

2.1.5 TRAFFIC AND TRANSPORTATION/PEDESTRIAN AND BICYCLE SYSTEM

This section describes the potential impacts on the transportation system near the project site. The impact analysis examines the roadway, transit, and bicycle/pedestrian components of the overall transportation system under construction year (Year 2006) and cumulative (Year 2025) conditions with and without the project alternatives. The technical analysis presented in this section is based on the February 9, 2004, Final Traffic Analysis Report for the Sheldon Road/SR 99 Interchange Improvement Project Report.

REGULATORY SETTING

Existing federal, state, and local transportation policies, laws and regulations that would apply to the proposed project are summarized below. This information provides a context for the impact discussion related to the project's consistency with applicable regulatory conditions.

Federal

Federal funding may be used for the Sheldon Road/SR 99 Interchange Improvement project; therefore, the following federal regulations pertain:

Accommodation of Pedestrian and Bicyclists

Title 23 Code of Federal Regulations (CFR) Part 652 outlines policy related to the provision of pedestrian and bicycle accommodations on highway construction projects that are financed in part with federal funds. Section 652.5 provides the following direction:

“The safe accommodation of pedestrians and bicyclists should be given full consideration during the development of Federal-aid highway projects, and during the construction of such projects. The special needs for the elderly and handicapped shall be considered in all Federal-aid projects that include pedestrian facilities. Where current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort shall be made to minimize the detrimental effects on all highway users who share the facility.”

Americans with Disabilities Act (1990)

The FHWA is committed to carrying out the 1990 Americans with Disabilities Act (ADA) by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public will be provided to persons with disabilities.

State

Caltrans

Caltrans oversees the state highway system. The following policies pertain to the state highway portion of the proposed project.

Transportation Concept Report

Caltrans has identified LOS F as the concept LOS for SR 99 through the study area in the *Draft State Route 99 Transportation Concept Report* (Caltrans, May 2003).

Guide for the Preparation of Traffic Impact Studies

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on state highway facilities.

Policy on Non-motorized Vehicles

Caltrans Deputy Directive DD-64 requires that all projects accommodate non-motorized travel as follows:

“The Department fully considers the needs of non-motorized travelers (including pedestrian, bicyclists and persons with disabilities) in all programming, planning, maintenance, construction, operations and project development activities and products.”

Local

City of Elk Grove

The City of Elk Grove requires a minimum LOS D at all times in urban areas and LOS C at all times in rural areas according to the General Plan.

City of Sacramento

The City of Sacramento’s General Plan strives for achieving an overall LOS C on the City’s local and major street systems.

South Sacramento Community Plan

The City of Sacramento’s South Sacramento Community Plan outlines several policies that relate to transportation and circulation, as they relate to the proposed project:

- **Policy 2:** Improve the flow of traffic along major streets;
- **Policy 4:** Provide adequate bike paths throughout South Sacramento; and
- **Policy 7:** Give high priority to funding major streets, which will mitigate identified traffic impacts when making annual recommendations for projects in the Capital Improvements Program.

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Other

Operational (i.e., traffic) conditions are typically described by transportation professionals in terms of “level of service” (LOS). Level of service is a common, qualitative measure of the effect of a number of factors on traffic operation conditions, including speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort, and convenience. LOS varies for LOS A (the best) to LOS F (the worst). Specific LOS definitions for freeway facilities and intersections are described in **Table 2.1.5-1** through **Table 2.1.5-4**.

**TABLE 2.1.5-1
FREEWAY SEGMENT LOS CRITERIA**

Level of Service	Description	Density (vplpm)
A	Free-flow operations.	≤ 11
B	Reasonable free-flow operations and free-flow speed is maintained.	> 11 to 18
C	Speeds at or near free-flow speed, freedom to maneuver is noticeably restricted.	> 18 to 26
D	Speeds begin to decline slightly with increased flows and density, and driver experiences reduced physical and psychological comfort levels.	> 26 to 35
E	Operations at capacity with speeds above 50 mph.	> 35 to 45
F	Breakdowns in vehicular flow when flow rate exceeds capacity.	> 45

Source: *Highway Capacity Manual (Transportation Research Board, 2000)*

**TABLE 2.1.5-2
RAMP JUNCTION LOS CRITERIA**

Level of Service	Description	Density (vplpm)
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	< 10
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	> 10 to 20
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.	> 20 to 28
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.	> 28 to 35
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 to 43
F	Represents a breakdown in flow.	> 43

Source: *Highway Capacity Manual (Transportation Research Board, 2000)*

**TABLE 2.1.5-3
SIGNALIZED INTERSECTION LOS CRITERIA**

Level of Service	Description	Average Control Delay (seconds/vehicle)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	< 10
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10 to 20
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20 to 35
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35 to 55
E	Operations with high delay values indicating poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	> 55 to 80
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	> 80

Source: Highway Capacity Manual (Transportation Research Board, 2000)

**TABLE 2.1.5-4
UNSIGNALIZED INTERSECTION LOS CRITERIA**

Level of Service	Description	Average Control Delay (seconds/vehicle)
A	Little or no conflicting traffic.	< 10
B	The approach begins to notice absence of available gaps.	> 10 to 15
C	The approach begins experiencing delay for available gaps.	> 15 to 25
D	The approach experiences queuing due to a reduction in available gaps.	> 25 to 35
E	Extensive queuing due to insufficient gaps.	> 35 to 50
F	Insufficient gaps of suitable size to allow traffic demand to cross safely through a major traffic stream.	> 50

Source: Highway Capacity Manual (Transportation Research Board, 2000)

AFFECTED ENVIRONMENT

Existing conditions for the study area roadway, transit, bicycle, and pedestrian components of the transportation system are described below, including a description of the current roadway system near the proposed project and the traffic analysis of study area intersections, freeway mainline segments, transit, bicycle, and pedestrian facilities under existing conditions. **Figure 2.1.5-1** shows the project study area and study intersections for the proposed project.

