03- PLA - 80 - PM1.9/PM6.1 and 65-PM R4.8/PM R7.3
03-4E3200 - EFIS# 0300000696
PPNO 4894
Program Code 1302
National Corridor Infrastructure Improvement Program
MPO ID PLA25440
August 2016

Project Report
for the
I-80/SR 65 Interchange Improvements

On Route Interstate 80 and State Route 65

Between Douglas Boulevard and Rocklin Road (PM 1.9-6.1)

And Interstate 80 and Pleasant Grove Boulevard (PM R4.8-R7.3)

I have reviewed the right of way information contained in this report and the R/W Data Sheet attached hereto, and find the data to be complete, current and accurate:

JOHN BALLANTYNE, *CHIEF NORTH REGION, RIGHT OF WAY*

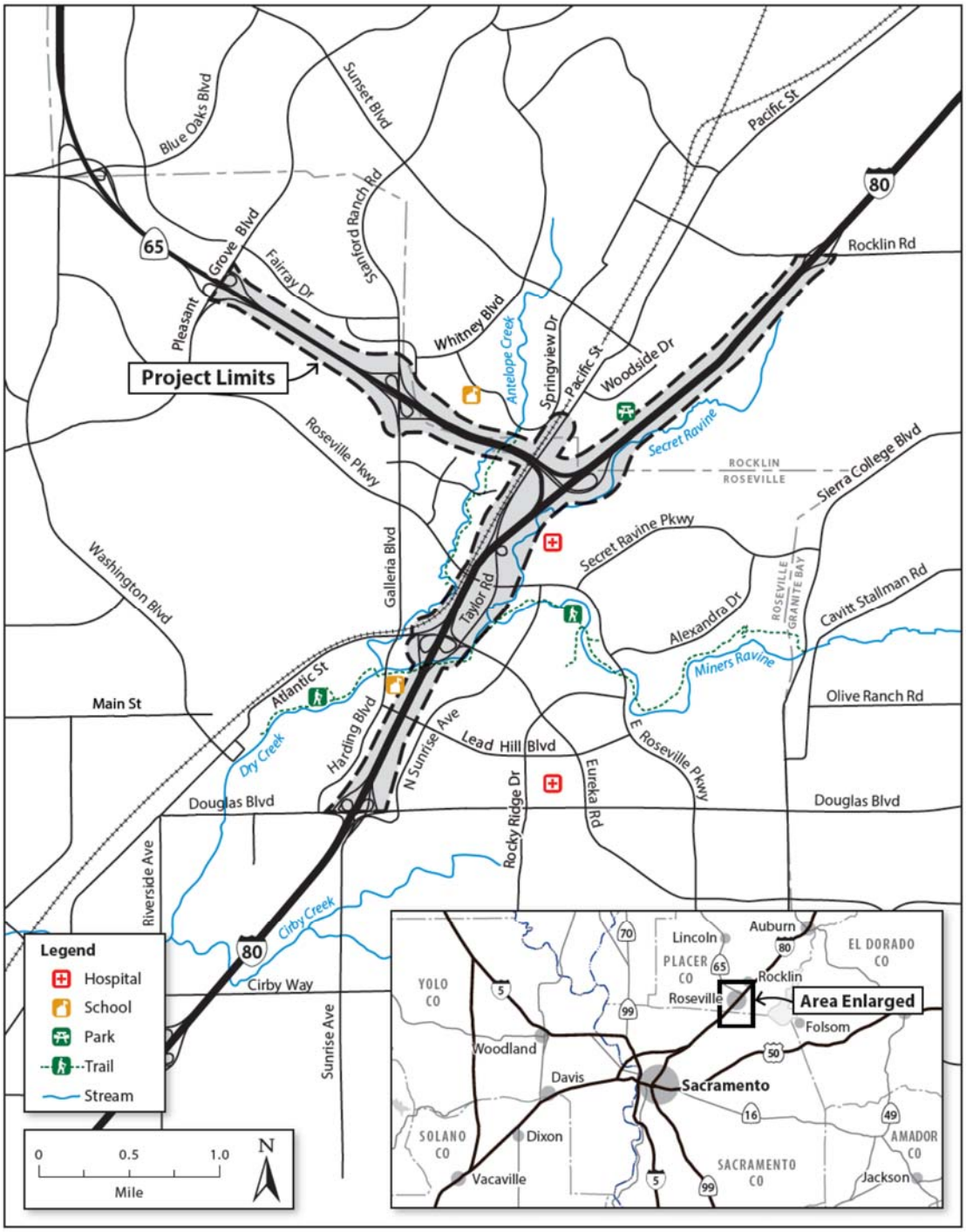
APPROVAL RECOMMENDED:

WAYNE A. LEWIS, P.E., *PROJECT MANAGER*

APPROVED:

AMARJEET S. BENIPAL, P.E., *DISTRICT 3 DIRECTOR* — *DATE* 9-8-2016

Vicinity Map



This project report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

Lauren Proctor
REGISTERED CIVIL ENGINEER

08/24/2016
DATE

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1. INTRODUCTION

The California Department of Transportation (Caltrans), in cooperation with the Placer County Transportation Planning Agency (PCTPA), Placer County, and the Cities of Roseville, Rocklin, and Lincoln, proposes to improve the Interstate 80/State Route 65 (I-80/SR 65) interchange in Placer County, California, to reduce future traffic congestion, improve operations and safety, and comply with current Caltrans and local agency design standards.

The project proposes to improve the I-80/SR 65 interchange with high speed connector ramps, adding one additional lane to each connector ramp, the addition of a high-occupancy vehicle (HOV) direct connector between I-80 and SR 65, and local interchange ramp improvements and street widening to accommodate these improvements. The construction cost is estimated at $348 million for Alternative 2, which includes $7.9 million for right of way and utilities and $340 million for construction. The project will be constructed in phases. Three viable build alternatives have been considered. Each alternative improves I-80 and SR 65 as described above and includes additional unique improvements as follows:

Alternative 1 – Taylor Road Full Access Interchange. This alternative proposes to construct a new Taylor Road local interchange within the I-80/SR 65 interchange. The new access would provide for all four ramp movements between I-80 and Taylor Road as separate local ramps connecting directly to I-80. After evaluation, FHWA and Caltrans determined that Alternative 1 is not acceptable because it still allows weaving conditions between the Eureka Road/Atlantic Street, Taylor Road, and SR 65 interchanges that result in increased congestion and reduced safety on I-80 eastbound.

Alternative 2 – Collector-Distributor System Ramps. This alternative proposes to construct a separate eastbound collector-distributor system parallel to I-80 that collects the Eureka Road ramp traffic and distributes it to Taylor Road, eastbound I-80, and northbound SR 65, eliminating the weaving conditions on eastbound I-80 between Eureka Road and the I-80/SR 65 interchanges. This alternative maintains the Taylor Road partial interchange in its existing location.

Alternative 3 – Taylor Road Interchange Eliminated. This alternative proposes to remove the Taylor Road partial interchange and redirect the traffic to the adjacent local interchanges at Eureka Road/Atlantic Street, Rocklin Road, and Galleria Boulevard/Stanford Ranch Road. Some local intersections would also be improved.

Alternative 2 was found to meet all aspects of the need and purpose by maintaining the Taylor Road interchange access while improving the operational needs of I-80 eastbound, over and above Alternatives 1 and 3. After comparing and weighing the benefits and impacts of all feasible alternatives and considering feedback provided by the public, Alternative 2 has been identified as the preferred alternative.

The project is subject to state and federal environmental review requirements because the use of federal funds from the Federal Highway Administration is proposed. Accordingly, project documentation is being prepared in compliance with both the

California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Caltrans is the lead agency under NEPA and CEQA. This project is included in the Placer County 2035 Regional Transportation Plan (RTP) and the Sacramento Area Council of Governments (SACOG) 2035 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). Phase 1 of the project is programmed in the SACOG 2015/2018 Metropolitan Transportation Improvement Program (MTIP). The complete project (i.e., Phases 1 through 4) will be included in the upcoming 2036 MTP/SCS.

The project is located in Placer County in the cities of Roseville and Rocklin at the I-80/SR 65 interchange (See Location Map in Attachment A). The project limits consist of I-80 from the Douglas Boulevard interchange to the Rocklin Road interchange (post miles 1.9–6.1) and SR 65 from the I-80/SR 65 interchange to the Pleasant Grove Boulevard interchange (post miles R4.8–R7.3). The total length of the project is 4.2 miles along I-80 and 2.5 miles along SR 65. The project area also includes various local roads—specifically, portions of Eureka Road/Atlantic Street, East Roseville Parkway, and Taylor Road.

Project Limits	03-PLA-80 and 03-PLA-65 PM 1.9 to 6.1 and PM R4.8 to R7.3
Number of Alternatives	5 (3 Build, TSM, No-Build)
Current Capital Outlay Construction Estimate	$338.6M to $348.3M (2014 Dollars) $404.3M to $410.2M (2020 Dollars)
Current Capital Outlay Right of Way Estimate	$5.3M to $7.9 (2014 Dollars)
Funding Source	NCIIP, Local Agency, SHOPP
Funding Year	2016
Type of Facility	Interstate and freeway
Number of Structures	9-11
Environmental Determination or Document	EIR/complex EA leading to FONSI
Legal Description	Interchange
Project Development Category	4A

2. RECOMMENDATION

It is recommended that the project be approved and advance to the PS&E phase of project development using the preferred alternative, which is Alternative 2- Collector-Distributor System Ramps.

The affected local agencies have been consulted with respect to the recommended plan, their views have been consulted, and are in general accord with the plan as presented.

3. BACKGROUND

Project History

I-80/SR 65 Interchange Project Study Report

In 2009, Caltrans completed a Project Study Report (PSR) for upgrading the interchange to remedy operational problems caused by high peak-period traffic volumes and less-efficient geometry. The PSR identified three build alternatives that would add a bi-directional HOV direct connector ramp, replace the existing loop connector, widen the East Roseville Viaduct, replace the Taylor Road overcrossing, and increase capacity on the connector ramps. Other interchanges and local roads within the project area would also be affected to accommodate the proposed upgrades identified in the PSR.

The proposed alternatives described in this Draft Project Report build upon the alternatives presented in the PSR, and have been expanded to incorporate results and feedback from the technical advisory committees, traffic analysis, environmental technical studies, and public input.

Right of way has not yet be acquired for this project and will be performed during the PS&E phase.

Other Projects

I-80 Bottleneck Project

In 2011, Caltrans completed construction of the I-80 Bottleneck Project to improve congestion along the I-80 corridor by providing HOV and auxiliary lanes in both directions from the Placer/Sacramento county line to one mile east of the I-80/SR 65 interchange.

I-80/Eureka Road Interchange Improvements

In 2013, the City of Roseville completed improvements to Eureka Road including the Taylor Road, Sunrise Boulevard, and eastbound I-80 on- and off-ramp intersections.

I-80/Rocklin Road PSR

The City of Rocklin is proposing to improve Rocklin Road and the on- and off-ramps at the I-80 Interchange. The PSR-PDS has been completed and PA&ED is in progress.

I-80 Auxiliary Lanes

The PA&ED phase, led by PCTPA, is in progress to reduce congestion, improve traffic operations, and enhance safety. The improvements include providing auxiliary lanes on eastbound I-80 from SR 65 to Rocklin Road and on westbound I-80 from Douglas Boulevard to Riverside Avenue. A fifth lane alternative on westbound I-80 is also being considered.

Galleria Boulevard/Stanford Ranch Road Interchange Project

The Highway 65 Joint Powers Authority and the City of Roseville are in the planning phase of a project at the northbound Galleria Boulevard/Stanford Ranch Road Interchange. The project will include reconfiguration and widening of the northbound ramps to improve operations and add capacity.

SR 65 Capacity and Operational Improvements Project

PCTPA is currently completing the PA&ED phase to provide capacity and operational improvements to SR 65. The alternatives include adding general purpose lanes, carpool lanes, and auxiliary lanes in both directions from the Galleria Boulevard Interchange to Lincoln Boulevard. The proposed geometrics have been coordinated with the I-80/SR 65 Interchange Improvements Project to provide the appropriate and contiguous improvements along the SR 65 corridor.

Community Interaction

Public involvement has helped to shape the project and the alternatives that were considered in the draft environmental document. Extensive coordination has been conducted with project stakeholders to provide updates on the status of the proposed project, obtain public and agency input, and resolve issues. The following public outreach efforts were made through December 2014:

- Three Community Public Workshops
- Four Stakeholder Meetings
- Website Creation and Updates
- Four Project Newsletters
- Flyers
- Online Engagement Tools and Survey
- Social Media Updates

More than 100 stakeholders expressed interest in the proposed project and key stakeholders were identified and invited to the various stakeholders meetings. The project stakeholders consist of a cross section of project-vicinity property and business owners/tenants, residents, and other interested organizations/individuals that may be directly affected by the project. The following parties were active participants in the various stakeholder meetings:

- All American Self Storage
- Building Industry Association
- Bodycraft Collision
- California Trucking Association
- Caltrans
- City of Lincoln
- City of Rocklin
- City of Roseville
- Dry Creek Conservancy
- Evergreen Company
- FitzGerald LLC
- The Fountains
- Lund Construction
- PCTPA
- Pillar Hotels
- Regal Cinema UA Theatre
- Roseville Chamber of Commerce
- Roseville Coalition of Neighborhood Associations
- Rocklin Chamber of Commerce
- Sacramento Area Bicycle Advocates
- Stonehouse Property
- Sun City Roseville

- Flooring Liquidators
- Golfland Sunsplash
- Hewlett Packard
- Hilton Garden Inn
- Taylor Road Self Storage
- Westfield Galleria Mall
- William Jessup University

Support and Opposition

In addition to stakeholders meetings, individual meetings were held with local businesses and local agencies to obtain focused feedback. In general, the local agencies, businesses, and residents agree that the Taylor Road interchange ramps should not be closed due to concerns that their closure would negatively impact local businesses along Taylor Road, and cut off access to some of the City of Rocklin neighborhoods that utilize Taylor Road/Pacific Street.

PCTPA received letters from the City of Rocklin and local business owners supporting the overall project but expressing concerns with any alternatives that remove the Taylor Road interchange ramps. PCTPA also received a letter from Caltrans District 3 stating that Alternative 1 does not meet established Caltrans and FHWA requirements and is considered high risk. Caltrans and FHWA have also indicated that Alternative 2 appears to be the design that best meets both the local agency partner preferences and addresses Caltrans' operations and safety concerns.

Existing Facility

Interstate 80

I-80 is the principal east−west route in northern California, providing all-weather access across the Sierra Nevada for major goods movement into the Sacramento and San Francisco Bay areas. The interstate accommodates high commute, interregional, and recreational traffic volumes, as well as high levels of truck freight traffic within the greater Sacramento region.

Within Placer County, I-80 begins at the Sacramento County/Placer County line in Roseville as a ten-lane freeway—including two carpool/HOV lanes, one in each direction. It extends east through the Riverside Boulevard interchange where it narrows to nine lanes (five eastbound and four westbound). At the Douglas Boulevard interchange, I-80 widens to a ten-lane freeway and remains as ten-lanes through the Lead Hill Boulevard overcrossing, the Eureka Road/Atlantic Street interchange, the Roseville Parkway overcrossing, the Taylor Road interchange, and the I-80/SR 65 interchange. East of SR 65, I-80 narrows to six lanes, the HOV lanes end, and the interstate continues into the city of Rocklin past the Rocklin Road interchange.

Constrained Area along I-80

The minimum existing right of way width within the project limits along the I-80 corridor is 198 feet. Between the Eureka Road/Atlantic Street and I-80/SR 65 interchanges, westbound I-80 is directly adjacent to the Union Pacific Railroad (UPRR) tracks, an abandoned and capped landfill, and local businesses including Cattlemens Restaurant and Flooring Liquidators. Eastbound I-80 is adjacent to several properties including Golfland Sunsplash, Larkspur Landing Hotel, Hilton

Garden Inn, two 230 kV towers owned by PG&E and SMUD, and a conservation area adjacent to Sutter Roseville Medical Center. The existing Roseville Parkway Overcrossing, over I-80 and the UPRR tracks, and associated columns provide limited available width for future mainline lanes.

Secret Ravine and Miners Ravine meander through the project limits and also serve as an additional constraint for future improvements. See the Constraints Map in Attachment B for the various constraints along the I-80 corridor.

State Route 65

SR 65 is an important interregional route that serves both local and regional traffic. The route serves as a major connector for both automobile and truck traffic originating from the I-80 corridor in the Roseville/Rocklin area to the SR 70/99 corridor in the Marysville/Yuba City area. SR 65 is a vital economic link from residential areas to shopping and employment centers in southern Placer County. It is also an important route for transporting aggregate, lumber, and other commodities.

