I-5 Freight Corridor Project

LOS ANGELES COUNTY, CALIFORNIA
DISTRICT 7 – LA – 5 (PM 27.0/R67.0)
34210/0717000244

Initial Study with Proposed Negative Declaration / Environmental Assessment

Prepared by the
State of California Department of Transportation

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

January 2019

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INTERSTATE 5 FREIGHT CORRIDOR PROJECT

INITIAL STUDY WITH PROPOSED NEGATIVE DECLARATION/ENVIRONMENTAL ASSESSMENT

Submitted Pursuant to: (State) Division 13, California Public Resources Code (Federal) 42 USC 4332(2)(C), 49 USC 303, and/or 23 USC 138

THE STATE OF CALIFORNIA
Department of Transportation
CEQA Lead Agency

Responsible Agency: California Transportation Commission

Jan 4, 2019
Date of Approval

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PROPOSED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes the I-5 Freight Corridor Improvement Project to improve freight efficiency along Interstate 5 (I-5) from State Route 134 (SR-134) to Templin Highway Undercrossing in Los Angeles County. The project proposes to increase the vertical clearance to 16'-6", to eliminate load capacity restrictions for heavy loads, and to reduce the frequency of route closures due to maintenance.

Determination

This proposed Negative Declaration (ND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a ND for this project. This does not mean that the Caltrans' decision regarding the project is final. This ND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project, and pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on agriculture and forest resources, mineral resources, and population and housing.

In addition, the proposed project would have less than significant effects on aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, recreation, transportation/traffic, tribal cultural resources, and utilities and service systems.

DRAFT

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RONALD KOSINSKI
Deputy District Director
Division of Environmental Planning, District 7
California Department of Transportation

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Chapter 1 – Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) proposes the I-5 Freight Corridor Improvement Project to improve freight efficiency along Interstate 5 (I-5) from State Route 134 (SR-134) to Templin Highway Undercrossing (UC) in Los Angeles County. The project proposes to increase the vertical clearance to 16'-6", eliminate load capacity restrictions for heavy loads, and reduce the frequency of route closures due to maintenance.

Caltrans, as assigned by the Federal Highway Administration (FHWA), is the lead agency under the National Environmental Policy Act (NEPA) and under the California Environmental Quality Act (CEQA). California participated in the "Surface Transportation Project Delivery Pilot Program" (Pilot Program) pursuant to 23 USC 327, for more than five years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (P.L. 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, Caltrans entered a Memorandum of Understanding pursuant to 23 USC 327 (NEPA Assignment MOU) with the Federal Highway Administration (FHWA). The NEPA Assignment MOU became effective October 1, 2012, and was renewed on December 23, 2016 for a term of five years. In summary, Caltrans continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and Caltrans assumed all the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to the Caltrans under the 23 USC 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

The project was adopted into the Federal Transportation Improvement Program (FTIP) through Amendment #17-11, approved on September 22, 2017. The project design and scope match the 2017 FTIP Amendment #17-14. The project Federal ID is LALS04. The funds programmed under the FTIP amendment were provided from the Southern California Association of Governments (SCAG) and the estimated project cost is $480 million. It is also included in the SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

Existing Facilities

I-5 is a major north/south freeway connecting the states of California, Oregon, and Washington, and a major commuter route in Los Angeles County. The I-5 corridor from SR-134 to the Templin Highway UC is generally an eight to ten-lane freeway. The project areas are in the urban setting of Los Angeles County and in the Los Padres National Forest. In addition to serving as a major commuter facility, it is also the region's primary goods movement artery. It is part of the Interstate System of highways and is used as a major local and regional truck route. I-

5 is listed as a "high-priority corridor" on the National Highway System (NHS), serving inter-regional commodities and vehicular travel in the north-south direction from California's most southern border with Mexico to its most northern border with Oregon. It is also listed on the State Highway Extra Legal Load (SHELL) Route system. These systems list those highways that have been constructed to accommodate the high volume and weight of inter- and interstate truck traffic. Within the project limits, I-5 is classified as an urban freeway, and it functions as the gateway to and from the Los Angeles Basin to central and northern California. Because of this unique characteristic of spanning the entire state, the interstate in the north Los Angeles County area experiences high volumes of traffic, including truck traffic.

To assist in understanding the various locations of this proposed project, the following Project Location Figures 1 and 2 are provided for your reference.

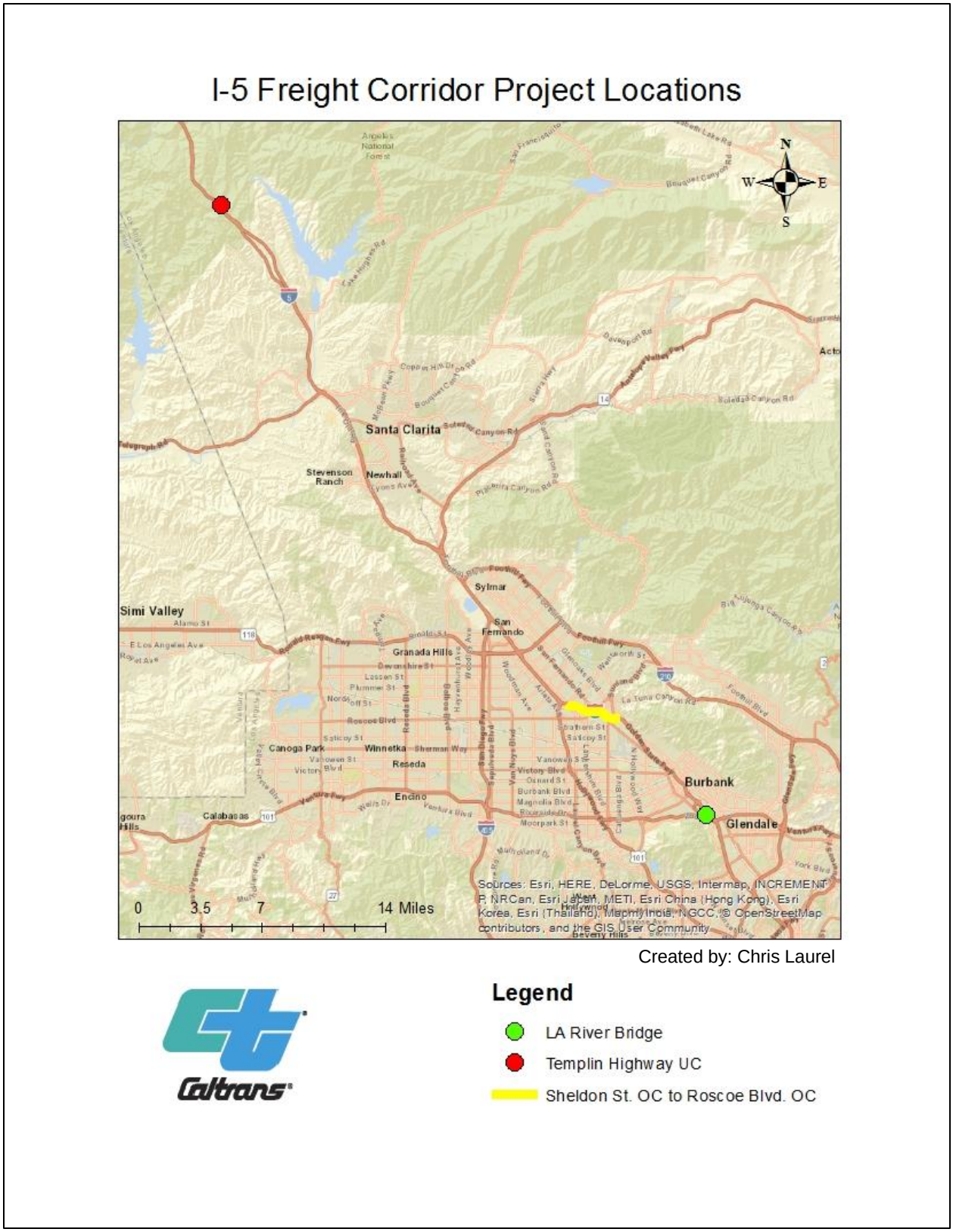

Figure 1: I-5 Freight Corridor Project Locations

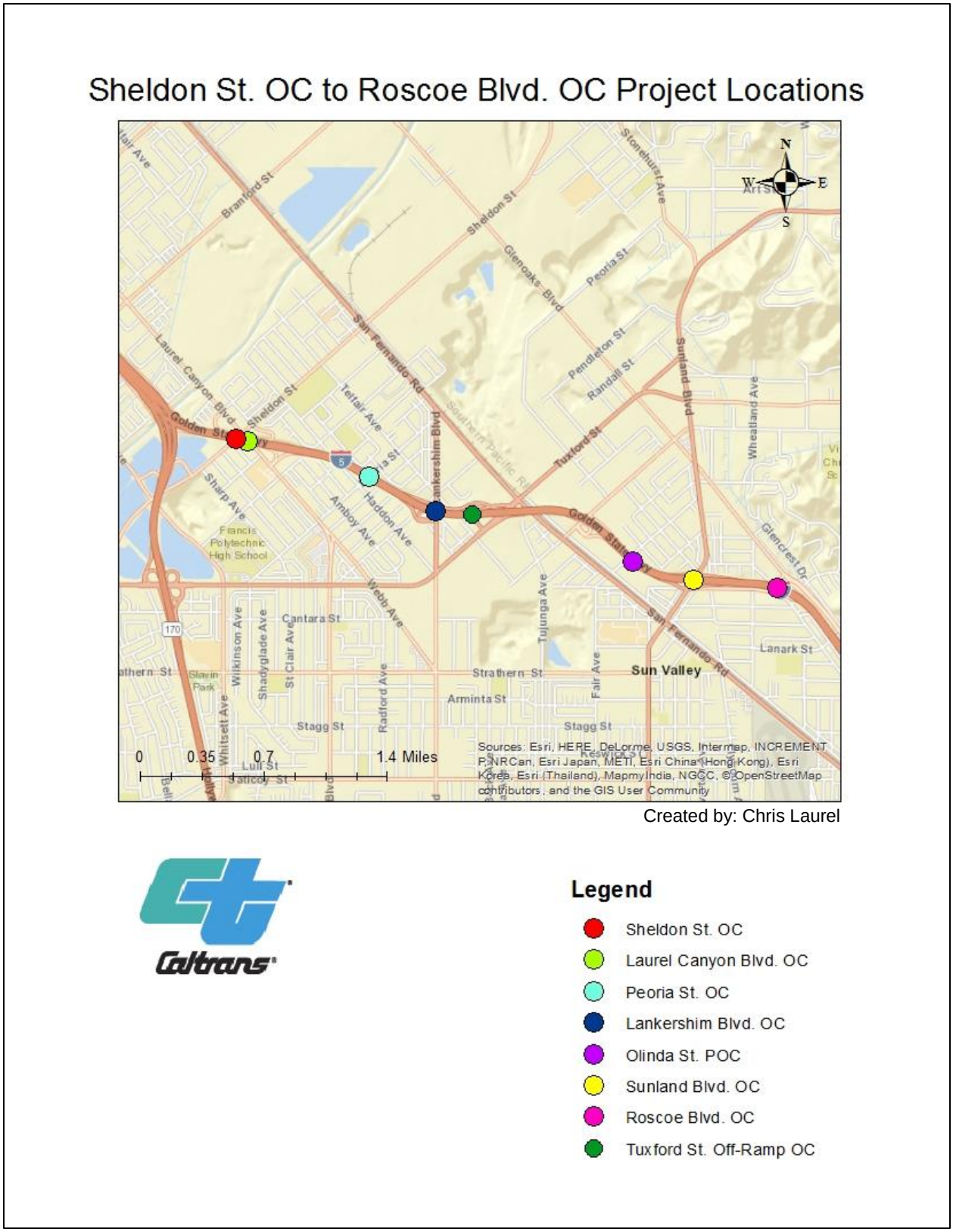

Figure 2: Project Locations in Sun Valley

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the I-5 Freight Corridor Improvement Project is to:

- Improve mobility by providing for a goods movement freight corridor that can be operated efficiently and continuously.
- Reduce delay due to load capacity restrictions by eliminating the need to detour heavy and over-height truck loads off I-5.
- Eliminate damage and reduce maintenance to bridges caused by non-standard vertical clearance.
- Provide improvements that will reduce the need for maintenance closures.
- Increase economic vitality through trade and commerce by providing greater truck and freight movement along I-5.

The project addresses restrictions from reduced vertical clearance as established in Caltrans' Highway Design Manual and load capacity restrictions as identified in federal guidelines.

The movement of freight goods will be enhanced along I-5 by eliminating load capacity restrictions and vertical clearance limitations on ten bridges. Freight efficiency will be improved by reducing the frequency of route closures due to maintenance. In addition, the project satisfies the Moving Ahead for Progress in the 21st Century (MAP-21) national goal of improving the national freight network, strengthening the ability of rural communities to access national and international trade markets, and supporting economic development.

1.2.2 Need

The need for this project is to increase economic vitality through trade and commerce by providing greater truck and freight movement along I-5. The project strategically identifies functionally non-standard bridges from the State's bridge inventory based on condition, serviceability, and goods movement ratings (restriction of extralegal freight movement due to the bridges' truck load/and or non-standard vertical clearance). The selection criteria are based on performance measures in Caltrans Asset Management Plan.

The bridges in the project limits currently have either non-standard vertical clearance or load capacity restrictions. As a result, truck and freight traffic with heavy and/or over-height loads need to detour off and back on to I-5 to travel around the bridge with non-standard vertical clearance or load capacity restrictions, resulting in delays in travel time. Following completion of the improvements, it is expected that goods movement will be facilitated along the critical I-5 freight corridor, bridge maintenance costs will be reduced, travel time will be reduced, and significant savings in delay costs will be realized. In addition, the service lives of some bridges will be extended by approximately 75 years.

1.3 Independent Utility and Logical Termini

Logical termini for project development are defined as (1) rational endpoints for a transportation improvement, and (2) rational end points for a review of environmental impact. The environmental impact end points frequently cover a broader geographic area than the strict limits of a proposed transportation improvement. Independent utility means that the project improvements have independent significance, or that the improvements are usable at a reasonable expenditure even if no additional transportation improvements are made in the area.

The proposed project termini are logical because the project limits, which are composed of the 10 bridge locations in LA County, would address the inefficient mobility of freight traffic from Downtown LA to the Kern County Line on I-5.

The proposed project has independent utility because it does not rely on other projects to address the identified need. Furthermore, the proposed project would not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

1.4 Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. The alternatives are the Build Alternative and the No-Build Alternative.

Caltrans is proposing a Freight Corridor Improvement Project (Project) along I-5 in Los Angeles County from SR-134 (Postmile 27.0) to Templin Highway Undercrossing (Postmile R67.0) by increasing the vertical clearance to 16’-6” and eliminating load capacity restrictions for heavy loads. The proposed project will increase vertical clearance at Roscoe Blvd. Overcrossing (OC), Sunland Blvd. OC, Olinda St. Pedestrian Overcrossing (POC), Tuxford Off-ramp OC, Lankershim Blvd. OC, Peoria St. OC, Laurel Canyon Blvd. OC, and Sheldon St. OC. This will be accomplished by replacing the bridges and raising the bridge profiles by approximately 1 to 2 feet at the Overcrossings and about 4 feet at Olinda St. POC. The proposed project will also eliminate the load capacity restrictions for heavy loads at the Los Angeles River Bridge and Separation and Templin Highway Undercrossing by repairing the steel girders and un-staggering the steel cross frames at the Los Angeles River Bridge and Separation and by replacing the Templin Highway Undercrossing.

It is expected that each bridge will have shallow spread footing at abutments and possibility of deep foundation at bent locations. Utilities will be protected in place or relocated during the construction of the bridges.

The bridges located in Sun Valley will be widened to accommodate the State of California’s Complete Streets Policies. Complete streets will include facilities that are planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. These facilities will include ADA curb ramps, sidewalks, bike lanes, and aesthetic treatments at all bridges in Sun Valley. Olinda St. POC will also be converted to a combined

Pedestrian/Bicycle Overcrossing (BOC).

The proposed project includes the following bridges, listed from south to north:

1. Los Angeles River Bridge and Separation (Bridge No. 53-1075 Left/Right[1] (L/R); PM 27.07)
2. Roscoe Blvd. OC (Bridge No. 53-1216; PM 33.28)
3. Sunland Blvd. OC (Bridge No. 53-1114; PM 33.68)
4. Olinda St. POC (Bridge No. 53-1467; PM 33.98)
5. Tuxford Off-Ramp OC (Bridge No. 53-1218 S; PM 34.82)
6. Lankershim Blvd. OC (Bridge No. 53-1118; PM 34.99)
7. Peoria St. OC (Bridge No. 53-1119; PM 35.35)
8. Laurel Canyon Blvd. OC (Bridge No. 53-1219; PM 35.94)
9. Sheldon St. OC (Bridge No. 53-1120; PM 36.00)
10. Templin Highway UC (Bridge No. 53-1810 L/R; PM 65.97)

This project contains a number of standardized project measures which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Chapter 2.

1.5 Alternatives

There are two alternatives under consideration. The Build Alternative and the No-Build Alternative. After the public circulation period, all comments will be considered and Caltrans will select a preferred alternative and make the final determination of the project's effect on the environment. Under the CEQA, if no unmitigable significant adverse impacts are identified, Caltrans will prepare a Negative Declaration (ND) or Mitigated ND. Similarly, if a determination is made that the proposed action does not significantly impact the environment, Caltrans, as assigned by the Federal Highway Administration (FHWA), will issue a Finding of No Significant Impact (FONSI) in accordance with the NEPA.

Alternative 1 (No-Build Alternative)
There would be no changes made to the existing I-5 facility under the No-Build Alternative. No action would be taken to improve the structures within the project limits. Under the No-Build Alternative, the 10 structures within the project limits would continue to have less than 16'-6'' vertical clearance and/or load capacity restrictions. This will continue to result in delays in travel time for freight trucks/vehicles that may have heavy loads/over-height vertical clearance, forcing them to make detours around this stretch of the I-5 corridor.

Alternative 2 (Build Alternative)
The Build Alternative proposes to allow for vertical clearance of 16'-6" and eliminating load capacity restrictions for heavy loads along I-5 from PM 27.0 to R67.0. The Build Alternative proposes to upgrade the vertical clearance at Roscoe Blvd. Overcrossing (OC), Sunland Blvd.

[1] For the purpose of this document, Left (L) will denote the southbound bridge and Right (R) denotes the northbound bridge.

OC, Olinda St. Pedestrian Overcrossing (POC), Tuxford Off-ramp OC, Lankershim Blvd. OC, Peoria St. OC, Laurel Canyon Blvd. OC, and Sheldon St. OC. This will be accomplished by replacing the bridges and raising the bridge profiles by approximately 1 to 2 feet at the overcrossings and about 4 feet at Olinda Pedestrian overcrossing. The Build Alternative also proposes to eliminate the load capacity restrictions for heavy loads at the Los Angeles River Bridge and Separation and Templin Highway Undercrossing by repairing the steel girders and un-staggering the steel cross frames at the Los Angeles River Bridge and Separation and replacing the Templin Highway Undercrossing.

The Build Alternative is proposed to go into construction under three separate phases (or segments):

Segment 1: Tuxford St. Off-Ramp OC 53-1218S
The proposed work will replace and shift Tuxford St Off-Ramp OC to the north by approximately 50 ft. The existing bridge will remain open while the new bridge is being constructed. The NB Tuxford St off-ramp will be closed when the new off-ramp joins the existing off-ramp. The HOV lanes on the mainline will be closed during the construction of the new bridge and the removal of the existing bridge for approximately 3 miles in Sun Valley.

Segment 2: Templin Hwy UC 53-1810 L/R
The proposed work will replace both bridges. This alternative will be completed in four stages. A median bridge between the northbound and southbound bridge will be constructed in the first stage. Three lanes in the southbound direction and four lanes in the northbound direction will remain open during this stage. The northbound bridge will be constructed in the second stage. During this stage the lanes will be reduced from four lanes to three lanes and crossed over to the southbound bridge and temporary bridge. The median bridge will be shifted in order to switch traffic to the northbound lanes in the third stage. Three lanes in each direction will be open during this stage, and the northbound on-ramp and off-ramp will be closed for approximately 6 months. The southbound bridge will be constructed in the fourth stage. Three lanes in each direction will remain and will cross over to the northbound bridge and median bridge during this stage. The southbound off-ramp will be closed during this stage for approximately 6 months. Approximately 3800 ft. of concrete pavement will be reconstructed to accommodate the bridge replacement.

Segment 3: LA River Bridge 53-1075 L/R, Roscoe Blvd. OC 53-53-1216, Sunland Blvd. OC 53-1114, Olinda St. POC 53-1467, Lankershim Blvd. OC 53-1118, & Peoria St. OC 53-1119, Laurel Canyon Blvd. OC 53-1219, & Sheldon St. OC 53-1120
The proposed work for the LA River Bridge is to strengthen the existing girders by repairing the welds and unstaggering the cross bracing. The proposed work for the remaining bridges is to replace the bridge and raise the bridge profile for each bridge. Roscoe Blvd. OC & Peoria St. OC will be closed and the traffic detoured around the area. Sunland. Blvd OC, Lankershim Blvd. OC, Laurel Canyon Blvd. OC, and Sheldon St. OC will be staged so at least one lane in each direction will be open during construction. Pavement, sidewalk, lighting, and curb & gutter reconstruction will be required on the local streets. On & off-ramp reconstruction for Roscoe Blvd., Sunland Blvd., & Lankershim Blvd. will be required to meet the raised bridge profile. The HOV lanes on the mainline will be closed during the removal and construction of the

bridges for approximately 3 miles. The Olinda St. POC will be converted to a BOC. The existing POC will remain open while the new BOC is being constructed. Once the new BOC is complete the existing POC will be removed.

Pump Plant Replacement
The existing pump plant south of Sheldon St will be replaced and new pipes will be installed to drain the water to spreading grounds near the I-5/SR-170 interchange. The new pipes will remain within the existing footprint of the work area for replacing Sheldon St OC.

The Tuxford St. off-ramp and Templin Hwy UC will not have any Right of Way (R/W) impacts. LA River Bridge 53-1075 Left/Right (L/R), Roscoe Blvd OC 53-53-1216, Sunland Blvd OC 53-1114, Olinda St POC 53-1467, Lankershim Blvd. OC 53-1118, & Peoria St OC 53-1119, Laurel Canyon Blvd OC 53-1219, & Sheldon St. OC 53-1120 will acquire 6 full parcels (fee), 1 partial parcel (fee), and another 35 parcels will have Temporary Construction Easements (TCEs).

Disposal of excavated material will be at an approved/appropriate landfill. Permanent and construction site Best Management Practices (BMPs) will be implemented at all locations. A Transportation Management Plan (TMP) will be developed for each segment to address potential effects of the construction activities on the I-5 freeway and adjacent facilities. The proposed project will comply with applicable storm water permits, including the NPDES Statewide Storm Water Permit Waste Discharge Requirements for State of California Department of Transportation, NPDES No. CAS000003 (Order 2012-0011-DWQ) as amended by Order WQ 2014-0006 Exec, Order WQ2014-0077-DWQ, and Order WQ 2015-0036 EXEC, and the NPDES General Permit for Storm Water Dischargers Associated with Construction and Land Disturbance Activities, NPDES No. CAS000002 (ORDER No. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ.

The proposed project will implement project design features and mitigation measures designed to reduce air quality impacts, including, but not limited to: (i) implementation of fugitive dust control measures in accordance with South Coast Air Quality Management District Rule 403, (ii) use of diesel emitting construction equipment with diesel particulate filters having 85% removal efficiency based on California Air Resources Board verified technologies and (iii) a variety of air quality control measures required in construction contracts.

1.6 Alternatives Considered but Eliminated from Further Discussion

This section includes all alternatives that were considered during the project development process, but were eliminated from further consideration, and gives the reason for rejection.

Alternative 3: Lower Roadway Profile. This alternative would lower the existing I-5 corridor at all overcrossing structures in order to allow for a vertical clearance of 16’-6’’.

This alternative was rejected because of the high cost of construction. This alternative would also cause a greater impact to traffic along the I-5 corridor during construction.

1.7 Transportation System Management (TSM) and Transportation Demand Management (TDM) Alternatives

Transportation Demand Management (TDM) focuses on regional means of reducing the number of vehicle trips and vehicle miles traveled as well as increasing vehicle occupancy. It facilitates higher vehicle occupancy or reduces traffic congestion by expanding the traveler's transportation options in terms of travel method, travel time, travel route, travel costs, and the quality and convenience of the travel experience. A typical activity would be providing funds to regional agencies that are actively promoting ridesharing, maintaining rideshare databases, and providing limited rideshare services to employers and individuals. Transportation System Management (TSM) strategies consist of actions that would increase the efficiency of existing facilities by increasing the number of through trips a facility can carry without increasing the number of through lanes. TSM and TDM alternatives were not considered and discussed as part of this project because they do not address the project's purpose and need.

1.8 Permits and Approvals Needed

The following permits, reviews, and approvals would be required for project construction

Table 1: Permits and Approvals

Agency	Permit/Approval
California Department of Fish and Wildlife	1602 Lake and Streambed Alteration Agreement
California Regional Water Quality Control Board	Section 401 Water Quality Certification
United States Army Corps of Engineers	Section 404 Nationwide Permit and Section 408 Permit

Chapter 2 - Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation Measures

Chapter 2 describes the existing affected environment for the study area. The affected environment is the base environmental condition on which environmental effects of the Build Alternatives are evaluated in this Initial Study/Environmental Assessment (IS/EA). The sections in Chapter 2 include the regulatory setting applicable to the environmental topic, the methodology of impact analysis, a description of the affected environment, environmental effects resulting from the Build and No Build alternatives, and measures to avoid, minimize, or mitigate adverse impacts of the Build Alternatives.

As part of the scoping and environmental analysis carried out for the project, the following environmental issues were considered but no adverse impacts were identified. As a result, there is no further discussion about these issues in this document.

Coastal Zone – There will be no effect on coastal resources because the project is not located within the coastal zone.

Wild and Scenic Rivers – There will be no effect on wild and scenic river resources because the project is not located within any wild and scenic river.

Farmland/Timberlands – There will be no effect on farmland and timberlands resources because the project is not located within or adjacent to farmland and timberland.

Hydrology and Floodplain – There will be no impacts related to hydrology and floodplain because the project is not located within a 100-year base floodplain.

Noise – This project does not qualify as a Type I project as defined in 23 Code of Federal Regulations (CFR) 772. Therefore, a noise study is not required or prepared as part of this project. Potential noise impacts related to short-term construction activities will be minimized through Caltrans Standard Specifications and Best Management Practices.

Paleontology – The project is not within a geologically sensitive area for paleontology. There will be no effect on paleontological resources because paleontological locality records and literature searches found that no paleontological resources have been recorded within the boundaries of the Project area.

2.1 Human Environment

2.1.1 Land Use and Planning

The forthcoming discussion presents existing and future land use in the project study area, the proposed project's consistency with State, regional, and local plans and program, and the impact the proposed project may have on land use and planning.

Affected Environment

General plan information for Castaic area, an unincorporated area in Los Angeles County, is maintained by the Santa Clarita Valley Area Plan. General plans for the neighborhood of Sun Valley, located in the City of Los Angeles, is maintained under the guidelines of the Sun Valley – La Tuna Canyon Community Plan. General Plan information for the City of Glendale is maintained by the City of Glendale General Plan. General plans provide a blueprint for the future development of an area and outlines the permitted uses and development densities for specific parcels. Developers use the general plan as a guidance on how to build on existing neighborhoods and maintain the existing qualities that distinguish an area.

The Santa Clarita Valley Area Plan, Sun Valley – La Tuna Canyon Community Plan, and the City of Glendale General Plan were reviewed to identify the land use goals and policies, and development trends that may be impacted by the project.

Santa Clarita Valley Area Plan: The Santa Clarita Valley Area Plan was updated on November 27, 2012. The Templin Highway project area is located in the Town of Castaic, an unincorporated area in Los Angeles County. The Santa Clarita Valley Area Plan guides the land use of the unincorporated areas of Los Angeles County in this specific region.[2]

The following land use categories are established in the Santa Clarita Valley Area Plan:

1. Rural
    - Rural Land (RL1): not to exceed maximum residential density of 1 dwelling unit per acre
    - Rural Land (RL2): not to exceed maximum residential density of 1 dwelling unit per 2 acres
    - Rural Land (RL5): not to exceed maximum residential density of 1 dwelling unit per 5 acres
    - Rural Land (RL10): not to exceed maximum residential density of 1 dwelling unit per 10 acres
    - Rural Land (RL20): not to exceed maximum residential density of 1 dwelling unit per 20 acres
2. Residential
    - Residential 2 (H2): not to exceed maximum residential density of two dwelling units per acre

[2] http://planning.lacounty.gov/assets/upl/project/ovov_2012-ch-02-landuse.pdf

- Residential 5 (H5): not to exceed maximum residential density of five dwelling units per acre
- Residential 18 (H18): not to exceed maximum residential density of 18 dwelling units per acre
- Residential 30 (H30): minimum residential density of 18 dwelling units per acre to a maximum residential density of 30 dwelling units per acre

3. Commercial
    - General Commercial (CG): maximum land use intensity of 1:1 FAR
        - Floor Area Ratio (FAR) represents the ratio between the total gross floor area of all buildings on a lot and the total area of that lot. For example, a lot with a FAR of 1:1 may have a single-story facility over the entire lot, a two-story facility covering half the lot, or any variation thereof.
    - Major Commercial (CM): maximum land use intensity of 2:1 FAR
4. Industrial
    - Light Industrial (IL): maximum land use intensity of 1:1 FAR
    - Industrial Office (IO): maximum land use intensity of 2:1 FAR
5. Public and Institutional
    - Community Serving (P): maximum land use intensity of 0.5:1 FAR
6. Transportation and Communication: areas for major transportation facilities
7. Open Space and Recreation
    - Parks and Recreation (OS-PR): public/private parks and golf courses
    - Open Space (OS-C): conservancy lands, nature preserves, wildlife habitats, limited agriculture, drainage or slope easements
    - Water (OS-W): lakes, rivers, and creeks
    - Bureau of Land Management (OS-BLM): land owned by U.S. Bureau of Land Management
    - National Forest (OS-NF): lands within the Angeles and Los Padres National Forests
8. Specific Plan: identifies lands in the planning area that are goverened by an adopted Specific Plan

Sun Valley – La Tuna Canyon Community Plan: The General Plan was adopted in Aug. 13, 1999 and serves to provide guidance to development in the northeast quadrant of the City of Los Angeles. The following elements are found in the Sun Valley – La Tuna Canyon Community Plan: Residential, Commercial, Industrial, Public and Institutional Land Use, Recreational and Park Facilities, Open Space, Schools, Libraries, Police Protection, Fire Protection, Transportation, and Historic and Cultural Resources.[3]
The following land use categories are established in the Sun Valley – La Tuna Canyon Community Plan:

1. Residential – Minimum Density: 0 to 1 dwelling units (du) per acre (ac)
2. Residential – Very Low I Density: 2 du/ac
3. Residential – Very Low II Density: 2 to 3 du/ac

[3] https://planning.lacity.org/complan/pdf/svycptxt.pdf

4. Residential – Low Density: 4 to 12 du/ac
5. Residential – Low Medium I Density: 10 to 17 du/ac
6. Residential – Low Medium II Density: 18 to 29 du/ac
7. Residential – Medium Density: 30 to 55 du/ac
8. Commercial Neighborhood Districts – Maximum height limit of three stories
9. Commercial Limited – Maximum height limit of three stories
10. Commercial General – Maximum height limit of three stories
11. Commercial Community Centers – Maximum height limit of six stories
12. Industrial Commercial
13. Industrial Limited
14. Industrial Light
15. Industrial Heavy
16. Open Space
17. Public Facilities
18. Parking Buffer

City of Glendale General Plan: The City of Glendale General Plan was revised in 1986 and since then, various amendments have been made to the plan. The General Plan takes into consideration current and future land use requirements, economic feasibility, environmental impacts, and implementation techniques in preparing guidance policies that provide a roadmap for future development in the city.[4]

The following land use categories are established in the City of Glendale General Plan:

1. Residential
    - Very Low Density/Open Space – 1 to 3 dwelling units (du) per acre (ac)
    - Low Density – 1 to 8 du/ac
    - Moderate Density – 8 to 25 du/ac
    - Medium Density – 25 to 35 du/ac
    - High Density – 35 to 60 du/ac

2. Commercial
    - Neighborhood Centers – Maximum height limit of 25 feet
    - Community Services/Centers – Maximum height limit of 35 to 90 feet and 3 to 6 stories depending on District
    - Regional Centers – Centers featuring goods and services that have wide appeal and drawing power including major department stores
3. Industrial – Light manufacturing, assembly, and wholesale/warehousing facilities and activities
4. Recreation/ Open Space – major public/semi-public properties in the City including Verdugo Mountains and San Rafael Hills, parks, golf courses, etc.

[4] https://www.glendaleca.gov/home/showdocument?id=27328

2.1.1.1 Existing and Future Land Use

The study areas and their respective census tracts include portions of the Castaic area in unincorporated Los Angeles County, Sun Valley, and the City of Glendale. Castaic area is characterized by its bountiful forest lands and open space, with pockets of development sprouting up at various sites along the transit corridor.[5] The neighborhood of Sun Valley is embedded within a cluster of single-family dwelling units, industrial factories, and commercial businesses.[6] The City of Glendale is bounded by Burbank, Pasadena, North Hollywood, La Crescenta, and Downtown Los Angeles.[7] It is characterized by its urban character—commercial car dealerships, large shopping centers, and mixed-use/residential dwelling units within the center of the valley.

Los Angeles County Unincorporated Area. Los Angeles County unincorporated areas make up about 65 percent of Los Angeles County.[8] The Castaic area is an unincorporated area in Los Angeles County and is governed by the Santa Clarita Valley Area Plan. The Area Plan is the result of a cooperative effort between Santa Clarita City Council and the Los Angeles County Board of Supervisors and aims to coordinate land uses, preserve natural resources, and manage the pace of development. The entire planning area encompasses over 480 square miles of footage, of which 432 square miles are in the County unincorporated area. Approximately 50 percent of this planning area is within the United States Forest Service boundaries.[9]

City of Los Angeles, neighborhood of Sun Valley. The neighborhood of Sun Valley is in Los Angeles City; however, the Sun Valley – La Tuna Canyon Community Plan guides the development of this specific neighborhood. The Community Plan covers 10,618 acres of land, of which approximately 46 percent are residential dwelling units (4,852 acres), 22 percent are open space (2,336 acres), and 19 percent are industrial space (2,017.5 acres). The community also incorporates the highest concentration of mineral processing facilities in Los Angeles, including rock/gravel mining operations and cement/concrete processing. Early houses were constructed in Craftsman style, and local stones were used as building material. The Community Plan emphasizes the need to preserve low-density single-family neighborhoods and protection from incompatible land use encroachments. It also identifies the commercial and industrial sectors as important establishments that maintain the economic and physical vitality of the community.[10] Table 2 summarizes the land use designations for the neighborhood of Sun Valley.

[5] http://planning.lacounty.gov/assets/upl/project/ovov_2012-ch_00-01_intro.pdf
[6] https://planning.lacity.org/complan/pdf/svycptxt.pdf
[7] https://www.glendaleca.gov/home/showdocument?id=25114
[8] http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan-ch4.pdf
[9] http://planning.lacounty.gov/assets/upl/project/ovov_2012-ch_00-01_intro.pdf
[10] https://planning.lacity.org/complan/pdf/svycptxt.pdf

Table 2: Land Use Designations for the Neighborhood of Sun Valley

Land Use Category	Acres	Percentage
Residential	4,852	45.7%
Open Space	2,336	22%
Industrial	2,017.5	19%
Other	1,412.2	13.3%
Total Neighborhood Acreage	10,618	100%

Note: Acres were calculated based on percentages and numbers available in Community Plan. Numbers may not add due to rounding.

City of Glendale. The City of Glendale encompasses approximately 19,581 acres of land.[11] The City of Glendale General Plan is responsible for laying out the blueprint for land use designations and future developments in the area. The City of Glendale General Plan reinforces managed growth consistent with the community's needs, preservation of single-family neighborhoods, and conservation/recreational uses of open space. Approximately 24.5 percent of the land is used for residential (6,053.2 acres), 2.8 percent for commercial (535.4 acres), 1.5 percent for industrial (294.9 acres), 12.8 percent for public/semi-public facilities (2,496 acres), 28.5 percent for open space/conservation (5,681.5 acres), and 22.6 percent for other uses (4,407.9 acres). Table 3 summarizes the land use capacities for the City of Glendale.

Table 3: Land Use Designations for the City of Glendale

Land Use Category	Acres	Percentage
Residential	6,053.2	31.1%
Commercial	535.4	2.8%
Industrial	294.9	1.5%
Public and Semi-Public	2,496	12.8%
Conservation/Open Space	5,681.5	28.5%
Other	4,407.9	22.6%
Total City Acreage	19,468.9	100%

Note: Percentages May Not Add Due to Rounding

Land use patterns within the study area reflect a mixture of residential, open space, and commercial/industrial use of space. The land use assessment was performed through reviewing an array of aerial photographs, maps, and previously written environmental documents. City and County planning documents were also used to gather relevant information regarding zoning and land use designations in affected areas. Windshield surveys were also conducted to gain a better understanding of the communities in the affected areas. The existing land uses in the study area are shown in Figure 3, 4, and 5.

[11] https://www.glendaleca.gov/home/showdocument?id=27328

County of Los Angeles. Figure 3 displays the land use designations of the Santa Clarita Valley Area Plan, which guides the development for unincorporated areas of Los Angeles County within the study area.