Roadway System

The primary existing roadways near the proposed project are State Route 99 (SR 99), Sheldon Road, Bruceville Road, and Cosumnes River Boulevard. Each roadway is described below:

- SR 99 is a major regional highway connecting Sacramento to Fresno and the San Joaquin Valley. SR 99 runs in a northwest/southeast direction through the City of Elk Grove as a four- to six-lane grade-separated freeway and provides connections to five major arterials (Cosumnes River Boulevard/Calvine Road, Sheldon Road, Laguna Boulevard/Bond Road, Elk Grove Boulevard, and Grant Line Road). In the vicinity of Sheldon Road, SR 99 has two mixed flow lanes and one HOV lane in each direction. SR 99 is an important route for both interregional and local traffic. Increasing travel demand in City of Elk Grove has led to increased congestion during peak periods and higher than average accident rates at the Sheldon Road/SR 99 interchange;
- Sheldon Road is a two-lane undivided arterial that connects Center Parkway with Grant Line Road. This route serves the adjacent residential and neighborhood commercial areas. Sheldon Road currently connects with SR 99 mainline via the East and West Stockton Boulevards. Sheldon Road is designated as a four- to six-lane arterial in the City of Elk Grove General Plan (City of Elk Grove, 2003);
- Bruceville Road is a north-south four-lane collector that extends south from Valley Hi Drive in the City of Sacramento, through the City of Elk Grove, and to Twin Cities Road in Sacramento County. Bruceville Road is designated as a six-lane arterial in the City of Elk Grove General Plan (City of Elk Grove, 2003);
- Cosumnes River Boulevard is an east-west four-lane urban arterial that connects Franklin Boulevard to Power Inn Road, and it becomes Calvine Road east of Power Inn Road. Calvine Road is currently a two- and four-lane urban arterial and is designated as a six-lane arterial in the City of Elk Grove General Plan (City of Elk Grove, 2003).

To determine the existing operating conditions within the study area, two (2) freeway segments and 13 intersections were selected for analysis by the City of Elk Grove. AM and PM peak hour traffic operations were evaluated for the study area freeway segments, ramp junctions, and intersections using procedures and methodologies contained in the Highway Capacity Manual (Transportation Research Board, 2000).

Freeway Mainline Segment Operations

Figure 2.1.5-2 shows the existing conditions for peak hour traffic volumes and lane configurations for the study area. **Table 2.1.5-5** summarizes the AM and PM peak hour LOS on SR 99 between Laguna Boulevard and Cosumnes River Boulevard.

Most study freeway mainline segments operate acceptably at LOS D or better during both AM and PM peak hours except for southbound SR 99 between Cosumnes River Boulevard and Sheldon Road, which operates at LOS E during the PM peak hour. However, southbound SR 99 between Cosumnes River Boulevard and Sheldon Road operates at the LOS E (nearly LOS D) threshold, which indicates that this segment operates under capacity. Field observations indicate that the SR 99 mainline operates acceptably with only a slight reduction of speed within the study area.

TABLE 2.1.5-5
FREEWAY MAINLINE LOS - EXISTING CONDITIONS

Freeway Mainline	AM Peak		PM Peak	
	Density ¹	LOS ²	Density ¹	LOS ²
SR 99 Northbound: Laguna Boulevard to Sheldon Road	27	D	26	C
SR 99 Northbound: Sheldon Road to Cosumnes River Blvd	30	D	26	D
SR 99 Southbound: Cosumnes River Blvd to Sheldon Road	25	C	<u>36</u>	<u>E</u>
SR 99 Southbound: Sheldon Road to Laguna Boulevard	24	C	30	D

Notes:

(1) Density in passenger cars per mile per lane.

(2) LOS based on the Highway Capacity Manual (Transportation Research Board, 2000)

Bold font with underscore indicates unacceptable operations.

Source: Fehr & Peers, 2003.

Freeway Ramp Junction Operations

Table 2.1.5-6 summarizes the AM and PM peak hour LOS at the Sheldon Road/SR 99 Interchange ramp junctions.

TABLE 2.1.5-6
FREEWAY RAMP JUNCTION LOS - EXISTING CONDITIONS

Freeway Ramp Junction	AM Peak		PM Peak	
	Density ¹	LOS ²	Density ¹	LOS ²
Northbound SR 99 Off-Ramp to East Stockton Blvd	31	D	30	D
Northbound SR 99 On-Ramp from East Stockton Blvd	31	D	28	C
Southbound SR 99 Off-Ramp to West Stockton Blvd	27	C	<u>37</u>	<u>E</u>
Southbound SR 99 On-Ramp from West Stockton Blvd	25	C	31	D

Notes:

(1) Density in passenger cars per mile per lane.

(2) LOS based on the Highway Capacity Manual (Transportation Research Board, 2000)

Bold font with underscore indicates unacceptable operations.

Source: Fehr & Peers, 2003.

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Most study freeway ramp junctions operate acceptably during both AM and PM peak hours. Although the merge and diverge areas have acceleration lanes that are shorter than current standards, the freeway mainline and ramp volumes are low enough such that merging and diverging movements result in uncongested operations. However, the southbound SR 99 off-ramp operates near the LOS D/LOS E threshold during the PM peak hour. Consequently, unacceptable operations likely occur at this location during the PM peak hour.

Intersection Operations

Table 2.1.5-7 summarizes the existing conditions analysis results for the study intersections.

TABLE 2.1.5-7
INTERSECTION LEVEL OF SERVICE AND DELAY - EXISTING CONDITIONS

Intersection	Control	LOS Threshold	Level of Service/Delay ¹	
			AM	PM
Calvine Rd./Northbound SR 99 Ramps	Signalized	LOS D	B/14	B/14
Calvine Rd./Southbound SR 99 Ramps	Signalized	LOS D	B/18	D/35
Cosumnes River Blvd./Bruceville Road	Signalized	LOS C	<u>D/41</u>	<u>E/64</u>
Sheldon Road/Bruceville Road ²	Signalized	LOS D	D/39 <u>SB: D/37</u>	<u>E/76</u> <u>SB: D/49</u>
Sheldon Road/Lewis Stein Road ²	Signalized	LOS D	A/9 SB: A/0	C/20 <u>SB: D/49</u>
Sheldon Road/West Driveway	Side-street Stop	LOS D	B/12	B/12
Sheldon Road/East Driveway	Side-street Stop	LOS D	A/2	A/2
Sheldon Road/West Stockton Boulevard ²	Signalized	LOS D	C/31 ³ <u>SB: E/55</u>	D/37 ³ <u>SB: D/46</u>
Sheldon Road/East Stockton Boulevard	Signalized	LOS D	<u>F/>80</u>	<u>F/>80</u>
W. Stockton Blvd./SR 99 Southbound Off-ramp	Side-street Stop	LOS D	B/12	D/31
W. Stockton Blvd./SR 99 Southbound On-ramp	Side-street Stop	LOS D	A/6	A/5
E. Stockton Blvd./SR 99 Northbound Off-ramp	Side-street Stop	LOS D	A/8	A/8
E. Stockton Blvd./SR 99 Northbound On-ramp	Side-street Stop	LOS D	C/15	D/25

Notes:

(1) Delay is reported as average control delay per vehicle for unsignalized intersections and average control delay for signalized intersections. All delays are reported in seconds per vehicle.

