4.13 TRANSPORTATION AND CIRCULATION

This section presents the key assumptions, methods, and results of analysis for the transportation and circulation impacts of the proposed Project. This section is based on the *San Juan Oaks Specific Plan Draft Transportation Impact Analysis* (June 2015) prepared by Fehr & Peers. This report is included in Appendix I and contains the traffic counts, level of service (LOS) calculations, signal warrant analyses, and a detailed description of the traffic forecasting done for the analysis.

Development of the proposed Project is anticipated to occur over five phases with anticipated build-out occurring over a period of approximately ten years. The development phases are intended to occur sequentially, although portions of phases may occur concurrently. Development of the Project would occur in response to market demands and other factors, pursuant to the terms of the Development Agreement and other Project-related approvals and entitlements. Over the course of Project buildout, the County is expected to experience other growth in the area. A number of development projects have already been entitled for development throughout the County, with additional projects anticipated to be entitled and built during this time frame. As such other projects develop, traffic would increase on local and regional roadways and freeways. As regional development proceeds, transportation system improvements would be provided through local and regional funding programs, individual project mitigation, and improvements funded by the County, local agencies such as the Council of San Benito County Governments (SBCOG), and the California Department of Transportation (Caltrans). These improvement programs are discussed below in Section 4.13.1(h), "Cumulative Year without Project Conditions."

Although it is reasonable to expect that future roadway system improvements would be provided as planned, they remain largely dependent on fees generated by the development of the projects that would affect the roadways as well as Caltrans funding. The likelihood that planned developments will proceed as anticipated can be reasonably forecasted but not predicted with certainty. The same is true of the timing of these developments and the continued updating of the fees to reflect latest project cost estimates. Consequently, this traffic analysis evaluates development impacts under three conditions:

1. *Existing Conditions*: The Project is evaluated against a backdrop of existing, "on-the-ground" environmental conditions; that is, the impacts and mitigation measures for the Project are evaluated against the existing roadway system with existing traffic volumes.

2. *Background Conditions*: The Project is evaluated against the backdrop of existing volumes plus traffic from approved but not yet constructed and occupied developments in the area. This scenario does not include pending, not yet approved projects because such potential projects are not reasonably foreseeable.

3. *Cumulative Conditions*: The Project is evaluated against a backdrop that assumes future growth as well as known network improvement commitments. This future scenario is evaluated for the year 2035. This scenario includes pending (not yet approved) projects.

These three conditions represent the reasonably foreseeable range of possible roadway scenarios that could be in place as the Project develops. The Project's potential impacts on pedestrian, transit and bicycle facilities are also evaluated.

The study area for the traffic analysis includes eleven nearby roadway intersections and three freeway segments. The study intersections were selected utilizing industry-standard methodologies based on the Project trips, anticipated travel paths, and the number of trips the Project would add to intersections and freeway segments within proximity of the Project Site, as well as in consultation with San Benito County and Caltrans. The specific intersections and freeway segments included in the study area are listed in Section 4.13.1(b) (Existing Conditions), and in the analysis methodology portion of Section 4.13.3 (Impact Analysis).

4.13.1 Setting

a. Existing Roadway Network. The Project Site is generally located on the southwest corner of the Union Road/San Juan Oaks Drive intersection in unincorporated San Benito County west of the City of Hollister. State Route 156 (SR 156) and US 101 provide regional access to the site. Local access is provided by the following roadways: San Juan Canyon Road, San Juan Oaks Drive and Union Road. Descriptions of these roadways are presented below.

- *US 101* is a federal highway that extends north through San Jose and San Francisco and south through Salinas. Near the Project Site, US 101 travels in a north-south direction and SR 156 intersects with US 101 just south of the City of San Juan Bautista. In this area, US 101 has two mixed-flow lanes in each direction separated by a grassy median with a barrier. The speed limit on the segment of US 101 that is in the study area is 65 miles per hour (mph). The US 101 interchange at SR 156 provides local access to the Project Site via an interchange configuration.

- *SR 156* is a state highway that is located just north of the Project Site and continues south to merge with Highway 101, then continues south on the US 101 alignment, until it veers west in Prunedale onto its own alignment to SR 1. Near the Project Site, SR 156 travels in an east-west direction joining the Cities of San Juan Bautista and Hollister. In this area, there is one mixed-flow travel lane in each direction and the speed limit is 55 mph. This roadway provides access to all local access streets listed below.

- *Union Road* is an arterial road originating at SR 156 and provides a connection to the main Project Site access roads at San Juan Oaks Drive and San Justo Road. It continues to SR 25 and into the City of Hollister. The speed limit is 55 mph.

- *San Juan Oaks Drive* is a two-lane private local road beginning at Union Road in unincorporated San Benito County and terminating at the Existing San Juan Oaks Golf Club located in the southeast portion of the Project Site.

b. Existing Intersection Levels of Service. Consistent with industry standards, study area intersections included in this analysis were selected based on the Project trips anticipated travel paths and the number of trips the Project would add to intersections and freeway segments within proximity of the Project Site, in consultation with San Benito County and Caltrans. Additionally,

the study area selection criteria form Section III of Caltrans' *Guide for the Preparation of Traffic Impact Studies* (December 2002) was applied to determine study locations.[1] Based on this methodology, the following eleven intersections were selected as study locations for the proposed Project:

1. *SR 129-Chittenden Road and US 101 Southbound Ramps (Caltrans facility, unsignalized)*
2. *SR 129-Chittenden Road and US 101 Northbound Ramps (Caltrans facility, unsignalized)*
3. *The Alameda and SR 156-San Juan Road (Caltrans facility)*
4. *Bixby Road and SR 156-San Juan Road (Caltrans facility, unsignalized)*
5. *Union Road and SR 156-San Juan Road (Caltrans facility)*
6. *SR 156 and San Juan Road (Caltrans facility)*
7. *San Juan Hollister Road and San Juan Road (County facility, unsignalized)*
8. *Union Road and San Juan Oaks Drive (County facility, unsignalized)*
9. *Riverside Road and Union Road (County facility, unsignalized)*
10. *San Benito Street and Union Road (County facility)*
11. *SR 25-Airline Highway and Union Road (Caltrans facility)*

Traffic flow on roadway networks is most constrained at intersections during peak travel periods. The existing operations of the study intersections were evaluated for the highest one-hour volume during the weekday morning and evening peak periods. AM and PM peak-hour intersection turning movement counts were conducted in February 2014. Traffic counts are provided in Appendix I.

The operations of roadway facilities are described with the term level of service ("LOS"), a qualitative description of traffic flow based on such factors as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS A, operating conditions with little to no delay, to LOS F, when traffic volumes exceed the intersection capacity, stop-and-go conditions result. More complete definitions are shown in Table 4.13-1.

Congestion can also be measured by a volume-to-capacity ratio (V/C ratio) wherein the traffic volume for each segment is divided by the capacity of the segment.

As discussed below, the existing, adopted San Benito County General Plan (1992) Transportation Element adopts LOS C as the minimum standard of operation for County intersections and roadways. On September 11, 2012, the San Benito County Board of Supervisors voted to revise the policy language in the Draft 2035 General Plan Update, from a LOS standard of C to D, to adequately serve automobile traffic throughout the County while still promoting and accommodating non-auto modes of transportation as a part of the Draft 2035 General Plan Update (Policy C-1.12, Circulation Element).[2] This analysis compares impacts to signalized intersections using the County's existing General Plan LOS C standard of operation and the proposed Draft 2035 General Plan Update LOS D standard of operation. However, because the Draft 2035 General Plan Update LOS D standard has yet to be adopted by the County of San Benito, the LOS C standard has been used as the threshold of significance and as the basis for mitigation planning.

[1] *Generally Caltrans's TIA guidelines indicates that State facilities need to be evaluated if 1) over 100 peak hour trips are assigned to State facilities, 2) between 50 and 100 peak hour trips are assigned to facilities operating at LOS C/D, and 3) between 1 and 49 trips are assigned to State facilities operating at LOS E or F. As noted above, these parameters were used in this analysis to help determine the study area.*

[2] *The Caltrans standard of LOS C would continue to apply to Caltrans facilities.*

Table 4.13-1
Level of Service Definitions

LOS	Interpretation	Signalized Intersection Average Stopped Delay per vehicle (seconds)	Stop-Controlled Intersection Average Total Delay (seconds/vehicle)
A	Excellent operation. No vehicle waits longer than one red light and no approach phase is fully used.	≤ 10	≤ 10
B	Very good operation. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	> 10 and ≤ 20	> 10 and ≤ 15
C	Good operation. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	> 20 and ≤ 35	> 15 and ≤ 25
D	Fair operation. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developed lines, preventing excessive backups. High V/C ratios.	> 35 and ≤ 55	> 25 and ≤ 35
E	Poor operation. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles. High V/C ratios.	> 55 and ≤ 80	> 35 and ≤ 50
F	Failure. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths. High V/C ratios.	> 80	> 50

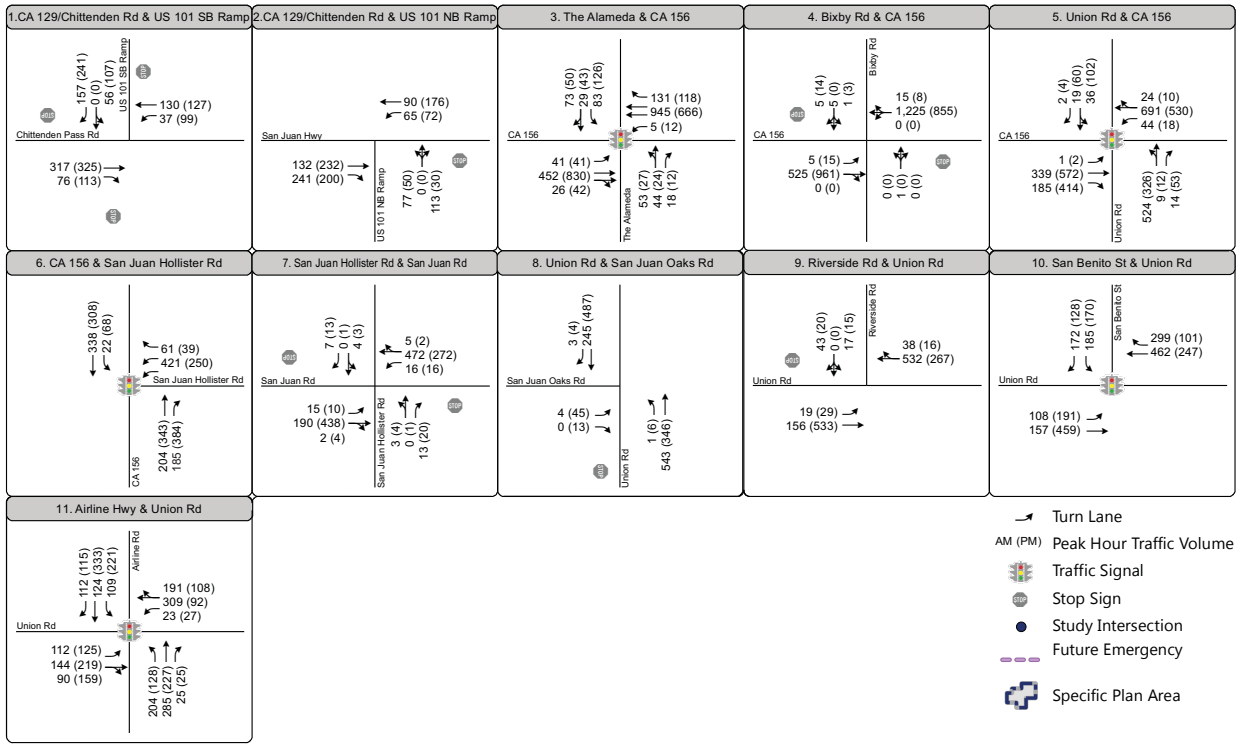
Source: Highway Capacity Manual, Special Report 209 and Transportation Research Board, 2010

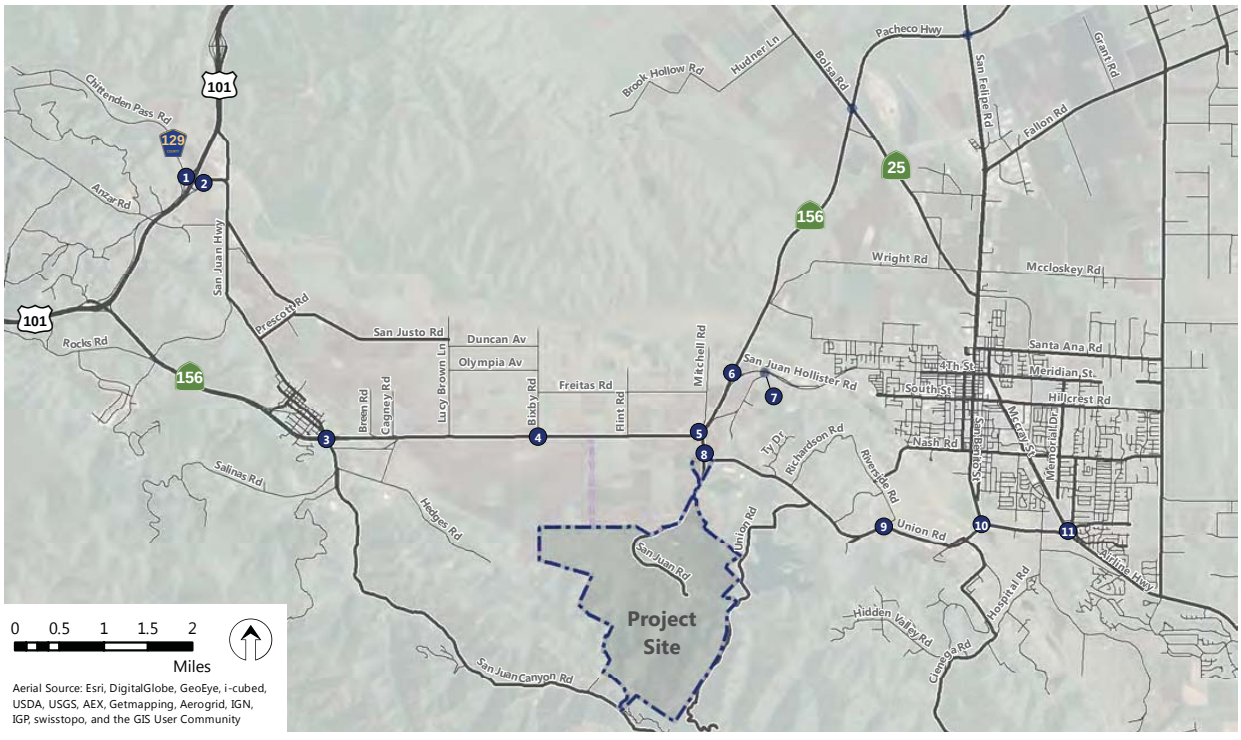
Figure 4.13-1 shows the intersection volumes for the AM and PM peak hours for the Existing (2014) Conditions. Table 4.13-2 provides the delay and LOS values for each study intersection under Existing (2014) Conditions. The LOS calculations were based on technical procedures documented in the 2010 Highway Capacity Manual, as described in Section 4.13.2, "Methodology and Significance Thresholds."

As shown in Table 4.13-2, under Existing Conditions, three of the eleven study intersections currently operate below the existing San Benito County and Caltrans LOS C standard during the AM and/or PM peak hour. These include:

4. *Bixby Road and SR 156 (AM and PM peak hour)*
5. *Union Road and SR 156-San Juan Road (AM peak hour only)*
11. *SR-25 Airline Highway and Union Road (AM and PM peak hour)*

Intersection No. 4 (Bixby Road and SR 156) currently operates below the Caltrans LOS C standard during the AM peak hour based on the southbound left turn movements in the AM peak hour for this side-street stop-controlled intersection.





Existing (2014) Peak Hour Intersection Volumes

Figure 4.13-1

Source: Fehr & Peers, 2015

Table 4.13-2
Existing (2014) Intersection Level Of Service

Intersection	Jurisdiction	Intersection Control	Peak Hour	Existing (Year 2014)	
				Delay[1]	LOS[2]
1. SR 129-Chittenden Road and US 101 Southbound Ramps	Caltrans	AWSC	AM	12.4	B
			PM	13.1	B
2. SR 129-Chittenden Road and US 101 Northbound Ramps	Caltrans	SSSC	AM	13.5	B
			PM	12.7	B
3. The Alameda and SR 156-San Juan Road	Caltrans	Signal	AM	19.2	B
			PM	18.2	B
4. Bixby Road and SR 156-San Juan Road	Caltrans	SSSC	AM	**55.7**	**F**
			PM	**27.4**	**D**
5. Union Road and SR 156-San Juan Road	Caltrans	Signal	AM	**47.8**	**D**
			PM	34.3	C
6. SR 156 and San Juan Road	Caltrans	Signal	AM	10.8	B
			PM	11.5	B
7. San Juan Hollister Road and San Juan Road	San Benito County	SSSC	AM	13.8	B
			PM	13.6	B
8. Union Road and San Juan Oaks Drive	San Benito County	SSSC	AM	16.6	C
			PM	18.7	C
9. Riverside Road and Union Road	San Benito County	SSSC	AM	15.4	B
			PM	13.6	B
10. San Benito Street and Union Road	San Benito County	Signal	AM	15.8	B
			PM	11.9	B
11. SR 25-Airline Highway and Union Road	Caltrans	Signal	AM	**52.5**	**D**
			PM	**36.3**	**D**

Source: Fehr & Peers, 2015 (see Appendix I)
Signal = signalized intersection, AWSC = all-way stop controlled intersection, SSSC = side-street stop controlled intersection
Bold text indicates unacceptable LOS.
[1] Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2010 HCM.
[2] LOS = Level of service. LOS calculations conducted using the Synchro 8.0 level of service analysis software package.

c. Existing Freeway Levels of Service. Three freeway segments were also evaluated in this analysis. These freeway segments include:

1. *US 101 between Matt Will Memorial Highway (SR 156) and County Road 11*
2. *US 101 between Matt Will Memorial Highway (SR 156) and Chittenden Road (SR 129)*
3. *US 101 between Chittenden Road (SR 129) and Hollister Road (SR 25)*

Freeway mainline segments were evaluated using the method presented in Caltrans' Guide for the Preparation of Traffic Impact Studies (December 2002). Caltrans' analysis procedure is based on the density of the traffic flow using methods described in the 2010 Highway Capacity Manual (HCM). Density is expressed in vehicles per mile per lane. The HCS+ software (Version 5.3) is used to calculate the freeway segment levels of service. The Santa Clara County Valley Transportation Authority (VTA) monitors freeway performance and operations for freeway

segments in Santa Clara County and the segments of US 101 in San Benito County every two years. The results for the US 101 freeway study segments were obtained from the most recent monitoring report (VTA Monitoring and Conformance Report 2012). The freeway peak hour volumes presented in this report were used to evaluate freeway operations. Table 4.13-3 presents the range of densities for freeway mainline segment LOS.