Designated land use patterns in the Santa Clarita Valley Area Plan reflects primarily open space forests, open space waters, rural agricultural lands, and sparse residential villages. The majority of land use in this area is under the jurisdiction of the U.S. Forest Service. The Santa Felicia Significant Ecological Area (SEA) lies within the west tract of the Castaic area study region.[12]

[12] http://planning.lacounty.gov/assets/upl/project/ovov_2012-ch_a1.pdf

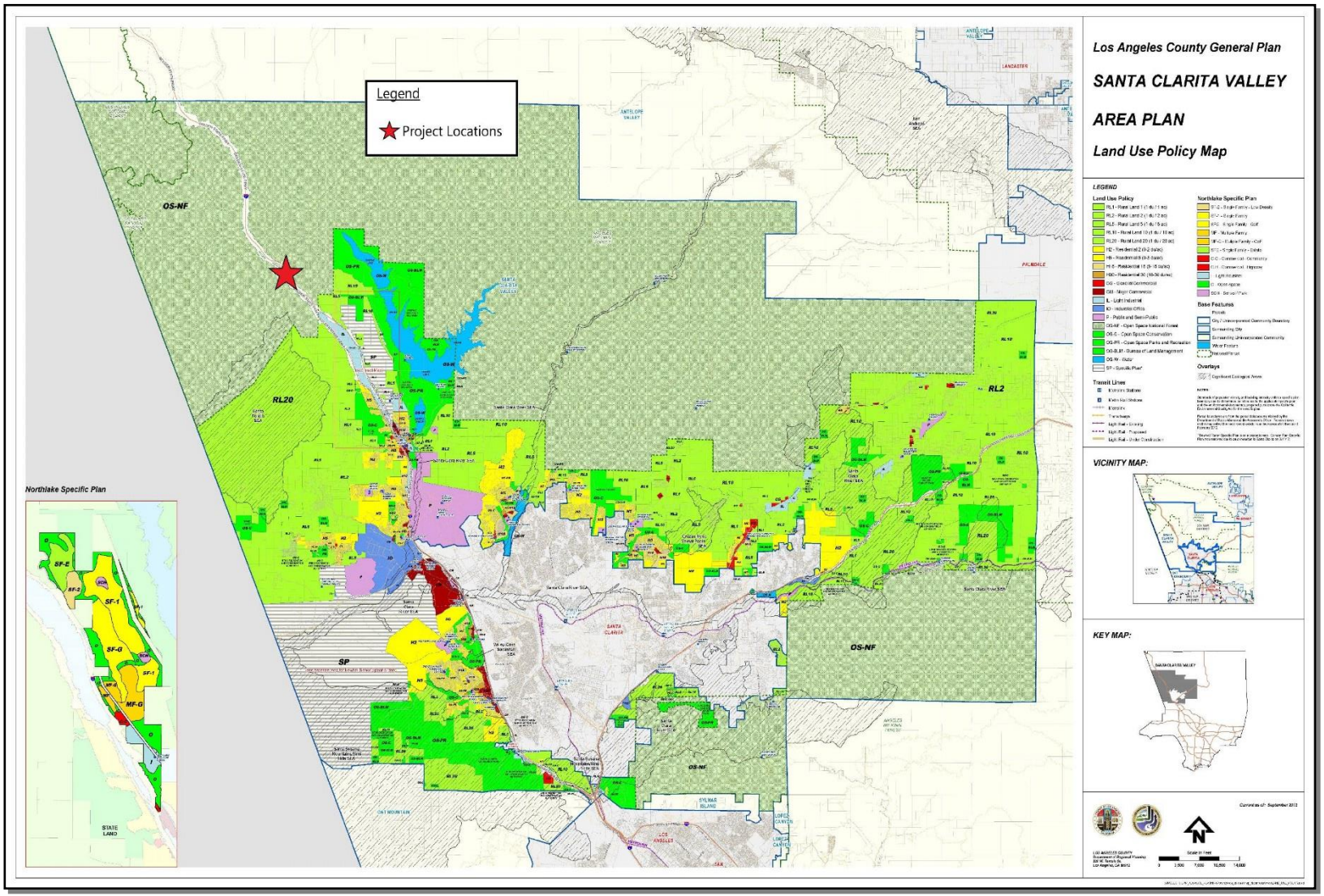

Figure 3: Santa Clarita Valley Land Use

City of Los Angeles. Figure 4 displays the land use designations of the Sun Valley – La Tuna Canyon Community Plan, which guides development in the Sun Valley neighborhood of Los Angeles City.

Land use patterns in the neighborhood reflect primarily low density residential dwelling units and commercial/industrial facilities in the center. Minimum development and open space is located in the eastern end of the neighborhood. The Verdugo Mountains, managed by California Department of Parks and Recreations, bounds the neighborhood to the east.

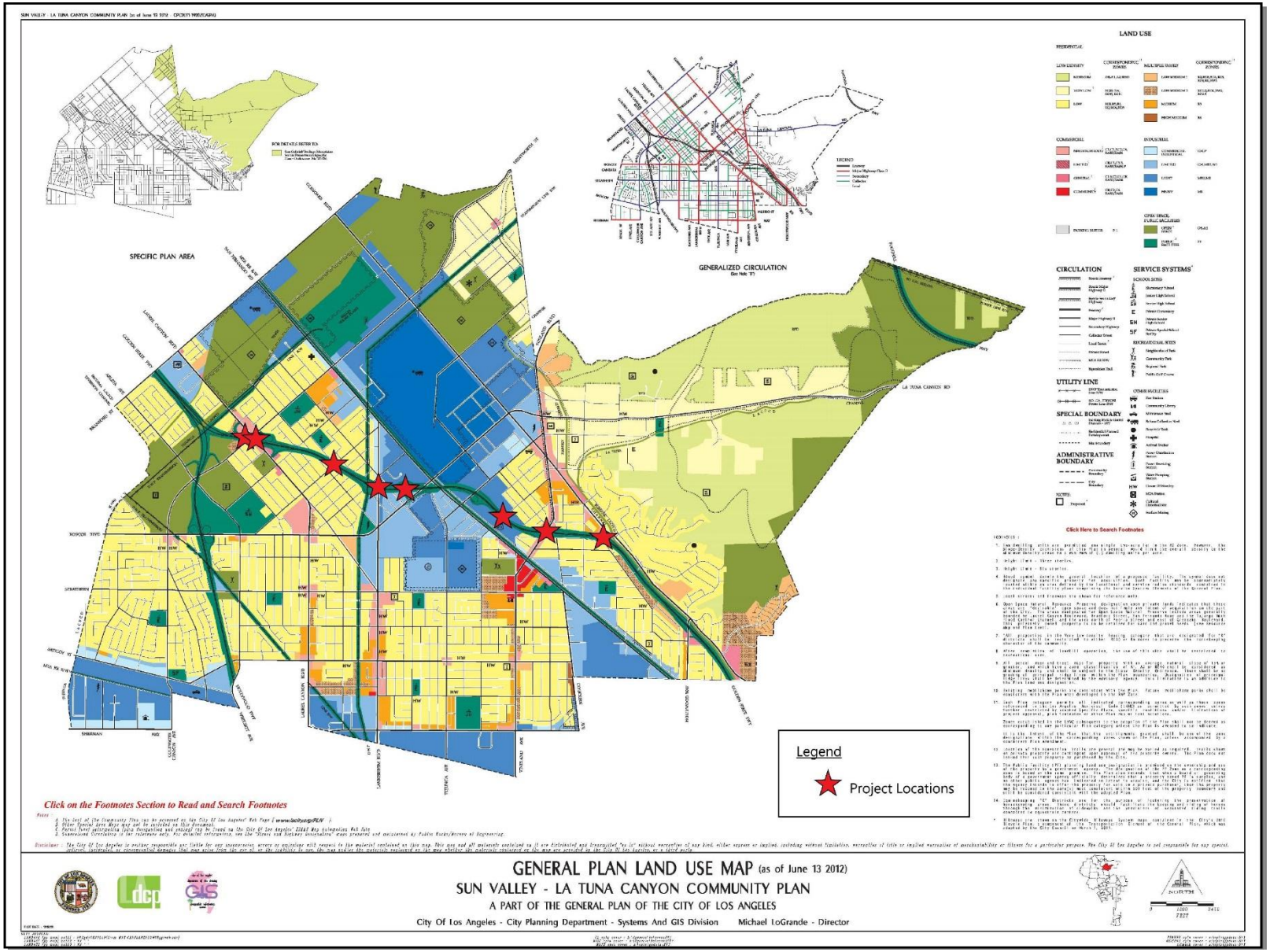

Figure 4: Sun Valley Land Use

City of Glendale. Figure 5 displays the land use designations of the City of Glendale General Plan.

The City of Glendale land use is dedicated to a mix of residential, commercial, and recreational/conservation uses. High density residential units are clustered around the Downtown Specific Plan area, with medium and low density residential zones in the surrounding area. Dedicated open space, most notably the Verdugo Mountains and San Rafael Hills, exists within the north and the east of the city. Industrial facilities, such as Dreamworks, Disney, and ABC, fall on the entirety of the southwestern boundary.

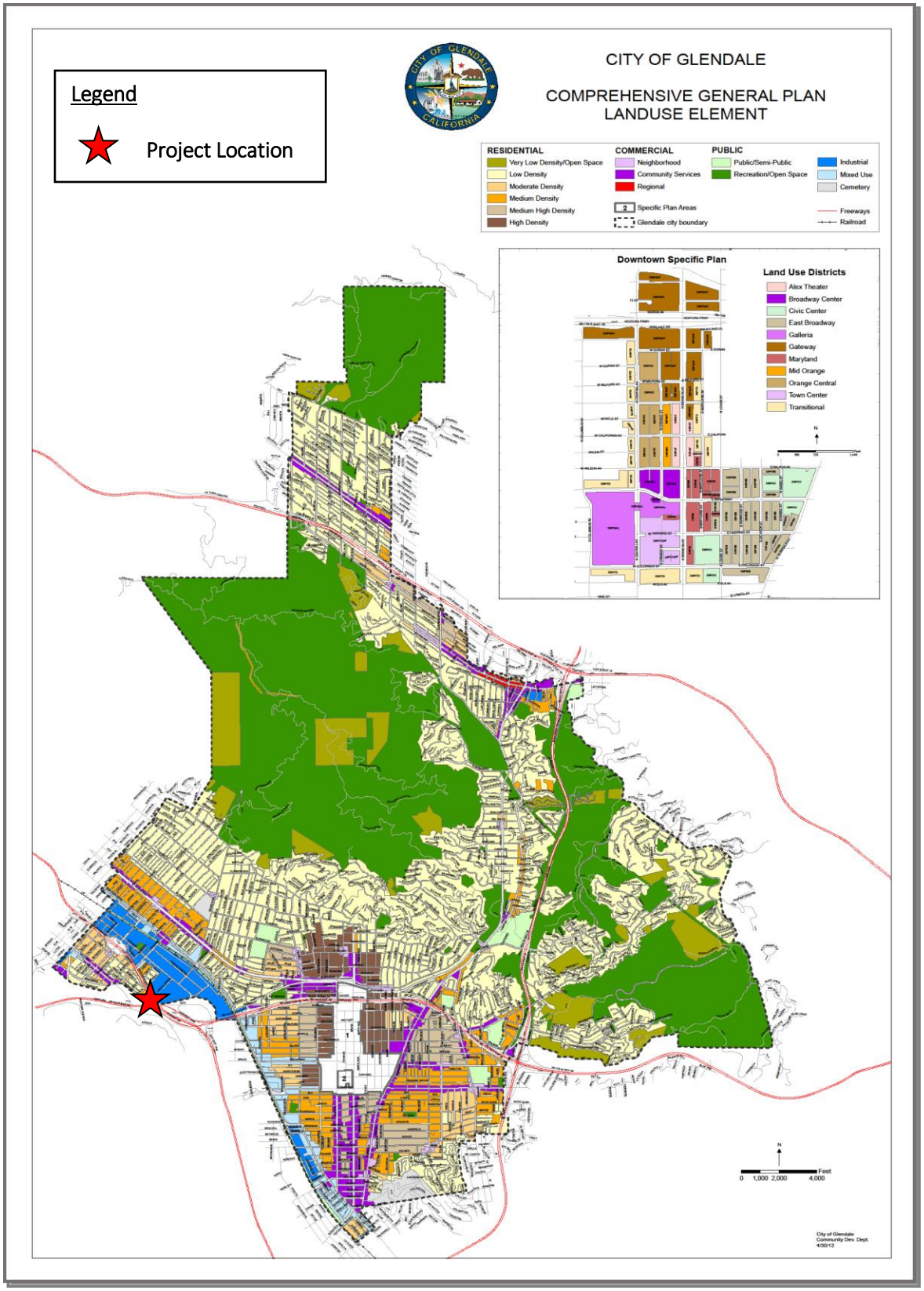

Figure 5: City of Glendale Land Use Development Trends Near the Study Area

Development Trends Near the Study Area

Castaic area in unincorporated Los Angeles County, Sun Valley neighborhood of Los Angeles City, and the City of Glendale all place a great emphasis in the importance of preserving current features of the land, with anticipation for little to moderate growth. Los Angeles County unincorporated area, Castaic, aims to preserve and prolong the beauty of its natural terrain and rural landscape. The Los Angeles City neighborhood of Sun Valley identifies single-family neighborhoods and industrial facilities as important factors to economic and physical vitality of the community. The City of Glendale recognizes the importance of its commercial/industrial facilities, single-family neighborhoods, and public/recreational facilities in community design and appeal. Uses of differential parcels are restricted to the range of facilities attainable for the land use category.

New construction within the project area is subject to the plans and policies set out in the regional, state and local plans addressed in Section 2.1.1.2, unless stated otherwise in Specific Plans in the area. The plans coordinate natural resource preservation with managed growth and minimizes the impacts of growth on the environment. Table 4 summarizes the upcoming development projects relevant to the impacted project area.[13, 14, 15]

Table 4: Development Trends in the Study Area

No.	Project Name Jurisdiction/ Location	Proposed Uses	Status
1	1900 Riverside Dr. Glendale, CA 91201	New 21-unit multi-family townhouse style complex.	Approved
2	8845 Sepulveda Blvd North Hills, CA 91343	New 364 multi-family apartment complex.	Approved
3	The ICON at Panorama City 14665 Roscoe Blvd Panorama City, CA 91402	423 units of multifamily apartments. 200,000 square feet of commercial floor area	Proposed
4	NoHo West 6150 Laurel Canyon Blvd North Hollywood, CA 91606	742 multifamily apartments 500,000 square feet of office space 190,000 square feet retail	Under Construction
5	North Hollywood Metro Station 8141 N Van Nuys Blvd W Van Nuys, CA 91402	1500 multifamily apartment units. 150,000 square feet retail space 450,000 square feet office space.	Proposed

[13] http://glendalegeo.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=2b58677f8b2249fbadc0d2f8e6d3eec9
[14] https://ladcp.maps.arcgis.com/apps/MapJournal/index.html?appid=b06f97ccf94741fdaad27443013eead1
[15] https://la.curbed.com/

6	Veteran's Community 9041 N Laurel Canyon Blvd Sun Valley, CA 91352	96-Unit Affordable Housing community	Under Construction
7	Line 204 Studio 11100-11070 W Peoria St. Sun Valley, CA 91352	240,000 Square Feet Studio Complex set to employ 800 individuals	Approved
8	Newhall Ranch 26835 Pico Canyon Rd, Stevenson Ranch, CA 91381	21,500 home large scale master-planned community.	Under Construction

2.1.1.2 Consistency with Relevant State, Regional, and Local Plans and Programs

The following are relevant State, regional, and local plans and programs:

State Plans

California Transportation Plan 2040 - California Transportation Plan 2040 (CTP 2040) outlines goals and policies to achieve a safe, sustainable, universally accessible, and globally competitive transportation system that provides reliable and efficient mobility for people, goods, and services. CTP 2040 provides the framework and guiding principles for all transportation decisions made in California by both public and private entities to develop and implement transportation policies, programs, and major statewide investments on transportation, the economy, and the environment that supports a sustainable California. The proposed project is consistent with the following CTP 2040 goals and policies:

Goal 1 - Improve multimodal mobility and accessibility for all people.
Policy 3 - Provide viable and equitable multimodal choices including active transportation.

Goal 2 - Preserve multimodal transportation system.
Policy 2 - Evaluate multimodal life-cycle costs in project decision-making.

Goal 3 - Support a vibrant economy.
Policy 1 - Support transportation choices to enhance economic activity.
Policy 2 - Enhance freight mobility, reliability, and global competitiveness.

Goal 5 – Foster livable and healthy communities and promote social equity.
Policy 2 – Integrate multimodal transportation and land use development.

Goal 6 - Practice environmental stewardship.
Policy 1 - Integrate environmental considerations in all stages of planning and implementation.
Policy 2 - Conserve and enhance natural, agricultural, and cultural resources.

California Freight Mobility Plan 2014- The California Freight Mobility Plan 2014 (CFMP 2014) is a statewide, long-range plan for California's freight transportation system. The CFMP 2014 was developed by the California State Transportation Agency (CalSTA) and the California Department of Transportation (Caltrans) in consultation with the California Freight Advisory Committee (CFAC). As the national gateway for international trade and domestic commerce, California enhances economic competitiveness by collaboratively developing and operating an integrated, multimodal freight transportation system that provides safe, sustainable, freight mobility. The proposed project is consistent with the following CFMP 2014 goals and objectives:

Goal 1 - Improve the contribution of the California freight transportation system to economic efficiency, productivity, and competitiveness.

Objective 2 - Invest in freight projects that enhance economic activity, freight mobility, reliability, and global competitiveness.

Goal 2 - Improve the safety, security, and resilience of the freight transportation system.

Objective 1 - Reduces rates of incidents, collisions, fatalities, and serious injuries associated with freight movements.

Goal 4 - Avoid and reduce adverse environmental and community impacts of the freight transportation system.

Objective 1 - Integrate environmental, health, and social equity considerations in all stages of freight planning and implementation, including considering impacts and mitigation relative to the context of the project location.

Objective 3 - Avoid and reduce air and water pollution, green house (GHG) emissions, and other negative impacts associated with freight transportation by transitioning to a lower-carbon and more efficient freight transportation system.

Goal 5 - Reduce costs to users by minimizing congestion on the freight transportation system.

Objective 1 - Develop, manage, and operate an efficient, integrated freight system.

<u>Regional Plans</u>

2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS) The Final 2016 RTP/SCS is a long-range plan that balances future mobility and housing needs with economic, environmental, and public health goals for smart and sustainable growth. Prepared with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders, the 2016 RCP/SCS is a living document that is federally mandated to be updated every four years. Its regional plans and strategies provide for the efficient movement of people, goods and information thereby enhancing economic growth and international trade while improving the environment and quality of life. The proposed project is consistent with the following 2016 RTP/SCS goals:

- Maximize mobility and accessibility for all people and goods in the region.
- Ensure travel safety and reliability for all people and goods in the region.
- Preserve and ensure a sustainable regional transportation system.
- Maximize the productivity of the regional transportation system
- Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).

Local Plans

Los Angeles County General Plan - The Los Angeles County General Plan, adopted on October 6, 2015, serves as the guide for long-term physical development and conservation through a framework of goals, policies, and implementation programs. With a strong commitment to ensuring sufficient services and infrastructure, it provides a general policy framework for community-based plans and incorporates several planning documents, including strategic plans and master plans. It also provides the policy framework for how and where the unincorporated areas will grow through the year 2035, fostering healthy, livable, and sustainable communities. Broken down into nine elements, the proposed project is consistent with the following Los Angeles County General Plan goals and policies:

Mobility (M) Element

Goal M 1 - Street designs that incorporate the needs of all users.

Policy M 1.1 - Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, children, and persons with disabilities when requiring or planning for new, or retrofitting existing, transportation corridors/networks whenever appropriate and feasible.

Policy M 1.2 - Ensure that streets are safe for sensitive users, such as seniors and children.

Goal M 2 - Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use.

Policy M 2.1 - Provide transportation corridors/networks that accommodate pedestrians, equestrians and bicyclists, and reduce motor vehicle accidents through a context-sensitive process that addresses the unique characteristics of urban, suburban, and rural communities whenever appropriate and feasible.

Policy M 2.4 - Ensure a comfortable walking environment for pedestrians by implementing the following, whenever appropriate and feasible:

- Designs that limit dead-end streets and dead-end sidewalks.
- Adequate lighting on pedestrian paths, particularly around building entrances and exits, and transit stops.

- Designs for curb ramps, which are pedestrian friendly and compliant with the American Disability Act (ADA).
- Perpendicular curb ramps at locations where it is feasible.
- Pedestrian walking speed based on the latest standard for signal timing. Slower speeds should be used when appropriate (i.e., near senior housing, rehabilitation centers, etc.)
- Approved devices to extend the pedestrian clearance times at signalized intersections.
- Accessible Pedestrian Signals (APS) at signalized intersections.
- Pedestrian crossings at signalized intersections without double or triple left or right turn lanes.
- Pedestrian signal heads, countdown pedestrian heads, pedestrian phasing and leading pedestrian intervals at signalized intersections.
- Exclusive pedestrian phases (pedestrian scrambles) where turning volume conflicts with very high pedestrian volumes.
- Advance stop lines at signalized intersections.
- Pedestrian Hybrid Beacons.
- Medians or crossing islands to divide long crossings.
- High visibility crosswalks.
- Pedestrian signage.
- Advanced yield lines for uncontrolled crosswalks.
- Rectangular Rapid Flashing Beacon or other similar approved technology at locations of high pedestrian traffic.
- Safe and convenient crossing locations at transit stations and transit stops located at safe intersections.

Policy M 2.8 - Connect trails and pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations.

Goal M 4 - An efficient multimodal transportation system that serves the needs of all residents.

Policy M 4.1 - Expand transportation options that reduce automobile dependence.

Policy M 4.9 - Ensure the participation of all potentially affected communities in the transportation planning and decision-making process.

Policy M 4.10 - Support the linkage of regional and community-level transportation systems, including multimodal networks.

Goal M 6 - The safe and efficient movement of goods.

Policy M 6.4 - Minimize noise and other impacts of goods movement, truck traffic, deliveries, and staging in residential and mixed-use neighborhoods.

Policy M 6.5 - Support infrastructure improvements and the use of emerging technologies that facilitate the clearance, timely movement, and security of trade.

Noise (N) Element

Goal N 1 - The reduction of excessive noise impacts.

Policy N 1.8 - Minimize noise impacts to pedestrians and transit-riders in the design of transportation facilities and mobility networks.

Los Angeles County Bicycle Master Plan – The Los Angeles County Bicycle Master Plan, adopted on March 13, 2012, is a sub-element of the Transportation Element of the County's General Plan. As an opted regional planning document, the Bicycle Master Plan guides implementing proposed bikeways as well as various bicycle-friendly policies and programs to promote bicycle ridership amongst users of all ages and skill sets within the County. The proposed project is consistent with the following Los Angeles County Bicycle Master Plan goal and policies:

Goal 1 – Bikeway System: Expanded, improved, and interconnected system of county bikeways and bikeway support facilities to provide a viable transportation alternative for all levels of bicycling abilities, particularly for trips of less than 5 miles.

Policy IA 1.1.3 – Implement bikeways proposed in this Plan when reconstructing or widening existing streets.

Policy IA 1.1.4 – Implement bikeways proposed in this Plan when completing road rehabilitation and preservation projects.

City of Los Angeles General Plan – The General Plan is the fundamental policy document of the City of Los Angeles. It defines the framework by which the City's physical and economic resources are to be managed and utilized over time. Decisions by the City with regard to the use of its land, design and character of buildings and open spaces, conservation of existing and provision of new housing, provision of supporting infrastructure and public and human services, protection of environmental resources, protection of residents from natural and man-caused hazards are guided by the plan. Every jurisdiction's General Plan includes seven required "Elements" that are mandated by State law; local governments may adopt additional optional Elements to address local priorities and planning goals. The project is consistent with the following City of Los Angeles General Plan goals, objectives, and policies:

Framework Element

Goal 5A - A livable City for existing and future residents and one that is attractive to future investment. A City of interconnected, diverse neighborhoods that builds on the strengths of those neighborhoods and functions at both the neighborhood and citywide scales.

Objective 5.5 - Enhance the livability of all neighborhoods by upgrading the quality of development and improving the quality of the public realm.

> **Policy 5.5.4 -** Determine the appropriate urban design elements at the neighborhood level, such as sidewalk width and materials, street lights and trees, bus shelters and benches, and other street furniture.

Goal 7C - A City with thriving and expanding businesses.

Objective 7.3 - Maintain and enhance the existing businesses in the City.

> **Policy 7.3.5 -** Improve the movement of goods and workers to industrial areas.

Air Quality Element

Goal 4 - Minimal impact of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.

Objective 4.2 - It is the objective of the City of Los Angeles to reduce vehicle trips and vehicle miles traveled associated with land use patterns.

> **Policy 4.2.4 -** Require that air quality impacts be a consideration in the review and approval of all discretionary projects.

Mobility Element

Objective 1 - Vision Zero: Decrease transportation related fatality to zero by 2035.

> **Policy 1.6 -** Multi-Modal Detour Facilities: Design detour facilities to provide safe passage for all modes of travel during times of construction.
>
> **Policy 1.8 -** Goods Movement Safety: Ensure that the goods movement sector is integrated with the rest of the transportation system in such a way that does not endanger the health and safety of residents and other roadway users.

Objective 2 - Bring all City-owned streets, tunnels, sidewalks, and bridges to good condition by 2035.

Policy 2.3 - Pedestrian Infrastructure: Recognize walking as a component of every trip, and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.

Policy 2.6 - Bicycle Networks: Provide safe, convenient, and comfortable local and regional bicycling facilities for people of all types and abilities.

Policy 2.8 - Goods Movement: Implement projects that would provide regionally significant transportation improvements for goods movement.

Policy 2.12 - Walkway and Bikeway Accommodations: Design for pedestrian and bicycle travel when rehabilitating or installing a new bridge, tunnel, or exclusive transit right-of-way.

Policy 2.13 - Highway Preservation and Enhancement: Support the preservation and enhancement of the state highways consistent with the RTP/SCS and the goals/policies of the General Plan.

Objective 3 - Install pedestrian access curb ramps at 100% of all intersections by 2035.

Policy 3.1 - Access for All: Recognize all modes of travel, including pedestrian, bicycle, transit, and vehicular modes - including goods movement - as integral components of the City's transportation system.

Policy 3.2 - People with Disabilities: Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.

Objective 4 - Coordinate communication with regional transportation agencies and neighboring jurisdictions.

Policy 4.11 - Cohesive Regional Mobility: Communicate and partner with the Southern California Association of Governments (SCAG), Los Angeles County Metropolitan Transportation Authority (Metro), and adjacent cities and local transit operators to plan and operate a cohesive regional mobility system.

City of Los Angeles Bicycle Plan - In March 2011, the Los Angeles City Council adopted the 2010 Bicycle Plan. It designated backbone, neighborhood, and green bikeway networks for the entire city and in total proposed 1,684 miles of bike facilities in Los Angeles. The 2010 Bicycle Plan has been adopted into the City's Mobility Plan 2035. The project is consistent with the following City of Los Angeles Bicycle Plan goals, objectives, and policies:

Goal 2 - Make every street a safe place to ride a bicycle.

Objective 2.3 - Design and maintain all streets so that they incorporate Complete Street standards.

Policy 2.3.1 - Upgrade bridges, intersections, freeway ramps, tunnels, and grade separations that impede safe and convenient bicycle passage.

Policy 2.3.4 - Maintain and facilitate best bikeway design practices.

Goal 3 - Make the City of Los Angeles a bicycle-friendly community.

Objective 3.3 - Provide a safe and comfortable Class I Bikeway and park experience for all users.

Policy 3.3.1 - Provide a connected network of Class I Bikeways facilities linking bicyclists to recreational, transportation, and community facilities.

City of Glendale General Plan - California State law requires each city to prepare a Comprehensive General Plan to address community policies and objectives for growth and development. The City of Glendale's General Plan establishes the policies for use and protection of resources to meet community needs. Glendale's General Plan contains eleven sections. These sections, called elements, are published separately. They address the seven topics (circulation, conservation, housing, land use, noise, open space, and safety) mandated by state law and three additional topics (community facilities, historic preservation, and recreation) recommended, but not required by state law. The proposed project is consistent with the following City of Glendale General Plan goals and policies:

Recreation Element

Goal 1 - To have a variety of recreational opportunities and programs for all residents.

Objective 7 - The City shall provide access to all recreational facilities for all residents beginning immediately.

Open Space and Conservation Element

Goal 6 - Preserve and protect valuable water and mineral resources.

Objective 1 - Preserve and protect important natural stream channels, particularly those identified as blue-line streams by the California Department of Fish and Game.

Los Angeles County Santa Clarita Valley Area Plan - The Los Angeles County Santa Clarita Valley Area Plan, adopted by the Board of Supervisors in 2012, provides goals, objectives, and policies to guide the land use and pace of development in the incorporated portions of the Santa Clarita Valley. The Area Plan is a component of the "One Valley One Vision" planning effort, a joint agreement with the City of Santa Clarita to implement a unified vision for the development of the entire Santa Clarita Valley through incorporating the voices of community residents who work and live in the Santa Clarita Valley. The following goals, policies, and objectives are consistent with the project scope:

Land Use Element

Goal LU-7 - Environmentally Responsible Development: Environmentally responsible development through site planning, building design, waste reduction and responsible stewardship of resources.

Objective LU-7.3 - Protect surface and ground water quality through design of development sites and drainage improvements.

Policy LU-7.3.2 - Maintain stormwater runoff onsite by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas and use of drainage areas as design elements, where feasible and reasonable.

Policy LU-7.3.4 - Implement best management practices for erosion control throughout the construction and development process.

Circulation Element

Goal C-1 - Multi-Modal Circulation Network: An inter-connected network of circulation facilities that integrates all travel modes, provides viable alternatives to automobile use, and conforms with regional plans.

Objective C-1.3 - Ensure conformance of the Circulation Plan with regional transportation plans.

Policy C-1.3.4 - Coordinate circulation planning with the Regional Transportation Plan prepared by the Southern California Association of Governments (SCAG), to ensure consistency of planned improvements with regional needs.

Policy C-1.3.5 - Continue coordinating with Caltrans on circulation and land use decisions that may affect Interstate 5, State Route 14, and State Route 126, and support programs to increase capacity and improve operations on these highways.

Policy C-1.3.7 - Support the Golden State Gateway Coalition in its advocacy efforts to improve the Interstate 5 corridor, recognizing that the corridor facilitates regional and international travel that impacts the Santa Clarita Valley.

Goal C-2 - Street and Highway System: A unified and well-maintained network of streets and highways which provides safe and efficient movement of people and goods between neighborhoods, districts, and regional centers, while maintaining community character.

Objective C-2.4 - Allow trucks to utilize only major and secondary highways as through routes, to minimize impacts of truck traffic on surface streets and residential neighborhoods

Policy C-2.4.1 - Require design of pavement sections on major and secondary highways to account for truck traffic to prevent excessive pavement deterioration from truck use

Conservation Element

Goal CO-3 - Biological Resources Conservation of biological resources and ecosystems, including sensitive habitats and species.

Objective CO-3.4 - Ensure that development in the Santa Clarita Valley does not adversely impact habitat within the adjacent National Forest lands.

Policy CO-3.4.1 - Coordinate with the United States Forest Service on discretionary development projects that may have impacts on the National Forest.

Noise Element

Goal N-3 - Residential Neighborhoods Protect residential neighborhoods from excessive noise.

Objective N-3.1 - Prevent and mitigate significant noise levels in residential neighborhoods.

Policy N-3.1.4 - Require that those responsible for construction activities develop techniques to mitigate or minimize the noise impacts on residences and adopt standards that regulate noise from construction activities that occur in or near residential neighborhoods.

Sun Valley – La Tuna Canyon Community Plan - The Sun Valley – La Tuna Canyon Community Plan, last updated September 7, 2016, is intended to promote an arrangement of land

uses, streets, and services which will encourage and contribute to the economic, social and physical health, safety, welfare and convenience of the people who live and work in the community. The plan is also intended to guide development in order to create a healthful and pleasant environment. Goals, objectives, policies and programs are created to meet the existing and future needs and desires of the community. The plan is intended to coordinate development among the various parts of the City of Los Angeles and adjacent municipalities in a fashion both beneficial and desirable to the residents of the community. The proposed project is consistent with the following Sun Valley Community Plan goals and policies:

Goal 4 – Adequate recreation and park facilities which meet the needs of the residents in the community.

Objective 4-1 - To conserve, maintain and better utilize existing recreation and park facilities which promote the recreational experience.

Policy 4-1.1 - Preserve and improve the existing recreational facilities and park space.

Goal 15 – A system of safe, efficient and attractive bicycle pedestrian and equestrian facilities.

Objective 15-1 - To promote an adequate system of safe bikeways for commuter, school and recreational use.

Policy 15-1.1 - Plan for and encourage funding and construction of bicycle facilities connecting residential neighborhoods to schools, open space areas and employment centers.

Sun Valley Streetscape Plan - The Sun Valley Streetscape Plan, approved by the City Planning Commission in 2001, serves as a blueprint for both public and private development projects in the community of Sun Valley. Designed specifically for the Community Design Overlay District in Sun Valley, the plan establishes the principles and standards for improvements in streetscape elements such as street lighting, infrastructure, signage, etc. in the public right-of-way. In conjunction with the Sun Valley Community Design Overlay District Plan, both plans serve to guide development toward a cohesive design concept that encourages community participation and revitalization in Sun Valley. This includes providing streetscape that enhances the safety and attractiveness of pathways to the Metrolink station. The project is consistent with the following goals, policies, and objectives of the Sun Valley Streetscape Plan:

Goal 2 - To promote safe, healthy, and attractive public spaces that encourage use by residents and visitors.

Principle 2 - Public safety is critical to the success of commercial districts. Public safety in this case refers not only to safety from criminal activity, but also creating an

environment in which pedestrian and automobile can safely coexist. Streetscape should include considerations of public safety.

Environmental Consequences

No-Build Alternative

There would be no impacts to adjacent land use or transportation networks involved in the No Build Alternative. However, the bridges involved in this project would remain in their current state, below 16'-6" vertical clearance with limited room for non-permitted vehicles. Therefore, the No Build Alternative would be inconsistent with state, regional, and local freight mobility goals, objectives, and policies aimed to improve the movement of goods, people, and services throughout the region.

Build Alternative

Consistency with State Plans – The Build Alternative proposes to raise the profile of eight bridges and reinforce the structure of two bridges along the I-5 Freight Corridor. Raising the profile of eight bridges will increase vertical clearance to 16'-6" and reinforcing the structure of two bridges will reduce load capacity restrictions.

Detour routes require an additional hour to four hours travel time for each truck trip, assuming no traffic congestion or other delays. The time required for the extra travel has a monetary cost for the drivers, equipment use, extra fuel consumed, delay in the delivery of goods, and facility damage to other facilities that are not constructed to Interstate pavement standards. The longer trips also generate greenhouse gas emissions and other pollutants and may create safety problems along the detour routes. Removing these impediments would increase the efficiency and connectivity of the I-5 Freight Corridor which is deemed critical to the movement of goods and services throughout the state.

As a result, the Build Alternative would be consistent with the California Transportation Plan 2040 (CTP 2040) goals and policies to achieve a safe, sustainable, universally accessible, and globally competitive transportation system that provides reliable and efficient mobility for people, goods, and services. Furthermore, by improving system conditions and performance, as well as reducing transportation costs on a priority freight corridor, the Build Alternative would be consistent with the goal of the CFMP 2014 to "improve the contribution of the California freight transportation system to economic efficiency, productivity, and competitiveness.

Consistency with Regional Plans – The purpose of the Build Alternative is to maximize freight efficiency, economic competitiveness, and productivity of the goods movement. The RTP/SCS specifically emphasizes the importance of efficiency in the movement of people and goods, economic growth and trade, and environmental progress. The construction of the Build Alternative will promote the continuous movement of trade throughout the I-5 Freight Corridor and maximize the productivity of trade. The proposed project will also decrease routine maintenance and improve local air quality, which aligns with RTP/SCS's goals of encouraging sustainable practices and protecting the environmental health of residents.

Consistency with Local Plans – The Build Alternative is consistent with the goals and policies

of the Los Angeles County, Los Angeles City, and Santa Clarita Valley General Plans. The local plans recognize the importance of multimodal mobility in improving the quality of a livable city. The plans specifically emphasize the use of other transit alternatives such as bicycle lanes to increase pedestrian traffic and create interconnected neighborhoods. The Build Alternative aims to construct bike lanes and develop an overcrossing that will support pedestrian and bicycle traffic across the freeway. This construction will enhance accessibility to community centers, transportation facilities, etc., which will increase walkability and livability of the neighborhood; thus, the project is consistent with the goals and objectives of the local plans.

Avoidance, Minimization, and/or Mitigation Measures

The Build Alternative is consistent with regional, county, city, and local plans; therefore, there are no avoidance, minimization, and/or mitigation measures involved in this alternative.

2.1.1.3 Parks and Recreational Facilities

This project will minimally affect facilities that are protected by the Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409). The Park Preservation Act prohibits local and state agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

Affected Environment

Figures 6 and 7 show the locations of parks and recreational facilities within the project's vicinity. The fourteen facilities shown in Table 5 are within a half mile from the project's locations.

Table 5: Parks and Recreational Facilities

Park	Address	Facility Features
Sheldon Arleta Park	12455 Wicks St, Sun Valley, CA 91352	Soccer Fields, Baseball Diamonds, Restrooms
Sheldon Skate Park	12511 Sheldon St, Sun Valley, CA 91352	Concrete Skating Facility, Restrooms
Fernangeles Recreation Center	8851 Laurel Canyon Blvd., Sun Valley, CA 91352	Baseball Diamond, Basketball Courts, Children's Play Area, Football Field, Outdoor Gym, Picnic Tables, Soccer Field, Horseshoe Pits, Kitchen, Stage, Classrooms, Gymnasium, Gymnastics Sand Pit, Kitchen Volleyball Court
Sun Valley Recreation Center	8133 Vineland Ave., Sun Valley, CA 91352	Baseball Diamond, Basketball Courts, Children's Play Area, Football Field, Picnic Tables, Soccer Field, Tennis Courts, Jogging Path, Kitchen, Pool with Slide, Multipurpose Room, Synthetic Turf Field
Bette Davis Picnic Area	1850 Riverside Dr., Glendale, CA 91201	Equestrian Trails, Bicycle Trails, Picnic Benches
Glendale Narrows Riverwalk	300 Paula Ave., Glendale, CA 91201	Bicycle Trails, Equestrian Facility, Bicycle Work Station, Benches, Picnic Tables
Griffith Park	4730 Crystal Springs Dr., Los Angeles, CA 90027	Children's Play Area, Picnic Tables, Restrooms, Soccer Field, Tennis Courts, Bike Path, Hiking Trail, Equestrian Trails, Merry-Go-Round, Pony Rides
Griffith Park Dog Park	5103 Zoo Dr., Los Angeles, CA 90027	1.6 Acre Fenced in Recreational Space for Dogs, Water Fountains, Benches
Los Angeles River Bicycle Path	N/A	Bicycle Trails
Griffith Park Hiking and Horseback Trail	N/A	Equestrian Trails, Hiking
Fernangeles Elementary School	12001 Art St, Sun Valley, CA 91352	Basketball courts, handball courts, jungle gym, grass field
Sun Valley High School	9171 Telfair Ave, Sun Valley, CA 91352	Basketball courts, soccer field, baseball diamond
Glenwood Elementary	8001 Ledge Ave, Sun Valley, CA 91352	Blacktop play area, grass field
John Ferraro Athletic Fields	5101 Zoo Dr., Los Angeles, CA 90027	Soccer Fields, Children's Play Area, Restrooms, Concessions

There are no parks and/or recreational facilities within 0.5 miles of the Templin Highway UC location.

ID	Public Facility	ID	Public Facility
1	Stranthern Park North	11	Robert H. Lewis High School
2	Sheldon Arleta Park	12	North Valley Military Institute
3	Sheldon Skate Park	13	Sun Valley High School
4	Fernangeles Recreation Center	14	Fernangeles Elementary School
5	Revo Soccer Valley Center	15	Arminta Street Elementary School
6	Sun Valley Recreation Center	16	Roscoe Elementary School
7	De Garmo Park	17	Glenwood Elementary
8	Verdugo Mountain State Park	18	Hospital of the Valley
9	Byrd Middle School	19	Sun Valley Library
10	Francis Polytechnic Senior High	20	Los Angeles Fire Department Station 77

Map by Joshua Miller

Figure 6: Public Facilities in Sun Valley

0 0.125 0.25 0.5 Miles

Legend

- Park
- School
- Hospital
- Museum
- Zoo
- Project Location

ID	Public Facility	ID	Public Facility
1	Los Angeles Equestrian Center	9	John Ferraro Athletic Fields
2	Bette Davis Picnic Area	10	Pelanconi Park
3	Glendale Narrows Riverwalk	11	Benjamin Franklin Elementary School
4	Amir's Garden	12	Community Surgery Center of Glendale
5	Griffith Manor Park	13	Los Angeles Live Steamers
6	Griffith Park	14	Walt Disney's Carolwood Barn
7	Griffith Park Dog Park	15	Autry Museum of the American West
8	Wilson & Harding Gold Courses	16	Los Angeles Zoo

Map by Joshua Miller

Figure 7: Los Angeles River Public Facilities

Recreational bicycle paths and equestrian trails within the limits of the Los Angeles River Bridge (Bridge #53-1075) include the Glendale Narrows Riverwalk, Los Angeles River Bike Path, and the Griffith Park Hiking and Horseback Trail (Table 6). The Glendale Narrows Riverwalk and the Los Angeles River Bike Path are both shared by bicyclists and pedestrians. The Griffith Park Hiking and Horseback Trail is shared by equestrians and pedestrians.

