

Chapter 1 Introduction

1.1 Background

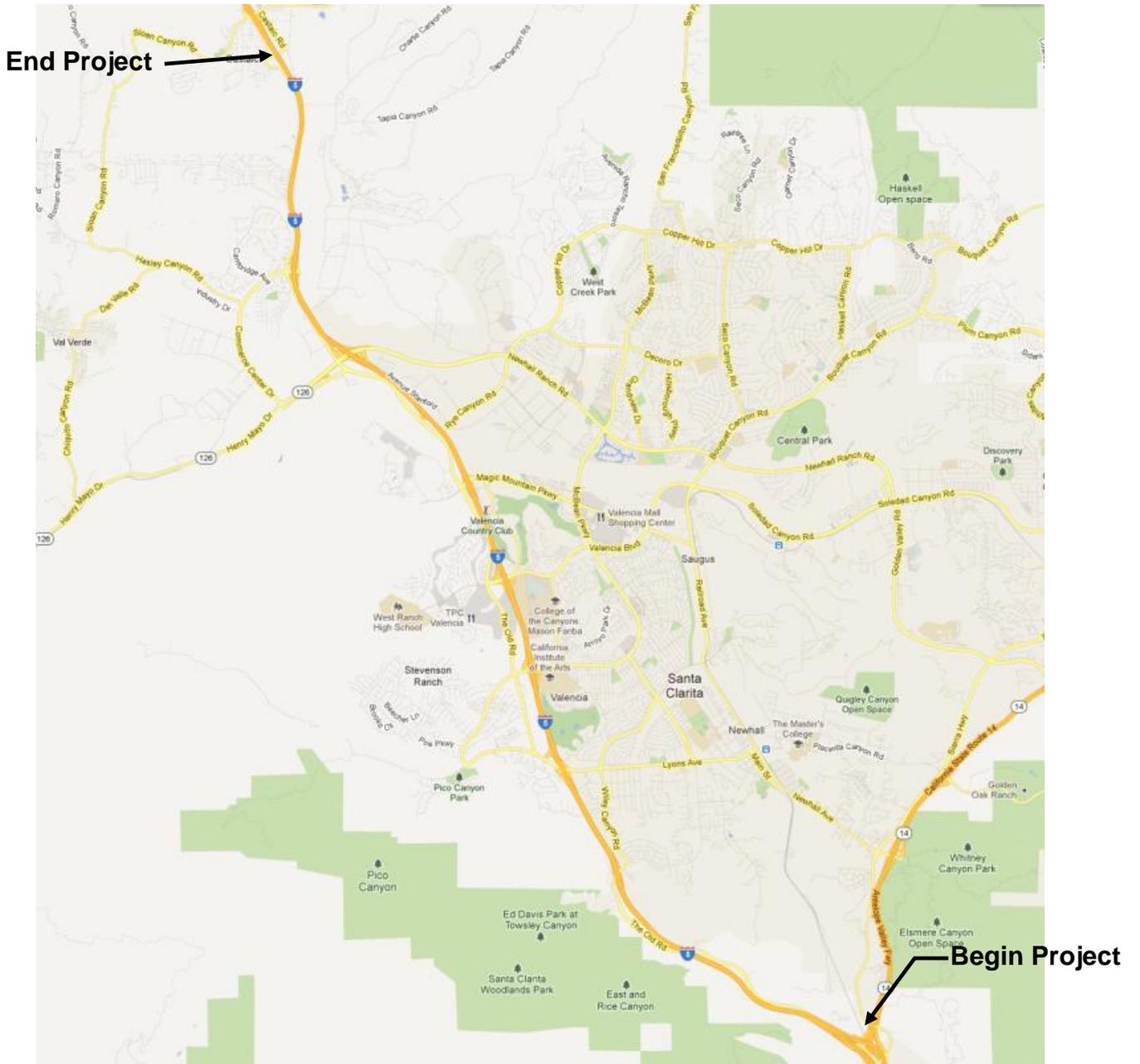
The California Department of Transportation approved the Final Environmental Impact Report/ Finding of No Significant Impact (EIR/FONSI) for the I-5 HOV/Truck Lanes Project (project) on September 1, 2009. Alternative 2 (Reduced Median Alternative) was identified as the Preferred Alternative.

The I-5 HOV/Truck Lanes Project is a joint project by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), and is subject to state and federal environmental review requirements. Project documentation, therefore, has been 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. Caltrans is the lead agency under CEQA. In addition, FHWA's responsibility for environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 United States Code (USC) 327.