Table 4.13-3
Freeway Segment Level of Service Definitions

LOS	Interpretation	Density (passenger cars per mile per lane)
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 11
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	11.1 to 18.0
C	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	18.1 to 26.0
D	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	26.1 to 35.0
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	35.1 to 45.0
F	Represents a breakdown in flow.	> 45.0

Source: Highway Capacity Manual, Transportation Research Board, 2010

Table 4.13-4 summarizes existing freeway levels of service. Acceptable operations are defined by Caltrans as LOS C or better (existing standard). The results of the density calculations indicate that all but one of the study segments (Southbound US 101: San Benito/Santa Clara to SR-129 in the PM peak hour) operate at acceptable levels of service according to the Caltrans LOS C standard.

Table 4.13-4
Existing (2014) Freeway Segment Levels of Service

Freeway	From	To	Peak Hour	Density	LOS
Northbound US 101	Monterey/San Benito County Line	SR 156	AM	10.3	A
			PM	13.5	B
	SR 156	SR 129	AM	15.1	B
			PM	13.9	B
	SR 129	San Benito/Santa Clara County Line	AM	24.4	C
			PM	16.3	B
Southbound US 101	San Benito/Santa Clara County Line	SR 129	AM	16.3	B
			PM	**28.6**	**D**
	SR 129	SR 156	AM	11.7	B
			PM	17.4	B
	SR 156	Monterey/San Benito County Line	AM	9.9	A
			PM	16.1	B

Source: Fehr & Peers, 2015 (see Appendix I)
Bold indicates unacceptable LOS

d. Existing Pedestrian Facilities. In general, pedestrian facilities in San Benito County consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. There are currently no public streets outside of the Project Site included in the study area that have sidewalks, crosswalks or pedestrian signals; however, there are sidewalks located along the existing San Juan Oaks Golf Club private roads within the Project Site.

e. Existing Bicycle Facilities. Bikeway planning and design in California typically rely on guidelines and design standards established by Caltrans in the Highway Design Manual (Chapter 1000: Bikeway Planning and Design). Caltrans provides for three distinct types of bikeway facilities, as described below and shown on the accompanying figures.

- *Class I Bikeways (Bike Paths)* provide a completely separate right-of-way and are designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized. In general, bike paths serve corridors not served by streets and highways or where sufficient right-of-way exists to allow such facilities to be constructed away from the influence of parallel streets and vehicle conflicts.

- *Class II Bikeways (Bike Lanes)* are lanes for bicyclists generally adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are generally five (5) feet wide. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted.

- *Class III Bikeways (Bike Routes)* are designated by signs or pavement markings for shared use with pedestrians or motor vehicles, but have no separated bike right-of-way or lane striping. Bike routes serve either to: a) provide continuity to other bicycle facilities, or b) designate preferred routes through high demand corridors.

There are currently no dedicated bicycle facilities provided within the study area.

f. Existing Transit Service. The Project Site is located near the San Benito County Express transit network. Local buses serving the City of Hollister operate weekdays from 5:30 AM to 8:30 PM and weekends from 7:40 AM to 6:00 PM. However, no buses currently serve the Project Site. The closest County Express Blue Line and Green Line stop is located in the City of Hollister at Graf Road and Central Avenue and the closest Red Line stop is located at Sunset Drive and Memorial Drive. County Express inter-county bus service provides access to the nearby Cities of Gilroy and San Juan Bautista. The closest County Express bus stop to the Project Site is located in the City of Hollister at 4th Street and Miller Road. This service operates Monday through Friday between Hollister, San Juan Bautista and Gilroy during the school year only. Patrons can access both the Caltrain commuter rail station as well as the VTA bus system in Gilroy.

g. Background No Project Conditions. To evaluate the Project's potential impacts on Background traffic conditions, it is first necessary to develop a forecast of background traffic volumes in the study area under background conditions without the Project. This provides a basis against which to measure the Project's traffic impacts. For purposes of this analysis, Background No Project Conditions are defined as conditions prior to completion and occupancy of the proposed Project. Background conditions typically also reflect expected near term conditions. Specifically, traffic volumes for Background No Project Conditions comprise existing volumes plus

traffic generated by fully approved but not yet constructed and/or occupied development in the area.

Growth from Projects. For purposes of this analysis, vehicle trips from "approved but not yet built" and "not occupied" development projects in the study area were added to existing traffic volumes to develop the Background No Project Conditions and does not include projects that are pending but not yet approved. Background projects include 31 residential and six commercial and industrial developments in the City of Hollister. The above-referenced projects included in this study for Background Conditions analysis, and the trip generation of each, are listed in Appendix I.

Roadway Improvements. There are no funded roadway improvement projects in the study area that are expected to be completed in the Background Conditions. Therefore, the geometries and roadway network is assumed to be the same as those in the Existing Conditions.

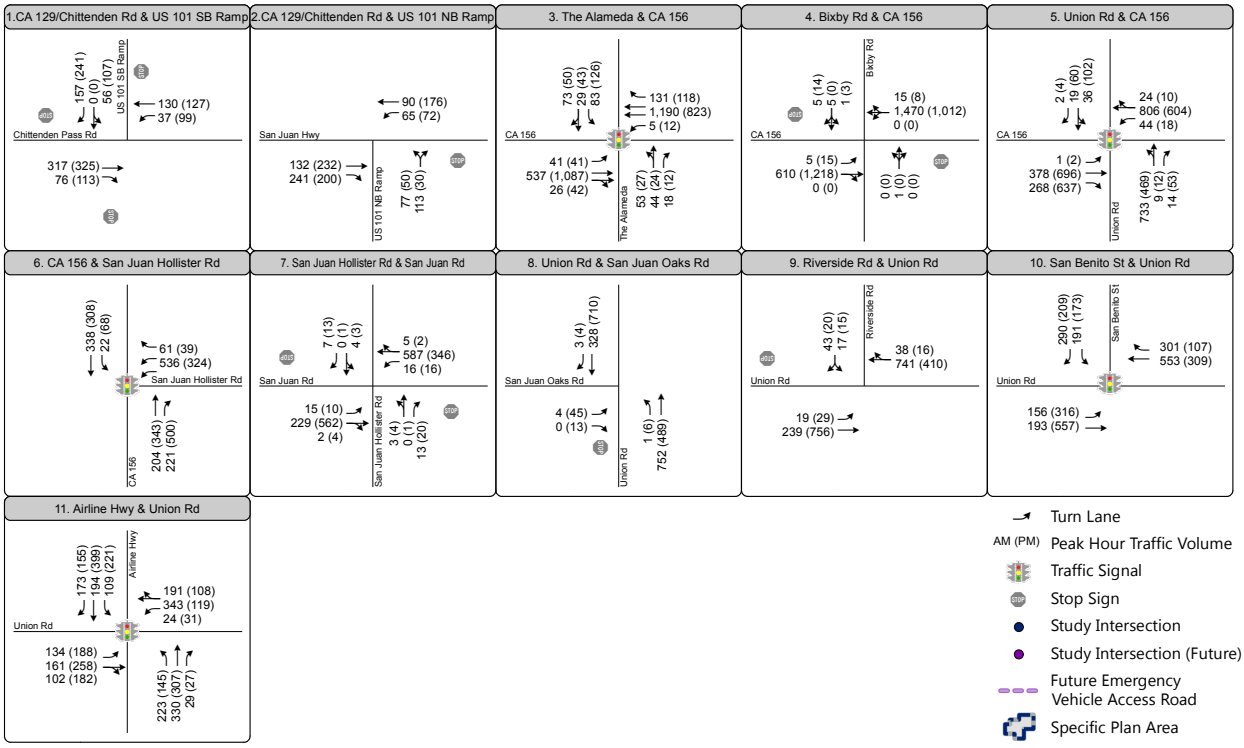
Peak Hour Intersection Level of Service. Based on the Background No Project Conditions forecasts, intersection level of service was calculated for each of the study intersections. Figure 4.13-2 shows the Background Conditions intersection volumes for the AM and PM peak hours. Table 4.13-5 summarizes the LOS results at each study intersection in Background Conditions.

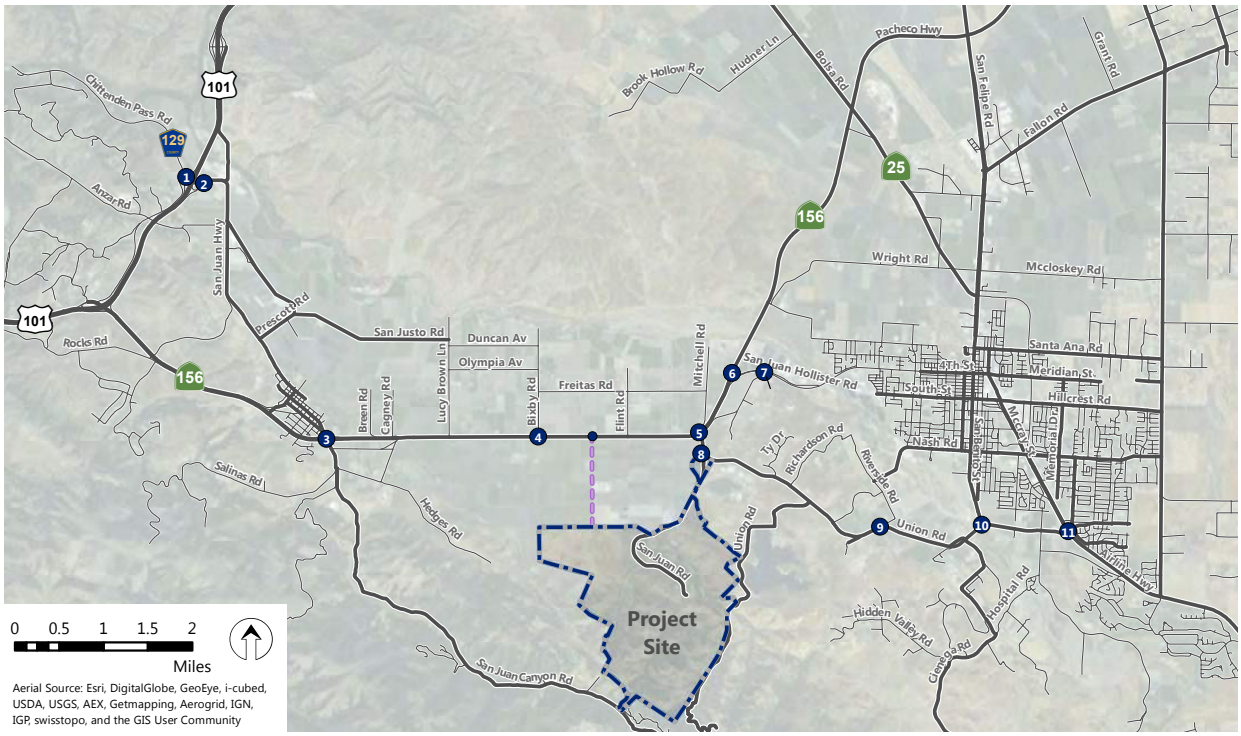
As shown in Table 4.13-5, under Background No Project Conditions, four of the eleven study intersections would operate below the existing San Benito County General Plan and Caltrans standard of LOS C during AM and/or PM peak hours. These include:

4. *Bixby Road & SR 156-San Juan Road (AM and PM peak hours)*
5. *Union Road & SR 156 (AM and PM peak hours)*
8. *Union Road and San Juan Oaks Drive (PM peak hour)*
11. *SR-25SR 25-Airline Highway & Union Road (AM and PM peak hour)*

Three of the eleven study intersections would operate below the proposed San Benito County Draft 2035 General Plan Update standard of LOS D for County facilities and Caltrans LOS C standard for Caltrans facilities during AM and/or PM peak hours. These include:

4. *Bixby Road & SR 156-San Juan Road (AM and PM peak hours)*
5. *Union Road & SR 156 (AM and PM peak hours)*
11. *SR 25-Airline Highway & Union Road (PM peak hour)*





Source: Fehr & Peers, 2015

Background Year Peak Hour Intersection Volumes

Figure 4.13-2

Table 4.13-5
Background Intersection Level Of Service

Intersection	Jurisdiction	Intersection Control	Peak Hour	Background No Project	
				Delay[1]	LOS[2]
1. SR 129-Chittenden Road and US 101 Southbound Ramps*	Caltrans	AWSC	AM	12.4	B
			PM	13.1	B
2. SR 129-Chittenden Road and US 101 Northbound Ramps*	Caltrans	SSSC	AM	13.5	B
			PM	12.7	B
3. The Alameda and SR 156-San Juan Road*	Caltrans	Signal	AM	19.5	B
			PM	18.8	B
4. Bixby Road and SR 156-San Juan Road*	Caltrans	SSSC	AM	**90.8**	**F**
			PM	**44.1**	**E**
5. Union Road and SR 156-San Juan Road*	Caltrans	Signal	AM	**133.2**	**F**
			PM	**67.6**	**E**
6. SR 156 and San Juan Road*	Caltrans	Signal	AM	11.7	B
			PM	12.6	B
7. San Juan Hollister Road and San Juan Road**	San Benito County	SSSC	AM	16.0	C
			PM	16.3	C
8. Union Road and San Juan Oaks Drive**	San Benito County	SSSC	AM	23.4	C
			PM	**33.1**	**D**
9. Riverside Road and Union Road**	San Benito County	SSSC	AM	21.8	C
			PM	18.9	C
10. San Benito Street and Union Road**	San Benito County	Signal	AM	17.8	B
			PM	13.4	B
11. SR 25-Airline Highway and Union Road*	Caltrans	Signal	AM	**96.4**	**F**
			PM	**58.9**	**E**

Source: Fehr & Peers, 2015 (see Appendix I)
Signal = signalized intersection, AWSC = all-way stop controlled intersection, SSSC = side-street stop controlled intersection
** Indicates a Caltrans intersection, ** indicates a San Benito County Intersection*
Bold text indicates unacceptable operations.
[1] Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2010 HCM.
[2] LOS = Level of service. LOS calculations conducted using the Synchro 8.0 level of service analysis software package.

Freeway Segment Level of Service. Freeway segment levels of service under Background Conditions without the Project are shown in Table 4.6-6. Two segments are projected to operate below the Caltrans standard of LOS C under Background No Project Conditions during the AM and/or PM peak hour. These include:

- *Northbound US-101: SR-129 to San Benito/Santa Clara County Line (AM peak hour).*
- *Southbound US-101: San Benito / Santa Clara County Line to SR-129 (PM peak hour).*

Table 4.13-6
Background Freeway Segment Levels of Service

Freeway	From	To	Background No Project		
			Peak Hour	Density	LOS
Northbound US 101	Monterey/San Benito County Line	SR 156	AM	10.9	A
			PM	14.3	B
	SR 156	SR 129	AM	16.0	B
			PM	14.8	B
	SR 129	San Benito/Santa Clara County Line	AM	**26.1**	**D**
			PM	17.3	B
Southbound US 101	San Benito/Santa Clara County Line	SR 129	AM	17.3	B
			PM	**31.0**	**D**
	SR 129	SR 156	AM	12.4	B
			PM	18.5	C
	SR 156	Monterey/San Benito County Line	AM	10.5	A
			PM	17.1	B

Source: Fehr & Peers, 2015 (see Appendix I)
Bold indicates unacceptable LOS

h. Cumulative No Project Conditions. To evaluate the Project's potential impacts on cumulative traffic conditions, it is first necessary to develop a forecast of cumulative traffic volumes in the study area under cumulative conditions without the Project. This provides a basis against which to measure the Project's traffic impacts. The year 2035 was selected for analysis based on the cumulative buildout condition assumed in the Association of Monterey Bay Area Governments (AMBAG) regional transportation demand model (October 2012). Although the Project itself is projected for completion by 2025, 2035 is used for traffic to capture the effects of growth from buildout consistent with available modeling. In addition, roadway infrastructure improvements are planned for a horizon year of 2035.

Ambient Growth. Traffic volumes under Cumulative No Project Conditions are based on the peak hour forecasts determined in collaboration with San Benito County staff and Caltrans. For all intersections in the study area, future volumes were developed by applying an annual growth factor of 2.0 percent per year. This growth rate was developed after reviewing the traffic projections from the AMBAG regional transportation demand model and the *San Benito Route 156 Improvement Project Draft Environmental Impact Report/Environmental Assessment* (Caltrans, July 2007).