Table 6: List of Recreational Paths

Path	Type of Path	Western Limit	Eastern Limit	Total Miles
Glendale Narrows Riverwalk	Bicycle Class I, Pedestrian	Garden St./ Paula Ave. Glendale, CA 91201	Flower St./ Fairmont Ave. Glendale, CA 91201	1.0
Los Angeles River Bike Path	Bicycle Class I, Pedestrian	Riverside Dr./ Sonora Ave. Glendale, CA 91201	N San Fernando Rd./N Figueroa St. Los Angeles, CA 90065	7.4
Griffith Park Hiking and Horseback Trail	Equestrian, Pedestrian	Los Angeles Equestrian Center	Riverside Dr./ Sonora Ave. Glendale, CA 91201	0.5

Environmental Consequences

No-Build Alternative

The No-Build Alternative would have no impacts on parks or other recreational facilities.

Build Alternative

Raising the profile of Sheldon St. Bridge (Bridge #53-1120) will require the removal of a portion of a fence on the northeast corner of Sheldon Skate Park. This fence will be replaced during construction and there will be no other effects to the park's features.

Bicyclists and pedestrians of the Glendale Narrows Riverwalk will be detoured to an unpaved path adjacent to the paved road during construction. Bicyclists and pedestrians of the Los Angeles River Bike Path will be detoured through Griffith Park and the surrounding area.

A further discussion of pedestrian and bicycle facilities affected by the proposed project is included in Section 2.1.5 Traffic and Transportation.

Refer to Appendix A: Section 4(f) *De Minimis* Determination for a more detailed analysis on Section 4(f) resources.

Cumulative Impacts

There are no cumulative projects identified that are anticipated to impact the parks and recreational facilities near the proposed project.

Avoidance, Minimization, and/or Mitigation Measures

Because the Build Alternative will not substantially affect the designated land use of areas involved in the study, the proposed project does not require avoidance, minimization, and/or mitigation measures.

2.1.2 Growth

Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which established the steps necessary to comply with the National Environmental Policy Act (NEPA) of 1969, require evaluation of the potential environmental effects of all proposed federal activities and programs. This provision includes a requirement to examine indirect effects, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations (40 Code of Federal Regulations [CFR] 1508.8) refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project's potential to induce growth. The CEQA guidelines (Section 15126.2[d]) require that environmental documents "…discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment…"

Affected Environment

The Southern California Association of Governments (SCAG) provides regional growth forecast for various regions in southern California. The three study areas involved in the proposed project fall into three separate SCAG regions: The Templin Highway study area within Castaic (unincorporated Los Angeles County), the Sun Valley study area within the City of Los Angeles, and the Los Angeles River study area within the City of Glendale. Two bridges will be reinforced and strengthened in two separate project areas—in the Castaic area and the City of Glendale. Additionally, a total of eight bridges will be re-constructed to raise vertical clearance in the Sun Valley neighborhood of Los Angeles City. Please refer to Chapter 1 for the specific locations and project description.

Templin Highway Study Area
Castaic, an unincorporated region of Los Angeles County, is located roughly 10 miles north of the City of Santa Clarita and is part of the Santa Clarita Valley. The region is characterized by rural lands and forests managed by the U.S. Forest Service. Land use policies greatly restrain the amount of development possible for the surrounding area. Specific guidelines in the Castaic Area Community Standards District strictly prioritize protecting the rural character, unique

appearance, and natural resources of the Castaic region.[16] Intense development is restricted, and the amount of growth is limited in the small village community.

Sun Valley Study Area

The Sun Valley neighborhood is located within the City of Los Angeles. The Sun Valley – La Tuna Canyon General Plan guides the planning policies of the neighborhood, but the policies must be consistent with the General Plan of the City of Los Angeles. Land use patterns from the City of Los Angeles General Plan provide a general overview of the land use patterns and development in the neighborhood of Sun Valley. The City of Los Angeles consists of 302,596 acres of land. Approximately 78 percent of this land is developed, while the remaining 22 percent of the land is undeveloped. Of the 22 percent of undeveloped land, only 24 percent is vacant (subject to development) and the rest is categorized as open space[17]. Major open space areas in the city include Griffith Park, the Santa Monica Mountains National Recreation Area, the Ballona Wetlands, and the Verdugo Mountains. There is limited room left for development, and the potential for growth is strictly minimal for the City of Los Angeles. Sun Valley, in particular, dedicates most of its land use to single-family dwelling units, open space, and industrial facilities as described in the Sun Valley – La Tuna Canyon Community Plan. The Plan emphasizes the significance of preserving single-family units, and the need to limit encroachment by incompatible uses. The land use pattern for the city is built-out, and substantial growth is not anticipated for this neighborhood.

Los Angeles River Study Area

The City of Glendale's land use policies and objectives have developed over time as a result of balancing various constraints to foster quality growth that will benefit the overall community. "Rampant growth," in terms of population increase, is not part of the General Plan. Most of the land use is designated as open space (Verdugo Mountains and San Rafael Hills), followed by low density and very low-density development areas.[18] The rest of the region is managed by specific land uses and medium density neighborhoods that are entirely developed; there is little room left for growth in the area.

According to the SCAG, unincorporated Los Angeles County will experience a growth rate of 0.8 percent, with households increasing at a rate of 1.22 percent. In the City of Los Angeles, annual population growth is projected to be 0.71 percent, while annual household growth is projected to be 0.98 percent. The City of Glendale growth rate is expected to be 0.38 percent a year, and household growth rate is expected to be 0.43 percent a year. Employment growth rates for the unincorporated Los Angeles County, City of Los Angeles, and City of Glendale are projected to be 1.05 percent, 1 percent, and 0.5 percent, respectively, for each year. [19] Population growth and employment growth for all three regions are not anticipated to increase substantially through the I-5 Freight Corridor improvements. Table 7 illustrates SCAG's predictions for population growth between 2012 and 2040 in regions within the project scope.

[16]https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT22PLZO_DIV1PLZO_CH22.44SUDI_PT2COSTDI_22.44.137CAARCOSTDI
[17] https://planning.lacity.org/HousingInitiatives/HousingElement/Text/Ch2.pdf
[18] https://www.glendaleca.gov/home/showdocument?id=27328
[19] http://www.scag.ca.gov/Documents/2016_2040RTPSCS_FinalGrowthForecastbyJurisdiction.pdf

Table 7: SCAG Population, Households, Employment Annual Growth Rate 2012-2040

	Population 2012	Population 2040	Annual Growth Rate
Los Angeles County Unincorporated Area			
Population	1,040,700	1,273,700	0.80%
Households	292,700	392,400	1.22%
Employment	222,900	288,400	1.05%
City of Los Angeles			
Population	3,845,500	4,609,400	0.71%
Households	1,325,500	1,690,300	0.98%
Employment	1,696,400	2,169,100	1.00%
City of Glendale			
Population	193,200	214,000	0.38%
Households	72,400	81,100	0.43%
Employment	111,300	127,000	0.50%

SCAG does not create projections for specific communities such as Sun Valley and Castaic, therefore data specific to these areas are not available. The projections for the City of Los Angeles have been used to represent the Sun Valley neighborhood, and the projections of the Los Angeles County unincorporated areas have been used to represent Castaic area.

Environmental Consequences

Caltrans has adopted a process known as "First-Cut Screening"[20] in order to assess the potential growth-related impacts a project will have on the environment. This process eliminates the further examination of growth-related impacts based on a progressive series of questions. The first question in the "First-Cut Screening" process is: "Does the project have the potential to change accessibility?" When used in this context, "accessibility" refers to project effects such as the number of trips taken on a freeway, travel speeds, travel times, levels of congestion, roadway locations, or the ability to enter and exit the freeway. Since the proposed project will be improving and replacing existing features, it will not affect accessibility. Therefore, further examination of growth related impacts is not needed.

No-Build Alternative

Under the No-Build Alternative, existing conditions would remain, and no growth-related impacts would occur. The No-Build Alternative will maintain the existing I-5 corridor at its current state. A vertical clearance of 16- 6" will not be met, and freight exceeding the vertical clearance of the bridges will continue to detour to local routes.

Build Alternative

The first-cut screening for the proposed project concluded that there are no growth-related impacts reasonably foreseeable in the future for improving the current features of bridges on the I-5 Freight Corridor. The proposed scope of work includes raising vertical clearance to 16- 6"

[20] http://www.dot.ca.gov/ser/Growth-related_IndirectImpactAnalysis/gri_guidance.htm#5_2

and strengthening the structure of existing bridges; therefore, the proposed project will not create new access points nor change accessibility for transportation users. Land use will not change as a result of the Build Alternative as most of the affected areas have been built out—or have specific designations in place that greatly constrain the amount of growth possible.

Transportation capacity, accessibility, and land use for communities will not be changed as a result of this project. Therefore, substantial change in the location, distribution, or rate of population and housing growth is not intended nor expected for the Build Alternative.

In adherence to the "First-Cut Screening" process, further examination of growth related impacts is not necessary.

Cumulative Impacts

Because no growth impacts are expected to occur as a result of the proposed project, cumulative impacts are not expected to occur.

Avoidance, Minimization, and/or Mitigation Measures

There are no avoidance, minimization, and/or mitigation measures for the Build Alternative because the proposed project would not result in any adverse growth impacts.

2.1.3 Community Impacts

2.1.3.1 Community Character and Cohesion

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). The Federal Highway Administration (FHWA) in its implementation of NEPA (23 USC 109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community.

Affected Environment

A Community Impact Assessment was completed for this project in December 2018. Data regarding community demographics was collected from the U.S. Census Bureau's American

Community Survey and the U.S. 2010 Decennial Census. The study area consists of census tracts that have boundaries lying within a half mile from the bridges involved in the proposed project. Refer to Figures 8, 9, and 10 for the specific census tracts involved in the study. The demographic characteristics considered in the affected environment are race/ethnic groups, age, elderly population, income, and household size and composition.

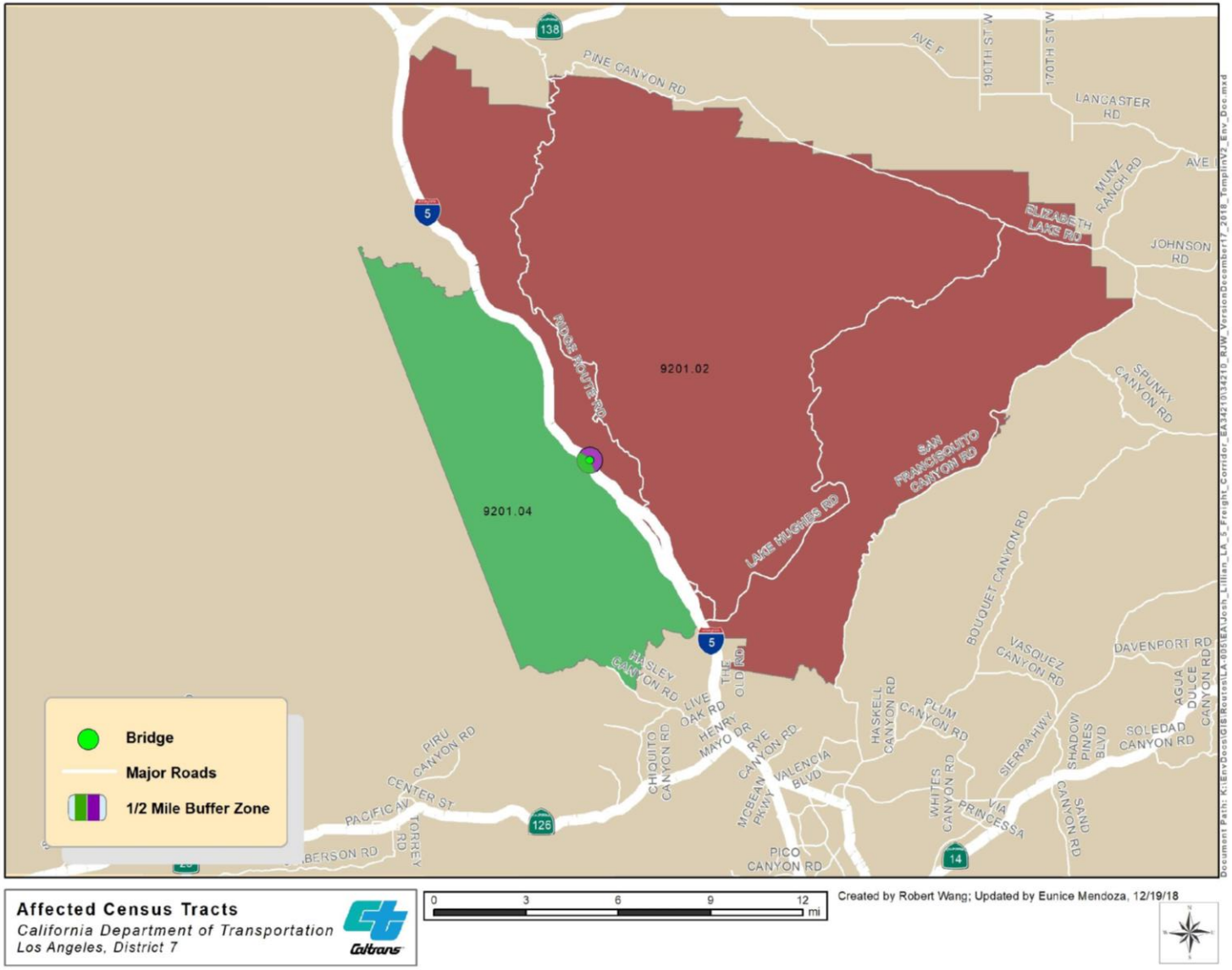

Figure 8: Templin Highway Study Area

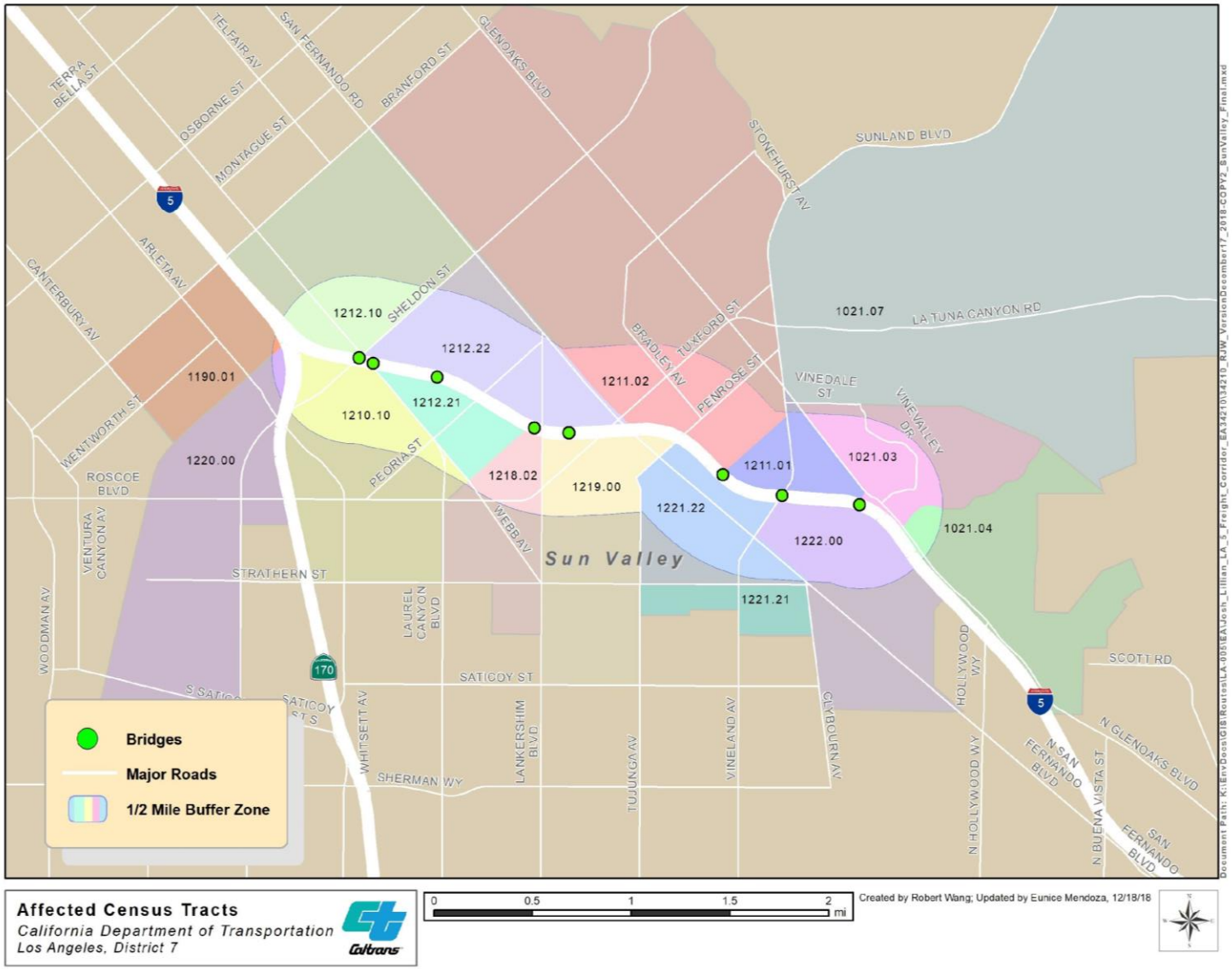

Figure 9: Sun Valley Study Area

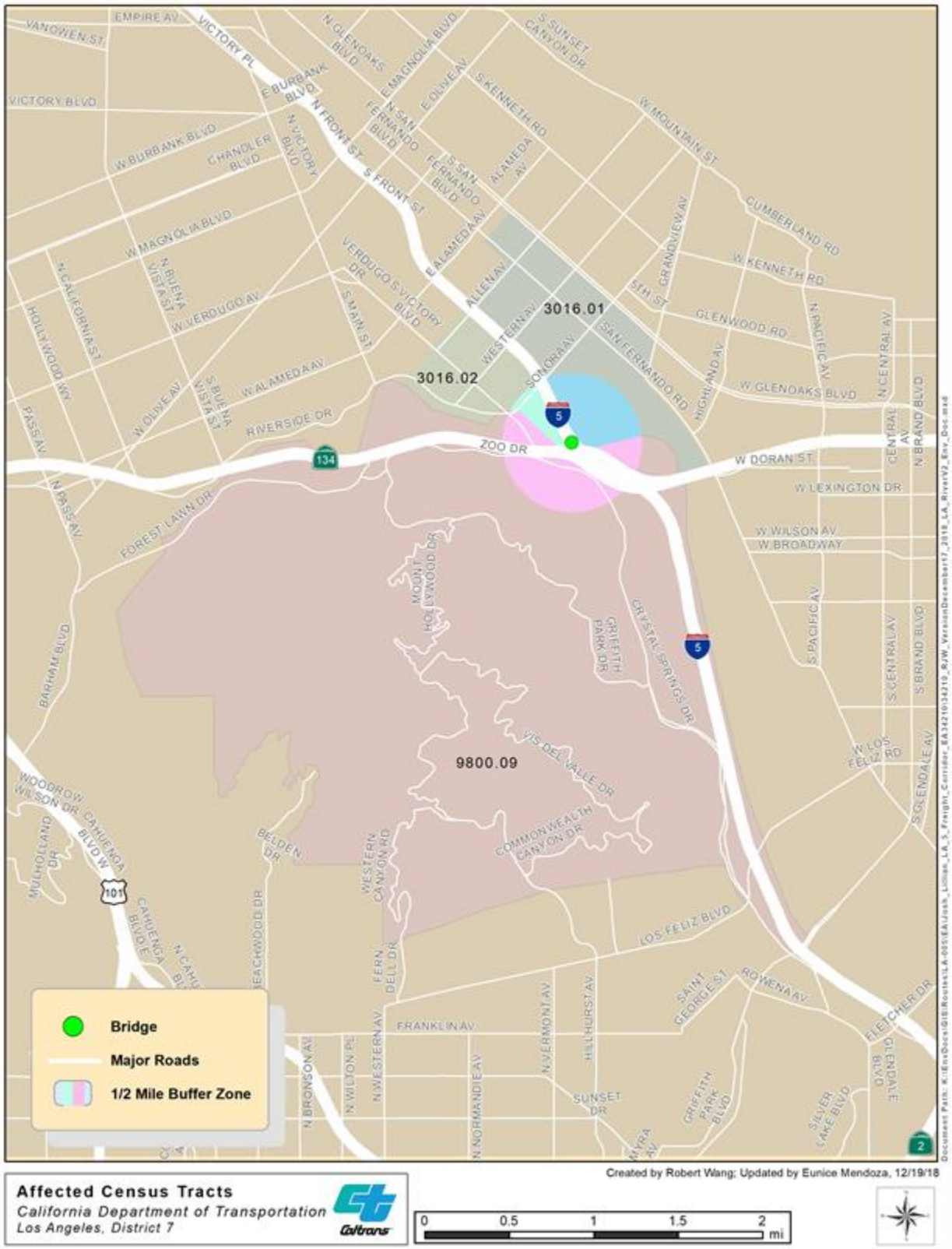

Figure 10: Los Angeles River Study Area

Local and Regional Population Characteristics

The following discussion of local and regional population characteristics is derived from data received from the *2017 American Community Survey* and is represented in Figure 11, 12, and 13. Table 8 shows the median household income for each study area.

Templin Highway Study Area

The Templin Highway study area comprises of 57 percent White, 29 percent Hispanic, 6 percent Asian, 2 percent Black, and 43 percent Multi-Racial residents. The study area has a higher percentage of Multi-Racial and White residents and a lower percentage of Asian, Hispanic, and Black residents compared to the demographics of Los Angeles County. The area's average median age is 39.2 years, which is higher than that of the County. The percent of married couples (70%) and the percent of single-unit homes (78%) is also higher than that of the County. The population's percentage of seniors, age 65 and over, is below that of the County. The median household income of this area, which is at $85,775, is above the County's average, while the average persons per household is consistent with that of the County.

Sun Valley Study Area

The Sun Valley study area comprises of 73 percent Hispanic, 18 percent White, 6 percent Asian, 2 percent Black, and 1 percent Multi-racial residents. The racial composition of the population in the Sun Valley study area shows a higher percentage of Hispanic residents and a lower percentage of Asian, Black, Multi-Racial and White residents than that of the County. The median age of Sun Valley's population (32.3 years) is lower than that of Los Angeles County. The median household income of this area is $55,570 which is lower than the median household income of the County.

Los Angeles River Study Area

The population in the Los Angeles River study area has a higher percentage of Multi-Racial (3 percent) and White (54 percent) residents and a lower percentage of Asian (9 percent), Black (3 percent), and Hispanic (31 percent) residents when compared to the County. The average household size (2.8 people per household), and number of single family units (32 percent) within the Los Angeles River study area are lower than the County's average. The median age for the Los Angeles River study area is 39.5 years, while the median household income is $45,327. Both values are lower than that of Los Angeles County. This study area also has a lower number of senior citizens than the County. Tract 9800.09, which lies within Griffith Park, is an outlier to the data collected and represents five surveyed individuals.

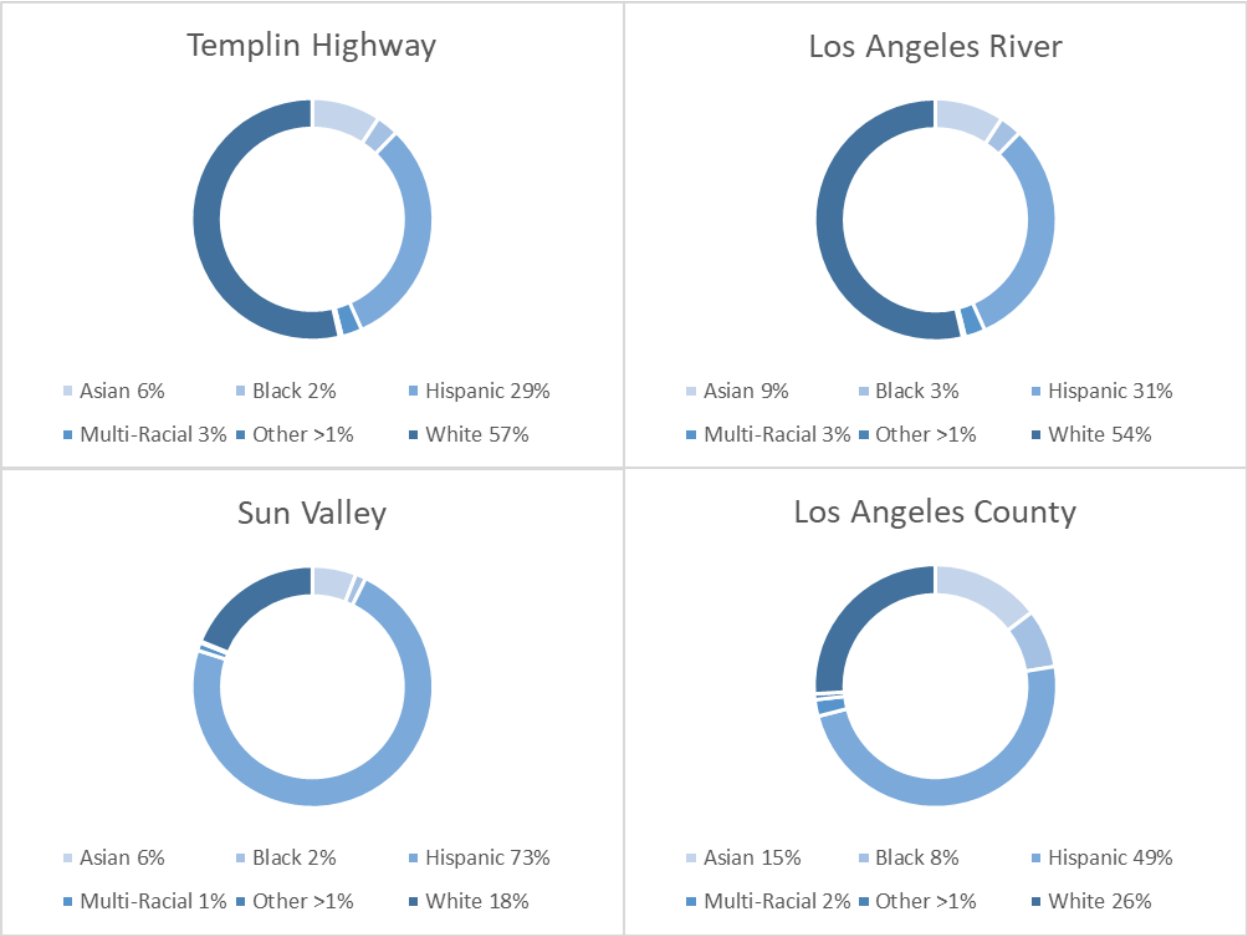

Figure 11: Race and Ethnicity, American Community Survey 2017

Table 8: Household Income, Age, and Composition

Location	Median Household Income	Persons Per Household	%Married Couples	%Single Unit Homes	Median Age
Templin Highway Study Area	$85,775	3	70%	78%	39.2
Tract 9201.02	$69,762	2.9	68%	69%	39.8
Tract 9201.04	$116,875	3	78%	100%	38
Sun Valley Study Area	$55,570	3.8	56%	76%	32.3
Tract 1190.01	$64,038	4.4	77%	100%	34.8
Tract 1220	$62,610	3.9	42%	87%	40
Tract 1212.10	$46,889	3.7	38%	80%	39.3
Tract 1210.10	$55,490	3.5	46%	85%	36.4
Tract 1212.21	$52,115	4.7	68%	93%	33.7
Tract 1212.22	$47,422	4.6	42%	42%	26.3
Tract 1218.02	$59,792	4.1	39%	96%	36.2
Tract 1219	$51,754	3.8	44%	77%	36
Tract 1211.02	$53,534	3.3	47%	97%	42.7
Tract 1221.22	$32,625	4.2	38%	42%	29.1
Tract 1221.21	$45,667	3.8	42%	54%	36
Tract 1211.01	$47,525	3.3	45%	39%	33.7
Tract 1222	$53,750	4.4	49%	80%	32.6
Tract 1021.03	$73,819	2.7	53%	79%	48.2
Los Angeles River Study Area	$45,327	2.8	52.6%	32%	39.5
Tract 3016.01	$39,882	2.8	60%	24%	38.6
Tract 3016.02	$53,849	2.6	42%	44%	40.8
Tract 9800.09	$10,640	n/a	0%	100%	20.5
Los Angeles County	$65,006	3	45%	55%	36.6

Source: American Community Survey 2017

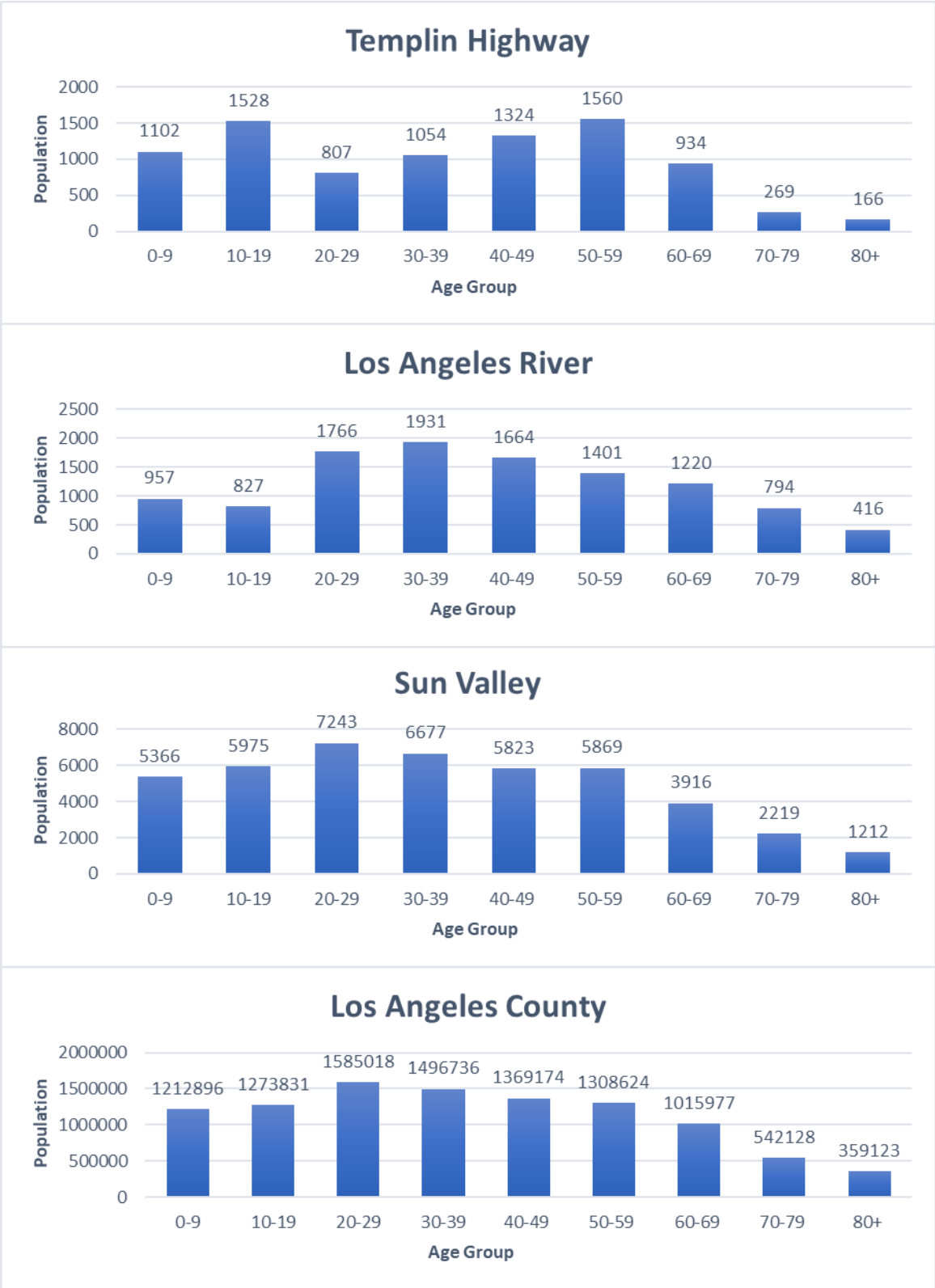

Figure 12: Age Groups; American Community Survey 2017

Community Character and Cohesion

A community is defined as "a population rooted in one place, where the daily life of each member involves contact with and dependence on other members." The population involved in the three study areas: Templin Highway, Sun Valley, and Los Angeles River, lie within the larger communities of the Castaic area, the Sun Valley neighborhood in the City of Los Angeles, and the City of Glendale.

Templin Highway Study Area

Castaic is an unincorporated community located in the northern part of Los Angeles County, 41.7 miles northwest of Los Angeles Union Station. The town officially began as a stop along with cafes, general stores, and automobile services when the Castaic-Tejon Ridge Route opened in 1915. Further development came in 1923 with the suburban development Parker Ranch, which subdivided the land into five regions, each with two representatives on the Castaic Town Counsel, which is still in operation. Today, thousands of motorists pass through the area each day via the I-5 transportation corridor utilizing its important trucking industry services. Further development has filled in each side of the highway, with the older portion on the east. Castaic is also known for its recreational facilities, including Castaic Lake Recreation Area, Castaic Regional Sports Complex and Aquatic Center, Val Verde Park, and its proximity to hiking trails in Los Padres National Forest. The closest residential area to the project area is a mobile home park known as Paradise Ranch, which offers "country living just minutes away from the Santa Clarita Valley."[21]

Sun Valley Study Area

Sun Valley is a neighborhood in the San Fernando Valley region of Los Angeles, approximately fifteen miles north of downtown. The area was originally developed as a train stop on the Southern Pacific Railroad, which was constructed in 1876. At that time, it was a town known as Roberts, then Roscoe beginning in 1913. The town was incorporated into the City of Los Angeles in 1915 due to its reliance on the city's water resources and became known as Sun Valley in 1948. Piggybacking on the railroad's infrastructure, Sun Valley developed into the Northeast Valley's industrial base hosting numerous manufacturing businesses, quarries, and gravel processing facilities. The workforce for these industries lived in the area's predominantly craftsman style houses, which were mostly built and designed by the initial homeowners. Sun Valley maintains this working-class identity to this day by encouraging a range of housing choices be made available to personas of all social, economic, and ethnic backgrounds. The community has numerous churches, predominantly Roman Catholic and Evangelical, that host seasonal events, festivals, and community outreach services. Among Sun Valley's numerous parks, Fernangeles and Sun Valley Recreational Centers act as public gathering places for the community and offer youth programs such as sports leagues, pre-school programs, after-school tutoring, and classes in a variety of subjects.

Los Angeles River Study Area

The City of Glendale was incorporated in 1906 in the Southeastern end of the San Fernando Valley, eight miles north of downtown Los Angeles. The city has historically been appealing to employers because of its location at the center of four major freeways, which provide easy access

[21] http://www.paradiseranchmobilehomepark.com/about.html

for residents, workers, and customers from around the region. One of Southern California's leading office markets, Glendale has over six million square feet of office space and is home to the headquarters of firms such as Walt Disney Imagineering, Nestle USA, IHOP/ Applebee's, Dream Works, LegalZoom, and Public Storage. The City of Glendale aims to appeal to residents because of its central location, well maintained streets, high quality school system, state-of the art health care facilities, and wide variety of restaurant and entertainment options. Beginning with a surge of immigration in the 1970s, the Armenian population in Glendale has continued to grow in the last two decades.

Community cohesion refers to "the degree to which residents have a "sense of belonging" to their neighborhood, a level of commitment of the residents to the community or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time."[22] Community cohesion is often subtle and hard to identify, however, some indicators that a community has a high degree of cohesion are:

- *Long average residency tenures:* Long-term residents are likely to feel more connected to their community. Approximately 59 percent of the population in the Templin Highway study area, 72 percent of the population in the Sun Valley study area, and 61 percent of the population in the Los Angeles River study area moved in prior to the 1990s. All study areas have a longer residency tenure than that of Los Angeles County (51 percent). This shows that communities within the study areas have higher than average long-term residents living within the affected areas.

- *Households of two or more people:* A high percentage of single-person households tend to correlate with a low sense of community cohesion. Communities with a higher average household size tend to be more focused on family rearing, which increases community cohesion. Average household size is 3, 3.8, and 2.8 for Templin Highway, Sun Valley, and Los Angeles River study areas, respectively. The average household size for the Templin Highway study area is consistent with that of Los Angeles County, while the average household size of the Sun Valley study area is higher than that of the County. The last location, the Los Angeles River study area, is below that of the County.

- *Single family homes over higher density housing:* Two of the study areas, Templin Highway and Sun Valley, have a higher than average percentage of single-family homes (78 and 76 percent, respectively) than that of the County (55 percent). The Los Angeles River study area has a lower percentage of single-family homes (32 percent) than that of the County.

- *Home ownership over rentals:* Home ownership in the Templin Highway study area, Sun Valley study area, and the Los Angeles River study area are 67 percent, 60 percent, and 20 percent, respectively. Two of the study areas have higher rates of home ownership than that of the County (46 percent), while the Los Angeles River study has a lower rate of home ownership.

[22] http://www.dot.ca.gov/ser/vol4/downloads/chap_appdx/Ch5_SocialImps_21102011.pdf

- *Ethnic homogeny:* Clusters of populations with similar ethnic roots add to a sense of community cohesion. Both the Templin Highway (57 percent) and Los Angeles River (54 percent) study areas have a higher percentage of White residents than that of Los Angeles County (26 percent). The Sun Valley study area has a large percentage of Hispanic residents (73 percent) compared to that of Los Angeles County (49 percent).

In considering these five factors, the Sun Valley study area shows high potential for community cohesion as the community consistently maintains a high percentage of long residency tenures, households of two or more people, single family units, home ownership, and ethnic homogeny. The Templin Highway study area also shows high potential for community cohesion, although it has less ethnic homogeny and fewer average persons per household than that of the Sun Valley study area. The Los Angeles River location shows the least potential for having a high degree of community cohesion as it ranks below Los Angeles County in all five factors.