In the northbound direction, SR 65 begins at I-80 as a three-lane facility joining the two eastbound I-80 to northbound SR 65 connector ramp lanes with the single-lane westbound I-80 to northbound SR 65 connector ramp. The outside lane immediately ends along the East Roseville Viaduct and SR 65 continues north with two lanes through the Galleria Boulevard/Stanford Ranch Road interchange. A partial auxiliary lane begins prior to the Pleasant Grove Boulevard interchange and ends at the northbound off-ramp with an overall length of approximately 1,300 feet. Past the Pleasant Grove Boulevard interchange, northbound SR 65 continues toward the city of Lincoln as a two-lane facility with occasional auxiliary lanes.

In the southbound direction from the city of Lincoln, SR 65 has two lanes and occasional auxiliary lanes through the Pleasant Grove Boulevard interchange. A third southbound lane develops under the Galleria Boulevard/Stanford Ranch Road interchange prior to the southbound Galleria Boulevard on-ramp. The three lanes continue across the East Roseville Viaduct and split into four lanes, two serving the southbound SR 65 to westbound I-80 connector ramp, and two serving the southbound SR 65 to eastbound I-80 connector ramp. The minimum existing right of way width on SR 65 is approximately 270 feet, allowing adequate space to add capacity to the facility.

I-80/SR 65 System Interchange

The existing I-80/SR 65 interchange is a type F-6 freeway-to-freeway interchange with a low-speed loop connector serving eastbound I-80 to northbound SR 65. The existing geometry and insufficient capacity causes traffic to queue along I-80 in both directions.

Eureka Road/Atlantic Street Interchange

The Eureka Road and Atlantic Street Interchange serves traffic trying to access East Roseville and downtown Roseville and also serves as a parallel local facility to I-80. The interchange is located 1.1 miles west of the I-80/SR 65 interchange, spans Miners Ravine, and is adjacent to local businesses including In-N-Out Burger and Brookfields Restaurant. The intersection of the eastbound ramps, Taylor Road, and

Eureka Road was expanded in 2013 to improve operations and serve additional demand.

Taylor Road Interchange

The existing Taylor Road interchange is a partial interchanges that provides an eastbound loop off-ramp and a westbound slip on-ramp. The interchange is located between the Eureka Road/Atlantic Street and I-80/SR 65 interchanges, with half-mile spacing between each. The interchange provides access to and from the cities of Rocklin and Roseville, as well as several local businesses along Taylor Road and Pacific Street.

Galleria Boulevard/Stanford Ranch Road Interchange

The Galleria Boulevard/Stanford Ranch Road interchange along SR 65 provides access to and from the Roseville and Rocklin areas including the Galleria at Roseville shopping center. The interchange is located one mile from the I-80/SR 65 Interchange.

4. PURPOSE AND NEED

The project proposes to improve the I-80/SR 65 interchange in Placer County, California, to reduce future traffic congestion, improve operations and safety, and comply with current Caltrans and local agency design standards.

Termini (i.e., limits) for the project were developed through an iterative process involving engineering design and traffic operations analysis. Preliminary design concepts were tested with the traffic operations analysis model to evaluate how lane transitions and vehicle weaving influenced peak-hour conditions. Refinements were made to ensure that mainline lane balance was logical and that transitions did not cause unacceptable traffic operations such as extensive queuing or reduced speeds.

Purpose:

The purpose and objectives of the project are listed below:

- Upgrade the I-80/SR 65 interchange and adjacent transportation facilities to reduce no-build traffic congestion;
- Upgrade the I-80/SR 65 interchange and adjacent transportation facilities to comply with current Caltrans and local agency design standards for safer and more efficient traffic operations while maintaining and, if feasible, improving the current level of community access, at a minimum;
- Consider all travel modes and users in developing project alternatives;

Need:

The project is needed for the following reasons:

- Recurring morning and evening peak-period demand exceeds the current design capacity of the I-80/SR 65 interchange and adjacent transportation facilities, creating traffic operations and safety issues. These issues result in high delays, wasted fuel, excessive air pollution, and greenhouse gas emissions, all of which will be exacerbated by traffic from future population and employment growth.

- Interchange design features do not comply with current Caltrans design standards for safe and efficient traffic operations and limit existing community access to nearby land uses.
- Travel choices are limited in the project area because the transportation network does not include facilities for all modes and users consistent with the complete streets policies of Caltrans and local agencies.

4A. Problem, Deficiencies, Justification

Since the I-80/SR 65 interchange was constructed in 1985, the area has grown and the interchange no longer operates efficiently and effectively, which necessitates the need for replacement. Some of the existing features within the project limits do not meet current Caltrans design standards including interchange spacing, weaving distance, and preferred freeway-to- freeway direct connector ramps and associated design speeds. Accident data show that collisions in the project area are higher than state averages and traffic congestion is expected to worsen by 2040. The proposed improvements are expected to improve operations and safety.

A 2-mile minimum separation is required between system and local interchanges; however, the existing spacing between the Eureka Road/Atlantic Street interchange and the I-80/SR 65 interchange is 1.1 miles. The nonstandard interchange spacing creates a critical weave area between traffic entering and exiting I-80 between the Eureka Road/Atlantic Street, Taylor Road, and I-80/SR 65 interchanges. Along SR 65, the existing spacing between the I-80/SR 65 interchange and the Galleria Boulevard/Stanford Ranch Road interchange is one mile, also causing a critical weave area between traffic entering and exiting SR 65 between I-80 and the Galleria Boulevard/Stanford Ranch Road interchange.

The existing Taylor Road interchange is located between the Eureka Road/Atlantic Street and I-80/SR 65 interchanges, with approximately half-mile spacing between each. The close proximity of ramps creates an undesirable critical weave area between the interchanges and restricts traffic flow in this section of I-80. The interchange is an important connection to the local stakeholders as it provides connectivity to local businesses and residents in the Rocklin area.

The existing eastbound I-80 to northbound SR 65 loop connector currently has a posted speed of 25 mph which does not provide a high-speed connection in this direction of travel, causing traffic to reduce travel speed by as much as 40 mph while approaching the loop.

The existing merge between the westbound I-80 to northbound SR 65 and eastbound I-80 to northbound SR 65 does not have adequate capacity, resulting in a bottleneck, causing traffic to queue back onto the connector ramps as well as the I-80 mainline in both directions.

Currently, a significant portion of Taylor Road within the project limits has no sidewalks or bicycle facilities. There is a gap in the bicycle and pedestrian network between Roseville Parkway and Plumber Way. A gap closure is proposed along Taylor Road, consistent with the City of Roseville Bicycle Master Plan, which would

provide improved bicycle and pedestrian connections between Roseville and Rocklin, as well as improved access to the Class I trails along Secret Ravine, Miners Ravine, and Antelope Creek.

4B. Regional and System Planning

I-80 is on the National Highway System and is part of the Eisenhower Interstate System. It is on the National Truck Network, the Interregional Road System, the extra legal load network (ELLN) and a Surface Transportation Assistance Act (STAA) route. The 2009 I-80 Corridor System Management Plan identifies I-80, within the project limits, as a ten-lane facility.

SR 65 is identified as a principal arterial route on the National Highway System and is a Terminal Access (STAA) route. The 2001 Caltrans SR 65 Transportation Concept Report (TCR) identifies SR 65 as an ultimate eight-lane facility.

4C. Traffic

The transportation analysis for the I-80/SR 65 interchange project used an integrated modeling approach that has three different levels of detail: macro, meso, and micro. At the macro level, the regional travel forecasting model (SACMET) was used to forecast peak period origin-destination (OD) traffic volume flows between traffic analysis zones both internal and external to the study area. At the meso level, the peak period OD flows were divided into four one-hour trip tables and disaggregated into three modes—single occupant vehicle (SOV), HOV, and truck—and then assigned to the sub-area roadway network using the VISUM software. The assignment process was based on congested travel times that reflect roadway link speeds and capacity. At the micro level, the traffic volumes were converted to individual vehicles that were assigned to the operational study area using the VISSIM software that contains detailed inputs governing traffic controls (signal timings), geometrics (lane configurations), and driver behavior.

The traffic forecasts were developed using the first two modeling platforms (macro and meso). The first platform is a modified version of the regional SACMET model developed by the Sacramento Area Council of Governments (SACOG) for the Metropolitan Transportation Plan (MTP)/Sustainable Communities Strategy (SCS). The second platform is the VISUM sub-area trip assignment model, which was used to assign the trips generated from the SACMET model to a detailed roadway network within the study area.

The SACMET and VISUM models were calibrated and validated according to the *2010 California Regional Transportation Guidelines (*California Transportation Commission, 2010) and criteria approved by the PDT. Both models passed applicable static and dynamic validation tests. The detailed validation results are included in the Transportation Analysis Report in Attachment C.

Traffic volume forecasts were developed for construction year (2020) and design year (2040) conditions. The forecasts relied on modified inputs to the MTP/SCS SACMET

model based on PDT refinements to land use projections and the planned roadway network as explained below.

The traffic volume forecasts were derived from future socioeconomic projections that started with regional socioeconomic projections developed by SACOG for the regional MTP/SCS. These were reviewed by the PDT and modified to better reflect local plans. Socioeconomic projections are the largest single influence on traffic volume forecasts, so they affect volume projections to a greater extent than the roadway network changes or any other modeling component. If the socioeconomic forecasts vary in reality, it will have a direct effect on future traffic volumes.

The traffic volume forecasts are also influenced by modifications to the existing transportation network according to improvement projects anticipated to be constructed by the construction (2020) and design (2040) years. These projects are based on the financially constrained project list contained in the MTP/SCS, but also consider projects the PDT agreed would likely be constructed by the design year. The rationale for adding projects to the MTP/SCS list was that the design year is five years beyond the 2035 horizon of the MTP/SCS. This creates a longer timeframe for revenue to accumulate. Further, the additional socioeconomic growth added to the model would also be contributing to transportation revenue to help pay for these improvements.

The roadway system in the project area currently experiences peak-period congestion, which will worsen in the future according to the traffic volume forecasts summarized in the I-80/SR 65 Interchange Improvements Transportation Analysis Report approved in September 2014 and included in Attachment C. Increased capacity along I-80, SR 65, at the system interchange, and on Taylor Road is needed to reduce forecasted congestion.

Freeway Operations

The traffic data show that no-build design year conditions will lead to increased congestion. Table 1 shows average annual daily traffic volumes on the freeway network for existing (year 2012) and design year (2040) conditions. The design year analysis includes traffic forecasts for both a no-build (i.e., no project) and a build (i.e., plus project) alternative.

Table 1. Average Annual Daily Traffic Volumes for Existing (Year 2012) and Design Year (2040) Conditions

		Existing Conditions		Design Year No Build	
Freeway	Segment	Total	Trucks	Total	Trucks
I-80	Douglas Blvd to Eureka Rd	155,000	9,000	197,400	14,200
	Eureka Rd to Taylor Rd	158,700	9,600	203,800	14,400
	Taylor Rd to SR 65	150,000	8,700	194,200	13,900
	SR 65 to Rocklin Rd	109,600	6,400	139,500	9,900
SR 65	I-80 to Galleria Blvd	106,100	3,500	151,500	6,000
	Galleria Blvd to Pleasant Grove Blvd	104,400	3,500	159,100	6,600

Source: Fehr & Peers 2014, Table 16.

Table 2 summarizes the existing and design year freeway operations in the AM and PM peak hours for selected freeway segments. Bold and underlined font indicate LOS F conditions. Conditions at the Eureka Road, Taylor Road, and Galleria Boulevard ramps worsen as well as at the SR 65 and I-80 merge and diverge ramps under no-build conditions. In some cases traffic operations improve between existing and design year no-build conditions, resulting from upstream bottlenecks preventing traffic from reaching downstream locations during the peak hours.

Table 2. Selected Freeway Operations Results –Existing and Design Year Conditions

Freeway	Location	Type	Existing (LOS/Average Density)		Design Year No Build (LOS/Average Density)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
EB I-80	Eureka Rd Off-ramp	Diverge	C / 26	**F / 46**	**F / 114**	**F / 149**
	Eureka Rd Off to On-ramp	Basic	C / 21	C / 23	**F / 138**	**F / 141**
	Eureka Rd EB On-ramp	Merge	B / 19	B / 20	**F / 132**	**F / 96**
	Eureka Rd to Taylor Rd	Weave	C / 23	E / 42	**F / 131**	**F / 142**
	Taylor Rd to SR 65	Basic	D / 28	E / 42	**F / 123**	**F / 133**
	SR 65 Off-ramp	Diverge	C / 28	**F / 52**	**F / 86**	**F / 65**
WB I-80	SR 65 Off-ramp	Diverge	B / 199	E / 35	C / 27	**F / 114**
	Douglas Blvd Off-ramp	Diverge	D / 32	C / 26	C / 21	**F / 108**
	Douglas Blvd WB On-ramp	Merge	E / 36	D / 34	C / 25	C / 20
	Douglas Blvd EB On-ramp	Merge	E / 42	E / 37	C / 23	B / 15
	Douglas Blvd to Riverside Ave	Basic	D / 33	D / 31	D / 28	C / 21
	Riverside Ave Off-ramp	Diverge	E / 40	E / 36	C / 20	B / 16
NB SR 65	I-80 WB On-ramp	Merge	**F / 53**	**F / 95**	**F / 57**	**F / 84**
	I-80 to Stanford Ranch Rd	Basic	D / 32	**F / 77**	D / 35	E / 36
	Stanford Ranch Rd Off-ramp	Diverge	D / 33	**F / 62**	D / 31	D / 32
SB SR 65	Blue Oaks Blvd WB On-ramp	Merge	**F / 60**	B / 20	D / 34	C / 28
	Blue Oaks Blvd to Pleasant Grove Blvd	Weave	**F / 75**	C / 21	D / 29	C / 26
	Pleasant Grove Blvd Off to On-ramp	Basic	**F / 89**	C / 25	D / 32	D / 29
	Pleasant Grove Blvd WB On-ramp	Merge	**F / 72**	D / 31	C / 28	C / 22
	Pleasant Grove Blvd EB On-ramp	Merge	**F / 53**	E / 39	E / 44	D / 29
	Pleasant Grove Blvd to Galleria Blvd	Basic	E / 36	D / 32	**F / 49**	D / 32
	Galleria Blvd Off-ramp	Diverge	E / 35	D / 32	**F / 55**	D / 33
	Galleria Blvd On-ramp	Merge	D / 30	C / 24	**F / 77**	E / 39
	I-80 Off-ramp	Diverge	C / 24	C / 22	D / 33	D / 31

Note: **Bold** and underline font indicate LOS F conditions.
Source: Fehr & Peers 2014, Technical Appendix Part 1

Local Intersection Operations

Table 3 summarizes existing and design year conditions of key local intersection operations. In the design year, traffic shows to generally operate at LOS F for the no-build condition. The majority of local intersections will operate at an equal or worse

LOS by the design year compared to existing conditions. The unacceptable conditions highlighted in the table are based on LOS policies in the General Plans of the City of Roseville (Updated in October 2012), the City of Rocklin (adopted April 1991) and the City of Lincoln (adopted March 2008)

Table 3. Existing and Design Year Conditions of Key Local Intersection Operations

	Existing Conditions (2012)		Design Year No-Build (2040)	
Intersection	AM	PM	AM	PM
Blue Oaks Blvd / Washington Blvd	**D / 43**	C / 33	**F / 136**	**F / >240**
Blue Oaks Blvd / SR 65 NB Ramps	C / 24	C / 23	**F / 116**	**F / 115**
Stanford Ranch Rd / Five Star Blvd	B / 19	C / 32	**F / 151**	**D / 36**
Stanford Ranch Rd / SR 65 NB Ramps	A / 9	B / 15	**F / 127**	D / 36
Galleria Blvd / SR 65 SB Ramps	B / 13	B / 19	D / 38	C / 29
Galleria Blvd / Roseville Pkwy	C / 30	D / 36	D / 39	**F / 213**
Roseville Pkwy / Creekside Ridge Dr	A / 6	B / 17	B / 10	C / 24
Roseville Pkwy / Taylor Rd	C / 30	C / 28	**F / 98**	D / 48
Atlantic St / I-80 WB Ramps	A / 7	B / 11	B / 12	**D / 51**
Eureka Rd / Taylor Rd / I-80 EB Ramps	C / 26	E / 61	E / 55	**F / 92**
Eureka Rd / Sunrise Ave	C / 24	C / 30	C / 29	**F / 184**
Douglas Blvd / Harding Blvd	B / 19	C / 28	C / 25	**F / >240**
Douglas Blvd / Sunrise Ave	C / 26	D / 35	C / 35	**F / >240**
Rocklin Rd / Granite Dr	B / 15	D / 37	D / 29	**F / >240**

Note: **Bold** and underline font indicate unacceptable conditions.
Source: Fehr & Peers 2014, Technical Appendix Part 1

Collision Analysis

Caltrans Traffic Accident Surveillance and Analysis System (TASAS) traffic collision data for mainline I-80 and SR 65, and the ramp connections were compiled for a three-year period from April 1, 2009 to March 31, 2012.

