh/h	184	0	2	0	0	0	6	0	0	0	1	592
Future Vol, veh/h	184	0	2	0	0	0	6	0	0	0	1	592
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	17	0	15	15	0	0
Mvmt Flow	204	0	2	0	0	0	7	0	0	0	1	658

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	2	0	0	740	410	-	-	411	1
Stage 1	-	-	-	-	-	-	409	409	-	-	1	-
Stage 2	-	-	-	-	-	-	331	1	-	-	410	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.27	6.5	-	-	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.653	4	-	-	4	3.3
Pot Cap-1 Maneuver	1540	-	-	1539	-	-	314	534	0	0	534	1090
Stage 1	-	-	-	-	-	-	591	600	0	0	899	-
Stage 2	-	-	-	-	-	-	652	899	0	0	599	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1539	-	-	111	463	-	-	463	1090
Mov Cap-2 Maneuver	-	-	-	-	-	-	111	463	-	-	463	-
Stage 1	-	-	-	-	-	-	512	520	-	-	899	-
Stage 2	-	-	-	-	-	-	258	899	-	-	519	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	7.6	0	39.5	13.3
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	111	1540	-	-	1539	-	-	1088
HCM Lane V/C Ratio	0.06	0.133	-	-	-	-	-	0.606
HCM Control Delay (s)	39.5	7.7	0	-	0	-	-	13.3
HCM Lane LOS	E	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.5	-	-	0	-	-	4.3

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	24	0	2	0	2	11	9	0	0
Future Vol, veh/h	0	0	0	24	0	2	0	2	11	9	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	31	0	3	0	3	14	12	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	3	0	0	1	0	0	-	66	1	74	65	-
Stage 1	-	-	-	-	-	-	-	1	-	64	64	-
Stage 2	-	-	-	-	-	-	-	65	-	10	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1538	-	-	1540	-	-	0	829	1078	921	830	0
Stage 1	-	-	-	-	-	-	0	899	-	952	846	0
Stage 2	-	-	-	-	-	-	0	845	-	1016	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1538	-	-	1540	-	-	-	812	1078	892	813	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	812	-	892	813	-
Stage 1	-	-	-	-	-	-	-	899	-	952	829	-
Stage 2	-	-	-	-	-	-	-	828	-	1000	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	6.8	8.6	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1026	1538	-	-	1540	-	-	892
HCM Lane V/C Ratio	0.016	-	-	-	0.02	-	-	0.013
HCM Control Delay (s)	8.6	0	-	-	7.4	0	-	9.1
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	8	11	15	11	0	0	0	0	9	7	16
Future Vol, veh/h	0	8	11	15	11	0	0	0	0	9	7	16
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	10	14	19	14	0	0	0	0	11	9	20

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	24	0	0	69	76	14
Stage 1	-	-	-	-	-	-	52	52	-
Stage 2	-	-	-	-	-	-	17	24	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1604	-	0	941	790	1072
Stage 1	0	-	-	-	-	0	976	827	-
Stage 2	0	-	-	-	-	0	1011	850	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1604	-	-	930	0	1072
Mov Cap-2 Maneuver	-	-	-	-	-	-	930	0	-
Stage 1	-	-	-	-	-	-	976	0	-
Stage 2	-	-	-	-	-	-	999	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.2	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1604	-	1016
HCM Lane V/C Ratio	-	-	0.012	-	0.039
HCM Control Delay (s)	-	-	7.3	0	8.7
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	6	0	0	15	23	10	10	5	0	0	0
Future Vol, veh/h	11	6	0	0	15	23	10	10	5	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	15	8	0	0	20	31	13	13	7	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	51	0	-	-	-	0	74	89	8
Stage 1	-	-	-	-	-	-	38	38	-
Stage 2	-	-	-	-	-	-	36	51	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1568	-	0	0	-	-	898	777	1080
Stage 1	-	-	0	0	-	-	952	838	-
Stage 2	-	-	0	0	-	-	954	827	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1568	-	-	-	-	-	889	0	1080
Mov Cap-2 Maneuver	-	-	-	-	-	-	889	0	-
Stage 1	-	-	-	-	-	-	942	0	-
Stage 2	-	-	-	-	-	-	954	0	-

Approach	EB	WB	NB
HCM Control Delay, s	4.7	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	945	1568	-	-	-
HCM Lane V/C Ratio	0.035	0.009	-	-	-
HCM Control Delay (s)	8.9	7.3	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	7	0	0	0	6	0	0	0	1	34
Future Vol, veh/h	11	0	7	0	0	0	6	0	0	0	1	34
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	59	59	59	59	59	59	59	59	59	59	59	59
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	19	0	12	0	0	0	10	0	0	0	2	58

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2	0	0	12	0	0	76	46	-	-	52	2
Stage 1	-	-	-	-	-	-	44	44	-	-	2	-
Stage 2	-	-	-	-	-	-	32	2	-	-	50	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1539	-	-	1526	-	-	919	850	0	0	843	1045
Stage 1	-	-	-	-	-	-	975	862	0	0	898	-
Stage 2	-	-	-	-	-	-	990	898	0	0	857	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1539	-	-	1526	-	-	859	840	-	-	833	1045
Mov Cap-2 Maneuver	-	-	-	-	-	-	859	840	-	-	833	-
Stage 1	-	-	-	-	-	-	963	852	-	-	898	-
Stage 2	-	-	-	-	-	-	934	898	-	-	847	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0	9.2	8.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	859	1539	-	-	1526	-	-	1037
HCM Lane V/C Ratio	0.012	0.012	-	-	-	-	-	0.057
HCM Control Delay (s)	9.2	7.4	0	-	0	-	-	8.7
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

F – Cumulative (2030) Plus Betabel Project Traffic Conditions

Intersection	
Int Delay, s/veh	9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	294	0	7	0	0	312	4	0	0
Future Vol, veh/h	0	0	0	294	0	7	0	0	312	4	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	327	0	8	0	0	347	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	8	0	0	1	0	0	-	663	1	833	659	-
Stage 1	-	-	-	-	-	-	-	1	-	658	658	-
Stage 2	-	-	-	-	-	-	-	662	-	175	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1531	-	-	1540	-	-	0	384	1078	290	386	0
Stage 1	-	-	-	-	-	-	0	899	-	457	464	0
Stage 2	-	-	-	-	-	-	0	462	-	832	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1531	-	-	1540	-	-	-	302	1078	164	304	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	302	-	164	304	-
Stage 1	-	-	-	-	-	-	-	899	-	457	365	-
Stage 2	-	-	-	-	-	-	-	364	-	564	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.8	9.9	27.6
HCM LOS			A	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1078	1531	-	-	1540	-	-	164
HCM Lane V/C Ratio	0.322	-	-	-	0.212	-	-	0.027
HCM Control Delay (s)	9.9	0	-	-	8	0	-	27.6
HCM Lane LOS	A	A	-	-	A	A	-	D
HCM 95th %tile Q(veh)	1.4	0	-	-	0.8	-	-	0.1

