

3.15 TRAFFIC AND TRANSPORTATION

3.15.1 INTRODUCTION

This section presents an overview of the existing transportation and circulation system in the area surrounding the location of the Proposed Action and alternatives. It also discusses the potential effects on transportation and circulation system as a result of implementing the Proposed Action or an alternative, both during construction and upon occupancy and operation. Where significant effects are identified, mitigation measures are recommended to reduce the severity of the effect to the extent possible.

In addition to the land development plan for the project site set forth under the Proposed Action, the Applicant has also put forth a compensatory wetland mitigation plan that includes wetland restoration activities at three off-site mitigation properties. Although there would be some construction vehicle trips to and from the mitigation sites during the time that the restoration activities are underway, they would not be a substantial number of daily trips that could result in congestion along the study area roadways. Furthermore, since no land development would occur on any of the three off-site mitigation properties, no long-term impacts with respect to traffic would occur as a result of wetland restoration and mitigation construction. Thus, the mitigation properties are not discussed further in this section.

Sources of information used in this analysis include:

- Amoruso Ranch Specific Plan (ARSP) EIR prepared by the City of Roseville (City of Roseville 2016a);
- City of Roseville General Plan 2035 (City of Roseville 2016b);
- Traffic Study for the Amoruso Ranch Specific Plan prepared by Fehr & Peers (Fehr & Peers 2016) (included in **Appendix 3.15a**); and
- Traffic Study for the No Action, Proposed Action, and Alternatives 1, 2, and 3 prepared by Fehr & Peers (Fehr & Peers 2018) (included in **Appendix 3.15b**).

3.15.2 AFFECTED ENVIRONMENT

3.15.2.1 Study Area Roadways and Intersections

State Highway System

Roseville is served by an interstate highway, Interstate 80 (I-80), and a state highway, State Route 65 (SR 65). I-80 is a transcontinental highway that links Roseville not only to Sacramento and the Bay Area, but to the rest of the United States via its crossing of the Sierra Nevada. It carries commuter traffic between Placer and Sacramento Counties, as well as interregional and interstate business, freight, tourist, and recreational travel. Roseville is connected to I-80 by five interchanges - Riverside Avenue, Douglas Boulevard, Eureka Road/Atlantic Street, Taylor Road, and SR 65. The freeway has eight lanes west of Riverside Avenue and six lanes through the remainder of Roseville. High Occupancy Vehicle (HOV) lanes currently exist on I-80 in Sacramento County but terminate at the Placer County line.

SR 65 is generally a north-south trending state route that connects Roseville with the cities of Lincoln and Marysville (via Highway 70). In Roseville, this highway is a four-lane freeway with access provided by four

interchanges; I-80, Galleria Boulevard/Stanford Ranch Road, Pleasant Grove Boulevard, and Blue Oaks Boulevard.

Arterial Street System

The arterial network links residential areas to both commercial and employment centers and links all of these uses to the regional highway system. The existing arterial street network in the western portion of the City of Roseville is described below:

Blue Oaks Boulevard

This roadway is an east–west arterial that links the cities of Roseville and Rocklin to each other and to SR 65. Between SR 65 and west of Fiddymont Road, it has six lanes with the exception of the four-lane overcrossing of Industrial Avenue. Blue Oaks Boulevard has recently been extended west of Fiddymont Road as part of the West Roseville Specific Plan (WRSP)/Fiddymont Ranch development.

Fiddymont Road

This roadway is a north–south arterial connecting west Roseville with Placer County and the City of Lincoln. Fiddymont Road has recently been widened and realigned as part of the West Roseville Specific Plan. It is currently four lanes between Pleasant Grove Boulevard and the northern Roseville City limit.

Foothills Boulevard

This roadway is a major north–south arterial in Roseville west of I-80. It extends as far south as Cirby Way, where it becomes Roseville Road and continues south into Sacramento. North of Cirby Way it traverses portions of the City’s Infill Area, Northwest Specific Plan, and North Industrial Plan Area and currently ends at Duluth Avenue at the northern City limit. This roadway (along with Washington Boulevard, Harding Boulevard, and SR 65) provides one of four grade-separated crossings of the Union Pacific railroad mainline.

Junction Boulevard

This roadway is an east–west arterial in west Roseville that has four lanes from Washington Boulevard to Baseline Road.

Pleasant Grove Boulevard

This roadway is an east–west arterial that extends from the WRSP area to the City of Rocklin where it becomes Park Drive and connects the WRSP, the Del Webb Specific Plan, the Northwest Roseville Specific Plan, the North Central Roseville Specific Plan, and the Highland Reserve Specific Plan to each other and to SR 65. It has four lanes from its current western terminus at Market Drive to west of Foothills Boulevard. It has six lanes from west of Foothills Boulevard to SR 65.

Washington Boulevard

This roadway is a major north–south arterial. It connects SR 65 and Blue Oaks Boulevard on the north to Oak Street in downtown Roseville. Most of Washington Boulevard has four lanes, except a two-lane segment north and south of where it crosses under the Union Pacific railroad tracks.

Woodcreek Oaks Boulevard

This roadway is a north–south arterial that extends from Baseline Road to Blue Oaks Boulevard. This arterial has four lanes from Baseline Road to north of Pleasant Grove Boulevard and two lanes north to Blue Oaks Boulevard.

Baseline Road

This roadway is an east-west arterial that connects Roseville with the unincorporated Dry Creek Area and SR70/99. From the City limits east, Baseline Road provides two westbound lanes and one eastbound lane until it becomes Main Street at Foothills Boulevard.

Local Street System

Hayden Parkway

This roadway is a two-lane collector street with a 50-foot ROW to accommodate a 12-foot wide landscape median with restricted median breaks. Hayden Parkway currently links Blue Oaks Boulevard to Fiddymment Road south of Blue Oaks Boulevard. In the future, Hayden Parkway will also extend north of Blue Oaks Boulevard and head northeast to reconnect with Fiddymment Road.

Parkway One

This roadway is a two-lane connector that is proposed from the Creekview Specific Plan (CSP) eastern boundary through the Fiddymment Farms portion of the WRSP to Fiddymment Road.

Westbrook Boulevard

This roadway is planned as a six-lane facility with a 100-foot ROW extending between a future extension of Blue Oaks Boulevard in the WRSP Area and Baseline Road in the Sierra Vista Specific Plan (SVSP) Area. Westbrook Boulevard would be extended northward within the CSP Area and through the Amoruso Ranch project site to connect with Sunset Boulevard West.