Mainline I-80

A total of 578 collisions were reported on the freeway sections in both directions of I-80, including 4 fatalities and 228 injuries. As shown in Table 4, the actual accident rate on eastbound I-80 from Douglas Boulevard to SR 65 is 1.52, which is higher than the statewide average of 0.90 for a similar type facility. Westbound I-80 for the same limits has an accident rate of 1.08 which is also higher than the statewide average. The data show that fatality and injury rates are also higher than comparable statewide averages.

During the 3-year period, the types of accidents that occurred on I-80 were as follows:

- 353 rear-ends (61%)
- 113 sideswipes (19%)
- 73 hit objects (13%)

- 11 broadsides (2%)
- 11 overturns (2%)
- 11 other factors (2%)
- 6 auto-pedestrian (1%)

The majority of accidents took place in the travel lanes, with only 11.5% of accidents occurring in the left or right shoulder areas or the recovery areas beyond the shoulders. Rear-end accidents account for 61% of all of the accidents, which are generally congestion-related. The next most frequent accident types are side-swipes and hit objects (31%). The other accident types are collectively less than 10% of all accidents.

Mainline SR 65

A total of 150 accidents were reported within the freeway section in both directions of SR 65, including 1 fatality and 52 injuries. As shown in Table 4, the actual accident rate on SR 65 is lower than the statewide average for a similar type facility. The accident rates for fatal and injury accidents are also lower than comparable state averages.

During the 3-year period, the types of accidents that occurred on SR 65 are as follows:

- 101 rear-ends (67%)
- 19 sideswipes (13%)
- 24 hit objects (16%)
- 2 broadsides (1%)
- 1 overturns (1%)
- 2 other factors (1%)
- 1 auto-pedestrian (1%)

I-80/SR 65 Connector Ramps

A total of 63 accidents were reported at four different connector locations. There are three locations that have accident rates higher than the statewide average for a similar type of facility, as shown in Table 5. The three locations that have actual accident rates higher than the statewide rate are as follows:

- Southbound SR 65 to Westbound I-80 Connector (PM 3.95) – A total of 21 accidents were reported with no fatalities. The actual accident rate on the connector ramp is 0.75, which is higher than the statewide average of 0.32 for a similar type facility.

  The types of accidents mostly involve passenger cars and pickup trucks that were speeding and made improper turning movements, resulting in rear-end, hit objects, and sideswipe types of collisions. These accidents are congestion related and are consistent with short weaving distances, number of lanes, and turning roadways of the existing facilities.

- Eastbound I-80 to Northbound SR 65 (PM 4.22) – A total of 31 accidents were reported at this location with no fatalities. The actual accident rate on the connector ramp is 0.98, which is higher than the statewide average of 0.68 for a similar type of facility.

  The types of accidents mostly involve passenger cars and pickup trucks that were speeding and made improper turn type collisions, resulting in rear-end, hit objects, sideswipe, and head-on types of collisions. These accidents are congestion related and are consistent with number of lanes, turning roadways, and configuration of the existing facilities.

- Westbound I-80 to Northbound SR 65 (PM 4.32) – A total of nine accidents were reported at this location with one fatality. The actual accident rate on the connector is 0.63, which is higher than the statewide average of 0.38 for a similar type of facility.

  The types of accidents involved mostly passenger cars that were speeding, under the influence of alcohol and made improper turns, resulting in rear-end, hit objects, and sideswipe types of collisions. These accidents are congestion related and consistent with number of lanes and turning roadways of the existing facilities.

Interchange Ramps to and from I-80, Eureka Road/Atlantic Street and Taylor Road

A total of 43 accidents were reported at seven different ramp locations within the project limits for the Eureka Road/Atlantic Street interchange and the Taylor Road interchange. With exception of three locations, all have accident rates lower than the statewide average for a similar type of facility, as shown in Table 5. All three ramps are in the eastbound direction.

The three ramp locations that have actual rates equal to or higher than statewide rates are as follows:

- Eastbound Off-ramp to Eureka Road/Atlantic Street/Taylor Road Intersection (PM 2.85) – A total of 13 accidents were reported with no fatalities. The actual accident rate on the off-ramp is 1.01, which is equal to the statewide average for a similar type of facility. The types of accidents involve passenger cars that were speeding and involved in rear-end and hit objects type collisions. These accidents are congestion related and consistent with short weaving distances, number of ramps and turning roadways, and short acceleration/deceleration distances of the existing facilities. It should be noted that improvements to this off-ramp were completed in 2013, after the 3-year accident data period.

- Eastbound Loop On-ramp from Atlantic Street (PM 3.01) – A total of three accidents were reported at this location with no fatalities. The actual accident rate on the on-ramp is 1.10, which is higher than the statewide average of 0.73 for a similar type facility.

The types of accidents involve passenger cars that hit object, sideswipe, and overturn type collisions due to speeding. These accidents are consistent with the types of vehicles movements of the existing facility.

- Eastbound Loop Off-ramp to Taylor Road (PM 3.60) – A total of seven accidents were reported at this location with no fatalities. The actual accident rate on the off-ramp is 1.44, which is higher than the statewide average of 1.03 for a similar type facility.

  The types of accidents involved mostly passenger cars that were under the influence of alcohol and made improper turns, resulting in the vehicles hitting object and overturning.

Interchange Ramps to and from SR 65, Galleria Boulevard/Stanford Ranch Road and Pleasant Grove Boulevard

A total of 42 accidents were reported at four different ramp locations within the project limits for the Galleria Boulevard/Stanford Ranch Road interchange. Two of the ramps have accident rates lower than the statewide average for a similar type of facility, as shown in Table 5.

The two ramp locations that have actual accident rates higher than the statewide rate are as follows:

- Southbound On-ramp from Galleria Boulevard/Stanford Ranch Road (PM 5.7) – A total of 16 accidents were reported with no fatalities. The actual accident rate on the on-ramp is 0.90, which is higher than the statewide average of 0.63 for a similar type of facility.

  The types of accidents involve passenger cars that were speeding and involved rear-end and sideswipe type collisions. These accidents are congestion related and consistent with number of ramps and turning roadways of the existing facilities.

- Northbound On-ramp from Galleria Boulevard/Stanford Ranch Road (PM 6.2) – A total of 22 accidents were reported at this location with no fatalities. The actual accident rate on the on-ramp is 2.15, which is higher than the statewide average of 0.63 for a similar type of facility.

  The types of accidents involved passenger cars and pickup trucks that were speeding, made improper turns resulting in rear-end type collisions. These accidents are congestion related and consistent with short weaving distances, number of ramps and turning roadways, and short acceleration distances of existing facilities.

Table 4. Actual and Average Accident Rates on Mainline from 4/1/2009 to 3/31/2012

Direction/ Location	Number of Accidents		Accident Rates					
			Actual			Average		
	Total	F*	F*	F+I***	Total	F*	F+I***	Total
EB I-80 (PM 2.2 to 4.2): Douglas Blvd On to SR 65 Off	256	2	**0.012**	**0.56**	**1.52**	0.004	0.28	0.900
EB I-80 (PM 4.2 to 5.9): SR 65 Off to Rocklin Rd Off	52	0	0.000	0.15	0.48	0.004	0.27	0.87
WB I-80 (PM 4.3 to 5.9): Rocklin Rd On to SR 65 Off	81	1	**0.010**	**0.34**	0.81	0.004	0.27	0.87
WB I-80 (PM 2.2 to 4.3): SR 65 Off to Douglas Off	189	1	**0.006**	**0.31**	**1.08**	0.004	0.28	0.90
NB SR 65 (PM R4.9 to R6.9): I-80 On to Pleasant Grove Blvd Off	55	1	**0.009**	0.15	0.5	0.006	0.33	1.02
SR 65 (PM R4.9 to R7.1): Pleasant Grove Blvd WB On to I-80 Off	95	0	0.000	0.29	0.77	0.006	0.34	1.04
TOTAL	728	5						

Note: Accident rates on mainline are per million vehicle miles.

* Fatalities

** Injuries

*** Fatalities plus injuries

Bold and underlined font indicate actual accident rates that are higher than the statewide average for similar facilities.

Table 5. Actual and Average Accident Rates on Ramps from 4/1/2009 to 3/31/2012

Direction/ Location	Number of Accidents		Accident Rates					
			Actual			Average		
	Total	F*	F*	F+I***	Total	F*	F+I***	Total
EB I-80 Off to Eureka Rd (PM 2.9)	13	0	0.000	0.16	1.01	0.003	0.34	1.01
EB I-80 On from EB Eureka Rd (PM 3.0)	3	0	0.000	**0.37**	**1.10**	0.002	0.21	0.73
EB I-80 On from WB Eureka Rd (PM 3.2)	6	0	0.000	**0.25**	0.51	0.003	0.18	0.57
EB I-80 Off to Taylor Rd (PM 3.6)	7	0	0.000	**0.62**	**1.44**	0.003	0.30	1.03
EB I-80 Off to SR 65 (PM 4.5)	31	0	0.000	**0.29**	**0.98**	0.004	0.20	0.68
EB I-80 On from SR 65 (PM 4.5)	2	0	0.000	**0.17**	0.17	0.003	0.14	0.41
WB I-80 Off to SR 65 (PM 4.3)	9	1	**0.070**	**0.42**	**0.63**	0.005	0.13	0.38
WB I-80 On from SR 65 (PM 4.0)	21	0	0.000	**0.18**	**0.75**	0.003	0.11	0.32
WB I-80 On from Taylor Rd (PM 3.6)	3	0	0.000	0.000	0.54	0.003	0.18	0.57
WB I-80 Off to WB Atlantic St (PM 3.2)	2	0	0.000	0.23	0.46	0.004	0.24	0.75
WB I-80 Off to EB Atlantic St (PM 3.0)	0	0	0.000	0.000	0.00	0.003	0.30	1.06
WB I-80 On from Atlantic St (PM 2.8)	9	0	0.000	**0.32**	**0.71**	0.002	0.22	0.63
NB SR 65 Off to Stanford Ranch Rd (PM R5.7)	2	0	0.000	0.06	0.11	0.002	0.08	0.25
NB SR 65 On from Stanford Ranch Rd (PM R6.2)	22	0	0.000	**0.88**	**2.15**	0.002	0.22	0.63
SB SR 65 Off to Galleria Blvd (PM R6.2)	2	0	0.000	0.09	0.18	0.002	0.08	0.25
SB SR 65 On from Galleria Blvd (PM R5.7)	16	0	0.000	**0.45**	**0.90**	0.002	0.22	0.63
TOTAL	148	1						

Note: Accident rates on mainline are per million vehicle miles.

* Fatalities

** Injuries

*** Fatalities plus injuries

Bold and underlined font indicate actual accident rates that are higher than the statewide average for similar facilities.

5. ALTERNATIVES

5A. Viable Alternatives

The project proposes to improve the I-80/SR 65 interchange with high-speed connector ramps, adding one additional lane to each connector ramp, the addition of an HOV direct connector between I-80 and SR 65, and local interchange ramp improvements and street widening to accommodate these improvements. Three build alternatives have been considered. Each alternative improves I-80 and SR 65 in the same manner and includes additional unique improvements:

Alternative 1 – Taylor Road Full Access Interchange. This alternative proposes to construct a new Taylor Road local interchange within the I-80/SR 65 interchange. The new access would provide for all four ramp movements between I-80 and Taylor Road as separate local ramps connecting directly to I-80. After evaluation, FHWA and Caltrans determined that Alternative 1 is not acceptable because it still allows weaving conditions between the Eureka Road/Atlantic Street, Taylor Road, and SR 65 interchanges that result in increased congestion and reduced safety on I-80 eastbound.

Alternative 2 – Collector-Distributor System Ramps. This alternative proposes to construct a separate eastbound collector-distributor system parallel to I-80 that collects the Eureka Road ramp traffic and distributes it to Taylor Road, eastbound I-80, and northbound SR 65, eliminating the weaving conditions on eastbound I-80 between Eureka Road and the I-80/SR 65 interchanges. This alternative maintains the Taylor Road partial interchange in its existing location.

Alternative 3 – Taylor Road Interchange Eliminated. This alternative proposes to remove the Taylor Road partial interchange and redirect the traffic to the adjacent local interchanges at Eureka Road/Atlantic Street, Rocklin Road, and Galleria Boulevard/Stanford Ranch Road. Some local intersections would also be improved.

Common Features to Build Alternatives

The three Build alternatives studied have the same or similar improvements on I-80 and SR 65 except in how access to Taylor Road is addressed. These common features are described in detail below.

State Route 65

The proposed improvements to the SR 65 corridor are the same for all three Build Alternatives. These include:

- Widen northbound SR 65 to three to five lanes
- Widen southbound SR 65 to three to five lanes
- Add one HOV lane in each direction of travel
- Reconstruct Galleria Boulevard/Stanford Ranch Road interchange on-ramp
- Widen the northbound 65 to eastbound Stanford Ranch Road off-ramp to two lanes
- Reconstruct southbound Pleasant Grove Boulevard interchange ramps

- Widen the East Roseville Viaduct Structure
- Add soundwalls at two locations
- Construct or reconstruct ramp metering and preferential bypass lanes at on-ramps

SR 65 would be widened to include one HOV lane and one additional general purpose lane in each direction of travel. Auxiliary lanes would be provided between the I-80/SR 65 interchange and the Galleria Boulevard/Stanford Ranch Road interchange. Widening would occur on both the inside and outside of the existing pavement in both directions. The median would be fully paved and divided by a concrete median barrier. An additional concrete barrier would be added in the northbound direction separating the HOV and general purpose lanes to prevent HOV access between the I-80/SR 65 interchange and the Galleria Boulevard/Stanford Ranch Road interchange.

In the southbound direction, a 4-foot-wide, pavement-delineated soft barrier would separate the HOV and general purpose lanes to prohibit HOV access between the southbound Galleria Boulevard/Stanford Ranch Road on-ramp and the HOV direct connector ramp.

The SR 65 mainline widening would require reconstruction of the ramp connections for all of the Galleria Boulevard/Stanford Ranch Road interchange ramps. The northbound Stanford Ranch Road slip off-ramp would be widened to two lanes to accommodate a future project at the ramp terminus. Due to the proximity of the mainline widening to the northbound Galleria Boulevard/Stanford Ranch Road loop off-ramp, a concrete barrier would separate the mainline and ramp under the overcrossing where traffic runs adjacent and parallel. The northbound Galleria Boulevard loop off-ramp would also need to be reconfigured at the ramp terminus to accommodate the future project. Both of the northbound ramps would accommodate the future improvements at the ramp termini, proposed by a separate project.

The southbound Galleria Boulevard/Stanford Ranch Road on-ramp would be reconstructed to provide two general purpose lanes plus an HOV preferential lane. Although access to the HOV direct connector would be restricted from traffic entering at this ramp, the HOV preferential lane would serve as an incentive to carpool.

The southbound Pleasant Grove Boulevard loop on-ramp would serve as the beginning of the third southbound general purpose lane and the southbound slip on-ramp would be reconfigured to accommodate the mainline widening.

The East Roseville Viaduct would be widened in both directions to both the inside and the outside, spanning the existing Union Pacific Railroad tracks, Antelope Creek, and Taylor Road. Bridge design requires that the widened portion of the structures be configured similarly to the existing structure to provide consistent performance in regards to structure stiffness, deflection control, and seismic performance; therefore, the additional columns would be placed parallel to the existing columns along the entire length of the viaduct. Due to a combination of variable widening and a curved alignment, the widening in the northbound direction would shift the edge of deck approximately 33 to 42 feet closer to the Hearthstone apartment complex. Currently,

the distance between the edge of deck of the viaduct and the Hearthstone apartment complex ranges from 57 to 65 feet. The proposed widening would result in a distance ranging from 23 to 24 feet. Similarly in the southbound direction, the proposed widening would shift the edge of deck approximately 4 to 17 feet closer to the Preserve at Creekside apartment complex. Currently, the distance between the edge of deck of the viaduct and the Preserve at Creekside apartment complex ranges from 77 to 129 feet. The proposed widening would result in a distance ranging from 60 to 125 feet. Soundwalls would be added to both sides of the East Roseville Viaduct to mitigate the increased noise caused by the project.

The proposed improvements to the SR 65 corridor, as shown in Attachment D, would remain within the existing right of way and have been coordinated with the future SR 65 Capacity and Operational Improvements Project.