(2) The southbound approach is within City of Sacramento; therefore, LOS C applies.

(3) Field observations indicate the W. Stockton Boulevard/Sheldon Road intersection operates at LOS D and LOS F during the AM and PM peak hours, respectively.

Bold with underscore indicates unacceptable operations.

Source: Fehr & Peers, 2003.

Field observations indicate that the congestion at the Sheldon Road/East Stockton Boulevard intersection affects traffic operations at the Sheldon Road/West Stockton Boulevard intersection. Consequently, queues on East Stockton Boulevard and West Stockton Boulevard extend from Sheldon Road to SR 99 northbound and southbound off-ramps, respectively. In addition, due to the short acceleration lengths, heavy vehicles experience difficulty accelerating into the mainline traffic flow.

Most of the study intersections operate acceptably during both the AM and PM peak hours. High demand volumes and the limited capacity of certain turning movements cause unacceptable operational conditions at some study intersections.

- The Bruceville Road/Cosumnes River Boulevard intersection serves more than 400 vehicles in one 37-meter (120-foot) left turn lane on the southbound approach and serves approximately 900 vehicles in two 73-meter (240-foot) left turn lanes on the westbound approach during the PM peak hour. Consequently, vehicles queuing in the left turn lane frequently block the adjacent through lanes, which increases delay for the through movement. As a result, Bruceville Road/Calvine Road intersection operates at LOS E conditions during the PM peak hour.
- The Sheldon Road/East Stockton Boulevard intersection has only one shared left/through/right turn lane on the eastbound approach and serves more than 700 vehicles during the PM peak hour. The high volumes compared with the limited capacity of this approach cause LOS F operations during both peak hours at this location.
- The Sheldon Road/West Stockton Boulevard intersection is reported to operate at LOS C and D during the AM and PM peak hours, respectively. However, field observations indicate that this intersection operates acceptably during the AM peak hour and unacceptably during the PM peak hour due to vehicle queues that extend from the East Stockton Boulevard/Sheldon Road intersection. The methodology used to analyze the study intersections does not consider the effects of queuing from or to adjacent intersections. Consequently, the intersection analysis only provides the LOS for the volume of traffic that actually enters the intersection. Field observations indicate that this intersection operates at LOS D and F during the AM and PM peak hours, respectively.

Bicycle/Pedestrian System

Within the study area, bicycling and walking activity relies heavily on the existing roadway system. Existing facilities are limited in the project study area. Class II bike lanes exist on Bruceville Road between Sheldon Road and Laguna Boulevard, Elk-Grove Florin Road between Calvine Road and East Stockton Boulevard, and on Cosumnes River Boulevard from SR 99 to the west.

Pedestrian sidewalks on Sheldon Road exist along developed frontages. Consequently, there is no continuity to the pedestrian facilities and there is substantial variation in the improved cross-sections with some sidewalks separated from Sheldon Road by landscaping and others adjacent to the roadway. Crosswalks and pedestrian ramps are provided at signalized intersections except the East Stockton Boulevard and West Stockton Boulevard intersections.

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IMPACTS

Construction Year (2006) Conditions

Year 2006 with project conditions for the study area roadway system, including the traffic analysis of study area freeway mainline segments, ramp junctions, intersections and ramp meters, are summarized in **Table 2.1.5-8** through **Table 2.1.5-11**. **Figures 2.1.5-3** and **2.1.5-4** show the traffic volumes and lane configurations under 2006 conditions for Alternatives 2A and 3A, respectively. The traffic volumes and lane configurations for SR 99 are the same for all project alternatives. Therefore, the freeway mainline operations analysis results shown in **Table 2.1.5-9** and **Table 2.1.5-10** would be the same regardless of the alternative.

TABLE 2.1.5-8
FREEWAY MAINLINE LOS – CONSTRUCTION YEAR (2006) CONDITIONS

Freeway Mainline	AM Peak		PM Peak	
	Density ¹	LOS ²	Density ¹	LOS ²
<i>Build Alternatives</i>				
SR 99 Northbound: Laguna Boulevard to Sheldon Road	28	D	27	D
SR 99 Northbound: Sheldon Road to Cosumnes River Boulevard	31	D	28	D
SR 99 Southbound: Cosumnes River Boulevard to Sheldon Road	26	D	<u>39</u>	<u>E</u>
SR 99 Southbound: Sheldon Road to Laguna Boulevard	25	C	31	D

Notes:

(1) Density in passenger cars per mile per lane.

(2) LOS based on the methodologies contained in the 2000 HCM.

Bold font with underscore indicates unacceptable operations.

Source: Fehr & Peers, 2003.

TABLE 2.1.5-9
FREEWAY RAMP JUNCTION LOS – CONSTRUCTION YEAR (2006) CONDITIONS

Freeway Ramp Junction	AM Peak		PM Peak	
	Density ¹	LOS ²	Density ¹	LOS ²
<i>Build Alternatives</i>				
Northbound SR 99 Off-Ramp to Sheldon Road	34	D	34	D
Northbound SR 99 On-Ramp from Eastbound Sheldon Road	29	D	28	C
Northbound SR 99 On-Ramp from Westbound Sheldon Road	32	D	30	D
Southbound SR 99 Off-Ramp to Sheldon Road	19	B	<u>>43</u>	<u>F</u>
Southbound SR 99 On-Ramp from Sheldon Road	27	C	33	D

Notes:

(1) Density in passenger cars per mile per lane.