3.15.2.2 Traffic Study Area

The Traffic Study for the Amoruso Ranch Specific Plan EIR prepared in 2016 found that the Proposed Action would result in significant traffic impacts on five intersections and two freeway segments under 2035 Cumulative conditions. Three of the impacted intersections are located with the City of Roseville and two are located in unincorporated Placer County. The two impacted freeway segments are located along southbound SR 65. Based on these results, the study area for the analysis of traffic impacts in this Draft EIS was defined to include only the five impacted intersections and two freeway segments identified in the 2016 ARSP EIR Traffic Study. **Figure 3.15-1, Locations of Study Intersections**, shows the study intersections analyzed for traffic impacts in this Draft EIS.

3.15.2.3 Existing Traffic Levels of Service

Level of Service (LOS) is a qualitative measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an

indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents severe congestion and delay under stop-and-go conditions.

Signalized Intersections

All of the study intersections that are located in the City of Roseville are signalized. The operations of the signalized intersections are analyzed using procedures from the Transportation Research Board's 2010 Highway Capacity Manual (HCM). **Table 3.15-1, Level of Service Definitions at Signalized Intersections**, presents the level of service categories for signalized intersections considered in this analysis and provides a definition of each category with the corresponding average delay per vehicle.

**Table 3.15-1
Level of Service Definitions at Signalized Intersections**

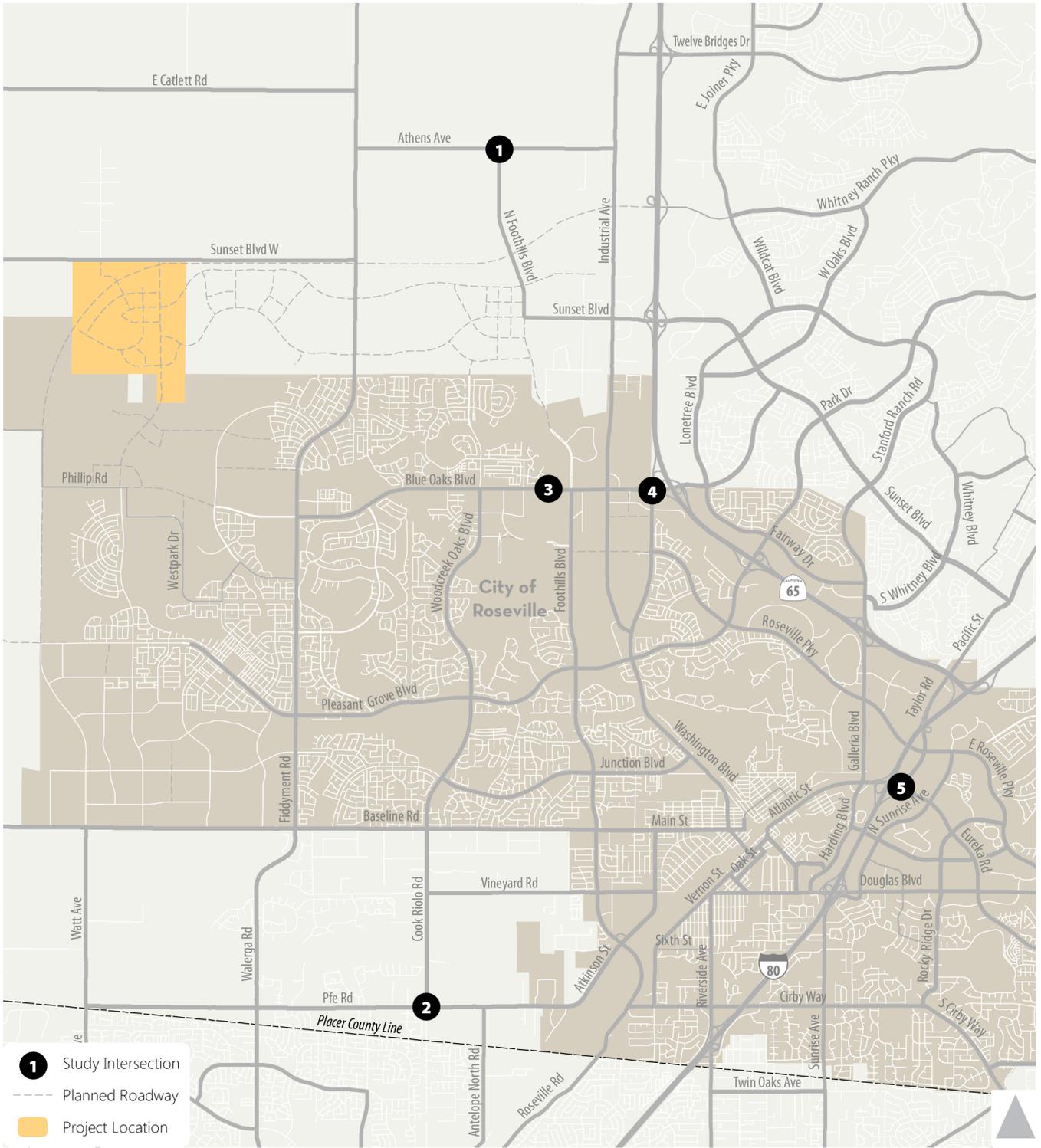
Level of Service (LOS)	HCM (Average Delay in Seconds per Vehicle) ²
A	≤ 10.0
B	> 10.0 to 20.0
C ²	> 20.0 to 35.0
D	> 35.0 to 55.0
E	> 55.0 to 80.0
F	> 80.0

Source: Highway Capacity Manual 2010, Transportation Research Board, 2010.

Unsignalized Intersections

All of the study intersections that are unsignalized are located in Placer County. These unsignalized study intersections within Placer County are analyzed using Synchro, which employs HCM 2000 procedures. At all-way stop-controlled intersections, the average delay and LOS is reported for all vehicles passing through the intersection. At side-street stop-controlled intersections, the average delay and LOS is reported for both the entire intersection and for the minor-street movement with the greatest delay.

Table 3.15-2, Level of Service Definitions at Unsignalized Intersections, presents the level of service categories for unsignalized intersections considered in this analysis and provides a definition of each category with the corresponding average delay per vehicle.



SOURCE: Fehr & Peers, 2018

FIGURE 3.15-1

Locations of Study Intersections

Table 3.15-2
Level of Service Definitions at Unsignalized Intersections

Level of Service (LOS)	Average Delay per Vehicle (sec/vehicle)
A	≤10.0
B	> 10.0 to 15.0
C	> 15.0 to 25.0
D	> 25.0 to 35.0
E	> 35.0 to 50.0
F	> 50.0

Source: Highway Capacity Manual 2000.

Freeway Facilities

Per Caltrans standards, existing conditions of freeway segment operations are evaluated using methodologies from the 2010 HCM. The LOS for a freeway segment is based on the vehicle density (passenger cars/lane/mile) as shown in **Table 3.15-3, Freeway Level of Service Definitions**.