The project proposes to widen existing Interstate 5 (I-5) to include high-occupancy vehicle (HOV) lanes, truck climbing lanes, and additional auxiliary lanes from State Route 14 (SR-14) on the south to Parker Road on the north, a distance of approximately 13.6 miles (mi) (Figure 1.1). The project is located within the City of Santa Clarita and within unincorporated Los Angeles County.

Construction on the truck climbing lanes began in May 2012 and is expected to be completed in 2014. The project will add a truck lane to the outside of southbound I-5 by paving the median area and outside shoulder, and shifting the mixed-flow lanes inward. Median retaining walls and two short sections of outside retaining walls will be built to accommodate this widening. The cost of the project is \$72 million, of which \$70 million is provided by the State Highway Operation and Protection Program (SHOPP) and \$2 million is provided by Measure R.

Figure 1.1 Project Location



1.2 Original Project Description

I-5 is a major north/south freeway connecting the States of California, Oregon, and Washington, and a major commuter route from the Santa Clarita Valley into the southern Los Angeles area. The existing I-5 facility within the project limits currently provides generally four mixed-flow lanes in each direction with the exception of through the midpoint of the I-5/SR-14 interchange, where there are three mixed-flow lanes in each direction. Two truck lanes in each direction pass through the I-5/SR-14 interchange area, separated from the mainline freeway. Within the project limits, this truck bypass route begins (southbound)/ends (northbound) just north of the I-5/SR-14 interchange consisting of ± 5 percent grade.

The project description from the 2009 Final EIR/FONSI is provided below:

The project proposes to widen the center median and the outside shoulder of the northbound and southbound lanes between SR-14 and south of Parker Road to accommodate HOV, additional auxiliary, and truck lanes. The project would provide one HOV lane in each direction from the I-5/SR-14 interchange to south of the Parker Road interchange. The project would extend one northbound truck lane from where the truck lanes currently merge with northbound I-5 near the Weldon Canyon Road/I-5 overcrossing to the Calgrove Boulevard/I-5 interchange. Southbound truck climbing lanes are proposed between the Weldon Canyon Road overcrossing and Calgrove Boulevard interchange (two truck lanes) and from Calgrove Boulevard to south of the Pico Canyon Road/Lyons Avenue interchange (one truck lane). As discussed above, the truck lanes are currently in construction.

The proposed auxiliary lanes are as follows:

- in the northbound direction from SR-14 to the northbound truck lane merge, Calgrove Boulevard to Pico Canyon Road/Lyons Avenue, and Valencia Boulevard to Magic Mountain Parkway,
- in the southbound direction between SR-126 and Rye Canyon Road, Rye Canyon Road and Magic Mountain Parkway, and Valencia Boulevard and McBean Parkway.

The project proposes median and inside shoulder widths that are less than the California Department of Transportation (Caltrans) standard (48-foot [ft] median and less than 10 ft inside shoulders at median structure columns) within a maximum

210 ft cross section. The reduced minimum median width of 48 ft is measured from inside the Mixed Flow Lane (MFL), Edge of the Traveled Way (ETW), to inside the MFL ETW. Additional widening beyond the 48 ft minimum in the median area would be provided when necessary for horizontal stopping sight distance requirements. A 48 ft median would accommodate a 1 ft buffer, a 12 ft HOV lane, and a 10 ft inside shoulder. Shoulder widths along freeway ramps would be 8 ft. The project would not provide for a 10 ft continuous inside shoulder (at column locations) or a 4 ft buffer between HOV and adjacent mixed-flow lanes. The HOV buffer would be 1 ft. The maximum cross section width is intended to accommodate the proposed HOV and truck climbing lanes within the existing Caltrans right of way to the extent feasible to limit the number of right of way acquisitions.

Per Caltrans HOV lane guidelines, California Highway Patrol (CHP) enforcement areas are recommended every 2 mi. Based on Caltrans criteria, approximately five enforcement areas would be required within the 13.6 mi project limit. Additional width in the median (beyond the proposed 48 ft) is required to provide for those CHP enforcement areas and has been included in the design.

The project would not require realignment of any adjacent roadways.