Interstate 80

The proposed improvements to the I-80 corridor are the same for all three Build Alternatives. These include:

- Widen eastbound I-80 to three to six lanes
- Widen westbound I-80 to three to six lanes
- Add soundwalls at two locations

I-80 would be widened to add at least one lane in each direction of travel. A retaining wall would be constructed in the eastbound direction between the Eureka Road/Atlantic Street interchange and the Roseville Parkway overcrossing but the overall width and impacts to the existing right of way would vary by alternative. A tie-back wall would be constructed under the East Roseville Parkway Overcrossing to maximize the pavement width on I-80 without impacting the overcrossing. In all three Build alternatives, the Eureka Road/Atlantic Street Overcrossing and the Roseville Parkway Overcrossing would remain in place.

I-80/SR 65 Interchange

The proposed improvements to the I-80/SR 65 interchange are the same for all three Build Alternatives. These include:

- Construct a new eastbound to northbound connector ramp with three lanes
- Widen the westbound to northbound connector ramp to two lanes
- Widen the southbound to eastbound connector ramp to two lanes
- Widen the southbound to westbound connector ramp to three lanes
- Add a bi-directional HOV direct connector ramp with one lane in each direction

To accommodate the future demand, one lane of capacity would be added to each connector ramp and realigned to accommodate the mainline widening. The westbound I-80 to northbound SR 65 connector (“WN” Line) would be constructed on fill with a retaining wall along portions of the outside shoulder to avoid right of

way encroachments. The ramp diverge would remain in relatively the same location but would be shifted out to accommodate the mainline widening.

The existing eastbound I-80 to northbound SR 65 loop connector would be removed and replaced with a high-speed three lane flyover, diverging from mainline approximately 2,200 feet farther west than its existing location. The two existing connector ramp structures over I-80 would be removed.

The Southbound SR 65 to Eastbound I-80 connector ramp ("SE" Line) and Eastbound I-80 to Northbound SR 65 connector ramp ("EN" Line) would consist of a combination of fill, retaining walls, and structures but the location where it enters the mainline facility varies by alternative. The southbound SR 65 to westbound I-80 connector ("SW" Line) also varies by alternative.

A bi-directional, direct connecting HOV flyover ramp would be added to serve high occupancy vehicle traffic traveling from eastbound I-80 to northbound SR 65 and from southbound SR 65 to westbound I-80. The HOV connector would be located in the I-80 median and retained by mechanically stabilized earth (MSE) walls before transitioning to a structure spanning westbound I-80 and other local and/or connector ramps. The HOV connector would transition back to fill with a cast-in-place retaining wall along the shoulder before conforming to the proposed HOV lanes along the East Roseville Viaduct.

Taylor Road

The proposed improvements to Taylor Road are similar for all three Build Alternatives. These include:

- Widen and realign Taylor Road to four lanes with a center two-way left turn lane
- Construct a new four-lane Taylor Road over I-80 overcrossing structure

The existing Taylor Road ramp connections (eastbound off-ramp and westbound on-ramp) would be modified and access to Taylor Road would be removed, reconfigured, or relocated depending on the alternative. Taylor Road, within the project limits, would be widened and improved, including replacement of the Taylor Road Overcrossing to accommodate the mainline widening. Length and width of the structure would vary by alternative. Curb, gutter, and sidewalk would be constructed along the south side of Taylor Road and would accommodate bicycle traffic via shoulders or bicycle lanes depending on the alternative. The driveways into the various local businesses along Taylor Road would be modified to conform to the roadway widening. Any impacts to access are described within each alternative summary below.

Structures

The proposed improvements to structures are similar for all three Build Alternatives. See Attachment E for the structures advanced planning studies. These include:

- East Roseville Viaduct widening
- Eastbound I-80 to northbound SR 65 connector ramp structure

- Southbound SR 65 to eastbound I-80 connector ramp structure
- Bidirectional HOV direct connector structure
- Taylor Road Overcrossing
- Tie-back wall under Roseville Parkway Overcrossing
- Retaining Walls at:
    - Eastbound I-80 from Eureka Road/Atlantic Street to the Roseville Parkway Overcrossing
    - Westbound I-80 from Eureka Road Atlantic to the Roseville Parkway Overcrossing
    - Southbound SR 65 to Westbound I-80 Connector Ramp
    - Westbound I-80 to Northbound SR 65 Connector Ramp
    - Southbound SR 65 to Eastbound I-80 Connector Ramp
    - HOV Connector
- Soundwalls at:
    - NB/SB East Roseville Viaduct
    - Eastbound I-80 near the eastern project limits
    - Westbound I-80 near the eastern project limits

The widening of the East Roseville Viaduct would be the same across all three Build Alternatives. The widening would include a cross slope correction in the southbound direction to maintain a standard vertical clearance over the UPRR tracks.

The other structures are the same or similar across the Build Alternatives. Any differences are described with the unique features of the alternatives.

To avoid potential impacts on fish, pile driving would not be used as a construction method, for any of the Build alternatives, in or immediately adjacent to Secret Ravine, Miners Ravine, and Antelope Creek.

Right of Way

The existing right of way conditions surrounding the project limits consist of a combination of commercial, residential, landscape, open space preserve, and vacant lots. The alternatives were designed to avoid significant right of way acquisitions and are summarized in each alternative description. Right of way impacts vary by alternative but all three propose impacts to the existing access to the Stone House on parcel 015-162-007. Although the Build alternatives do not directly impact the Stone House, the parcel is proposed as a full take due to the percentage of the parcel that would be impacted and the inability to continue to provide access to the parcel after the project is constructed. The right of way impacts are summarized with each alternative.

Utilities

Existing utility information was provided by the following companies:

- City of Roseville
- City of Rocklin
- Kinder Morgan
- Pacific Gas and Electric (PG&E)
- Placer County Water Agency (PCWA)
- Sacramento Municipal Utility District (SMUD)
- South Placer Municipal Utility District (SPMUD)
- Consolidated Communications (formerly Surewest)
- Western Area Power Administration (WAPA)

  Existing facilities within the project limits should be protected in place unless otherwise specified as a unique feature to an alternative.

Features Unique to Each Alternative

Alternative 1 – Taylor Road Full Access Interchange

This alternative proposes to construct a new Taylor Road local interchange within the I-80/SR 65 interchange. The new access would provide for all four ramp movements between I-80 and Taylor Road as separate local ramps connecting directly to I-80. After evaluation, FHWA and Caltrans determined that Alternative 1 is not acceptable because it still allows weaving conditions between the Eureka Road/Atlantic Street, Taylor Road, and SR 65 interchanges that result in increased congestion and reduced safety on I-80 eastbound. See Alternative 1 exhibits in Attachment D.

Taylor Road Interchange

The proposed improvements to the Taylor Road interchange unique to Alternative 1 include:

- Relocate the existing partial interchange at Taylor Road
- Construct a Taylor Road full access interchange to the east, reconstructing the eastbound off and westbound on-ramps, and providing new westbound off and eastbound on-ramps

Taylor Road Full Access Interchange would improve spacing and vehicle lane-weaving movements between the Eureka Road/Atlantic Street and Taylor Road interchanges in both directions along I-80. The two existing Taylor road interchange ramps would be relocated approximately 3,000 feet to the east and reconstructed into a Type L-1/L-12 interchange configuration, providing two additional ramp connections, improving access between the local streets and freeway system. The Taylor Road interchange ramp termini would be located below I-80 mainline and connect to a new local road serving the ramps and Taylor Road. The new connection with Taylor Road would require a new signal along Taylor Road with two left-turn

lane pockets to be added from the westbound direction. The Taylor Road Overcrossing would have four lanes, and bicycles would utilize the shoulders.

Interstate 80

The proposed improvements to the I-80 corridor unique in Alternative 1 include:

- Extend the eastbound 4th mainline lane to an eastbound exit only ramp to the relocated Taylor Road interchange
- Reconstruct four of the six Eureka Road/Atlantic Street interchange ramps to conform with the widened I-80
- Construct or reconstruct ramp metering and preferential bypass lanes at on-ramps where feasible

Along eastbound I-80, there would be one HOV lane, five general purpose lanes, and one auxiliary lane between the eastbound Eureka slip on-ramp ("E2" Line) and the eastbound I-80 to northbound SR 65 connector ramp ("EN" Line). In addition to the auxiliary lane, one general purpose lane would exit to the northbound SR 65 connector and one would exit at the eastbound Taylor loop off-ramp ("T1" Line), leaving one HOV and three general purpose lanes conforming to the existing condition and continuing on towards the Rocklin Road interchange.

From the city of Rocklin in the westbound direction, there would be one HOV lane, three general purpose lanes and one partial auxiliary lane of approximately 1,300 feet between the Rocklin Road interchange and the westbound I-80 to northbound SR 65 connector ramp ("WN" Line). The third general purpose lane would have optional exits at the "WN" connector ramp and the new westbound Taylor Road off-ramp ("T3" Line). The westbound Taylor Road on-ramp ("T4" Line) would merge with mainline prior to the three lanes entering the facility from the southbound SR 65 to westbound I-80 connector ramp ("SW" Line). One lane would exit to the Atlantic Street off-ramp ("E3" Line), and one would exit at the westbound Eureka Road loop off-ramp. The HOV and four general purpose lanes would tie into the existing condition and continue west towards the Douglas Boulevard interchange. A continuous retaining wall would be required from the southbound SR 65 to westbound I-80 ramp to maximize the available pavement width while avoiding impacts to UPRR right of way.

Alternative 1 proposes a 2-foot pavement-delineated soft barrier separating the HOV lanes and general purpose lanes to prohibit weaving between the critical weaving area from the Eureka Road/Atlantic Street interchange to the I-80/SR 65 interchange. The soft barrier is proposed in both the eastbound and westbound directions for Alternative 1. The facility would be signed and pavement delineated such that traffic utilizing the HOV lanes would be restricted from accessing the Eureka Road/Atlantic Street, Taylor Road, or Galleria Boulevard/Stanford Ranch Road interchanges.

I-80/SR 65 Interchange

The proposed improvements to the I-80/SR 65 interchange unique to Alternative 1 include:

- Eastbound to northbound connector ramp length and alignment

- Westbound to northbound connector ramp length and alignment
- Southbound to eastbound connector ramp length and alignment
- Southbound to westbound connector ramp length and alignment

The Eastbound I-80 to Northbound SR 65 Connector ("EN" Line) would be realigned into a flyover and widened to three lanes. In Alternative 1, three lanes (two trap and one optional) would diverge from eastbound I-80 to create the high-speed flyover. Retaining walls would be constructed on both sides to minimize impacts to Secret Ravine and right of way. The "EN" Line would span I-80, Secret Ravine, and the local Taylor Road interchange ramps before transitioning back to fill and conforming to the East Roseville Viaduct.

The westbound I-80 to northbound SR 65 Connector ("WN" Line) is generally the same across all three Build alternatives with the exception of the ramp diverge. The "WN" Line would diverge approximately 1,000 feet farther east compared to the existing condition, closer to the Rocklin Road interchange, to allow adequate spacing between the connector and the westbound Taylor off-ramp ("T3" Line).

The southbound SR 65 to eastbound I-80 connector ramp ("SE" Line) would merge with I-80 approximately 930 feet farther east compared to the existing condition, closer to the Rocklin Road interchange, to allow adequate spacing between the connector and the eastbound Taylor Road on-ramp ("T2" Line),.

The southbound SR 65 to westbound I-80 connector ramp ("SW" Line) would merge with I-80 approximately 1,700 feet farther west compared to existing, closer to the Eureka Road/Atlantic Street interchange, to provide adequate spacing between the connector and westbound Taylor on-ramp ("T4" Line).

Alternative 1 would have four levels to accommodate the various ramps and relocated Taylor Road interchange. The first level would be constructed below I-80 mainline, serving local traffic accessing Taylor Road. The "EN" and "HOV" connectors would be one level above I-80 mainline, and the SE connector would be the top level.

HOV and Other Modes

The proposed HOV improvements unique to Alternative 1 include:

- Construction of ramp metering and preferential bypass lanes on Taylor Road On-Ramps

In addition, HOV enforcement areas would be added to the Taylor Road on-ramps. The improvements to Taylor Road would close the existing sidewalk gaps, providing contiguous access within the project limits, and shoulders would be improved to provide room for bicycles.

Structures

The proposed improvements to structures unique to Alternative 1 include:

- New I-80 Mainline bridges (EB and WB) spanning new Taylor Interchange Ramps
- Southbound SR 65 to Westbound I-80 Bridge spanning "T" Line

- 4-lane Taylor Road Overcrossing Structure spanning I-80 and "SW" Line
- Retaining Walls at:
    - Eastbound Eureka Loop On-Ramp to minimize floodplain impacts
    - Southbound SR 65 to Eastbound I-80 to avoid Eastbound Taylor On-Ramp

Alternative 1 improvements include seven new bridges, the East Roseville Viaduct widening, and one tie-back wall. The APS reports, included in Attachment E, provide more detailed structures information.

Utilities

The proposed Alternative 1 improvements would avoid the existing 230 kV towers owned by PG&E and SMUD. Overhead lines from these towers as well as WAPA facilities span I-80 and would need to be protected in place during construction.

Right of Way

Alternative 1 would impact a total of 11 parcels, nine partial takes, and two full takes totaling 11.93 acres. Unique to Alternative 1, the "SE" connector would encroach on the Secret Ravine ordinary high water mark and require right of way acquisition. The Alternative 1 proposed improvements would also have the greatest impact on the Cattlemens parking lot but would not impact the Golfland Sunsplash parking lot. Alternative 1 would also avoid impacts to the landscaping along the Larkspur Landing and Hilton Garden Inn hotels. The new connection with Taylor Road would cause the access to Stone Court to be relocated to the south, impacting the parking lot of the Seventh Day Adventist Church. See Right of Way Data Sheets in Attachment K.

Cost

The estimated construction cost for Alternative 1 is $343.5 million. See Attachment F for the preliminary cost estimate.

Alternative 2 – Collector-Distributor System Ramps

This alternative proposes to construct a separate eastbound collector-distributor system parallel to I-80 that collects the Eureka Road ramp traffic and distributes it to Taylor Road, eastbound I-80 and northbound SR 65, eliminating the weaving conditions on eastbound I-80 between Eureka Road and the I-80/SR 65 interchanges. This alternative maintains the Taylor Road interchange in its existing location. See Alternative 2 exhibits in Attachment D.

Collector-Distributor System Ramps

The proposed Collector-Distributor System Ramps in Alternative 2 include:

- Relocate the existing eastbound Taylor off-ramp exit to be combined with the eastbound Eureka Ro
- ad off-ramp

- Construct a new Taylor Road eastbound off-ramp alignment separate from I-80 as the collector distributor system
- Reconstruct the existing Eureka Road loop on-ramp to I-80 to combine with the collector distributor system
- Reconstruct the existing Eureka Road slip on-ramp to combine with the collector distributor system
- Reconstruct the existing Taylor loop off-ramp to diverge from the collector distributor system
- Construct a new exit only ramp from the collector distributor system to the I-80/SR 65 interchange eastbound to northbound connector ramp
- Construct a new collector distributor on-ramp to eastbound I-80
- Construct new structures:
    - CDS ramp over Miners Ravine
    - Eureka Road over CDS
    - Eureka slip on-ramp over CDS
    - CDS over Secret Ravine

Collector-Distributor (C-D) System Ramps would improve spacing and vehicle lane-weaving movements between the interchanges on I-80 by collecting and redirecting eastbound ramp traffic onto a barrier separated collector-distributor ramp system, parallel to I-80 mainline. The collector-distributor system would provide eastbound access to Taylor Road, eastbound I-80, and northbound SR 65 from Eureka Road at the Eureka Road/Atlantic Street interchange and would restrict local traffic from leaving or entering I-80 mainline until after the critical weave area between Eureka Road and the I-80/SR 65 interchange. The two existing Taylor Road interchange ramps would remain in relatively the same place as existing conditions, but the eastbound loop ramp would be accessed from the collector-distributor road instead of the I-80 mainline.

The collector-distributor ramp (“CD1”) would diverge from I-80 near the existing eastbound Eureka off-ramp. Traffic traveling on eastbound I-80 trying to access Taylor Road would exit at the collector-distributor ramp near the Eureka Road Interchange. The eastbound Eureka loop ramp would be realigned to merge with the C-D to form a cut-and-cover tunnel under the Eureka Road Overcrossing. The eastbound Eureka slip on-ramp would braid over the tunnel, aligning the ramps such that minimal weaving would need to occur. The two ramps would join to form a two-lane C-D road parallel to eastbound I-80. Once past the Taylor loop off-ramp, the two lanes would split and transition to separate structures, spanning Secret Ravine. One would exit to SR 65 by merging with the “EN” connector, and one would serve as an on-ramp to eastbound I-80.