Table 3.15-3
Freeway Level of Service Definitions

Level of Service (LOS)	Mainline Density (pcpmlpl ¹)	Ramp Junction Density (pcpmlpl ¹)
A	≤ 11	≤ 10
B	> 11 to 18	> 10 to 20
C	> 18 to 26	> 20 to 28
D	> 26 to 35	> 28 to 35
E	> 35 to 45	> 35
F	> 45 or Demand exceeds capacity ²	Demand exceeds capacity ²

Source: Highway Capacity Manual 2010, Transportation Research Board, 2010.

¹ Density is expressed in passenger car equivalents per mile per lane (pcpmlpl). Density values are rounded to the nearest whole value and evaluated for LOS based on the above thresholds (i.e., 35 pcpmlpl = LOS D)

² Occurs when freeway demand exceeds upstream (diverge) or downstream (merge) freeway segment capacity, or if off-ramp demand exceeds off-ramp capacity.

3.15.2.4 Study Area Intersections

Table 3.15-4, City of Roseville Study Intersections (Signalized) – Existing Levels of Service, shows the levels of service at signalized intersections located in the City of Roseville. As indicated in the table, the

intersections of Blue Oaks Boulevard/Washington Boulevard/SR 65 SB Ramps and Eureka Road/Taylor Road/I-80 EB Ramps intersections operate at LOS D.

Table 3.15-4
City of Roseville Study Intersections (Signalized) – Existing Levels of Service

Intersection	PM Peak Hour Delay (seconds)/LOS
Blue Oaks Blvd / Collector C	Does not exist
Blue Oaks Blvd / Washington Blvd / SR 65 SB Ramps	37/D
Eureka Rd / Taylor Rd / I-80 EB Ramps	44/D

Source: Fehr & Peers, 2018.

Table 3.15-5, Placer County Study Intersections (Unsignalized) – Existing Levels of Service, shows the level of service at the two unsignalized intersections located in unincorporated Placer County. As shown in the table, both study intersections operate acceptably at LOS A. The worst movement for Foothills Boulevard/Athens Avenue is the northbound left, which operates at LOS B.

Table 3.15-5
Placer County Study Intersections (Unsignalized) – Existing Levels of Service

Intersection	Traffic Control	AM Peak Hour Delay (seconds)/LOS
Cook Riolo Rd / PFE Rd ¹	AWSC	15/B
Foothills Blvd / Athens Ave ²	SSSC	2 (11)/A (B)

Source: Fehr & Peers, 2018.

AWSC = All-Way Stop-Control. SSSC = Side-Street Stop-Control

1 For all-way stop-controlled intersections in Placer County, the overall delay and LOS is shown.

2 For side-street stop-controlled intersections the overall delay and LOS is shown without parenthesis and the worst movement delay and LOS in parenthesis.

3.15.2.5 Study Highway Segments

Table 3.15-6, LOS on Highway Segments – Existing Conditions, shows AM peak hour vehicular density (expressed in passenger car equivalents per mile per lane) and levels of service on study freeway mainlines. Both segments operate acceptably at LOS D or better.

**Table 3.15-6
LOS on Highway Segments – Existing Conditions**

Freeway Segment	Segment Type	Lanes	AM Peak Hour	
			Density (pcpmpl ¹)	LOS
SR 65 SB between Ferrari Ranch Rd and Lincoln Blvd	Basic	2	18	C
SR 65 SB between Twelve Bridges Dr and Sunset Blvd ²	Basic	2	27	D

Source: Fehr & Peers, 2018.

¹ Density is expressed in passenger car equivalents per mile per lane (pcpmpl). Density values are rounded to the nearest whole value.

² The segment of SR 65 SB between Twelve Bridges Dr and Sunset Blvd. is reported because the Whitney Ranch Parkway interchange was not constructed at the time of the counts and analysis.

3.15.2.6 Existing Transit Service

Transit service is currently provided to the residents of the City of Roseville by two transit providers: Roseville Transit Services and Placer County Transit. Other transit systems in Roseville include taxicab services, Greyhound Bus Lines, and Amtrak. These existing transit services are described below.

City of Roseville Transit Services

Roseville Commuter Service is a fixed-route scheduled transit system operated by the City of Roseville. It provides weekday commute period service between Roseville and downtown Sacramento. Roseville Transit is a fixed-route scheduled transit system operated by the City of Roseville within the city limits. There are currently nine scheduled routes. There are five transfer points - Sierra Gardens, Galleria Mall, Civic Center, Louis/Orlando, and Woodcreek Oaks/Junction. Many of the Roseville Transit riders are elderly and disabled. The Roseville Transit system connects to both Placer County Transit (at Galleria Mall and Louis/Orlando) and Sacramento Regional Transit (at Louis/Orlando).

There are currently no Roseville Transit routes directly serving the project site. The closest route is Route M. This route currently passes within approximately 3 miles of the project site, with its closest access being at the intersection of Pleasant Grove Boulevard and Market Street. Route R currently passes within about 3.5 miles of the project site, with its closest access being at the intersection of Blue Oaks Boulevard and Foothills Boulevard.

Roseville Transit Dial-A-Ride is a curb-to-curb system operated by the City of Roseville within its city limits, seven days a week. As a dial-a-ride service, it does not operate on fixed-route schedules; most of its riders are the elderly or the disabled.

Placer County Transit Services

Placer County Transit is a fixed-route scheduled transit system operated by Placer County that principally serves the I-80, Highway 49, and SR 65 corridors. Placer County Transit has an Auburn-to-Light Rail express route that stops at the Louis/Orlando transfer point and connects to Roseville Transit and Sacramento Regional Transit before proceeding to the Watt/I-80 light rail station. Placer County Transit also has a Lincoln to Galleria to Sierra College route.

Other Transit Services

Greyhound Bus Lines, Amtrak, and Capital Corridor Intercity Rail are other bus and rail transit services that are available in the Roseville area.

3.15.2.7 Existing Pedestrian Facilities

The City of Roseville has an extensive network of pedestrian facilities. Most residential streets contain improved sidewalk facilities and crosswalks at intersections. Arterial roadways adjacent to existing residential development have wide sidewalks, often flanked by landscaping corridors. There currently are no sidewalk facilities along existing Sunset Boulevard West or elsewhere adjacent to the project site.

3.15.2.8 Existing Bicycle Facilities

Bikeways are defined as specific routes and classes that meet minimum design standards. Roseville generally follows Caltrans' design standards for Class I, Class II, and Class III bikeways. In addition, Roseville has an additional classification for bikeways: Class IA facilities which are shared pedestrian and bikeway paths within landscaped corridors along arterial and collector roadways and are separated from the roadway. The City of Roseville has an adopted Bikeway Master Plan, which provides guidelines for the development of a city-wide network of Class I, IA, II, and III bicycle facilities and design standards (based on Caltrans standards) for new bicycle facilities within Roseville. Class II bike lanes currently exist near the project site on Fiddymont Road and Pleasant Grove Boulevard. The City's recommended bicycle network includes future Class II bike lanes on all arterial and collector roadways.