For the purposes of this analysis, the methodology used to project cumulative growth is different from the approach used for background traffic projections. The background growth projections used available information on specified approved projects in the adjacent communities to reflect the anticipated near-term growth. To project the cumulative (20 year) traffic growth, traffic projections were developed using the 2035 AMBAG travel demand model with some supplemental information from the San Benito County Model. The 2035 AMBAG model captures regional, as well as local, land use changes that will impact future travel patterns in the area and traffic volumes on the highways serving the Project Site. Although the Project itself is projected for completion by 2025, 2035 is used for as the horizon traffic analysis year to capture the effects of growth from buildout consistent with available modeling.

Roadway Improvements. The Cumulative roadway network includes planned transportation improvements that have been identified within the San Benito County Transportation Impact Mitigation Fee (TIMF) Nexus Study dated March 2011 and Caltrans

planned improvements, and therefore assumed to be funded and constructed under Cumulative Conditions. The following roadway improvement projects are assumed to be in place under Cumulative No Project conditions. TIMF fees previously mentioned under Existing and Background conditions will contribute to the applicable projects listed below.

- *US 101 Widening – from two lanes to three lanes in each direction from SR 156 on- and off-ramp to the north;*
- *State Route 156 Widening – widen 5.2 miles of SR 156 from two lanes to a four-lane expressway and realign the route from The Alameda to 0.2 miles east of Fourth Street/Business Route 156;*
- *Airline Highway Widening (SR 25) – widen from two lanes to a four-lane expressway from Sunset Drive to Fairview Road;*
- *Highway 25 Widening (Phase I) – widen from a two-lane rural highway to a four-lane expressway from San Felipe Road to Hudner Lane*;
- *Union Road Construction – construct a four-lane arterial from SR 25 to Fairview Road;*
- *Union Road Widening (East) – widen to a four-lane arterial from San Benito Street to Airline Highway (SR 25);*
- *Union Road Widening (West) – widen to a four-lane arterial from SR 156 to San Benito Street.*

Peak Hour Intersection Level of Service. Based on Cumulative No Project forecasts, intersection level of service was calculated for each of the eleven study intersections. Figure 4.13-3 shows the Cumulative Conditions intersection volumes for the AM and PM peak hours. Table 4.13-7 summarizes the delay and associated LOS results at each study intersection.

As shown in Table 4.13-7, under Cumulative Conditions, four of the eleven study intersections would operate below the existing San Benito County General Plan standard of LOS C during AM and/or PM peak hours. These include:

1. *SR 129-Chittenden Road and US 101 Southbound Ramps (AM and PM peak hours)*
4. *Bixby Road and SR 156-San Juan Road (AM and PM peak hours)*
8. *Union Road and San Juan Oaks Drive (PM peak hour)*

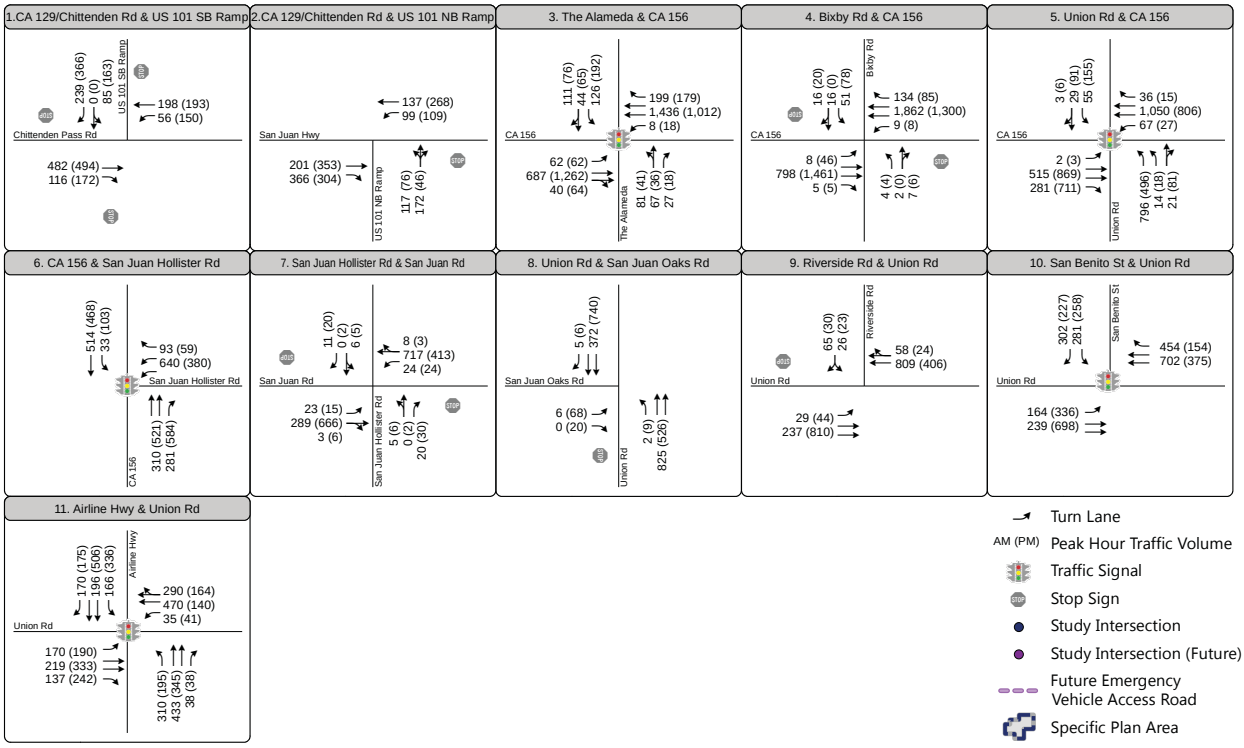
Under Cumulative Conditions, one of the eleven study intersections would operate below the proposed San Benito County Draft 2035 General Plan Update standard of LOS D during AM and PM peak hours:

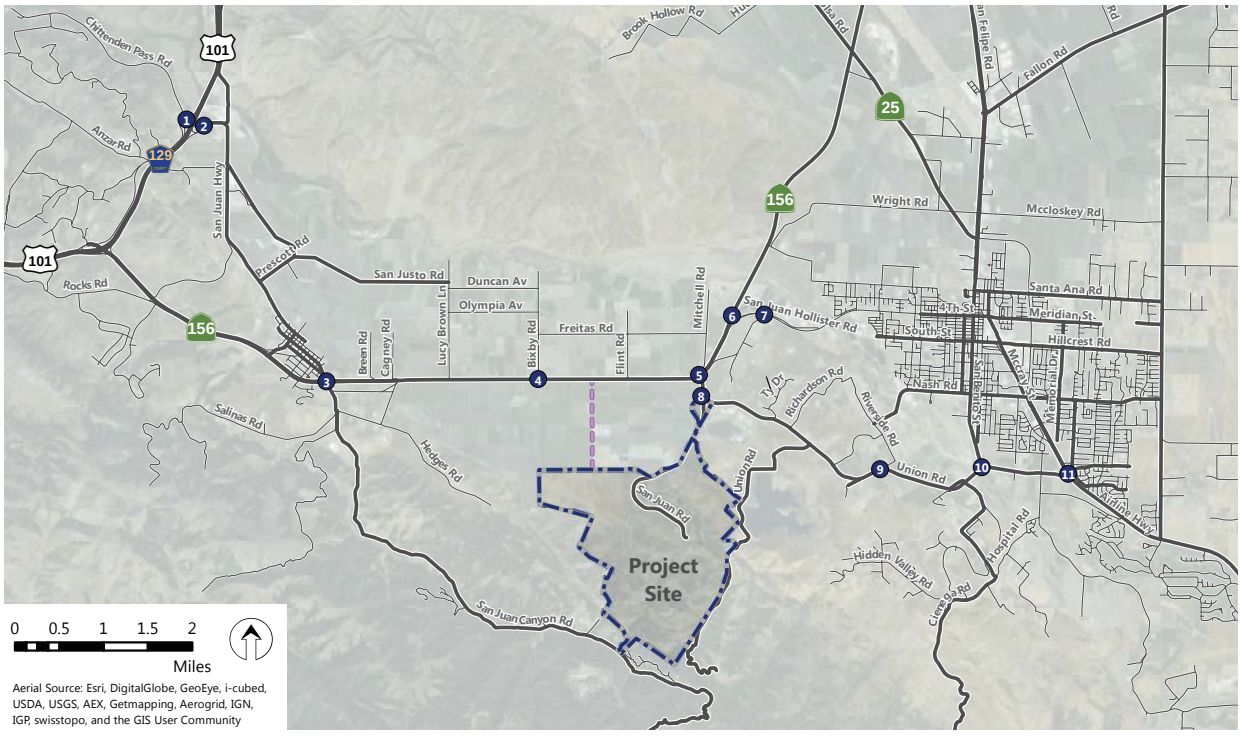
4. *Bixby Road and SR 156-San Juan Road (AM and PM peak hours)*

Table 4.13-7
Cumulative Intersection Level Of Service

Intersection	Jurisdiction	Intersection Control	Peak Hour	Cumulative No Project (Year 2035)	
				Delay[1]	LOS[2]
1. SR 129-Chittenden Road and US 101 Southbound Ramps	Caltrans	AWSC	AM	**34.0**	**D**
			PM	**33.8**	**D**
2. SR 129-Chittenden Road and US 101 Northbound Ramps	Caltrans	SSSC	AM	23.6	C
			PM	18.9	C
3. The Alameda and SR 156-San Juan Road	Caltrans	Signal	AM	26.4	C
			PM	26.8	C
4. Bixby Road and SR 156-San Juan Road	Caltrans	SSSC	AM	**>200.0**	**F**
			PM	**>200.0**	**F**
5. Union Road and SR 156-San Juan Road	Caltrans	Signal	AM	29.3	C
			PM	25.5	C
6. SR 156 and San Juan Road	Caltrans	Signal	AM	13.5	B
			PM	13.7	B
7. San Juan Hollister Road and San Juan Road	San Benito County	SSSC	AM	20.2	C
			PM	20.8	C
8. Union Road and San Juan Oaks Drive	San Benito County	SSSC	AM	18.0	C
			PM	**31.7**	**D**
9. Riverside Road and Union Road	San Benito County	SSSC	AM	21.0	C
			PM	15.5	C
10. San Benito Street and Union Road	San Benito County	Signal	AM	18.2	B
			PM	14.7	B
11. SR 25-Airline Highway and Union Road	Caltrans	Signal	AM	26.0	C
			PM	28.1	C

Source: Fehr & Peers, 2015 (see Appendix I)
Signal = signalized intersection, AWSC = all-way stop controlled intersection, SSSC = side-street stop controlled intersection
Bold text indicates unacceptable operations.
[1] Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2010 HCM.
[2] LOS = Level of service. LOS calculations conducted using the Synchro 8.0 level of service analysis software package.





Cumulative (2035) Base Peak Hour Intersection Volumes

Figure 4.13-3

Source: Fehr & Peers, 2015

Freeway Segment Level of Service. Freeway segment levels of service under Cumulative Conditions without the Project are shown in Table 4.13-8. The following segment is projected to operate below the existing San Benito County General Plan and Caltrans standard of LOS C under Cumulative No Project Conditions during AM and/or PM peak hours:

- *Southbound US-101: San Benito / Santa Clara County Line to SR-129 (PM peak hour).*

Table 4.13-8
Cumulative Freeway Segment Levels of Service

Freeway	From	To	Cumulative No Project (year 2035)		
			Peak Hour	Density	LOS
Northbound US 101	Monterey/San Benito County Line	SR 156	AM	15.5	B
			PM	20.4	C
	SR 156	SR 129	AM	15.2	B
			PM	14.1	B
	SR 129	San Benito/Santa Clara County Line	AM	24.6	C
			PM	16.4	B
Southbound US 101	San Benito/Santa Clara County Line	SR 129	AM	16.4	B
			PM	**29.0**	**D**
	SR 129	SR 156	AM	11.8	B
			PM	17.6	B
	SR 156	Monterey/San Benito County Line	AM	15.0	B
			PM	24.6	C

Source: Fehr & Peers, 2015 (see Appendix I)
Bold indicates unacceptable LOS

i. Regulatory Setting.

Federal.

Americans with Disabilities Act. The Americans with Disabilities Act (ADA) of 1990 prohibits discrimination toward people with disabilities and guarantees that they have equal opportunities as the rest of society to become employed, purchase goods and services, and participate in government programs and services. The ADA includes requirements pertaining to transportation infrastructure. The Department of Justice's revised regulations for Titles II and III of the ADA, known as the 2010 ADA Standards for Accessible Designs, set minimum requirements for newly designed and constructed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities. These standards apply to accessible walking routes, curb ramps, and other facilities.

Surface Transportation Assistance Act Routes (STAA – Federal Designation). The Surface Transportation Assistance Act (STAA) of 1982 allows large trucks, referred to as STAA trucks, that comply with maximum length and wide requirements, to operate on routes that are part of the National Network. The National Network includes the Interstate System and other designated highways which were a part of the Federal-Aid Primary System on June 1, 1991; however, states are encouraged to allow access for STAA trucks on all highways.

State.

California Complete Streets Act of 2008. This act requires that the circulation element of local general plans accommodate a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

California Transportation Development Act. The Mills-Alquist-Deddeh Act (SB 325) (also known as the Transportation Development Act) was enacted in 1971 to improve public transportation services and encourage regional transportation coordination. This law provides funding to be allocated to transit and non-transit related purposes that comply with regional transportation plans. The TDA provides two funding sources: 1) the Local Transportation Fund (LTF), which is derived from a ¼ cent of the general sales tax collected statewide, and 2) the State Transit Assistance fund (STA), which is derived from the statewide sales tax on diesel fuel.

Local.

Current Adopted San Benito County General Plan. The existing, adopted San Benito County General Plan (1985), Open Space and Conservation Element , Safety Element , and Transportation Element provide the following goals, policies and objectives regarding transportation:

Open Space and Conservation Element:

Policy 41 *Fire safety. New development will not be allowed where access is a fire safety risk.*

Policy 46 *County and City bike plans. It will be the County's policy to require new development to provide easements for trails/bikeways identified in the City of Hollister Parks and Recreation Master Plan and to be consistent with the San Benito County Bike Plan.*

Safety Element:

Policy 1 *Roads should be of adequate capacity for use in times of emergency.*

Policy 3 *It will be the County's policy to require that lands which are subdivided and developed in the future to residential or commercial uses be designed and constructed in such a manner that levels of "acceptable risk" identified in Appendix A of the Seismic Safety Element are not exceeded. It will be the County's further policy that these uses will supply adequate water for normal use and fire suppression. Roads which are suitable for safe passage for emergency vehicles, legible street name signs and two means of access to all parcels except on those with cul-de-sacs 600 feet or less.*

Transportation Element:

Goal	*Develop a safe and efficient Countywide transportation system that will provide an opportunity for a variety of modes of transportation for the diverse segments of the population in San Benito County.*
Objective 1	*Provide for a balanced, safe and efficient transportation system to serve all segments of the County.*
Objective 2	*The existing road patterns should form a continuous network of recognized categories of roads, i.e. Federal and State Highways, arterials, collectors, private roads and local roads.*
Objective 3	*The intensity of road development should correspond to the volume the road carries and the areas through which the road travels.*
Objective 4	*Transportation options should be available where practical to persons without access to an automobile.*
Objective 5	*Non-motorized forms of travel (i.e. horses, bicycles, walking) should be encouraged whenever possible.*
Policy 3	*Improvements to road systems needed to accommodate traffic generated by new development shall be funded by that development.*
Policy 4	*A level of service of C shall be used for the accepted minimum standard of operation for intersections and roadways.*
Policy 5	*New road development and design (private or public) shall conform to County standards.*
Policy 7	*To preserve the capacity of existing and future arterials and state highways in the County, access to these major roads shall be limited to collectors, arterials and state highways intersecting the roadways. Exceptions may be allowed only in cases where there is not an existing major road within a quarter mile.*
Policy 8	*New subdivisions/development shall be designed to utilize existing roads and minimize the construction of new driveways onto those roads.*
Policy 15	*New development at urban density shall be required to dedicate funding for transit stops and signage and design subdivisions to allow easy access to public transit where service is available.*
Policy 16	*All new development proposals/subdivisions shall be consistent with and implement policies regarding Transit in the San Benito County Regional Transportation Plan.*
Policy 20	*Support the development of mixed land uses to reduce vehicle trips on collectors and arterials.*

Policy 23 *Bicycle use shall be encouraged within the County for commuting and recreational uses.*

Policy 24 *Require dedication and construction of walkways for through, safe, pedestrian traffic and internal pedestrian circulation in new large scale developments or within the vicinity of concentrations of population.*

Policy 25 *Encourage clustered land use to encourage pedestrian and combined pedestrian and transit use.*

Policy 26 *Develop a program to provide pedestrian/bike paths linking schools, commercial centers, and recreational areas to communities in the County.*

Policy 32 *Require streets and interior circulation systems in new developments to adequately provide for truck delivery and utility services.*

San Benito County Bikeway and Pedestrian Master Plan (2009). The Bikeway and Pedestrian Master Plan provides the following goals, policies, objectives, and standards regarding bicycle and pedestrian facilities within the County. The following goals and objectives in the Bikeway and Pedestrian Master Plan pertain to increasing access for bicyclists and pedestrians:

Objective 1-2 *Expand bicycle and pedestrian facilities and access in and between neighborhoods, employment centers, shopping areas, schools, and recreational sites*

Objective 1-3 *Consider bicycle and pedestrian facilities in all transportation projects.*

Objective 1-4 *Increase the number of bicycle-transit trips and pedestrian access to transit.*

Objective 4-1 *Make biking and walking an integral part of daily life in San Benito County, particularly for trips less than five miles, by implementing and maintaining a bikeway network, providing end-trip facilities, improving bicycle/transit integration, encouraging bicycle use, and making bicycling safer.*

Draft 2035 General Plan Update. The proposed (but not yet adopted) Draft 2035 General Plan Update Land Use Element, Circulation Element, and Health and Safety Element, provide the following goals, policies and objectives pertaining to transportation and circulation. Because the Draft 2035 General Plan Update has not yet been adopted by the Board of Supervisors, these policies are included for informational purposes only.