Interstate 80

The proposed improvements to the I-80 corridor unique in Alternative 2 include:

- Provide one less eastbound mainline lane between the Eureka off-ramp and the eastbound to northbound connector exit
- Reconstruct the westbound Taylor Road on-ramp to conform with the widened I-80
- Remove the Eureka Road eastbound loop and slip on-ramps from eastbound I-80
- Widen the eastbound Eureka Road off-ramp to two lanes, one serving Eureka Road/Atlantic street, one serving the C-D ramp. The existing off-ramp structure over Miners Ravine would remain one lane and a new structure would be constructed over Miners Ravine for the C-D ramp.
- Remove the Taylor Road eastbound loop off-ramp from eastbound I-80
- Reconstruct the Eureka Road/Atlantic Street westbound slip and loop off-ramps to conform with the widened I-80
- Construct or reconstruct ramp metering and preferential bypass lanes at on-ramps, where feasible.

Along eastbound I-80, there would be one HOV lane and four general purpose lanes from the project conform to the eastbound I-80 to northbound SR 65 connector ramp ("EN" Line). Two lanes would diverge from I-80 to form the EN Connector (one trap lane, one optional exit lane). The HOV lane and three remaining general purpose lanes would continue eastbound towards Rocklin. The eastbound I-80 on-ramp from the collector-distributor ("CD4" Line) would merge with I-80 as would the SE Connector lanes and the improvements would conform to existing conditions.

From the City of Rocklin in the westbound direction, there would be one HOV lane, three general purpose lanes and one partial auxiliary lane of approximately 2,200-feet between the Rocklin Road Interchange and the westbound I-80 to northbound SR 65 connector ramp ("WN" Line). The third general purpose lane would have an optional exit at the "WN" connector ramp. Three lanes would enter the facility from the southbound SR 65 to westbound I-80 connector ramp ("SW" Line) and the existing westbound Taylor on-ramp ("T2" Line) would merge in relatively the same location as existing except be realigned to accommodate the mainline widening. One lane would exit to the Atlantic Street off-ramp ("E3" Line), and one would exit at the westbound Eureka Road loop off-ramp. The HOV and four general purpose lanes would tie into the existing condition and continue west towards the Douglas Boulevard interchange. A continuous retaining wall would be required along the outside shoulder from the south to west connector to the Atlantic off-ramp to maximize the available pavement width while avoiding impacts to UPRR right of way.

Alternative 2 proposes a 2-foot pavement delineated soft barrier in the westbound direction, separating the HOV lanes and general purpose lanes, to prohibit weaving between the critical area from I-80/SR 65 Interchange to the Eureka Road/Atlantic Street Interchange. The soft barrier is proposed only in the westbound direction because the barrier between eastbound I-80 and the collector-distributor facility

would physically prevent traffic entering from Eureka Road from accessing the HOV lanes.

To avoid impacts to UPRR right of way, costly impacts to the Roseville Parkway Overcrossing, and to provide at least 60 MPH stopping sight distance on mainline, the HOV lane entering from SR 65 would have a non-standard entrance and auxiliary lane length. The HOV lanes would taper at 30:1 to maximize the length of the auxiliary lane shown in the HOV Guidelines and the standard merge escape area would not be provided. Design focus meetings were held with Caltrans and the design team to develop the geometrics shown in Attachment D.

Taylor Road

The proposed improvements to the Taylor Road interchange unique to Alternative 2 include:

- Maintain the existing partial interchange at Taylor Road
- Construct a new five-lane Taylor Road over I-80 overcrossing structure

Alternative 2 would not require a new intersection or turn pockets along Taylor Road nor would it require a new driveway location for Stonehouse Court. The Taylor Road overcrossing would have five lanes because the third northbound lane would be added from the loop off-ramp and would become an auxiliary lane between the ramp and the turn lane into the Cattlemens parking lot.

I-80/SR 65 Interchange

The proposed improvements to the I-80/SR 65 interchange unique in Alternative 2 include:

- Provide a two-lane exit for the eastbound to northbound connector
- Provide a one-lane slip on-ramp from the CDS to the eastbound to northbound connector, providing the third lane for the connector
- Eastbound to northbound connector ramp length and alignment
- Westbound to northbound connector ramp length and alignment
- Southbound to eastbound connector ramp length and alignment
- Southbound to westbound connector ramp length and alignment

The Eastbound I-80 to Northbound SR 65 Connector (“EN” Line) would be realigned into a flyover and widened to three lanes. In Alternative 2, two lanes (one trap and one optional) would diverge from eastbound I-80 to create the high-speed flyover. The third lane would be added from the collector-distributor ramp (“CD3” Line). Retaining walls would be constructed on both sides to minimize impacts to the Secret Ravine area and right of way. The “EN” Line would span I-80, and Secret Ravine before transitioning back to fill and conforming to the East Roseville Viaduct.

The westbound I-80 to northbound SR 65 Connector (“WN” Line) is generally the same across all three Build alternatives with the exception of the ramp diverge. The

"WN" Line would diverge in approximately the same location as the existing condition.

The southbound SR 65 to eastbound I-80 connector ramp ("SE" Line) would merge with I-80 approximately 200-feet farther east compared to the existing condition, closer to the Rocklin Road interchange.

The southbound SR 65 to westbound I-80 connector ramp ("SW" Line) would merge with I-80 approximately 550-feet farther west compared to existing, closer to the Eureka Road/Atlantic Street interchange, to accommodate the mainline widening.

Alternative 2 would have three levels to accommodate the various connectors. The first level would be the I-80 mainline grade, the "EN" and "HOV" connectors would be one level above I-80 mainline, and the SE connector would be the top level.

HOV and Other Modes

The proposed bicycle and pedestrian improvements unique to Alternative 2 include:

- Northbound bicycle lane between Taylor Road #2 lane and auxiliary lane
- Tight radius curves at ramp termini to reduce pedestrian conflicts with high speed vehicles.

Due to the limited available right of way, an HOV preferential and enforcement area would not be provided on the westbound Taylor Road on-ramp.

The improvements to Taylor Road would close the existing sidewalk gaps, providing contiguous access within the project limits.

Structures

The proposed improvements to structures unique to Alternative 2 include:

- 5-lane Taylor Road Overcrossing
- Cut-and-Cover Tunnel under Eureka Road/Atlantic Street Overcrossing
- Collector-Distributor Road over Miners Ravine
- Retaining Walls at:
    - Along Collector-Distributor ramps to minimize right of way impacts
    - Retaining wall along westbound Taylor On-Ramp

Alternative 2 improvements include seven new bridges, the East Roseville Viaduct widening, a cut-and-cover tunnel, and one tie-back wall. The APS reports, included in Attachment E, provide more detailed structures information.

Utilities

The proposed utility impacts unique to Alternative 2 include:

- Relocate PG&E transmission tower
- Relocate SMUD transmission tower

The proposed Alternative 2 improvements would impact the existing 230 kV towers, located in the Golfland Sunsplash parking lot, that are owned by PG&E and SMUD. The towers are proposed to be relocated and their shift would require the parking lot to be reconfigured. The new location of the towers would need to be coordinated with the facility owners. Overhead lines from these towers as well as WAPA facilities span I-80 and UPRR and would need to be protected in place during construction.

Right of Way

Alternative 2 would impact a total of 12 parcels, ten partial takes, and two full takes totaling 12.71 acres. Alternative 2 would impact the Golfland Sunsplash parcel as well as require sliver acquisitions along the landscaping of the Larkspur Landing and Hilton Garden Inn Hotels. See Right of Way Data Sheets in Attachment K for more details. Several retaining walls are proposed in close proximity to the right of way limits. The walls can be constructed and maintained within existing and proposed right of way within the project limits but may be require temporary construction easements to facilitate construction, depending on the design refinements made during PS&E.

In the area near the collector-distributor merge with the EB Eureka Road slip on-ramp, a cut retaining wall of approximately 5 feet is required within existing Caltrans right of way. The wall type will most likely be a Caltrans Standard Type 5 to keep the footing within existing right of way, but will need to be confirmed during PS&E. Additionally, drainage and barrier details will need to be determined prior to setting the temporary construction easement limits, but approximately 10 feet is anticipated to be needed along the Brookfields parcel to provide adequate room for construction.

A temporary construction easement will also most likely be needed along WB I-80 to construct the wall between mainline and the UPRR tracks. The location of the wall is relatively the same location as the existing wall that runs along the shoulder in this location.

In the area near the SB SR 65 to EB I-80 Connector, the geometrics are constrained by the proximity of the Secrete Ravine. There should be adequate room to construct the wall within Right of Way and an additional 5-foot swath between the existing right of way and Secrete Ravine has been assumed for temporary impacts during construction. The constraint is relatively short, approximately 100 feet, and maintenance access can be provided from both the Rocklin Road interchange to the east and the system interchange to the west.

Cost

The estimated construction cost for Alternative 2 is $351.9 million. See Attachment F for the preliminary cost estimate.

Alternative 3 – Taylor Road Interchange Eliminated

This alternative proposes to remove the Taylor Road partial interchange and redirect the traffic to the adjacent local interchanges at Eureka Road/Atlantic Street, Rocklin Road, and Galleria Boulevard/Stanford Ranch Road. Some local intersections would also be improved.

Taylor Road Interchange

The proposed improvements to the Taylor Road interchange unique to Alternative 3 include:

- Eliminate the existing partial interchange at Taylor Road

Alternative 3 will remove the eastbound loop off-ramp to Taylor and the westbound on-ramp to I-80 and not replace them. The traffic demands would be accommodated by the adjacent local interchanges at the Eureka Road/Atlantic Street, Rocklin Road, and Galleria Boulevard/Stanford Ranch Road Interchanges.

I-80 and the I-80/SR 65 Interchange

The proposed improvements to the I-80 corridor unique in Alternative 3 include:

- Remove the Taylor Road on-ramp from westbound I-80
- Remove the Taylor Road loop off-ramp from eastbound I-80
- Relocate the Eureka Road loop on-ramp and the Eureka Road slip on-ramps
- Reconstruct the Eureka Road/Atlantic Street westbound slip and loop off-ramps to conform with the widened I-80
- Construct or reconstruct ramp metering and preferential bypass lanes at on-ramps where feasible

Alternative 3 would improve spacing and eastbound weaving movements between the Eureka Road/Atlantic Street Interchange and the I-80/SR 65 interchange. Eureka On-ramp traffic would be redirected onto a barrier separated two-lane collector-distributor ramp, parallel to I-80 facility, restricting traffic from entering mainline until past the critical weave area between Eureka Road/Atlantic Street and the I-80/SR 65 system interchange. Similar to Alternative 2, the parallel two-lane collector-distributor facility would split into two on-ramps, one to the Eastbound I-80 to Northbound SR 65 Connector to access northbound SR 65, and the other to access eastbound I-80. These ramps would be on structure, spanning Secret Ravine.

Because the westbound Taylor Road on-ramp would be eliminated, weaving in the westbound direction would be improved between the “SW” connector and the westbound Atlantic Street Off-ramp.

The connector ramps serving I-80 and SR 65 (“SW”, “EN”, “SE”, “WN”, and “HOV” Lines) would be the same as in Alternative 2.

Alternative 3 would not include a 2-foot painted delineated soft barrier in the eastbound direction between the HOV and general purpose lanes due to the proposed barrier the between mainline and the ramp collector-distributor system would physically restrict traffic entering at Eureka to weave into the HOV lanes. A 2-foot soft barrier would be proposed in the westbound direction to restrict weaving between the HOV and general purpose lanes.

Taylor Road

Alternative 3 would not require a new intersection or turn pockets along Taylor Road and does require a new driveway location for Stonehouse Court. The Taylor Road Overcrossing would consist of four lanes because the eastbound Taylor loop off-ramp would be eliminated.

Eureka Road/Atlantic Street Interchange

The proposed improvements to the Eureka Road/Atlantic Street interchange unique in Alternative 3 include:

- Realign the Eureka Road loop eastbound on-ramp, separate from I-80
- Realign the Eureka Road slip eastbound on-ramp, separate from I-80
- Construct a new two-lane Eureka Road eastbound on-ramp with ramp entrances to the eastbound to northbound connector ramp and to eastbound I-80
- Widen the Eureka Road eastbound off-ramp to two lanes
- Improve the Eureka Road/Taylor Road intersection
- Improve the Taylor Road/East Roseville Parkway intersection

The westbound Eureka Road/Atlantic Street Ramps would remain in the same location and would only be adjusted to accommodate the mainline I-80 widening. The eastbound Eureka Road/Atlantic Street Ramps would tie in to the new separated ramp system instead of merging with I-80 mainline. Unlike Alternative 2, the ramps would not braid near the Eureka Road/Atlantic Street overcrossing and would not require a cut-and-cover tunnel, nor a new bridge over Miners Ravine.

Because Taylor Road traffic demands would be partially shifted to the Eureka Road/Atlantic Street interchange, the eastbound Eureka Road off-ramp would need to be widened to two lanes with added left turn pockets to accommodate future traffic demands. Intersection improvements, including dual right turn pockets would also be warranted at the Eureka Road/Taylor Road and Taylor Road/East Roseville Parkway intersections.

HOV and Other Modes

The proposed bicycle and pedestrian improvements unique to Alternative 3 include:

- Lower the trail adjacent to Miners Ravine to provide standard vertical clearance under widened bridge

The improvements to Taylor Road would close the existing sidewalk gaps, providing contiguous access within the project limits and bicycles could utilize the proposed shoulders.

Structures

The proposed improvements to structures unique to Alternative 3 include:

- Widening of eastbound Eureka Road slip off-ramp bridge

Alternative 3 improvements include six new bridges, the East Roseville Viaduct widening, the eastbound Eureka Road off-ramp structure widening, and two tie-back walls. The APS reports, included in Attachment E, provide more detailed structures information.

Utilities

The proposed utility impacts unique to Alternative 3 include:

- Relocate PG&E transmission tower
- Relocate SMUD transmission tower

The proposed Alternative 3 improvements would impact the existing 230 kV towers, located in the Golfland Sunsplash parking lot, that are owned by PG&E and SMUD. The towers are proposed to be relocated and their shift would require the parking lot to be reconfigured. The new location of the towers would need to be coordinated with the facility owners. Overhead lines from these towers as well as WAPA facilities span I-80 and would need to be protected in place during construction.

Right of Way

Alternative 3 would impact a total of 12 parcels, ten partial takes, and two full takes totaling 12.59 acres. Alternative 3 would impact the Golfland Sunsplash parcel as well as require sliver acquisitions along the landscaping of the Larkspur Landing and Hilton Garden Inn hotels.

Cost

The estimated construction cost for Alternative 3 is $344.2 million. See Attachment F for the preliminary cost estimate.

5B. Preferred Alternative

Substantial contributions from many different disciplines at FHWA and Caltrans assisted the Project Development Team in developing the three build alternatives considered. As a result of this collaboration and feedback from the public, PCTPA and Caltrans have identified Alternative 2 - Collector–Distributor (C-D) System Ramps as the preferred alternative.

Because the engineering design is limited by the available area in and adjacent to the interchange, the impact footprint of the three build alternatives are not substantially different from each other. Further, Alternative 2 is a solution to the need for the project that is acceptable to the local agencies, Caltrans, and FHWA.

After extensive engineering and traffic analysis efforts and review and screening of 22 design concepts, three build alternatives surfaced for consideration and analysis that would meet the project’s purpose and need. All of the alternatives studied involve the same or similar improvements on I-80 and SR 65, except for how access to the existing Taylor Road interchange is addressed.

Alternative 2 - Collector-Distributor (C-D) System Ramps was found to meet all aspects of the need and purpose, over and above Alternatives 1 and 3, by providing a separation of the ramp and freeway movements on I-80 eastbound, which will reduce

traffic congestion compared to Alternative 1, and maintain the existing Taylor Road ramps, access that would be eliminated under Alternative 3.

Nonstandard Features

Caltrans design standards were used in development of the preliminary geometrics within state right of way. Alternative 2 fact sheet exceptions to mandatory and advisory design standards are included in Attachment G. AASHTO and City of Roseville Standards were used for proposed improvements along Taylor Road because it is a local roadway.

There are two physically constrained areas within the project limits that contain 87% of all exceptions identified. These are the I-80/SR 65 system interchange ramps and the I-80 Eureka Road-Taylor Road segment along I-80. The system interchange ramp area is constrained on all sides by the following conditions:

- The East Roseville Viaduct structure over Taylor Road, UPRR, and Antelope Creek
- The existing residential and commercial development in the northeast quadrant of the interchange
- The existing residential and commercial development in the northwest quadrant of the interchange
- Secret Ravine Creek and Open Space Preserve on the south side of I-80

The mandatory and advisory exceptions at this location comprise 40% of all exceptions and are associated with avoiding replacement of the viaduct, impacts to apartment and townhome structures, single family residences, a public storage business, and added impacts to the Preserve area.