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	159	158	1	160	0	0	0	0	21	10	153
Future Vol, veh/h	0	159	158	1	160	0	0	0	0	21	10	153
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	177	176	1	178	0	0	0	0	23	11	170

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	353	0	0	445	533	178
Stage 1	-	-	-	-	-	-	180	180	-
Stage 2	-	-	-	-	-	-	265	353	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1217	-	0	574	435	870
Stage 1	0	-	-	-	-	0	856	727	-
Stage 2	0	-	-	-	-	0	784	609	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1217	-	-	573	0	870
Mov Cap-2 Maneuver	-	-	-	-	-	-	573	0	-
Stage 1	-	-	-	-	-	-	856	0	-
Stage 2	-	-	-	-	-	-	783	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1217	-	819
HCM Lane V/C Ratio	-	-	0.001	-	0.25
HCM Control Delay (s)	-	-	8	0	10.9
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0	-	1

Intersection	
Int Delay, s/veh	11.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	5	0	0	7	2	148	29	4	0	0	0
Future Vol, veh/h	163	5	0	0	7	2	148	29	4	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	179	5	0	0	8	2	163	32	4	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	10	0	-	-	-	0	372	373	5
Stage 1	-	-	-	-	-	-	363	363	-
Stage 2	-	-	-	-	-	-	9	10	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1623	-	0	0	-	-	604	537	1084
Stage 1	-	-	0	0	-	-	676	602	-
Stage 2	-	-	0	0	-	-	981	862	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1623	-	-	-	-	-	537	0	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	537	0	-
Stage 1	-	-	-	-	-	-	601	0	-
Stage 2	-	-	-	-	-	-	981	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.3	0	15.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	544	1623	-	-	-
HCM Lane V/C Ratio	0.366	0.11	-	-	-
HCM Control Delay (s)	15.4	7.5	0	-	-
HCM Lane LOS	C	A	A	-	-
HCM 95th %tile Q(veh)	1.7	0.4	-	-	-

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	4	0	8	0	0	0	1	0	0	0	0	2
Future Vol, veh/h	4	0	8	0	0	0	1	0	0	0	0	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	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	4	0	9	0	0	0	1	0	0	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	9	0	0	15	14	-	-	18	1
Stage 1	-	-	-	-	-	-	13	13	-	-	1	-
Stage 2	-	-	-	-	-	-	2	1	-	-	17	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1540	-	-	1530	-	-	1006	884	0	0	880	1047
Stage 1	-	-	-	-	-	-	1013	889	0	0	899	-
Stage 2	-	-	-	-	-	-	1026	899	0	0	885	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1530	-	-	1002	881	-	-	877	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	1002	881	-	-	877	-
Stage 1	-	-	-	-	-	-	1010	886	-	-	899	-
Stage 2	-	-	-	-	-	-	1024	899	-	-	882	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0	8.6	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1002	1540	-	-	1530	-	-	1047
HCM Lane V/C Ratio	0.001	0.003	-	-	-	-	-	0.002
HCM Control Delay (s)	8.6	7.3	0	-	0	-	-	8.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	400	0	1	0	0	269	10	0	0
Future Vol, veh/h	0	0	0	400	0	1	0	0	269	10	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	0	15	0	15	0	0	10	0	15
Mvmt Flow	0	0	0	444	0	1	0	0	299	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	1	0	0	-	890	1	1040	890	-
Stage 1	-	-	-	-	-	-	-	1	-	889	889	-
Stage 2	-	-	-	-	-	-	-	889	-	151	1	-
Critical Hdwy	4.25	-	-	4.1	-	-	-	6.5	6.2	7.2	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Follow-up Hdwy	2.335	-	-	2.2	-	-	-	4	3.3	3.59	4	-
Pot Cap-1 Maneuver	1540	-	-	1635	-	-	0	284	1090	201	284	0
Stage 1	-	-	-	-	-	-	0	899	-	327	364	0
Stage 2	-	-	-	-	-	-	0	364	-	833	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1635	-	-	-	207	1090	115	207	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	207	-	115	207	-
Stage 1	-	-	-	-	-	-	-	899	-	327	265	-
Stage 2	-	-	-	-	-	-	-	265	-	605	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8	9.5	39.6
HCM LOS			A	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1540	-	-	1635	-	-	115
HCM Lane V/C Ratio	0.274	-	-	-	0.272	-	-	0.097
HCM Control Delay (s)	9.5	0	-	-	8	0	-	39.6
HCM Lane LOS	A	A	-	-	A	A	-	E
HCM 95th %tile Q(veh)	1.1	0	-	-	1.1	-	-	0.3

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	135	145	8	201	0	0	0	0	4	9	200
Future Vol, veh/h	0	135	145	8	201	0	0	0	0	4	9	200
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	7	13	0	0	0	0	0	0	15	0
Mvmt Flow	0	150	161	9	223	0	0	0	0	4	10	222

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	311	0	0	472	552	223
Stage 1	-	-	-	-	-	-	241	241	-
Stage 2	-	-	-	-	-	-	231	311	-
Critical Hdwy	-	-	-	4.23	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.317	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1190	-	0	554	424	822
Stage 1	0	-	-	-	-	0	804	683	-
Stage 2	0	-	-	-	-	0	812	635	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1190	-	-	549	0	822
Mov Cap-2 Maneuver	-	-	-	-	-	-	549	0	-
Stage 1	-	-	-	-	-	-	804	0	-
Stage 2	-	-	-	-	-	-	805	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.3	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1190	-	814
HCM Lane V/C Ratio	-	-	0.007	-	0.291
HCM Control Delay (s)	-	-	8	0	11.2
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0	-	1.2