3.15.2.9 City of Roseville General Plan Level of Service (LOS) Policy Improvement Standards

The City of Roseville level of service policy calls for maintenance of LOS C standard at a minimum of 70 percent of all signalized intersections in the City during the PM peak hours.¹ The determination of project consistency with this policy is based on buildout of currently entitled land within the City and 2035 market rate development outside of the City.

¹ At the time that the Amoruso traffic study was prepared for the EIR, this threshold only applied to the PM peak hour. However, the EIR voluntarily included an evaluation of the AM peak hour as well. Since then the City of Roseville's General Plan has been revised and now includes the 70 percent of signalized intersections operating at LOS C or better threshold for both peak hours.

Roadway improvements within the City of Roseville must conform to a set of standards that detail City standards for pavement width, lighting, drainage, sewer, and other roadside facilities. Roadway facilities associated with the Proposed Action, or an alternative, must meet or exceed these standards.

3.15.3 SIGNIFICANCE THRESHOLDS AND ANALYSIS METHODOLOGY

3.15.3.1 Significance Thresholds

Council for Environmental Quality (CEQ) guidance requires an evaluation of a proposed action's effect on the human environment. The Corps has determined that the Proposed Action, or an alternative, would result in significant effects related to transportation and traffic if the traffic added by the Proposed Action, or an alternative, resulted in the exceedance of standards established by the City of Roseville, Placer County, or the State of California for transportation facilities within their jurisdiction.

The Corps has reviewed these standards and has determined them to be applicable for use as significance thresholds in this analysis. A significant impact would occur if implementation of the Proposed Action, or an alternative, would result in any of the following:

City of Roseville

- Cause a signalized intersection in Roseville to be degraded as follows under Cumulative Conditions during the AM or PM peak hours:
 - For intersections that currently operate at LOS C or better: worsen operations to LOS D or worse.
 - For intersections that currently operate at less than LOS C: cause operations to further worsen by one or more service levels.
- Cause the overall percentage of signalized intersections throughout the City of Roseville operating at LOS C or better during the AM or PM peak hours to fall below 70 percent.
- Not meet the policies and guidelines of Roseville's Bikeway Master Plan; or
- Have a negative impact on transit operations, travel times, and/or circulation.

*Placer County*²

- Cause an unsignalized intersection in Placer County (located beyond one-half mile of a state highway) to worsen from LOS C or better to LOS D or worse during the AM or PM peak hours; or
- Cause an unsignalized intersection in Placer County that is already (or projected to be) operating unacceptably during the AM or PM peak hours to experience a three-second or greater increase in delay.

² Placer County no longer uses these criteria as written to evaluate impacts at unsignalized intersections; both criteria have been updated by the County. However to maintain consistency with the analysis in the ARSP EIR, these criteria are used in this EIS to evaluate impacts of the Proposed Action and alternatives. Even if the new criteria were used, they would not change any of the conclusions of the analysis (although the delay reported for N. Foothills Boulevard/Athens Avenue would change).

State Highway Facilities

The *State Route 65 Corridor System Management Plan (CSMP)* (Caltrans, 2009) identifies a 20-year concept LOS E for SR 65 north of Blue Oaks Boulevard into and through the City of Lincoln. The document notes that “no further degradation of service from existing ‘F’ is acceptable, as indicated by delay performance measurement.” Accordingly, the following criterion was used as a threshold of significance for impacts on freeway facilities:

- Cause a facility maintained by Caltrans to worsen from acceptable to unacceptable operations during the AM or PM peak hours.

3.15.3.2 Analysis Methodology

Buildout of the Proposed Action is anticipated to occur by 2034. The City’s adopted Capital Improvement Program (CIP) Update and level of service standard considers traffic levels expected to occur under 2035 development levels, which was defined as the build out of currently entitled City land, plus some potential redevelopment of properties within the City’s Downtown area and 2035 market rate development outside of the City. The build out development forecasts within the City of Roseville are based on the forecasts developed for the City’s adopted CIP update. The National Environmental Policy Act (NEPA) requires an evaluation of the environmental effects of a Proposed Action relative to conditions that would exist in the area without the Proposed Action. Because Proposed Action buildout is assumed to occur by 2035, the transportation effects of the Proposed Action and alternatives were evaluated in this Draft EIS relative to background (2035) conditions that would exist in the study area without the Proposed Action or alternative. The Proposed Action and alternatives were not evaluated against the No Action alternative conditions because the No Action alternative in this Draft EIS is a reduced development scenario and is not a “No Development” scenario. Thus, traffic and circulation impacts of the Proposed Action, as well as those of the alternatives, were evaluated against the background conditions forecasted for year 2035.

The travel demand model for the City of Roseville and Placer County was used to estimate 2035 traffic volumes without the Proposed Action. The model translates land uses into roadway volume projections. Its inputs are estimates of development (i.e., the number of single-family and multi-family dwelling units, and the amount of square footage of various categories of non-residential uses) and descriptions of the roadway and transit systems. The model covers not only the City of Roseville, but also the entire Sacramento region (including portions of Placer County west of Colfax). The model maintains a general consistency with the trip distribution and mode choice estimates from the regional model used by the Sacramento Area Council of Governments (SACOG).

The outputs of the travel demand model include average daily, AM and PM, peak hour traffic volume forecasts on roadway segments, as well as turning movements at intersections. For the transportation analysis used in this Draft EIS, LOS were generated for existing and planned signalized intersections in the City of Roseville and unincorporated Placer County.

Analysis Scenarios

The following scenarios were evaluated in detail:

- 2035 Background Conditions;
- 2035 plus No Action Alternative Conditions;
- 2035 plus Proposed Action Conditions;
- 2035 plus Alternative 1 (Southern Avoidance) Conditions;
- 2035 plus Alternative 2 (Northern Avoidance) Conditions; and
- 2035 plus Alternative 3 (Distributed Avoidance) Conditions.

Development Assumptions for 2035 Background Conditions

The following land use and growth assumptions were used to develop 2035 Background Conditions:³

- Build-out of City of Roseville (existing City including approved specific plans);
- Build-out of the Regional University Specific Plan;
- Build-out of Phase 1 of Placer Vineyards;
- 2035 levels of residential market absorption in the City of Lincoln;
- Build-out of residential and 2035 market absorption levels of non-residential land uses in the City of Rocklin;
- SACOG 2035 market absorption for specific projects outside of South Placer County, including the Elverta Specific Plan (Sacramento County), Johnson Ranchos (Wheatland), and Sutter Pointe (Sutter County);
- Partial buildout of Placer Ranch (50 percent residential, 25 percent non-residential, and 25,000-student university); and
- Campus Oaks (HP Campus Rezone) project, including the extension of Roseville Parkway as a two-to four-lane street from Foothills Boulevard through the HP Campus northwesterly to Blue Oaks Boulevard.