The I-80 Eureka-Taylor Segment is constrained on both sides of I-80 by the following conditions:

- The UPRR transcontinental railroad corridor and utility corridor on the north side of I-80
- A capped and monitored landfill on the north side of I-80
- The existing commercial development on the south side of I-80
- The Roseville Parkway overcrossing and overhead crossing I-80
- The Eureka Road/Atlantic Street overcrossing

The mandatory and advisory exceptions at this location comprise 47% of all exceptions and are associated with avoiding replacement of the overcrossings and streets, impacts to a hotel, a restaurant, a miniature golf course and waterpark, a parking garage and landfill, and avoiding relocating the UPRR railroad tracks and utility facilities.

The remaining 13% of the exceptions are advisory. All mandatory exceptions are in these two constrained areas.

The proposed curve geometrics at the "E1" EB Eureka Rd Loop on-ramp entrance will be finalized during the next phase of the project; however, the proposed design will satisfy ADA requirements. The risk of project delay is not anticipated.

The following exceptions to Mandatory Caltrans design standards are as follows:

A. Mandatory Design Exception Feature #1

Non-standard Feature: Standards for Superelevation

Location A: EB Eureka Road on-ramp, "E2" station 78+39.95 to 81+42.95, the proposed 200-foot radius curve will have a superelevation rate of 6 percent.

The standard superelevation required for 200-foot curve is 12 percent.

Location B: The "E1" EB Eureka Road Loop on-ramp entrance will comply with ADA standards; therefore, the superelevation rate will be 4.5 percent.

Location C: EB Taylor Road Loop off-ramp, "T1" station 107+53.12 to 109+01.84, the proposed 100-foot curve will have a superelevation rate varying from 4 percent to 5 percent.

The standard superelevation required for 100-foot curve is 12 percent.

Location D: WB Taylor Road on-ramp, "T2" station 8+91.54 to 11+81.10, the proposed 850-foot curve will have superelevation rate of 6 percent.

The standard superelevation required for an 850-foot curve is 10 percent.

Location E: SB SR 65 to EB I-80 Connector, "SE" station 105+95.49 to 110+58.44, the proposed 860-foot curve will have a superelevation rate of 4 percent.

The standard superelevation required for an 860-foot curve is 10 percent.

Location F: SB SR 65 to WB I-80 Connector, "SW" station 27+91.06 to 30+98.79, the proposed 930-foot curve will have a superelevation rate of 4 percent.

The standard superelevation required for 930-foot curve is 10 percent.

Location G: HOV Direct Connector, "HOV" station 131+21.31 to 131+94.99, the proposed 880-foot curve will have superelevation rate of 4 percent.

The standard superelevation required for an 880-foot curve is 10 percent.

B. Mandatory Design Exception Feature #2

Nonstandard Feature: Curve Radius

Location A: The curve radius for EB Eureka Road slip on-ramp "E2" will be 200' between station 78+39.95 and 81+42.95.

The standard curve radius for 40 mph design speed is 550'.

Location B: The curve radius for EB Taylor Road loop on-ramp "T1" will be 100' between station 107+53.12 and 109+01.84.

The standard curve radius for 20 mph design speed is 130'.

C. Mandatory Design Exception Feature #3

Non-standard Feature: Lane Width

Location A: The width of all general purpose lane EXCEPT the outside lane of eastbound I-80 will be 11 feet between station "ME1" 61+78 and station "ME1" 102+57, a total length of 4,079 feet.

Location B: The width of the HOV lane along westbound I-80 will be 11 feet between station "MW1 85+25 and station "MW1" 101+56 for a total length of 1,631 feet. All general purpose lanes EXCEPT the outside/auxiliary lane of westbound I-80 will be 11 feet wide between station "MW1" 65+64 and station "MW1" 104+53, a total length of 3,889 feet.

Location C: The width of the collector-distributor lanes will be 11 feet from station "CD1" 82+36 and station "E2" 83+68 to station "CD3" 92+60, a total length of 960 feet.

Location D: The width of the Taylor Road WB on-ramp lane will be 11 feet from station "T2" 5+72 to station"T2" 11+81, a total length of 609 feet.

D. Mandatory Design Exception Feature #4

Non-standard Feature: Shoulder Width and Horizontal Clearance

Location A: The width of the inside shoulder and horizontal clearance to the inside shoulder of eastbound I-80 will vary from 4 feet to 10 feet between station "ME1" 71+56 and station "ME1" 94+78, a total length of 2,322 feet.

The shoulder width transitions from 10 feet wide to 8 feet wide between station "ME1" 71+56 and station 74+00. The inside shoulder remains a constant 8-foot width until station "ME1" 92+48 where it begins transitioning down to a 4-foot width. This is a spot location where Caltrans R/W is reduced toward the south, creating a pinch point. From this point, the inside shoulder immediately starts opening up and reaches a standard 10-foot width at station "ME1" 94+78.

Location B: The width of the inside shoulder and horizontal clearance to the inside shoulder of westbound I-80 will vary from 2.5 feet to 10 feet between station "MW1" 65+64 and station "MW1" 91+58, a total length of 2,594 feet.

The shoulder width at station "MW1" 65+64 is a standard 10 feet and begins transitioning down to 8.1 feet before the Eureka Road/Atlantic Street Overcrossing. Under the overcrossing, the shoulder width is reduced to a minimum of 4.35 feet because of the center pier of the bridge. Once past the overcrossing, the inside shoulder transitions from 4.35 feet to 4 feet until station "MW1" 85+25.10. The shoulder then opens up from 4 feet wide to 5.5 feet wide from station "MW1" 85+25.10 to station "MW1" 86+74.96.

Location C: The width of the outside shoulder and horizontal clearance to the outside shoulder of westbound I-80 will vary from 7.4 feet to 9-feet from station "MW1" 77+57 to station "MW1" 95+75, a total length of 1,818 feet

The shoulder width at station "MW1" 77+57 is 7.4 feet and widens to 9 feet at station "MW1" 81+02. Once past the East Roseville Parkway Overcrossing, the shoulder width is reduced to 8 feet until station "MW1" 95+75.

Location D: The width of the outside shoulder and horizontal clearance to the outside shoulder of the collector-distributor road will vary from 8 feet to 10 feet between station "CD1" 83+02 and station "CD3" 91+97, a total length of 890 feet.

E. Mandatory Design Exception Feature #5

Non-standard Feature: Stopping Sight Distance

Location A: The proposed stopping sight distance for the westbound HOV lane will be 595 feet from station "MW1" 87+85 to "MW1" 97+75 due to the obstructed view caused by the median barrier. The corresponding speed for the 595 feet stopping sight distance is 60 mph.

The 60 mph stopping sight distance provided matches the stopping sight distance of the existing facility for this location.

Location B: The proposed stopping sight distance for SB SR 65 to WB I-80 Connector will be 360 feet from station "SW" 14+98 to "SW" 30+98 due to obstructed view caused by the barrier. The corresponding speed for the 360 feet stopping sight distance is 45 mph.

Location C: The proposed stopping sight distance for SB SR 65 to EB I-80 Connector will be 354 feet from station "SE" 114+08 to "SE" 135+69 due to an obstructed view caused by the crest vertical

curve. The corresponding speed for the 354 feet stopping sight distance is approximately 45 mph.

Location D: The proposed stopping sight distance for the HOV Connector will be 365 feet from station "HOV" 115+91 to "HOV" 131+95 due to obstructed view caused by the crest vertical curve. The corresponding speed for the 365 feet stopping sight distance is approximately 45 mph.

Location E: The proposed stopping sight distance for the EB I-80 to NB SR 65 Connector will be 361 feet from station "EN" 116+30 to "EN" 132+12 due to obstructed view caused by the barrier. The corresponding speed for the 361 feet stopping sight distance is 45 mph.

Location F: The proposed stopping sight distance for the WB I-80 to NB SR 65 Connector will be 361 feet from station "WN" 123+87 to "WN" 134+97 due to an obstructed view caused by the barrier. The corresponding speed for the 361 feet stopping sight distance is 45 mph.

F. Mandatory Design Exception Feature #6

Non-standard Feature: Median Standards

The median width will vary from 16 feet to 22 feet, between station "MW1" 65+64 to 93+13, a total length of 2,749 feet.

G. Mandatory Design Exception Feature #7

Non-standard Feature: Interchange Spacing

Below is the list of non-standard spacing between interchanges:

- Eureka Rd/Atlantic St I/C to Taylor Rd I/C: 0.6 mile
- Eureka Rd/Atlantic St I/C to I-80/SR 65 I/C: 1.1 mile
- Taylor Rd I/C to I-80/SR 65 I/C: 0.5 mile
- Galleria Boulevard/Stanford Ranch Rd I/C to I-80/SR 65 I/C: 1.0 mile

H. Mandatory Design Exception Feature #8

Non-standard Feature: Weaving Length

Location A: The weaving length between the WB Taylor Road on-ramp and WB Atlantic Street off-ramp is 1,720 feet.

Location B: The weaving length between the SB SR 65 to WB I-80 Connector and WB Atlantic Street off-ramp is 2,750 feet.

Location C: The weaving length between the EB Eureka Road on-ramp and EB Taylor Road off-ramp is 1,300 feet.

Location D: The weaving length between the WB I-80 to NB SR 65 Connector and the NB Galleria Boulevard/Stanford Ranch Road off-ramp is 2,815 feet.

Location E: The weaving length between the SB Galleria Boulevard/Stanford Ranch Road on-ramp and the SB SR 65 to WB I-80 Connector is 2,145 feet.

I. Mandatory Design Exception Feature #9

Non-standard Feature: Local Street Interchanges

Taylor Road interchange is a partial interchange with an isolated off-ramp.

Exceptions to Advisory Caltrans design standards are as follows:

A. Advisory Design Exception Feature #1

Non-standard Feature: Vertical Curve

The realigned EB Eureka Road off-ramp "E5" will have a vertical curve length of 310 feet.

B. Advisory Design Exception Feature #2

Superelevation of Compound Curves

Location A: The proposed superelevation compound curve transition for the HOV Connector, "HOV" line will not occur at the PCC.

Location B: The proposed superelevation compound curves transition for the SB SR 65 to WB I-80 Connector, "SW" line will occur within the second curve and not at the PCC.

C. Advisory Design Exception Feature #3

Non-standard Feature: Compound Curves

Location A: The proposed HOV Connector, "HOV" line will have a compound curve of R = 880 feet which is less than 2/3 of R = 3,012 feet.

Location B: The proposed EB I-80 to NB SR 65 Connector, "EN" line will have a compound curve of R = 900 feet which is less than 2/3 of R = 3,052 feet.

Location C: The proposed SB SR 65 to EB I-80 Connector, "SE" line will have a compound curve of R = 860 feet which is less than 2/3 of R = 2,985 feet and the smaller radius follows the larger radius.

Location D: The proposed SB SR 65 to WB I-80 Connector, "SW" line will have a compound curve of R = 930 feet which is less than 2/3 of R = 2,750 feet and the smaller radius follow the larger radius.

Location E: The proposed SB SR 65 to EB I-80 Connector, "SE" line will have a compound curve of R = 930 feet which is less than 2/3 of R = 3,000 feet.

D. Advisory Design Exception Feature #4

Non-standard Feature: Median Width

Location A: The proposed I-80 mainline will have a median width varying from 22 feet to 36 feet between station "ME1" 128+73 and "ME1"134+47.

Location B: The proposed SR 65 mainline will have a median width 22 feet between station "MS" 170+66 and "MS" 236+62.

E. Advisory Design Exception Feature #5

Non-standard Feature: Gore Width

The proposed gore width for the WB Taylor Road on-ramp will be 18 feet.

F. Advisory Design Exception Feature #6

Non-standard Feature: Diverge Angle for Off-Ramp

Location A: The proposed diverge angle from I-80 mainline to the collector-distributor road "CD1" is 2 degrees.

Location B: The proposed diverge angle from the collector-distributor road "CD1" to the EB Eureka Road off-ramp "E5" is 2 degrees.

G. Advisory Design Exception Feature #7

Non-standard Feature: Deceleration Length for Off-Ramp

Location A: NB off-ramp to Galleria Boulevard, "G2" will be a single-lane ramp 1,660-feet long.

Location B: SB off-ramp to Stanford Ranch Road, "G4" will be a single-lane ramp 1,650-feet long.

Location C: NB HOV Connector, "HOV" will be a single-lane connector 5,800-feet long.

Location D: SB HOV Connector, "HOV" will be a single-lane connector 2,400-feet long.

H. Advisory Design Exception Feature #8

Non-standard Feature: Side Slope

The proposed side slope along SB SR 65 mainline from station "MS" 217+00 to station "MS" 222+00 will be 2:1.

5C. Other Build Alternatives Considered

Alternative 1 - Taylor Road Full Access Interchange provides for an improved Taylor Road interchange access but has unacceptable effects on I-80 and the system interchange. Alternative 1 is not acceptable to FHWA and Caltrans because it still allows weaving conditions between the Eureka Road/Atlantic Street, Taylor Road, and SR 65 interchanges that result in increased congestion and reduced safety on I-80 eastbound. Alternative 2 would solve this issue by separating the Eureka Road/Atlantic Street and Taylor Road weaving movements from the I-80 freeway, while still maintaining the existing access to Taylor Road.

Alternative 3 - Taylor Road Interchange Eliminated would eliminate the Taylor Road interchange, transferring the local access to the adjacent Eureka Road/Atlantic Street, Galleria Boulevard/Stanford Ranch Road, and Rocklin Road interchanges. Construction of the original I-80/SR 65 interchange and adjacent interchanges has reduced local access to Taylor Road, resulting in a strain on the local roadways, especially Eureka Road/Atlantic Street. Alternative 3 results in negative impacts to businesses with significant out-of-direction travel that is unacceptable to local agencies. Alternative 2 would solve this issue by maintaining the existing access to Taylor Road.

5D. No Build Alternative

The No Build alternative is the basis for comparison of the Build alternatives. It satisfies the statutory requirements under CEQA and NEPA for an alternative that does not include any new action or project beyond what is already committed. The No Project Alternative represents the state and local transportation system in its current state. It includes implementation of programs or projects projected in regional transportation plans that have identified funds for implementation and that are expected to be in place by 2040; it also reflects any major planned land use changes. The figure in Attachment H illustrates the existing transportation infrastructure that currently serves these major travel markets and the proposed projects planned for implementation within the project area by the year 2040.

The No Build alternative includes programs and projects identified in the SACOG financially constrained project list in the 2035 Metropolitan Transportation Plan/Sustainable Communities Strategy, (SACOG 2012) and input from the PDT regarding projects that would be built by the design year.

5E. Rejected Alternatives

A total of 22 concepts were developed and screened by the project development team. Four technical working group meetings were held to screen the concepts to balance the competing demands of design, environmental impact, cost, and function using the following criteria:

- Improve Freeway Operations
- Reduce Congestion
- Enhance Safety
- Preserve Access
- Consider Alternative Modes
- Maintain Consistency with Regional and local Plans (including phasing and funding)
- Minimize Community Impacts
- Minimize Adverse Environmental Impacts
- Maximize Cost Effectiveness

Concepts were ranked with a score of 0-5 with each criteria weighted equally. The screening process and details of each concept is summarized in the Alternatives Analysis Memo prepared in May of 2012.

The screening process resulted in three Build alternatives, the TSM, and the No-Build. The three Build Alternatives were:

1. Full Access Taylor Interchange – Diamond Shaped
2. Full Access Taylor Interchange – Trumpet Shaped
3. Taylor Road Interchange Eliminated

Through discussions with the PDT and feedback provided by Caltrans and FHWA, the Alternatives were modified to provide improved design features. Concerns with weaving distance and interchange spacing triggered several focus meetings with Caltrans, FHWA, local agencies, and the design team, resulting in changes to the Alternatives as well as the development of a new alternative proposing a collector-distributor system in the eastbound direction. Features from Alternatives 1 and 2 were combined to maximize the available weaving distance for a full access interchange alternative. On December 4, 2013, the PCTPA board approved moving forward with the five alternatives listed below, for analysis in the environmental document:

1. Taylor Road Full Access Interchange
2. Collector-Distributor System Ramps
3. Taylor Road Interchange Eliminated
4. Transportation System Management (TSM)
5. No-Build

Alternative 4 – Transportation system Management (TSM) was eliminated after further consideration. Alternative 4 proposed to manage the design year traffic volumes without increasing capacity or modifying the current interchange configurations and surrounding transportation facilities within the project area. The project footprint impacts would be significantly lower than with the Build alternatives; however, the TSM measures alone do no satisfy the purpose and need of the project. Several features identified for the TSM alternative have been incorporated into the Build alternatives as listed below:

Common to all Build Alternatives:

- Freeway auxiliary lanes in both directions between I-80 and the Galleria Boulevard/Stanford Ranch Road interchange
- Ramp widening for storage and HOV bypass lane on the southbound Galleria Boulevard/Stanford Ranch Road on-ramp

Alternative 1 TSM Features:

- Ramp widening for storage and HOV bypass lane on the westbound Taylor Road on-ramp
- Ramp widening for storage and HOV bypass lane on eastbound Taylor Road on-ramp

Alternative 2 TSM Features:

- Eastbound I-80 auxiliary lane between Douglas Boulevard interchange and Eureka Road/Atlantic Street interchange

Alternative 3 TSM Features:

- Eastbound auxiliary lane between Douglas Boulevard interchange and Eureka Road/Atlantic Street interchange
- Ramp widening for storage at the Eureka Road/Taylor Road intersection
- Ramp widening for storage at the East Roseville Parkway/Taylor Road intersection

6. CONSIDERATIONS REQUIRING DISCUSSION

6A. Hazardous Waste

The following summarizes the hazardous waste evaluation conducted during the Initial Site Assessment (ISA). The complete ISA report is included in Attachment I.