Permanent Project Components

Mainline Improvements (HOV, Truck, and Auxiliary Lanes)

The project proposes:

- One HOV lane in the median in each direction from the I-5/SR-14 interchange (southern project limit) to south of the Parker Road interchange (northern project limit).
- One southbound truck lane south of Pico Canyon Road/Lyons Avenue and Calgrove Boulevard, and two southbound truck lanes from Calgrove Boulevard to just south of Weldon Canyon Road, where the truck bypass lanes (2) begin.
- Addition of one northbound truck lane from the I-5/SR-14 interchange to Calgrove Boulevard. All truck lanes would be built along the outside edge of the freeway.
- Auxiliary lanes in the northbound direction from SR-14 to the northbound truck lane merge, Calgrove Boulevard to Pico Canyon Road/Lyons Avenue, and Valencia Boulevard to Magic Mountain Parkway.

- Auxiliary lanes in the southbound direction between SR-126 and Rye Canyon Road, Rye Canyon Road and Magic Mountain Parkway, and Valencia Boulevard and McBean Parkway.
- Additional widening to provide standard horizontal stopping sight distance (SSD) (70 mph) on all 13 mainline horizontal curves.

Bridges

Several bridge structures require widening and/or replacement under the project as follows: the replacement of Weldon Canyon Bridge and the widening of the following seven bridges: Gavin Canyon undercrossing, Calgrove Boulevard undercrossing, Butte Canyon Bridge, I-5/SR-26 Separation (Magic Mountain Parkway overcrossing), Santa Clara Overhead, Rye Canyon undercrossing, and Castaic Creek Bridge.

The project proposes to improve the vertical clearance and provide SSD (70 mph) for the southbound I-5 lanes at the Pico Canyon Road/Lyons Avenue overcrossing structure.

Right-of-Way Acquisition

Acquisition of two parcels would be required for additional right of way. The acquisition would be limited to one partial parcel take and one full parcel take.

Major Drainage Facilities

Drainage facilities are proposed in order to provide additional capacity for the existing drainage facilities based on the design flows established for the crossings. These facilities include the upsizing or replacement of existing culverts.

Water quality treatment devices include numerous vegetated swales to provide biofiltration, three detention basins, one gross solids removal device, and two Austin sand media filters. Depending on actual groundwater elevations, the detention basins may be able to function as infiltration basins. The locations of water quality treatment facilities will continue to be refined during final design.

Retaining Walls

Retaining walls are required to retain fill or cut slopes to avoid impacts and additional right of way throughout the corridor.

Retaining walls are required in the median where the elevation differences between the northbound and southbound lanes exceed 2 ft. Median retaining walls are

generally required between SR-14 and Valencia Boulevard and between SR-126 and Parker Road. The heights of the median retaining walls vary from 2 ft to 18 ft.

Retaining walls are also required along the outside shoulder in many locations throughout the project to reduce impacts and minimize additional right of way requirements. The outside shoulder retaining walls' heights range from 2 ft to 39 ft.

Sound Barriers

The project includes construction of sound barriers (SB) to reduce traffic noise associated with the proposed project. The following sound walls are considered reasonable and feasible on the basis of cost and effectiveness:

- 10 ft sound barrier outside of Caltrans right of way adjacent to homes along Foxtail Court (SB No. 1-2).
- 6 ft sound barrier outside of Caltrans right of way adjacent to homes along The Old Road (SB No. 1-6).
- 10 ft sound barrier outside of Caltrans right of way, adjacent to homes along Los Arqueros and Playa Serena Drive (SB No. 2-1).
- 8 ft sound barrier for Alternative 2 and 12 ft sound wall for Alternative 3 outside of Caltrans right of way, adjacent to homes along Baviera Way (SB No. 2-2).
- 12 ft sound barrier outside of Caltrans right of way, adjacent to homes along Sycamore Meadow Drive (SB No. 2-3) for Alternative 2, and 14 to 16 ft for Alternative 3.
- 12 ft sound barrier outside of Caltrans right of way, adjacent to homes along Silver Aspen Way (SB No. 2-4).
- 16 ft sound barrier along the edge of shoulder within Caltrans right of way, adjacent to homes on Sandwedge Lane (SB No. 2-5)
- 6 ft sound barrier outside of Caltrans right of way, adjacent to homes along Altos Drive (SB No. 2-6).
- 6 ft sound barrier outside of Caltrans right of way, adjacent to the homes along Romeo Canyon Road (SB No. 3-3).
- 12 ft sound barrier outside of Caltrans right of way for Alternative 2, and 10 ft barrier for Alternative 3, adjacent to homes along Holmby Court (SB No. 3-7).
- A 10 ft sound barrier outside of Caltrans right-of-way, adjacent to homes along Desert Rose Drive (SB No. 3-8).
- 16 ft sound barrier along the edge of Caltrans right of way, adjacent to homes along Daisy Court (SB No. 3-11a).