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	143	0	0	0	8	2	201	8	2	0	0	0
Future Vol, veh/h	143	0	0	0	8	2	201	8	2	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	8	0	0	0	15	15	0	15	0	0	0	0
Mvmt Flow	159	0	0	0	9	2	223	9	2	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	11	0	-	-	-	0	328	329	0
Stage 1	-	-	-	-	-	-	318	318	-
Stage 2	-	-	-	-	-	-	10	11	-
Critical Hdwy	4.18	-	-	-	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	2.272	-	-	-	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	1570	-	0	0	-	-	671	569	-
Stage 1	-	-	0	0	-	-	742	631	-
Stage 2	-	-	0	0	-	-	1018	861	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1570	-	-	-	-	-	603	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	603	0	-
Stage 1	-	-	-	-	-	-	667	0	-
Stage 2	-	-	-	-	-	-	1018	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.6	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	1570	-	-	-
HCM Lane V/C Ratio	-	0.101	-	-	-
HCM Control Delay (s)	-	7.6	0	-	-
HCM Lane LOS	-	A	A	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-	-

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	2	0	0	0	6	0	0	0	1	6
Future Vol, veh/h	2	0	2	0	0	0	6	0	0	0	1	6
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	17	0	15	15	0	0
Mvmt Flow	2	0	2	0	0	0	7	0	0	0	1	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	2	0	0	10	6	-	-	7	1
Stage 1	-	-	-	-	-	-	5	5	-	-	1	-
Stage 2	-	-	-	-	-	-	5	1	-	-	6	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.27	6.5	-	-	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.653	4	-	-	4	3.3
Pot Cap-1 Maneuver	1540	-	-	1539	-	-	971	893	0	0	892	1090
Stage 1	-	-	-	-	-	-	979	896	0	0	899	-
Stage 2	-	-	-	-	-	-	979	899	0	0	895	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1539	-	-	963	892	-	-	891	1090
Mov Cap-2 Maneuver	-	-	-	-	-	-	963	892	-	-	891	-
Stage 1	-	-	-	-	-	-	978	895	-	-	899	-
Stage 2	-	-	-	-	-	-	972	899	-	-	894	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.7	0	8.8	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	963	1540	-	-	1539	-	-	1056
HCM Lane V/C Ratio	0.007	0.001	-	-	-	-	-	0.007
HCM Control Delay (s)	8.8	7.3	0	-	0	-	-	8.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	424	0	2	0	2	297	9	0	0
Future Vol, veh/h	0	0	0	424	0	2	0	2	297	9	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	551	0	3	0	3	386	12	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	3	0	0	1	0	0	-	1106	1	1300	1105	-
Stage 1	-	-	-	-	-	-	-	1	-	1104	1104	-
Stage 2	-	-	-	-	-	-	-	1105	-	196	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1538	-	-	1540	-	-	0	212	1078	140	213	0
Stage 1	-	-	-	-	-	-	0	899	-	258	289	0
Stage 2	-	-	-	-	-	-	0	289	-	810	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1538	-	-	1540	-	-	-	136	1078	64	137	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	136	-	64	137	-
Stage 1	-	-	-	-	-	-	-	899	-	258	186	-
Stage 2	-	-	-	-	-	-	-	186	-	519	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.6	10.6	73.4
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1030	1538	-	-	1540	-	-	64
HCM Lane V/C Ratio	0.377	-	-	-	0.358	-	-	0.183
HCM Control Delay (s)	10.6	0	-	-	8.6	0	-	73.4
HCM Lane LOS	B	A	-	-	A	A	-	F
HCM 95th %tile Q(veh)	1.8	0	-	-	1.6	-	-	0.6

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	151	154	6	211	0	0	0	0	3	7	216
Future Vol, veh/h	0	151	154	6	211	0	0	0	0	3	7	216
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	189	193	8	264	0	0	0	0	4	9	270

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	382	0	0	566	662	264
Stage 1	-	-	-	-	-	-	280	280	-
Stage 2	-	-	-	-	-	-	286	382	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1188	-	0	489	366	780
Stage 1	0	-	-	-	-	0	772	656	-
Stage 2	0	-	-	-	-	0	767	591	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1188	-	-	485	0	780
Mov Cap-2 Maneuver	-	-	-	-	-	-	485	0	-
Stage 1	-	-	-	-	-	-	772	0	-
Stage 2	-	-	-	-	-	-	761	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.2	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1188	-	774
HCM Lane V/C Ratio	-	-	0.006	-	0.365
HCM Control Delay (s)	-	-	8.1	0	12.3
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0	-	1.7

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	154	0	0	0	6	2	210	10	2	0	0	0
Future Vol, veh/h	154	0	0	0	6	2	210	10	2	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	205	0	0	0	8	3	280	13	3	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	11	0	-	-	-	0	420	421	0
Stage 1	-	-	-	-	-	-	410	410	-
Stage 2	-	-	-	-	-	-	10	11	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1621	-	0	0	-	-	566	505	-
Stage 1	-	-	0	0	-	-	643	574	-
Stage 2	-	-	0	0	-	-	980	861	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1621	-	-	-	-	-	495	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	495	0	-
Stage 1	-	-	-	-	-	-	562	0	-
Stage 2	-	-	-	-	-	-	980	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.5	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	-	1621	-	-	-
HCM Lane V/C Ratio	-	0.127	-	-	-
HCM Control Delay (s)	-	7.5	0	-	-
HCM Lane LOS	-	A	A	-	-
HCM 95th %tile Q(veh)	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	7	0	0	0	6	0	0	0	1	5
Future Vol, veh/h	2	0	7	0	0	0	6	0	0	0	1	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	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	59	59	59	59	59	59	59	59	59	59	59	59
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	3	0	12	0	0	0	10	0	0	0	2	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2	0	0	12	0	0	19	14	-	-	20	2
Stage 1	-	-	-	-	-	-	12	12	-	-	2	-
Stage 2	-	-	-	-	-	-	7	2	-	-	18	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1539	-	-	1526	-	-	1000	884	0	0	878	1045
Stage 1	-	-	-	-	-	-	1014	890	0	0	898	-
Stage 2	-	-	-	-	-	-	1020	898	0	0	884	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1539	-	-	1526	-	-	989	882	-	-	876	1045
Mov Cap-2 Maneuver	-	-	-	-	-	-	989	882	-	-	876	-
Stage 1	-	-	-	-	-	-	1012	888	-	-	898	-
Stage 2	-	-	-	-	-	-	1010	898	-	-	882	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	8.7	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	989	1539	-	-	1526	-	-	1012
HCM Lane V/C Ratio	0.01	0.002	-	-	-	-	-	0.01
HCM Control Delay (s)	8.7	7.3	0	-	0	-	-	8.6
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