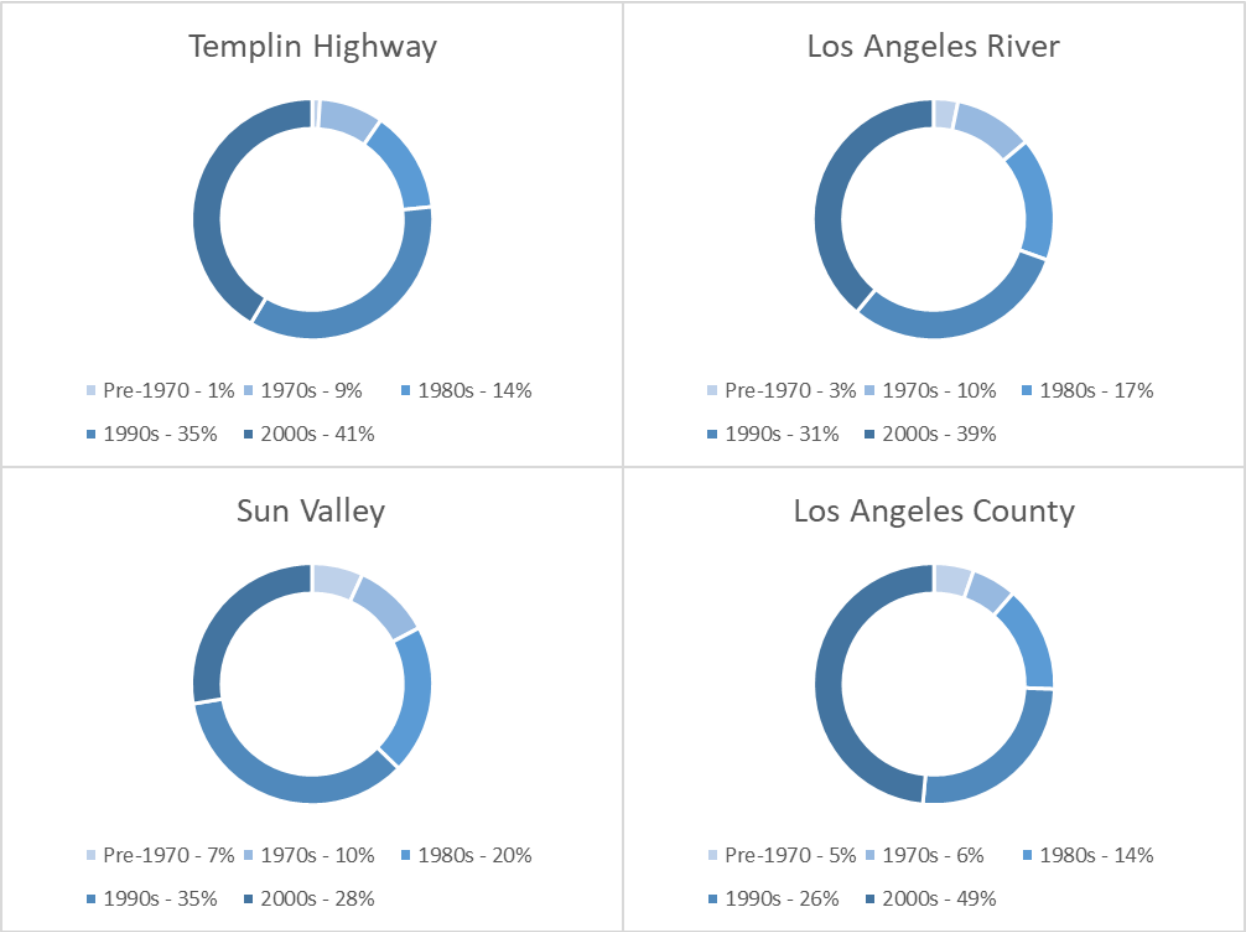

Figure 13: Residency Tenures; American Community Survey 2017

Housing

Most of the housing in the Templin Highway area are single units occupied by the property owner. Owner-occupied housing accounts for 67 percent of the homes in the Templin Highway study area, which is higher than the County average (46 percent). Median home values for the Templin Highway study area ($395,162) is lower than the median home value of the County

($588,700). Average vacancy rates of homes in the Templin Highway study area (4 percent) is lower than the vacancy rates in Los Angeles County (7 percent).

Owner-occupied housing rates in the Sun Valley study area is 60 percent, 14 percent higher than the County average. Median home values for the study area is $389,640, which is lower than the County average. Home vacancy rates are 5 percent in this area, lower than the County average of 7 percent.

Owner-occupied housing accounts for 20 percent of the homes in the Los Angeles River study area. The median home value for the area is $544,609, and the vacancy rate is 2 percent. All percentages and values mentioned are below the County average.

Table 9: Household Value, Occupancy, and Commuting Data

Location	Total Population	Median Home Value	% Occupied Units	% Owner Occupied	% Multi-Unit	Average Commute
Templin Highway	8744	$395,162	96%	67%	18%	31.7
Tract 9201.02	5772	$455,700	98%	95%	0%	30.5
Tract 9201.04	2972	$323,300	95%	55%	26%	32.3
Sun Valley	50628	$389,640	95%	60%	21%	30.3
Tract 1190.01	4185	$367,400	98%	78%	0%	33.3
Tract 1220	6146	$452,000	98%	63%	10%	26.7
Tract 1212.10	2999	$320,800	97%	62%	15%	30.4
Tract 1210.10	4421	$364,100	96%	70%	14%	34.8
Tract 1212.21	2292	$317,800	91%	64%	6%	33.9
Tract 1212.22	5507	$391,200	96%	26%	58%	33.1
Tract 1218.02	3523	$357,400	97%	77%	1%	33.1
Tract 1219	4004	$370,300	90%	65%	14%	29.2
Tract 1211.02	2621	$396,800	98%	67%	3%	27.3
Tract 1221.22	2383	$36,600	90%	23%	53%	26.6
Tract 1211.01	3084	$310,800	95%	43%	61%	25.3
Tract 1222	4015	$346,500	96%	46%	19%	27.2
Tract 1021.03	1870	$503,300	95%	68%	21%	28.3
Tract 1021.04	3578	$450,000	94%	79%	21%	32.7
Los Angeles River	10976	$544,609	98%	20%	67%	25.1
Tract 3016.01	6681	$586,400	100%	13%	76%	24.6
Tract 3016.02	4290	$519,100	97%	30%	56%	26
Tract 9800.09	5	n/a	n/a	n/a	n/a	8.3
Los Angeles County	10,163,507	$588,700	93%	46%	43%	31.7

Source: American Community Survey 2017

Environmental Consequences

No-Build Alternative

Under the No-Build Alternative, the proposed project would not be constructed. Therefore, no impacts to community character/cohesion, housing, or economic conditions would occur.

Build Alternative

Temporary Impacts

Traffic, air quality, and noise impacts from construction activities will temporarily affect communities during the project's construction. These disruptions may include an increase in noise and vibration, lights and glare, air emissions, etc. In-depth analyses for construction-related impacts can be found in the traffic and air quality sections for the Build Alternative. The side-effects of construction are temporary in duration, and substantial disruptions to the local population and housing are not anticipated for the Build Alternative.

Permanent Impacts

The Build Alternative will result in right of way acquisitions from several private property owners. Businesses will be relocated for construction and staging. Additional information regarding the right of way acquisitions are discussed in Section 2.1.3.2 Relocations and Real Property Acquisition. The acquisitions are not anticipated to affect the character and cohesion of the community.

Cumulative Impacts

Temporary cumulative impacts as a result of the proposed project, in combination with other past, present and future projects, are not considered to be adverse. All temporary impacts described in the above sections, as well as impacts for other projects in the study area, would each be avoided or minimized and would, therefore, not have a cumulative impact to humans or the physical environment.

Avoidance, Minimization, and/or Mitigation Measures

The Build-Alternative was developed in a manner avoiding the acquisition of as many properties as possible to minimize the impact on local communities. A Traffic Management Plan (TMP) will be developed and implemented to mitigate the impact of road closures and detours. Construction noise is regulated by Caltrans standard specifications, Section 7-1.01I, Sound Control Requirements. These requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations. Best Management Practices (BMPs) will be in place to decrease the effects of construction related noise, vibration, and light pollution.

2.1.3.2 Relocations and Real Property Acquisition

Regulatory Setting

Caltrans' Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of the RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix C for a summary of the RAP.

All relocation services and benefits are administered without regard to race, color, national origin, persons with disabilities, religion, age, or sex. Please see Appendix B for a copy of Caltrans' Title VI Policy Statement.

Affected Environment

A Relocation Impact Report was prepared for this project in January 2019.

Construction for the Build Alternative will require one partial acquisition, six full acquisitions, and 35 Temporary Construction Easements (TCEs) for a total of 42 parcels. All acquisitions and TCEs are located within the Sun Valley neighborhood of the City of Los Angeles (Table 10 and 11).

Table 10: List of Partial Fee Acquisitions and Temporary Construction Easements

Parcel Number	Address	Land Use Designation
Partial Fee Acquisitions		
2632-026-900	8358 San Fernando Rd., Sun Valley CA 91352	Commercial/ Industrial
Temporary Construction Easements		
2404-019-048	10467 Roscoe Blvd., Los Angeles, CA 91352	Commercial/ Industrial
2404-019-046	8345 Glenoaks Blvd., Los Angeles, CA 91352	Commercial/ Industrial
2404-019-050	8333 Glenoaks Blvd., Los Angeles, CA 91352	Commercial/ Industrial
2408-014-026	8360 Sunland Blvd., Los Angeles, CA 91352	Vacant Land
2408-014-024	8370 Sunland Blvd., Los Angeles, CA 91352	Commercial/Industrial
2408-014-032	8431 Sunland Blvd., Los Angeles, CA 91352	Commercial/Industrial
2408-014-037	8351 Sunland Blvd., Los Angeles, CA 91352	Commercial/Industrial
2408-024-039	8274 Sunland Blvd., Los Angeles, CA 91352	Commercial/ Industrial
2632-025-029	10908 Roscoe Blvd., Los Angeles, CA 91352	Commercial/ Industrial
2408-018-014	11043 Olinda St., Los Angeles, CA 91352	Commercial/ Industrial
2632-026-900	8358 San Fernando Rd., Los Angeles, CA 91352	Commercial/ Industrial
2632-021-031	8620 Lankershim Blvd., Los Angeles, CA 91352	Commercial/ Industrial
2632-021-003	8610 Lankershim Blvd., Los Angeles, CA 91352	Commercial/ Industrial
2632-021-004	8604 Lankershim Blvd., Los Angeles, CA 91352	Multi-Family Residential
2632-021-005	8600 Lankershim Blvd., Los Angeles, CA 91352	Commercial/ Industrial
3632-021-006	8548 Lankershim Blvd., Los Angeles, CA 91352	Commercial/ Industrial
2632-021-030	8520 Kewen Ave., Los Angeles, CA 91352	Commercial/ Industrial
2631-018-061	8700 Lankershim Blvd., Los Angeles, CA 91352	Commercial/ Industrial

2631-018-083	8706 Lankershim Blvd., Los Angeles, CA 91352	Commercial/ Industrial
2631-011-040	8707 Lankershim Blvd., Los Angeles, CA 91352	Commercial/ Industrial
2631-031-003	11917 Peoria St., Los Angeles, CA 91352	Single Family Residential
2631-010-076	11902 Peoria St., Los Angeles, CA 91352	Single Family Residential
2631-031-011	11911 Peoria St., Los Angeles, CA 91352	Single Family Residential
2633-016-027	11940 Peoria St., Los Angeles, CA 91352	Single Family Residential
2633-016-003	11946 Peoria St., Los Angeles, CA 91352	Single Family Residential
2633-016-002	11950 Peoria St., Los Angeles, CA 91352	Single Family Residential
2633-016-001	8724 Haddon Ave., Los Angeles, CA 91352	Single Family Residential
2634-037-014	11961 Peoria St., Los Angeles, CA 91352	Single Family Residential
2634-005-022	8866 Laurel Canyon Blvd., Los Angeles, CA 90352	Commercial/ Industrial
2634-007-026	8879 Laurel Canyon Blvd., Los Angeles, CA 90352	Commercial/ Industrial
2634-007-017	8893 Laurel Canyon Blvd., Los Angeles, CA 90352	Commercial/ Industrial
2634-007-015	8897 Laurel Canyon Blvd., Los Angeles, CA 90352	Commercial/ Industrial
2634-008-022	8899 Morehart Ave., Los Angeles, CA 90352	Single Family Residential
2634-008-022	8864 Remick Ave., Los Angeles, CA 91352	Single Family Residential
2634-006-908	12511 Sheldon St., Los Angeles, CA 91352	Vacant Land

Partial Fee Acquisition. The partial fee acquisition is within the parking lot of the Sun Valley Metrolink Station; a portion of the parking lot will permanently be used to accommodate the Olinda St. BOC structure, and a larger portion of the parking lot will be used as a TCE to facilitate the structure's construction. There will be no improvements made at this location, so there is no relocation involved (Table 8).

Temporary Construction Easements. The TCEs are minor in nature, i.e., a few feet wide at the edge of the property adjacent to Caltrans or public right-of-way to make room for staging and construction. There are no relocations involved in the 35 TCEs (Table 8).

Table 11: List of Full Acquisitions

Parcel Number	Address	Name of Business	Reason for Acquisition	Age of Business*
2408-017-029	11042 Olinda St., Sun Valley, CA 91352	G&G Marble and Quartz	A portion of property will be incorporated into Olinda St. BOC.	>1
2408-017-020	11040 Olinda St., Sun Valley, CA 91352	Howard Brown and Sons Auto Sales	Property to be acquisitioned during construction of Olinda St. BOC.	20
2632-020-042	8620 Cayuga Ave., Sun Valley, CA 91352	Higgins Termite Inc.	There will be impact to the building while raising Lankershim Blvd.	12
2633-028-020	8601 Lankershim Blvd., Sun Valley, CA 91352	Sun Garden Supplies, Valley Mexican Candy	Access to the building will be blocked while raising Lankershim Blvd.	7
2633-028-021	Address not Available	Parking lot of Sun Garden Supplies	Access to parking will be blocked due to Lankershim Blvd. being raised.	7
2634-007-027	8903 Laurel Canyon Blvd., Sun Valley. CA 91352	Eddy's Barber Shop, Bonita's Beauty Salon, House of Venoms Boxing Club	Access to this parcel will be blocked due to Laurel Canyon Blvd. being raised.	9

**Note: Age of Business is estimated with reference to the last market sale information on each of the property records as indicated by Landvision.*

Full Fee Acquisitions. Project construction will result in the full acquisition of six parcels (Table 9). The existing structures on four of the acquisitioned properties, G&G Marble, Howard Brown and Sons Auto Sales, and Higgen's Termite Inc., will be demolished to construct the Olinda St. BOC and raise vertical clearance on Lankershim Blvd. Access to the remaining businesses will be blocked during construction, thereby necessitating their acquisition. In addition to the parcels listed in Table 9, a recycling business operating out of a portion of an impacted parking lot and a cell tower within the same parking lot will need to be relocated. All businesses affected by acquisitions will be relocated under RAP. After construction, the acquired parcels will remain as part of Caltrans Right-of-Way, and excess lands adjacent to businesses/landowners will be available for purchase.

Environmental Consequences

No-Build Alternative

Under the No-Build Alternative, there will be no relocations or acquisition of property. Therefore, no impacts will occur.

Build Alternative

Temporary Impacts

The 35 TCEs for project construction are minor in nature and extend a few feet wide at the edge of the property adjacent to Caltrans or public right-of-way to make room for staging and construction. They will remain only for the duration of project construction. No relocations are necessary; therefore, there will be no relocation impacts.

Permanent Impacts

The partial fee acquisition of the Sun Valley Metrolink Station's parking lot will result in the permanent removal of parking spots near the northwest corner of the property to construct the Olinda St. BOC. Once constructed, pedestrians and bicyclists will be able to access the Metrolink Station by the Olinda St. BOC. No relocations are necessary. Therefore, there are no relocation impacts for the partial fee acquisition.

The six full fee parcel acquisitions will require the relocation of ten businesses. The provisions of the Uniform Act and the 1987 Amendments as implemented by the Uniform Relocation Assistance and Real Property Acquisition Regulations for Federal and Federally Assisted Programs adopted by the United States Department of Transportation (March 2, 1989) will be followed. An independent appraisal of the affected property will be obtained, and an offer for the full appraisal would be made.

Cumulative Impacts

The proposed project would be conducted in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Title VI of the Civil Rights Act. While business relocations would result from the Build Alternative, the surrounding area would be sufficient to provide a replacement site for displaced uses. Because of the relatively small number of relocations required for the proposed project, it is estimated that there are comparable replacement business sites in the area that are expected to be available to fulfill the needs of businesses displaced. Therefore, the Build Alternative's contributions to cumulative impacts would not be considerable.

Avoidance, Minimization, and/or Mitigation Measures

COM-1: Caltrans will conform to the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations (CFR) Part 24 through Caltrans RAP. Following the measures implemented in the Caltrans RAP process, relocation impacts will be less than substantial.

Minimization measures include, but is not limited to:

- Financial compensation for real property
- Reimbursement of costs involved in moving and moving related expenses, reestablishment expenses, in-lieu payment, etc.
- Advisory services to assist individuals in locating a suitable replacement property, completing loan documents, determining relocation benefits and eligibility, etc.

2.1.3.3 Environmental Justice

Regulatory Setting

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President William J. Clinton on February 11, 1994. This EO directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2017, this was $24,600 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964, and related statutes, have also been included in this project. The Department's commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director, which can be found in Appendix B of this document.

Affected Environment

The FHWA Guidance on Environmental Justice and NEPA, dated December 16, 2011, states:

"As per FHWA Order 6640.23, a disproportionately high and adverse effect on a minority or low-income population means the adverse effect is predominantly borne by such population or is appreciably more severe or greater in magnitude on the minority or low-income population than the adverse effect suffered by the non-minority or non-low-income population."

The term "minority" includes persons who identify themselves as Black/African American, Asian/Pacific Islander, Native American, or of Hispanic/Latino origin. The White House Council on Environmental Quality (CEQ) Environmental Justice Guidance under the NEPA, dated December 10, 1997, states that "Minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis."

Minority Populations. The total percentage of minorities in a community was calculated by adding the percentages of residents identifying themselves as Black/African American, Asian/Pacific Islander, Native American and Hispanic/Latino. According to the American Community Survey 2016, 81 percent of the residents in the Sun Valley study area is considered part of the minority population (Figure 11). Seventy-three percent of the population in the Sun Valley study area identifies as Hispanic, 6 percent as Asian, and 2 percent as Black. This figure is 9 percent higher than that of Los Angeles County. However, the Templin Highway study area and Los Angeles River study area do not show potential for substantial minority populations (37 percent and 43 percent, respectively).

The term "low income" for environmental justice populations includes persons whose household income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines. Based on HHS guidelines for 2018, a household of four living at an income of $25,100 or below is considered "low income".[23] The cut-off for "low income" households is an additional $4,320 for each additional person.

Low-income Populations. According to the American Community Survey of 2017, the percentage of residents living at or below the poverty rate in Los Angeles County is 14.9 percent (Figure 14). In the Templin Highway study area, the rate is 16.5 percent; in the Sun Valley study area, the rate is 18.3 percent; and in the Los Angeles River study area, the rate is 14.7 percent. Both the Templin Highway and Sun Valley study areas have higher percentages of low-income households than that of Los Angeles County.

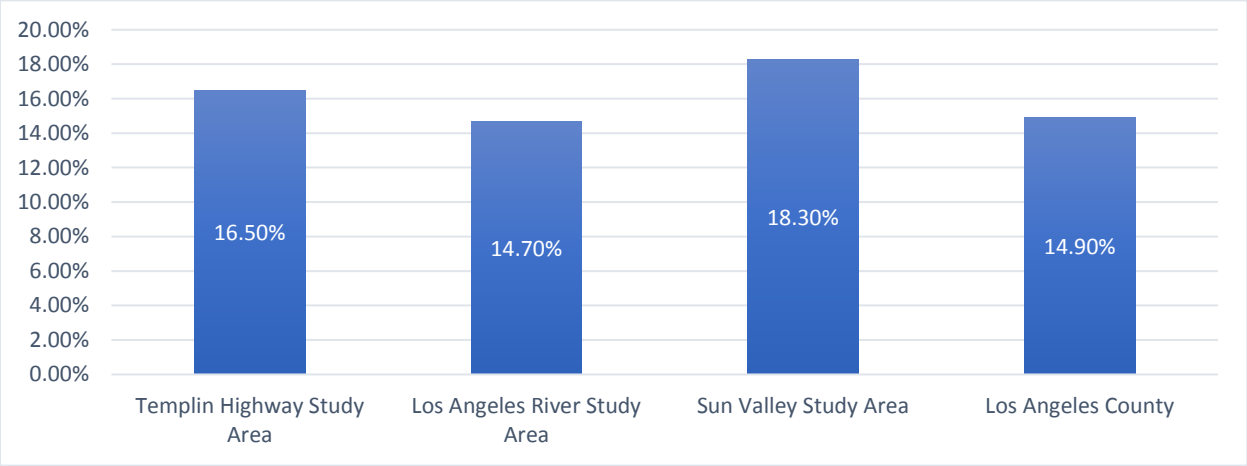

Figure 14: Percentage of Low-Income Households in the Project Study Areas; American Community Survey 2017

Environmental Consequences

No-Build Alternative

Under the No-Build Alternative, there would be no direct or indirect impacts on minority or low-income populations.

Build Alternative

Temporary Impacts

The Build Alternative will increase vertical clearance to 16'-6" on eight bridges in Sun Valley, which will create a continuous route for freight traffic on the I-5 corridor. This is the only alternative to improve freight efficiency on the I-5 Freight Corridor. Though the project may temporarily affect low-income or minority populations, the Build Alternative will benefit the communities by reducing truck traffic on local roads and creating the Olinda St. BOC. Affected communities will experience less traffic on local roads, improved air quality, and better connectivity to transportation facilities. As with all construction activities, there will be temporary construction-related noise, lights, emissions, etc. Construction-related impacts will

[23] https://aspe.hhs.gov/poverty-guidelines

cease once construction is completed. These effects are temporary in nature and will not permanently affect the communities surrounding the project locations.

Permanent Impacts
Six parcels will require full acquisition and one parcel will require partial acquisition. Construction of the Olinda St. BOC will require a small portion of the Sun Valley Metrolink parking lot (partial fee acquisition). The remaining parcels will be acquired for the purpose of construction and staging, as construction will block off access to the businesses on these parcels. After construction, the acquired parcels will remain as part of Caltrans Right-of-Way, and excess lands adjacent to businesses/landowners will be available for purchase. Therefore, there will be no substantial impacts to low-income or minority populations in the project areas. Please refer to Section 2.1.3.2 Relocations and Real Property Acquisition for more information related to parcels and right of way acquisitions.

Cumulative Impacts
Implementation of the proposed project would not disproportionately affect any minority or low-income populations; therefore, the project would not contribute to cumulative impacts on environmental justice.

Avoidance, Minimization, and/or Mitigation Measures

Based on the above discussion and analysis, the Build Alternative would not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of Executive Order 12898. Therefore, no avoidance, minimization, and/or mitigation measures are required.

2.1.4 Utilities/Emergency Services

Affected Environment

The project corridor spans 39.5 miles and includes multiple utilities (Table 12). The following existing utility systems will either be relocated or potholed and protected in place for the proposed project:

Table 12: Affected Utilities

	Affected Utility	Owned By	Location	Action
1	Sewer	LA Department of Public Works (LADPW)	LA River Bridge	Pothole
2	Sewer	LADPW	Roscoe Blvd.	Relocate
3	Electricity	LA Department of Water and Power (LADWP)	Roscoe Blvd.	Relocate
4	Water Line	LADWP	Roscoe Blvd.	Relocate
5	Natural Gas Line	Southern California Gas Co.	Sunland Blvd.	Relocate
6	Electricity	LADWP	Sunland Blvd.	Relocate
7	Water Line	LADWP	Sunland Blvd.	Relocate
8	Telephone Pole	AT&T	Sunland Blvd.	Relocate
9	Sewer	LADPW	Sunland Blvd.	Relocate
10	Water Line	LADWP	Sunland Blvd.	Relocate
11	Natural Gas Line	Southern California Gas Co.	Sunland Blvd.	Relocate
12	Natural Gas Line	Southern California Gas Co.	Sunland Blvd.	Relocate
13	Water Line	LADWP	Olinda St.	Pothole
14	Natural Gas Line	Southern California Gas Co.	Olinda St.	Pothole
15	Natural Gas Line	Southern California Gas Co.	Olinda St.	Pothole
16	Natural Gas Line	Southern California Gas Co.	Lankershim Blvd.	Relocate
17	Natural Gas Line	Southern California Gas Co.	Lankershim Blvd.	Relocate
18	Natural Gas Line	Southern California Gas Co.	Lankershim Blvd.	Relocate
19	Telephone Pole	AT&T	Lankershim Blvd.	Relocate
20	Water Line	LADWP Water	Lankershim Blvd.	Relocate
21	Water Line	LADWP Water	Lankershim Blvd.	Relocate
22	Electricity	LADWP	Peoria St.	Relocate
23	Water Line	LADWP	Peoria St.	Relocate
24	Natural Gas Line	Southern California Gas Co.	Peoria St.	Relocate
25	Natural Gas Line	Southern California Gas Co.	Peoria St.	Relocate
26	Telephone Pole	AT&T	Laurel Canyon Blvd.	Relocate
27	Electricity	LADWP	Laurel Canyon Blvd.	Relocate
28	Water Line	LADWP	Laurel Canyon Blvd.	Relocate

29	Natural Gas Line	Southern California Gas Co.	Laurel Canyon Blvd.	Relocate
30	Natural Gas Line	Southern California Gas Co.	Laurel Canyon Blvd.	Relocate
31	Sewer	LADPW	Laurel Canyon Blvd.	Relocate
32	Oil	Arco	Laurel Canyon Blvd.	Relocate
33	Telephone Pole	AT&T	Laurel Canyon Blvd.	Relocate
34	Power Line	LADWP	Sheldon St.	Relocate
35	Telephone Pole	AT&T	Sheldon St.	Relocate
36	Natural Gas Line	Southern California Gas Co.	Sheldon St.	Relocate
37	Water Line	LADWP	Sheldon St.	Relocate
38	Natural Gas Line	Southern California Gas Co.	Sheldon St.	Relocate

FIRE PROTECTION

The Los Angeles Fire Department (LAFD) provides firefighting and emergency medical services for the City of Los Angeles. The LAFD is responsible for approximately 4 million people who live in the agency's 471 square mile jurisdiction.

The Los Angeles County Fire Department (LACoFD) provides firefighting and emergency medical services for the unincorporated parts of Los Angeles County, California, as well as 59 cities. The department is responsible for just over 4 million residents spread out over 1.2 million housing units across an area of 2,305 square miles.

The following is a list of LAFD and LACoFD stations within 1 mile of the project limits.

Los Angeles River:

- Glendale Fire Station 27
  1127 Western Ave, Glendale, CA 91201

- Glendale Fire Station 21
  421 Oak St, Glendale, CA 91204

- Burbank Fire Dept. Station 15
  1420 W Verdugo Ave, Burbank, CA 91506

Sun Valley:

- Los Angeles Fire Dept., Station 77
  9224 Sunland Blvd, Sun Valley, CA 91352

- Los Angeles Fire Dept., Station 89
  7063 Laurel Canyon Blvd, North Hollywood, CA 91605

Templin Highway:

- Los Angeles County Fire Station #149
  31770 Ridge Rte Rd, Castaic, CA 91384

LAW ENFORCEMENT

The Los Angeles Police Department (LAPD), officially the City of Los Angeles Police Department, serves an area of 498 square miles and a population of more than 4 million.

The following is a list of police departments within 1 mile of the project limits.

Los Angeles River:

- Glendale Police Department
  131 N Isabel St, Glendale, CA 91206

Sun Valley:

- Foothill Community Police Station
  12760 Osborne St, Pacoima, CA 91331

Templin Highway:

- There are no police departments within 1 mile of the Templin Highway location.

HOSPITALS

The following is a list of hospitals located within 1 mile of the project limits.

Los Angeles River:

- There are no hospitals located within 1 mile of the Los Angeles River location.

Sun Valley:

- Pacifica Hospital of the Valley
  9449 San Fernando Rd, Sun Valley, CA 91352

Templin Highway:

- There are no hospitals located within 1 mile of the Templin Highway location.

Environmental Consequences

No-Build Alternative

Under the No-Build Alternative, emergency services (fire protection, law enforcement protection, and emergency service vehicles) and public utilities will not be affected.

Build Alternative

There are several utilities in the project area including sewer, water, power, telephone, and gas lines. During construction, intermittent disruptions of utilities and relocation of utilities will be required to complete the proposed project. Any disruptions to utility service would be scheduled and coordinated to ensure they would not adversely affect the surrounding community.

Coordination with the California Public Utilities Commission (CPUC), and utility owners would be conducted to avoid and minimize impacts to local utilities as a result of this project.

None of the fire/police stations or hospitals located within 1 mile of the proposed project would be directly impacted as a result of the Build Alternative. The Build Alternative would not result in increased population or demand for public services in the study area because no new housing or businesses would be constructed. The Build Alternative would have both beneficial and adverse effects on fire protection, law enforcement protection, and emergency vehicle services within the study area. Construction activities that require closures of travel lanes could result in traffic delays that could affect the ability of fire, law enforcement, and emergency service providers to meet response time goals within the study area. Beneficial effects include improved emergency response times, as the ability to move fire protection, law enforcement, and emergency service vehicles from one area to another would be enhanced by the improved transportation network following construction.

Impacts to existing utility systems would be avoided or minimized to the extent feasible along I-5 and local streets for the Build Alternative. At locations where multiple constraints are present, the existing utility systems are proposed to be relocated. Examples of constraints include residences, businesses, or other private properties.

Cumulative Impacts

Temporary cumulative impacts as a result of the proposed project, in combination with other past, present and future projects, are not considered to be adverse. All temporary impacts described in the above sections, as well as impacts for other projects in the study area, would each be minimized or mitigated and would, therefore, not have a cumulative impact to humans or the physical environment.

Avoidance, Minimization, and/or Mitigation Measures

The relocation work would be performed to reduce or minimize service disruptions in accordance with requirements from the utility owners. The project team will coordinate with various utility owners affected by the project to understand their requirements and avoid or minimize the temporary impacts due to construction. Detailed relocation requirements would be developed in the final design phase when the scope of relocation is defined.

U-1: Caltrans would coordinate with all affected private and public service utilities during the design stage to identify any potential conflicts with existing utilities. This process would include an evaluation of ways to avoid utility relocations by refining the project design and/or protecting existing utilities in place. After seeking approval from utility providers, final relocation/protection measures would be incorporated into the final plans and specifications. Per Caltrans requirements, all linear underground utilities within Caltrans' right of way (ROW) would be encased from ROW to ROW in either steel or concrete.

U-2: Coordination with the California Public Utilities Commission (CPUC) would be conducted during final design and throughout construction of the Project.

U-3: A Traffic Management Plan would be implemented to minimize any circulation impacts during construction and would include construction staging plans, as well as coordination with local residents, businesses, local agencies, and emergency responders. During project construction, Caltrans will coordinate with local emergency service providers to keep them informed of the project construction schedule and any detour routes so as to avoid or minimize any impacts.

2.1.5 Traffic and Transportation/Pedestrian and Bicycle Facilities

Regulatory Setting

The Department, as assigned by the Federal Highway Administration (FHWA), directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of Federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652). It further directs that the special needs of the elderly and the disabled must be considered in all Federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 CFR 27) implementing Section 504 of the Rehabilitation Act (29 United States Code [USC] 794). The FHWA has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to federal-aid projects, including Transportation Enhancement Activities.

Affected Environment

A Traffic Study was completed for this project on June 15, 2018, and a Community Impact Assessment was completed in January 2019.

The study area for traffic and transportation includes the section of the I-5 Freight Corridor from SR-134 to Templin Highway Undercrossing in Los Angeles County. This section of the I-5 is a freeway with full access control and interchanges. From SR-134 to Route 210, it is located in a fully developed urban area. From SR-210 to Calgrove Boulevard, the land surrounding I-5 is mountainous in nature and undeveloped. From Calgrove Boulevard to SR-126, I-5 traverses through the City of Santa Clarita and the Newhall Ranch area, which is newly developed. The Castaic community is located along I-5 north of SR-126. The area further north is not developed. There is a 2.5-mile segment of truck-only lanes from Interstate 210 to SR-14.

Traffic demand generated along this portion of the I-5 freight corridor comes mainly from residential, commercial, and industrial developments.

The Caltrans Project Development Team (PDT) concluded that a quantitative analysis is not needed as the Build Alternative does not increase the capacity of the current facility. Following construction, the number of lanes for automobile traffic would remain the same as pre-construction conditions for all bridges.

Access, Circulation, and Parking

I-5 is a major north/south freeway connecting the states of California, Oregon, and Washington, and a major commuter route in Los Angeles County. The I-5 corridor from SR-134 to the Templin Highway Undercrossing is generally an eight to ten-lane freeway.

The eight bridges in Sun Valley are described below:

Roscoe Blvd. Overcrossing (OC) (Bridge #53-1216) – A two-lane bridge structure with one sidewalk located on its west side. There are no bike lanes or parking on this bridge.

Sunland Blvd. OC (Bridge #53-1114) – A four-lane bridge structure with left turn lanes, a center median, and sidewalks on both sides. There are no bike lanes or parking.

Olinda Street Pedestrian OC (POC) (Bridge #53-1467) – A pedestrian-only bridge structure.

Tuxford St. Offramp (Bridge #53-1218S) – A single-lane southbound off-ramp structure.

Lankershim Blvd. OC (Bridge #53-1118) – A four-lane bridge structure with left turn lanes, a center median, and sidewalks on both sides. A Class II bike lane is located on this bridge. There is no parking.

Peoria St. OC (Bridge #53-1119) – A two-lane bridge structure with sidewalks on both sides. There are no bike lanes or parking on this bridge.

Laurel Canyon OC (Bridge #53-1219) – A four-lane bridge structure with left turn lanes, a center median, and sidewalks on both sides. There are no bike lanes or parking.

Sheldon St. OC (Bridge #53-1120) – A four-lane bridge structure with a left turn lane, center median, and sidewalks on both sides. There are no bike lanes or parking on this bridge.

Bicycle and Pedestrian Facilities

Bicycle travel is accommodated in the study area with two Class I facilities, the Glendale Narrows Riverwalk and the Los Angeles River Bike Path, located adjacent to the Los Angeles River Bridge and a Class II facility on Lankershim Blvd.

Class I Bikeways provide a completely separated right-of-way for the exclusive use of bicycles and pedestrians, with cross-flow by motorists minimized. Class II bicycle lanes provide a striped lane for one-way bicycle travel on a street or highway. Pedestrian facilities within the study area include sidewalks and undercrossings.

Public Transportation

Table 11 contains a list of Metro Bus Routes that travel on roads involved in the proposed project. In addition to these bus routes, Metrolink's Sun Valley Station on the Antelope Valley Line is near the Olinda St. POC.

Table 13: Metro Bus Routes in Project Area

Route	Street	Route	Street
230	Laurel Canyon Blvd.	152	Vineland Blvd.
94	Lankershim Blvd.	163	Vineland Blvd.
224	Lankershim Blvd.	153	Vineland Blvd.
152	Tuxford Ave.	163	Vineland Blvd.
169	Sunland Blvd.	169	Vineland Blvd.

Environmental Consequences

No-Build Alternative

Under the No-Build Alternative, it is anticipated that traffic volumes within neighboring communities will likely increase due to freight traffic detouring outside of the I-5 corridor.

Build Alternative

No impacts are expected to result from the Build Alternative. Traffic circulation is expected to improve with the implementation of the Build Alternative as freight traffic with heavy or over-height loads will be able to stay on I-5 without having to exit the freeway to detour around the bridges due to vertical clearance or load capacity restrictions.

Temporary impacts to traffic on I-5 and local streets may occur during construction. Sheldon St., Laurel Canyon Blvd., Lankershim Blvd., Tuxford Blvd., and Sunland Blvd., will all have one lane of motorized travel open in both directions during construction. The same is true for pedestrian and public access on these roads and bicycle access on Lankershim Blvd. The reconstruction and conversion of the Olinda St. POC to BOC also shows minimal potential to affect travel as the bridge will remain open while the new facility is being constructed.

Three bridges involved in the proposed project involve full closure. As mentioned previously, the Los Angeles River Bicycle Path will be closed during construction from N Zoo Dr. to Riverside Dr. Rerouting bicycle travel through Griffith Park will increase the distance traveled from .7 miles to 1.1 miles. Refer to Figure 15 for the proposed detour. Motorized traffic intending to cross the I-5 freeway at the Peoria St. OC during its closure will be rerouted approximately 5 minutes. The delay time for pedestrians will be approximately 10-20 minutes depending on destination. These estimated vehicular and pedestrian travel times are similar to those that will be experienced during the Roscoe Blvd. construction closure.

The alternating closure of the Templin Highway on/off ramps will affect access, particularly to the residents of the Paradise Ranch community. During Stage 2 of the bridge's construction, northbound traffic intending to exit to Templin highway will experience an estimated 19-minute

increase in travel times due to detours. During Stage 4 of construction, southbound traffic will experience an estimated 15-minute detour. These effects will be temporary and only exist during construction.

During construction, the High Occupancy Vehicle (HOV) lanes will be closed on the main line stretch of the I-5 through Sun Valley (Roscoe Blvd. through Sheldon St.). These closures may cause increased travel time on the freeway. The HOV lanes will reopen once the reconstruction of the eight bridges in Sun Valley is complete. Businesses, emergency vehicles, and school bus routes may temporarily be affected during construction. A Transportation Management Plan (TMP) will be established during the Plans, Specifications, and Estimate (PS&E) phase to address potential impacts. Strategies of a TMP will include public information, motorist information, incident management, construction, demand management, and alternate routes or detours.

The Metro Bus Lines on Lankershim Blvd, Tuxford Ave., Sunland Blvd., and Vineland Blvd. may be slightly delayed due to lane closures. These delays will be minimal as no bus lines are to be detoured because of this project.

There will be a permanent loss of parking spaces at the Sun Valley Metrolink Station due to the new location of the proposed Olinda St. BOC. While this will negatively affect park-and-ride patrons of the station, pedestrians and bicyclists will experience easier access to the station.

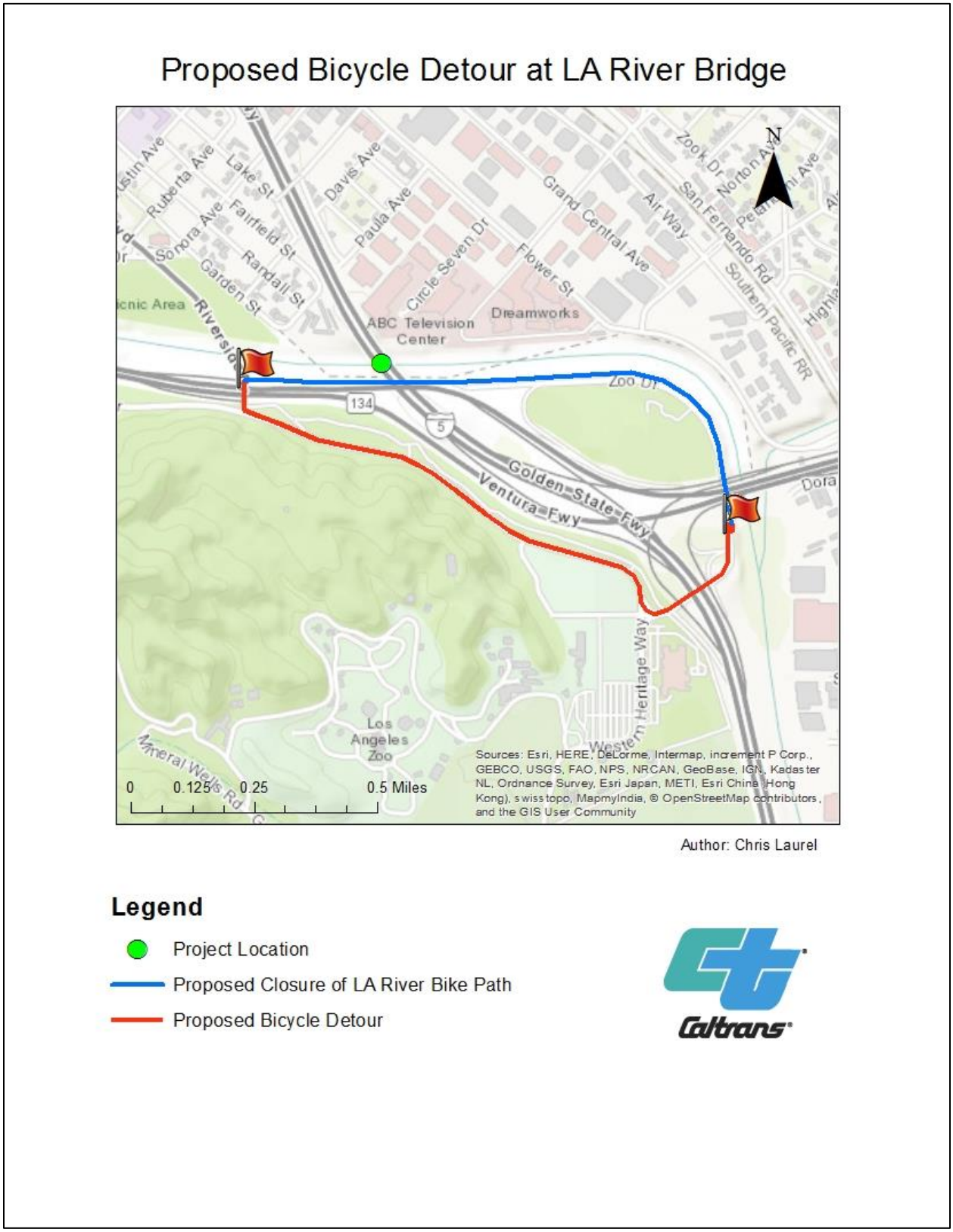

Figure 15: Proposed Bicycle Detour at LA River Bridge

Cumulative Impacts

The implementation of the Build Alternative could be expected to improve the operational capacity, and consequently the safety service level within the project limits. Therefore, the proposed project would not contribute to cumulative impacts. Temporary cumulative impacts associated with the proposed project, in combination with other past, present, and future projects, are not considered to be adverse. All temporary impacts as well as impacts for other projects in the study area, would each be minimized or mitigated and would, therefore, not have a cumulative impact to humans or the physical environment.