Additional input from affected property owners would be obtained before the start of final design to confirm whether the walls would be constructed.

On- and Off-Ramps

Modifications to all the on- and off-ramps in the project limits are required to transition to the mainline widening.

Utilities

Utility relocations would be required in local roadways primarily at the transverse crossing of the mainline and, in some cases, adjacent to the Caltrans right of way to allow widening of the mainline. In general, the utility relocations are limited to areas where the local roadways cross I-5 at the interchanges and other structures and adjacent to the I-5 right of way where the widening encroaches onto the local roadway. Utilities to be relocated include general telephone cable, water lines, communication conduits, sewer lines, gas pipes, electrical lines, and oil transmission pipes.

Intelligent Transportation System (ITS) Facilities

The project would include the addition of the following ITS facilities:

- Five new Closed Circuit Television (CCTV) cameras
- Nine new Ramp Metering Stations/Traffic Monitoring Stations (RMS/TMS)
- A new communication conduit throughout the project from SR-14 to Parker Road
- The upgrading of four CCTV cameras
- The upgrading of 19 RMS/TMS stations
- Upgrading three Changeable Message Signs (CMS)
- Upgrading a Weigh-in-Motion system (WIM)

These elements would provide needed links and fill data gaps in the current ITS system and provide for more comprehensive corridor management.

Landscaping and Irrigation Systems

Landscaping and irrigation systems would be provided where necessary within the corridor to provide aesthetic treatment, replacement planting, or mitigation planting for the project. The areas available for planting would be identified and coordinated with operations and maintenance to ensure consistency with their objectives and requirements. New irrigation systems would be designed to use reclaimed water (if available).

Design Exceptions

The project would require mandatory design exceptions for the spacing between interchanges from Rye Canyon Road to Magic Mountain Parkway and from Rye Canyon Road to SR-126. The spacing between these interchanges would be less than 1 mi. In addition, a mandatory design exception would be required to the standard 10 ft inside shoulder at structure columns (a minimum 7.4 ft shoulder is proposed) and the standard 8 ft outside shoulder at the Magic Mountain Parkway northbound on-ramp (a 4 to 8 ft shoulder is proposed).

The following advisory design exceptions would be required for the project: (1) 2:1 sideslopes instead of the standard 4:1 sideslopes; (2) a 26 ft standard between the outer edge-of-travel-way (ETW) of I-5 and the ETW of the frontage road for the project at various locations; (3) a median width of 22 ft rather than the standard 36 ft median; (4) outer separation distance, with guardrails and/or walls proposed where the separation distance is less than 26 ft; (5) use of the Rye Canyon Interchange as a partial interchange, with all ramps not connecting to a single cross street; and (6) at ramps at SR-14, Calgrove Boulevard, Pico Canyon Road/Lyons Avenue, and Hasley Canyon where the entrance and exit convergence/divergence geometry is not met. This design exception is needed to avoid reverse curves along ramps to tie back into existing ramps, realignment of frontage roads, higher or increased retaining walls and/or existing ditch reconstruction.

Soil Balance

The project would result in approximately 216,000 cubic yards (cy) of excess soil material that would require disposal.

Temporary Project Components

Construction

Staging of the construction would be required for all ramp reconstruction, freeway widening, and profile adjustments. The number of through lanes would be maintained by restriping and shifting traffic on the existing lanes to maintain the existing capacity. Closure of I-5 is not anticipated; however, temporary ramp closures are expected at various interchanges within the corridor.

The majority of the project involves widening the median area and the outside shoulder area of I-5 in two stages. Stage 1 involves placing temporary railing in the median area, constructing the median retaining walls and widening the median. Stage 2 involves placing temporary railing near the outside edge of traveled way,

constructing outer retaining walls, and widening the proposed outside pavement. Widening of existing structures would be constructed in a similar sequence, with interior widening completed first, followed by exterior widening. Late-night closures in each direction may be necessary for removal of the existing and construction of the new Weldon Canyon Bridge. Reconstruction at the ramp exit and entrances may require short-term closures.