Land Use Element:

LU-2.7 *Sustainable Location Factor. The County shall encourage new development in locations that provide connectivity between existing transportation facilities to increase efficiency, reduce congestion, and improve safety.*

LU-4.2 *Urban Residential Development. The County shall ensure new urban residential development (e.g., greater than two units per acre) occurs in areas that have, or can provide, adequate public facilities and services to support such uses, and are*

near existing and future major transportation networks, transit and/or bicycle corridors, pedestrian paths and trails, and employment centers.

Circulation Element:

C-1.2 *Complete Streets. To promote a road and street network that accommodates cars without requiring car-dependence, the County shall plan for use of roadways by all vehicle types and users, including automobiles, trucks, alternative energy vehicles, agricultural equipment, transit, bicyclists, and pedestrians, when constructing or modifying roadways. Additionally, the County shall plan its road and street network to reflect a context sensitive approach to the design of thoroughfare assemblies, where the allocation of right-of-way and the facilities provided are based on the intended character, whether urban or rural, of a particular location (urban context). Roads and streets within communities shall be designed to support and encourage walkability as a response to their context, whereas roads in open areas of the County shall be designed primarily for vehicular circulation. As such, thoroughfares that serve both open areas and communities in the County shall change as the surrounding urban context varies. This includes:*

a. Encouraging thoroughfare designs that are context sensitive, such as those recommended in Designing Walkable Urban Thoroughfares: A Context Sensitive Approach by the Institute of Transportation Engineers (ITE);

b. Supporting urban design principles that promote walkability within communities to include:

i. A mix and variety of land uses designed to be relatively compact and in proximity to one another;

ii. Buildings that are oriented toward streets, with appropriately narrow setbacks and functional entries directly fronting onto sidewalks;

iii. Pedestrian-scaled architecture, landscape, and thoroughfares designed to provide engaging sidewalk views and comfort to pedestrians traveling at slow speeds; and

iv. Circulation networks that provide an interconnected system of streets and open spaces with relatively small block lengths;

c. Creating multi-modal street connections in order to establish a comprehensive, integrated, and connected transportation network;

d. Incorporating pedestrian and bicycle facilities, where appropriate and feasible, that promote safety and maximize access;

e. Planting street trees adjacent to curbs and between the street and sidewalk or walking path to provide a buffer between the pedestrian and the automobile, where appropriate;

e. Incorporating traffic calming devices such as roundabouts, bulb-outs at intersections, and traffic tables; and

f. Coordinating with other agencies and cities to ensure connections are made between jurisdictions.

C-1.4 *Funding Sources. Prior to approving new development, the County shall identify, develop, and/or maintain a variety of funding sources to implement the improvements on the Circulation Diagram or other improvements deemed*

necessary to accommodate the new development at applicable levels of service. These funding sources may include County capital funds as available, building and traffic impact fees for new development or designated benefit areas, developer/subdivider improvements, offers of dedication of rights-of-way, assessment/improvement districts, and gas taxes or other measures.

C-1.5 *Mitigating Transportation Impacts. The County shall assess fees on all new development to ensure new development pays its fair share of the costs for new and expanded transportation facilities, as applicable, to County, City, regional and/or State facilities.*

C-1.9 *Dedicate Rights-of-Way. The County shall require project applicants with property fronting along planned road improvements, as a condition of project approval, to dedicate right-of-way and/or construct improvements in accordance with the Circulation Diagram when (1) a nexus can be established between the proposed project and the dedication and/or construction; and (2) the dedication and/or construction would be roughly proportional to the proposed project's impacts.*

C-1.10 *Street Network Plans. The County shall require project applicants to prepare a street network plan for any subdivision proposal located near existing, approved, or proposed development (county or city). The plan shall illustrate how adjoining properties will inter-connect over the long-term and how the plan will improve pedestrian and bicycle connectivity. The plan shall include an interim access plan and a long-term plan that consolidates vehicular access onto arterials/collectors (via street network design, or some other method).*

C-1.11 *Discourage Cul-de-Sacs. The County shall encourage developers to minimize the use of cul-de-sac streets in new development. Cul-de-sac streets shall not exceed 800 feet in length and no portion of the cul-de-sac street shall be more than 400 feet from an intersecting street or public accessway unless physical constraints make it unfeasible.*

C-1.12 *Level of Service (LOS) Standard. The County shall endeavor to maintain a General Plan target goal of LOS D at all locations. If a transportation facility is already operating at an LOS D or E, the existing LOS should be maintained. Exceptions should be considered where achievement of these levels of service would cause unacceptable impacts to other modes of transportation, the environment, or private property.*

C-1.14 *Driveway Siting. The County shall encourage driveways to be located on adjacent collector streets rather than on arterial streets.*

C-1.15 *Street Networks that Enhance Neighborhood Character. The County shall encourage traditional interconnected street networks that provide alternate routes between neighborhoods and other measures that slow neighborhood traffic and enhance neighborhood character, such as those associated with Complete Streets.*

C-2.1 *Bicycle, Pedestrian, and Equestrian Systems. The County shall encourage complete, safe, and interconnected bicycle, pedestrian, and equestrian systems, as appropriate to the context, that serve both commuter travel and recreational use, and provide access to major destinations in the county.*

C-2.2 *Pedestrian and Bike Path Construction. The County shall plan, design, and construct pedestrian routes and bikeways consistent with the 2009 County Bikeway and Pedestrian Master Plan or its succeeding plan. Priority shall be given to bicycle commuting routes, routes to schools, bike lanes on all new streets classified as arterials or collectors, and bike lanes on or adjacent to existing heavily traveled roads.*

C-2.6 *Development Along Planned Bikeways. The County shall require project applicants of new developments adjacent to designated bikeways to provide the portion of the planned bikeway within the development, including rights-of-way dedication and/or construction when (1) a nexus can be established between the proposed development and the dedication and/or construction; and (2) the dedication and/or construction would be roughly proportional to the development's impacts.*

C-2.8 *Sidewalks or Pedestrian Paths in Subdivisions. The County shall encourage project applicants to provide sidewalks or pedestrian paths, or other safe and convenient accommodations for pedestrians (e.g., shared-space streets) on all new roads or modifications to existing roads, as appropriate to the context, in accordance with County road-way design standards.*

C-2.10 *Paths Through Cul-de-Sacs. The County shall encourage developments at a density of one unit per acre or greater to include paths for bicycle and pedestrian traffic through or near the ends of loop streets and cul-de-sacs over 500 feet in length and to facilitate bicycle and pedestrian travel.*

C-2.11 *Curb Ramps. The County shall require developments to include curb ramps at new intersections, consistent with ADA requirements.*

C-3.1 *Transit-Supportive Land Use. The County shall encourage transit lines, stops, and facilities in locations where land uses and density would support transit use.*

C-3.8 *Transit in New Development. The County shall require new development at densities of one unit per acre or greater to provide funding for or construct transit stops and signs in appropriate locations and facilitate access to existing or future public transit through project design, consistent with the Local Transportation Authority Transit Design Guidelines.*

C-3.9 *Consistency with RTP. The County shall require all new development proposals to be consistent with and implement the San Benito County Regional Transportation Plan transit policies.*

C-3.11 *Fixed Bus Route Efficiency. The County shall encourage effective location and design of bus stops, transit centers, and complementary roadway projects that*

maximize the speed, efficiency, and passenger usability of fixed- route buses and are consistent with the Local Transportation Authority Transit Design Guidelines.

Health and Safety Element:

HS-1.11 Road Capacity. The County shall require roads to be of adequate capacity for use in times of emergency.

The consistency of the Project with applicable County General Plan and Draft 2035 General Plan Update transportation and circulation goals, policies and objectives, including key policies listed above, is evaluated in Section 4.10, *Land Use*.

San Benito County Regional Transportation Plan (2014). The Regional Transportation Plan ("RTP') was updated by the Council of San Benito County Governments in 2014. To further goals of improving access and mobility and promoting healthy communities, social equity, and safety, the RTP provides several policies that are relevant to the proposed Project. These policies include providing convenient, accessible, and reliable travel options; fostering efficient development patterns that encourage active transportation, providing an equitable level of transportation services to all segments of the population, and ensuring safe regional transportation.

San Benito COG Traffic Impact Mitigation Fee Program (2011). San Benito COG has adopted the 2011 traffic mitigation fee program for the purpose of collecting fees to finance transportation facilities needed to accommodate new development within the City of Hollister and unincorporated San Benito County. The 2011 TIMF includes a fee schedule for projects that occur in the County area.

San Benito County Code of Ordinance. Design standards applicable to certain improvements made to or adjacent to roads and highways are set forth in the San Benito County Code of Ordinances Title 19 (Land Use and Environmental Regulations), Chapter 19.27 (Roads and Highways), Article I (In General). Requirements pertaining to dedication of streets, roads, alleys, access and abutters' rights; drainage, public utility and other public easements; bicycle paths; transit facilities; and payment of development impact fees to help fund other facilities, are addressed in Title 23 (Subdivision Ordinance), Chapter 23.15 (Dedications, Reservations and Development Fees). Design standards for roads, bicycle and pedestrian paths, and related facilities are set forth in Title 23 (Subdivision Ordinance), Chapters 23.25 (Design Requirements), 23.27 (Fire Design Standards), 23.29 (Road Standards), and 23.31 (Improvement Designs), Article II (Roadway Design Standards). These standards focus on the safe and standardized design of streets in subdivisions, design standards for bike lanes and separated bike paths, defensible space in the event of fires, accessible roadways for fire service providers, and water systems for fire protections.

4.13.2 Previous Environmental Review

The 2003 *San Juan Oaks Golf Club General Plan Amendment/Zone Change/Vesting Tentative Subdivision Map EIR* (2003 EIR) examined the existing roadway network and transportation facilities in the Project region and the potential impacts resulting from development under the

San Juan Oaks Golf Club General Plan Amendment/Zone Change/Vesting Tentative Subdivision Map Project. The 2003 EIR concluded that impacts related to the generation of new vehicle trips on project area roadways and intersections, and the increased demand for parking would be significant impacts which would be reduced to less than significant levels with mitigation measures identified in the EIR. Mitigation measures identified included widening of SR 156, restriping the SR 156/Union Road intersection, and the provision of adequate parking spaces. All other transportation and circulation impacts were determined to be less than significant in the 2003 EIR. The 2003 San Juan Oaks Golf Club project included a General Plan Amendment/Zone Change/Vesting Tentative Tract Map. This previously approved project allowed for the development of 156 market rate residential units, 30 affordable units, a resort hotel, a village commercial site, a park, a permanent wildlife habitat/open space, an additional 18-hole golf course, and an additional nine-hole golf course. None of the previously approved uses have been constructed.

Although the 2003 EIR addressed transportation and circulation impacts, substantial changes to the previously approved 2003 San Juan Oaks Golf Club project are proposed as part of the Del Webb at San Juan Oaks Specific Plan project.

The development footprint of the 2003 San Juan Oaks Golf Club Project and the current proposed Project are substantially similar, as shown in Figure 1-1 in Section 1.0, *Introduction*. However, substantial changes to the previously approved 2003 San Juan Oaks Golf Club project are proposed as part of Del Webb at San Juan Oaks Specific Plan Project. Specifically, the Del Webb at San Juan Oaks Specific Plan project proposes to increase the previously approved overall impervious building area from approximately 193 acres to approximately 322 acres, increase the total number of residential dwellings from 186 single-family residential dwellings to 1,084 single-family residential dwellings, increase the neighborhood commercial area from approximately seven acres to approximately 14 acres, increase roadway areas from approximately 44 acres to approximately 88 acres, increase the permanent wildlife habitat/open space from approximately 1,163 acres to approximately 1,243 acres, permanently preserve approximately 153 acres of off-site prime agricultural land, and develop an approximately ten-acre amenity center. These proposed changes have the potential to substantially increase the trips generated by the Project, and therefore increase the severity of transportation and circulation impacts. Therefore, the following impact analysis has been prepared pursuant to Public Resources Code Section 21166 and CEQA Guidelines Section 15162 (a).

4.13.3 Impact Analysis

a. Methodology and Significance Thresholds. According to the adopted Appendix G of the state *CEQA Guidelines*, impacts related to transportation and circulation from the proposed Project would be significant if the Project would:

1) *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;*

2) *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;*
3) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;*
4) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment);*
5) *Result in inadequate emergency access; and/or*
6) *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.*

As described in further detail in Section 4.15, *Effects Found Not to be Significant,* implementation of the Project would not result in a change in air traffic patterns given its location (which is not near any airport or air strip). The Project is not located in an area with existing public transit, bicycle, or pedestrian facilities, but proposes to establish pedestrian and bicycle-oriented circulation within the Project Site (San Benito County Regional Transportation Plan, 2014). Therefore, the Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or decrease the performance or safety of such facilities. In addition, primary and emergency access would be adequate for the Project, and the Project would not substantially increase hazards due to a design feature or incompatible use. Therefore, no further discussion of Thresholds 3 through 6 is included in this section. Further discussion of these issues can be found in Section 4.15, *Effects Found Not to Be Significant.* Thresholds 1 and 2 are discussed below.

For both thresholds 1 and 2, San Benito County and California Department of Transportation (Caltrans) impact thresholds were used to assess the significance of the traffic generated by the Project. These include measures of effectiveness for the performance of the circulation system and LOS standards established by the County of San Benito and Caltrans, and are further described under *Significance Criteria* below.

Analysis Methodology**.** As explained above, weekday AM and PM peak hour traffic operations were evaluated at the study intersections and freeway segments for each of the following traffic scenarios:

1. *Existing Conditions - Existing volumes obtained from existing traffic counts.*
2. *Existing plus Project Conditions - Existing volumes plus traffic generated by the proposed Project.*
3. *Background No Project Conditions - Existing volumes plus traffic from approved but not yet constructed and occupied developments in the study area.*
4. *Background plus Project Conditions -Background volumes from Scenario 3 plus traffic generated by the proposed Project.*
5. *Cumulative No Project Conditions – Background volumes from Scenario 1 plus Cumulative volumes obtained by applying anticipated growth in vehicle traffic from the Association of Monterey Bay Area Governments (AMBAG) regional transportation demand model.*
6. *Cumulative plus Project Conditions - Scenario 5 volumes plus traffic generated by the proposed Project.*

Level-of-Service Methodology. Levels of Service (LOS) for signalized intersections were evaluated with the method described in Chapter 16 of the 2010 Highway Capacity Manual (HCM). In this method, LOS is based on the average control delay for the critical movements. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and acceleration delay. LOS ratings for stop-sign-controlled intersections were based on Chapter 17 of the HCM. In this method, LOS is based on the average control delay expressed in seconds per vehicle. At two-way or side-street-controlled intersections, the average control delay is calculated for each stopped movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane.

Project Traffic Projections. The traffic projections for the proposed Project were developed using the following three steps: 1) estimating the trip generation of the Project; 2) determining trip distribution of the Project's trips; and 3) assigning the identified Project trips to the roadway system.

Project Trip Generation. Table 4.13-9 summarizes the daily, AM, and PM peak hour trip generation estimates for the proposed Project. For the land uses proposed as part of the Project, trip generation was determined using rates developed by the Institute of Transportation Engineers (ITE) and published in *Trip Generation Manual* (9th Edition), as follows:

- *Senior Adult Housing – Detached (ITE #251)*
- *Single Family – Detached (ITE #210)*[3]
- *Resort Hotel (ITE #330)*
- *Assisted Living (ITE #254)*
- *Specialty Retail (AM – Shopping Center) (ITE #826/820)*[4]
- *General Office (ITE #710)*
- *Medical Office (ITE #720)*

The Project Site includes an existing golf course and related facilities; therefore, trips from this use are considered part of the Existing Conditions and not additional Project trips.

A mixed-use reduction of 13 percent for total daily trips, 15 percent for AM peak hour trips, and 22 percent for PM peak hour trips was applied to account for trips traveling between residential and commercial land uses and staying within the site. This reduction reflects the internalization of vehicle trips due to the complementary residential and retail land uses. The reductions used in the trip generation estimates were determined using the latest mixed-use development research. Based on the land use mix and proximity to various land uses outside of the Project Site, a 13 to 22 percent reduction was used to estimate Project trips that leave the Project Site. Some of these trips would be made by patrons walking or bicycling between each facility. The combined reductions for the mixed-use nature of the development and diverted link trips resulted in a total reduction of 53 AM peak hour trips and 127 PM peak hour trips.

[3] *The ITE land use for senior adult housing developments includes amenities such as tennis courts, swimming pools, security patrols, and common recreational facilities. Therefore the trip rates include trips generated by those uses and separate trip rates were not developed for the Amenity Center. (The Amenity Center includes a multipurpose room, fitness center, craft room, locker rooms, administrative space, swimming pool, tennis courts, pickle ball, and bocce courts.)*

[4] *Specialty retail was chosen to account for the unique land uses that are anticipated to occupy the retail space and is not expected to generate trips from a large outside population like a shopping center would attract.*

As shown in Table 4.13-9, the Project would generate 7,906 net average daily trips, 373 (181 inbound and 192 outbound) net AM peak hour trips, and 563 (270 inbound and 292 outbound) net PM peak hour trips.