(2) LOS calculations based on the HCM 2000 procedures.

Bold font with underscore indicates unacceptable operations.

Source: Fehr & Peers, 2003.

TABLE 2.1.5-10
INTERSECTION LOS – CONSTRUCTION YEAR (2006) CONDITIONS

Intersection	Control	Jurisdiction & LOS Threshold	Level of Service/Delay ¹			
			Alternative 2A		Alternative 3A	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Calvine Rd./Northbound SR 99 Ramps	Signalized	Caltrans LOS D	B/12	<u>F/>80</u>	B/12	<u>F/>80</u>
Cosumnes River Blvd./Southbound SR 99 Ramps	Signalized	Caltrans LOS D	B/17	<u>F/>80</u>	B/17	<u>F/>80</u>
Cosumnes River Blvd./Bruceville Road	Signalized	Sacramento LOS C	<u>E/62</u>	<u>F/>80</u>	<u>E/62</u>	<u>F/>80</u>
Sheldon Road/Bruceville Road ²	Signalized	Elk Grove LOS D	C/27 SB: B/18	D/38 SB: C/26	C/26 SB: B/15	D/38 SB: C/28
Sheldon Road/White House Road ²	Signalized	Elk Grove LOS D	-	-	A/5 SB: B/14	A/6 SB: C/27
Sheldon Road/Lewis Stein Road ²	Signalized	Elk Grove LOS D	C/17 SB:C/31	B/19 SB: C/21	C/22 <u>SB: D/38</u>	C/23 SB: C/33
Sheldon Road/West Driveway	Side-street Stop	Elk Grove LOS D	A/3 (A/1)	A/3 (A/1)	A/3 (A/2)	A/3 (A/2)
Sheldon Road/East Driveway	Side-street Stop	Elk Grove LOS D	A/5 (A/2)	A/5 (A/2)	A/6 (A/1)	A/5 (A/1)
Sheldon Road/SR 99 Southbound Ramps/West Stockton Boulevard ³	Signalized	Caltrans LOS D	B/19	C/21	A/10	B/13
Sheldon Road/SR 99 Northbound Ramps	Signalized	Caltrans LOS D	A/8	A/6	A/8	A/7
Sheldon Road/East Stockton Boulevard	Signalized	Elk Grove LOS D	C/21	C/25	C/23	C/25

Notes:

(1) Delay (in seconds per vehicle) is reported as worst-case approach delay and average control delay (shown in parentheses) for unsignalized intersections and average control delay for signalized intersections.

(2) The southbound approach of the intersection is within the City of Sacramento (LOS C threshold applies).

(3) This intersection is Sheldon Road/SR 99 Southbound Ramps intersection under Alternative 3A.

Bold with underscore indicates unacceptable operations.

Source: Fehr & Peers, 2003.

**TABLE 2.1.5-11
RAMP METERING OPERATIONS – CONSTRUCTION YEAR (2006) CONDITIONS**

On-Ramp	Number of Lanes	AM Peak Hour		PM Peak Hour	
		Peak-Hour Volume (vph)	Minimum Metering Rate (vphpl)	Peak-Hour Volume (vph)	Minimum Metering Rate (vphpl)
<i>Build Alternatives</i>					
Sheldon Road Northbound Loop On-ramp	1 Metered Lane 1 HOV Bypass Lane	250	240	160	240
Sheldon Road Northbound Diagonal On-ramp	2 Metered Lanes 1 HOV Bypass Lane	490	240	270	240

Note:

The minimum and maximum practical metering rates are 240 and 900 vehicles per hour per lane (vphpl), respectively.

Source: Fehr & Peers, 2003.

The following locations exceed the LOS threshold for both Alternatives 2A and 3A under 2006 conditions:

- Freeway mainline for southbound SR 99 between Cosumnes River Boulevard and Sheldon Road in the PM peak hour;
- Freeway off-ramp from southbound SR 99 to Sheldon Road;
- Intersection at Calvine Road/northbound SR 99 ramps for the PM peak hour;
- Intersection at Cosumnes River Boulevard/southbound SR 99 ramps for the PM peak hour;
- Intersection at Cosumnes River Boulevard/Bruceville Road for the AM and PM peak hours.

The southbound approach to the Sheldon Road/Lewis Stein Road intersection exceeds the LOS threshold for Alternative 3A during the AM peak hour. All other locations would operate with an acceptable LOS. The ramp meters would also operate acceptably without causing backups onto Sheldon Road.

Impact and mitigation measures related to the analysis of construction year (2006) conditions and design year (2025) conditions are presented below.

No Build Alternative

Under the No Build scenario traffic congestion would continue to increase on the existing Sheldon Road/SR 99 interchange to an unacceptable LOS due to the expected increase in the number of vehicle trips resulting from planned growth in the area.

Build Alternative 3A

Unacceptable LOS at Sheldon Road and Lewis Stein Road Intersection

For Alternative 3A, West Stockton Blvd. would be realigned to connect to Lewis Stein Road, and Lewis Stein Road would be the only access from Sheldon Road to the northwest quadrant of the project area. Therefore, all the traffic that uses West Stockton Boulevard to access Sheldon Road under existing conditions would shift to Lewis Stein Road, resulting in longer delays on the southbound approach to the intersection. However, because of the traffic shift to Lewis Stein Road that would occur under Alternative 3A, better operations would occur at the Sheldon Road/SR 99 southbound ramps intersection.

Build Alternatives (2A and 3A) Impacts

Specific impact statements related to the analysis presented in **Table 2.1.5-8** through **Table 2.1.5-11** are presented below.

Potential Induced Travel at Sheldon Road/SR 99 Interchange Under 2006 Conditions

Implementation of Alternative 2A or 3A could reduce travel time through the Sheldon Road/SR 99 interchange, which may create a corresponding short-term increase in vehicle trips through the improved interchange and change travel patterns (i.e., increase or decrease traffic volumes on adjacent roadways such as Bruceville Road and Cosumnes River Boulevard.) The increase in vehicle trips occurring from a roadway capacity improvement is commonly referred to as induced travel and can come from the following three sources:

- An existing vehicle trip diverted from adjacent facilities to the reconstructed Sheldon Road/SR 99 interchange (diverted from another route);
- An existing vehicle trip that currently uses the existing interchange during off-peak hours and shifts to using the reconstructed interchange during the peak hours (a shift in travel time); or
- A vehicle trip created as a result of improved accessibility caused by the Sheldon Road/SR 99 interchange reconstruction (a new vehicle trip).