Road Network Assumptions

The following roadway improvements were included for the 2035 Background Conditions:

- I-80 improvements, including new auxiliary lanes on EB I-80 from SR 65 to Rocklin Road and on WB I-80 from Douglas Boulevard to Riverside Avenue (included as a Tier 1 project in SACOG's MTP/SCS);
- SR 65 widening to six continuous lanes between I-80 and Blue Oaks Boulevard (partial funding being collected through South Placer Regional Transportation Agency (SPRTA) fee program, full funding expected to be available for construction in 21-year horizon period according to City staff);
- Baseline/Riego Road widening to six lanes from Fiddymment Road to SR 99 through Roseville, Placer County, and Sutter County (funded through fee programs and local developer frontage improvement requirements);

³ Although some of the projects included in the 2035 background conditions do not have permits/approvals from resource agencies including the Corps, they are considered reasonably foreseeable for this NEPA analysis as they have been proposed in the project area and some of these projects have also received land use approvals from the local jurisdictions in which they are proposed.

- SR 99/Riego Road interchange construction (now complete);
- Watt Avenue widening to six lanes between Baseline Road and Sacramento County line, and to four lanes from the County line to Antelope Road (funded through fee programs and local developer frontage improvement requirements);
- Walerga Road widening to four lanes between Baseline Road and Sacramento County line (funded through fee programs and local developer frontage improvement requirements);
- Santucci Boulevard construction as a six lane roadway from Baseline Road to Blue Oaks Boulevard (funded through City of Roseville CIP and local developer frontage improvement requirements);
- Blue Oaks Boulevard widening to eight lanes from SR 65 to Woodcreek Oaks Boulevard, and six lanes from Woodcreek Oaks Boulevard to Santucci Boulevard (funded through City of Roseville CIP and local developer frontage improvement requirements);
- Placer Parkway Phase 1 construction as a four lane roadway from SR 65 to Foothills Boulevard (included as a Tier 1 project in SACOG's 2035 MTP/SCS);
- Sunset Boulevard widening to four lanes from west of SR 65 to Cincinnati Avenue (funded through Placer County CIP);
- Sunset Boulevard widening to six lanes east of SR 65 (based on City of Rocklin General Plan Circulation Element Diagram 4-8, October 2012);
- Fiddymont Road widening to four lanes from the Roseville city limits to Athens Avenue (included as a Tier 1 project in SACOG's 2035 MTP/SCS); and
- Extension of Placer Parkway westerly as a four-lane roadway from Foothills Boulevard to Santucci Boulevard.

Trip Generation of Proposed Action and Alternatives

Table 3.15-7, Land Use Assumptions for Proposed Action and Alternatives, and **Table 3.16-8, Proposed Action and Alternatives Trip Generation**, provide a summary of the proposed land uses and trip generation and summarize the additional trips associated with the Proposed Action and each of the alternatives. As indicated in **Table 3.15-8**, the Proposed Action would generate approximately 36,591 daily trips. Daily trips include both trips originating from and terminating at the project site. **Table 3.15-8** also shows the estimated daily trips associated with each of the alternatives. The trip generation of the project alternatives range from 59 percent (No Action alternative) to 95 percent (Alternative 3, Distributed Avoidance) of the Proposed Action.

The internalization of trips within the project site was estimated using a Mixed-Use Trip Generation Model (MXD), which was developed for the U.S. Environmental Protection Agency (USEPA) to estimate internal trip-making and external trips by non-auto travel modes. This model was developed by consultants and academic researchers to more accurately estimate the external vehicular trip generation of mixed-use land development projects than prior methods (e.g., ITE internalization spreadsheet). At the time of the *Final*

Table 3.15-7
Land Use Assumptions for Proposed Action and Alternatives

Land Use	Units	Land Use Assumptions				
		No Action	Proposed Action ¹	Alternatives		
				Alt. 1 Southern Avoidance	Alt. 2 Northern Avoidance	Alt. 3 Distributed Avoidance
Single Family ²	DUs	1,095	1,954	1,499	1,607	1,757
Multi-Family		584	982	809	810	973
Retail ³	KSF	263	442	442	442	442
Office ³		20	34	34	34	34
School ⁴	Students	800	800	800	800	800

Source: Fehr & Peers 2016, 2018

Notes: DU = Dwelling Unit; KSF = Thousand Square Feet.

1 The number of dwelling units reported here are from the 2016 TIS. The proposed project as defined in the 2016 EIR included 1,954 single-family and medium density units whereas the Proposed Action has been redefined and includes 1,302 single-family units and about 542 medium density units for a total of 1,844 units, which are 110 units fewer than analyzed in the 2016 TIS.

2 Per the Applicant, all medium-density residential uses (ranging from 7 to 13 units per acre) were assumed to be single-family so as to provide a conservative analysis.

3 Per the Applicant, the 27.3-acre Village District (AR-51 and AR-52) is assumed to consist of 15% office and 85% retail, which yields 34 ksf office and 204 ksf retail. Although the 23.85-acre Community Commercial parcel (AR-53) may permit a mix of retail and office, a worst-case assumption of 100% retail 238 KSF was assumed.

4 Typical elementary school size and attendance assumed.

Table 3.15-8
Proposed Action and Alternatives Trip Generation

Land Use	Daily Trips Per Unit	Daily Trips				
		No Action	Proposed Action	Alternatives		
				Alt. 1 Southern Avoidance	Alt. 2 Northern Avoidance	Alt. 3 Distributed Avoidance
Single Family (DUs)	9.52	10,424	18,602	14,270	15,299	16,727
Multi-Family (DUs)	6.65	3,884	6,530	5,380	5,387	6,470
Retail (KSF)	42.7	11,230	18,873	18,873	18,873	18,873
Office (KSF)	11.03	221	377	375	375	375
School (Students)	1.29	1,032	1,032	1,032	1,032	1,032
Gross Trips		26,791	45,144	39,930	40,966	43,477
Internal Trips		-5,217	-8,823	-8,131	-8,269	-8,590
Net External Trips		21,574	36,591	31,799	32,697	34,887
As Percentage of Proposed Action		59	100	87	89	95

Source: Fehr & Peers 2016; 2018

Notes: DU = Dwelling Unit; KSF = Thousand Square Feet.

Traffic Study for the Amoruso Ranch Specific Plan, the model was developed based on empirical evidence at 240 mixed-use projects located across the U.S. The model considers various built environment variables, such as land use density, regional location, proximity to transit, and various design variables when calculating the project's internal trips, and external trips made by auto, transit, and non-motorized vehicles.