Avoidance, Minimization, and/or Mitigation Measures

T-1: Transportation Management Plan (TMP). A TMP shall be developed to implement practical measures to minimize any traffic delays that may result from lane restrictions or closures in the work zone. TMP strategies shall be planned and designed to improve mobility, as well as increase safety for the traveling public and highway workers. These strategies include, but are not limited to, dissemination of information to motorists and the greater public, traffic incident management, construction management strategies, traffic demand management, and alternative route planning/detouring. The TMP would include coordination with local residents, businesses, local agencies, and emergency responders.

T-2: Roadway Closure Planning. Closure plans shall be developed to minimize traffic disruption during peak periods, and to the extent possible, such closures (when required) shall occur during off-peak and/or overnight periods. In advance of any closure periods, appropriate temporary signage (in accordance with Caltrans and City guidelines) shall be used to alert motorists of the closure and direct them to alternate routes.

T-3: Temporary Traffic Controls. Temporary traffic controls, signage, barriers, and flagmen shall be deployed as necessary and appropriately for the efficient movement of traffic (in accordance with standard traffic engineering practices) to facilitate construction of the project improvements while maintaining traffic flows and minimizing disruption.

2.1.6 Visual/Aesthetics

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). To further emphasize this point, the Federal Highway Administration (FHWA), in its implementation of NEPA (23 USC 109[h]), directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of *aesthetic*,

natural, scenic and historic environmental qualities" (CA Public Resources Code [PRC] Section 21001[b]).

Affected Environment

A Visual Impact Assessment (VIA) was completed for this project on October 22, 2018.

The proposed project is located on I-5 between Templin Highway and SR-134 in the City of Los Angeles in Los Angeles County, California. The project is set mostly in the San Fernando Valley of Southern California with a single spot location in the Los Padres National Forest in Los Angeles County at Templin Highway. The landscape is characterized by the flat valley floor with surrounding mountains visible in the background in a suburban residential and light industrial land use setting. Templin Highway is north of the San Fernando Valley in the Los Padres National Forest, a rural mountainous area between Los Angeles and Bakersfield.

No designated State Scenic Highways are within the project limits. Views of the Los Padres National Forest, which the Templin Highway overcrossing lies within, is considered a scenic resource.

Environmental Consequences

No-Build Alternative
Under the No-Build Alternative, existing visual characteristics would remain. The existing condition of the main project area consists of discolored, aging bridges with rust stains surrounded by a patchwork of painted out graffiti, fences in various states of repair, and unpaved areas that collect weeds and trash. The No-Build Alternative will not address these deficiencies.

Build Alternative
Under the Build Alternative, the visual character of the proposed project will be compatible with the visual character of the corridor. Current facilities contrast strongly with the newer portions of the corridor which are vivid with patterns and textures, and unified with a few repeated themes. The proposed project will increase unity, intactness, and vividness overall in the corridor.

As there will be no visual change to the Los Angeles River Bridge and moderate-low changes to the Templin Hwy. segment, resource change overall will be moderate.

Neighbors (people with views *to* the road) and *highway users* (people with views *from* the road) will be affected by the proposed project. Following property acquisition, the Build Alternative will require some buildings to be removed or altered. Neighbors will see low retaining walls and changes in grade at street overcrossings. Relocation of the POC will also be visible to neighbors. Most other changes will be seen from the highway. It is anticipated that visual changes will be considered by viewers as positive.

Visual impacts of the Build Alternative are both temporary and permanent. In comparison to the segment currently in construction and the completed interchange improvements to the north and south, the temporary visual impacts of this project will be low.

No portion of the proposed project area is a designated State Scenic Highway. Scenic resources in the Los Padres National Forest will not be affected. Visual impacts from light and glare are anticipated to be similar to existing conditions. Land acquisitions have the potential to result in derelict buildings creating visual blight. If the acquired portions are cleared the resulting open space may become a visual amenity.

Avoidance, Minimization, and/or Mitigation Measures

The following measures to avoid or minimize visual impacts have been incorporated into the project:

V-1: Design to minimize property acquisitions.

V-2: Stage the work to avoid or minimize impacts to the LA River, minimize slope impacts at Templin Highway, and include aesthetic features including stamped and colored concrete, bridge rail pattern and retaining wall patterns that match others throughout the corridor.

2.1.7 Cultural Resources

Regulatory Setting

The term "cultural resources" as used in this document refers to the "built environment" (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws cultural resources that meet certain criteria of significance are referred to by various terms including "historic properties," "historic sites," "historical resources," and "tribal cultural resources." Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 Code of Federal Regulations [CFR] 800]. On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) among the Federal Highway Administration (FHWA), the ACHP, the California State Historic Preservation Officer (SHPO) and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the ACHP's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA's responsibilities under the PA

have been assigned to the Department. The FHWA's responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties (in Section 4(f) terminology—historic sites). See Appendix A for specific information about Section 4(f).

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as "unique" archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term "tribal cultural resources" to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the NRHP listing criteria. It further requires the Department to inventory state-owned structures in its rights-of-way. Procedures for compliance with PRC Section 5024 are outlined in a Memorandum of Understanding (MOU)[24] between the Department and SHPO, effective January 1, 2015. For most Federal-aid projects on the State Highway System, compliance with the Section 106 PA will satisfy the requirements of PRC Section 5024.

Affected Environment

A Historic Property Survey Report (HPSR), an Archaeological Survey Report (ASR), and a Historical Resources Evaluation Report (HRER) were completed for this project on October 18, 2018. Methods used to complete the technical studies included defining the Area of Potential Effects (APE), conducting a records search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC), reviewing other pertinent cultural resources documentation, reviewing historical information, contacting the Native American Heritage Commission (NAHC) and consulting with interested Native Americans, local governments and historic organizations, conducting archaeological and built environment field surveys, and analyzing the results in the resulting technical reports.

Area of Potential Effects (APE)

The Area of Potential Effects (APE) for the project encompasses all areas that fall within the physical footprint of all project alternatives and areas that may either be directly or indirectly

[24] The MOU is located on the SER at http://www.dot.ca.gov/ser/vol2/5024mou_15.pdf

affected by project-related construction activities. The APE includes all locations of proposed construction, staging of equipment and other materials, and temporary as well as permanent new right of way acquisition. The expected maximum depth of excavation is approximately 31 feet below grade for bridge abutments and 70 feet for bent placement.

Consideration was also given for the U.S. Army Corps of Engineers (USACE) jurisdiction of the Los Angeles River, as the Los Angeles River Bridges and Separations (Bridge No. 53-175L and 53-175R) cross over the river.

Records Searches

A search for archaeological and historical records was completed at the SCCIC on November 14, 2017. The records search included a review of previously recorded cultural resources and previously conducted cultural resources investigations within the APE and a 1-mile radius search area.

In addition to official maps and records, the following sources of information were consulted as part of the records search:

- National Register of Historic Places – listed properties (2018)
- California Register of Historic Resources (2018)
- California Inventory of Historic Resources (1976 and updates)
- California State Historic Landmarks (1996 and updates)
- California Points of Historical Interest (1992 and updates)
- Directory of Properties in the Historical Resources Inventory (Office of Historic Preservation April 2012)
- City of Los Angeles Office of Historic Resources
- Designated Historic-Cultural Monuments
- Historic Preservation Overlay Zones (designated and proposed)

The Caltrans Cultural Resources Database (CCRD) and cultural resources department files were also reviewed for additional cultural resources information not available through CHRIS.

The SCCIC records search shows a total of 65 cultural resources studies previously conducted within the scope of the records search, including 11 studies that covered portions of the APE. These and other studies have identified 12 resources within the 1-mile radius search area. One of these, the Glendale Narrows (P19-190897), is identified in the Department of Parks and Recreation primary record as a channelized section of the Los Angeles River that is south of the project's Los Angeles River Bridge and Separation. The remaining resources consist of 10 historic-period resources and one prehistoric/Native American site containing a fire hearth. The historical resources include a trail, two roads, a transmission line, a lime kiln, two bridges, a refuse deposit, Our Lady of the Holy Rosary Church building complex, and Griffith Park.

Native American Consultation

A search of the Sacred Lands File of the Native American Heritage Commission (NAHC) did not indicate the presence of Native American cultural sites within or in the vicinity of the APE. Caltrans contacted 12 Native American representatives from Fernandeño, Luiseño, Gabrieleño,

and Tongva Indian communities via letters and phone calls for information on any issues of concern related to the proposed project. Responses were received from only two representatives: Mr. Jairo Avila of the Fernandeño Tataviam Band of Mission Indians and Mr. Andrew Salas of the Gabrieleño Band of Mission Indians – Kizh Nation. In phone call and email correspondences, Mr. Salas deferred consultation for the project to the Fernandeño community. Mr. Avila requested information on the extent and maximum depth of ground disturbance at the project locations. This information was provided to (and reviewed by) Mr. Avila. To date, the Tribe has not voiced any concerns for the project.

Field Surveys

A systematic intensive-level pedestrian archaeological survey of the APE was conducted on August, 3, 4, and 29, 2018. The survey employed pedestrian transects spaced at 5-meter intervals throughout the entirety of the APE. The survey focused on areas of exposed soils and unpaved areas for the presence of cultural resources and covered 100 percent of the proposed ground disturbance locations within the APE. The exposed soil areas, upon inspection, proved to be exposures of fill material and not native or undisturbed sediments. All of the APE locations, with the exception of the Templin Highway UC location, were located in relatively flat developed and disturbed areas. The Templin Highway UC location was characterized by artificially raised areas with steep slopes. The archaeological survey resulted in the identification of no archaeological resources within the APE.

Reconnaissance-level and intensive built environment surveys of the APE were conducted in February and August 2018. The intensive survey included those properties which were found to require evaluation for historic significance (including “borderline” properties, or those which may or may not ultimately be intensively evaluated). For properties being evaluated, all salient, extant building permits (for work that is visible from the street and or exterior) were reviewed and noted.

In order to make professional judgements regarding historic significance, the National Register criteria for evaluation, along with integrity assumptions, were applied.

For this project, both previously identified historic resources and previously unidentified properties were field-checked and evaluated for historic significance, according to National Register and California Historic Landmark criteria. Resources subject to review were not limited to buildings, but included structures, objects and bridges, and linear resources. Areas that might qualify as historic districts were considered for eligibility as well.

Archaeological Resources

The archaeological pedestrian survey did not identify any archaeological resources in the APE.

The vertical extent of the APE ranges from 6 feet to 31 feet beneath the existing ground surface for the bridge abutments, and up to 70 feet beneath the ground surface for the pile-driving activities associated with the new bents. Therefore, review of the original construction and proposed construction excavation depths of the Project locations indicate that the proposed improvements will largely remain within the original footprint of construction and within previously disturbed soils for the bridge abutments. The proposed excavation depths for the

abutments are the same or less than the existing disturbance depths from the original construction of the abutments. The construction of the proposed bridge bents will exceed the existing ground disturbance depths that occurred from the original construction of the bridge bents by approximately 40 feet to 52 feet. As a result, construction of the bridge bents will be partially located within previously disturbed soils at depths greater than approximately 18 feet below the ground surface in specific areas. However, there is low potential to encounter archaeological deposits at these depths.

Built Environment Resources

The built environment survey identified a total of 76 properties in the APE boundaries. Of the 76 properties, two properties are being considered eligible for the National Register for the purposes of the project and nine properties met the 50-year age criterion, meriting evaluation and were not exempt from evaluation under the *First Amended Section 106 Programmatic Agreement*. Of those resources, none were determined eligible for listing in the National Register or as a California Historical Landmark. In addition, none is considered a cultural resource for the purposes of NEPA, or as a historical resource as defined in CEQA. The two properties assumed eligible properties are:

<u>Los Angeles River</u>

A segment of the Los Angeles River, between Riverside Dr. on the west side and Flower St. on the east side, in Los Angeles and Glendale, is being assumed eligible for the National Register for the purpose of the project at the local level of significance under Criterion A for its association with the development of federal and Los Angeles County flood control efforts. Its importance under Criterion C is as an engineering and construction archetype. The larger resource is a 51-linear-mile, concrete lined flood channel. Its period of significance is from 1938 to 1960. Flowing roughly east and south from the confluence of Bell Creek and Arroyo Calabasas in Canoga Park, it terminates at Los Angeles Harbor in Long Beach. The assumed-eligible resource boundaries are from Riverside Dr. to Flower St., between the north and south paved banks, including parallel roadways at the tops of the banks. It is not otherwise designated and has not been evaluated for historic significance in reviewed surveys.

<u>Transmission Towers</u>

Two Los Angeles Department of Water & Power (LADWP) electrical transmission towers and connecting wires, between Riverside Dr. on the west side and I-5 Golden State Freeway on the east side, in Los Angeles are being assumed eligible for the National Register for the purpose of the project. They are significant at the local level under Criterion A for their association with the development of 20th century Los Angeles and the availability of electricity. The larger resource is an electrical transmission line of an unknown length. Its period of significance is from 1936 to 1941. The lines run parallel to the Los Angeles River on its southern banks and north of State Route 134 (Ventura Freeway) in the project area. The assumed-eligible resource boundaries are between Riverside Dr. and I-5. The towers are not otherwise designated and have not been previously evaluated for historic significance in reviewed surveys.

Environmental Consequences

No-Build Alternative

Under the No-Build Alternative the existing condition would remain; therefore, no effects to cultural resources would occur.

Build Alternative

Archaeological Resources

No known archaeological sites were identified in the Project's APE. Based on the results of the archaeological studies for this project and given that the proposed work will largely be within a disturbed context or partially located within previously undisturbed soils at depths greater than approximately 18 feet, there is a low potential for encountering intact buried cultural deposits.

If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in and around that immediate area until a qualified archaeologist can assess the significance of the find. Additional archaeological surveys will be needed if the Project limits are extended beyond the present survey limits.

If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Caltrans District Environmental Cultural Branch Chief, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Built Environment Resources

Caltrans, pursuant to Section 106 PA Stipulation IX.A and as applicable PRC 5024 MOU Stipulation IX.A.2, has determined a Finding of **No Historic Properties Affected** is appropriate for this Project because the following historic properties will not be affected.

Neither of the properties being assumed eligible for the National Register for the purposes of the project would be affected by the proposed project.

Los Angeles River

The portions of the Los Angeles River (LA River) in the APE would not be directly affected by its temporary use as a staging area on its existing, paved, level roads at the tops of the levees. None of the roads, sloped side walls or the center channel would be altered by the temporary staging area and there is no other practical way to reach the bridges' undersides, abutments, piers or bents to perform project construction. While vehicles, materials and equipment may be stored in the project area, all vehicles, materials and equipment would be removed at the end of the construction process. Its ownership would not change. The construction process would be temporary (approximately 6-8 months for work at the LA River Bridge) and the river in that area (immediately beneath a freeway) is not sensitive to short term indirect, additional temporary

noise, or setting changes. After the project is completed, the Los Angeles River in this area and its setting would be unchanged.

Transmission Towers
The two electrical transmission towers and their related wires in the APE would not be directly affected by temporary use as staging area on the existing, adjacent paved, level roads atop the levees. The transmission towers would not be altered by the area's use as a temporary staging area and there is no other practical way to reach the bridges' undersides, abutments, piers or bents to perform construction. The construction process would be temporary (approximately 6-8 months for work at the LA River Bridge). The transmission towers and their wires in that area (immediately above the Los Angeles River and two freeways, SR-134 and I-5) are not sensitive to short term additional noise or temporary setting changes. After the project is completed, the transmission towers, their wires, and setting would be unchanged.

Section 4(f)
Since the overall project has a Section 106 No Historic Properties Affected finding, a *De Minimis* Finding to Section 4(f) resources regarding historic properties was made for the Los Angeles River and the LADWP electrical transmission towers. Please refer to Appendix A for further discussion on Section 4(f) resources.

Coordination with the State Historic Preservation Officer was conducted.

Cumulative Impacts
Since the proposed project is not anticipated to affect archaeological or built environment resources and will not affect historic properties, cumulative impacts resulting from the proposed project are not anticipated.

Avoidance, Minimization, and/or Mitigation Measures

C-1: If cultural materials are discovered during construction, all earth-moving activities within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

C-2: If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Caltrans District Environmental Cultural Branch Chief, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

2.2 Physical Environment

2.2.1 Water Quality and Storm Water Runoff

Regulatory Setting

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source[25] unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.

- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).

- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCBs) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).

- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The goal of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

[25] A point source is any discrete conveyance such as a pipe or a man-made ditch.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of the USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency's (U.S. EPA) Section 404 (b)(1) Guidelines (40 Code of Federal Regulations [CFR] Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent[26] standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

State Requirements: Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined, and this definition is broader than the CWA definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect those uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires

[26] The U.S. EPA defines "effluent" as "wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall."

the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollutant Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)- Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water." The SWRCB has identified the Department as an owner/operator of an MS4 under federal regulations. The Department's MS4 permit covers all Department rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

The Department's MS4 Permit, Order No. 2012-0011-DWQ (adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. WQ 2014-0006-EXEC effective January 17, 2014 and Order No. 2015-0036-EXEC (effective April 7, 2015) has four basic requirements:

1. The Department must comply with the requirements of the Construction General Permit (see below);

2. The Department must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and

3. The Department storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the maximum extent practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

4. Caltrans is required to implement control measures to achieve 1650 Compliance Units ("CUs") per year where one CU is equivalent to one acre of the Caltrans right of way, from which is retained, treated, or otherwise controlled prior to discharge.

To comply with the permit, the Department developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design,

construction, and maintenance activities throughout California. The SWMP assigns responsibilities within the Department for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices the Department uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of BMPs. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

Construction General Permit- Construction General Permit, NPDES NO. CAS000002 Order No. 2009-0009-DWQ (adopted on September 2, 2009 and effective on July 1, 2010), as amended by Order No. 2010-0014-DWQ (effective February 14, 2011) and Order No. 2012-0006-DWQ (effective on July 17, 2012). The permit regulates storm water discharges from construction sites that result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least one acre must comply with the provisions of the Construction General Permit. Construction activity that results in soil disturbances of less than one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop Storm Water Pollution Prevention Plans (SWPPPs); to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective SWPPP. In accordance with the Department's SWMP and Standard Specifications, a Water Pollution Control Program (WPCP) is necessary for projects with DSA less than one acre.

Section 401 Permitting- Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the U.S. must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by the USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before the USACE issues a 404 permit.

In some cases, the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as WDRs under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for

protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

Affected Environment

This section is based on a Stormwater Data Report that was completed in October 2018.

Los Angeles River Watershed (Figure 16)

The proposed project (excluding the Templin Hwy location) is located within the jurisdiction of the Los Angeles Regional Water Quality Control Board and within the Los Angeles River watershed. The Los Angeles (LA) River Watershed is one of the largest in the region at 824 square miles; the river is 55 miles long. Approximately 324 square miles of the watershed are covered by forest or open space land including the area near the headwaters which originate in the Santa Monica, Santa Susana, and San Gabriel Mountains. The rest of the watershed is highly developed.

Major tributaries to the river in the San Fernando Valley are the Pacoima Wash, Tujunga Wash (both drain portions of the Angeles National Forest in the San Gabriel Mountains), Burbank Western Channel and Verdugo Wash (both drain the Verdugo Mountains). Due to major flood events at the beginning of the century, by the 1950's most of the river was lined with concrete. At the eastern end of the San Fernando Valley, the river bends around the Hollywood Hills and flows through Griffith and Elysian Parks, in an area known as the Glendale Narrows. Since the water table was too high to allow laying of concrete, the river in this area has a rocky, unlined bottom with concrete-lined or rip-rap sides. This stretch of the river is fed by natural springs and supports stands of willows, sycamores, and cottonwoods. The many trails and paths along the river in this area are heavily used by the public for hiking, horseback riding, and bird watching.

Pollutants from dense clusters of residential, industrial, and other urban activities have impaired water quality in the middle and lower watershed. Added to this complex mixture of pollutant sources (in particular, pollutants associated with urban and stormwater runoff), is the high number of point source permits.

A majority of the approximately 100 NPDES discharges go directly to the Los Angeles River. Of the 1,319 dischargers enrolled under the general industrial storm water permit in the watershed, the largest numbers occur in the cities of Los Angeles (many within the community of Sun Valley), Vernon, South Gate, Long Beach, Compton, and Commerce. There is a total of 378 construction sites enrolled under the general construction storm water permit in this watershed, the most in the region but half of the number of sites enrolled in 2007.

The majority of the LA River Watershed outside of National Forest land is considered impaired due to a variety of point and nonpoint sources. The 2010 303(d) list implicates pH, ammonia, a number of metals, coliform, trash, scum, algae, oil, chlorpyrifos as well as other pesticides, and volatile organics.

Total Maximum Daily Loads (TMDLs) have been developed (as required by the Clean Water Act) for many of the impairments in the watershed. TMDLs are the total maximum allowable pollutants among the different pollutant sources to ensure that the water quality objectives set by the Environmental Protection Agency (USEPA) are achieved. TMDLs are established by the USEPA. [27]

Sun Valley Watershed (Figure 16)

The Sun Valley Watershed is located within the Los Angeles River Watershed, approximately 14 miles northwest of downtown Los Angeles. It encompasses the communities of Sun Valley and North Hollywood in the City of Los Angeles.

The Sun Valley Watershed contains an area of approximately 2,800 acres (4.4 square miles) and spans roughly 6 miles in length from north to south. The watershed is in an urban area consisting of industrial, commercial, and residential uses. The northern portion of the watershed is developed mostly with industrial uses, while the southern portion is primarily residential.

Most of the rainfall in the Sun Valley Watershed occurs between the months of November and April. Due to the slight slope of the land, storm water that is not captured travels southward over street surfaces and drains into the Los Angeles River.[28]

[27] https://www.waterboards.ca.gov/rwqcb4/water_issues/programs/regional_program/Water_Quality_and_Watersheds/los_angeles_river_watershed/la_summary.shtml

[28] https://dpw.lacounty.gov/wmd/svw/overview.aspx

Figure 16: Los Angeles River Watershed & Sun Valley Watershed

Santa Clara River Watershed (Figure 17)

The Templin Hwy location of the project is located within the Santa Clara River Watershed. The Santa Clara River is the largest river system in Southern California remaining in a relatively natural state. The Santa Clara River flows in a westerly direction for approximately 84 miles through Tie Canyon, Aliso Canyon, Soledad Canyon, the Santa Clarita Valley, the Santa Clara River Valley, and the Oxnard Plain before discharging to the Pacific Ocean near the Ventura Harbor.

The Santa Clara River and tributary system covers about 1,634 square miles. Major tributaries include Castaic Creek and San Franciscquito Creek in Los Angeles County, and the Sespe, Piru, and Santa Paula Creeks in Ventura County. Approximately 40 percent of the Watershed is located in Los Angeles County and 60 percent is in Ventura County.[29]

Land use is predominately open space with the mainstem of the river residential, agriculture, and some industrial uses.

Most of the 30 NPDES discharges are to the mainstream of the Santa Clara River while the rest discharge to various tributaries or lakes.

Of the 125 dischargers enrolled under the general industrial storm water permit in the watershed, the largest numbers are located in the cities of Santa Clarita, Santa Paula and Valencia.

Total Maximum Daily Loads (TMDLs) have been developed (as required by the Clean Water Act) for many of the impairments in the watershed. TMDLs are the total maximum allowable pollutants among the different pollutant sources to ensure that the water quality objectives set by the Environmental Protection Agency (USEPA) are achieved. TMDLs are established by the USEPA.[30]

[29] http://www.scrwatershed.org/

[30] https://www.waterboards.ca.gov/rwqcb4/water_issues/programs/regional_program/Water_Quality_and_Watersheds/santa_clara_river_watershed/SC_River.pdf

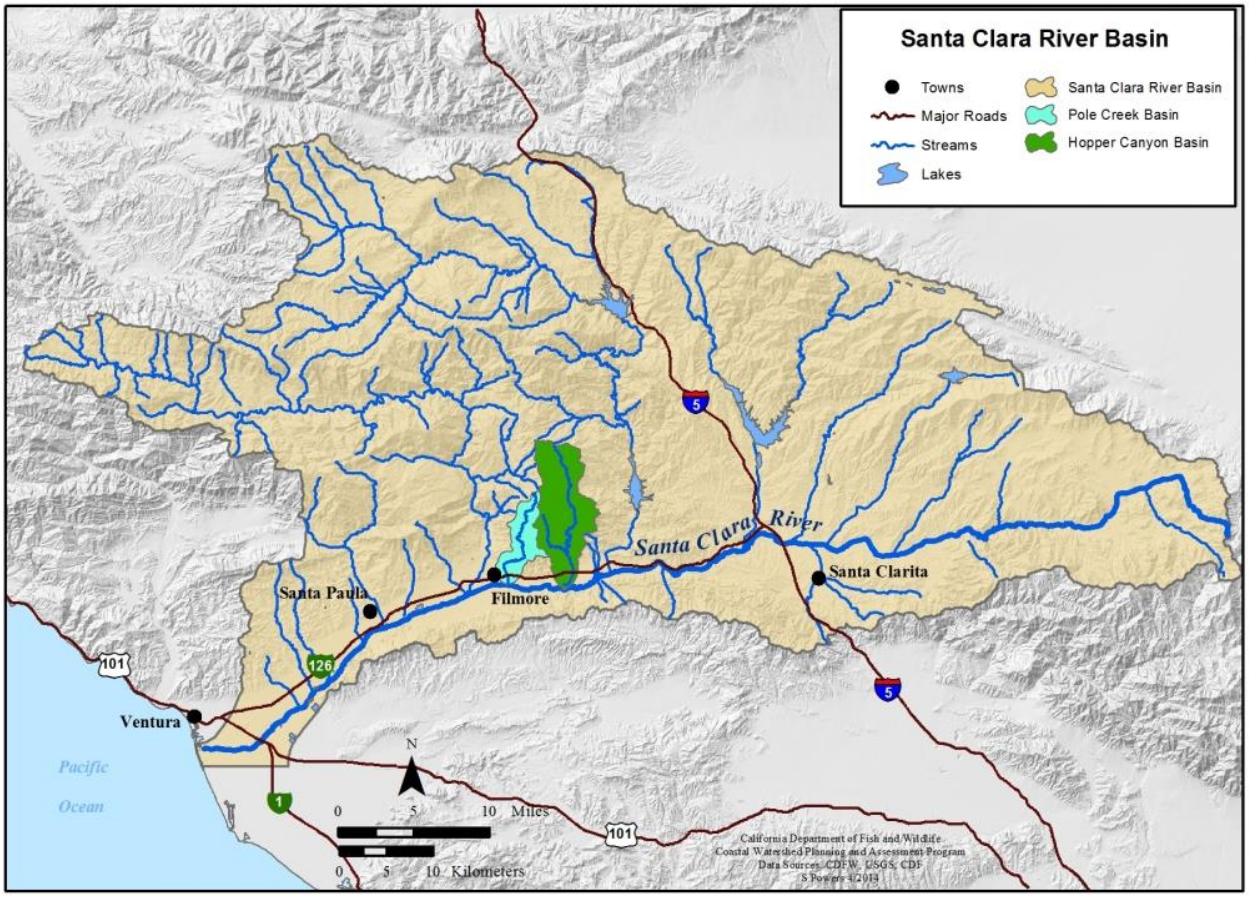

Figure 17: Santa Clara River Watershed

Environmental Consequences

No-Build Alternative

The existing condition would remain; therefore, no impact would occur.

Build Alternative

The Build Alternative would include the replacement of 10 structures along the I-5 Corridor.

Implementation of the Build Alternative would result in the replacement of 27.2 acres of impervious surface and an increase of approximately 0.6 acres of impervious surface area as a result of the replacement and widening of the bridges. The total Disturbed Soil Area (DSA) is 24.6 acres. The calculation provided is an approximation using MicroStation CADD software.

Although the Build Alternative would result in an increase in impervious surface area, the Build Alternative would be designed to accommodate anticipated runoff levels and would include storm water treatment Best Management Practices (BMPs) to minimize potential impacts, in accordance with Caltrans' Statewide NPDES Storm Water Permit. Erosion and sediment control BMPs are typically used to reduce sediment movement and storm water contamination along

roadways. Project BMP implementation would follow Caltrans' SWMP instruction. Therefore, no impacts on water quality are anticipated to result from the operation of the Build Alternative. During construction, there is potential that exposed soils, construction debris, and other pollutants could be carried in storm water runoff and discharged into drainages near the project area. Construction impacts from the Build Alternative would be minimized through compliance with the NPDES General Permit for Discharges from Construction Activities (Construction General Permit), which requires the development and implementation of a SWPPP.

The SWPPP must include erosion and sediment control BMPs, as well as BMPs that control other potential construction-related pollutants. A Construction Site Monitoring Program that identifies monitoring and sampling requirements during construction is also a required component of the SWPPP. Construction BMPs would include implementation of erosion control measures, street sweeping and vacuuming, and installation of concrete washout bins, fiber rolls, drainage inlet protection, and sediment barriers. BMPs would be finalized during final Project design. With implementation of standard BMPs, no impacts on water quality are anticipated to result from Project construction.

Any existing Treatment BMPs within the scope of the Build Alternative will not be removed or modified as part of the project.

Cumulative Impacts

The cumulative setting is considered the Los Angeles River Watershed and Santa Clara River Watershed where water quality has been impaired by several types of pollutants, as discussed above. Therefore, past projects within the cumulative setting have resulted in substantial cumulative impacts on water quality and storm water runoff. However, present and reasonably foreseeable future projects would be required to comply with standard regulations and permits, which would minimize or avoid potential cumulative impacts on the watershed.

The Build Alternative would be designed in accordance with Caltrans' Statewide NPDES Storm Water Permit and related storm water requirements, which would minimize the potential for water quality impacts. Therefore, contributions to cumulative impacts would not be considerable.

Avoidance, Minimization, and/or Mitigation Measures

The Build Alternative would be designed in accordance with Caltrans' Statewide NPDES Storm Water Permit and related stormwater requirements, which would minimize potential impacts; therefore, no avoidance, minimization, and/or mitigation measures are required.

2.2.2 Geology/Soils/Seismic/Topography

Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of

major geological features." Topographic and geologic features are also protected under the California Environmental Quality Act (CEQA).

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Structures are designed using the Department's Seismic Design Criteria (SDC). The SDC provides the minimum seismic requirements for highway bridges designed in California. A bridge's category and classification will determine its seismic performance level and which methods are used for estimating the seismic demands and structural capabilities.

Affected Environment

This section describes geologic, soil, and seismic conditions near the project area; an analysis of potential environmental impacts of the project alternatives on these conditions and potential impacts of geotechnical conditions on the transportation facility is also included. This section assesses potential impacts from faulting, seismicity, and liquefaction to the proposed project.

The Los Angeles River Bridge location is not included in this section because ground disturbance is not proposed. Therefore, impacts to geology at this location are not anticipated.

The geologic and geotechnical conditions and subsequent conclusions presented in this section are based on the Preliminary Foundation Reports (Caltrans, April – September 2018) prepared for the project.

Site Geology

Sun Valley Locations:

The topography of this area is gently sloping alluvial plain with the freeway in a cut section below the surrounding area. The entire project (including the existing freeway) is directly underlain by alluvium. This alluvium was deposited primarily by floods emanating from the San Gabriel and Verdugo Mountains to the north of San Fernando Valley adjacent to the project location. The alluvium consists of predominantly medium dense to very dense sand that in some areas include sparse to abundant gravel and cobbles with occasional boulders. Depth to bedrock or rock-like material should be estimated at greater than 300 feet for this project. The proposed bridge footings along the northbound and southbound I-5 Freeway will be founded on cut section within the alluvium.

Templin Hwy UC:

The material encountered in the north abutment cut slopes is sedimentary bedrock of Tertiary Age Peace Valley Formation consisting of clay shale, claystone, and siltstone with thin layers of sandstone. The bedding of the sedimentary bedrock strikes approximately north/south and dips between 15-22 degrees toward the west. It appears that there was a gully or canyon nearby and partially under the south abutment that was filled during original freeway construction. The material encountered in the south abutment consists of mixtures of sand and clay fill with gravel overlying clay shale, claystone, and siltstone sedimentary bedrock which was encountered at an approximate elevation of 2510 feet.

Subsurface Conditions

Sun Valley Locations:
Geotechnical borings performed at all structures in Sun Valley found the subsurface to consist of alluvium at all locations.

Templin Hwy UC:
Interbedded shale and sandstone were encountered on the northwest end of the structure and on the southeast end of the structure. Varying thickness of alluvium were found to overlie the bedrock material on the southside of the bridge. Approximately 12 to 22 feet of medium dense clayey sand and very stiff sandy clay with rock fragments was encountered in this area. The thickness of the alluvium was found to increase from west to east.

The freeway embankment itself is primarily composed of cut sandstone/shale on the north side of the bridge and stiff sandy clay and medium dense sandy silt fill on the south end.

Groundwater Conditions

Sun Valley Locations:
Groundwater was not located at any of the bridge structures in Sun Valley.

Templin Hwy UC:
Groundwater was measured at 42 feet below ground surface. The groundwater was found within the sandy clay alluvium lying above the bedrock formation.

Faulting and Seismicity

None of the structures are located within any Alquist-Priolo Earthquake Fault Zone as established by the California Geological Survey and is not located within 1000 feet of a Holocene fault. Therefore, potential for surface fault rupture does not exist.

Liquefaction

Sun Valley Locations:
Since groundwater was not encountered at any of the Sun Valley locations, the potential for the occurrence of liquefaction is considered non-existent.

Templin Hwy UC:
Due to the presence of groundwater within very dense sand or sandy clay and below the top of bedrock, the potential for liquefaction is considered negligible at the project site.

Environmental Consequences

No-Build Alternative

There would be no modifications to existing structures and no ground disturbance would occur under the No-Build Alternative. Therefore, this alternative would not result in impacts related to geology, soils, seismicity, and topography.

Build Alternative

The environmental consequences for the Build Alternative are as follows:

Ground Shaking – The proposed structures may be subject to strong ground motions from nearby earthquake sources during their design life. However, the project would be built to meet current seismic standards.

Liquefaction – The liquefaction potential is considered to be none to low for the Build Alternative.

Cumulative Impacts

While other projects may impact the geology at their project sites, the geological impacts would be localized and would not impact regional geology. Therefore, the build alternatives would not contribute to cumulative adverse impacts related to geological and seismic hazards.

Avoidance, Minimization, and/or Mitigation Measures

GEO-1: Additional geologic testing will be required to provide appropriate recommendations to ensure the design of the proposed structures, foundation, pacing, and grading associated with the proposed project is geologically sound as the current report is preliminary, and a final Foundation Report (FR) will be required.

2.2.3 Hazardous Waste/Materials

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, and the Resource Conservation and Recovery Act (RCRA) of 1976. The purpose of CERCLA, often referred to as "Superfund," is to identify and cleanup abandoned contaminated sites so that public health and welfare are not compromised. The RCRA provides for "cradle to grave" regulation of hazardous waste generated by operating entities. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order (EO) 12088, *Federal Compliance with Pollution Control Standards*, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and cleanup of contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

Affected Environment

The following discussion incorporates the results of the Hazardous Waste Assessment (HWA) prepared on October 25, 2018. The assessment generally consists of project evaluation, a departmental record review, regulatory agency records review, and a general field visit. Key elements of the project scope of work will involve environmental issues common to highway construction projects. Of particular concern were the potential occurrence of aerially deposited lead (ADL), Asbestos and lead-based paint, soil vapor and groundwater, imported borrow, electrical waste, treated wood waste, and yellow striping waste as presented in Table 14.

Table 14: Hazardous Waste/Materials of Concern

Hazardous Waste/Materials of Concern	Occurrence
Aerially Deposited Lead (ADL)	Aerially Deposited Lead contamination is generally found in unpaved soil due to historical use of lead containing fuel.
Asbestos and Lead-Based Paint	Asbestos containing materials and lead-based paint are suspected to be present in the structures proposed for widening, especially for bridges built prior to 1970.
Soil Vapor and Groundwater	The Sheldon, Laurel Canyon, Peoria St., Lankershim, Tuxford, Olinda, Sunland, Roscoe, and LA River Bridge structures are within the boundaries of the San Fernando Valley Groundwater Superfund site. The Superfund site is contaminated with volatile organic compounds (VOCs) as soil vapor and in the groundwater. A Site Investigation will be performed during the design phase in order to quantify the amount of VOCs that will be encountered.

Imported Borrow	If imported borrow is needed, it will be tested and found to be free of contaminants prior to acceptance and placement.
Electrical Waste	Electrical equipment waste may be generated by the project. This includes mercury sensors, switches, timers, mercury vapor lamps, ballasts, fluorescent and LED bulbs, etc.
Treated Wood Waste	Treated wood waste will be encountered during removal and replacement of Metal Beam Guard Rail (MBGR). Pursuant to Title 22 CA Code of Regulations, the existing wood posts can be assumed to be treated with chemical preservatives such as arsenic, chromium, copper, and pentachloro-phenol. Once the wood posts/poles are removed and become waste, they are considered as treated wood waste (TWW), a California hazardous waste that is subject to California regulations for the handling, storage, transportation, and disposal.
Yellow Thermoplastic Traffic Striping	Yellow thermoplastic traffic stripes that need to be removed may contain lead and chromium at concentrations that are considered hazardous.

Environmental Consequences

No-Build Alternative

The No-Build Alternative would not change the existing physical environment and therefore would not result in permanent impacts related to hazardous wastes, including permanent acquisition of properties with hazardous waste concerns. As with the Build Alternative, routine maintenance activities would continue and would be required to follow applicable regulations with respect to the handling and disposal of potentially hazardous materials. Vehicles utilizing the I-5 corridor would continue to transport hazardous substances that could spill and impact the roadway, adjacent properties, or resources.

Build Alternative

There is a potential for exposure to general hazardous waste/materials of concern during construction. Soil excavation and earth-moving activities associated with the Build Alternative could expose workers to contaminants associated with Aerially Deposited Lead (ADL), asbestos and lead-based paint, soil vapor and groundwater, imported borrow, electrical waste, treated wood waste, and yellow thermoplastic traffic striping.

Aerially Deposited Lead

ADL from the historical use of leaded gasoline, exists along roadways throughout California. There is likely presence of soils with elevated concentrations of lead as a result of ADL on the state highway system right-of-way within the limits of the Build Alternative. Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed under the July 1, 2016, ADL Agreement between Caltrans and the California Department of Toxic Substances

Control. This ADL Agreement allows such soils to be safely reused within the project limits as long as all requirements of the ADL Agreement are met.