The amount of induced travel resulting from implementation of Alternative 2A or 3A is uncertain and is a function of many factors including travel time savings relative to total trip length.

Impact 2.1.5-1 Implementation of Alternative 2A or 3A may induce vehicle travel to the project study area under 2006 conditions. The amount of induced travel resulting from implementation of the project alternatives is uncertain.

MITIGATION MEASURES

Specific mitigation measures related to the analysis presented in **Table 2.1.5-9** through **Table 2.1.5-12** are presented below.

MM 2.1.5-1 Traffic conditions at the off-site study intersections will be monitored for peak hour volume and levels of service, and improvements necessary to maintain levels of service consistent with Policy CI-10 of the City of Elk Grove General Plan will be funded and constructed.

It is important to note that the implementation of the mitigation measure is uncertain because the engineering and environmental feasibility studies for the improvements cannot be completed at this time. Further, the City's ability to fund and construct the improvements is uncertain.

Unacceptable LOS of Freeway Mainline and Ramp Junctions under Construction Year (2006) Conditions

With the project improvements under Alternative 2A or 3A, southbound SR 99 between Cosumnes River Boulevard and Sheldon Road would operate with unacceptable LOS E conditions and the SR 99 southbound off-ramp to Sheldon Road would operate at unacceptable LOS F conditions during the PM peak hour. The increase in freeway mainline and ramp junction vehicle density would be caused by the growth in mainline traffic volumes from existing to 2006 conditions that are unrelated to the project, such as planned and expected growth in the area.

Unacceptable LOS for Cosumnes River Boulevard/Calvine Road intersections at Northbound SR 99 Ramps, Southbound SR 99 Ramps, and Bruceville Road

With the project improvements under Alternative 2A or 3A, the Cosumnes River Boulevard/Bruceville Road intersection would operate with unacceptable LOS E conditions during the AM peak hour. Also, the Cosumnes River Boulevard/Calvine Road intersections at northbound SR 99 Ramps, southbound SR 99 Ramps, and Bruceville Road would operate with unacceptable LOS F conditions during the PM peak hour. These conditions, however, reflect a worsening of traffic operations from existing conditions caused by growth in traffic volumes that are unrelated to the project, such as planned and expected development in the area.

The expected LOS at the Cosumnes River Blvd./Calvine Road intersections at northbound SR 99 ramps, southbound SR 99 ramps, and Bruceville Road would be inconsistent with City of Sacramento General Plan goals, policies, and actions related to streets and roads. Specifically, Section 5-11 – Goal D of the City of Sacramento General Plan, states that the City will, "Work towards achieving a Level of Service C on the City's local and major street system." These unacceptable LOS, however, reflect a worsening of traffic operations from existing conditions caused by growth in traffic volumes that are unrelated to the project, such as planned and expected development in the area. The proposed project would serve to improve the LOS at the described areas to the greatest extent feasible, and would not, in itself, cause a worsening of levels of service in the area.

Construction Impacts

IMPACT

Impact 2.1.5-2 Construction activities associated with the implementation of the project have the potential to obstruct or delay Regional Transit bus service and

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public school bus service access through the project area. If public/school transportation vehicles cannot pass through the construction area, or if the construction activities result in a substantial delay in public/school transportation vehicles passing through the construction area, residents in the area could be impacted.

MITIGATION MEASURES

MM 2.1.5-2 Prior to the start of construction, a Traffic Management Plan (TMP) shall be developed that would reduce delays and obstructions caused by construction activities to the greatest extent possible. The Plan developers shall coordinate with public and school transportation providers during plan development to insure that traffic control measures proposed in the plan would meet the needs of the service providers. Construction detours shall be provided to all public and school transportation providers who utilize the project area prior to the TMP's implementation, to avoid impacts to public and school transportation services.

IMPACT

Impact 2.1.5-3 Construction activities for the project may temporarily disrupt traffic in the project area. Temporary lane closures or traffic detours required to accommodate construction activities may disrupt regular traffic flow in and surrounding the project area, causing traffic congestion and/or queuing. Additionally, construction activities may result in queuing from the project area onto the freeway mainline of SR 99, particularly during peak AM and PM hours.

MITIGATION MEASURES

MM 2.1.5-3 The contractor shall complete a Traffic Control Plan that would reduce construction-related traffic congestion to the greatest extent feasible, and submit it to Caltrans for review and to the City of Elk Grove Public Works Department for approval, prior to beginning construction. The Caltrans Traffic Manual, Chapter 5, provides information on "Traffic Controls for Highway Construction and Maintenance Operations," and may be referenced during the development of the Traffic Control Plan. The Traffic Control Plan should consider the placement of electronic signs in advance of the Sheldon Road/SR 99 interchange off-ramps to provide advance notification of construction activities and showing the duration of the project's construction dates. Additionally, the sign may recommend that motorists use alternate interchanges, such as the Cosumnes River Boulevard-Calvine Road interchange and the Laguna Boulevard-Bond Road interchange during the Sheldon Road/SR 99 Interchange Improvement project construction period. To the extent possible,

construction shall be limited during the AM and PM peak hours to avoid exacerbating congestion in the area.

IMPACT

Impact 2.1.5-4 Construction activities for the project would temporarily increase the amount of traffic on the project area roadways. The construction equipment and personnel to be used for the project are not known at this time, however, substantial construction traffic is expected during the construction period. Vehicular traffic associated with the project construction primarily consists of trucks used for the delivery and hauling of construction materials to and from the site, the hauling of dirt and demolition debris, the daily use of heavy earth-moving and other construction equipment, and the travel to and from the site by construction workers and inspectors. Additional traffic would be generated from construction workers commuting to the site and the transportation of construction vehicles and equipment. Some of the construction vehicles and equipment would be left on-site for the duration of their use, while other construction vehicles would make daily trips to the project site. The need for certain types and number of vehicles and equipment would depend on the phase of the project. Construction activities creating the most traffic would involve heavy haul trucks removing demolition material or importing fill.