G - Cumulative (2030) Plus Betabel Plus SVIP Project Traffic Conditions

Intersection	
Int Delay, s/veh	9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	294	0	7	0	0	312	4	0	0
Future Vol, veh/h	0	0	0	294	0	7	0	0	312	4	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	327	0	8	0	0	347	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	8	0	0	1	0	0	-	663	1	833	659	-
Stage 1	-	-	-	-	-	-	-	1	-	658	658	-
Stage 2	-	-	-	-	-	-	-	662	-	175	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1531	-	-	1540	-	-	0	384	1078	290	386	0
Stage 1	-	-	-	-	-	-	0	899	-	457	464	0
Stage 2	-	-	-	-	-	-	0	462	-	832	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1531	-	-	1540	-	-	-	302	1078	164	304	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	302	-	164	304	-
Stage 1	-	-	-	-	-	-	-	899	-	457	365	-
Stage 2	-	-	-	-	-	-	-	364	-	564	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.8	9.9	27.6
HCM LOS			A	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1078	1531	-	-	1540	-	-	164
HCM Lane V/C Ratio	0.322	-	-	-	0.212	-	-	0.027
HCM Control Delay (s)	9.9	0	-	-	8	0	-	27.6
HCM Lane LOS	A	A	-	-	A	A	-	D
HCM 95th %tile Q(veh)	1.4	0	-	-	0.8	-	-	0.1

Intersection	
Int Delay, s/veh	116.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	159	158	47	160	0	0	0	0	503	10	153
Future Vol, veh/h	0	159	158	47	160	0	0	0	0	503	10	153
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	177	176	52	178	0	0	0	0	559	11	170

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	353	0	0	547	635	178
Stage 1	-	-	-	-	-	-	282	282	-
Stage 2	-	-	-	-	-	-	265	353	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1217	-	0	~ 502	379	870
Stage 1	0	-	-	-	-	0	770	655	-
Stage 2	0	-	-	-	-	0	784	609	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1217	-	-	~ 478	0	870
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 478	0	-
Stage 1	-	-	-	-	-	-	770	0	-
Stage 2	-	-	-	-	-	-	747	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	1.8	206.9
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1217	-	534
HCM Lane V/C Ratio	-	-	0.043	-	1.386
HCM Control Delay (s)	-	-	8.1	0	206.9
HCM Lane LOS	-	-	A	A	F
HCM 95th %tile Q(veh)	-	-	0.1	-	33.9

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

Intersection	
Int Delay, s/veh	61.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	487	0	0	53	107	148	29	206	0	0	0
Future Vol, veh/h	163	487	0	0	53	107	148	29	206	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	179	535	0	0	58	118	163	32	226	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	176	0	-	-	-	0	1010	1069	535
Stage 1	-	-	-	-	-	-	893	893	-
Stage 2	-	-	-	-	-	-	117	176	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1412	-	0	0	-	-	251	210	549
Stage 1	-	-	0	0	-	-	379	343	-
Stage 2	-	-	0	0	-	-	877	729	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1412	-	-	-	-	-	206	0	549
Mov Cap-2 Maneuver	-	-	-	-	-	-	206	0	-
Stage 1	-	-	-	-	-	-	311	0	-
Stage 2	-	-	-	-	-	-	877	0	-

Approach	EB	WB	NB
HCM Control Delay, s	2	0	188.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	324	1412	-	-	-
HCM Lane V/C Ratio	1.299	0.127	-	-	-
HCM Control Delay (s)	188.4	7.9	0	-	-
HCM Lane LOS	F	A	A	-	-
HCM 95th %tile Q(veh)	20	0.4	-	-	-

Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	687	0	8	0	0	0	1	0	0	0	0	152
Future Vol, veh/h	687	0	8	0	0	0	1	0	0	0	0	152
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	763	0	9	0	0	0	1	0	0	0	0	169

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	9	0	0	1617	1532	-	-	1536	1
Stage 1	-	-	-	-	-	-	1531	1531	-	-	1	-
Stage 2	-	-	-	-	-	-	86	1	-	-	1535	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1540	-	-	1530	-	-	84	118	0	0	117	1047
Stage 1	-	-	-	-	-	-	148	181	0	0	899	-
Stage 2	-	-	-	-	-	-	927	899	0	0	180	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1530	-	-	43	59	-	-	59	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	43	59	-	-	59	-
Stage 1	-	-	-	-	-	-	74	91	-	-	899	-
Stage 2	-	-	-	-	-	-	777	899	-	-	90	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	0	90.9	9.1
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	43	1540	-	-	1530	-	-	1047
HCM Lane V/C Ratio	0.026	0.496	-	-	-	-	-	0.161
HCM Control Delay (s)	90.9	9.6	0	-	0	-	-	9.1
HCM Lane LOS	F	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	2.9	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	400	0	1	0	0	269	10	0	0
Future Vol, veh/h	0	0	0	400	0	1	0	0	269	10	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	0	15	0	15	0	0	10	0	15
Mvmt Flow	0	0	0	444	0	1	0	0	299	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	1	0	0	-	890	1	1040	890	-
Stage 1	-	-	-	-	-	-	-	1	-	889	889	-
Stage 2	-	-	-	-	-	-	-	889	-	151	1	-
Critical Hdwy	4.25	-	-	4.1	-	-	-	6.5	6.2	7.2	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Follow-up Hdwy	2.335	-	-	2.2	-	-	-	4	3.3	3.59	4	-
Pot Cap-1 Maneuver	1540	-	-	1635	-	-	0	284	1090	201	284	0
Stage 1	-	-	-	-	-	-	0	899	-	327	364	0
Stage 2	-	-	-	-	-	-	0	364	-	833	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1635	-	-	-	207	1090	115	207	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	207	-	115	207	-
Stage 1	-	-	-	-	-	-	-	899	-	327	265	-
Stage 2	-	-	-	-	-	-	-	265	-	605	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8	9.5	39.6
HCM LOS			A	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1540	-	-	1635	-	-	115
HCM Lane V/C Ratio	0.274	-	-	-	0.272	-	-	0.097
HCM Control Delay (s)	9.5	0	-	-	8	0	-	39.6
HCM Lane LOS	A	A	-	-	A	A	-	E
HCM 95th %tile Q(veh)	1.1	0	-	-	1.1	-	-	0.3