Asbestos Containing Materials and Lead-Based Paint

There is a hazardous waste concern that Asbestos Containing Materials (ACM) and lead-based paint might exist in bridge structures. Therefore, to meet the National Emission Standards for Hazardous Air Pollutants, an asbestos survey by a certified asbestos consultant would be required to determine if ACM is present in the bridge structures. If the bridge contains ACM, abatement would be required. A lead-based paint survey will also be required in order to determine if the bridge structures contain lead-based paint. Any lead-based paint encountered will be contained and disposed of at a permitted Class 1 Hazardous Waste disposal facility.

Soil Vapor and Groundwater

As mentioned previously, there is potential to encounter soil vapor and groundwater at the proposed project locations. If dewatering is required for the project, the groundwater will need to be sampled and analyzed during the design phase to determine disposal options such as recycling or sewer/storm drain discharge. Treatment of groundwater may be required if discharge to the storm drain is selected. Discharge to the storm drain will require a National Pollutant Discharge Elimination System (NPDES) Permit.

Imported Borrow

If imported borrow is needed, it must be tested and found to be free of contaminants prior to acceptance and placement.

Electrical Waste

Electrical equipment waste may be generated by the project. Electrical equipment waste is a California hazardous waste that must be disposed of at a permitted facility in California. All electrical equipment requiring disposal shall be packaged and transported to an appropriate permitted disposal facility.

Treated Wood Waste

Treated Wood Waste generated from the Build Alternative will be subject to California regulations for its handling, transportation, and disposal. The appropriate standard special provision will be included in the Plans, Specifications & Estimates during the Design phase.

Yellow Thermoplastic Traffic Striping

During construction, exposure to contaminants associated with yellow traffic striping can be avoided fully, or minimized as needed, through adherence to protocols for their removal, handling, and disposal.

Right-of-Way Acquisition

Any right-of-way acquisition will require a Site Investigation (SI) on the parcels for all contaminants to comply with Caltrans requirement for acquisition of uncontaminated property.

A SI for hazardous waste/materials will be needed at all project locations and will be performed during the Design phase of the project.

Cumulative Impacts

The proposed project operations would not involve the use of hazardous materials and would not have impacts with regard to hazardous waste. Therefore, proposed project operations would not contribute to cumulative effects regarding hazardous wastes or materials.

Temporary cumulative impacts as a result of the proposed project, in combination with other past, present and future projects, are not considered to be adverse. All temporary impacts described in the above sections, as well as impacts for other projects in the study area, would each be minimized and would, therefore, not have a cumulative impact to humans or the physical environment.

Avoidance, Minimization, and/or Mitigation Measures

HAZ-1: A project-specific Lead Compliance Plan and Debris Containment and Disposal Work Plan will be prepared to address the removal, containment, storage, sampling, transport, and disposal of yellow thermoplastic and lead-based painted traffic strip and/or pavement markings, and to prevent or minimize worker exposure to lead while handling the debris/residue (California Code of Regulations [CCR], Title 8, Section 1532.1, "Lead," and California Occupational Safety and Health Administration [Cal OSHA] Construction Safety Order).

HAZ-2: During construction, excess ADL soils require special handling and waste management, especially when disturbed during earthmoving activities. The California Department of Transportation (Caltrans) Office of Environmental Engineering will initiate a project-specific aerially deposited lead (ADL) investigation to evaluate whether the excess ADL soils generated can be reused on the project site and/or along the project corridor by adhering to the requirements of the Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils (ADL Agreement) that the Department entered into with the California Department of Toxic Substances Control (July 2016). If the excess ADL soils cannot be reused on the project site and/or along the project corridor, the site investigation will also determine whether they are classified as federal or state hazardous waste that requires off-site disposal at a permitted Class I California hazardous waste disposal facility or can be relinquished to the contractor with or without restrictions on land use.

HAZ-3: Surveying and sampling will be required to determine procedures for the proper removal, handling, and disposal of asbestos-containing materials (ACM) and lead-based paint (LBP) during construction. Upon completion and analyses of surveys and sampling, an Asbestos Compliance Plan, Asbestos Removal Work Plan, and Lead-Based Paint Compliance Plan, and Lead-Based Paint Removal Work Plan shall be completed and signed by a Certified Industrial Hygienist that outlines potential risks and appropriate monitoring plans, as well as safety measures, to reduce the risk of worker exposure to contamination.

HAZ-4: Groundwater testing will be required to determine the extent of potential contamination in groundwater that will be encountered during construction, and to confirm whether contamination, if any, can be attributed to nearby sources and impacts from previous releases.

Appropriate non-Standard Special Provisions for excavation, air monitoring, management, and disposal of soil and groundwater (perched, if encountered) shall be included in the PS&E package.

HAZ-5: If dewatering is required for the project, the groundwater will need to be sampled and analyzed during the PS&E phase to determine disposal options.

HAZ-6: If imported borrow is needed, it must be tested and found to be free of contaminants prior to acceptance and placement. The appropriate non-Standard Special Provisions shall be included in the PS&E package.

HAZ-7: If new right-of-way will be acquired for the proposed improvements as fee or easement, permanent or temporary, including full acquisition, partial acquisition, permanent easement, maintenance easement, aerial easement, or TCE, a site investigation (SI) needs to be performed on the parcels for all contaminants to comply with Caltrans requirement for acquisition of uncontaminated property. The SI will be performed after right-of-way appraisal maps are received and entry permits are obtained by the Division of Right of Way.

HAZ-8: All electrical equipment requiring disposal shall be packaged and transported to an appropriate permitted disposal facility. A Non-Standard Specification (NSSP) that requires the contractor to inspect the existing electrical components to determine if any hazardous materials are present prior to starting construction shall be included in the PS&E package.

HAZ-9: Caltrans shall follow the appropriate Standard Special Provisions for the handling, storage, transportation, and disposal of Treated Wood Waste.

2.2.4 Air Quality

Regulatory Setting

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality while the California Clean Air Act (CCAA) is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (ARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for six transportation-related criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM)—which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM_{10}) and particles of 2.5 micrometers and smaller ($PM_{2.5}$)—and sulfur dioxide (SO_2). In addition, national and state standards exist for lead (Pb), and state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H_2S), and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety, and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air

toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under the National Environmental Policy Act (NEPA). In addition to this environmental analysis, a parallel "Conformity" requirement under the FCAA also applies.

Conformity

The conformity requirement is based on FCAA Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the NAAQS. "Transportation Conformity" applies to highway and transit projects and takes place on two levels: the regional (or planning and programming) level and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and "maintenance" (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. U.S. EPA regulations at 40 Code of Federal Regulations (CFR) 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and in some areas (although not in California), sulfur dioxide (SO_2). California has nonattainment or maintenance areas for all of these transportation-related "criteria pollutants" except SO_2, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP) and 4 years (for the FTIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the FCAA and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA) make the determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the FCAA. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept and scope and the "open-to-traffic" schedule of a proposed transportation project are the same as described in the RTP and FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Project-level conformity is achieved by demonstrating that the project comes from a conforming RTP and TIP; the project has a design concept and scope[31] that has not changed significantly from those in the RTP and TIP; project analyses have used the latest planning assumptions and EPA-approved emissions models; and in PM areas, the project complies with any control measures in the SIP. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in CO and PM nonattainment or maintenance areas to examine localized air quality impacts.

Affected Environment

The following discussion is based on the information provided in an Air Quality Report prepared by the Caltrans Air Quality Branch on 12/14/18.

The proposed freight corridor improvement project is located along I-5 in Los Angeles County within the South Coast Air Basin (SCAB). The primary agency responsible for attaining state and federal air quality standards in the SCAB is the South Coast Air Quality Management District (SCAQMD). The SCAQMD works directly with the Southern California Association of Governments (SCAG), which is the Metropolitan Planning Organization (MPO) that have jurisdiction over the project area. Mobile sources are regulated by the California Air Resources Board (CARB).

The proposed project is included in the 2017 Federal Transportation Improvement Program (Federal TIP) and is proposed for funding from the State Highway Operation and Protection Program (SHOPP) under Bridges Program 20.10.201. It is also included in the SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

Climate, Meteorology, and Topography

Meteorology (weather) and terrain can influence air quality. Certain weather parameters are highly correlated to air quality, including temperature, the amount of sunlight, and the type of winds at the surface and above the surface. Winds can transport ozone and ozone precursors from one region to another, contributing to air quality problems downwind of source regions. Furthermore, mountains can act as a barrier that prevents ozone from dispersing.

Climate throughout the District varies depending on the terrain. The SCAB includes coastal zone, inland valleys, mountain areas, and deserts, but most of the basin is relatively arid, with little rainfall and abundant sunshine during summer months. It is bordered by the Pacific Ocean to the southwest and mountains over 10,000 feet in elevation to the north and east.

Topography and terrain will greatly influence air movement through an area. The SCAB has light winds and poor vertical mixing compared to most other large urban areas in the United States, largely due to temperature inversions. Typically, air is warmer near the Earth's surface and becomes cooler as distance from the Earth increases and air loses heat. However, in the Southern California summer, warm, high-pressure, subsiding air is undercut by a shallow layer

[31] "Design concept" means the type of facility that is proposed, such as a freeway or arterial highway. "Design scope" refers to those aspects of the project that would clearly affect capacity and thus any regional emissions analysis, such as the number of lanes and the length of the project.

of cool marine air, creating a marine inversion that acts as a cap 1000-1500 feet above mean sea level for emitted pollutants, preventing their escape. Drainage of cool air off of the region's surrounding mountains at night in addition to the seaward movement of cool air can also create a temperature inversion, especially around the Lake Elsinore area.

This poor air dispersion combined with plentiful sunshine creates an atmospheric environment constructive to the formation of photochemical smog, especially during the dry season. Because the direction and speed of airflow determine how air pollutants are transported and dispersed, particulates and other pollutants become easily trapped in the Basin.

The climatological station at Glendale Stapenhorst (#043450), San Fernando (#047759), and Dry Canyon Reservoir (#042516), maintained by the Western Regional Climate Center, are located near the project site and are representative of meteorological conditions near the project. Table 15 below shows the annual average maximum and minimum temperature measured at the climatological stations. January and February are typically the coldest months and warmest temperature occurs in July and August. Temperature inversions are common affecting localized pollutant concentrations in the winter and enhancing ozone formation in the summer.

Table 15: Climatological Data

Climatological Stations	Station Number	Period of Record	Annual Temperature		Annual Ave Rainfall (inches)
			Ave Max	Ave Max	
Glendale Stapenhorst	43450	1929 to 1971	76.4° (24.7°C)	49.2°F (9.5°C)	16.37
San Fernando	47759	1906 to 1974	77.8F (25.4C)	49.0°F (9.5°C)	17.77
Dry Canyon Reservoir	42516	1921 to 1990	77.0°F (25°C)	45.5F (7.5°C)	13.74

Existing Ambient Air Quality

Ambient monitoring data were obtained from the Monitoring Stations identified below.

Santa Clarita-Placerita Station (ARB#70090)
22224 Placerita Canyon, Santa Clarita, CA 91321
Lat 34.383333, Long -118.5283
Located approximately 2.23 miles East of I-5 and 15.5 miles south of Templin Highway UC.

Reseda Station (ARB#70074)
18330 Gault St, Reseda, CA 91702
Lat 34.199167, Long -118.5328
Located approximately 7.0 miles West of I-5 and 8.5 miles west of Roscoe OC, Sunland OC, Olinda POC, Tuxford Off-Ramp OC, Lankershim OC, Peoria OC, Laurel Canyon OC, and Sheldon OC.

LA-North Main Station (ARB#70087)
1630 North Main St, Los Angeles, CA 90012
Lat 34.066389, Long -118.2267
Located approximately 0.6 miles West of I-5 and 7.21 miles southwest of LA-River Bridge.

Figures 18, 19, and 20 shows the location of the monitoring stations in relation to the freeway and the proposed project area. Tables 16, 17, and 18 lists air quality trends in data collected at the above identified monitoring stations near the proposed project.

Figure 18: Location of Santa Clarita Monitoring Station and Templin Highway UC

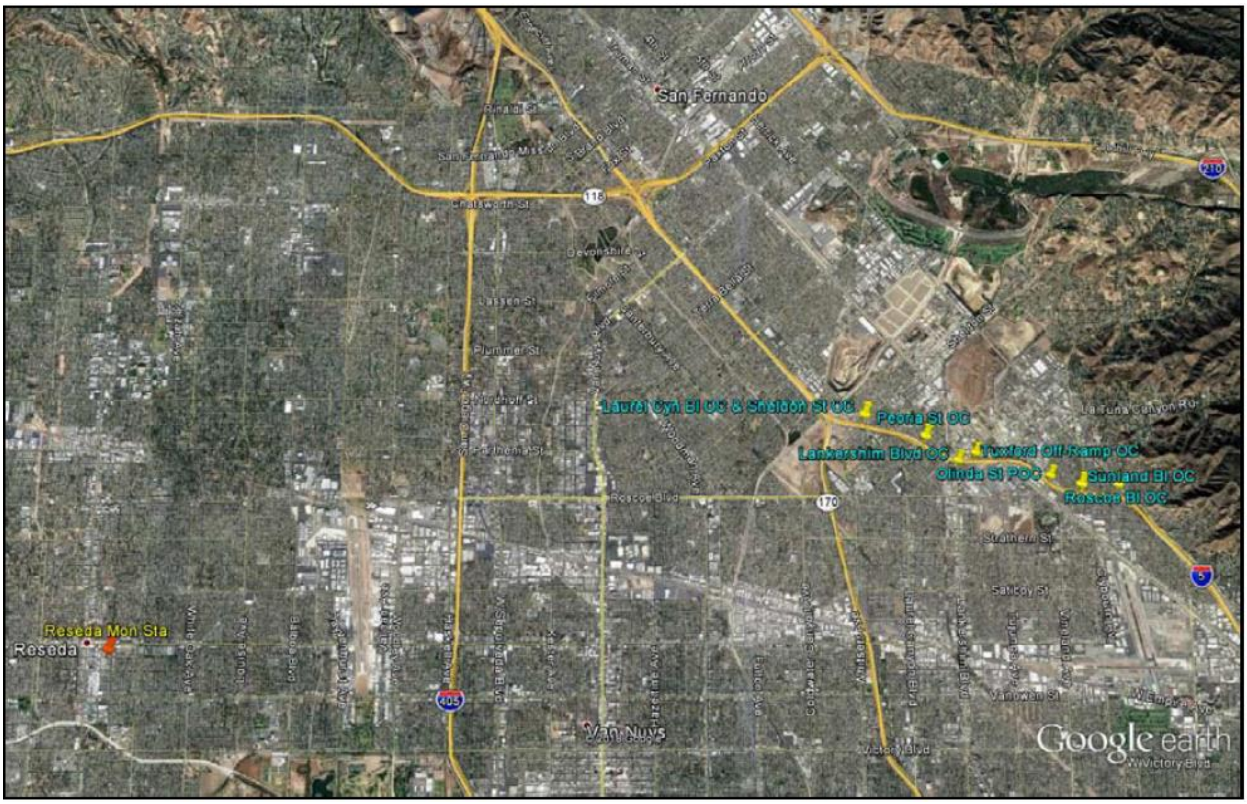

Figure 19: Location of Reseda Monitoring Station and Roscoe OC, Sunland OC, Olinda POC, Tuxford Off-ramp OC, Lankershim OC, Peoria OC, Laurel Canyon OC, and Sheldon OC

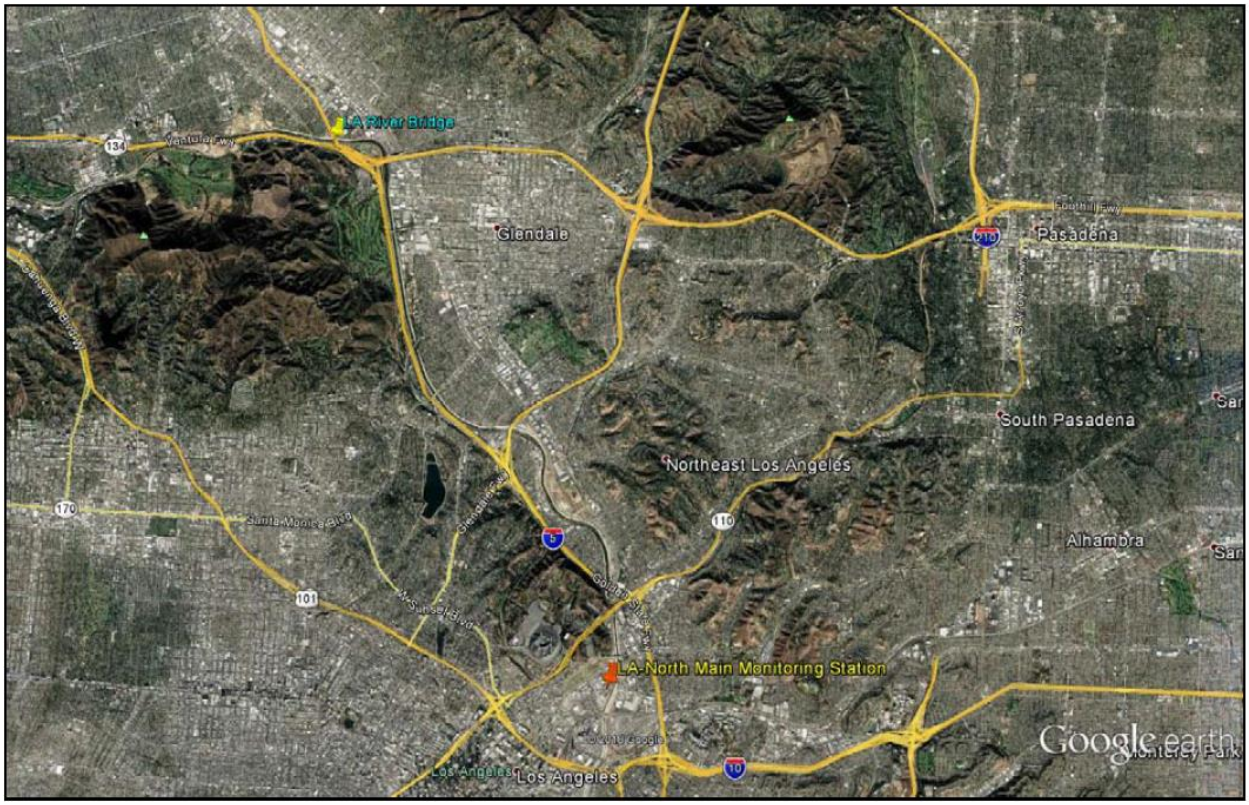

Figure 20: Location of LA-North Monitoring Station and LA River Bridge

Table 16: Ambient Concentrations at the Santa Clarita Monitoring Station (5 years)

Pollutant	Standard	2013	2014	2015	2016	2017
Ozone						
Max 1-hr concentration		0.134	0.137	0.126	0.13	0.151
No. days exceeded: State	0.09 ppm	30	32	23	29	45
Max 8-hr concentration		0.104	0.110	0.108	0.115	0.128
No. days exceeded: State	0.070 ppm	58	65	55	59	76
Federal	0.070 ppm	57	64	52	57	73
Carbone Monoxide						
Max 1-hr concentration		1.3	2.9	1.2	1.3	1.3
No. days exceeded: State	20 ppm	*	*	*	*	*
Federal	35 ppm	0	0	0	0	0
Max 8-hr concentration		0.8	1.2	0.9	1.1	0.8
No. days exceeded: State	9.0 ppm	*	*	*	*	*
Federal	9 ppm	0	0	0	0	0
PM_{10}						
Max 24-hr concentration		43	47	41	96.0	66.5
No. days exceeded: State	50 μg/m^3	0	0	0	*	*
Federal	150 μg/m^3	0	0	0	0	0.0
Annual Average concentration: Federal/State		21.6/20.6	23.2/22.1	18.4/*	23.4/*	23.7/*
No. days exceeded: State	20 μg/m^3	*	*	*	*	*
$PM_{2.5}$						
Max 24-hr concentration: State		29.5	28.9	34.4	33.9	32.6
No. days exceeded: Federal	35 μg/m^3	*	*	*	*	*
Annual Average concentration: Federal/State		*/9.9	*/*	*/*	9.4/*	10.2/*
No. days exceeded: State	12 μg/m^3	*	*	*	*	*
Federal	12.0 μg/m^3	*	*	*	*	*
Nitrogen Dioxide						
Max 1-hr concentration		65.3	57.7	64.6	46.4	57.6
No. days exceeded: State	0.18 ppm	0	0	0	0	0
Federal	100 ppb	0	0	0	0	0
Annual Average		14	12	11	10	10
No. days exceeded: State	0.030 ppm	0	0	0	0	0
Federal	53 ppb	0	0	0	0	0

Notes:

1. *Data were taken from the CARB website except for CO, which was taken from the EPA website.*
2. "*" Means data not available.

Table 17: Ambient Concentrations at the Reseda Monitoring Station (5 years)

Pollutant	Standard	2013	2014	2015	2016	2017
Ozone						
Max 1-hr concentration		0.124	0.116	0.119	0.122	0.14
No. days exceeded: State	0.09 ppm	7	6	11	9	26
Max 8-hr concentration		0.092	0.092	0.094	0.098	0.114
No. days exceeded: State	0.070 ppm	21	31	34	23	67
Federal	0.070 ppm	20	27	32	23	64
Carbone Monoxide						
Max 1-hr concentration		2.9	3.7	3.0	2.4	3.0
No. days exceeded: State	20 ppm	0	0	0	0	0
Federal	35 ppm	0	0	0	0	0
Max 8-hr concentration		2.3	3.0	2.5	1.9	2.5
No. days exceeded: State	9.0 ppm	0	0	0	0	0
Federal	9 ppm	0	0	0	0	0
PM_{10} **						
Max 24-hr concentration		53.3	68.6	*	*	*
No. days exceeded: State	50 μg/m^3	5.7	*	*	*	*
Federal	150 μg/m^3	0	0	*	*	*
Annual Average concentration: Federal/State		25.8/28	28.8/*	*/*	*/*	*/*
No. days exceeded: State	20 μg/m^3	0	*	*	*	*
$PM_{2.5}$						
Max 24-hr concentration: State		41.8	27.2	36.8	30.0	35.2
No. days exceeded: Federal	35 μg/m^3	3.0	*	3.6	0	0
Annual Average concentration: Federal/State		9.8/9.9	*/*	8.8/*	9.1/16.9	9.7/16.8
No. days exceeded: State	12 μg/m^3	0	0	0	0	0
Federal	12.0 μg/m^3	0	0	0	0	0
Nitrogen Dioxide						
Max 1-hr concentration		58.1	58.9	72.5	55.5	62.5
No. days exceeded: State	0.18 ppm	0	0	0	0	0
Federal	100 ppb	0	0	0	0	0
Annual Average		*	*	13	12	12
No. days exceeded: State	0.030 ppm	*	*	0	0	0
Federal	53 ppb	*	*	0	0	0

Notes:

1. *Data were taken from the CARB website except for CO, which was taken from the EPA website.*
2. "*" Means data not available.
3. "**" Means data were taken from Burbank Monitoring Station; no data available since 2015; due to termination of the lease, the station was shut down in June 2014

Table 18: Ambient Concentrations at the LA-North Main Monitoring Station (5 years)

Pollutant	Standard	2013	2014	2015	2016	2017
Ozone						
Max 1-hr concentration		0.081	0.113	0.104	0.103	0.116
No. days exceeded: State	0.09 ppm	0	3	2	2	6
Max 8-hr concentration		0.069	0.094	0.074	0.078	0.086
No. days exceeded: State	0.070 ppm	0	7	6	4	16
Federal	0.070 ppm	0	6	6	4	14
Carbone Monoxide						
Max 1-hr concentration		2.5	2.5	3.2	1.9	2.0
No. days exceeded: State	20 ppm	0	0	0	0	0
Federal	35 ppm	0	0	0	0	0
Max 8-hr concentration		2.0	2.0	1.8	1.4	1.8
No. days exceeded: State	9.0 ppm	0	0	0	0	0
Federal	9 ppm	0	0	0	0	0
PM_{10}						
Max 24-hr concentration		57	66	73	64.0	64.6
No. days exceeded: State	50 μg/m^3	21.4	18.7	13.8	*	*
Federal	150 μg/m^3	0	0	0	0	0.0
Annual Average concentration: Federal/State		29.5/35.3	30.6/30.2	27.1/27	25.8/*	25.7/*
No. days exceeded: State	20 μg/m^3	*	*	*	*	*
$PM_{2.5}$						
Max 24-hr concentration: State		43.1	59.9	56.4	44.3	54.9
No. days exceeded: Federal	35 μg/m^3	1.1	*	8.4	2.1	6.1
Annual Average concentration: Federal/State		12.0/18.9	*/*	12.3/12.6	11.7/12	12.0/16.3
No. days exceeded: State	12 μg/m^3	*	*	*	*	*
Federal	12.0 μg/m^3	*	*	*	*	*
Nitrogen Dioxide						
Max 1-hr concentration		90.3	82.1	79.1	64.7	80.6
No. days exceeded: State	0.18 ppm	0	0	0	0	0
Federal	100 ppb	0	0	0	0	0
Annual Average		*	22	22	20	20
No. days exceeded: State	0.030 ppm	0	0	0	0	0
Federal	53 ppb	0	0	0	0	0
Notes:						
1. *Data were taken from the CARB website except for CO, which was taken from the EPA website.*						
2. "*" Means data not available.						

Table 19: Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page …

For more information please call ARB-PIO at (916) 322-2990 California Air Resources Board (5/4/16)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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Criteria Pollutants

Table 20 summarizes the sources and health effects that result from exposure to these criteria pollutants. Table 21 presents a list of state and federal attainment statuses for the Basin in which the proposed project is located (SCAB). The attainment status is based on designations promulgated by the EPA. A brief explanation of each state and federal criteria pollutant follows Table 20 and 21 below.

Table 20: Health Effect Summary from Criteria Pollutants

Pollutant	Principal Health and Atmospheric Effects	Typical Sources
Ozone (O_3)	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage and cancer. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include many known toxic air contaminants. Biogenic VOC may also contribute.	Low-altitude ozone is almost entirely formed from reactive organic gases/volatile organic compounds (ROG or VOC) and nitrogen oxides (NOx) in the presence of sunlight and heat. Common precursor emitters include motor vehicles and other internal combustion engines, solvent evaporation, boilers, furnaces, and industrial processes.
Respirable Particulate Matter (PM_{10})	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some toxic air contaminants. Many toxic and other aerosol and solid compounds are part of PM_{10}.	Dust- and fume-producing industrial and agricultural operations; combustion smoke & vehicle exhaust; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources.
Fine Particulate Matter ($PM_{2.5}$)	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter – a toxic air contaminant – is in the $PM_{2.5}$ size range. Many toxic and other aerosol and solid compounds are part of $PM_{2.5}$.	Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical and photochemical reactions involving other pollutants including NOx, sulfur oxides (Sox), ammonia, and ROG.
Carbon Monoxide (CO)	CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen. CO is also a minor precursor for photochemical ozone. Colorless, odorless.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.
Nitrogen Dioxide (NO_2)	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain & nitrate	Motor vehicles and other mobile or portable engines, especially diesel; refineries; industrial operations.

	contamination of stormwater. Part of the "NOx" group of ozone precursors.	
Sulfur Dioxide (SO_2)	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing; some natural sources like active volcanoes. Limited contribution possible from heavy-duty diesel vehicles if ultra-low sulfur fuel not used.
Lead (Pb)	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also a toxic air contaminant and water pollutant.	Lead-based industrial processes like battery production and smelters. Lead paint, leaded gasoline. Aerially deposited lead from older gasoline use may exist in soils along major roads.
Visibility-Reducing Particles (VRP)	Reduces visibility. Produces haze. NOTE: not directly related to the Regional Haze program under the Federal Clean Air Act, which is oriented primarily toward visibility issues in National Parks and other "Class I" areas. However, some issues and measurement methods are similar.	See particulate matter above. May be related more to aerosols than to solid particles.
Sulfate	Premature mortality and respiratory effects. Contributes to acid rain. Some toxic air contaminants attach to sulfate aerosol particles.	Industrial processes, refineries and oil fields, mines, natural sources like volcanic areas, salt-covered dry lakes, and large sulfide rock areas.
Hydrogen Sulfide (H_2S)	Colorless, flammable, poisonous. Respiratory irritant. Neurological damage and premature death. Headache, nausea. Strong odor.	Industrial processes such as: refineries and oil fields, asphalt plants, livestock operations, sewage treatment plants, and mines. Some natural sources like volcanic areas and hot springs.
Vinyl Chloride	Neurological effects, liver damage, cancer. Also considered a toxic air contaminant.	Industrial processes.

Table 20 presents a list of attainment status for the basin in which the proposed project is located. The attainment status is based on designations promulgated by the EPA.

Table 21: Federal (NAAQS) and State (CAAQS) Attainment Status

South Coast Air Basin (SCAB), NAAQS, and CAAQS Attainment Status				
Criteria Pollutant	**NAAQS**		**CAAQS**	
	Averaging Time	**Designation (Classification)**	**Averaging Time**	**Designation (Classification)**
2008 8-Hour Ozone	8-Hour (0.070 ppm)	Nonattainment	0.070 ppm (137 μg/m^3)	Nonattainment
CO	1-Hour (35 ppm) 8-Hour (9 ppm)	Maintenance	1-Hour (20 ppm) 8-Hour (9 ppm)	Attainment
PM_{10}	24-Hour (150 μg/m^3)	Maintenance	24-Hour (50 μg/m^3)	Nonattainment
			Annual (20 μg/m^3)	Nonattainment
$PM_{2.5}$	24-Hour (35 μg/m^3)	Nonattainment	No separate State standard	N/A
	Annual (12.0 μg/m^3)	Nonattainment	Annual (12.0 μg/m^3)	Nonattainment
NO_2	1-Hour (100 ppb)	Attainment	0.18 ppm (339 μg/m^3)	Attainment
	Annual (0.053 ppm)	Maintenance	0.030 ppm (57 μg/m^3)	Attainment
SO_2	1-Hour (75 ppb)	Attainment	0.25 ppm	Attainment
	24-Hour (0.14 ppm) Annual (0.03 ppm)	Attainment	0.04 ppm (105 μg/m^3)	Attainment
Lead (Pb)	3-Months Rolling (0.15 μg/m^3)	Nonattainment	30-Day Concentration (1.5 μg/m^3)	Attainment
Sulfates (SO_4^{2-})	N/A		24-Hour (25 μg/m^3)	Attainment
H_2S	N/A		1-Hour (0.03 ppm)	Unclassified

The discussion below provides a brief explanation of each criteria pollutant.

<u>Ozone (O_3)</u>
Ozone is a toxic gas that irritates the lungs and damages materials and vegetation. Ozone is a secondary pollutant. It is not directly emitted, but is formed in the atmosphere through a series of reactions involving hydrocarbons (HC) and nitrogen oxides in the presence of sunlight. It is a principal cause of lung and eye irritation in an urban environment.

Particulate Matter (PM_{10} and $PM_{2.5}$)
PM includes both aerosols and solid particles of a wide range of size and composition. Of particular concern are those particles between 10 and 2.5 microns in size (PM_{10}) and smaller than or equal to 2.5 microns ($PM_{2.5}$). The size of the PM is referenced to the aerodynamic diameter of the particulate. The PM_{10} criteria are aimed primarily at what the Environmental Protection Agency (EPA) refers to as "coarse particles." Course particles are often found near roadways, dusty industries, construction sites, and fires. The $PM_{2.5}$ criteria, which are directed at particles less than or equal to 2.5 microns in size, are referred to as "fine particles." These particles can also be directly emitted and they can also be formed when gases emitted from power plants, industries and automobiles react in the air. The principal health effect of airborne PM is on the respiratory system. Studies have linked particulate pollution with irritation of the airways, coughing, aggravated asthma, irregular heartbeat, and premature death in people with heart or lung disease.

Carbon Monoxide (CO)
CO is a colorless and odorless gas, which, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can lead to headaches, aggravation of cardiovascular disease, and impairment of central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations are typically found near crowded intersections, along heavily used roadways carrying slow moving traffic, and at or near ground level. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within a relatively short distance (300 to 600 feet) of heavily traveled roadways. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973.

Nitrogen Oxides (NOx)
Nitrogen oxides from automotive sources are some of the precursors in the formation of ozone and secondary PM. Ozone and PM are formed through a series of photochemical reactions in the atmosphere. Because the reactions are slow and occur as the pollutants are diffusing downwind, elevated ozone levels are often found many miles from the source of precursor emission. The effects of nitrogen oxides emission are examined on a regional basis.

Lead (Pb)
Nitrogen oxides from automotive sources are some of the precursors in the formation of ozone and secondary PM. Ozone and PM are formed through a series of photochemical reactions in the atmosphere. Because the reactions are slow and occur as the pollutants are diffusing downwind, elevated ozone levels are often found many miles from the source of precursor emission. The effects of nitrogen oxides emission are examined on a regional basis.

Sulfur Oxides (Sox)
Sulfur oxides constitute a class of compounds of which sulfur dioxide (SO2) and sulfur trioxide (SO_3) are of greatest importance. The oxides are formed during combustion of the sulfur components in motor fuels. Relatively few sulfur oxides are emitted from motor vehicles since

motor fuels are now de-sulfured. The health effects of sulfur oxides include respiratory illness, damage to the respiratory tract, and bronchia-constriction.

Toxic Air Contaminants

Toxic Air Contaminants (TACs) are pollutants that may result in an increase in mortality or serious illness or that may pose a present or potential hazard to human health. Health effects of TACs include cancer, birth defects, neurological damage, damage to the body's natural defense system, and diseases that lead to death. In 1998, following a 10-year scientific assessment process, CARB identified particulate matter from diesel-fueled engines as a TAC. Compared with other air toxics CARB has identified and controlled, diesel particulate matter (DPM) emissions are estimated to be responsible for about 70% of the total ambient air toxics risk (CARB 2000). Through the 1990 amendments to the CAA, Congress mandated that EPA regulate 188 air toxics, which are also known as hazardous air pollutants (HAPs). In the EPA's latest final rule on the control of hazardous air pollutants from mobile sources (72 Federal Register [FR] 8430), the agency identified 93 compounds emitted from mobile sources, which are listed in their Integrated Risk Information System (IRIS). From this list of 93 compounds, EPA has identified nine as priority mobile-source air toxics (MSATs). The high priority status of these nine MSATs was based on EPA's 2011 National Air Toxics Assessment (NATA), and the MSATs are listed as follows: acetaldehyde, acrolein, benzene, 1,3-butadiene, diesel particulate matter, ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter (POM).

The aforementioned 2007 rule requires controls to decrease MSAT emissions dramatically through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's latest emissions model, the Motor Vehicle Emissions Simulator (MOVES) 2014a, even if vehicle activity (vehicle miles traveled [VMT]) increases by 45%, as assumed from 2010 to 2050, a combined reduction of 90% in the total annual emission rate for the priority MSATs is projected for the same period.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the demographic characteristics of occupants and users and the activities involved. Sensitive receptors include residential areas, hospitals, elder-care facilities, rehabilitation centers, elementary schools, daycare centers, and parks. Residential areas are considered sensitive to air pollution because residents, including children and the elderly, tend to be at home for extended periods of time, resulting in sustained exposure to pollutants.

The zone of greatest concern near roadways is within 500 feet (or 150 meters). Sensitive receptors within 500 feet (or 150 meters) of the project include residential uses, which are predominantly located adjacent to I-5 between Sheldon Street and Lankershim Blvd and between Sunland Blvd and Roscoe Blvd. Los Angeles River Bridge is surrounded by parks (Glendale Narrows Riverwalk), offices, and a multi-family residential (Griffith Park Apartments). The Glendale Narrows Riverwalk, a riverfront park, is located approximately 120 feet from Los Angeles River Bridge.

Sensitive receptors near Sheldon Blvd. OC include Sheldon Skate Park (25,000 sq. ft. park) and Laurel Canyon Dialysis Center (medical facility). Sheldon Skate Park is located approximately

190 ft west of I-5 while Laurel Canyon Dialysis Center is located approximately 175 ft east of I-5. Land use along I-5 between Lankershim and Sunland is predominantly industrial use while Templin Highway UC is surrounded by open space.

Environmental Consequences

No-Build Alternative

The No-Build Alternative would not result in the construction of any of the proposed improvements and therefore, would not result in temporary, construction-related impacts to air quality.

Build Alternative

Long-term (Operational) Emissions

Operational emissions take into account long-term changes in emissions due to the project (excluding the construction phase). The operational emissions analysis compares forecasted emissions for existing/baseline, No-Build, and the Build Alternative.

Based on the proposed project scope of work, this project is exempt from regional conformity requirements according to 40 CFR 93.127.

Regional Conformity

The proposed project is listed in the financially constrained 2016 RTP/SCS, which was found to conform by SCAG on April 7, 2016 and FHWA and FTA made a regional conformity determination finding on June 1, 2016. The project is also included in SCAG financially constrained 2017 FTIP, ID# LALS04, which was adopted by SCAG on September 14, 2016. The 2017 FTIP was determined to conform by FHWA and FTA on December 16, 2016. The most recent Amendment to the 2017 FTIP is No. 17-22, approved by FHWA and FTA on August 30, 2018.

Project Level Conformity

Carbon Monoxide Analysis

The local analysis is commonly referred to as a project-level hot-spot analysis. Conformity must be demonstrated at the project level for projects in CO, PM_{10}, and $PM_{2.5}$ nonattainment and maintenance areas. As discussed previously, a region is a nonattainment area if one or more monitoring stations in the region fails to attain the relevant CAAQS or NAAQS. In general, projects must not cause the standards to be violated, and in nonattainment areas, the project must not cause any increase in the number and severity of violations.

The CO Protocol has a screening exercise that would determine whether the project requires a qualitative or quantitative analysis, or whether none would be necessary. Below is a step-by-step explanation of the CO Protocol flowchart.

Q. 3.1.1. Is this project exempt from all emissions analyses?

NO. Table 1 of the CO Protocol is Table 2 of 40 CFR 93.126, which contains a list of projects exempt from the requirement to determine conformity. The proposed project is not classified according to Table 1; therefore, it is not deemed exempt from all emissions analyses.

Q. 3.1.2. Is the project exempt from regional emissions analyses?

YES. Table 2 of the CO Protocol is Table 3 of 40 CFR 93.127, which contains a list of projects exempt from regional emissions analysis. The proposed project is under category "Changes in vertical and horizontal alignment", which is listed in Table 3; therefore, it is deemed exempt from regional emissions analyses.

Q. 3.1.9. Examine Local Impacts

Section 3.1.9 of the flowchart directs the project evaluation to Section 4, Local Air Quality Analysis. This concludes the evaluation of CO Protocol Figure 1.

The Local Analysis starts at level 1 of the CO Protocol. It is illustrated in Figure 3 of the CO Protocol, entitled Local CO Analysis. This flowchart is utilized in determining the type of project-level CO analysis required for the proposed project. A step-by-step response to each step and level is provided below. Each level cited is followed by a response, which will determine the next applicable level of the flowchart.

Q. Level 1. Is the project in a CO nonattainment area?

NO. The proposed project is located in a CO maintenance area. The Santa Clarita, Reseda, and LA-North monitoring stations are deemed representative of the proposed project site and has available CO monitoring data. The most recent five-year highest CO data indicate that there are no recorded violations of the CO standards.

Q. Level 1. Was the area redesignated as "attainment" after the 1990 Clean Air Act?

YES. The SCAB was redesignated as attainment after the 1990 Clean Air Act. Section 4.1.2 of the CO Protocol states that projects located in areas that have been proposed by CARB for federal redesignation to attainment after the 1990 CAA must have a Maintenance Plan and should proceed to Section 4.1.3.