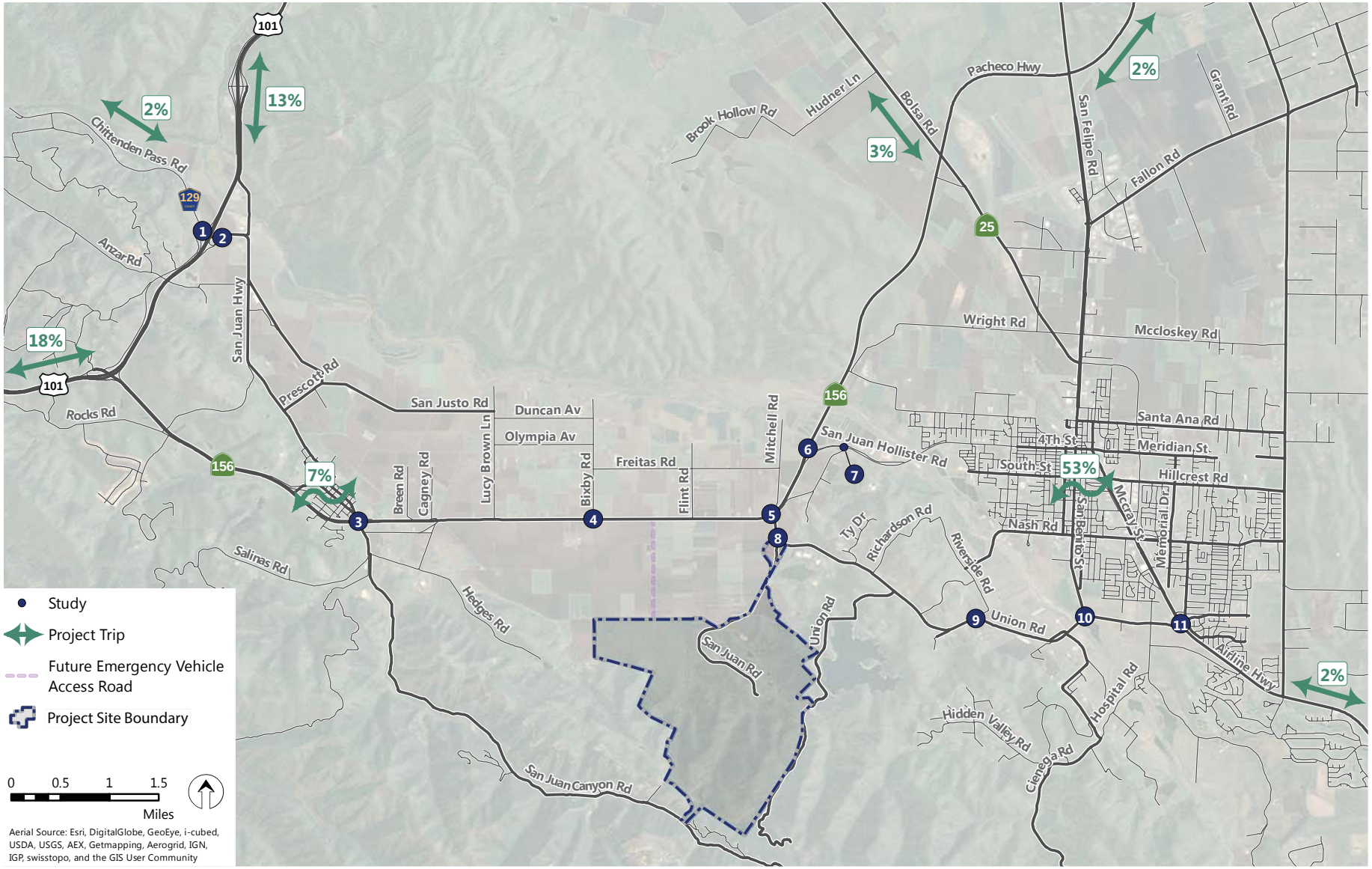
Project Trip Distribution. Trip distribution is the process of assigning the amount of traffic to and from a project site. The directions of approach and departure for the Project's trips were estimated using the existing street and highway network, previous analyses performed within the City of Hollister by Fehr & Peers, and local knowledge. Retail uses are assumed to attract more trips from the immediate vicinity than office and residential land uses; therefore, two trip distributions were developed: one for retail land uses and another for residential land uses. Trip distribution was approved by staff at the County of San Benito before analysis was conducted. The resulting major directions of approach and departure are shown on Figure 4.13-4.

Project Trip Assignment. The final product of the trip assignment process is a full accounting of Project trips, by direction and turning movement at the study intersections. The Project's trips were assigned to the roadway system based on the directions of approach and departure described above with existing street geometries taken into account.

Table 4.13-9
Project Trip Generation

Land Use	Size	Weekday Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Residential Development								
Single Family – Active Adult	1,017 du	3,725	78	132	203	156	100	256
Single Family - Detached	67 du	727	14	43	57	46	27	73
Gross Residential (A)		*4,452*	*85*	*175*	*260*	*202*	*127*	*329*
Other								
Resort Hotel	200 rooms	1,600	45	17	62	36	48	84
Assisted Living	100 beds	266	9	5	14	10	12	22
Gross Other (B)		*1,866*	*54*	*22*	*76*	*46*	*60*	*106*
Neighborhood Commercial								
Specialty Retail (AM - Shopping Center)	50 ksf	2,216	30	18	48	62	79	141
General Office	7.5 ksf	183	21	3	24	15	72	87
Medical Offices	7.5 ksf	92	14	4	18	8	19	27
Gross Neighborhood Commercial (C)		*2,491*	*65*	*25*	*90*	*85*	*170*	*255*
Total Gross Trip Generation (A+B+C)		**8,809**	**204**	**222**	**426**	**333**	**357**	**690**
MXD Reduction off Residential and Commercial ((A+C)*MXD Reduction)[1]		(903)	(23)	(30)	(53)	(63)	(65)	(128)
NET NEW TRIPS		**7,906**	**181**	**192**	**373**	**270**	**292**	**562**

Source: Fehr & Peers, 2015 (Appendix I)
ksf = thousand square feet, du = dwelling unit, ( ) denotes subtraction
[1] Mixed-Use Development (MXD) Reduction was estimated to be 13% for total daily trips, 15% for AM peak hour trips, and 22% for PM peak hour trips.



Source: Fehr & Peers, 2015

Trip Distribution and Study Intersections

Figure 4.13-4

Significance Criteria**.** As indicated above, the analysis evaluates the Project's potential impacts to intersections and freeway segments. Significance criteria for each of these components as defined by the existing San Benito County General Plan and the proposed San Benito County 2035 General Plan Update are outlined below. Both the existing County of San Benito and Caltrans impact thresholds were used to assess the significance of the traffic generated by the Project. The Draft 2035 General Plan Update threshold was also used to assess the impacts of the traffic generated by the Project. However, because these thresholds have not been formally adopted by the County, the impact discussions have been provided for informational purposes only.

San Benito County Intersection Criteria (Existing General Plan). San Benito County currently identifies LOS C as the standard for their signalized intersections. Significant impacts at signalized San Benito County intersections are defined when the addition of project traffic causes one of the following to occur:

1. *The level of service at the intersection degrades from an acceptable LOS C or better under baseline conditions to an unacceptable LOS D or worse under project conditions, or*
2. *The level of service at the intersection is an unacceptable LOS D or worse under baseline conditions and the addition of project trips causes the average intersection delay to increase by five or more seconds.*

San Benito County currently does not have a specific level of service standard for unsignalized intersections. A signal warrant analysis was performed for unsignalized intersections that degrade from a LOS C or better under baseline conditions to a LOS D or worse under Project conditions. For purposes of this study, a significant impact would occur when an intersection that operates unacceptably also passes a peak hour signal warrant.

San Benito County Intersection Criteria (Proposed 2035 General Plan). The San Benito County Draft 2035 General Plan Update proposes to revise the LOS standard from C to D, to adequately serve automobile traffic throughout the County while still promoting and accommodating non-auto modes of transportation as a part of the Draft 2035 General Plan Update (Policy C-1.12, Circulation Element). Under the Draft 2035 General Plan Update, significant impacts at signalized San Benito County intersections are defined when the addition of Project traffic causes one of the following to occur:

1. *The level of service at the intersection degrades from an acceptable LOS D or better under baseline conditions to an unacceptable LOS E or worse under Project conditions, or*
2. *The level of service at the intersection is an unacceptable LOS E or F under baseline conditions and the addition of Project trips causes the average intersection delay to increase by four seconds.*

The San Benito County Draft 2035 General Plan Update has also established a specific level of service standard for unsignalized intersections. It proposes that a significant adverse impact on traffic conditions at the intersection would occur if for any peak hour the following conditions are met for the all-way stop and one or two-way stop controlled intersections:

All-way stop:

1. *The average overall LOS at the intersection degrades from an acceptable LOS D or better under baseline conditions to an unacceptable LOS E or F under project conditions; or*
2. *The average overall intersection LOS is already at an unacceptable LOS E or F under baseline conditions and the addition of project traffic causes the average overall delay to increase by more than four seconds beyond what it was without the project.*

One- or two-way stop:

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 adopted by Caltrans; 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 peak-hour volume traffic signal warrant adopted by Caltrans, 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 Facilities Criteria (Existing General Plan). Most study intersections, with the exception of those along San Benito Street, Union Road, and San Juan Hollister Road, are located within Caltrans' right-of-way and are subject to the Caltrans criteria.

In the Guide for the Preparation of Traffic Impact Studies (2002), Caltrans identifies a level of service threshold of C/D (i.e. on the "cusp" or threshold between level of service C and D) as the acceptable service level for signalized intersections. Significant impacts at signalized Caltrans intersections are defined to occur when with the addition of project traffic one of the following occurs:

1. *The level of service at the intersection degrades from an acceptable LOS C or better under baseline conditions to an unacceptable LOS D or worse under project conditions, or*
2. *The level of service at the intersection is an unacceptable LOS D or worse under baseline conditions and the addition of project trips causes the average intersection delay to increase by any amount.*

Caltrans does not have an identified LOS threshold for unsignalized intersections. Therefore, for the purpose of this analysis, a significant impact at unsignalized Caltrans intersections is defined to occur when the addition of project traffic:

1. *Operates at an unacceptable service level (LOS E or worse), and*
2. *The MUTCD peak hour volumes signal warrant is met (Fehr and Peers, 2015).*

The LOS standard for freeway segments is LOS C in San Benito County. Traffic impacts on a freeway segment are determined to occur when the addition of Project traffic causes either of the following to occur:

1. *The level of service at the intersection degrades from an acceptable LOS C or better under baseline conditions to an unacceptable LOS D, E or F under Project conditions, or*

3. *The level of service at the intersection is an unacceptable LOS D, E or F under baseline conditions and the addition of project traffic causes the freeway segment capacity (2,300 vehicles per hour per lane) to degrade by more than one percent.*

*Caltrans Facilities Criteria (Draft 2035 General Plan Update).*The criteria for Caltrans facilities under the San Benito County Draft 2035 General Plan Update would continue to be LOS C, as described above.

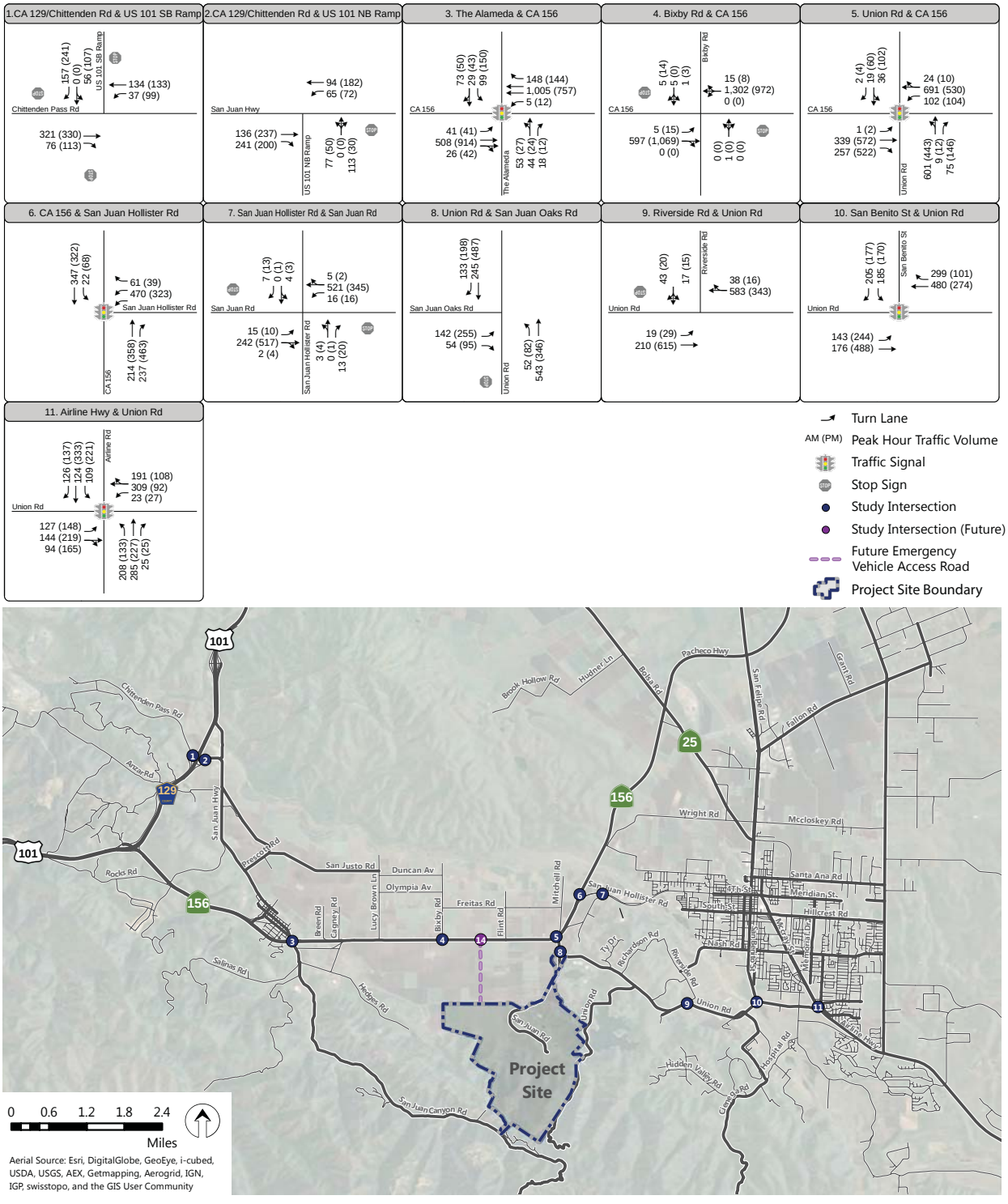
b. Project Impacts and Mitigation Measures.

Impact TRF-1 The proposed Project would increase traffic levels at study intersections under Existing plus Project conditions and exceed established measures of effectiveness at four of the eleven study area intersections. Mitigation is required for three of the four intersections, and would reduce impacts to two intersections to a less than significant level. However, impacts at Union Road-Mitchell Road and SR 156 (Intersection #5) would remain Class I, *significant and unavoidable*. [Threshold numbers 1 and 2]

As noted above, the proposed Project would generate 7,906 net average daily trips, including 373 net AM peak hour trips, and 562 net PM peak hour trips (see Table 4.13-9). Existing plus Project peak period traffic volumes were analyzed to determine the existing (year 2014) operating conditions with the addition of the proposed Project traffic. Existing plus Project peak period traffic volumes are illustrated in Figure 4.13-5 (refer to Appendix I for worksheets showing level of service calculations). The results of the Existing plus Project analysis are presented in Table 4.13-11.