Intersection	
Int Delay, s/veh	16.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	135	145	181	201	0	0	0	0	132	9	200
Future Vol, veh/h	0	135	145	181	201	0	0	0	0	132	9	200
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	7	13	0	0	0	0	0	0	15	0
Mvmt Flow	0	150	161	201	223	0	0	0	0	147	10	222

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	311	0	0	856	936	223
Stage 1	-	-	-	-	-	-	625	625	-
Stage 2	-	-	-	-	-	-	231	311	-
Critical Hdwy	-	-	-	4.23	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.317	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1190	-	0	331	252	822
Stage 1	0	-	-	-	-	0	537	458	-
Stage 2	0	-	-	-	-	0	812	635	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1190	-	-	267	0	822
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	0	-
Stage 1	-	-	-	-	-	-	537	0	-
Stage 2	-	-	-	-	-	-	655	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.1	43
HCM LOS			E

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1190	-	450
HCM Lane V/C Ratio	-	-	0.169	-	0.842
HCM Control Delay (s)	-	-	8.6	0	43
HCM Lane LOS	-	-	A	A	E
HCM 95th %tile Q(veh)	-	-	0.6	-	8.3

Intersection	
Int Delay, s/veh	20.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	143	128	0	0	181	415	201	8	56	0	0	0
Future Vol, veh/h	143	128	0	0	181	415	201	8	56	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	8	0	0	0	15	15	0	15	0	0	0	0
Mvmt Flow	159	142	0	0	201	461	223	9	62	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	662	0	-	-	-	0	892	1122	142
Stage 1	-	-	-	-	-	-	460	460	-
Stage 2	-	-	-	-	-	-	432	662	-
Critical Hdwy	4.18	-	-	-	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	2.272	-	-	-	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	899	-	0	0	-	-	315	195	911
Stage 1	-	-	0	0	-	-	640	544	-
Stage 2	-	-	0	0	-	-	659	440	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	899	-	-	-	-	-	255	0	911
Mov Cap-2 Maneuver	-	-	-	-	-	-	255	0	-
Stage 1	-	-	-	-	-	-	517	0	-
Stage 2	-	-	-	-	-	-	659	0	-

Approach	EB	WB	NB
HCM Control Delay, s	5.2	0	83.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	302	899	-	-	-
HCM Lane V/C Ratio	0.975	0.177	-	-	-
HCM Control Delay (s)	83.8	9.9	0	-	-
HCM Lane LOS	F	A	A	-	-
HCM 95th %tile Q(veh)	10	0.6	-	-	-

Intersection	
Int Delay, s/veh	12.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	184	0	2	0	0	0	6	0	0	0	1	592
Future Vol, veh/h	184	0	2	0	0	0	6	0	0	0	1	592
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	17	0	15	15	0	0
Mvmt Flow	204	0	2	0	0	0	7	0	0	0	1	658

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	2	0	0	740	410	-	-	411	1
Stage 1	-	-	-	-	-	-	409	409	-	-	1	-
Stage 2	-	-	-	-	-	-	331	1	-	-	410	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.27	6.5	-	-	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.653	4	-	-	4	3.3
Pot Cap-1 Maneuver	1540	-	-	1539	-	-	314	534	0	0	534	1090
Stage 1	-	-	-	-	-	-	591	600	0	0	899	-
Stage 2	-	-	-	-	-	-	652	899	0	0	599	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1539	-	-	111	463	-	-	463	1090
Mov Cap-2 Maneuver	-	-	-	-	-	-	111	463	-	-	463	-
Stage 1	-	-	-	-	-	-	512	520	-	-	899	-
Stage 2	-	-	-	-	-	-	258	899	-	-	519	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	7.6	0	39.5	13.3
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	111	1540	-	-	1539	-	-	1088
HCM Lane V/C Ratio	0.06	0.133	-	-	-	-	-	0.606
HCM Control Delay (s)	39.5	7.7	0	-	0	-	-	13.3
HCM Lane LOS	E	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.5	-	-	0	-	-	4.3

Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	424	0	2	0	2	297	9	0	0
Future Vol, veh/h	0	0	0	424	0	2	0	2	297	9	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	551	0	3	0	3	386	12	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	3	0	0	1	0	0	-	1106	1	1300	1105	-
Stage 1	-	-	-	-	-	-	-	1	-	1104	1104	-
Stage 2	-	-	-	-	-	-	-	1105	-	196	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1538	-	-	1540	-	-	0	212	1078	140	213	0
Stage 1	-	-	-	-	-	-	0	899	-	258	289	0
Stage 2	-	-	-	-	-	-	0	289	-	810	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1538	-	-	1540	-	-	-	136	1078	64	137	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	136	-	64	137	-
Stage 1	-	-	-	-	-	-	-	899	-	258	186	-
Stage 2	-	-	-	-	-	-	-	186	-	519	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.6	10.6	73.4
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1030	1538	-	-	1540	-	-	64
HCM Lane V/C Ratio	0.377	-	-	-	0.358	-	-	0.183
HCM Control Delay (s)	10.6	0	-	-	8.6	0	-	73.4
HCM Lane LOS	B	A	-	-	A	A	-	F
HCM 95th %tile Q(veh)	1.8	0	-	-	1.6	-	-	0.6

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	151	154	15	211	0	0	0	0	9	7	216
Future Vol, veh/h	0	151	154	15	211	0	0	0	0	9	7	216
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	189	193	19	264	0	0	0	0	11	9	270

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	382	0	0	588	684	264
Stage 1	-	-	-	-	-	-	302	302	-
Stage 2	-	-	-	-	-	-	286	382	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1188	-	0	475	355	780
Stage 1	0	-	-	-	-	0	755	641	-
Stage 2	0	-	-	-	-	0	767	591	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1188	-	-	466	0	780
Mov Cap-2 Maneuver	-	-	-	-	-	-	466	0	-
Stage 1	-	-	-	-	-	-	755	0	-
Stage 2	-	-	-	-	-	-	752	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.5	12.6
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1188	-	760
HCM Lane V/C Ratio	-	-	0.016	-	0.382
HCM Control Delay (s)	-	-	8.1	0	12.6
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0	-	1.8