Aerially Deposited Lead (ADL)

Sampling results indicate the average levels of lead found within the project limits studied are below the levels requiring regulatory action, and soils excavated from the surface to any depth up to 3-ft can be reused or disposed as non-hazardous soil with respect to lead content. An appropriate Lead Compliance Plan and Lead Awareness Training Plan must be prepared by the contractor to prevent or minimize exposure to lead.

Yellow and White Traffic Stripe

Due to potentially hazardous levels of lead and chromium in yellow and white color traffic paint and/or thermoplastic stripes, removal shall be removed and disposed of in accordance with the Caltrans Special Provision.

Asbestos Containing Materials (ACM) and Lead Based Paint (LBP)

The as-built plans for the bridges impacted by the project indicate no asbestos containing materials (ACMs) or Lead Based Paint (LBP) on the structures. However, utilities running through the utility openings may contain ACMs and it is recommended that a properly certified inspector survey the bridges for ACM and LBP.

Midwest Guardrail System (MGS) Wood Post

The contractor shall prepare and submit a safety and health work practices plan for handling treated wood waste approved by an ABIH Certified Industrial Hygienist. Treated wood waste must be disposed of in an approved treated wood waste facility.

Parcel Acquisitions

APN 015-162-007: Stonehouse Court—Review of historical aerial photography and fence line reconnaissance shows a residence at the end of Stonehouse Court. Real estate records indicate the home was built in 1928. Common issues associated with homes of this era include asbestos containing materials, lead based paints, leach fields, septic tanks, and heating oil tanks. Acquisition of this parcel should include a site inspection, owner interview, and county file review.

APN 015-162-005: Alta Sierra Body Shop/Venture Out Recreational Vehicles—This parcel is immediately adjacent to the project footprint. Records indicate six registered Underground Fuel Storage Tanks (USTs) exist at the site. The tanks were installed in 1971 and are listed as two 1,000 gallon unleaded gasoline tanks and four 1,000 gallon regular gasoline tanks. A gasoline release from a leaking underground storage tank (LUST) was discovered in 1990. No information on the quantity of release or corrective action was noted in the file. The release was listed as "soil only" and the case was closed in 1992. This parcel is adjacent to all three Build alternatives. Consequently, to reduce the potential of encountering unexpected contamination additional information should be obtained about the contamination history of this parcel and should include a site inspection, owner interview, and county file review.

APN 015-450-079: Roseville Golfland Sunsplash—A 1,000-gallon, aboveground fuel storage tank (AST) is located between the parking structure and the racetrack. The AST is stored within a spill containment area and risk of hazardous material impacts is low. If the project limits change and additional acquisition areas of the parcel are to occur, further assessment is recommended including a site inspection, owner interview, and county file review.

Utilities

Two power towers are planned to be relocated in the Golfland Sunsplash parking lot. Existing transformers should be checked for the presence of polychlorinatedbiphenyls (PCBs) or other hazardous materials by the utility owner, and if present, should be properly remediated and disposed. Identification and remediation of old transformers is the responsibility of the utility owner.

6B. Value Analysis

A five day value analysis workshop was held during the week of August 4, 2014 at the Caltrans Rocklin Field Office. The workshop was led by a certified value specialist and conducted through guidance published by the Society of American Value Engineers (SAVE) to efficiently provide resources to the project and make a contribution to its success. The value team was tasked to identify design concepts that were more cost-effective than the original proposal. The value team developed the following four VA alternatives:

1. VA Alternative No. R-1, Realign Secret Ravine, Eliminate Collector-Distributor Structure
2. VA Alternative No. R-2, Replace Transfer Ramp with Loop
3. VA Alternative No. S-1, Narrow Viaduct
4. VA Alternative No. S-2, Alternative Transpose South SR 65/I-80 Ramp

All four of the VA alternatives and three strategies were rejected and not implemented based on discussions held during the VA Implementation Meeting on October 15, 2014 as well as subsequent analysis provided to the meeting participants. A summary of the discussion can be found in the VA Implementation Meeting Minutes and a detailed summary of the VA Study can be found in the Final Value Analysis Study Report, November 2014 included in Attachment J.

6C. Resource Conservation

Features aimed at reducing wasteful, inefficient, and unnecessary consumption of energy and nonrenewable resources in construction, operations and maintenance of the project will be included wherever possible including: recycling the existing structural sections and concrete structures as aggregate base through provisions in the contract documents. Other measures include recycling the structural steel and other steel materials within the project limits, using concrete washout materials on the job site, not idling construction equipment and adding high occupancy vehicle lanes and HOV bypass lanes to encourage carpooling.

6D. Right of Way Issues

The existing right of way along the I-80 corridor within the project drove the viable alternatives presented in this report. Prohibitive costs associated with potential impacts to adjacent businesses, including hotels, resulted in several of the non-standard features in the alternatives. Standard lane and shoulder widths, stopping sight distance, and median width are not provided within the constrained right of way area for any of the Build alternatives in an attempt to avoid extensive and costly acquisitions. The Right of Way Data Sheets, figures, and spreadsheets included in Attachment K show the detailed costs associated with the various parcel impacts.

Railroads

The Build Alternatives would widen the existing East Roseville Viaduct over the Union Pacific Railroad tracks, requiring an encroachment permit from UPRR. For the next phase of the project, master agreements will need to be negotiated for Construction and Maintenance (i.e. C&M agreement) of structures over UPRR right of way.

Taylor Road is currently located within UPRR right of way and Placer County's easement. Limits of the proposed improvements would remain within Placer County's existing easement.

Utilities

The utility impacts described in Section 5 will require permanent relocation and right of way easements.

6E. Environmental Issues

The Draft Environmental Impact Report/Environmental Assessment has been prepared in accordance with Caltrans' environmental procedures, as well as State and federal environmental regulations. The attached Draft Environmental Impact Report/Environmental Assessment in Attachment L is the appropriate document for the proposal.

Wetlands

A wetland delineation was conducted encompassing approximately 490 acres, covering the project alternatives footprint plus a 100-foot-wide buffer zone. Table 6 below summaries the 6.651 acres of wetlands and other waters identified in the delineation area. A detailed summary of the wetland delineation can be found in the

Delineation of Potential Waters of the United States, Including Wetlands for the Interstate 80/State Route 65 Interchange Improvements Project, October 2014

Table 6. Summary of Potential Wetlands and Other Waters Identified in the Delineation Area	
Wetlands and Other Waters	Acreage in Delineation Area
Wetlands	
Riparian Forest/Shrub Wetland	1.210
Vernal Pool	0.528
Seasonal Wetland	0.276
Emergent Wetland	1.045
Wetlands Subtotal	*3.059*
Other Waters	
Perennial Stream	4.116
Intermittent Stream	0.258
Ephemeral Stream	0.080
Other Waters subtotal	*4.454*
Total	**7.513**

Floodplains

There are six waterways that flow through or along the Project's vicinity that may be impacted by the Project. Impervious area would be added within the project limits causing increased flows and impacts to the existing drainage patterns. The project would improve, replace or add storm drain systems to mitigate these changes to the existing drainage patterns. A detailed summary of the drainage impacts can be found in the Drainage Impact Summary Report, January 2015.

6F. Air Quality Conformity

The complete project (i.e., Phases 1 through 4) will be included in the regional emissions and conformity analysis for the upcoming 2036 MTP/SCS. Adoption and federal approval of the 2036 MTP/SCS is expected in early 2016, prior to the final environmental document for the project. Table 7 provides a summary of the impacts; avoidance, minimization, and/or measures; and significance conclusions discussed in the Air Quality Study Report, November 2014.

Table 7. Summary of Impacts and Avoidance, Minimization, and/or Mitigation Measures Associated with the Project		
Impact	Conclusions	Avoidance, Minimization, and/or Mitigation Measures
AQ-1: Conformity of the Regional Transportation Plan with the State Implementation Plan	Phase 1 of the project is listed in the 2035 MTP/SCS and the 2013-2016 MTIP Air Quality Conformity analysis. The complete project will be included in the regional emissions and conformity analysis for the upcoming 2036 MTP/SCS and 2015-2018 MTIP	None Required
AQ-2: Potential Violations of the Carbon Monoxide NAAQS or CAAQS	The Build Alternatives are note anticipated to exceed 1-or 8-hour CO NAAQS or CAAQS	None Required
AQ-3: Potential Violations of PM2.5, NAAQS, or CAAQS	Placer County is currently classified as a nonattainment area with regards to the federal PM2.5 NAAQS. However, due to minimal increases in AADT between the No Build and Build Alternatives, the project is determined not to a Project of Air Quality Concern.	None Required
AQ-4: Potential for Generation of Mobile Source Air Toxics (MSAT) Emissions	The project would result in incremental increases in MSATs under construction (2020) and design (2040) year conditions. Localized MSAT at highly trafficked intersections may also slightly increase.	None Required
AQ-5: Generation of Operation-Related Emissions of O_3 Precursors, Carbon Monoxide, and Particulate Matter	The project would result in minor increases in O_3 precursors, CO, PM10, and PM2.5 under construction (2020) and design (2040) year conditions. Emissions increases are a result of induced vehicle travel growth in VMT under Build Alternatives	None Required
AQ-6: Potential Temporary Increase in O_3 Precursors (ROG and NO_X), CO, and PM10 Emissions during Grading and Construction Activities	The project would result in temporary increases in O_3 precursors, CO, PM10, and PM2.5 during construction.	Addressed by construction related PM10 emission minimization measures in Caltrans Standard Specifications Section 14
AQ-7: Potential for Generation of Greenhouse Gas Containment Emissions	The project would result in minor increases to GHG emissions during construction and long-term operation Operational emissions increase are a result of induced vehicle travel and growth in VMT under the Build Alternatives	Please review the section Greenhouse Gas Reduced Strategies in Chapter 3 of the Air Quality Study Report, November 2014

6G. Title VI Considerations

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have been included in this project. Caltrans' commitment to upholding the mandates of Title VI is evidenced by its Title VI Policy Statement, signed by the Director.

6H. Noise Abatement Decision Report

This section represents the Noise Abatement Decision Report (NADR) which:

- Is an evaluation of the reasonableness and feasibility of incorporating noise abatement measures into this project;
- Constitutes the preliminary decision on noise abatement measures to be incorporated into the Draft Environmental Document; and
- Is required for Caltrans to meet the conditions of Title 23 Code of Federal Regulations, Part 772 in accordance with the Federal Highway Administration noise standards.

The noise abatement decision report does not present the final decision regarding noise abatement; rather, it presents key information on abatement to be considered throughout the environmental review process, based on the best available information at the time the draft environmental document is published. If a project is subject to federal review, but does not have a circulated environmental document, the noise abatement decision report section documents the final noise abatement decision.

The noise abatement decision report does not address noise barriers or other noise reducing treatments required as mitigation for significant adverse environmental effects identified under CEQA.

Modeling results in the NSR indicate that a substantial increase in noise levels over existing conditions is not predicted under any of the build alternatives. Predicted traffic noise levels for design-year with-project conditions approach or exceed NAC of 67 dBA-L_{eq} (h) for Activity Category B and Activity Category C land uses; therefore, traffic noise impacts are predicted to occur and noise abatement was considered. Tables 8 through 15 below summarize the eight barriers and their calculated noise reduction and reasonable allowances for each barrier. Detailed results and a summary of the cost reasonableness of evaluated barriers are provided in the Noise Study Report, May 2015 and the Noise Abatement Decision Report, May 2015.

Table 8. Summary of Reasonableness Determination Data—Noise Barrier A (I-80 Eastbound off-ramp to Atlantic Street STA 3+40 to STA 12+10)						
Location: Olympus Pointe Sculpture Park, Roseville						
Predicted Sound Level without Barrier						
Design year noise level, dBA L_{eq}(h): 67 dBA (Alternatives 1–3)						
Design year noise level minus existing noise level: 1 dBA						
Design Year with Barrier	**10-Foot Barrier**	**12-Foot Barrier**	**14-Foot Barrier**	**16-Foot Barrier**	**18-Foot Barrier**	**20-Foot Barrier**
Barrier noise reduction, dB	2	4	5	5	6	6
Barrier design goal met?	No	No	No	No	No	No
Number of benefited receivers	0	0	1	1	1	1
Reasonable allowance per benefited receiver	$64,000	$64,000	$64,000	$64,000	$64,000	$64,000
Total reasonable allowance	$0	$0	$64,000	$64,000	$64,000	$64,000

Table 9. Summary of Reasonableness Determination Data—Noise Barrier B (I-80 Eastbound STA 84+00 to STA 87+70)					
Location: Golfland miniature golf course, Roseville					
Predicted Sound Level without Barrier					
Design year noise level, dBA L_{eq}(h): 68 dBA (Alternatives 1–3)					
Design year noise level minus existing noise level: 2 dBA					
Design Year with Barrier	**8-Foot Barrier**	**10-Foot Barrier**	**12-Foot Barrier**	**14-Foot Barrier**	**16-Foot Barrier**
Barrier noise reduction, dB	5	5	6	6	7
Barrier design goal met?	No	No	No	No	Yes
Number of benefited receivers	1	1	1	1	1
Reasonable allowance per benefited residence	$64,000	$64,000	$64,000	$64,000	$64,000
Total reasonable allowance	$64,000	$64,000	$64,000	$64,000	$64,000

Table 10. Summary of Reasonableness Determination Data—Noise Barrier C (I-80 Eastbound STA 175+50 to STA 193+30)					
Location: Rustic Hills Drive, Rocklin					
Predicted Sound Level without Barrier					
Design year noise level, dBA L_{eq}(h): 72 dBA (Alternatives 1–3)					
Design year noise level minus existing noise level: 2 dBA					
Design Year with Barrier	**8-Foot Barrier**	**10-Foot Barrier**	**12-Foot Barrier**	**14-Foot Barrier**	**16-Foot Barrier**
Barrier noise reduction, dB	5	6	8	9	9
Barrier design goal met?	No	No	Yes	Yes	Yes
Number of benefited receivers	2	4	7	10	10
Reasonable allowance per benefited residence	$64,000	$64,000	$64,000	$64,000	$64,000
Total reasonable allowance	$128,000	$256,000	$448,000	$640,000	$640,000

Table 11. Summary of Reasonableness Determination Data—Noise Barrier D (I-80 Westbound STA 186+80 to 201+00)					
Location: Rocklin Mobile Home Park					
Predicted Sound Level without Barrier					
Design year noise level, dBA L_{eq}(h): 78 dBA (Alternatives 1–3)					
Design year noise level minus existing noise level: 2 dBA					
Design Year with Barrier	**8-Foot Barrier**	**10-Foot Barrier**	**12-Foot Barrier**	**14-Foot Barrier**	**16-Foot Barrier**
Barrier noise reduction, dB	3	5	7	10	11
Barrier design goal met?	No	No	Yes	Yes	Yes
Number of benefited receivers	0	4	13	13	20
Reasonable allowance per benefited residence	$64,000	$64,000	$64,000	$64,000	$64,000
Total reasonable allowance	$0	$256,000	$832,000	$832,000	$1,280,000

Table 12. Summary of Reasonableness Determination Data—Noise Barrier E (SR 65 Northbound STA 133+00 to 151+70)				
Location: North of SR 65, east of Stanford Ranch Road				
Predicted Sound Level without Barrier				
Design year noise level, dBA L_{eq}(h): 69 dBA (Alternatives 2 and 3); 67 dBA (Alternative 1)				
Design year noise level minus existing noise level: 4 dBA				
Design Year with Barrier	**8-Foot Barrier**	**10-Foot Barrier**	**12-Foot Barrier**	**14-Foot Barrier**
Barrier noise reduction, dB	6	7	7	8
Barrier design goal met?	No	Yes	Yes	Yes
Number of benefited receivers	235	250	263	279
Reasonable allowance per benefited residence	$64,000	$64,000	$64,000	$64,000
Total reasonable allowance	$15,040,000	$16,000,000	$16,832,000	$17,856,000