As shown in Table 4.13-11, the majority of the study intersections would operate at acceptable levels of service according to their designated LOS standard. However, under Existing plus Project conditions, the Project would exacerbate unacceptable intersection operations at the Bixby Road and SR 156 intersection, which is already operating unacceptably under Existing No Project conditions. In addition, Project traffic would degrade operations from an acceptable LOS (under Existing No Project conditions) to an unacceptable LOS at the Union Road and San Juan Oaks Drive intersection. In summary, under the Existing General Plan and Caltrans LOS C threshold, the following four intersections would operate at unacceptable LOS during the specified peak hours under Existing plus Project conditions:

- *Intersection #4: Bixby Road and SR 156 (AM and PM peak hours)*
- *Intersection #5: Union Road-Mitchell Road and SR 156 (AM and PM peak hours)*
- *Intersection #8: Union Road and San Juan Oaks Drive (AM and PM peak hours)*
- *Intersection #11: SR 25 – Airline Highway and Union Road (AM and PM peak hours)*



Existing (2014) Plus Project Peak Hour Intersection Volumes

Figure 4.13-5

Source: Fehr & Peers, 2015

Under the proposed Draft 2035 General Plan Update LOS D threshold and Caltrans LOS C threshold, the following four intersections would operate at unacceptable LOS during the specified peak hours under Existing plus Project conditions:

- *Intersection #4: Bixby Road and SR 156 (AM and PM peak hours)*
- *Intersection #5: Union Road-Mitchell Road and SR 156 (AM peak hour)*
- *Intersection #8: Union Road and San Juan Oaks Drive (PM peak hour)*
- *Intersection #11: SR 25 – Airline Highway and Union Road (AM peak hour)*

Table 4.13-11
Existing plus Project Intersection Level Of Service

Intersection	Intersection Control	Peak Hour	Existing (Year 2014)		Existing plus Project		
			Delay[1]	LOS[2]	Delay[1]	LOS[2]	Signal Warrant Met?[3]
1. SR 129-Chittenden Road and US 101 Southbound Ramps*	AWSC	AM	12.4	B	12.6	B	N/A
		PM	13.1	B	13.3	B	
2. SR 129-Chittenden Road and US 101 Northbound Ramps*	SSSC	AM	13.5	B	13.7	B	N/A
		PM	12.7	B	12.8	B	
3. The Alameda and SR 156-San Juan Road*	Signal	AM	19.2	B	19.4	B	N/A
		PM	18.2	B	19.4	B	
4. Bixby Road and SR 156-San Juan Road*	SSSC	AM	**55.7**	**F**	**69.3**	**F**	No
		PM	**27.4**	**D**	**36.0**	**E**	No
5. Union Road and SR 156-San Juan Road*	Signal	AM	**47.8**	**D**	**65.6**	**E**	N/A
		PM	34.3	C	**51.9**	**D**	
6. SR 156 and San Juan Road*	Signal	AM	10.8	B	11.4	B	N/A
		PM	11.5	B	12.8	B	
7. San Juan Hollister Road and San Juan Road**	SSSC	AM	13.8	B	15.0	C	N/A
		PM	13.6	B	15.3	C	
8. Union Road and San Juan Oaks Drive**	SSSC	AM	16.6	C	**28.6**	**D**	**Yes**
		PM	18.7	C	**147.4**	**F**	**Yes**
9. Riverside Road and Union Road**	SSSC	AM	15.4	B	16.9	C	N/A
		PM	13.6	B	15.6	C	
10. San Benito Street and Union Road**	Signal	AM	15.8	B	16.9	B	N/A
		PM	11.9	B	12.8	B	
11. SR 25-Airline Highway and Union Road*	Signal	AM	**52.5**	**D**	**55.4**	**E**	N/A
		PM	**36.3**	**D**	**38.8**	**D**	

Source: Fehr & Peers, 2015 (see Appendix I)
Signal = signalized intersection, AWSC = all-way stop controlled intersection, SSSC = side-street stop controlled intersection
** indicates Caltrans intersection, ** indicates San Benito County*
Bold indicates unacceptable LOS
[1] Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2010 HCM.
[2] LOS = Level of service. LOS calculations conducted using the Synchro 8.0 level of service analysis software package.
[3] A MUTCD peak hour signal warrant was evaluated at unsignalized intersections that operate at LOS E or F under Existing plus Project conditions.

The following discusses the impacts at these intersections under the existing General Plan LOS C threshold:

- Bixby Road/SR-156 (Intersection #4). Under Existing No Project conditions, the side-street control delay at the intersection of Bixby Road and SR-156 operates unacceptably at LOS F during the AM peak hours and LOS D during the PM peak hours. Under Existing plus Project conditions, the side-street control delay would continue to operate unacceptably at LOS F during the AM peak hours and LOS E during the PM peak hours. However, the intersection does not meet the MUTCD peak hour traffic signal warrant due to the low side street volumes along Bixby Road, which is the applicable threshold for unsignalized intersections. Therefore, while the intersection would continue to operate at an unacceptable LOS, for purposes of this analysis, the addition of Project traffic to an intersection that already operates at an unacceptable level would not result in a significant impact since the MUTCD peak hour signal warrant would not be met.

- Union Road-Mitchell Road/SR-156 (Intersection #5). The addition of Project traffic under Existing plus Project conditions would exacerbate already unacceptable existing AM peak hour intersection operations from LOS D to E. During PM peak hour, the LOS would decrease from acceptable LOS C to unacceptable LOS D, resulting in a significant impact.

- Union Road/San Juan Oaks Drive (Intersection #8). Union Road and San Juan Oaks Drive is the only Project access intersection for the Project. During the AM and PM peak hours, the addition of Project traffic would degrade acceptable operations under Existing Conditions to unacceptable operations under Existing plus Project Conditions, resulting in a significant impact.

  The Project-specific impact at this intersection is triggered due to additional construction- and operation-related Project traffic in terms of PM peak hour trips exiting the site, which would result in the MUTCD peak hour volume warrant being met.

- SR-25-Airline Highway/Union Road (Intersection #11). The addition of Project traffic under Existing plus Project conditions would exacerbate the existing unacceptable intersection operations during the AM and PM peak hours, resulting in a significant impact. The AM peak hour LOS would deteriorate from LOS D to E and the PM peak hour would continue to operate at LOS D. The Project-specific impact at this intersection would be triggered due to additional Project traffic peak hour trips.

Construction Traffic. Construction of the proposed Project would generate up to 2,412 daily passenger car equivalent (PCE) trips.[5] To minimize the effects of these trips on the roadway network, as a condition of Project approval, the applicant would be required to develop a Construction Management Plan (CMP) for the Project which includes the following provisions related to traffic:

[5] *According to the 2010 HCM, a PCE factor can be applied to construction trip forecasts to account for truck trips. PCEs are used in capacity analysis to convert heavy vehicle traffic (i.e. construction traffic) into the equivalent passenger car flow to account for their relative impact. The 2010 HCM specifies a PCE range for trucks from 1.5 for level terrains to 4.5 for mountainous terrains. The terrain in the Project Area is relatively level and a PCE of 1.5 is applied (Fehr & Peers, 2015). In addition, this figure conservatively assumes that land development, landscaping, and home construction would overlap, and does not account for phasing of project construction.*

- A set of comprehensive traffic control measures, including scheduling of major truck trips, designated construction access routes, and deliveries to avoid peak traffic.
- Notification procedures for on-site and adjacent property owners and the appropriate County staff regarding when major deliveries will occur.
- Identification of on-site construction staging areas for materials, equipment, and vehicles.
- Identification of haul routes for movement of construction vehicles on roads with LOS D or better in order to minimize impacts on vehicular traffic.
- A provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the Project applicant.
- Limitations on truck access to the Project Site so that a majority of truck trips occur outside of peak commute times (7:00 to 9:00 AM and 4:00 to 6:00 PM).
- A process for responding to and tracking complaints pertaining to construction activity.

Although the CMP would require that the majority of construction truck trips occur outside the peak hour, some trips would still occur during peak commute times, including the PM peak hour. Because the MUTCD peak hour volume signal warrant for the Union Road/San Juan Oaks Drive intersection (intersection #8) is 158 additional trips, and the Project construction traffic is estimated at 243 PM peak hour trips, the signal warrant would be met despite implementation of the CMP. Therefore, impacts to this intersection would remain potentially significant.

The following discusses the impacts at these intersections under the proposed Draft 2035 General Plan Update LOS D threshold:

- Bixby Road/SR 156 (Intersection #4). Under Existing No Project conditions, the side-street control delay at the intersection of Bixby Road and SR 156 operates unacceptably at LOS F during the AM peak hours and acceptably at LOS D during the PM peak hours. Under Existing plus Project conditions, the side-street control delay would operate unacceptably at LOS F during the AM peak hour. The additional Project traffic would degrade the intersection operations from acceptable levels (LOS D) to unacceptable levels (LOS E) during the PM peak hour. However, the intersection does not meet the MUTCD peak hour traffic signal warrant during either peak hour due to the low side street volumes along Bixby Road, which is the applicable threshold for unsignalized intersections. Therefore, while the intersection would continue to operate at an unacceptable LOS, for purposes of this analysis, the addition of Project traffic to an intersection that already operates at an unacceptable level would not result in a significant impact since the MUTCD peak hour signal warrant would not be met.

- Union Road-Mitchell Road/SR 156 (Intersection #5). The addition of Project traffic under Existing plus Project conditions would degrade operations from unacceptable LOS D to unacceptable LOS E intersection operations during the AM peak hour, resulting in a significant impact.

- Union Road/San Juan Oaks Drive (Intersection #8). Union Road/San Juan Oaks Road is the only Project access intersection for the Project. During the PM peak hour, the

addition of Project traffic would degrade acceptable operations under Existing Conditions to unacceptable operations under Existing plus Project Conditions, resulting in a significant impact.

The Project-specific impact at this intersection is triggered due to additional construction- and operation-related Project traffic in terms of PM peak hour trips exiting the site, which would result in the MUTCD peak hour volume warrant being met.

- SR 25-Airline Highway/Union Road (Intersection #11). The addition of Project traffic under Existing plus Project conditions would exacerbate the existing unacceptable intersection operations during the AM peak hours, resulting in a significant impact. The AM peak hour LOS would deteriorate from LOS D to E. The Project-specific impact at this intersection would be triggered due to additional Project traffic peak hour trips.

Mitigation Measures. No mitigation is required for impacts to the intersection of Bixby Road and SR 156 (intersection #4) because the MUTCD peak hour signal warrant would not be met with Project-added traffic (refer to Table 4.13-11).

The impact to the intersection of Union Road-Mitchell Road and SR 156 (intersection #5) would be fully mitigated through implementation of the planned San Benito SR 156 widening project. This project, which is a planned and funded Caltrans project, would widen 5.2 miles of SR 156 from two lanes to four, and would realign the route. The purpose of the roadway improvement project is to reduce existing congestion and provide for future traffic needs, improve safety, and improve route continuity (Council of San Benito County Governments, 2011). Although this improvement would mitigate the impact to the Union Road-Mitchell Road/SR 156 intersection, the timing of the ultimate improvements is estimated to be completed in July 2019 (http://www.dot.ca.gov).Further, the improvement is under Caltrans' jurisdiction and authority, and therefore beyond the control of the applicant and/or County of San Benito. In the interim (before completion of the SR 156 widening project), the impact to intersection #5 could be mitigated by reconstructing the northbound approach on Union Road to include two left-turn lanes, one through lane, one right-turn lane, and an associated left-turn receiving lane to the west leg of SR 156. However, this improvement would be demolished and removed upon construction of the SR 156 widening project and is therefore not considered reasonably practical. Therefore, the Project is required to pay TIMF fees in accordance with Mitigation Measure TRF-1(a).

Mitigation Measures TRF-1(b) and TRF-1(c) are required for intersections #8 (Union Road and San Juan Oaks Drive) and #11 (SR 25-Airline Highway and Union Road), respectively.

TRF-1(a) **Union Road-Mitchell Road and SR 156 (Intersection #5).** Prior to issuance of each building permit, the applicant shall pay the applicable Regional Traffic Impact Mitigation Fee (TIMF) to the County of San Benito as a fair share contribution toward the SR 156 widening project. The TIMF for the SR-156 widening project has been calculated as part of the Transportation Impact Fee Nexus Study completed by the Council of San Benito County Governments (2011). Based upon this study, the applicable fee

will be $5,233 per residential unit and $3,395/1000 s.f. of commercial development within the Project Site.

Monitoring: Compliance shall be monitored by the County Planning Department.

TRF-1(b) **Union Road and San Juan Oaks Drive (Intersection #8).** At such time when construction related traffic is anticipated to reach 158 vehicles trips (the MUTCD peak hour volume signal warrant for this intersection), the applicant shall install a signal at the intersection, which would accommodate efficient ingress and egress for construction-labor traffic, construction heavy vehicles, and operation-related traffic, both in the peak and off peak hours.

Monitoring: Compliance shall be monitored by the County Planning Department.

TRF-1(c) **SR 25-Airline Highway and Union Road (Intersection #11).** Prior to issuance of the first occupancy permit for the Project, the applicant shall add an eastbound right-turn lane from Union Road onto southbound Airline Highway (SR 25). However, this intersection falls under Caltrans jurisdiction and the County cannot control issuance of the required permit. The applicant shall commence design of the improvement immediately following project approval and work diligently in collaboration with Caltrans and the County to obtain the permit required to authorize construction of this improvement. This improvement is included in the TIMF.

Monitoring: Compliance shall be monitored by the County Planning Department.

TRF-1(d) **Construction Traffic.** At the start of grading, the applicant shall have developed, in close collaboration with the County Public Works Director, a Construction Management Plan that would include industry, Caltrans (Caltrans Standard Plans and 2014 MUTCD), and County standards for managing construction traffic to and from the site. Measures to manage construction traffic could include warning signs per 2014 MUTCD requirements, flag men, and scheduling deliveries outside the AM and PM peak hours. This Traffic Management Plan shall also include the construction of a temporary signal or the permanent signal in Mitigation Measure TRF-1(b) at Intersection #8.

Significance After Mitigation. Table 4.13-12 shows LOS levels at impacted intersections with implementation of Mitigation Measures TRF-1(a) through TRF-1(d). Mitigation Measure TRF-1(a) requires the applicant to pay TIMF fees as a fair share contribution toward the SR 156 widening project. This widening project would fully mitigate impacts to the Union Road-

Mitchell Road and SR 156 intersection (intersection #5), as shown in Table 4.13-12. As described previously, this improvement is estimated to be completed in July 2019. However, the improvement is under Caltrans' jurisdiction and authority and therefore beyond the control of the applicant and/or County of San Benito. Payment of the fee alone would not guarantee the timely construction of the SR 156 widening project. Due to the uncertainty of project completion dates, operational impacts to the Union Road-Mitchell Road and SR 156 intersection would remain significant and unavoidable until such time as the SR 156 widening project is complete, when impacts would be reduced to a less than significant level.

With implementation of Mitigation Measure TRF-1(b), the intersection of Union Road and San Juan Oaks Drive (intersection #8) would operate at acceptable levels (LOS A or B). Therefore, the impact to this intersection would be reduced to a less than significant level. However, the intersection of SR 25-Airline Highway and Union Road (Intersection #11) would continue to operate at unacceptable LOS levels in the AM peak hour, even after implementation of Mitigation Measure TRF-1(c). Nevertheless, this mitigation measure would reduce delay levels to below Existing (2014) No Project conditions; in other words, implementation of the identified measure would make operations *better* than under Existing No Project conditions. Because delay conditions would be improved compared to existing conditions (which exceed the threshold of significance), impacts would be less than significant for the SR 25-Airline Highway and Union Road intersection (intersection #11). However, the improvement is under Caltrans' jurisdiction and authority and therefore beyond the control of the applicant and/or County of San Benito. Payment of the TIMF alone would not guarantee the timely construction of the intersection improvements. Due to the uncertainty of completion dates, operational impacts would remain significant and unavoidable until such time as improvements are complete, when impacts would be reduced to a less than significant level.

Table 4.13-12
Existing plus Project Mitigated Intersection LOS

Intersection	Mitigation	Peak Hour	Existing (Year 2014)		Existing plus Project			
			Delay	LOS	Pre-Mitigation		Post-Mitigation	
					Delay	LOS	Delay	LOS
5. Union Road and SR 156	TRF-1(a)	AM	**47.8**	**D**	**65.6**	**E**	27.7	C
		PM	34.3	C	**51.9**	**D**	29.9	C
8. Union Road and San Juan Oaks Drive	TRF-1(b)	AM	16.6	C	**28.6**	**D**	7.3	A
		PM	18.7	C	**147.4**	**F**	11.6	B
11. SR 25-Airline Highway and Union Road	TRF-1(c)	AM	**52.5**	**D**	**55.4**	**E**	**45.0**	**D**
		PM	**36.3**	**D**	**38.8**	**D**	32.2	C

Source: Fehr & Peers, 2015 (see Appendix I)
Bold = unacceptable LOS levels

Impact TRF-2 Implementation of the Project would add traffic to nearby freeway segments under Existing plus Project conditions. However, the Project-added traffic would not exceed established measures of effectiveness by causing unacceptable freeway segment levels of service. Impacts would be Class III, *less than significant.* [Threshold numbers 1 and 2]

Table 4.13-13 shows the freeway segment levels of service in Existing plus Project conditions under the existing Caltrans' LOS C threshold. As shown, all identified segments but one would operate at an acceptable LOS (see Table 4.13-13 below). The segment of Southbound US-101 from the San Benito/Santa Clara County line to SR-129 operates at an unacceptable level (LOS D) during the PM peak hour. Nevertheless, the amount of traffic contributed by the proposed Project would not exceed one percent of the freeway's capacity on segments that are operating unacceptably under Existing No Project conditions. Therefore, under the applicable Caltrans' threshold of significance, the proposed Project would have a less than significant impact at this segment.

Table 4.13-13 shows the freeway segment levels of service in Existing plus Project conditions under the proposed Draft 2035 General Plan Update LOS D and Caltrans LOS C and significance threshold. As shown, all identified segments would operate at an acceptable LOS under Existing plus Project conditions (see Table 4.13-13 below). Therefore, the proposed Project would have a less than significant impact at this segment.