MITIGATION MEASURES

MM 2.1.5-4 Construction traffic involving heavy haulers moving demolition material from the project site or moving fill to the project site shall operate outside of AM and PM peak traffic hours. This requirement shall be included in the construction contract.

IMPACT

Impact 2.1.5-5 Construction activities associated with the intersection improvements could result in damage to project area roadways. Construction of the intersection improvements would involve extensive construction activities along Sheldon Road. These construction activities involve the use of heavy hauler trucks to export demolition material and import fill. The movement of these trucks could damage project area roadways.

MITIGATION MEASURES

MM 2.1.5-5 Following the completion of construction activities, the construction contractor shall repair any project-related roadway damage in both the City of Elk Grove and the City of Sacramento, including new overlays on affected roadways. This requirement shall be included in the project construction contract.

2.1 HUMAN ENVIRONMENT

As proposed, Alternatives 2A and 3A include provisions for the accommodation of bicyclists and pedestrians. The major bicycle and pedestrian improvements proposed are listed below:

- A 1.5-meter striped bike lane on the overcrossing. At intersections, the bike lane would be located between the through and right turn lanes;
- The on-ramp entrances would be two lanes separated by a pedestrian refuge island and have short radius corners;
- Pedestrian sidewalks would be provided on Sheldon Road including the overcrossing;
- All intersections would have pedestrian crosswalks with pedestrian ramps. Crosswalks would be provided on the north, south, and west legs of the ramp-terminal intersections and on all legs of the Sheldon Road/East Stockton Boulevard intersection;

All pedestrian facilities would comply with ADA standards.

**TABLE 2.1.5-12
FREEWAY MAINLINE LOS – DESIGN YEAR (2025) CONDITIONS**

Freeway Mainline	AM Peak		PM Peak	
	Density ¹	LOS ²	Density ¹	LOS ²
<i>No Build and Build Alternatives</i>				
SR 99 Northbound: Laguna Boulevard to Sheldon Road	<u>40</u>	<u>E</u>	<u>43</u>	<u>E</u>
SR 99 Northbound: Sheldon Road to Cosumnes River Boulevard	<u>*</u>	<u>F</u>	<u>*</u>	<u>F</u>
SR 99 Southbound: Cosumnes River Boulevard to Sheldon Road	<u>*</u>	<u>F</u>	<u>*</u>	<u>F</u>
SR 99 Southbound: Sheldon Road to Laguna Boulevard	<u>43</u>	<u>E</u>	<u>*</u>	<u>F</u>

Notes:

(1) Density in passenger cars per mile per lane.

(2) LOS based on the methodologies contained in the 2000 HCM.

Bold font with underscore indicates unacceptable operations.

Source: Fehr & Peers, 2003.

**TABLE 2.1.5-13
 FREEWAY RAMP JUNCTION LOS – DESIGN YEAR (2025) CONDITIONS**

Freeway Ramp Junction	AM Peak		PM Peak	
	Density ¹	LOS ²	Density ¹	LOS ²
<i>No Build Alternative</i>				
Northbound SR 99 Off-Ramp to East Stockton Blvd	<u>≥43</u>	<u>F</u>	<u>≥43</u>	<u>F</u>
Northbound SR 99 On-Ramp from East Stockton Blvd	<u>≥43</u>	<u>F</u>	<u>≥43</u>	<u>F</u>
Southbound SR 99 Off-Ramp to West Stockton Blvd	<u>≥43</u>	<u>F</u>	<u>≥43</u>	<u>F</u>
Southbound SR 99 On-Ramp from West Stockton Blvd	<u>≥43</u>	<u>F</u>	<u>≥43</u>	<u>F</u>
<i>Build Alternatives</i>				
Northbound SR 99 Off-Ramp to Sheldon Rd	<u>≥43</u>	<u>F</u>	<u>≥43</u>	<u>F</u>
Northbound SR 99 On-Ramp from Eastbound Sheldon Rd	<u>36</u>	<u>E</u>	<u>37</u>	<u>E</u>
Northbound SR 99 On-Ramp from Westbound Sheldon Rd	<u>≥43</u>	<u>F</u>	<u>≥43</u>	<u>F</u>
Southbound SR 99 Off-Ramp to Sheldon Road	<u>≥43</u>	<u>F</u>	<u>≥43</u>	<u>F</u>
Southbound SR 99 On-Ramp from Sheldon Road	<u>≥43</u>	<u>F</u>	<u>≥43</u>	<u>F</u>

Notes:

(1) *Density in passenger cars per mile per lane.*

(2) *LOS calculations based on the HCM 2000 procedures.*

Bold font with underscore indicates unacceptable operations.

Source: Fehr & Peers, 2003

2.1 HUMAN ENVIRONMENT

**TABLE 2.1.5-14
INTERSECTION LOS – DESIGN YEAR (2025) CONDITIONS**

Intersection	Control	Jurisdiction & LOS Threshold	Level of Service/Delay ¹					
			No Project		Alternative 2A		Alternative 3A	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Calvine Rd./Northbound SR 99 Ramps	Signalized	Caltrans LOS D	D/41	<u>F/>80</u>	D/41	<u>F/>80</u>	D/41	<u>F/>80</u>
Cosumnes River Blvd./Southbound SR 99 Ramps	Signalized	Caltrans LOS D	<u>E/69</u>	<u>F/>80</u>	<u>E/69</u>	<u>F/>80</u>	<u>E/69</u>	<u>F/>80</u>
Cosumnes River Blvd./Bruceville Road	Signalized	Sacramento LOS C	<u>F/>80</u>	<u>F/>80</u>	<u>F/>80</u>	<u>F/>80</u>	<u>F/>80</u>	<u>F/>80</u>
Sheldon Road/Bruceville Road ²	Signalized	Elk Grove LOS D	<u>F/>80</u>	<u>F/>80</u>	D/40 SB: C/27	D/55 <u>SB: D/52</u>	D/44 SB: C/30	D/55 <u>SB: D/46</u>
Sheldon Road/White House Road ²	Signalized	Elk Grove LOS D	<u>F/>80</u>	<u>F/>80</u>	C/29 <u>SB: D/42</u>	D/40 <u>SB: D/52</u>	C/22 <u>SB: D/42</u>	D/40 <u>SB: D/49</u>
Sheldon Road/Lewis Stein Road ²	Signalized	Elk Grove LOS D	<u>F/>80</u>	<u>F/>80</u>	D/43 <u>SB: E/62</u>	D/48 <u>SB: E65</u>	D/53 <u>SB: E/57</u>	D/44 <u>SB: D/54</u>
Sheldon Road/West Driveway	Side-street Stop	Elk Grove LOS D	<u>F/>50</u> (D/27)	<u>F/>50</u> <u>(F/>50)</u>	A/3 (A/3)	A/3 (A/3)	A/5 (A/4)	A/5 (A/4)
Sheldon Road/East Driveway	Side-street Stop	Elk Grove LOS D	<u>F/>50</u> <u>(F/>50)</u>	<u>F/>50</u> <u>(F/>50)</u>	<u>F/>50</u> (A/5)	<u>E/>46</u> (A/4)	<u>E/49</u> (A/4)	<u>E/45</u> (A/4)
Sheldon Road/SR 99 Southbound Ramps/ West Stockton Boulevard ³	Signalized	Caltrans LOS D	<u>F/>80</u>	<u>F/>80</u>	D/50	D/54	C/31	D/37
Sheldon Road/SR 99 Northbound Ramps	Signalized	Caltrans LOS D	-	-	C/25	C/21	C/24	C/20