Table 13. Summary of Reasonableness Determination Data—Noise Barrier F (SR 65 Northbound STA 151+70 to STA 161+20)						
Location: Destiny Christian Church						
Predicted Sound Level without Barrier						
Design year noise level, dBA L_{eq}(h): 71 dBA (Alternatives 1-3)						
Design year noise level minus existing noise level: 2 dBA						
Design Year with Barrier	**10-Foot Barrier**	**12-Foot Barrier**	**14-Foot Barrier**	**16-Foot Barrier**	**18-Foot Barrier**	**20-Foot Barrier**
Barrier noise reduction, dB	3	4	5	5	6	6
Barrier design goal met?	No	No	No	No	No	No
Number of benefited receivers	0	0	1	1	1	1
Reasonable allowance per benefited residence	$64,000	$64,000	$64,000	$64,000	$64,000	$64,000
Total Reasonable Allowance	$0	$0	$64,000	$64,000	$64,000	$64,000

Table 14. Summary of Reasonableness Determination Data—Noise Barrier G (SR 65 Southbound STA 130+00 to STA 151+00)				
Location: South of SR 65, east of Stanford Ranch Road				
Predicted Sound Level without Barrier				
Design year noise level, dBA L_{eq}(h): 74 dBA (Alternatives 2 and 3); 73 dBA (Alternative 1)				
Design year noise level minus existing noise level: 4 dBA				
Design Year with Barrier	**8-Foot Barrier**	**10-Foot Barrier**	**12-Foot Barrier**	**14-Foot Barrier**
Barrier noise reduction, db	6	7	7	8
Barrier design goal met?	No	Yes	Yes	Yes
Number of benefited receivers	128	128	128	128
Reasonable allowance per benefited residence	$64,000	$64,000	$64,000	$64,000
Total reasonable allowance	$8,192,000	$8,192,000	$8,192,000	$8,192,000

Table 15. Summary of Reasonableness Determination Data—Noise Barrier H (I-80 Westbound STA 8+00 to STA 16+60)					
Location: John Adams Academy, Harding Boulevard					
Predicted Sound Level without Barrier					
Design year noise level, dBA L_{eq}(h): 69 dBA (Alternatives 1–3)					
Design year noise level minus existing noise level: 2 dBA					
Design Year with Barrier	**8-Foot Barrier**	**10-Foot Barrier**	**12-Foot Barrier**	**14-Foot Barrier**	**16-Foot Barrier**
Barrier noise reduction, dB	4	5	7	8	8
Barrier design goal met?	No	No	Yes	Yes	Yes
Number of benefited receivers	0	1	1	1	1
Reasonable allowance per benefited residence	$64,000	$64,000	$64,000	$64,000	$64,000
Total reasonable allowance	$0	$64,000	$64,000	$64,000	$64,000

7. OTHER CONSIDERATIONS AS APPROPRIATE

7A. Public Hearing Process

The Draft EIR/EA was circulated for public review and comments in August of 2015. All comments received during the public review period of the Draft EIR/EA were responded and incorporated into the Final EIR/EA. See Section 3, Community Interaction, for information related to public outreach.

7B. Route Matters

Alternative 1 proposes new connections to Interstate 80 at the Taylor Road Interchange. Alternative 2 modifies access near at the Eureka interchange and near the system interchange. Alternative 3 proposes to remove the existing Taylor Road Interchange Ramps. A Change of Access Report will be completed for FHWA review.

7C. Permits

The permits and coordination listed in Table 16 would likely be required for the project.

Table 16. Permits and Approvals Needed

Agency	Permit/Approval	Status
U.S. Fish and Wildlife Service	Coordination and Section 7 consultation regarding threatened and endangered species Amendment to City of Roseville Open Space Preserve Overarching Management Plan	Not yet initiated
National Marine Fisheries Service	Coordination and Section 7 consultation regarding threatened and endangered species	Informal consultation/ technical assistance initiated August 2014
U.S. Army Corps of Engineers	Section 404 authorization for fill of waters of the United States	Not yet initiated
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	Not yet initiated
Central Valley Regional Water Quality Control Board	Section 401 Water Quality Certification and coverage under the existing Caltrans National Pollutant Discharge Elimination System Permit (Order No. 00-06-DWQ)	Not yet initiated
Placer County Air Pollution Control District	Formal notification prior to construction	Not yet initiated

7D. Cooperative Agreements

The project is a PCTPA lead effort. An existing cooperative agreement between PCTPA and Caltrans was executed on September 9, 2010 and covers Project Approval and Environmental Document (PA&ED) efforts. Cooperative Agreements for Plans, Specifications, and Estimate (PS&E), right of way, and construction will be executed prior to each phase.

Any additional cooperative agreements required will be in place as needed prior to construction.

7E. Transportation Management Plan for Use during Construction

Consistent with District policy and procedures, the design and construction of the project, especially staging and traffic control systems, will be coordinated closely with District Traffic Manager (DTM) and District Transportation Management Plan (TMP) coordinators. It is also anticipated that there will be a Construction Zone Enhanced Enforcement Program (COZEEEP) in place as part of traffic management during construction, including setting and removals of K-rails.

This project cannot be constructed without some impact to traffic during construction, primarily due to driver curiosity, temporary lane closures and/or transitions for falsework erection and removal, and ramp conform work; however, impacts can be reduced with a well-planned stage construction/traffic handling plan and aggressive public awareness during construction. Temporary railing (Type K) will be used to separate construction zones from traffic. Some work-period lane closures will be

required (i.e. for removal of existing and addition of temporary pavement delineation, setting temporary railing (Type K), pavement conforms, and bridge construction, dependent upon the alternative).

A TMP memo is included in Attachment M, serving as an update to the transportation management plan and data sheet included in the PSR approved 2009. The general description of construction phasing are discussed below. Each phase may have sub-phases and will be dependent on funding.

7F. Stage Construction

Phase 1 – SR 65: Widen the East Roseville Viaduct and perform widening along SR 65. Reconfigure Galleria Boulevard/Stanford Ranch Road and Pleasant Grove Boulevard interchange ramps to accommodate the widening.

Phase 2 – Southbound to Eastbound and Eastbound to Northbound Connector Ramps: Construct the southbound SR 65 to eastbound I-80 connector ramp, shift traffic onto the new connector to allow removal of the existing southbound SR 65 to eastbound I-80 connector.

Construct eastbound I-80 to northbound SR 65 connector ramp with temporary conforms to eastbound I-80.

Shift traffic onto the new flyover to remove the existing eastbound I-80 to northbound SR 65 loop connector ramp and structure.

Phase 3 – I-80 Mainline:

Construct the new Taylor Road Overcrossing in two stages and temporary conforms to maintain the existing ramp access. Shift traffic onto first half of the new bridge to demo the existing overcrossing. Construct the second stage of the bridge.

Perform I-80 mainline and widening and southbound SR 65 to westbound I-80 connector ramp.

Reconfigure Eureka Road/Atlantic Street Interchange ramps to accommodate the widening. Perform Taylor Road and ramp improvements as applicable.

Phase 4 – HOV Connector:

Construct the HOV direct connector ramp and conform to the future SR 65 Capacity and Operational Improvements Project.

Phase 1

Phase 1 Traffic Analysis:

A Phase 1 traffic operations analysis was performed and shows that the improvements will improve network-wide traffic operations to reduce freeway congestion compared to No Build conditions. Without the Phase 1 Alternative, existing vehicle hours of delay (VHD) will increase by over 300 percent during the AM peak period and almost 600 percent during the PM peak period by 2020. The Phase 1 Alternative will reduce these delays while also increasing the total number of persons able to travel through the study area during these periods. While this information demonstrates the effectiveness of the Phase 1 Alternative, some bottlenecks remain in the study area

that will adversely affect peak period traffic operations because this alternative only includes a portion of the larger capacity expansion project. The Phase 1 Traffic Analysis Memo is included in Attachment M.

Phase 1 Improvements

A conceptual Phase 1 layout was developed and is included in Attachment M. Improvements would include:

- Eliminate the merge between the EN and WN connectors
- Add a third northbound lane along the outside of SR 65 from the WN connector to the existing partial auxiliary lane just south of the northbound Pleasant Grove off-ramp
- Construct entire northbound outside viaduct widening to provide third lane and over-wide outside shoulder
- Temporary reconfiguration of northbound Galleria Boulevard/Stanford Ranch Road ramps to accommodate the widening
- Construct a third lane on southbound SR 65 from the Pleasant Grove Boulevard loop on-ramp connecting to the existing third lane near the Galleria Boulevard/Stanford Ranch Road overcrossing.
- Temporary reconfiguration of southbound Pleasant Grove Boulevard slip on-ramp to accommodate the widening

The proposed improvements would require lane shifts but would be constructed within the existing right of way limits. Inside widening would not be required for the Phase 1 improvements. Caltrans and PCTPA are currently coordinating to construct Phase 1A, which would include a third lane on northbound SR 65 from I-80 over the East Roseville Viaduct to Galleria Boulevard/Stanford Ranch Road. Subsequent phases (i.e. Phase 1B, etc.) would be constructed based on funding availability.

7G. Accommodation of Oversize Loads

The segment of I-80 and SR 65 within the project limits will maintain minimum required height capabilities during freeway operating hours through the duration of the project.

7H. Graffiti Control

Placer County is not considered a graffiti-prone area and no special measures need be taken on this project.

7I. Stormwater Quality

The project has been identified as Risk Level 2 with an anticipated disturbed soil area of 165 acres. Additional information regarding stormwater, including potential BMPs can be found in the Stormwater Data Report in Attachment N.

7J. Landscape Architecture

The landscape architecture assessment sheet is included in Attachment O. Because this is a capacity increasing project, landscaping is warranted. Caltrans reviewed the proposed impacts, evaluated for erosion control, and provided preliminary costs for

highway planting, erosion control, mitigation planting, design for roadside maintenance safety, design for roadside vegetation management treatment, and aesthetic treatment required by the project. Project phasing will be considered to minimize redundant landscaping work during each phase.

8. FUNDING/PROGRAMMING

This project is planned to be funded as a minimum of two separate projects. Phase 1 of the project is currently funded with a combination of National Corridor Infrastructure Improvement Program funds, savings from the I-80 Bottleneck Project in Roseville, and local dollars. PCTPA and Caltrans are currently coordinating to fund design, right of way, and construction for the Phase 1A project which will address a high accident concentration on I-80 by constructing an auxiliary lane between the westbound I-80 connector to northbound SR 65 and the Galleria Boulevard/Stanford Ranch Road interchange northbound ramps. Full funding for Phase 1 and subsequent phases is anticipated based on a Placer County transportation sales tax measure planned for 2016, as well as other available state and federal funding. As a contingency plan for Phase 1A, PCTPA would program an additional $8.3 million in I-80 Bottleneck savings, on top of the $3.9 million in I-80 Bottleneck savings already programmed to complete the Project Approval and Environmental Documents (PA&ED) for the entire interchange modification project. Caltrans contribution would consist of $15.20 million in State Highway Operation and Protection Program (SHOPP) funds and $6.5 million in capital outlay support. The balance of local funds required would come from the South Placer Regional Transportation Authority (SPRTA) fee program. Tables 17 through 19 summarize the Phase 1A programming.

Funding is currently not identified for the remaining project phases. The unfunded need is being programmed as part of the 2036 MTP/SCS updated.

It has been determined that this project is eligible for federal-aid funding.

Capital Outlay Support and Project Estimates

Table 17. Phase 1A National Corridor Infrastructure (I-80 Bottleneck) Programming

Fund Source	Fiscal Year Estimate							
National Corridor Infrastructure	Prior	2014/15	2015/16	2016/17	2017/18	2018/19	Future	Total
Component	In thousands of dollars ($1,000)							
PA&ED	*3,900							3,900
PS&E								
Right of Way Support								
Construction Support				1,000				1,000
Right of Way			350					350
Construction				6,950				6,950
Total	3,900		350	7,950				12,200

*Note that this $3.900 million represents PCTPA expenditure for PA&ED for entire interchange modification project.

Table 18. Phase 1A SHOPP Programming								
Fund Source	Fiscal Year Estimate							
SHOPP	Prior	2014/15	2015/16	2016/17	2017/18	2018/19	Future	Total
Component	In thousands of dollars ($1,000)							
PA&ED Support		1,100						1,100
PS&E Support			2,500					2,500
PS&E								
Right of Way Support			300					300
Construction Support				2,600				2,600
Right of Way			150					150
Construction				15,050				15,050
Total		1,100	2,950	17,650				21,700

Table 19. Phase 1A Local Fund Programming								
Fund Source	Fiscal Year Estimate							
Local Funds	Prior	2014/15	2015/16	2016/17	2017/18	2018/19	Future	Total
Component	In thousands of dollars ($1,000)							
PA&ED								
PS&E								
Right of Way Support								
Construction Support								
Right of Way								
Construction				2,950				2,950
Total				2,950				2,950

Excluding the $3.9 million for PA&ED that covered the entire interchange modification, the support cost ratio for Phase 1A is 29.47%.

9. SCHEDULE

Project Milestones		Scheduled Delivery Date (Month/Day/Year)
PROGRAM PROJECT	M015	07/20/2010
BEGIN ENVIRONMENTAL	M020	08/24/2011
NOTICE OF PREPARATION (NOP)	M030	01/02/2013
CIRCULATE DPR & DED EXTERNALLY	M120	07/27/2015
PA & ED	M200	09/01/2016
*DRAFT STRUCTURES PS&E	M378	10/30/2016
*PROJECT PS&E	M380	01/31/2017
*RIGHT OF WAY CERTIFICATION	M410	02/28/2017
*READY TO LIST	M460	03/31/2017
*AWARD	M495	08/31/2017
*APPROVE CONTRACT	M500	10/02/2017
*CONTRACT ACCEPTANCE	M600	03/01/2020
*END PROJECT	M800	03/01/2022

* Schedule listed for first construction package. Complete scope expected to be completed by 2035 if funding becomes available as currently anticipated.

10. RISKS

A total of 18 risks have been identified in the project risk management plan and vary among design, project management, and environmental functions that could have an effect on scope, schedule, and cost. The risk register is included in Attachment PP.

11. FHWA COORDINATION

This project is considered to be a High Profile Project (HPP) in accordance with the current Federal Highway Administration (FHWA) and Department of Transportation (Caltrans) Joint Stewardship and Oversight Agreement. FHWA is actively participating on the Project Development Team

12. PROJECT REVIEWS

District Program Advisor N/A. Local Capital Outlay Project		Date N/A
District Maintenance	*A. Brandt*	Date 03/16/2015
Headquarters Design Coordinator	*Jim Deluca*	Date 03/16/2015
Project Manager	*Wayne Lewis*	Date 03/16/2015
FHWA	*Cesar Perez*	Date 03/16/2015
District 3 TMP, Signing, and Striping	Narayan Selwal	Date 03/02/2015
District Landscape Architect	*T. Chris Johnson*	Date 04/30/2015
Design	*W. Keith Mack*	Date 03/16/2015
Design	*Kookjoon Ahn*	Date 1/27/2015

13. PROJECT PERSONNEL

Caltrans District 3

Samuel Jordan, P.E., Caltrans Project Manager
Wayne A. Lewis, P.E., Caltrans Project Manager
Jim DeLuca, P.E., Caltrans Headquarters
Timothy B. Sobelman, Caltrans Headquarters
Heidi Sykes, P.E., Caltrans Headquarters
Scott Mann, P.E., Caltrans District 3 Design
W. Keith Mack, P.E., Caltrans District 3 Design
Gina Lopez, P.E., Caltrans District 3 Design
Kendall Schinke, Caltrans North Region Environmental
Ken Lastufka, Caltrans North Region Environmental
Jim Calkins, P.E., Caltrans District 3 Traffic Operations
Christine Zdunkiewicz, P.E., Caltrans District 3 Traffic Operations
D. Mike Smith, P.E., Caltrans District 3 Traffic Operations
Carl Berexa, P.E., Caltrans District 3 Construction

PCTPA

Celia McAdam, AICP, PCTPA Executive Director
Luke McNeel-Caird, P.E., PCTPA Project Manager

Consultant Staff

Leonard Heuston, P.E., Consultant (CH2M HILL) Project Manager
Chris Benson, P.E., Consultant (CH2M HILL) Deputy Project Manager
Lauren Proctor, P.E., Consultant (CH2M HILL) Project Engineer

14. ATTACHMENTS

Attachment A – Location Map
Attachment B – Constraints Map
Attachment C – Transportation Analysis Reports
Attachment D – Viable Alternatives Exhibits
Attachment E – Advance Planning Studies
Attachment F – Preliminary Cost Estimates
Attachment G – Exceptions to Design Standards
Attachment H – 2040 Planned Projects
Attachment I – Initial Site Assessment
Attachment J – Value Analysis
Attachment K – Right of Way
Attachment L –Environmental Document
Attachment M – Transportation Management Plan, Phase 1 Exhibit, Phase 1 Analysis Memo
Attachment N –Stormwater Data Report
Attachment O –Landscape Architecture Assessment Sheet
Attachment P – Risk Register