The southbound lanes at the westbound to southbound loop on-ramp at the Pico Canyon Road/Lyons Avenue interchange would be closed for three to five months during the reconstruction of the profile of southbound I-5 to provide standard vertical clearance and improved SSD. The ramp provides access from westbound Pico Canyon Road to southbound I-5. The reconstruction of the profile would require shifting of the mainline travel lanes to the east to allow for the removal of material to lower the profile. During the closure period, the existing southbound on-ramp that serves eastbound Pico Canyon Road would be temporarily reconfigured to also allow left turns from westbound Pico Canyon Road to maintain the vehicle movement affected by the ramp closure. To allow left turns from westbound Pico Canyon Road onto the ramp, the westbound approach would require temporary restriping and a temporary two-phase traffic signal would be required to control the left turns and conflicting eastbound traffic.

All construction activities would be closely coordinated with other construction projects that are occurring. Existing state facilities such as changeable message signs, traffic cameras, and traffic count stations would also be protected during construction. Close coordination would also be needed with the City, the County, Caltrans, and the public to ensure that traffic along I-5 and surrounding streets remains at an acceptable level of operation during construction.

Construction Vehicle Access and Material Staging

Construction vehicle access and staging of construction materials would occur within disturbed or developed areas inside the existing right of way or the proposed additional right of way. Vehicle access and materials staging during construction of walls adjacent to Caltrans right of way would occur in approved designated areas. All construction vehicle access, materials staging and storage, and other construction activities would occur within the defined disturbance limits for the project.

Construction Lighting

The project would require nighttime construction activities in some parts of the project area, which would require use of portable equipment to light up the work areas.

Temporary Construction Easements

Temporary construction easements (TCEs) would be necessary for constructing walls along the right of way, for the extension of major drainage facilities, for widening bridges, and for water quality improvements that extend outside of the existing right of way. The project would require 18 TCEs.

1.3 Purpose of this Document

Since the approval of the environmental document for the I-5 HOV/Truck Lanes Project, there has been a substantial change in the scope of the project. The change in scope is discussed in Chapter 2 of this document. The purpose of this Draft Supplemental EIR/Environmental Reevaluation (DSEIR/ER) is to evaluate the potential impacts associated with the scope change and ensure that the environmental documentation reflects the current project.

There have been no changes to the environmental setting and the environmental circumstances from what was described in the Final EIR/FONSI.

1.3.1 Basis in NEPA

As a highway project proceeds in its development from environmental review through construction, there may be circumstances that could affect the validity of its NEPA documentation or approval. The Federal Highway Administration (FHWA) regulations to implement the National Environmental Policy Act (NEPA) (23 CFR 771) and Technical Advisory T6640.8A provide direction on determining when a project's NEPA documentation must be re-examined. FHWA and Caltrans have developed *Joint Highway Administration – California Division/California Department of Transportation Regulatory Guidance on NEPA Consultation/Reevaluation (Joint Guidance)* and a *NEPA/CEQA Re-validation form* for documenting consultation and reevaluations.

The Joint Guidance is organized around three trigger points for consultation and/or re-evaluation: (1) the project is proceeding to the next major federal approval, (2) project

changes, and (3) the 3-year timeframe for an Environmental Impact Statement (EIS). This Reevaluation is being prepared because there have been project changes since the Final EIR/FONSI was prepared in 2009. Project changes discussed in the Joint Guidance and relevant to the project include changes to project engineering/design.

Based on the nature and extent of the changes, the determination has been made that additional documentation is needed to maintain the validity of the original FONSI but does not require the preparation of a new or higher level document.

1.3.2 Basis in CEQA

According to the CEQA Guidelines (Title 14 California Code of Regulations §15163), a subsequent or supplemental environmental impact report may be required if "substantial changes" in the project or its circumstances will require major revisions to the EIR. Namely, one or more of the following events occurs:

1. Substantial changes are proposed in the project that will require major revisions of the environmental impact report due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
2. Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
3. New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available. New information includes:
 - The project will have one or more significant effects not discussed in the previous EIR;
 - Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the Department declines to adopt them; or

- Mitigation measures or alternatives, which are considerably different from those analyzed in the previous EIR, would substantially reduce one or more significant effects on the environment, but the Department declines to adopt them.

A supplement to an EIR may be prepared if any of the conditions listed above would require the preparation of a subsequent EIR, and only minor additions or changes would be necessary to make the previous EIR adequately apply to the changed project.