Intersection	
Int Delay, s/veh	15.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	154	6	0	0	15	23	210	10	5	0	0	0
Future Vol, veh/h	154	6	0	0	15	23	210	10	5	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	205	8	0	0	20	31	280	13	7	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	51	0	-	-	-	0	454	469	8
Stage 1	-	-	-	-	-	-	418	418	-
Stage 2	-	-	-	-	-	-	36	51	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1568	-	0	0	-	-	541	473	1080
Stage 1	-	-	0	0	-	-	637	569	-
Stage 2	-	-	0	0	-	-	954	827	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1568	-	-	-	-	-	470	0	1080
Mov Cap-2 Maneuver	-	-	-	-	-	-	470	0	-
Stage 1	-	-	-	-	-	-	554	0	-
Stage 2	-	-	-	-	-	-	954	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.4	0	24.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	476	1568	-	-	-
HCM Lane V/C Ratio	0.63	0.131	-	-	-
HCM Control Delay (s)	24.6	7.6	0	-	-
HCM Lane LOS	C	A	A	-	-
HCM 95th %tile Q(veh)	4.3	0.5	-	-	-

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	7	0	0	0	6	0	0	0	1	34
Future Vol, veh/h	11	0	7	0	0	0	6	0	0	0	1	34
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	59	59	59	59	59	59	59	59	59	59	59	59
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	19	0	12	0	0	0	10	0	0	0	2	58

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2	0	0	12	0	0	76	46	-	-	52	2
Stage 1	-	-	-	-	-	-	44	44	-	-	2	-
Stage 2	-	-	-	-	-	-	32	2	-	-	50	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1539	-	-	1526	-	-	919	850	0	0	843	1045
Stage 1	-	-	-	-	-	-	975	862	0	0	898	-
Stage 2	-	-	-	-	-	-	990	898	0	0	857	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1539	-	-	1526	-	-	859	840	-	-	833	1045
Mov Cap-2 Maneuver	-	-	-	-	-	-	859	840	-	-	833	-
Stage 1	-	-	-	-	-	-	963	852	-	-	898	-
Stage 2	-	-	-	-	-	-	934	898	-	-	847	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0	9.2	8.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	859	1539	-	-	1526	-	-	1037
HCM Lane V/C Ratio	0.012	0.012	-	-	-	-	-	0.057
HCM Control Delay (s)	9.2	7.4	0	-	0	-	-	8.7
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

H – Cumulative (2030) Plus Betabel Plus SVIP Project Traffic Conditions + Improvements

Intersection	
Int Delay, s/veh	9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	294	0	7	0	0	312	4	0	0
Future Vol, veh/h	0	0	0	294	0	7	0	0	312	4	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	327	0	8	0	0	347	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	8	0	0	1	0	0	-	663	1	833	659	-
Stage 1	-	-	-	-	-	-	-	1	-	658	658	-
Stage 2	-	-	-	-	-	-	-	662	-	175	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1531	-	-	1540	-	-	0	384	1078	290	386	0
Stage 1	-	-	-	-	-	-	0	899	-	457	464	0
Stage 2	-	-	-	-	-	-	0	462	-	832	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1531	-	-	1540	-	-	-	302	1078	164	304	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	302	-	164	304	-
Stage 1	-	-	-	-	-	-	-	899	-	457	365	-
Stage 2	-	-	-	-	-	-	-	364	-	564	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.8	9.9	27.6
HCM LOS			A	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1078	1531	-	-	1540	-	-	164
HCM Lane V/C Ratio	0.322	-	-	-	0.212	-	-	0.027
HCM Control Delay (s)	9.9	0	-	-	8	0	-	27.6
HCM Lane LOS	A	A	-	-	A	A	-	D
HCM 95th %tile Q(veh)	1.4	0	-	-	0.8	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	159	158	47	160	0	0	0	0	503	10	153
Future Vol, veh/h	0	159	158	47	160	0	0	0	0	503	10	153
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	-	-	-	-	-	-	-	-	-	150	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	177	176	52	178	0	0	0	0	559	11	170

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	353	0	0	547	635	178
Stage 1	-	-	-	-	-	-	282	282	-
Stage 2	-	-	-	-	-	-	265	353	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1217	-	0	~ 502	379	870
Stage 1	0	-	-	-	-	0	770	655	-
Stage 2	0	-	-	-	-	0	784	609	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1217	-	-	~ 478	0	870
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 478	0	-
Stage 1	-	-	-	-	-	-	770	0	-
Stage 2	-	-	-	-	-	-	747	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	1.8	
HCM LOS			-

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1217	-	478	-	870
HCM Lane V/C Ratio	-	-	0.043	-	1.169	-	0.195
HCM Control Delay (s)	-	-	8.1	0	124.2	-	10.1
HCM Lane LOS	-	-	A	A	F	-	B
HCM 95th %tile Q(veh)	-	-	0.1	-	20.4	-	0.7

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

Intersection	
Int Delay, s/veh	12.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	487	0	0	53	107	148	29	206	0	0	0
Future Vol, veh/h	163	487	0	0	53	107	148	29	206	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	179	535	0	0	58	118	163	32	226	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	176	0	-	-	-	0	1010	1069	535
Stage 1	-	-	-	-	-	-	893	893	-
Stage 2	-	-	-	-	-	-	117	176	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1412	-	0	0	-	-	251	210	549
Stage 1	-	-	0	0	-	-	379	343	-
Stage 2	-	-	0	0	-	-	877	729	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1412	-	-	-	-	-	206	0	549
Mov Cap-2 Maneuver	-	-	-	-	-	-	206	0	-
Stage 1	-	-	-	-	-	-	311	0	-
Stage 2	-	-	-	-	-	-	877	0	-

Approach	EB	WB	NB
HCM Control Delay, s	2	0	36.4
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	206	549	1412	-	-	-
HCM Lane V/C Ratio	0.79	0.47	0.127	-	-	-
HCM Control Delay (s)	67	17.2	7.9	0	-	-
HCM Lane LOS	F	C	A	A	-	-
HCM 95th %tile Q(veh)	5.6	2.5	0.4	-	-	-

Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	687	0	8	0	0	0	1	0	0	0	0	152
Future Vol, veh/h	687	0	8	0	0	0	1	0	0	0	0	152
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	763	0	9	0	0	0	1	0	0	0	0	169