3.15.4 ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES

Impact TRA-1 Increased Traffic at City of Roseville Intersections

No Action Alt. The No Action alternative would result in development of the project site with a variety of land uses, including residential and commercial uses. As indicated in **Table 3.15-9** (at the end of this section), two of the study intersections in the City of Roseville would operate at LOS D under 2035 plus No Action alternative conditions during the PM peak hour. However, the No Action alternative would not result in these intersections degrading by one or more LOS category, as indicated under the significance thresholds above. Thus, **no direct** or **indirect** effects on traffic in the City of Roseville under the No Action alternative were identified.

Proposed Action The Proposed Action would construct a larger mixed-use development on the project site, compared to the No Action alternative. As indicated in **Table 3.15-9**, all three study intersections would operate at LOS D or E under 2035 plus Proposed Action conditions during the PM peak hour. A description of each intersection affected is provided below:

- **Blue Oaks Boulevard/Collector C** – This planned intersection would be located approximately 1,175 feet west of the Blue Oaks Boulevard/Foothills Boulevard intersection. The Proposed Action would add approximately 300 eastbound through vehicles during the PM peak hour. Queued vehicles on the eastbound Blue Oaks Boulevard approach would spill back through this intersection, thereby causing intersection to degrade from LOS C to LOS D during the PM peak hour. Due to the level of project-added traffic and the degree of delay increase (32 to 55 seconds), it is unlikely that signal timing modifications would restore operations to LOS C. Further, no additional widening beyond what is assumed is possible. This would be a **significant indirect** effect.
- **Blue Oaks Boulevard/Washington Boulevard/SR 65 SB Ramps** – The traffic added under the Proposed Action would cause the intersection of Blue Oaks Boulevard /Washington Boulevard /SR 65 SB Ramps to degrade from LOS D to LOS E during the PM peak hour. This intersection was modified within the last four years to add additional capacity. The 2035 Cumulative scenario assumes additional planned widening (i.e., second northbound right-turn lane and third westbound through lane), and no additional widening beyond what was assumed is possible. This would be a **significant indirect** effect.
- **Eureka Road/Taylor Road/I-80 EB Ramps** – Traffic added under the Proposed Action would cause the intersection of Eureka Road/Taylor Road/I-80 EB to degrade from LOS D to LOS E during the PM peak hour. This intersection was rebuilt within the last five years to add additional capacity. A second westbound right-turn lane is planned on Taylor Road, which is assumed in-place for the 2035

Cumulative scenario. No additional widening at this intersection is possible. This would be a **significant indirect** effect.

As discussed above, no feasible improvements are available to reduce the effect on these three impacted intersections. Therefore, a **significant indirect** effect on traffic at the City of Roseville intersections would occur under the Proposed Action. **No direct** effects on traffic on the City of Roseville intersections under the Proposed Action were identified.

Alts. 1, 2, 3

Alternatives 1, 2, and 3 would construct similar large-scale mixed-use developments on the project site compared to the Proposed Action, but each would have a reduced footprint. As indicated in **Table 3.15-9**, Alternatives, 1, 2, and 3 would cause the intersection of Blue Oaks Boulevard/Collector C to degrade from LOS C to LOS D during the PM peak hour, and the intersection of Blue Oaks Boulevard /Washington Boulevard /SR 65 SB Ramps to degrade from LOS D to LOS E during the PM peak hour. In addition, under Alternative 3, the intersection of Eureka Road/Taylor Road/I-80 EB would degrade from LOS D to LOS E during the PM peak hour; however, no degradation of service would occur under Alternatives 1 or 2 at this intersection. Based on the significance criteria listed above, and as discussed under the Proposed Action, **indirect** effects on City intersections would be **significant**. No feasible improvements are available to reduce the effect on these three impacted intersections. Thus, a **significant indirect** effect on traffic at the City of Roseville intersections would occur under Alternatives, 1, 2, or 3. **No direct** effects on traffic at the City of Roseville intersections, under Alternatives 1, 2, and 3, were identified.

Impact TRA-2 Consistency of Proposed Development with City of Roseville’s Policy related to Intersection Operations

No Action Alt., Proposed Action, Alts. 1, 2, 3 The Proposed Action, as well as all of the alternatives, would be consistent with City of Roseville’s policy, which requires that even with the addition of a project’s traffic, at least 70 percent of the signalized intersections in Roseville operate at LOS C or better in both AM and PM peak hours under cumulative conditions. The Traffic Study for the ARSP EIR prepared in 2016 found that the Proposed Action would result in 80 to 90 percent of the City’s signalized intersections to function at LOS C or better during the PM and AM peak hours, respectively. Since the No Action alternative and Alternatives 1, 2, and 3 would generate less external trips than the Proposed Action, as shown on **Table 3.15-8**, they would not cause this percentage to decrease below the 70 percent threshold. Therefore, **no direct** or **indirect** effects on signalized intersections in the City of Roseville, under the Proposed Action, as well as the alternatives, were identified.

Impact TRA-3 Increased Traffic at Placer County Intersections

No Action Alt. Operations at the two study intersections in unincorporated Placer County that would be operating at LOS F under 2035 conditions would be exacerbated under the No Action alternative. As shown in **Table 3.15-10** (at the end of this section), the No Action alternative would increase delay at the intersection of Cook Riolo Road/PFE Road by seven seconds during the AM peak hour and delay at the intersection of North Foothills Boulevard/Athens Avenue by 26 seconds during the AM peak hour. This would have a **significant indirect** effect on traffic at Placer County intersections.

Mitigation Measure TRA-3a is proposed to address the effect at the intersection of Cook Riolo Road/PFE Road and would require the Applicant to pay fair share costs of any capacity enhancing improvements identified by Placer County to mitigate for project impacts on the intersection. This measure is the same as Mitigation Measure 4.3-3(c) in the ARSP EIR and it is highly likely that the City would impose this mitigation measure on the No Action alternative. However, as noted in the ARSP EIR, Placer County staff has indicated that the Dry Creek community does not desire a traffic signal at the intersection of Cook Riolo Road/PFE Road. Thus, no foreseeable planned improvements have been identified for this intersection as part of the Dry Creek Community Plan.

Mitigation Measure TRA-3b is proposed to address the effect at the intersection of North Foothills Boulevard/Athens Avenue and would require the Applicant to pay fair share costs of installing a traffic signal at the intersection. Installation of a traffic signal at this intersection would restore operations to LOS A during the AM peak hour. This measure is the same as Mitigation Measure 4.3-3(h) in the ARSP EIR, and it is highly likely that the City would impose this mitigation measure on the No Action alternative. However, there is uncertainty regarding this improvement because this improvement is not included in any known fee program.