Table 4.13-13
Existing Freeway Segment Levels of Service

Freeway	From	To		Existing		Existing plus Project			
			Peak Hour	Density	LOS	Trips	Density	LOS	% Change
Northbound US 101	Monterey/San Benito County Line	SR 156	AM	10.3	A	33	10.5	A	0.8
			PM	13.5	B	49	13.9	B	1.1
	SR 156	SR 129	AM	15.1	B	25	15.3	B	0.6
			PM	13.9	B	38	14.3	B	0.9
	SR 129	San Benito/Santa Clara County Line	AM	24.4	C	25	24.6	C	0.6
			PM	16.3	B	38	16.6	B	09
Southbound US 101	San Benito/Santa Clara County Line	SR 129	AM	16.3	B	24	16.6	B	0.5
			PM	28.6	D	35	29.2	D	0.8
	SR 129	SR 156	AM	11.7	B	24	11.9	B	0.5
			PM	17.4	B	35	17.7	B	0.8
	SR 156	Monterey/San Benito County Line	AM	9.9	A	35	10.1	A	0.8
			PM	16.1	B	53	16.4	B	1.2

Source: Fehr & Peers, 2015 (see Appendix I)

Mitigation Measures. No mitigation measures are required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

Impact TRF-3 The proposed Project would increase traffic levels at study intersections under Background plus Project conditions and would exceed established measures of effectiveness at four of the eleven study area intersections. Mitigation is required for three of the four intersections, and would reduce impacts to two intersections to a less than significant level. However, impacts at Union Road-Mitchell Road and SR 156 (Intersection #5) would

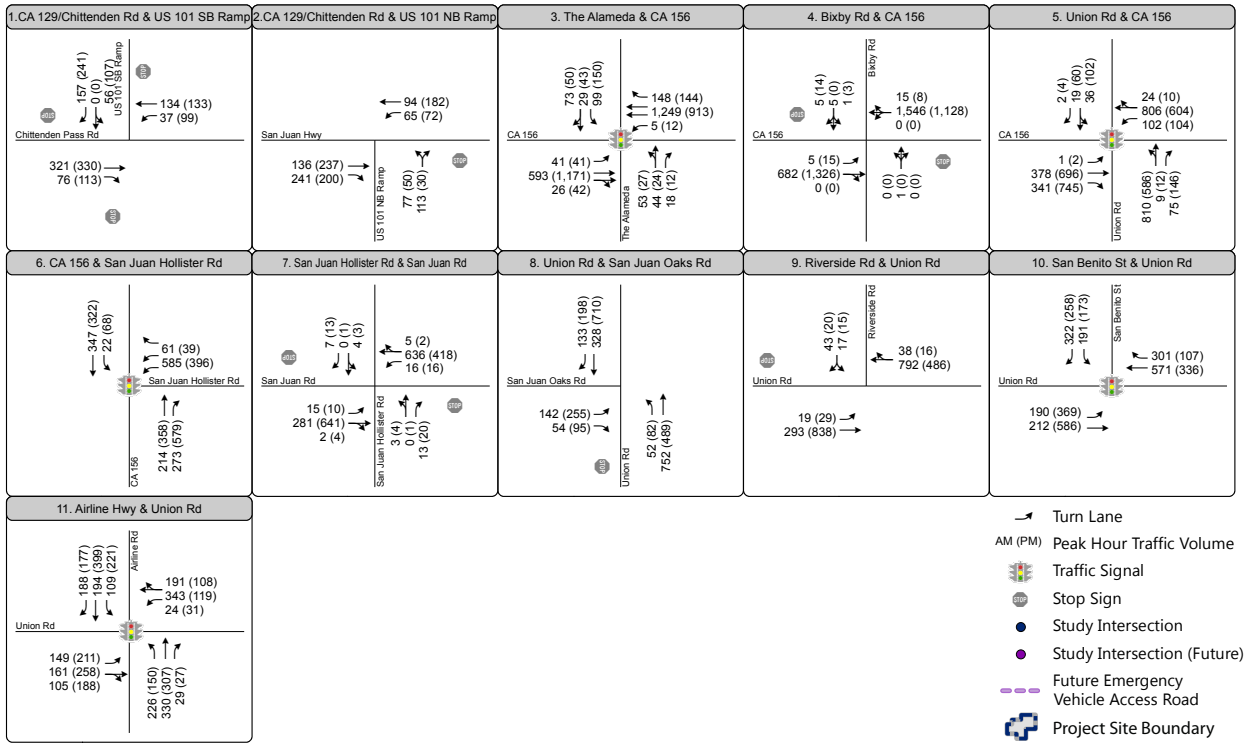
remain Class I, *significant and unavoidable*. [Threshold numbers 1 and 2]

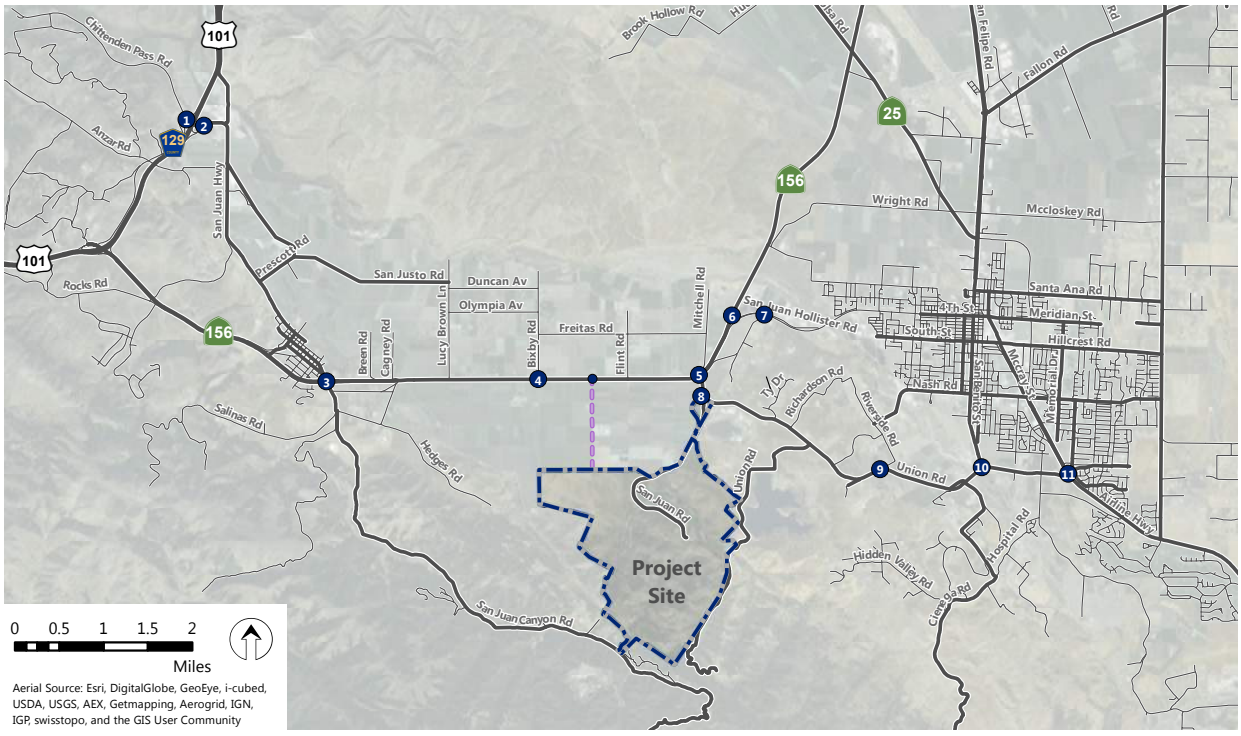
The proposed Project would generate 7,906 net average daily trips, including 373 net AM peak hour trips, and 562 net PM peak hour trips (see Table 4.13-9). Background plus Project peak period traffic volumes were analyzed to determine the projected Background operating conditions with the addition of the proposed Project traffic. Background plus Project peak period traffic volumes are illustrated in Figure 4.13-6 (refer to Appendix I for worksheets showing level of service calculations). The results of the Background plus Project analysis are presented in Table 4.13-14.

Table 4.13-14
Background plus Project Intersection Level Of Service

Intersection	Intersection Control	Peak Hour	Background		Background plus Project		
			Delay[1]	LOS[2]	Delay	LOS	Signal Warrant Met?[3]
1. SR 129-Chittenden Road and US 101 Southbound Ramps*	AWSC	AM	12.4	B	12.6	B	N/A
		PM	13.1	B	13.3	B	
2. SR 129-Chittenden Road and US 101 Northbound Ramps*	SSSC	AM	13.5	B	13.7	B	N/A
		PM	12.7	B	12.8	B	
3. The Alameda and SR 156-San Juan Road*	Signal	AM	19.5	B	19.9	B	N/A
		PM	18.8	B	20.5	C	
4. Bixby Road and SR 156-San Juan Road*	SSSC	AM	**90.8**	**F**	**111.0**	**F**	No
		PM	**44.1**	**E**	**62.8**	**F**	No
5. Union Road and SR 156-San Juan Road*	Signal	AM	**133.2**	**F**	**164.8**	**F**	N/A
		PM	**67.6**	**E**	**105.3**	**F**	
6. SR 156 and San Juan Road*	Signal	AM	11.7	B	12.2	B	N/A
		PM	12.6	B	13.7	B	
7. San Juan Hollister Road and San Juan Road**	SSSC	AM	16.0	C	17.5	C	N/A
		PM	16.3	C	18.9	C	
8. Union Road and San Juan Oaks Drive**	SSSC	AM	23.4	C	**73.7**	**F**	**Yes**
		PM	33.1	D	**>200.0**	**F**	**Yes**
9. Riverside Road and Union Road**	SSSC	AM	21.8	C	24.7	C	N/A
		PM	18.9	C	22.5	C	
10. San Benito Street and Union Road**	Signal	AM	17.8	B	20.9	C	N/A
		PM	13.4	B	16.2	B	
11. SR 25-Airline Highway and Union Road*	Signal	AM	**96.4**	**F**	**100.8**	**F**	N/A
		PM	**58.9**	**E**	**63.3**	**E**	

Source: Fehr & Peers, 2015 (see Appendix I)
Signal = signalized intersection, AWSC = all-way stop controlled intersection, SSSC = side-street stop controlled intersection
** indicates Caltrans intersection, ** indicates San Benito County*
Bold indicates unacceptable LOS
[1] Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2010 HCM.
[2] LOS = Level of service. LOS calculations conducted using the Synchro 8.0 level of service analysis software package.
[3] A MUTCD peak hour signal warrant was evaluated at unsignalized intersections that operate at LOS E or F under Background plus Project conditions.





Background Plus Project Peak Hour Intersection Volumes

Figure 4.13-6

Source: Fehr & Peers, 2015

As shown in Table 4.13-14, the majority of the study intersections will operate at acceptable levels of service according to their designated LOS standard. Under the existing General Plan LOS C standard, the Project would exacerbate intersection operations which are already operating unacceptably under Background No Project conditions, at the following intersections: Bixby Road and SR-156-San Juan Road (#4), during both AM and PM peak hours; Union Road and SR-156-San Juan Road (#5), during both AM and PM peak hours; Union Road and San Juan Oaks Drive (#8), during PM peak hours only; and SR-25-Airline Highway and Union Road (#11), during both AM and PM peak hours. In addition, Project traffic would degrade operations at the Union Road and San Juan Oaks Drive (#8) intersection from acceptable LOS during AM peak hours, under Background No Project conditions, to unacceptable levels. In summary, the following four intersections are projected to operate at unacceptable service levels under Background plus Project conditions:

- *Intersection #4: Bixby Road and SR-156 (AM and PM peak hours)*
- *Intersection #5: Union Road-Mitchell Road and SR-156 (AM and PM peak hours)*
- *Intersection #8: Union Road and San Juan Oaks Drive (AM and PM peak hours)*
- *Intersection #11: SR-25 – Airline Highway and Union Road (AM and PM peak hours)*

Under the proposed Draft 2035 General Plan Update LOS D standard for County facilities and Caltrans LOS C standard for Caltrans facilities, the Project would exacerbate intersection operations which are already operating unacceptably under Background No Project conditions, at the same intersections.

The following discusses the intersection impacts at these intersections:

- Bixby Road/SR 156 (Intersection #4).Under Background No Project conditions, the side-street control delay at this intersection operates unacceptably during both the AM peak (LOS F) and PM peak (LOS E) hours. Under Background plus Project conditions, the side-street control delay at this intersection would continue to operate unacceptably (LOS F) during both the AM and PM peak hours. However, because of the low side street traffic volumes on Bixby Road, the intersection does not meet the MUTCD peak hour signal warrant. Therefore, under the applicable threshold (which requires a trigger of the signal warrant to constitute a significant impact), the addition of Project traffic would result in a less than significant impact at this intersection.

- Union Road-Mitchell Road/SR 156 (Intersection #5). The addition of Project traffic under Background plus Project conditions would exacerbate unacceptable intersection operations during the AM and PM peak hours, resulting in a significant impact.

- Union Road/San Joan Oaks Road (Intersection #8). During the AM and PM peak hours, the addition of Project traffic would degrade acceptable operations under Background No Project conditions to unacceptable operations, and the MUTCD peak hour signal warrant would be met, resulting in a significant impact.

- SR 25-Airline Highway/Union Road (Intersection #11). The addition of Project traffic under Background plus Project conditions would exacerbate unacceptable intersection operations during the AM and PM peak hours, resulting in a significant impact.

The remaining six study intersections are projected to operate at acceptable levels under Background plus Project conditions.

Mitigation Measures. Mitigation Measures TRF-1(a) through TRF-1(c) under Impact TRF-1 would be required.

Significance After Mitigation. 4.13-14 shows LOS levels at impacted intersections with implementation of Mitigation Measures TRF-1(a) through TRF-1(c). Mitigation Measure TRF-1(a) requires the applicant to pay TIMF fees as a fair share contribution toward the SR 156 widening project. As described previously, the timing of this improvement is unknown, and the improvement is under Caltrans' jurisdiction and authority and therefore beyond the control of the applicant and/or County of San Benito. Payment of the fee alone would not guarantee the timely construction of the SR 156 widening project. Due to the uncertainty of project completion dates, operational impacts to the Union Road-Mitchell Road and SR 156 intersection remain significant and unavoidable until such time as the SR 156 widening project is complete.

With implementation of Mitigation Measure TRF-1(b), the intersection of Union Road and SR 156 (intersection #8) would operate at acceptable levels (LOS A or B). Therefore, the impact to this intersection would be reduced to a less than significant level. However, the intersection of SR 25-Airline Highway and Union Road (intersection #11) would continue to operate at unacceptable LOS levels in the AM peak hour, even after implementation of Mitigation Measure TRF-1(c). However, this mitigation measure would reduce delay levels to below Background No Project conditions; in other words, implementation of the identified measure would *improve* operations at this intersection. Because delay conditions would be improved compared to Background No Project conditions, impacts would be considered less than significant. As described previously, the improvement is under Caltrans' jurisdiction and authority and therefore beyond the control of the applicant and/or County of San Benito. Payment of the TIMF alone would not guarantee the timely construction of the intersection improvements. Due to the uncertainly of completion dates, operational impacts would remain significant and unavoidable until such time as the improvements are complete, when impacts would be reduced to a less than significant level.

Table 4.13-15
Background plus Project Mitigated Intersection LOS

Intersection	Mitigation	Peak Hour	Background		Background plus Project			
			Delay	LOS	Pre-Mitigation		Post-Mitigation	
					Delay	LOS	Delay	LOS
4. Bixby Road and Union Road	n/a	AM	**90.8**	**F**	**111.0**	**F**	Less Than Significant	
		PM	**44.1**	**E**	**62.8**	**F**		
5. Union Road and SR 156	T-1(a)	AM	**133.2**	**F**	**164.8**	**F**	**43.7**	**D**
		PM	**67.6**	**E**	**105.3**	**F**	**43.2**	**D**
8. Union Road and San Juan Oaks Drive	T-1(b)	AM	23.4	C	**73.7**	**F**	7.3	A
		PM	**33.1**	**D**	**>200.0**	**F**	14.5	B
11. SR 25-Airline Highway and Union Road	T-1(c)	AM	**96.4**	**F**	**100.8**	**F**	**76.1**	**E**
		PM	**58.9**	**E**	**63.3**	**E**	40.7	D

Source: Fehr & Peers, 2015 (see Appendix I)
Bold = unacceptable LOS levels

Impact TRF-4 Implementation of the Project would add traffic to nearby freeway segments under Background plus Project conditions. However, the Project-added traffic would not exceed established measures of effectiveness by causing unacceptable freeway segment levels of service. Impacts would be Class III, *less than significant.* [Threshold numbers 1 and 2]

Table 4.13-16 shows the freeway segment levels of service in Background plus Project conditions. Under the existing General Plan LOS C threshold, two segments are projected to operate at an unacceptable LOS D during the identified peak hour under Background No Project and Background plus Project conditions:

- Northbound US-101: SR-129 to San Benito / Santa Clara County Line (AM peak hour);
- Southbound US-101: San Benito / Santa Clara County Line to SR-129 (PM peak hour).

However, the amount of traffic contributed by the development would not exceed one percent of the freeway's capacity on segments that are operating at unacceptable levels under Background No Project conditions. Therefore, under the applicable Caltrans' threshold of significance, the Project would have a less than significant impact at the identified freeway segments.

Under the proposed Draft 2035 General Plan Update LOS D and Caltrans LOS C standard and significance threshold, all of the freeway segments are projected to operate at acceptable service levels for both peak periods under Background No Project and Background plus Project conditions.

Table 4.13-16
Background Freeway Segment Levels of Service

Freeway	From	To		Background		Background plus Project			
			Peak Hour	Density	LOS	Trips	Density	LOS	% Increase
Northbound US 101	Monterey/San Benito County Line	SR 156	AM	10.9	A	33	11.2	A	0.8
			PM	14.3	B	49	14.7	B	1.1
	SR 156	SR 129	AM	16.0	B	25	16.2	B	0.6
			PM	14.8	B	38	15.1	B	0.9
	SR 129	San Benito/Santa Clara County Line	AM	**26.1**	**D**	25	**26.4**	**D**	0.6
			PM	17.3	B	38	17.6	B	09
Southbound US 101	San Benito/Santa Clara County Line	SR 129	AM	17.3	B	24	17.6	B	0.5
			PM	**31.0**	**D**	35	**31.7**	**D**	0.8
	SR 129	SR 156	AM	12.4	B	24	12.6	B	0.5
			PM	18.5	C	35	18.8	C	0.8
	SR 156	Monterey/San Benito County Line	AM	10.5	A	35	10.7	A	0.8
			PM	17.1	B	53	17.4	B	1.2

Source: Fehr & Peers, 2015 (see Appendix I)

Mitigation Measures. No mitigation measures required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

c. Cumulative Impacts. Cumulative No Project conditions are defined as existing volumes plus an annual growth rate applied to the Year 2035. Cumulative plus Project conditions are defined as Cumulative No Project conditions plus traffic generated by the proposed Project. The cumulative roadway network includes planned transportation improvements that have been identified within the San Benito County TIMF Nexus Study dated March 2011. These roadway improvement projects are assumed to be in place under Cumulative No Project conditions.