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	9	0	0	1617	1532	-	-	1536	1
Stage 1	-	-	-	-	-	-	1531	1531	-	-	1	-
Stage 2	-	-	-	-	-	-	86	1	-	-	1535	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1540	-	-	1530	-	-	84	118	0	0	117	1047
Stage 1	-	-	-	-	-	-	148	181	0	0	899	-
Stage 2	-	-	-	-	-	-	927	899	0	0	180	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1530	-	-	43	59	-	-	59	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	43	59	-	-	59	-
Stage 1	-	-	-	-	-	-	74	91	-	-	899	-
Stage 2	-	-	-	-	-	-	777	899	-	-	90	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	0	90.9	9.1
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	43	1540	-	-	1530	-	-	1047
HCM Lane V/C Ratio	0.026	0.496	-	-	-	-	-	0.161
HCM Control Delay (s)	90.9	9.6	0	-	0	-	-	9.1
HCM Lane LOS	F	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	2.9	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	400	0	1	0	0	269	10	0	0
Future Vol, veh/h	0	0	0	400	0	1	0	0	269	10	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	90	90	90	90	92
Heavy Vehicles, %	15	15	15	0	15	0	15	0	0	10	0	15
Mvmt Flow	0	0	0	444	0	1	0	0	299	11	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	1	0	0	-	890	1	1040	890	-
Stage 1	-	-	-	-	-	-	-	1	-	889	889	-
Stage 2	-	-	-	-	-	-	-	889	-	151	1	-
Critical Hdwy	4.25	-	-	4.1	-	-	-	6.5	6.2	7.2	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.2	5.5	-
Follow-up Hdwy	2.335	-	-	2.2	-	-	-	4	3.3	3.59	4	-
Pot Cap-1 Maneuver	1540	-	-	1635	-	-	0	284	1090	201	284	0
Stage 1	-	-	-	-	-	-	0	899	-	327	364	0
Stage 2	-	-	-	-	-	-	0	364	-	833	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1635	-	-	-	207	1090	115	207	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	207	-	115	207	-
Stage 1	-	-	-	-	-	-	-	899	-	327	265	-
Stage 2	-	-	-	-	-	-	-	265	-	605	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8	9.5	39.6
HCM LOS			A	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1540	-	-	1635	-	-	115
HCM Lane V/C Ratio	0.274	-	-	-	0.272	-	-	0.097
HCM Control Delay (s)	9.5	0	-	-	8	0	-	39.6
HCM Lane LOS	A	A	-	-	A	A	-	E
HCM 95th %tile Q(veh)	1.1	0	-	-	1.1	-	-	0.3

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	135	145	181	201	0	0	0	0	132	9	200
Future Vol, veh/h	0	135	145	181	201	0	0	0	0	132	9	200
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	-	-	-	-	-	-	-	-	-	150	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	7	13	0	0	0	0	0	0	15	0
Mvmt Flow	0	150	161	201	223	0	0	0	0	147	10	222

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	311	0	0	856	936	223
Stage 1	-	-	-	-	-	-	625	625	-
Stage 2	-	-	-	-	-	-	231	311	-
Critical Hdwy	-	-	-	4.23	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.317	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1190	-	0	331	252	822
Stage 1	0	-	-	-	-	0	537	458	-
Stage 2	0	-	-	-	-	0	812	635	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1190	-	-	267	0	822
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	0	-
Stage 1	-	-	-	-	-	-	537	0	-
Stage 2	-	-	-	-	-	-	655	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	4.1	
HCM LOS			-

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1190	-	267	-	822
HCM Lane V/C Ratio	-	-	0.169	-	0.549	-	0.27
HCM Control Delay (s)	-	-	8.6	0	33.8	-	11
HCM Lane LOS	-	-	A	A	D	-	B
HCM 95th %tile Q(veh)	-	-	0.6	-	3	-	1.1

Intersection	
Int Delay, s/veh	14.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	143	128	0	0	181	415	201	8	56	0	0	0
Future Vol, veh/h	143	128	0	0	181	415	201	8	56	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	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	8	0	0	0	15	15	0	15	0	0	0	0
Mvmt Flow	159	142	0	0	201	461	223	9	62	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	662	0	-	-	-	0	892	1122	142
Stage 1	-	-	-	-	-	-	460	460	-
Stage 2	-	-	-	-	-	-	432	662	-
Critical Hdwy	4.18	-	-	-	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	2.272	-	-	-	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	899	-	0	0	-	-	315	195	911
Stage 1	-	-	0	0	-	-	640	544	-
Stage 2	-	-	0	0	-	-	659	440	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	899	-	-	-	-	-	255	0	911
Mov Cap-2 Maneuver	-	-	-	-	-	-	255	0	-
Stage 1	-	-	-	-	-	-	517	0	-
Stage 2	-	-	-	-	-	-	659	0	-

Approach	EB	WB	NB
HCM Control Delay, s	5.2	0	55.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	255	911	899	-	-	-
HCM Lane V/C Ratio	0.876	0.078	0.177	-	-	-
HCM Control Delay (s)	70.8	9.3	9.9	0	-	-
HCM Lane LOS	F	A	A	A	-	-
HCM 95th %tile Q(veh)	7.4	0.3	0.6	-	-	-

Intersection	
Int Delay, s/veh	12.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	184	0	2	0	0	0	6	0	0	0	1	592
Future Vol, veh/h	184	0	2	0	0	0	6	0	0	0	1	592
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	15	15	0	15	15	15	17	0	15	15	0	0
Mvmt Flow	204	0	2	0	0	0	7	0	0	0	1	658

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	2	0	0	740	410	-	-	411	1
Stage 1	-	-	-	-	-	-	409	409	-	-	1	-
Stage 2	-	-	-	-	-	-	331	1	-	-	410	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.27	6.5	-	-	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.653	4	-	-	4	3.3
Pot Cap-1 Maneuver	1540	-	-	1539	-	-	314	534	0	0	534	1090
Stage 1	-	-	-	-	-	-	591	600	0	0	899	-
Stage 2	-	-	-	-	-	-	652	899	0	0	599	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1539	-	-	111	463	-	-	463	1090
Mov Cap-2 Maneuver	-	-	-	-	-	-	111	463	-	-	463	-
Stage 1	-	-	-	-	-	-	512	520	-	-	899	-
Stage 2	-	-	-	-	-	-	258	899	-	-	519	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	7.6	0	39.5	13.3
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	111	1540	-	-	1539	-	-	1088
HCM Lane V/C Ratio	0.06	0.133	-	-	-	-	-	0.606
HCM Control Delay (s)	39.5	7.7	0	-	0	-	-	13.3
HCM Lane LOS	E	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.5	-	-	0	-	-	4.3

Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	424	0	2	0	2	297	9	0	0
Future Vol, veh/h	0	0	0	424	0	2	0	2	297	9	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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	15	15	15	15	15	0	15	0	4	0	0	15
Mvmt Flow	0	0	0	551	0	3	0	3	386	12	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	3	0	0	1	0	0	-	1106	1	1300	1105	-
Stage 1	-	-	-	-	-	-	-	1	-	1104	1104	-
Stage 2	-	-	-	-	-	-	-	1105	-	196	1	-
Critical Hdwy	4.25	-	-	4.25	-	-	-	6.5	6.24	7.1	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	-	4	3.336	3.5	4	-
Pot Cap-1 Maneuver	1538	-	-	1540	-	-	0	212	1078	140	213	0
Stage 1	-	-	-	-	-	-	0	899	-	258	289	0
Stage 2	-	-	-	-	-	-	0	289	-	810	899	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1538	-	-	1540	-	-	-	136	1078	64	137	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	136	-	64	137	-
Stage 1	-	-	-	-	-	-	-	899	-	258	186	-
Stage 2	-	-	-	-	-	-	-	186	-	519	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.6	10.6	73.4
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1030	1538	-	-	1540	-	-	64
HCM Lane V/C Ratio	0.377	-	-	-	0.358	-	-	0.183
HCM Control Delay (s)	10.6	0	-	-	8.6	0	-	73.4
HCM Lane LOS	B	A	-	-	A	A	-	F
HCM 95th %tile Q(veh)	1.8	0	-	-	1.6	-	-	0.6

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	151	154	15	211	0	0	0	0	9	7	216
Future Vol, veh/h	0	151	154	15	211	0	0	0	0	9	7	216
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	-	-	-	-	-	-	-	-	-	150	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	8	0	14	0	0	0	0	0	15	0
Mvmt Flow	0	189	193	19	264	0	0	0	0	11	9	270

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	382	0	0	588	684	264
Stage 1	-	-	-	-	-	-	302	302	-
Stage 2	-	-	-	-	-	-	286	382	-
Critical Hdwy	-	-	-	4.1	-	-	6.4	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.65	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.135	3.3
Pot Cap-1 Maneuver	0	-	-	1188	-	0	475	355	780
Stage 1	0	-	-	-	-	0	755	641	-
Stage 2	0	-	-	-	-	0	767	591	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1188	-	-	466	0	780
Mov Cap-2 Maneuver	-	-	-	-	-	-	466	0	-
Stage 1	-	-	-	-	-	-	755	0	-
Stage 2	-	-	-	-	-	-	752	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.5	
HCM LOS			-

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	1188	-	466	-	780
HCM Lane V/C Ratio	-	-	0.016	-	0.024	-	0.346
HCM Control Delay (s)	-	-	8.1	0	12.9	-	12
HCM Lane LOS	-	-	A	A	B	-	B
HCM 95th %tile Q(veh)	-	-	0	-	0.1	-	1.6

Intersection	
Int Delay, s/veh	14.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	154	6	0	0	15	23	210	10	5	0	0	0
Future Vol, veh/h	154	6	0	0	15	23	210	10	5	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	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	15	15	15	15	0	0	0	0
Mvmt Flow	205	8	0	0	20	31	280	13	7	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	51	0	-	-	-	0	454	469	8
Stage 1	-	-	-	-	-	-	418	418	-
Stage 2	-	-	-	-	-	-	36	51	-
Critical Hdwy	4.1	-	-	-	-	-	6.55	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.55	5.65	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.55	5.65	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.635	4.135	3.3
Pot Cap-1 Maneuver	1568	-	0	0	-	-	541	473	1080
Stage 1	-	-	0	0	-	-	637	569	-
Stage 2	-	-	0	0	-	-	954	827	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1568	-	-	-	-	-	470	0	1080
Mov Cap-2 Maneuver	-	-	-	-	-	-	470	0	-
Stage 1	-	-	-	-	-	-	554	0	-
Stage 2	-	-	-	-	-	-	954	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.4	0	22.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	470	1080	1568	-	-	-
HCM Lane V/C Ratio	0.596	0.019	0.131	-	-	-
HCM Control Delay (s)	23.3	8.4	7.6	0	-	-
HCM Lane LOS	C	A	A	A	-	-
HCM 95th %tile Q(veh)	3.8	0.1	0.5	-	-	-

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	7	0	0	0	6	0	0	0	1	34
Future Vol, veh/h	11	0	7	0	0	0	6	0	0	0	1	34
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	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	59	59	59	59	59	59	59	59	59	59	59	59
Heavy Vehicles, %	15	15	0	15	15	15	0	0	15	15	0	15
Mvmt Flow	19	0	12	0	0	0	10	0	0	0	2	58

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2	0	0	12	0	0	76	46	-	-	52	2
Stage 1	-	-	-	-	-	-	44	44	-	-	2	-
Stage 2	-	-	-	-	-	-	32	2	-	-	50	-
Critical Hdwy	4.25	-	-	4.25	-	-	7.1	6.5	-	-	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	-	5.5	-
Follow-up Hdwy	2.335	-	-	2.335	-	-	3.5	4	-	-	4	3.435
Pot Cap-1 Maneuver	1539	-	-	1526	-	-	919	850	0	0	843	1045
Stage 1	-	-	-	-	-	-	975	862	0	0	898	-
Stage 2	-	-	-	-	-	-	990	898	0	0	857	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1539	-	-	1526	-	-	859	840	-	-	833	1045
Mov Cap-2 Maneuver	-	-	-	-	-	-	859	840	-	-	833	-
Stage 1	-	-	-	-	-	-	963	852	-	-	898	-
Stage 2	-	-	-	-	-	-	934	898	-	-	847	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0	9.2	8.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	859	1539	-	-	1526	-	-	1037
HCM Lane V/C Ratio	0.012	0.012	-	-	-	-	-	0.057
HCM Control Delay (s)	9.2	7.4	0	-	0	-	-	8.7
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2