Intersection	Control	Jurisdiction & LOS Threshold	Level of Service/Delay ¹					
			No Project		Alternative 2A		Alternative 3A	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Sheldon Road/East Stockton Boulevard	Signalized	Elk Grove LOS D	<u>F/>80</u>	<u>F/>80</u>	<u>F/>80</u>	<u>E/69</u>	<u>E/78</u>	D/47
Sheldon Road/Power Inn Road	Signalized	Elk Grove LOS D	<u>F/>80</u>	<u>F/>80</u>	D/50	D/44	D/37	D/37
W. Stockton Blvd./SR 99 Southbound Off-ramp ⁴	Side-street Stop	Elk Grove LOS D	<u>F/>50</u>	<u>F/>50</u>	-	-	-	-
W. Stockton Blvd./SR 99 Southbound On-ramp ⁴	Side-street Stop	Elk Grove LOS D	A/6 (A/4)	A/6 (A/4)	-	-	-	-
E. Stockton Blvd./SR 99 Northbound Off-ramp ⁴	Side-street Stop	Elk Grove LOS D	<u>F/>50</u>	<u>F/>50</u>	-	-	-	-
E. Stockton Blvd./SR 99 Northbound On-ramp ⁴	Side-street Stop	Elk Grove LOS D	<u>F/>50</u>	<u>F/>50</u>	-	-	-	-

Notes:

- (1) Delay (in second per vehicle) is reported as worst-case approach delay and average control delay (shown in parentheses) for unsignalized intersections and average control delay for signalized intersections.
- (2) The southbound approach of the intersection is within the City of Sacramento (LOS C threshold applies).
- (3) This intersection is Sheldon Road/West Stockton Boulevard intersection under the No Project Alternative and Alternative 2A, and Sheldon Road/SR 99 Southbound Ramps intersection under Alternative 3A.
- (4) These intersections only apply to the No Project Alternative.
Bold with underscore indicates unacceptable operations.

2.1 HUMAN ENVIRONMENT

**TABLE 2.1.5-15
RAMP METERING OPERATIONS – DESIGN YEAR (2025) CONDITIONS**

On-Ramp	Number of Lanes	AM Peak Hour		PM Peak Hour	
		Peak-Hour Volume (vph)	Minimum Metering Rate (vphpl)	Peak-Hour Volume (vph)	Minimum Metering Rate (vphpl)
<i>Build Alternatives</i>					
Sheldon Road Northbound Loop On-ramp	1 Metered Lane 1 HOV Bypass Lane	650	580	550	550
Sheldon Road Northbound Diagonal On-ramp	2 Metered Lanes 1 HOV Bypass Lane	860	360	390	240

Notes:

The maximum practical metering rate is 900 vehicles per hour per lane (vphpl).

Source: Fehr & Peers, 2003.

IMPACTS - DESIGN YEAR (2025) CONDITIONS

The design year (2025) traffic operations analysis results for the study area roadway system including the traffic analysis of study area freeway mainline segments, ramp junctions, intersections and ramp meters are summarized in **Table 2.1.5-12** through **Table 2.1.5-15**. **Figure 2.1.5-5** through **Figure 2.1.5-7** display the peak-hour traffic volumes, lane configurations, and traffic controls under 2025 conditions for the No Build alternative and Alternatives 2A and 3A, respectively. The traffic volumes and lane configurations for SR 99 are the same for both No Build and Build Alternatives. Therefore, the freeway operations analysis results shown in **Table 2.1.5-13** and **Table 2.1.5-14** would be the same regardless of alternative.

The following locations exceed the LOS threshold for the No Build alternative, Alternative 2A, and Alternative 3A under 2025 conditions:

- Freeway mainline for all locations in the study area;
- Freeway ramps for all locations in the study area;
- Intersection at Cosumnes River Boulevard/southbound SR 99 ramps during AM and PM peak hours;
- Intersection at Cosumnes River Boulevard/Bruceville Road during AM and PM peak hours;
- Intersection at Sheldon Road/White House Road during AM and PM peak hours in the southbound direction under Alternatives 2A and 3A, and in all directions during AM and PM peak hours under the No Build alternative;

- Intersection at Sheldon Road/Lewis Stein Road during AM and PM peak hours in the southbound direction under Alternatives 2A and 3A, and in all directions during AM and PM peak hours under the No Build alternative
- Intersection at Sheldon Road/East Driveway during AM and PM peak hours;
- Intersection at Sheldon Road/East Stockton Boulevard during AM peak hour under Alternatives 2A and 3A, and during AM and PM peak hours under the No Build alternative;
- Intersection at Calvine Road/northbound SR 99 ramps during the PM peak hour; and
- Sheldon Road/Bruceville Road during the PM peak hour in the southbound direction under Alternatives 2A and 3A, and in all directions during the AM and PM peak hours under the No Build alternative.