Both mitigation measures discussed above would require the City of Roseville to negotiate in good faith with Placer County, on behalf of the Applicant, to identify the fair share funding contribution toward any capacity enhancing improvements identified by the County for these intersections. Since the type of improvements and funding sources are not known, there is no assurance that the remaining funds necessary for construction will be collected. For these reasons, there is uncertainty regarding the feasibility of these mitigation measures. Thus, **indirect** effects on traffic at Placer County intersections under the No Action alternative would be **significant**. **No direct** effects on traffic at Placer County intersections under the No Action alternative were identified.

Proposed Action Like the No Action alternative, LOS F operations at the two study intersections in unincorporated Placer County would be exacerbated under the Proposed Action. As shown in **Table 3.15-10**, the Proposed Action would increase delay at the intersection of Cook Riolo Road/PFE Road by 12 seconds during the AM peak hour and the delay at the

intersection of North Foothills Boulevard/Athens Avenue by 45 seconds during the AM peak hour. Based on the significance criteria listed above, and for the same reasons identified under the No Action alternative, **indirect** effects on traffic at Placer County intersections would be **significant**.

Mitigation Measures TRA-3a and **TRA-3b** are proposed to address these effects and are the same as Mitigation Measures 4.3-3(c) and 4.3-3(h), respectively, in the ARSP EIR, which were adopted by the City of Roseville at the time of project approval. However, as noted above, these mitigation measures require the City of Roseville to negotiate in good faith with Placer County to identify the Proposed Action's fair share funding contribution. In addition, the City of Roseville does not have jurisdiction over the improvements at Placer County intersections. Therefore, due to the uncertainty regarding the feasibility of implementing these mitigation measures, **indirect** effects on traffic at Placer County intersections, under the Proposed Action, would be **significant**. **No direct** effects on traffic at Placer County intersections, under the Proposed Action, were identified.

Alts. 1, 2, 3

Like the No Action alternative and Proposed Action, LOS F operations at the two study intersections in unincorporated Placer County would be exacerbated under Alternatives 1, 2, and 3. As shown in **Table 3.15-10**, these alternatives would increase delay at the intersection of Cook Riolo Road/PFE Road by 10 to 12 seconds during the AM peak hour and the delay at the intersection of North Foothills Boulevard/Athens Avenue by 37 to 43 seconds during the AM peak hour. Based on the significance criteria listed above, and for the same reasons presented under the No Action alternative **indirect** effects on traffic at Placer County intersections under Alternatives 1, 2, or 3 would be **significant**.

Mitigation Measures TRA-3a and **TRA-3b** are proposed to address these effects and are the same as Mitigation Measures 4.3-3(c) and 4.3-3(h), respectively, in the ARSP EIR. However, as noted above, these mitigation measures require the City of Roseville to negotiate in good faith with Placer County to identify the fair share funding contribution. In addition, the City of Roseville does not have jurisdiction over the improvements on Placer County intersections. Therefore, due to the uncertainty regarding the feasibility of implementing these mitigation measures, **indirect** effects on traffic at Placer County intersections, under Alternatives 1, 2, and 3, would be **significant**. **No direct** effects on traffic at Placer County intersections, under Alternatives 1, 2, or 3, were identified.

Mitigation Measure TRA-3a:

Pay fair share of the improvements to the intersection of Cook Riolo Road/PFE Road

(Applicability – No Action, Proposed Action, and Alternatives 1, 2, and 3)

The Applicant shall pay their fair share cost of any capacity enhancing improvements identified by Placer County at the Cook Riolo Road/PFE Road intersection.

Mitigation Measure TRA-3b:

Pay fair share of the improvements to the intersection of North Foothills Boulevard/Athens Avenue

(Applicability – No Action, Proposed Action, and Alternatives 1, 2, and 3)

The Applicant shall pay their fair share cost of installing a traffic signal at the North Foothills Boulevard/Athens Avenue intersection.

Impact TRA-4 Increased Traffic on Highway Segments

No Action Alt. As indicated in **Table 3.15-11** (at the end of this section), of the two study highway segments, the SB segment of SR 65 from Ferrari Ranch Road to Lincoln Boulevard is projected to operate at an acceptable level during the AM peak hour under 2035 plus No Action conditions. However, the SB segment of SR 65 from Twelve Bridges Drive to Placer Parkway is projected to degrade from LOS E to LOS F during the AM peak hour under 2035 plus No Action conditions. Thus, **indirect** effects on traffic along highway segments under the No Action alternative would be **significant**. **No direct** effects on traffic along highway segments, under the No Action alternative, were identified.

Mitigation Measure TRA-4 is proposed and would require the Applicant to pay the Highway 65 Joint Powers Authority (JPA) fee and the South Placer Regional Transportation Agency (SPRTA) fee (The Highway 65 JPA fee assesses fees on new development for the cost of interchange improvements along SR 65 and the SPRTA fee provides funding for regional projects such as the State Route 65 Widening and Placer Parkway). This measure is the same as Mitigation Measure 4.3-7 in the ARSP EIR and is highly likely to be imposed by the City of Roseville under the No Action alternative to address this effect. However, because the remaining funding needed to widen SR 65 to six lanes from north of Whitney Ranch Parkway/Placer Parkway to Ferrari Ranch Road has not been identified, the needed improvement may not be implemented.

**Proposed
Action**

As indicated in **Table 3.15-11** below, with the addition of traffic associated with the Proposed Action, operations of the two study highway segments on SR 65 would degrade from LOS E to LOS F during the AM peak hour under 2035 plus Proposed Action conditions. Based on the significance criteria listed above, and for the same reasons identified under the No Action alternative, these **indirect** effects would be **significant**. **No direct** effects on traffic along highway segments, under the Proposed Action, were identified.

Mitigation Measure TRA-4 is proposed to address the effects on both segments. However, as noted above, remaining funding necessary to widen SR 65 to six lanes from north of Whitney Ranch Parkway/Placer Parkway to Ferrari Ranch Road has not been identified. This means that the mitigation may not occur at the same time as the impacts caused by

the Proposed Action.

Alts. 1, 2, 3

As indicated in **Table 3.15-11** below, the SB segment of SR 65 from Ferrari Ranch Road to Lincoln Boulevard is projected to operate at an acceptable level during the AM peak hour under 2035 plus Alternative 1 conditions. However, the SB segment along SR 65 from Twelve Bridges Drive to Placer Parkway is projected to degrade from LOS E to LOS F during the AM peak hour under 2035 plus Alternative 1 conditions. With respect to Alternatives 2 and 3, both study highway segments along SR 65 would degrade from LOS E to LOS F during the AM peak hour under both alternatives. Based on the significance criteria listed above, and for the same reasons identified under the No Action Alternative, **indirect** effects on traffic along highway segments under Alternatives 1, 2, and 3 would be **significant**. **No direct** effects on traffic along highway segments under Alternatives 1, 2, or 3 were identified.