Q. Level 1. Has "continued attainment" been verified with the local Air District, if appropriate?

YES. The SCAB has been in continued attainment (maintenance) for CO since 2007. Section 4.1.3 of the CO Protocol states that projects in areas where continued attainment has been verified (or where proposed redesignation is so recent that the annual review of monitoring data has not yet occurred) should proceed to Section 4.7.

Q. Level 7. Does project worsen air quality?

The CO Protocol Section 4.7.1 recommends the following criteria to be used to determine whether the project is likely to worsen air quality for the area substantially affected by the project:

- *"The project significantly increases the percentage of vehicles operating in cold start mode. Increasing the number of vehicles operating in cold start mode by as little as 2% should be considered potentially significant."*

The purpose of this project is to improve mobility by providing for a goods movement freight corridor that can be operated efficiently and continuously. Existing land uses within the project area remain the same. Therefore, the proposed project would not affect the percentage of vehicles operating in a cold start mode.

- *"The project significantly increases traffic volumes. Increases in traffic volumes in excess of 5% should be considered potentially significant. Increasing the traffic volume by less than 5% may still be potentially significant if there is also a reduction in average speeds."*

As shown in Table 22 below, traffic volumes on Lankershim Blvd/I-5 southbound on/off ramp intersection is anticipated to remain the same between the "Build" Alternative and "No Build" Alternative during AM and PM peak hours in the opening year (2025) and horizon year (2040).

- *"The project worsens traffic flow. For uninterrupted roadway segments, a reduction in average speeds (within a range of 3 to 50 mph) should be regarded as worsening traffic flow. For intersection segments, a reduction in average speed or an increase in average delay should be considered as worsening traffic flow."*

Table 22 provides a summary of Levels of Service (LOS) and delays at the Lankershim Blvd/I-5 southbound on/off ramp intersection. LOS and delays remained the same with implementation of the project in 2025 and 2040 when compared to the No-Build conditions.

Table 22: Existing, Opening Year (2025) and Horizon Year (2040) LOS and Delay

Peak Hour Traffic Data at Lankershim Blvd. I-5 Southbound On/Off Ramps Signalized Intersection							
	Direction	**Peak Hour Approach Volumes**		**LOS**		**Delay (Second)**	
		AM	**PM**	**AM**	**PM**	**AM**	**PM**
Existing (2018)	North Leg (Lankershim Blvd.)	576	618	B	B	17	16
	South Leg (Lankershim Blvd.)	480	762				
	East Leg (I-5 Southbound On/Off Ramps)	1124	448				
	West Leg (Cayuga Ave.)	17	49				
Opening Year (2025)	North Leg (Lankershim Blvd.)	617	663	C	B	20	19
	South Leg (Lankershim Blvd.)	515	817				
	East Leg (I-5 Southbound On/Off Ramps)	1206	480				
Horizon Year (2040)	West Leg (Cayuga Ave.)	18	54	C	C	23	22
	North Leg (Lankershim Blvd.)	707	759				
	South Leg (Lankershim Blvd.)	590	935				
	East Leg (I-5 Southbound On/Off Ramps)	1381	550				
	West Leg (Cayuga Ave.)	20	61				

Note: Build and No-Build data are the same

The criteria in section 4.7.1 of the CO Protocol have been satisfied for the Build Alternative, and no further analysis is needed according to Figure 3 (not shown) of the CO Protocol. The analysis has sufficiently addressed the CO impact and demonstrated that the proposed project is not anticipated to cause or contribute to any new violations of the federal or state CO standard.

Particulate Matter (PM) Analysis

The FCAA section 176(c)(1)(B) is the statutory criterion that must be met by all projects in nonattainment and maintenance areas that are subject to transportation conformity. Section 176(c)(1)(B) states that federally-supported transportation projects must not "cause or contribute to any new violation of any standard in any area; increase the frequency or severity of any existing violation of any standard in any area; or delay timely attainment of any standard or any required interim emission reductions or other milestones in any area." To meet statutory requirements, the March 10, 2006 final rule requires $PM_{2.5}$ and PM_{10} hot-spot analyses to be performed for projects of air quality concern. Qualitative hot-spot analyses would be done for these projects before appropriate methods and modeling guidance are available and quantitative

$PM_{2.5}$ and PM_{10} hot-spot analyses are required under 40 CFR 93.123(b)(4). In addition, through the final rule, EPA determined that projects not identified in 40 CFR 93.123(b)(1) as projects of air quality concern (POAQC) have also met statutory requirements without any further hot-spot analyses (40 CFR 93.116(a)). The final rule requires Interagency Consultation (IAC) concurrence on the project-level hot-spot analysis and findings for every project in a PM nonattainment and maintenance area, which is not fully exempt from conformity analysis requirements. IAC concurrence is required for both projects where a detailed analysis is done, and for the decision that a project is not a POAQC and does not need a detailed analysis.

Ambient monitoring data were collected at a representative monitoring stations selected based on the land use, traffic impacts, and proximity to the highway in comparison to the project location. As shown in Table 16, the ambient level of 24-hour $PM_{2.5}$ at the Santa Clarita monitoring station are lower than the standard of 35 ug/m3, with a measured value of 29.5 ug/m3 in 2013, 28.9 ug/m3 in 2014, 34.4 ug/m3 in 2015, 33.9 ug/m3 in 2016, and 32.6 ug/m3 in 2017. However, 24-hour $PM_{2.5}$ at the Reseda monitoring station as shown in Table 16 are higher than the standard except in 2014 and 2016 where measured value of 27.2 ug/m3 and 30.0 ug/m3, respectively are lower than the standard. The $PM_{2.5}$ measured at the LA-North monitoring station, as shown in Table 18 are also higher than the standard.

The purpose of the project is to improve mobility by providing for a goods movement freight corridor that can be operated efficiently and continuously. The proposed project improvements are not anticipated to significantly increase the amount of truck traffic. Traffic (measured in Average Daily Traffic, or ADT) and Truck ADT are not anticipated to change between the Build and No-Build scenarios in both the opening year (2025) and horizon year (2040), as summarized in Table 23 below. Based on the traffic assessment above, the proposed project is not anticipated to result in new or worsened PM2.5 or PM10 violations.

Within the SCAB, the SCAG Transportation Conformity Working Group (TCWG) meets to discuss transportation conformity issues as IAC. The TCWG is composed of representatives from FHWA, EPA, ARB, SCAQMD, and other local and state partners. Pursuant to the requirements set forth in 40 CFR 93, the project summary was submitted for interagency consultation. On October 23, 2018, the SCAG TWCG discussed the proposed project and concurred that it would not be of air quality concern and would not cause or contribute to, or increase the severity of or exceedance of, the NAAQS for $PM_{2.5}$ and PM_{10}. Therefore, the project meets the conformity requirements for 40 CFR 93.116 and 93.123 for both $PM_{2.5}$ and PM_{10} without hot-spot analyses.

Table 23: Average Daily Traffic (ADT) and Truck ADT for Existing, Opening, and Horizon Years

Location	Post Mile	2015 ADT		2025		2040	
		Total	Truck	Total	Truck	Total	Truck
LA River Separation	27.07	258,000	15,900	258,400	15,940	259,000	16,000
Roscoe Bl OC	33.28	200,000	12,400	204,800	12,720	212,000	13,200
Sunland Bl OC	33.68	190,000	11,900	194,400	12,180	201,000	12,600
Olinda St POC	33.98	188,000	12,100	192,400	12,380	199,000	12,800
Tuxford St UC	34.65	188,000	12,200	192,000	12,440	198,000	12,800
Lankershim Bl OC	34.99	189,000	12,400	193,400	12,680	200,000	13,100
Peoria St POC	35.35	189,000	12,500	193,000	12,740	199,000	13,100
Laurel Canyon Bl OC	35.94	190,000	12,700	194,400	12,980	201,000	13,400
Sheldon St OC	36.00	190,000	13,400	194,800	13,760	202,000	14,300
Templin Highway UC	R65.97	72,000	5,400	104,000	7,760	152,000	11,300

Mobile Source Air Toxic (MSAT) Analysis

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the EPA regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list of their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in the IRIS, available at https://www.epa.gov/iris. In addition, EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 2011 NATA, available at https://www.epa.gov/national-air-toxics-assessment. These are: 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel PM, ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter (POM). While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules.

According to EPA, MOVES2014 is a major revision to MOVES2010 and improves upon it in many respects. MOVES2014 includes new data, new emissions standards, and new functional improvements and features, incorporating substantial new data for emissions, fleet, and activity developed since the release of MOVES2010. These new emissions data are for light- and heavy-duty vehicles, exhaust and evaporative emissions, and fuel effects. MOVES2014 also adds updated vehicle sales, population, age distribution, and VMT data.

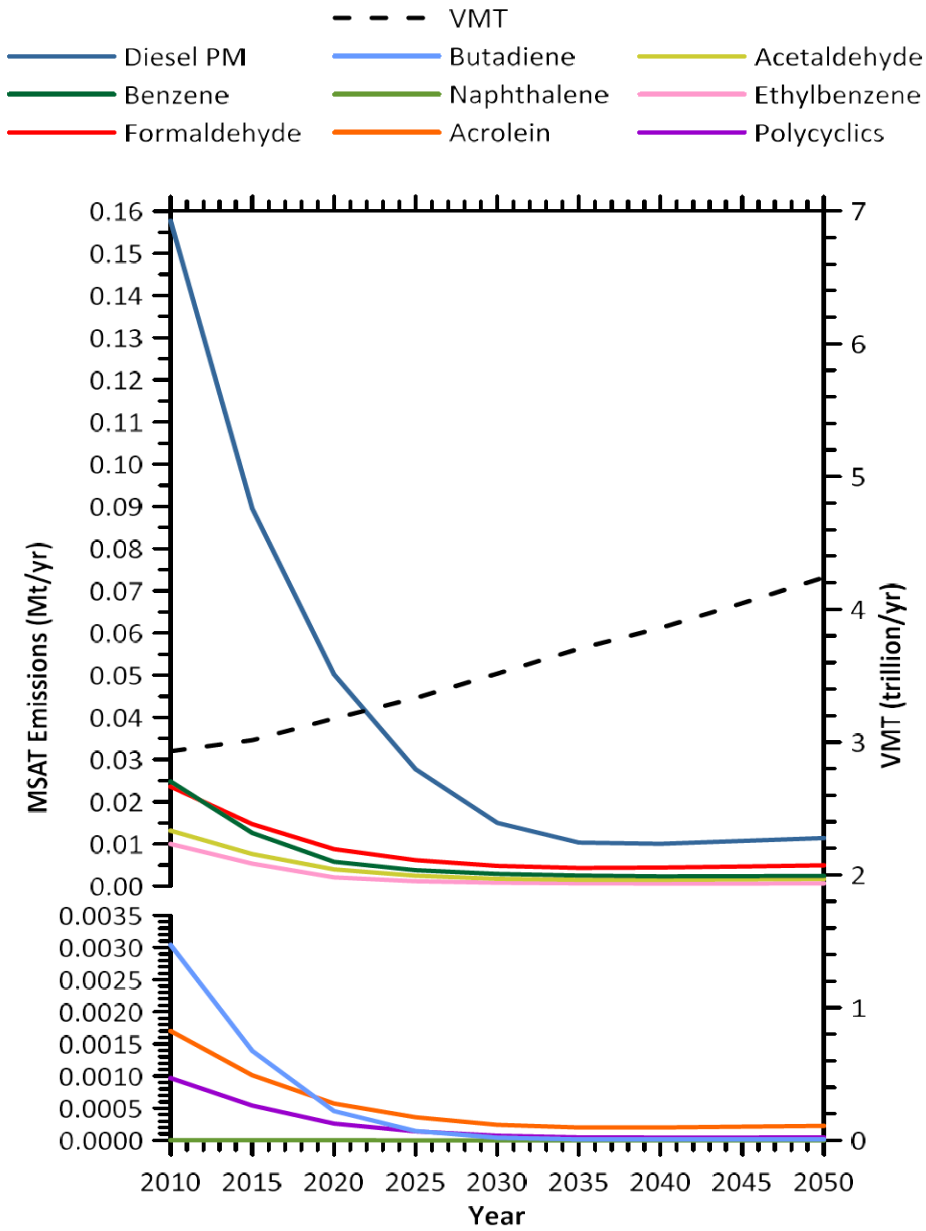

Figure 21: Projected National MSAT Emission Trends 2010-2050 For Vehicles Operating on Roadways Using EPA's MOVES2014a Model

Note: Trends for specific locations may be different, depending on locally derived information, representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors.
Source: EPA MOVES2014a model runs conducted by FHWA, September 2016.

MOVES2014 incorporates the effects of three new Federal emissions standard rules not included in MOVES2010. These new standards are all expected to impact MSAT emissions and include Tier 3 emissions and fuel standards starting in 2017 (79 FR 60344), heavy-duty greenhouse gas regulations that phase in during model years 2014-2018 (79 FR 60344), and the second phase of light duty greenhouse gas regulations that phase in during model years 2017-2025 (79 FR 60344). Since the release of MOVES2014, EPA has released MOVES2014a. In the November 2015 MOVES2014a Questions and Answers Guide, EPA states that for on-road emissions, MOVES2014a adds new options requested by users for the input of local VMT, includes minor updates to the default fuel tables, and corrects an error in MOVES2014 brake wear emissions. The change in brake wear emissions results in small decreases in PM emissions, while emissions for other criteria pollutants remain essentially the same as MOVES2014.

Using EPA's MOVES2014a model as shown in Figure 21, FHWA estimates that even if VMT increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91 percent in the total annual emissions for the priority MSAT is projected for the same time period.

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how potential public health risks posed by MSAT exposure should be factored into project-level decision-making within the context of NEPA.

Nonetheless, air toxics concerns continue to be raised on highway projects during the NEPA process. Even as the science emerges, we are duly expected by the public and other agencies to address MSAT impacts in our environmental documents. The FHWA, EPA, the Health Effects Institute (HEI), and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this field.

Incomplete or Unavailable Information for Project Specific MSAT Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, https://www.epa.gov/iris/).

Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the HEI. A number of HEI studies are summarized in Appendix D of FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are: cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI Special Report 16, https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-reviewliterature-exposure-and-health-effects) or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts – each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI.[32] As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA states that with respect to diesel engine exhaust, "[t]he absence of adequate data to develop a sufficiently confident dose-response relationship from the epidemiologic studies has prevented the estimation of inhalation carcinogenic risk (https://www.epa.gov/iris)."

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine an "acceptable" level of risk due to emissions from a source, which is generally no greater than

[32] Special Report 16, https://www.healtheffects.org/publication/mobile-source-air-toxicscritical-review-literature-exposure-and-health-effects

approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA's approach to addressing risk in its two step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable.[33]

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

Tiered Approach for MSAT Impacts Analysis

Due to the emerging state of MSAT-related science and techniques, there are no established criteria for determining the relative significance of air toxics emissions. Given the state, however, the FHWA recommends a range of options deemed appropriate for addressing and documenting the MSAT issue in NEPA documents in its updated Interim Guidance, published in October 2016 (https://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/).

Project Analysis

Based on a comparison of the Build Alternative with the different categories in the Interim Guidance, the project meets the criteria for Category 1 MSAT analysis, as the project would have no meaningful impact on traffic volumes or vehicle mix. In accordance with the latest Interim FHWA Guidance, no MSAT analysis is required.

The purpose of the proposed project is to improve mobility by providing for a goods movement freight corridor that can be operated efficiently and continuously. The movement of freight goods will be enhanced along I-5 by eliminating load capacity restrictions and vertical clearance limitations on ten bridges. This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factors that would cause a meaningful increase in MSAT impacts of the project from that of the No-Build Alternative.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES2014 model forecasts a combined reduction of over 90 percent in the total annual emissions rate for the priority MSAT from 2010 to 2050 while

[33]https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/$file/07-1053-1120274.pdf

vehicle-miles of travel are projected to increase by over 45 percent (Updated Interim Guidance on MSAT in NEPA Documents, FHWA, October 12, 2016). This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

Short-Term (Construction) Emissions

During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include CO, NOx, volatile organic compounds (VOCs), directly-emitted particulate matter (PM_{10} and $PM_{2.5}$) and TACs such as diesel exhaust particulate matter. Construction activities are expected to increase traffic congestion in the area, resulting in increases in emissions from traffic during the delays. These emissions would be temporary and limited to the immediate area surrounding the construction site, and they would not require more than five years to complete; therefore, construction emissions are not considered for conformity purposes.

Site preparation and roadway construction typically involves clearing, cut-and-fill activities, grading, removing or improving existing roadways, building bridges, and paving roadway surfaces. Construction-related effects on air quality from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. These activities could temporarily generate enough PM_{10}, $PM_{2.5}$, and small amounts of CO, SOx, NOx, and VOCs to be of concern. These temporary emissions typically fall into two main categories:

Fugitive Dust

All air districts and the California Health and Safety Code (Sections 41700-41710) prohibit "visible emissions" exceeding three minutes in one hour. This applies not only to dust but also to engine exhaust. In general, this is interpreted as visible emissions crossing the right-of-way line. Sources of fugitive dust could include disturbed soils at the construction site and trucks carrying uncovered loads of soils.

Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions may vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Construction activities for large development projects are estimated by the EPA to add 1.09 tonne (1.2 tons) of fugitive dust per acre of soil disturbed per month of activity. If water or other soil stabilizers are used to control dust, the emission can be reduced by up to 50 percent. Caltrans' Standard Specifications require the use of water or dust palliative compounds and will reduce potential fugitive dust emissions during construction. The proposed project is located within the SCAB and is required to comply with the SCAQMD fugitive dust rule (Rule 403) to minimize emissions of fugitive dust during construction activities.

Construction Equipment Emissions

In addition to fugitive dust emissions, heavy-duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NOx, VOCs, and some soot particulate (PM_{10} and $PM_{2.5}$) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are idling or delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site. In order to minimize the temporary exhaust emissions from the heavy-duty trucks and construction equipment adjacent to certain sensitive receptors, certain construction activities (e.g., extended idling, material storage, and equipment maintenance) would need to be conducted in areas at least 500 feet away from those sensitive receptors.

SO_2 is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Off-road diesel fuel meeting federal standards can contain 300 ppm or more of sulfur, whereas on-road diesel is restricted to less than 15 ppm of sulfur. However, under California law and ARB regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel (not more than 15 ppm); thus, SO_2-related issues due to diesel exhaust will be minimal. Some phases of construction, particularly asphalt paving, would result in short-term odors in the immediate area of each paving site(s). Such odors would be quickly dispersed below detectable thresholds as distance from the site(s) increases.

Construction emissions for the proposed project are estimated using detailed equipment inventories and project construction scheduling information provided by the Design Engineer, using the Road Construction Model, version 9.0 developed by the SMAQMD combined with the emission factors from EMFAC. Construction-related emissions for the Build Alternative are presented in **Table 24 through Table 32** below. The emissions presented are based on the best information available at the time of calculations. The emissions represent the peak daily construction emissions that would be generated by the project build alternative.

Table 24: Summary of Construction Emissions, LA River Bridge

Project Phases	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)	CO (lbs/day)	NOx (lbs/day)	CO_2 (tons/day)
Grubbing/Clearing	5.45	1.44	9.70	10.49	1.11
Grading/Excavation	8.47	4.16	65.58	84.13	7.77
Drainage/Utilities/Sub-grade	7.15	3.00	46.17	52.69	5.23
Paving	0.42	0.37	12.81	8.38	1.06
Maximum	8.47	4.16	65.58	84.13	7.77

Table 25: Summary of Construction Emissions, Lankershim Blvd. OC

Project Phases	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)	CO (lbs/day)	NOx (lbs/day)	CO_2 (tons/day)
Grubbing/Clearing	5.47	1.44	9.75	10.92	1.23
Grading/Excavation	8.63	4.30	66.29	88.40	8.07
Drainage/Utilities/Sub-grade	7.31	3.13	46.87	56.42	5.57
Paving	0.48	0.42	12.91	9.51	1.24
Maximum	8.63	4.30	66.29	88.40	8.07

Table 26: Summary of Construction Emissions, Laurel Canyon Blvd. & Sheldon St. OC

Project Phases	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)	CO (lbs/day)	NOx (lbs/day)	CO_2 (tons/day)
Grubbing/Clearing	5.47	1.44	9.75	10.92	1.23
Grading/Excavation	8.50	4.18	65.72	85.18	8.06
Drainage/Utilities/Sub-grade	7.19	3.02	46.33	53.94	5.56
Paving	0.45	0.38	12.89	9.01	1.23
Maximum	8.50	4.18	65.72	85.18	8.06

Table 27: Summary of Construction Emissions, Olinda Ave. OC

Project Phases	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)	CO (lbs/day)	NOx (lbs/day)	CO_2 (tons/day)
Grubbing/Clearing	5.47	1.44	9.75	10.92	1.23
Grading/Excavation	8.65	4.32	66.38	88.76	7.90
Drainage/Utilities/Sub-grade	7.48	3.32	47.90	59.98	5.24
Paving	0.53	0.46	12.93	9.83	1.13
Maximum	8.65	4.32	66.38	88.76	7.90

Table 28: Summary of Construction Emissions, Peoria St. OC

Project Phases	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)	CO (lbs/day)	NOx (lbs/day)	CO_2 (tons/day)
Grubbing/Clearing	5.47	1.44	9.75	10.92	1.23
Grading/Excavation	8.67	4.33	66.47	89.40	8.07
Drainage/Utilities/Sub-grade	7.53	3.34	48.07	61.25	5.59
Paving	0.54	0.47	12.99	10.26	1.25
Maximum	8.67	4.33	66.47	89.40	8.07

Table 29: Summary of Construction Emissions, Roscoe Blvd. OC

Project Phases	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)	CO (lbs/day)	NOx (lbs/day)	CO_2 (tons/day)
Grubbing/Clearing	5.47	1.44	9.75	10.92	1.23
Grading/Excavation	8.63	4.30	66.29	88.40	8.07
Drainage/Utilities/Sub-grade	7.31	3.13	46.87	56.42	5.57
Paving	0.48	0.42	12.91	9.51	1.24
Maximum	8.63	4.30	66.29	88.40	8.07

Table 30: Summary of Construction Emissions, Sunland Blvd. OC

Project Phases	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)	CO (lbs/day)	NOx (lbs/day)	CO_2 (tons/day)
Grubbing/Clearing	5.47	1.44	9.75	10.92	1.23
Grading/Excavation	8.63	4.30	66.29	88.40	8.07
Drainage/Utilities/Sub-grade	7.31	3.13	46.87	56.42	5.57
Paving	0.48	0.42	12.91	9.51	1.24
Maximum	8.63	4.30	66.29	88.40	8.07

Table 31: Summary of Construction Emissions, Templin Hwy OC

Project Phases	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)	CO (lbs/day)	NOx (lbs/day)	CO_2 (tons/day)
Grubbing/Clearing	5.50	1.47	7.64	11.95	1.07
Grading/Excavation	7.46	3.25	41.71	57.08	4.40
Drainage/Utilities/Sub-grade	6.76	2.65	34.58	40.06	3.61
Paving	0.78	0.68	17.79	14.29	1.56
Maximum	7.46	3.25	41.71	57.08	4.40

Table 32: Summary of Construction Emissions, Tuxford St. Off-Ramp OC

Project Phases	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)	CO (lbs/day)	NOx (lbs/day)	CO_2 (tons/day)
Grubbing/Clearing	5.58	1.55	10.06	13.62	1.24
Grading/Excavation	9.75	5.34	72.61	114.89	7.93
Drainage/Utilities/Sub-grade	8.19	3.97	52.63	75.27	5.38
Paving	0.63	0.56	13.12	11.42	1.19
Maximum	9.75	5.34	72.61	114.89	7.93

Construction Greenhouse Gas (GHG) emissions would result from material processing, onsite by construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during the construction phase.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation events. During construction, contractors are required to comply with all applicable state and local regulations, including, but not limited to, SCAQMD Rules 401 (Visible Emissions), 402 (Nuisance), and 403 (Fugitive Dust).

During project construction, objectionable odors would be primarily related to operation of diesel-powered equipment and off-gas emissions during road-building activities, such as paving and asphalting. SCAQMD Rule 1113 (Architectural Coatings) limits the amount of VOC emissions from paving, asphalt, concrete curing, and cement coating operations. Construction of the proposed project shall comply with all applicable SCAQMD Rules. While construction equipment on site would generate some objectionable odors arising from mostly diesel exhaust, these emissions would generally be limited to the project site and would be temporary in nature. Objectionable odors should also be minimized by conducting certain construction activities in areas at least 500 feet from sensitive receptors, as feasible.

Naturally Occurring Asbestos (NOA)

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by state, federal, and international agencies and was identified as a toxic air disease and cancer.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed.

Serpentinite may contain chrysotile asbestos, especially near fault zones. Ultramafic rock, a rock closely related to serpentinite, may also contain asbestos minerals. Asbestos can also be associated with other rock types in California, though much less frequently than serpentinite and/or ultramafic rock. Serpentinite and/or ultramafic rock are known to be present in 44 of California's 58 counties. These rocks are particularly abundant in the counties of the Sierra Nevada foothills, the Klamath Mountains, and Coast Ranges. The California Department of

Conservation, Division of Mines and Geology have developed a map of the state showing the general location of ultramafic rock in the state. Los Angeles County is one of the Counties identified as one of the Counties containing serpentinite and ultramafic rock. According to the United States Geological Survey (USGS) Report Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California (2011), Ventura County is one of five counties with no reported asbestos occurrences, and (or) ultramafic rock/serpentinite. Therefore, no or little potential impacts from naturally occurring asbestos during project construction would occur. While unlikely, if naturally occurring asbestos, serpentine, or ultramafic rock is discovered during grading operations Section 93105, Title 17 of the California Code of Regulations requires notification to the VCAPCD by the next business day and implementation of the following measures within 24-hours:

1. Unpaved areas subject to vehicle traffic must be stabilized by being kept adequately wetted, treated with a chemical dust suppressant, or covered with material that contains less than 0.25 percent asbestos;
2. The speed of any vehicles and equipment traveling across unpaved areas must be no more than fifteen (15) miles per hour unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust that is visible crossing the project boundaries;
3. Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept adequately wetted, treated with a chemical dust suppressant, or covered with material that contains less than 0.25 percent asbestos; and
4. Activities must be conducted so that no track-out from any road construction project is visible on any paved roadway open to the public.

Cumulative Impacts

A project satisfies the regional analysis requirement if it is included in the FHWA-approved RTP and TIP. The proposed project is included in the latest conforming 2016 RTP/SCS and 2017 FTIP, ID# LALS04. The design concept and scope of the proposed project is consistent with the project description and the assumptions in the SCAG's regional emissions analysis. Therefore, the proposed project will satisfy the regional conformity requirements.

A qualitative analysis of project-level pollutants concludes that the proposed project does not pose any significant operational impact on the ambient air quality in the project vicinity. Therefore, cumulative impacts to air quality are not anticipated.

Temporary cumulative impacts as a result of the proposed project, in combination with other past, present and future projects, are not considered to be adverse. All temporary impacts described in the above sections, as well as impacts for other projects in the study area, would each be minimized and would, therefore, not have a cumulative impact to humans or the physical environment.

Avoidance, Minimization, and/or Mitigation Measures

Most of the construction impacts to air quality are short-term in duration and therefore, will not result in long-term adverse conditions. Implementation of the following measures, some of which may also be required for other purposes such as storm water pollution control will reduce any air quality impacts resulting from construction activities.

Short-Term (Construction)
AIR-1: The construction contractor shall comply with Caltrans' Standard Specifications in Section 14-9 (2015). Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including SCAQMD rules and regulations and local ordinances.

AIR-2: Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emission or at the right of way line as required by the SCAQMD.

AIR-3: Spread soil binder on any unpaved roads used for construction purposes, and all project construction parking areas.

AIR-4: Wash off trucks as they leave the R/W as necessary to control fugitive dust emissions.

AIR-5: Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.

AIR-6: Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.

AIR-7: Locate equipment and materials storage sites at least 500 feet from the sensitive receptors. Keep construction areas clean and orderly.

AIR-8: Establish environmentally sensitive areas (ESAs) or their equivalent at least 500 feet away from sensitive air receptors within which construction activities such as extended idling, material storage, and equipment maintenance, would be prohibited, to the extent feasible.

AIR-9: Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic.

AIR-10: Cover all transported loads of soils and wet materials prior to transport, or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emission of dust (particulate matter) during transportation.

AIR-11: Promptly and regularly remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease particulate matter.

AIR-12: Route and schedule construction traffic to avoid peak travel times as much as possible, to reduce congestion and related air quality impacts caused by idling vehicles along local roads.

AIR-13: Install mulch or plant vegetation as soon as practical after grading to reduce windblown particulate in the area. Be aware that certain methods of mulch placement, such as straw blowing, may themselves cause dust and visible emission issues, and may need to use controls such as dampened straw.

AIR-14: Unpaved areas subject to vehicle traffic must be stabilized by being kept adequately wetted, treated with a chemical dust suppressant, or covered with material that contains less than 0.25 percent asbestos.

AIR-15: The speed of any vehicles and equipment traveling across unpaved areas must be no more than fifteen (15) miles per hour unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust that is visible crossing the project boundaries.

AIR-16: Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept adequately wetted, treated with a chemical dust suppressant, or covered with material that contains less than 0.25 percent asbestos.

AIR-17: Activities must be conducted so that no track-out from any road construction project is visible on any paved roadway open to the public.

Minimization of PM_{10} during Construction

As noted above, Caltrans Standard Specifications 2015 specifically require compliance with all applicable laws and regulations related to air quality, which would include applicable rules and regulations of the respective AQMD such as Rules 401, 402, and 403.

AIR-18: Rule 401 requires no visible emissions be discharged in the atmosphere of such opacity for a period of periods aggregating more than three minutes in any one hour as to obscure an observer's view to a degree equal to or greater than the dark shade of smoke as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines. Rule 402 requires that air pollutant emissions not be a nuisance off-site.

AIR-19: Measures to control fugitive dust caused by project construction are presented in SCAQMD Rule 403 – Fugitive Dust. The project construction will need to comply with these control measures and any other local or regional applicable rules, guidance, and measures.

AIR-20: SCAQMD's Rule 403 requires that fugitive dust be controlled with the best available control measures (BACM) in order to reduce dust so that it does not remain visible in the atmosphere beyond the property line of the proposed project. It also requires a dust control plan to be submitted and approved prior to construction. The dust control plan should describe all applicable dust control measures that will be implanted at the project; and should describe types

of dust suppressant, surface treatments and other measures to be utilized at the construction sites to comply with the Rule.

Climate Change
Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level greenhouse gas analysis. FHWA emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there have been requirements set forth in California legislation and executive orders on climate change, the issue is addressed in the California Environmental Quality Act (CEQA) chapter of this document. The CEQA analysis may be used to inform the National Environmental Policy Act (NEPA) determination for the project.

2.3 Biological Environment

A Natural Environment Study (NES) was completed for the project on October 29, 2018. The Biological Environment section of the environmental document is divided into the following subsections:

- Natural Communities
- Wetlands and Other Waters
- Plant Species
- Animal Species
- Threatened and Endangered Species
- Invasive Species

2.3.1 Natural Communities

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors, fish passage, and habitat fragmentation, as appropriate. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Wetlands and other waters are discussed in section 2.3.2 (Wetlands and Other Waters). Habitat areas that have been designated as critical habitat under the federal Endangered Species Act (FESA) are discussed in section 2.3.5 (Threatened and Endangered Species).

Affected Environment

The Biological Study Area (BSA) includes 0.078 square kilometers (km) (19.3 acres) of vegetation which varies greatly with topography.

The proposed project includes 10 project sites along the well-travelled I-5 corridor. Aside from the Templin Highway UC site, all the sites are in highly urbanized locations. Aside from the Templin Bridge and the Los Angeles River Bridge, the vegetation at the other sites is landscaped, with many invasive and ruderal plant species present. Trees, shrubs and ground cover occur at most of the sites. The vegetation at most sites is sparse and the soil is friable and consists of silt and sand. Most of the soil at each site is well drained. Aside from the Los Angeles River, there are no watercourses within the BSA for any other project site. Human disturbance is prevalent as homeless encampments are dispersed throughout the corridor within the BSA of most project sites.

Los Angeles River

The Los Angeles River is comprised of a natural community "black willow/cattail scrub." The segment of the Los Angeles River where work will be conducted is within the Glendale Narrows portion of the Los Angeles River. It is one of four sections of the Los Angeles River that has an earthen bottom, hence riparian plant species will grow whereas concrete lined portions of the river support less vegetation. Due to year-round running water, riparian vegetation and associated wildlife in the form of birds occur in this section of the river. After clearing and grubbing by US Army Corps of Engineers (USACE), the only two plant species present were cattails and black willow. After clearing and grubbing by USACE, the natural riparian community would be black willow/cattail scrub. Arundo that was cut is now growing. The Los Angeles River at this project site provides habitat for a number of migratory bird species. This riparian community is rare in this area as opposed to the past before channelization of the rivers in Southern California.

The Los Angeles River black willow/cattail scrub natural community was comprised of such native riparian plant species as cattails *(Typha latifolia)*, black willow *(Salix nigra)*, alder *(Alnus sp.)*, Fremont cottonwood *(Populus fremontii)*, Pacific willow *(Salix lucida)*, *w*ater smartweed *(Polygonum amphibium)*, watercress *(Nasturtium officinale)*, and western sycamore *(Platanus recemosa)*. However, the USACE was observed removing what appeared to be all vegetation except cattails and black willow during December of 2017. These two species dominate the river at this site as of the drafting of this report.

Roscoe Blvd OC, Sunland OC, Olinda Street POC, Lankershim Blvd OC, Peoria St OC, Laurel Canyon Blvd OC, Sheldon St OC, Tuxford St Off-Ramp OC, Templin Highway UC

There are no natural communities at the above project sites. Aside from Templin Highway UC, these project sites involve landscaped vegetation, and are in poor condition (including the Templin Highway Bridge project site).

Regional Conservation Plans

- The Greater Los Angeles County Open Space for Habitat and Recreation Plan (OSHARP) – The purpose of OSHARP is to provide a comprehensive regional framework for incorporating open space, both habitat and recreation, into project design features.

- California Essential Habitat Connectivity Project – Caltrans and the California Department of Fish and Wildlife commissioned the California Essential Habitat Connectivity Project in order to promote a functional network of connected wildlands.

- Significant Ecological Areas (SEA) Program – Significant Ecological Areas are officially designated areas within LA County with irreplaceable biological resources. The SEA Program objective is to conserve genetic and physical diversity within LA County by designating biological resource areas that are capable of sustaining themselves into the future. The Los Angeles River Bridge and Separation is located adjacent to Griffith Park which is established as an SEA.

Environmental Consequences

No-Build Alternative

Under the No-Build Alternative, the proposed project would not be constructed. There would be no permanent direct or indirect impacts to natural communities.

Build Alternative

Since the Build Alternative includes the repair of the Los Angeles River Bridge and Separation, impacts to the Los Angeles River will be avoided or minimized with the implementation of Construction Best Management Practices (BMPs) and a Water Pollution Control Plan and/or a Water Pollution Program. BMPs would be implemented at all of the 10 proposed project sites. Examples of BMPs include, but are not limited to, concrete washouts, tracking/sediment controls, silt fences and plastic covers to be used necessary during on-site activity.

The proposed project will be limited to the prism of the roadway and the adjacent disturbed, primarily landscaped land. The status of the resource is degraded due to the lack of irrigation, determinantal effects of the highway environment, human disturbance, invasive plant species, and the age of landscaped plantings. Therefore, with the implementation of BMP's and avoidance and minimization measures, there would be no potential direct or indirect, permanent or temporary, impacts with the Build Alternative on sensitive natural communities.

Cumulative Impacts

With the use of avoidance and minimization measures it is anticipated at this time that this project will not result in a net loss of the Los Angeles River natural community. When combined with other approved projects in the region of the BSA, the cumulative effects on the Los Angeles River natural community are expected to remain low. Considering the lack of suitable habitat for any listed sensitive species, with the implementation of strict Stormwater and Erosion Control BMPs, there are no actions that would have the potential to threaten the Los Angeles River natural community. With proposed avoidance and minimization measures, impacts to the Los Angeles River natural community through the implementation of this project is expected to be low.

With the implementation of the Build Alternative, there will be no conflicts with any regional conservation plans. The proposed project will not impact open space or natural habitats, it will

not impact wildlife connectivity, and is not located within any SEA's within Los Angeles County. The Los Angeles River Bridge is located adjacent to Griffith Park which has been established as an SEA; however, there will be no impacts as the proposed project will not incorporate or use the park's land.

Avoidance, Minimization, and/or Mitigation Measures

BIO-1: A stabilized construction access will be used.

BIO-2: Vehicle Equipment Cleaning procedures and practices will be used to minimize or eliminate the discharge of pollutants from vehicle and equipment cleaning operations to storm drain system or to watercourses.

BIO-3: Vehicle Equipment Fueling procedures and practices will be used to minimize or eliminate the discharge of fuel spills and leaks into storm drain systems or to water courses.

BIO-4: Vehicle Equipment Maintenance procedures and practices will be used to eliminate the discharge of pollutants to the storm drain systems or to watercourses from vehicle and equipment maintenance procedures. This includes drip pans under equipment when not in use.

BIO-5: Material Delivery procedures and practices for the proper handling and storage of material in a manner that minimizes or eliminates the discharge of these materials to the storm drain systems or to water courses will be used.

BIO-6: Stockpile Management procedures and practices will be used to reduce or eliminate air and stormwater pollution from stock piles of soil and paving materials such as Portland cement concrete (PCC) rubble, Asphalt Concrete (AC), AC rubble, aggregate base, aggregate sub-base or pre-mixed aggregate, asphalt binder and pressure treated wood.

BIO-7: Spill Prevention and Control will be implemented to prevent and control spills in a manner that minimizes or prevents the discharge of spilled material to the drainage system or watercourse.

BIO-8: Solid Waste Management procedures and practices will be used to minimize or eliminate the discharge of pollutants to the drainage system or to watercourse as a result of creation, stockpiling or removal of construction site wastes.

BIO-9: Concrete Waste Management procedures and practices will be used to minimize or eliminate the discharge of concrete waste materials within the waters.

2.3.2 Wetlands and Other Waters

Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. The lateral limits of jurisdiction over non-tidal water bodies extend to the ordinary highwater mark (OHWM), in the absence of adjacent wetlands. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the U.S. Environmental Protection Agency (U.S. EPA).

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (40 Code of Federal Regulations [CFR] 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a "least environmentally damaging practicable alternative" (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, EO 11990 states that a federal agency, such as FHWA and/or the Department, as assigned, cannot undertake or provide assistance for

new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction and (2) the proposed project includes all practicable measures to minimize harm. A Wetlands Only Practicable Alternative Finding must be made.

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCBs) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or the Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed, bank or channel of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFW.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue water quality certifications for activities which may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. Please see the Water Quality section for more details.

Affected Environment

The project contains one watercourse, which is the Los Angeles River. The Los Angeles River begins in the Simi Hills and Santa Susana Mountains and flows through Los Angeles County, California, from Canoga Park in the western end of the San Fernando Valley, nearly 77 km (48 miles) southeast to its mouth in Long Beach where it discharges into San Pedro Bay. It is one of four sections of the Los Angeles River that has an earthen bottom, hence riparian plant species will grow whereas concrete lined portions of the river support less vegetation. It should be noted that municipal storm drains contribute much water to the Los Angeles River.

The Los Angeles River is a Water of the U.S. due to its connectivity with the Pacific Ocean, a traditional navigable water. It is also a California Department of Fish and Wildlife (CDFW) regulated stream.