Impact TRF-5 Implementation of the Project would increase traffic levels at study intersections under Cumulative plus Project conditions and would exceed established measures of effectiveness at three of the eleven study area intersections. Impacts to one of the intersections would be mitigated to a less than significant level. However, impacts at two intersections would remain Class I, *significant and unavoidable.* [Threshold numbers 1 and 2]

As noted above, the proposed Project would generate 7,906 net average daily trips, including 373 net AM peak hour trips, and 562 net PM peak hour trips (see Table 4.13-7). Cumulative plus Project peak period traffic volumes were analyzed to determine the projected Cumulative operating conditions with the addition of the proposed Project traffic. Cumulative conditions include planned transportation improvement projects. Cumulative plus Project peak period traffic volumes are illustrated in Figure 4.13-7 (refer to Appendix I for worksheets showing level of service calculations). The results of the Cumulative plus Project analysis are presented in Table 4.13-17.

As shown in Table 4.13-17, two study area intersections under the existing General Plan LOS C threshold already operating at unacceptable LOS under Cumulative conditions are projected to further degrade under Cumulative plus Project conditions.

- *Intersection #4: Bixby Road and SR-156 (AM and PM peak hours)*
- *Intersection #8: Union Road and San Juan Oaks Drive (PM peak hour)*

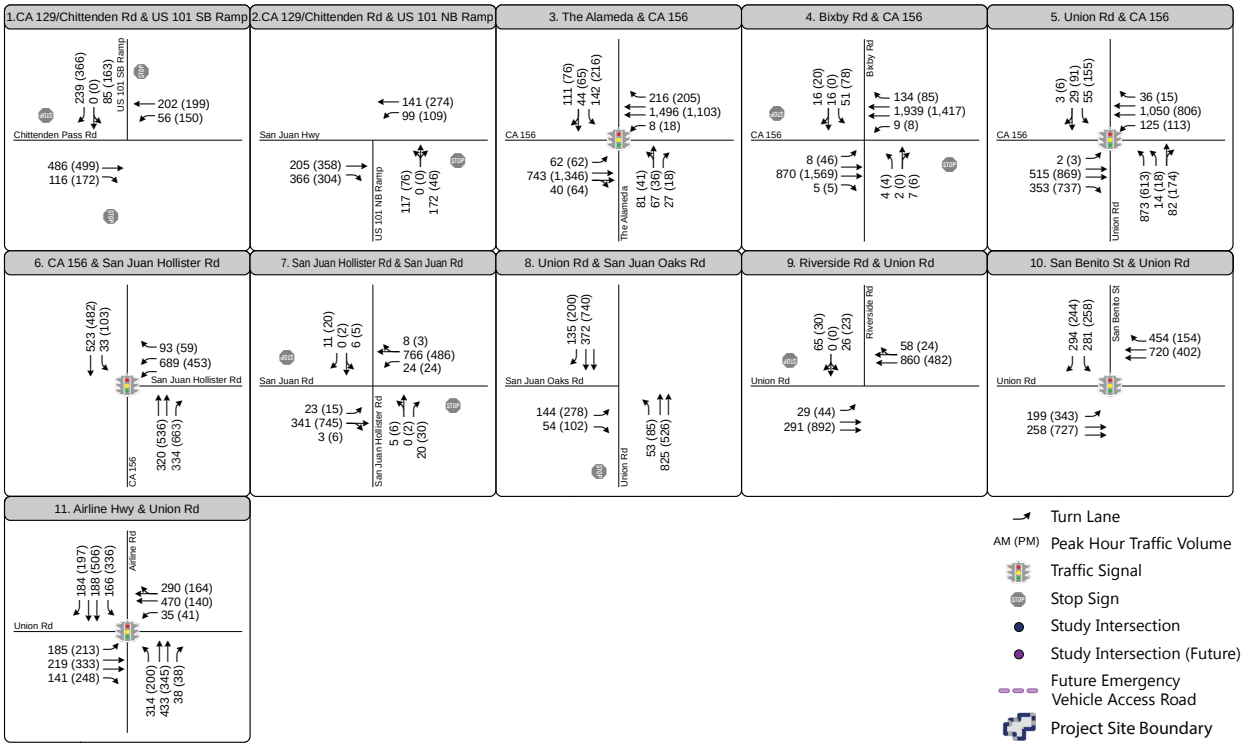
Further, the addition of Project traffic would degrade operations from acceptable LOS under Cumulative plus Project conditions to unacceptable levels at the following intersection:

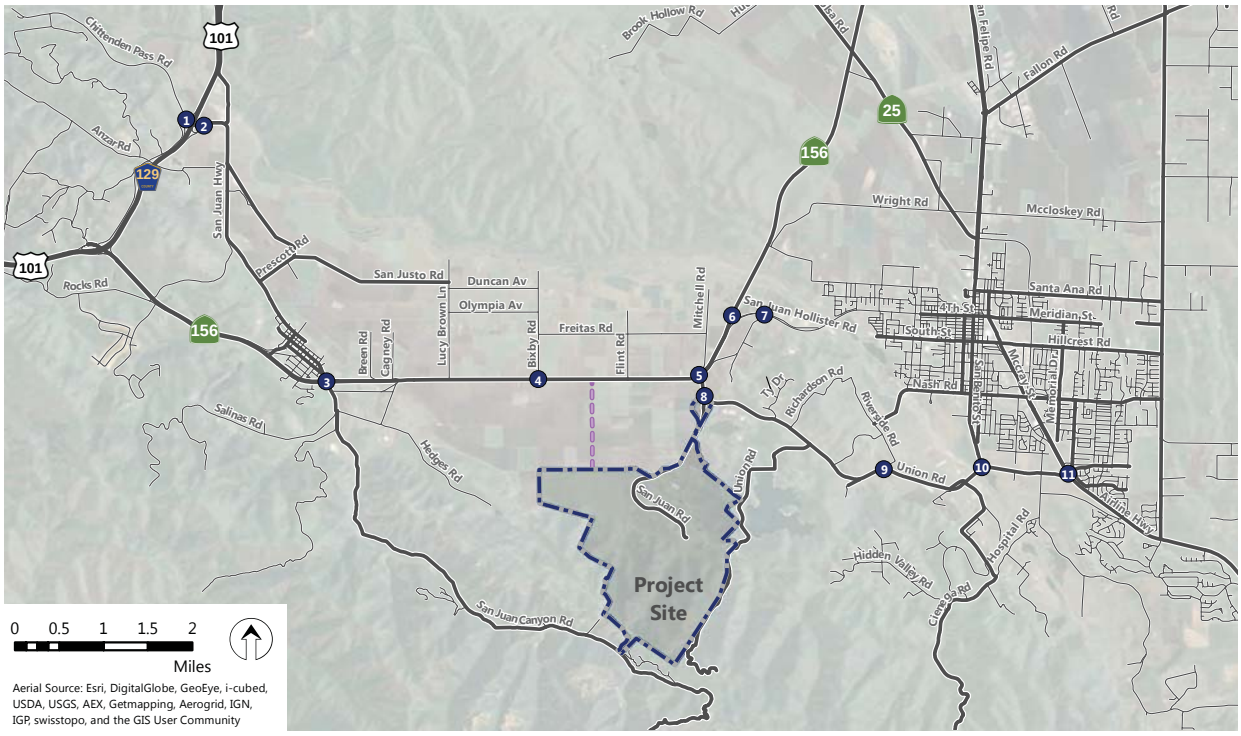
- *Intersection #8: Union Road and San Juan Oaks Drive (AM peak hour)*

Table 4.13-17
Cumulative plus Project Intersection Level Of Service

Intersection	Intersection Control	Peak Hour	Cumulative No Project		Cumulative plus Project		
			Delay[1]	LOS[2]	Delay[1]	LOS[2]	Signal Warrant Met?[3]
1. SR 129-Chittenden Road and US 101 Southbound Ramps*	AWSC	AM	34.0	D	34.2	D	Yes
		PM	33.8	D	34.0	D	Yes
2. SR-129SR 129-Chittenden Road and US 101 Northbound Ramps*	SSSC	AM	23.6	C	24.2	C	N/A
		PM	18.9	C	19.2	C	
3. The Alameda and SR 156-San Juan Road*	Signal	AM	26.4	C	27.9	C	N/A
		PM	26.8	C	29.6	C	
4. Bixby Road and SR 156-San Juan Road*	SSSC	AM	**>200.0**	**F**	**>200.0**	**F**	No
		PM	**>200.0**	**F**	**>200.0**	**F**	**Yes**
5. Union Road and SR 156-San Juan Road*	Signal	AM	29.3	C	33.7	C	N/A
		PM	25.5	C	31.8	C	
6. SR 156 and San Juan Road*	Signal	AM	13.5	B	14.1	B	N/A
		PM	13.7	B	15.0	B	
7. San Juan Hollister Road and San Juan Road**	SSSC	AM	20.2	C	22.6	C	N/A
		PM	20.8	C	24.8	C	
8. Union Road and San Juan Oaks Drive**	SSSC	AM	18.0	C	**35.5**	**E**	**Yes**
		PM	**31.7**	**D**	**>200**	**F**	**Yes**
9. Riverside Road and Union Road**	SSSC	AM	21.0	C	23.4	C	N/A
		PM	15.5	C	17.5	C	
10. San Benito Street and Union Road**	Signal	AM	18.2	B	20.0	C	N/A
		PM	14.7	B	17.7	B	
11. SR 25-Airline Highway and Union Road*	Signal	AM	26.0	C	28.8	C	N/A
		PM	28.1	C	26.1	C	

Source: Fehr & Peers, 2015 (see Appendix I)
Signal = signalized intersection, AWSC = all-way stop controlled intersection, SSSC = side-street stop controlled intersection
** indicates Caltrans intersection, ** indicates San Benito County*
Bold indicates unacceptable LOS
[1] Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2010 HCM.
[2] LOS = Level of service. LOS calculations conducted using the Synchro 8.0 level of service analysis software package.
[3] A MUTCD peak hour signal warrant was evaluated at unsignalized intersections that operate at LOS E or F under Cumulative plus Project conditions.





Cumulative (2035) Plus Project Peak Hour Intersection Volumes

Figure 4.13-7

Source: Fehr & Peers, 2015

The following discusses the intersection impacts at these intersections under the existing General Plan LOS C threshold:

- Bixby Road/SR-156 (Intersection #4). Under Cumulative No Project and Cumulative plus Project conditions, the side-street control delay at this intersection operates unacceptably (LOS F) during both the AM and PM peak hours. Additionally, during the PM peak hour, the volume signal warrant is met. Therefore, the Project is considered to have a significant impact at this intersection. Since the intersection operates unacceptably and meets the peak hour volume signal warrant under the No Project scenario, the Project does not cause the operational deficiency, but rather exacerbates the unacceptable operations. The Project would contribute approximately 7 percent of the traffic growth at this intersection. This fair share payment would be made to the SR 156 widening project funding and would be part of the TIMF or other funding mechanism to collect development impact fees and implement the improvement.

  The *San Benito Route 156 Improvement Project Draft EIR Assessment* (Caltrans, July 2007) assumed this intersection to be signalized as part of the SR-156 widening project. However, recent plans submitted by Caltrans show this intersection as side street stop controlled despite the anticipated operational deficiencies. Signalization of this intersection would mitigate the identified impact. However, the decision to install a traffic signal is ultimately Caltrans' decision.

- Union Road/San Juan Oaks Drive (Intersection #8). During the AM peak hour, the addition of Project traffic would degrade acceptable operations under Cumulative No Project conditions to unacceptable operations. Widening Union Road to a four lane facility is included in the TIMF. This widening would include improvements to intersections and driveways along the roadway.

Under the proposed Draft 2035 General Plan Update, one study area intersection already operating at unacceptable LOS under Cumulative conditions is projected to further degrade under Cumulative plus Project conditions.

- *Intersection #4: Bixby Road and SR 156 (PM peak hours)*

Further, the addition of Project traffic would degrade operations from acceptable LOS under Cumulative plus Project conditions to unacceptable levels at the following intersection:

- *Intersection #8: Union Road and San Juan Oaks Drive (AM and PM peak hours)*

Mitigation Measures. The Project would pay the TIMF fees for the four lane widening of Union Road (intersection #8), which would fully mitigate the impact. Mitigation Measure TRF-5 below is required for the intersection of Bixby Road and SR 156-San Juan Road (intersection #4).

TRF-5 **Bixby Road and SR 156-San Juan Road (Intersection #4).** The applicant shall pay a fair share contribution toward the cost of installing a signal at this intersection. Because the Project would contribute approximately 7 percent of the traffic growth at this

intersection, the Project's fair share contribution is 7 percent of the total cost of the improvement.

Plan Requirements and Timing: Prior to final map recordation, the applicant shall submit an agreement for provision of traffic mitigation fees, which will be a fair share payment of the cost of installing the signal. The fair share contribution shall be paid prior to Project occupancy.

Monitoring: Compliance shall be monitored by the County Planning Department.

Significance After Mitigation. As shown in Table 4.13-18, Mitigation Measure TRF-1(b) would improve operations compared to Cumulative No Project conditions and reduce the impacts to less than significant levels at the Union Road and San Juan Oaks intersection (#8).

The intersection of Bixby Road and SR 156-San Juan Road (intersection #4) would be mitigated to less than significant with signalization of the intersection. The *San Benito Route 156 Improvement Project Draft EIR Assessment prepared by Caltrans* (July 2007) assumed this intersection to be signalized as part of the planned SR 156 widening project, and Mitigation Measure TRF-5 requires that the applicant pay a fair share contribution toward this improvement (estimated at 7 percent of the cost of the improvement, as Project-generated traffic would represent 7 percent of the traffic growth at this intersection). However, recent plans submitted by Caltrans show this intersection as side street stop controlled despite the anticipated operational deficiencies. If a signal at this intersection is ultimately excluded from the SR 156 widening project, the impact to this intersection would remain significant. As with intersection #1, the decision to install a traffic signal at intersection #4 is ultimately under Caltrans' jurisdiction and authority, and therefore beyond the control of the applicant and/or County of San Benito. Because installation of this improvement cannot be assured, and payment of fair share fees may not be feasible, the impact for CEQA purposes is ultimately considered significant and unavoidable.

Table 4.13-18
Cumulative plus Project Mitigated Intersection LOS

Intersection	Mitigation	Peak Hour	Cumulative (Year 2035)		Cumulative plus Project			
					Pre-Mitigation		Post-Mitigation	
			Delay	LOS	Delay	LOS	Delay	LOS
4. Bixby Road and SR 156-San Juan Road	TRF-5	AM	**>200**	**F**	**>200**	**F**	**Significant and Unavoidable**	
		PM	**>200**	**F**	**>200**	**F**		
8. Union Road and San Juan Oaks Drive	TRF-1(b)	AM	18.0	C	**35.5**	**E**	6.0	A
		PM	**31.7**	**D**	**>200**	**F**	10.4	B

Source: Fehr & Peers, 2015 (see Appendix I)
Bold = unacceptable LOS levels

Impact TRF-6 Implementation of the proposed Project would add traffic to nearby freeway segments in Cumulative plus Project conditions. However, the Project-added traffic would not exceed established measures of effectiveness. Impacts would be Class III, *less than significant*. [Threshold numbers 1 and 2]

Table 4.13-19 shows the freeway segment levels of service in Cumulative plus Project conditions. Under the existing General Plan LOS C threshold, one segment is projected to operate at an unacceptable LOS D during the identified peak hour under Cumulative No Project and Cumulative plus Project conditions:

- *Southbound US-101: San Benito / Santa Clara County Line to SR-129 (PM peak hour).*

However, the amount of traffic contributed by the Project would not exceed one percent of the freeway's capacity on segments that are operating unacceptably under Cumulative No Project conditions. Therefore, the Project would have a less than significant impact at the identified freeway segment.

Under the Caltrans LOS C threshold that would continue to apply upon adoption of the Draft 2035 General Plan Update, no segment is projected to operate at an unacceptable LOS during the identified peak hour under Cumulative No Project and Cumulative plus Project conditions.

Table 4.13-19
Cumulative Freeway Segment Levels of Service

Freeway	From	To		Cumulative (year 2035)		Cumulative plus Project			
			Peak Hour	Density	LOS	Trips	Density	LOS	% Increase
Northbound US 101	Monterey/San Benito County Line	SR 156	AM	15.5	B	33	15.8	B	0.8
			PM	20.4	C	49	20.9	C	1.1
	SR 156	SR 129	AM	15.2	B	25	15.4	B	0.4
			PM	14.1	B	38	14.3	B	0.6
	SR 129	San Benito/Santa Clara County Line	AM	24.6	C	25	24.8	C	0.4
			PM	16.4	B	38	16.7	B	0.6
Southbound US 101	San Benito/Santa Clara County Line	SR 129	AM	16.4	B	24	16.7	B	0.3
			PM	**29.0**	**D**	35	**29.4**	**D**	0.5
	SR 129	SR 156	AM	11.8	B	24	11.9	B	0.3
			PM	17.6	B	35	17.8	B	0.5
	SR 156	Monterey/San Benito County Line	AM	15.0	B	35	15.2	B	0.8
			PM	24.6	C	53	24.9	C	1.2

Source: Fehr & Peers, 2015 (see Appendix I)

Mitigation Measures. No mitigation measures are required.

Significance After Mitigation. Impacts would be less than significant without mitigation.