Mitigation Measure TRA-4 is proposed to address the effects these segments and is highly likely to be imposed by the City of Roseville. However, as noted above, the mitigation may not occur at the same time as the impacts caused by the alternatives.

Mitigation Measure TRA-4:

Pay fair share of the cost of improvements to the affected SR 65 segments

(Applicability – No Action, Proposed Action, and Alternatives 1, 2, and 3)

The Applicant shall pay the Highway 65 JPA Fee and the SPRTA Fee.

Impact TRA-5 Increased Demand for Local Transit Service

No Action Alt. The No Action alternative would result in the development of the project site with a variety of land uses, including residential and commercial uses. The addition of these uses would increase the demand for transit within the City of Roseville. There are currently no Roseville Transit routes directly serving the project site, and due to funding constraints it is anticipated that Local Service (and thus ADA Paratransit Service) will not be extended to the project site upon initial development. Roseville Transit regularly reviews and, as needed and feasible, adjusts its services in consideration of unmet transit needs within the City of Roseville. Future service adjustments may include service to the project site. Until that time, Dial-A-Ride Service is the only transit service that will be available to the project site. As a result, the increased transit demand resulting from the project could impact Dial-A-Ride Service due to extended travel times and increased demand. This would result in an **indirect significant** effect to existing transit services and to future residents within the project site that would not have access to local transit services.

Mitigation Measure TRA-5 is proposed to address this effect and would require the

Applicant to construct transit stops at key arterial intersections and at other locations as determined by the Public Works Director, in accordance with the City's Improvement Standards, and require the Applicant to pay a fair share fee that will enable transit services to be extended to the project site. This measure is the same as Mitigation Measure 4.3-2 in the ARSP EIR and is highly likely to be imposed by the City of Roseville under the No Action alternative. **No direct** effects on local transit services under the No Action alternative were identified.

Proposed Action, Alts. 1, 2, 3 As noted above, there are currently no Roseville Transit routes directly serving the project site. The effect of the Proposed Action, as well as Alternatives 1, 2, and 3, would be the same as described above for the No Action alternative. Based on the significance criteria listed above, and for the same reasons identified under the No Action alternative, **indirect** effects on local transit services under the Proposed Action, as well as Alternatives 1, 2, and 3, would be **significant**.

Mitigation Measure TRA-5 would address this effect by ensuring that transit stops are constructed at key arterial intersections and that the Applicant pays its fair share to extend transit services to the project site. Since this mitigation measure has been imposed on the Proposed Action and is highly likely to be imposed by the City of Roseville on Alternatives 1, 2 and 3 to reduce this effect. **No direct** effects on local transit services under the Proposed Action, or Alternatives 1, 2, or 3, were identified.

Mitigation Measure TRA-5: **Pay fair share of the cost toward local transit improvements (Applicability – No Action, Proposed Action, and Alternatives 1, 2, and 3)**

The Applicant shall pay its fair share towards the capital improvements for expanded transit services to the project site. This includes bus turn-outs, shelter pads, and shelters.

Impact TRA-6 Increased Demand for Local Bicycle Facilities

No Action Alt. The No Action alternative would result in the development of the project site with a variety of land uses. These uses would increase the demand for bicycle facilities within the City of Roseville and neighboring jurisdictions. The No Action alternative would include Class I trails, Class II bike lanes, and Class IA facilities (paseos, etc.). These would be connected to each other within the project site and would connect to the existing City bikeway system. The demand for bicycle facilities would be adequately served by the proposed bicycle facilities under the No Action alternative. Therefore, **no direct** or **indirect** effects on local bicycle facilities under the No Action alternative were identified.

Proposed Action, Alts. 1, 2, 3 The Proposed Action, as well as Alternatives 1, 2, and 3, would also construct adequate bicycle facilities, including Class I trails, Class II bike lanes, and Class IA facilities. Based on the significance criteria listed above, and for the same reasons identified under the No Action alternative, **no direct** or **indirect** effects on local bicycle facilities, under the Proposed Action, as well as Alternatives 1, 2, and 3, were identified.

3.15.5 REFERENCES

- City of Roseville. 2016a. *Amoruso Ranch Specific Plan Environmental Impact Report SCH No. 2013102057*. May.
- City of Roseville. 2016b. *City of Roseville General Plan 2035*. Adopted June 15, 2016.
- Fehr & Peers. 2016. *Final Traffic Study for the Amoruso Ranch Specific Plan*. February 16.
- Fehr & Peers. 2018. *Focused Traffic Study for the Amoruso Ranch Specific Plan*. May 14.
- Transportation Research Board. 2000. *Highway Capacity Manual*.
- Transportation Research Board. 2010. *Highway Capacity Manual 2010*.

**Table 3.15-9
City of Roseville PM Peak Hour Intersection Operations – 2035 Cumulative Conditions**

Intersection	No Project		Alternatives									
			2035 Plus Project									
			No Action		Proposed Action		Southern Avoidance		Northern Avoidance		Distributed Avoidance	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Blue Oaks Blvd / Collector C	32	C	34	C	55	D	45	D	45	D	45	D
Blue Oaks Blvd / Washington Blvd / SR 65 SB Ramps	52	D	51	D	59	E	55	E	56	E	56	E
Eureka Rd / Taylor Rd / I-80 EB Ramps	53	D	53	D	55	E	54	D	54	D	56	E

Source: Fehr & Peers, 2016; 2018

**Table 3.15-10
Placer County AM Peak Hour Intersection Operations – 2035 Cumulative Conditions**

Intersection	No Project		Alternatives									
			2035 Plus Project									
			No Action		Proposed Action		Southern Avoidance		Northern Avoidance		Distributed Avoidance	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Cook Riolo Rd / PFE Rd	193	F	200	F	205	F	203	F	203	F	205	F
Foothills Blvd / Athens Ave	68 (352)	F (F)	94 (475)	F (F)	113 (281)	F (F)	105 (527)	F (F)	106 (531)	F (F)	111 (554)	F (F)

Source: Fehr & Peers, 2016; 2018

**Table 3.15-11
AM Peak Hour Freeway Operations – 2035 Cumulative Conditions**

Intersection	Alternatives											
	No Project		2035 Plus Project									
			No Action		Proposed Action		Southern Avoidance		Northern Avoidance		Distributed Avoidance	
	Density	LOS	Density	LOS	Density	Density	Density	LOS	Density	LOS	Density	LOS
SR 65 SB between Ferrari Ranch Rd and Lincoln Blvd	44	E	45	E	--	F	45	E	--	F	--	F
SR 65 SB between Twelve Bridges Dr and Sunset Blvd ²	45	E	--	F	--	F	--	F	--	F	--	F

Source: Fehr & Peers, 2016; 2018