The following locations exceed the LOS threshold for the No Build alternative only under 2025 conditions:

- Intersection at Sheldon Road/West Driveway during AM and PM peak hours;
- Intersection at Sheldon Road/West Stockton Boulevard during AM and PM peak hours;
- Intersection at Sheldon Road/Power Inn Road during AM and PM peak hours;
- Intersection at West Stockton Boulevard/SR 99 southbound off-ramp during AM and PM peak hours;
- Intersection at East Stockton Boulevard/northbound off-ramp during AM and PM peak hours; and,
- East Stockton Boulevard/northbound on-ramp during AM and PM peak hours.

All other locations would operate with an acceptable LOS. The ramp meters would also operate acceptably without causing backups onto Sheldon Road.

No Build Alternative

The No Build alternative would increase congestion on the existing Sheldon Road/SR 99 interchange and intersections to an unacceptable LOS.

Build Alternatives (2A and 3A) Impacts

Unacceptable LOS of Freeway Mainline and Ramp Junctions under Design Year (2025) Conditions

With Alternative 2A or 3A, the SR 99 mainline and ramp junctions at Sheldon Road would operate with unacceptable LOS E and F conditions during the AM and PM peak hours. The increase in freeway mainline and ramp junction vehicle density is caused by the growth in mainline traffic volumes from existing to 2006 conditions that is unrelated to the project.

2.1 HUMAN ENVIRONMENT

Inconsistency with City of Elk Grove General Plan Policies Requiring LOS D in Urban Areas and LOS C in Rural Areas

Implementation of the proposed project, under Alternative 2A or 3A, would not fully attain the goals laid out in Policy CI-10 in the City of Elk Grove General Plan. Policy CI-10 requires that all roadways in Elk Grove operate at a minimum LOS D at all times in urban areas and LOS C at all times in rural areas. The Sheldon Road/East Driveway and Sheldon Road/East Stockton Boulevard intersections would operate worse than LOS D during at least one peak hour. Exceptions to Policy CI-10 are identified in Policy CI-11 and include Sheldon Road between East Stockton Boulevard and Elk Grove-Florin Road; therefore, the Sheldon Road/East Stockton Boulevard intersection is consistent with General Plan policy. These unacceptable LOS, however, reflect a worsening of traffic operations from existing conditions caused by growth in traffic volumes that are unrelated to the project, such as planned and expected development in the area. The proposed project would serve to improve the LOS at the described areas to the greatest extent feasible, and would not, in itself, cause a worsening of levels of service in the area.

Unacceptable LOS for Cosumnes River Boulevard/Calvine Road intersections at Northbound SR 99 Ramps, Southbound SR 99 Ramps, and Bruceville Road

With the project improvements under Alternative 2A or 3A, the Cosumnes River Boulevard/southbound SR 99 ramps intersection would operate with unacceptable LOS E conditions in the AM peak hour and the Cosumnes River Boulevard/Bruceville Road intersection would operate with unacceptable LOS F conditions during the AM peak hour. Also, the Cosumnes River Boulevard/Calvine Road intersections at northbound SR 99 ramps, southbound SR 99 ramps, and Bruceville Road would operate with unacceptable LOS F conditions during the PM peak hour. These conditions reflect a worsening of traffic operations from existing conditions caused by growth in traffic volumes that is unrelated to the project. These unacceptable LOS, however, reflect a worsening of traffic operations from existing conditions caused by growth in traffic volumes that are unrelated to the project, such as planned and expected development in the area. The proposed project would serve to improve the LOS at the described areas to the greatest extent feasible, and would not, in itself, cause a worsening of levels of service in the area.

The LOS would also be inconsistent with City of Sacramento General Plan goals, policies, and actions related to streets and roads. Specifically, Section 5-11 – Goal D of the City of Sacramento General Plan, states that the City will, “Work towards achieving a Level of Service C on the City’s local and major street system.” These unacceptable LOS, however, reflect a worsening of traffic operations from existing conditions caused by growth in traffic volumes that are unrelated to the project, such as planned and expected development in the area. The proposed project would serve to improve the LOS at the described areas to the greatest extent feasible, and would not, in itself, cause a worsening of levels of service in the area.

Bicycle and Pedestrian System

As proposed, Alternatives 2A and 3A include provisions for the accommodation of bicyclists and pedestrians. The major bicycle and pedestrian improvements proposed are listed below:

- A 1.5-meter striped bike lane on the overcrossing. At intersections, the bike lane would be located between the through and right turn lanes;
- The on-ramp entrances would be two lanes separated by a pedestrian refuge island and have short radius corners;
- Pedestrian sidewalks would be provided on Sheldon Road including the overcrossing;
- All intersections would have pedestrian crosswalks with pedestrian ramps. Crosswalks would be provided on the north, south, and west legs of the ramp-terminal intersections and on all legs of the Sheldon Road/East Stockton Boulevard intersection;

All pedestrian facilities would comply with ADA standards.

CEQA FINDING

Under CEQA, a transportation/circulation impact is considered substantial if implementation of the proposed project would:

- Cause the 2006 or 2025 No Build LOS on a freeway mainline segment, freeway ramp junction, or at an intersection in the City of Elk Grove to deteriorate from LOS A, B, C, or D to LOS E or F;
- Cause the 2006 or 2025 No Project LOS at an intersection in the City of Sacramento to deteriorate from LOS A, B, or C to LOS D, E, or F;
- Exacerbate the 2006 or 2025 LOS E or F conditions on a freeway mainline segment, freeway ramp junction, or at an intersection in the City of Elk Grove;
- Exacerbate the 2006 or 2025 LOS D, E, or F conditions at an intersection in the City of Sacramento;
- Create inconsistencies with adopted roadway system plans, guidelines, policies, or standards of the City of Elk Grove;
- Create inconsistencies with federal regulations (23 CFR 652, Americans with Disabilities Act) related to non-motorized transportation facilities;
- Disrupt existing transit services or facilities;
- Interfere with planned transit services or facilities;
- Disrupt existing bicycle or pedestrian facilities; or
- Interfere with planned bicycle or pedestrian facilities

While the proposed project does not meet many of the LOS goals it is projected to improve traffic flow in both the near and long term when compared with the No Build Alternative. The projects impact to traffic is considered to **be less than significant** given the projected increases in traffic volumes.