An area must exhibit all three wetlands diagnostic characteristics, as described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West* Region and the *Corps of Engineers Wetlands Delineation Manual*, to be considered a USACE jurisdictional wetland. The wetlands diagnostic characteristics include: hydrophytic vegetation, hydric soils, and wetland hydrology.

There is potential for wetlands to occur at this portion of the Los Angeles River. However, due to clearing and grubbing conducted by the USACE in previous years, the three parameters for a wetland are not met. Therefore, there will be no wetlands encountered at the Los Angeles River Bridge.

Environmental Consequences

No-Build Alternative
Under the No-Build Alternative, there will be no impacts to wetlands or other waters.

Build Alternative
The Build Alternative will not affect wetlands, as wetlands are not anticipated to be encountered for the proposed project.

Under the Build Alternative, access to the Los Angeles River will be needed in order to perform work at the Los Angeles River Bridge. Coordination with the United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and the California Regional Water Quality Control Board (RWQCB) will be conducted throughout the project development process in order to meet the necessary requirements to obtain access to the Los Angeles River.

It is anticipated that a Section 404 Nationwide Permit and 408 Permit will be needed from the USACE pursuant to the Clean Water Act, a Section 401 Water Quality Certification from the RWQCB pursuant to the Clean Water Act, and a Section 1602 Lake and Streambed Alteration Agreement from CDFW pursuant to the California Fish and Game Code.

Avoidance, Minimization, and/or Mitigation Measures

BIO-10: Permits from regulatory resource agencies (i.e. USACE, CDFW, and RWQCB) must be acquired at the Design phase in order to perform work at the Los Angeles River Bridge.

2.3.3 Plant Species

Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species section in this document for detailed information about these species.

This section of the document discusses all other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), found at California Public Resources Code, Sections 21000-21177.

Affected Environment

Dominant Plant Species at Each Location

- **Los Angeles River Bridge and Separation**
  - Cattail (*Typha latifolia*)
  - Black willow (*Salix nigra*)
- **Roscoe Blvd OC**
  - Landscaped laurel sumac (*Malosma laurina*)
- **Sunland Blvd OC**
  - Peruvian pepper tree (*Schinus molle*)
- **Olinda Street POC**
  - Carob (*Ceratonia siliqua*)
- **Tuxford Off-Ramp OC**
  - Eucalyptus (*Eucalyptus sp.*)
- **Lankershim Blvd OC**
  - Peruvian pepper tree (*Schinus molle*)
- **Peoria Street OC**
  - Carob (*Ceratonia siliqua*)
- **Laurel Canyon Blvd OC/Sheldon Street OC**
  - Silver dollar eucalyptus (*Eucalyptus polyanthemos*)
- **Templin Highway UC**
  - Black mustard (*Brassica nigra*)
  - Yerba santa (*Eriodictyon californicum*)
  - Wild oats (*Avena fatua*)
  - Annual grasses (*Poaceae*)
  - California buckwheat (*Eriogonum facsiculatum*)
  - Bladderpod (*Peritoma arborea*)

A total of five (5) special-status plant species were identified as being potentially present within the BSA, based on preliminary literature research, and historical documentation including California Natural Diversity Database (CNDDB) occurrences, and Information for Planning and Consultation (IPaC) records. Summaries of these species and their occurrences in the proposed project vicinities are described below.

Special-status plant species include those that are: (1) state or federally listed as Rare, Threatened, or Endangered; (2) proposed for state of federal listing as Rare, Threatened or Endangered; (3) federal candidate species for listing; or (4) considered to be a Federal Species of Concern; (5) CNPS rarity level of 1.B1 and 1.B2. Threatened and endangered species are discussed further in Section 2.3.5.

Nevin's barberry (*Berberis nevinii*)
There is no suitable habitat at all the sites except the Los Angeles River which is also within the range of the species. This species is listed as State and Federally endangered. Suitable habitat would include chaparral, cismontane, woodland, coastal scrub and riparian scrub. The species was not observed within the Los Angeles River, which was the only location where it had potential to occur. The Los Angeles River was outside of designated final critical habitat.

San Fernando Valley Spineflower (*Chorizanthe parryi var. fernandina*)
San Fernando Valley Spineflower does not have the potential to occur within the 10 project locations. There is not suitable habitat at any of the project sites. Suitable habitat would include coastal sage scrub, valley and foothill grassland. This species is State Endangered. The IPaC list does not contain this species.

Slender-horned Spineflower (*Dodecahema leptoceras*)
Slender-horned spineflower does not have the potential to occur within the 10 project locations. There is not suitable habitat at any of the project sites. Suitable habitat would include alluvial-fans or freshwater marsh. Both the CNDDB and IPaC list this species. This species is listed as State and Federally endangered.

Gambel's Watercress (*Rorippa gambellii*)
Gambel's watercress does not have the potential to occur within the 10 project locations. This species was not observed during field surveys of any of the 10 project locations. There is not suitable habitat at any of the 10 project sites. Suitable habitat would include fresh and brackish water habitat such as lakesides and marshes. IPaC lists this species as Federally endangered. According to USFWS, the Templin project site is within the range of Gambel's watercress, however, the Templin project site is not within critical habitat for the species, and does not contain appropriate habitat.

California Orcutt grass (*Orcuttia californica*)
California Orcutt grass does not have the potential to occur within the 10 project locations. There is not suitable habitat at any of the project sites. Suitable habitat would include vernal pools. IPaC lists this species as Federally endangered and CNDDB lists this species as State endangered. According to USFWS, the Templin project location is within the range of California Orcutt grass, however, the Templin project site is not within critical habitat for the species and lacks suitable habitat.

Environmental Consequences

No-Build Alternative

Under the No-Build Alternative, existing conditions would remain and no impacts to plant species would occur.

Build Alternative

No plants of special concern were found to be present within the BSA during focused surveys. Therefore, no impacts to individuals of plant species are expected to occur with the implementation of the proposed project.

Cumulative Impacts

Cumulative impacts to plant species are not expected to occur as a result of the proposed project.

Avoidance, Minimization, and/or Mitigation Measures

BIO-11: A focused plant survey will be conducted prior to construction. Should pre-construction surveys determine presence of special status plant species, a qualified biologist will establish Environmentally Sensitive Area fencing surrounding the areas where individuals of plant species are found. If impacts cannot be avoided, individual specimens of species shall be collected and propagated at preapproved nurseries and replanted onsite, whenever possible.

2.3.4 Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service), and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in the section 2.3.5 (Threatened and Endangered Species). All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act (MBTA)
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act

- Sections 1600 – 1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

Affected Environment

Except for the Templin Bridge site, common animal species are limited to urban species. At the Templin site, three bird species were observed during a field visit: black capped chickadee (*Poecile atricapillus*), scrub jay *(Aphelocoma californica*), and common raven *(Corvus corax).* Since the Templin Bridge site is located in a rural, mountainous area, common mammal species would include mule deer *(Odocoileus hemionus californicus),* cougar *(Puma concolor),* coyote *(Canis latrans),* black bear (*Ursus americanus*), bobcat *(Lynx rufus)* and raccoon *(Procyon lotor).*

Birds and Bats
Although all bridges but one cross over roadway, there is the potential for birds or bats to roost or nest on any of the bridges involved with this project. The Los Angeles River Bridge is a steel bridge which would not be conducive to bat roosting, although birds may nest on a steel bridge. Nesting bird surveys will be conducted 3 days before construction.

Before USACE cleared vegetation from the channel, bird species observed at the Los Angeles River and Separation sites include mallards *(Anas platyrhynchos),* greater yellow legs *(Tringa melanoleuca),* Muscovy duck *(Cairina moschata),* black headed night heron *(Nycticorax nycticorax),* Northern mockingbird *(Mimus polyglottos),* Northern harrier *(Circus hudsonius* or *Circus cyaneus hudsonius),* rock dove *(Columba livia),* osprey *(Pandion haliaetus),* great egret *(Ardea alba*), cormorant *(*Phalacrocoracidae), black necked stilt *(Himantopus mexicanus*), American coot *(Fulica americana),* great blue heron *(Ardea herodias),* and semipalmated plover *(Charadrius semipalmatus)*. Bird species observed at the Templin Bridge project location include black-capped chickadee (*Poecile atricapillus),* California scrub jay *(Aphelocoma californica),* and common raven *(Corvus corax).* The only birds observed at the other 8 project sites were house sparrow *(Passer domesticus)*, house finch *(Haemorhous mexicanus)* and rock dove.

Environmental Consequences

<u>No-Build Alternative</u>
Under the No-Build Alternative, impacts to animal species will not occur.

<u>Build Alternative</u>
Under the Build Alternative, any impacts to animal species will be short term construction-related. With the implementation of avoidance and minimization measures, any impacts as a result from construction will be minimized to the maximum extent feasible.

Cumulative Impacts

Temporary cumulative impacts as a result of the proposed project, in combination with other past, present and future projects, are not considered to be adverse. All temporary impacts described in the above sections would each be avoided or minimized and would, therefore, not have a cumulative impact to animal species.

Avoidance, Minimization, and/or Mitigation Measures

BIO-12: Nesting bird and bat surveys must be conducted within 3 days of work. The Resident Engineer (RE) must inform the district biologist 7 days before construction is to begin. If there is a pause in construction, the site may need to be re-surveyed for bats and birds. If nesting birds are present on a bridge, the district biologist will recommend a 150-ft buffer for songbirds and 500-ft for raptors. Work will not be conducted in the buffer zone until the nesting birds fledge and can flee the project site.

2.3.5 Threatened and Endangered Species

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA) (and the Department, as assigned), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement or a Letter of Concurrence. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2080 of the California Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFW. For species listed under both FESA and CESA requiring a Biological Opinion

under Section 7 of FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

Affected Environment

A total of five (5) threatened and endangered plant species and eight (8) threatened and endangered animal species were identified as being potentially present within the BSA, based on preliminary literature research, and historical documentation including California Natural Diversity Database (CNDDB) occurrences, and Information for Planning and Consultation (IPaC) records. Summaries of these species and their occurrences in the proposed project vicinity are described below. Special-status plant species are discussed in Section 2.3.3.

Riverside Fairy Shrimp (*Streptocephalus woottoni*)
Riverside fairy shrimp is listed under CESA as California State endangered and listed under FESA as Federally endangered. Suitable habitat includes vernal pools, ponds, and other ephemeral pool-like bodies of water. Due to lack of suitable habitat, this species is not expected to occur at any of the 10 project locations.

Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)
Vernal pool fairy shrimp is listed under FESA as Federally endangered. Suitable habitat includes vernal pools, ponds, and other ephemeral pool-like bodies of water. Due to lack of suitable habitat, this species is not expected to occur at any of the 10 project locations. According to USFWS, the Templin project location is within the range of vernal pool fairy shrimp, however, the Templin project location is not within critical habitat for the species and lacks suitable habitat for this species.

Arroyo Toad (*Anaxyrus californicus*)
Arroyo toad is listed as a State Species of Special Concern and Federally endangered. This species prefers a riverine habitat and are known to occur within coastal southern California from the Salinas River Basin in Monterey to northern Baja California. The Arroyo toad's ideal habitat is wide, terraced riparian floodplains, and sandy river washes with an open riparian canopy. Suitable habitat for the Arroyo toad does not occur within the proposed project limits and no recorded observations of this species occurs within the BSA (CDFW CNDDB April 12, 2018). This species was not observed during surveys.

California Red-Legged Frog (*Rana draytonii*)
California red-legged frog is listed as a Federally threatened species. This species is highly aquatic with little movement away from streamside habitats. This species prefers quiet pools of streams, marshes, and occasionally ponds and are known to occur within coastal California. Suitable habitat for the red-legged frog does not occur within any of the 10 project locations. This species was not observed during any surveys, therefore there is no-effect on the species. Impacts to California red-legged frog is not expected to occur.

California Condor (*Gymnogyps californianus*)
California condor is listed under both CESA and FESA as endangered and is also protected under the MBTA. Known breeding sites for this species occur within the Los Padres National Forest. California condor requires wide areas of open range land for foraging. This species typically nests in caves, large crevices, behind rock slabs, or on large ledges on high sandstone cliffs. Nests are often surrounded by dense brush and occur within the Coastal and Transverse Ranges of Ventura and Santa Barbara counties. The proposed project locations do not contain breeding or foraging habitat for the California condor.

Coastal California Gnatcatcher (*Polioptila californica*)
Coastal California gnatcatcher's range is limited to southern California, occurring within low-growing drought tolerant scrub communities. This species is listed as Federally threatened and a California Species of Special Concern and are also protected under the MBTA.

No suitable habitat was identified for coastal California gnatcatcher during field surveys. Suitable habitat includes coastal sage scrub. This species was not present during field surveys of any of the 10 project locations. Suitable habitat does not occur at any of the 10 project locations. The closest known population is not available. Most of the project locations are within range for coastal California gnatcatcher, however, none of the project locations are within critical habitat.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*)
Southwestern willow flycatcher is listed under both CESA and FESA as endangered and are also protected under the MBTA. This species typically resides and breeds within shrubby riparian vegetation, often dominated by willows equal to or greater than 10 feet tall. Very marginal potential habitat exists at the Los Angeles River and Separation project location, but due to the urban nature of the project location and heavy traffic by humans, this species is not expected to occur at this project location. USACE also clears and grubs the Los Angeles River on a regular basis.

Least Bell's Vireo (*Vireo bellii pusillus*)
The least Bell's vireo is listed under both CESA and FESA as endangered and is also protected under the MBTA. This species typically resides and breeds within shrubby riparian vegetation, often dominated by willows. Only very marginal habitat was identified for least Bell's vireo at the Los Angeles River and Separation during field surveys and would not be considered as suitable habitat because USACE clears and grubs the Los Angeles River regularly. Suitable habitat includes shrubby riparian vegetation. This species was not present during field surveys of any of the 10 project locations. Suitable habitat does not occur at any of the 10 project locations. The closest known population was not available. This project is not in the range for least Bell's

vireo except at the Templin Highway UC project location, however, this project location is not within critical habitat for this species.

Environmental Consequences

No-Build Alternative

Under the No-Build Alternative, existing conditions would remain and no impacts to threatened and endangered species would occur.

Build Alternative

Under the Build Alternative, impacts to threatened and endangered species are not anticipated. Therefore, the proposed project will not have a detrimental effect on threatened and endangered species populations, and direct or indirect impacts are not expected to occur. Effect findings for threatened and endangered species are shown in Table 33.

Table 33: FESA and CESA Effect Findings

Common Name	Scientific Name	Status	Effect Finding	Effect Finding for Critical Habitat (if applicable).
Plants				
Nevin's Barberry	*Berberis nevinii*	FE, SE	No Effect	N/A
San Fernando Valley Spineflower	*Chorizanthe parryi var. fernandina*	SE	No Effect	N/A
Slender-horned Spineflower	*Dodecahema leptoceras*	FE, SE	No Effect	N/A
Gambel's Watercress	*Nasturtium gambelli*	FE	No Effect	N/A
California Orcutt Grass	*Orcuttia californica*	FE, SE	No Effect	N/A
Invertebrates				
Vernal Pool Fairy Shrimp	*Branchinecta lynchi*	FE	No Effect	N/A
Riverside Fairy Shrimp	*Streptocephalus woottoni*	FE, SE	No Effect	N/A
Amphibians and Reptiles				
Arroyo Toad	*Anaxyrus californicus*	FE, SC	No Effect	N/A
California Red-Legged Frog	*Rana draytonii*	FT	No Effect	N/A
Birds				
California Condor	*Gymnogyps californianus*	FE, SE	No Effect	N/A
Coastal California Gnatcatcher	*Polioptila californica*	FT, SC	No Effect	N/A
Southwestern Willow Flycatcher	*Empidonax trailii extimus*	FE, SE	No Effect	N/A
Least Bell's Vireo	*Vireo bellii pusillus*	FE, SE	No Effect	N/A

*Federal Endangered (FE), Federal Threatened (FT), State Endangered (SE), Species of Special Concern (SC)

Cumulative Impacts

Temporary cumulative impacts as a result of the proposed project, in combination with other past, present and future projects, are not considered to be adverse. All temporary impacts described in the above sections would each be avoided or minimized and would, therefore, not have a cumulative impact to threatened and endangered species.

Avoidance, Minimization, and/or Mitigation Measures

Since no impacts to threatened and endangered species are anticipated, avoidance, minimization, and/or mitigation measures will not be needed.

2.3.6 Invasive Species

Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration (FHWA) guidance issued August 10, 1999 directs the use of the State's invasive species list, maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

Affected Environment

All of the project sites harbor invasive plants. The Tuxford Off-Ramp OC project site is comprised almost exclusively of invasive plant species. Some examples of invasive plants within the overall project limits include Peruvian pepper tree *(Schinus molle)*, Brazilian pepper tree *(Schinus terebinthifolia)*, Russian thistle *(Salsola sp.)*, eucalyptus *(Eucalyptus sp.)*, fountain grass *(Pennisetum setaceum)*, horsetail weed *(Equisetum arvense)*, oleander *(Nerium oleander)*, silver dollar eucalyptus *(Eucalyptus polyanthemos)*, annual grasses *(Poaceae)*, black mustard *(Brassica nigra)*, ice plant *(Carpobrotus edulis)*, tree of heaven *(Ailanthus altissima)*, blue gum eucalyptus *(Eucalyptus globulus)*, tree tobacco *(Nicotiana glauca)*, wild oats *(Avena fatua)*, California fan palm *(Washingtonia filifera)*, Bermuda grass *(Cynodon dactylon)*, mallow *(Malva neglecta)*, prickly lettuce (*Lactuca serriola)*, sow thistle *(Sonchus sp.)*, Virginia creeper (*Parthenocissus quinquefolia)*, silver dollar eucalyptus *(Eucalyptus polyanthemos)*, and Chinese elm (*Ulmus parvifolia).*

Most of the BSA is in a developed, urban area. Vegetation in the State R/W is generally ornamental and includes invasive species, such as ice plant *(Carpobrotus edulis)*, per Cal-IPC. However, because ice plant is not on the California Noxious Weed List, the project is within an urban corridor, and this species will not be planted adjacent to any drainage, its "invasiveness" is

not an issue. In compliance with Executive order 13112, invasive species on the California Noxious weed list shall not be included as part of the highway planting restoration plan.

Environmental Consequences

No-Build Alternative
Under the No-Build Alternative, existing conditions would remain and there would be no potential to spread invasive species in the proposed project area.

Build Alternative
The proposed project has the potential to spread invasive species to adjacent native habitats in the BSA by the entering and exiting of construction equipment contaminated by invasive species, the inclusion of invasive species in seed mixtures and mulch, and by the improper removal and disposal of invasive species so that seed is spread along the highway. The avoidance and minimization measures that would be implemented as part of the proposed project would minimize any potential contributions related to invasive species. Therefore, impacts related to the Build Alternative would be low.

Cumulative Impacts
The avoidance and minimization measures that would be implemented as part of the proposed project would minimize any potential project contribution to cumulative effects related to invasive species. Therefore, the Build Alternative would not contribute to cumulative adverse impacts related to invasive species.

Avoidance, Minimization, and/or Mitigation Measures

BIO-13: Caltrans Landscape Architects will include a plant palette that will not include any known invasive plants, adjacent to the Los Angeles River.

BIO-14: Landscape Specialists will recognize the issue of invasive plants and will require construction crews to eradicate them.

Chapter 3 – California Environmental Quality Act (CEQA) Evaluation

Determining Significance under CEQA

The proposed 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). FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans. Caltrans is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the Caltrans to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 in order to provide the reader with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

AESTHETICS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

CEQA Significance Determinations for Aesthetics

No Impact

b: There are no designated or eligible scenic highways within or adjacent to the proposed project area.

d: The proposed project would not result in an increase of light or glare sources in the proposed project area, as the proposed project would not directly expand roadway or railroad capacity.

Less Than Significant Impact

a: Views of the Los Padres National Forest, which the Templin Highway overcrossing lies within, is considered a scenic resource. During construction, the proposed project could result in temporary degradation to visual character of the site and its surroundings. Once construction is completed, the proposed project area would be restored to existing quality or better.

c: The proposed project would be consistent with the existing scenery of the proposed project area and will not result in highly noticeable visual changes. During construction, the proposed project could result in temporary degradation to visual character of the site and its surroundings. Once construction is completed, the proposed project area would be restored to existing quality or better.

AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

CEQA Significance Determinations for Agriculture and Forest Resources

No Impact

There will be no impacts to farmland, agricultural, or forest resources within the project area. There will be no conversion of agricultural or forest land resources.

AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.				
Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

CEQA Significance Determinations for Air Quality

No Impact

a: The Build Alternative will not conflict with or obstruct the implementation of the applicable air quality plan, violate any air quality standard, or contribute substantially to an existing or projected air quality violation.

Less Than Significant Impact

b, c, d, e: Construction of the Build Alternative could result in construction emissions that exceed the South Coast Air Quality Management District's significance thresholds for criteria pollutants. No significant air quality impacts are anticipated because the proposed project is not a capacity increasing project. Neither construction nor operation of the proposed project would utilize materials generally known to cause objectionable odors. The construction of the project would utilize standard construction equipment that is commonly used for Caltrans' projects. Section 2.2.4 evaluates potential construction-related air quality impacts of the proposed project and the avoidance and minimization measures that will be implemented. In addition, the proposed project would not introduce new sources of toxic air contaminants.

BIOLOGICAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

CEQA Significance Determinations for Biological Resources

No Impact

c, d, e, f: There are no federally protected wetlands within the proposed project area. The proposed project will not interfere with the movement of migratory fish or wildlife species. The proposed project will not conflict with any local policies or ordinances protecting biological resources and will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Less Than Significant Impact

a, b: Impacts to natural communities and animal species because of the proposed project will be construction-related. With the implementation of avoidance and minimization measures, the proposed project would result in a less than significant impact on potentially encountered bird or bat species. Special status species will not be impacted because of the proposed project due to the absence of designated critical habitat within the proposed project area. On-going consultation with State and Federal agencies will be conducted to meet the necessary requirements to perform work at the Los Angeles River Bridge. Permits from regulatory agencies will be acquired during the design phase of the project.

CULTURAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

CEQA Significance Determinations for Cultural Resources

No Impact

b, c, d: Given that the proposed work will largely be within a disturbed context or partially located within previously undisturbed soils at depths greater than approximately 18 feet, there is a low potential for encountering intact buried deposits.

If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological surveys will be needed if the Project limits are extended beyond the present survey limits.

If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Caltrans District Environmental Cultural Branch Chief, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Less than Significant Impact

a: The LA River and two LADWP transmission towers are being is assumed eligible for the proposed undertaking; however, it is anticipated that the proposed project will have no impact to these resources.

GEOLOGY AND SOILS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

CEQA Significance Determinations for Geology and Soils

No Impact

a-i, b, c, d, e: None of the structures are located within any Alquist-Priolo Earthquake Fault Zone as established by the California Geological Survey and is not located within 1000 feet of a Holocene fault. Therefore, potential for surface fault rupture does not exist. There will also be no impacts regarding soil erosion and loss of top soil. The proposed project is not located on a geologic unit, soil that is unstable, or expansive soil.

Less than Significant Impact

a-ii, iii: Facilities and structures constructed as part of the proposed project could potentially be affected by liquefaction and seismically induced settlement, which could occur where liquefaction potential exists. The potential impacts to facilities and structures can be substantially

reduced based on design and construction, consistent with the recommendations of the detailed geotechnical investigations prepared during final design. Any liquefaction potential would have negligible effects on the proposed project locations.

GREENHOUSE GAS EMISSIONS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Caltrans has used the best available information based to the extent possible on scientific and factual information, to describe, calculate, or estimate the amount of greenhouse gas emissions that may occur related to this project. The analysis included in the climate change section of this document provides the public and decision-makers as much information about the project as possible. It is Caltrans' determination that in the absence of statewide-adopted thresholds or GHG emissions limits, it is too speculative to make a significance determination regarding an individual project's direct and indirect impacts with respect to global climate change. Caltrans remains committed to implementing measures to reduce the potential effects of the project. These measures are outlined in the climate change section that follows the CEQA checklist and related discussions.			
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

CEQA Significance Determinations for Hazards and Hazardous Materials

No Impact

a: The Build Alternative would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The implementation of the Build Alternative could be expected to improve the operational capacity, and consequently the safety service level within the project limits. In addition, transport of hazardous materials is subject to strict regulation. Caltrans, the California Highway Patrol, and local police and fire departments are trained in emergency response procedures for safely responding to accidental

spills of hazardous substances on public roads, which further reduces impacts. For these reasons, operation of Build Alternative would not result in a significant permanent impact related to transport or upset of hazardous waste and materials.

c: Operation of the Build Alternative would not result in a significant permanent impact within 0.25 miles of existing and proposed schools.

d, e, f: The proposed project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Also, the proposed project is not located within an airport land use plan or within the vicinity of a private airstrip. The Bob Hope Airport is located less than two miles from the Sunland Blvd OC, however there will be no direct impacts to the airport as a result of the proposed project. Therefore, the Build Alternative would not result in a safety hazard to aircraft operations or persons living or working near an airport.

Less Than Significant Impact

b: There is a potential for exposure to general hazardous waste/material of concern during construction. Soil excavation and earth-moving activities associated with the Build Alternative could expose workers to contaminants associated with yellow traffic striping, aerially deposited lead, groundwater, electrical waste, and treated wood waste. Please refer to Chapter 2.2.3 Hazardous Waste/Materials for further discussion on potentially encountered hazardous materials. Any potential exposure to hazardous waste/materials will be minimized to the maximum extent feasible through Caltrans Standard and Non-Standard Specifications & Procedures and avoidance and minimization measures.

g: The Build Alternative would not impair the implementation of, or physically interfere with, the adopted emergency response or evacuation plans of the cities in the study area and the County of Los Angeles. Following construction, the Build Alternative would have no impacts to emergency response and evacuation. Temporary impacts to emergency services would be addressed through preparation of the Transportation Management Plan (TMP). The TMP is a standard measure applicable to large construction projects.

h: The proposed project area at the Templin Highway UC is located within the Fire Hazard Severity Zone. In the case of a large fire, motorists may have to divert through local streets or another highway. The project area is at the wildland/urban interface where the potential for fire damage is heightened; however, considering that the proposed project would neither involve the construction of habitable structures nor land use changes, it is concluded that there would not be an increased exposure of people or structures to a significant risk involving wildland fires. During construction, there may be temporary delays for emergency responders in the area. Temporary impacts to emergency services would be addressed through the preparation of the Transportation Management Plan (TMP). The TMP is a standard Caltrans measure applicable to large construction projects.

HYDROLOGY AND WATER QUALITY

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☐	☒

CEQA Significance Determinations for Hydrology and Water Quality

Less Than Significant Impact

e: Although the Build Alternative would result in an increase in impervious surface area, the Build Alternative would be designed to accommodate anticipated runoff levels and would include stormwater treatment BMPs to minimize potential impacts in accordance with Caltrans' Statewide NPDES Storm Water Permit. Erosion and sediment control BMPs are typically used to reduce sediment movement and stormwater contamination along roadways.

f. Project operation would not increase potential pollutants that could degrade water quality beyond existing conditions. However, during construction, there is potential that exposed soils, construction debris, and other pollutants could be carried in storm water runoff and discharged into drainages near the Project Area. Construction impacts from the Build Alternative would be minimized through compliance with the NPDES Construction General Permit, which requires the development and implementation of a SWPPP.

No Impact

a: The Build Alternative would result in an increase in impervious surface area. However, the proposed project would be designed in accordance with the objectives of Caltrans' NPDES Permit requirements and related stormwater requirements. During construction, there is potential for pollutants to be carried in storm water runoff and discharged near the project area. Construction impacts from the proposed project would be minimized through compliance with the NPDES General Permit for Discharges from Construction Activities, which requires the development and implementation of a SWPPP. Following construction, the Build Alternative will not violate any water quality standards or waste discharge requirements.

b: Long term operation of the Build Alternative would not substantially deplete groundwater resources or interfere with groundwater recharge. Groundwater resources may be temporarily used during construction of the Build Alternative. The groundwater resources used or temporarily pumped during construction would comply with all water discharge and pumping permit requirements.

c, d: The Build Alternative would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river. The proposed project would not result in substantial erosion, siltation, or increase the rate or amount of surface runoff.

g, h, i: The proposed project area is not located within a 100-year flood hazard area and has a low risk of flooding. Transportation facilities currently exist in the Project Area. The Build Alternative would not expand the facility to increase capacity, therefore, the Build Alternative would not expose people or structures to additional risk of loss, injury, or death involving flooding beyond existing conditions.

j: The proposed project area is not in a designated tsunami inundation zone or exposed to hazards of a mudflow.

LAND USE AND PLANNING

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

CEQA Significance Determinations for Land Use and Planning

No Impact

a, c: The proposed project will not divide an established community or conflict with any applicable habitat conservation/natural community conservation plan.

Less Than Significant Impact

b: One property, 1040 Olinda St., Sun Valley, CA 91352 (Parcel #2408-017-020), will permanently become a part of the transportation network. The 0.19-acre lot is designated as Industrial Light by the Sun Valley – La Tuna Canyon Community Plan. The permanent acquisition of this lot will result in a .00009% loss of Sun Valley's 2017.5 acres of industrial designated land. The change in land use of this singular parcel does not represent a significant change in Sun Valley's land use patterns.

MINERAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

CEQA Significance Determinations for Mineral Resources

No Impact

There are no known mineral resources located in the project vicinity, therefore impacts will not be anticipated.

NOISE

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

CEQA Significance Determinations for Noise

No Impact

c, e, f: The project will not cause a substantial permanent increase in ambient noise levels. Noise levels following construction are expected to remain the same as pre-construction levels. There are no airports located within 2 miles of the proposed project and there are no private air strips within the vicinity.

Less Than Significant Impact

a, b, d: The Build Alternative could result in temporary construction related noise impacts to motorists, pedestrians, residents, and businesses. Construction noise is regulated by Caltrans standard specifications, Section 7-1.01I, Sound Control Requirements. These requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations. Therefore, construction impacts related to noise will be less than significant.

POPULATION AND HOUSING

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

CEQA Significance Determinations for Population and Housing

No Impact

a, b, c. The Build Alternative would not increase capacity of existing transportation facilities and would not induce local or regional growth. Therefore, the Build Alternative would not result in direct or indirect population growth in the area.

The Build Alternative would require ROW from adjacent parcels, however, housing displacement would not result from the acquisitions. Therefore, the Build Alternative would not result in impacts on housing or cause displacement of local residents.

PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

CEQA Significance Determinations for Public Services

No Impact
The proposed project would not necessitate the provisions of new or physically altered schools.

Less Than Significant Impact
The Build Alternative would not necessitate the provision of new or physically alter fire and police protection facilities. Caltrans would work with emergency and safety services during construction so that they can maintain acceptable response times. A Traffic Management Plan will be implemented during the construction of the project. The project will have temporary construction impacts in Griffith Park, Sheldon Skate Park, and a Metrolink parking lot; however, Caltrans will work with all relevant public entities in order to minimize impacts during construction.

RECREATION

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

CEQA Significance Determinations for Recreation

No Impact

a: The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Less Than Significant Impact

b: The proposed project involves replacing a fence on the corner of Sheldon Skatepark, temporary construction staging at the Glendale Narrows Riverwalk, and a temporary closure with a proposed detour of the Los Angeles River Bicycle Path. The proposed project will have no long-term impacts to these facilities as its features and ownership will remain the same. Coordination with the City of Los Angeles, County of Los Angeles, and the City of Glendale will be conducted throughout the project development process in order to minimize impacts to recreational facilities to the extent feasible.

TRANSPORTATION/TRAFFIC

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

CEQA Significance Determinations for Transportation/Traffic

No Impact

a, b, c, d, f: There are no negative long-term impacts from this project. Traffic circulation is expected to improve with the implementation of this project.

Less Than Significant Impact

e: During construction, the project will require the implementation of a Transportation Management Plan (TMP) which is utilized to reduce impacts to traffic. Temporary construction impacts will result in potential delays to emergency service providers within the study area. The implementation of a TMP will minimize any circulation impacts during construction and would include construction staging plans, as well as coordination with local residents, businesses, local agencies, and emergency responders. During project construction, Caltrans will coordinate with

local emergency service providers to keep them informed of the project construction schedule and any detour routes so as to avoid or minimize any impacts.

Beneficial effects include improved emergency response times, as the ability to move fire protection, law enforcement, and emergency service vehicles from one area to another would be enhanced by the improved transportation network following construction.

TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

CEQA Significance Determinations for Tribal Cultural Resources

No Impact

a, b: There are no tribal cultural resources that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources.

A search of the Native American Heritage Commission's (NAHC) Sacred Lands File showed that no Tribal Cultural Resources are situated within the APE.

The following Native American individuals were contacted via U.S. mail and phone calls:

- Kimia Fatehi, Fernandeño Tataviam Band of Mission Indians: A letter was sent to Ms. Fatehi on August 8, 2017 inviting the Tribe to consult. Mr. Jairo Avila responded on the Tribe's behalf (see below).
- Rosemary Morillo, Soboba Band of Luiseño Indians: A letter was sent to Ms. Morillo on August 8, 2017 inviting the Tribe to consult. No response received to date.
- Anthony Morales, Gabrieleno/Tongva San Gabriel Band of Mission Indians: Letters were sent to Mr. Morales on August 8, 2017 inviting the Tribe to consult. Mr. Salas responded via email and letter August 30, 2017 requesting to consult on the project. During a meeting on August 31, 2017 between the Tribe and Caltrans, Caltrans informed Mr. Salas that the environmental studies were currently on hold as the project's Design team needed time to work on project plans, and that he would be contacted once the environmental studies recommenced. In February 2018, Caltrans and the Tribe arranged for a consultation meeting. On March 15, 2018, Caltrans and the Tribe held a teleconference in which the Tribe relayed no concerns with the LA River Bridge location

as there would be no ground disturbance, nor with the Templin Highway location as it is outside of their ancestral territory. However, the Tribe expressed concern with the locations in the San Fernando Valley and referred Caltrans to Mr. John Valenzuela for more information. In a follow-up email dated March 15, 2018, the Tribe provided information on the Sunland area and identified four main village areas in the vicinity of the project: Cahuengna to the south, Pasekngna to the west, Pakooynga to the north, and Tuhungna to the east. The Tribe further claimed that major east-west trading routes passed through these villages, including mission roads and waterways. The Tribe reiterated that, although the Tribe has high concerns for the project, they are deferring consultation fore this part of the project to the Fernandeño Tribal Government. Caltrans followed up with the Tribe summarizing what had been discussed and confirming that they have deferred consultation to the Fernandeño.

- Rudy Ortega, Fernandeño Tataviam Band of Mission Indians: A letter was sent to Mr. Ortega on February 2, 2018 inviting the Tribe to consult. Mr. Jairo Avila responded on the Tribe's behalf (see below).
- Beverly Salazar, Fernandeño Tataviam Band of Mission Indians: A letter was sent to Ms. Salazar on February 2, 2018 inviting the Tribe to consult. Mr. Jairo Avila responded on the Tribe's behalf (see below).
- Alan Salazar, Fernandeño Tataviam Band of Mission Indians: A letter was sent to Mr. Salazar on February 2, 2018 inviting the Tribe to consult. Mr. Jairo Avila responded on the Tribe's behalf (see below).
- Jairo Avila, Fernandeño Tataviam Band of Mission Indians: A letter was sent to Mr. Avila on February 2, 2018 inviting the Tribe to consult. Mr. Avila responded in an email dated April 1, 2018, stating that the project was near a number of significant cultural resources, including the ethnohistoric villages of Jajamongna and Vijanga, an archaeological site, and a burial. Mr. Avila further stated that the subsurface boundary of the two recorded villages have not been well defined and may extend into the proposed project locations. For this reason, the Tribe requested information on the extent of previous ground disturbance at the bridge locations. The Tribe was provided this information in a letter and email dated September 17, 2018. The letter also let the Tribe know that a draft of the ASR had been prepared and a copy could be provided for review if requested.
- Sandonne Goad, Gabrielino/Tongva Nation: A letter was sent to Ms. Goad on February 28, 2018 inviting the Tribe to consult. No response received to date.
- Robert Dorame, Gabrielino Tongva Indians of California Tribal Council: A letter was sent to Mr. Dorame on February 28, 2018 inviting the Tribe to consult. No response received to date.
- Charles Alvarez, Gabrielino-Tongva Tribe: A letter was sent to Mr. Alvarez on February 28, 2018 inviting the Tribe to consult. No response received to date.
- John Valenzuela, San Fernando Band of Mission Indians: A letter was sent to Mr. Valenzuela on February 28, 2018 inviting the Tribe to consult. Caltrans later learned that Mr. Valenzuela was deceased. No response regarding consultation on this project has been received from the Tribe.

If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to

overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Caltrans District Environmental Cultural Branch Chief, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

UTILITIES AND SERVICE SYSTEMS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

CEQA Significance Determinations for Utilities and Service Systems

No Impact

a. The Build Alternative would not require wastewater treatment for Project operation.

Less than Significant Impact

b, c, d, e. The Build Alternative would not require wastewater treatment or additional water sources for operation. However, the Build Alternative would result in an increase of impervious surface that could increase the volume of runoff discharged into receiving sewers and channels. Additionally, there is potential that exposed soils, construction debris, and other pollutants could be carried in storm water runoff and discharged into drainages near the project area. Construction impacts would be minimized through compliance with the NPDES Construction General Permit, which requires the development and implementation of a SWPPP. Therefore, the Build Alternative would result in less than significant impacts on water, wastewater treatment, and drainage facilities in the project area.

f. Operation of the Build Alternative would not require disposal services. Construction would generate waste that would be received by a local landfill. The closest landfills to the project sites are the Vulcan Landfill in Sun Valley and the Chiquita Canyon Landfill in the city of Val Verde. The Build Alternative would result in minimal waste compared to the receiving capacity of the landfill. Therefore, the Build Alternative would result in less than significant impacts on local landfills.

g. Operation of the Build Alternative would not require solid waste disposal. Construction would require short-term solid waste disposal, which would comply with federal, state, and local statutes and regulations related to solid waste. Therefore, the impacts would be less than significant.

MANDATORY FINDINGS OF SIGNIFICANCE

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

CEQA Significance Determinations for Mandatory Findings of Significance

The proposed project would have no effect on agriculture and forest resources, mineral resources, and population and housing.

In addition, the proposed project would have less than significant effects to aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, recreation, transportation/traffic, tribal cultural resources, and utilities and service systems.

<u>No Impact</u>
b: Temporary cumulative impacts as a result of the proposed project, in combination with other past, present, and future projects, are not considered to be adverse. All temporary impacts described in the above sections, as well as impacts for other projects in the study area, would each be minimized or avoided and would, therefore, not have a cumulative impact to humans or the physical environment.

<u>Less Than Significant Impact</u>
a, c: After performing extensive environmental studies, it has been determined that any impacts to the quality of the environment are less than significant. During construction, any temporary

impacts would be avoided or minimized to the extent feasible with the Avoidance and Minimization measures outlined in Appendix D.

Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 has led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), HFC-23 (fluoroform), HFC-134a (1,1,1,2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of GHG emissions is electricity generation, followed by transportation.[34] In California, however, transportation sources (including passenger cars, light-duty trucks, other trucks, buses, and motorcycles) are the largest contributors of GHG emissions.[35] The dominant GHG emitted is CO_2, mostly from fossil fuel combustion.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels).

Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach

[34] https://www.epa.gov/ghgemissions/us-greenhouse-gas-inventory-report-1990-2014
[35] https://www.arb.ca.gov/cc/inventory/data/data.htm

that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices.[36] This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability."[37] Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life. Addressing these factors up front in the planning process will assist in decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project-level decision-making.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

The Energy Policy Act of 1992 (EPACT92, 102nd Congress H.R.776.ENR): With this act, Congress set goals, created mandates, and amended utility laws to increase clean energy use and improve overall energy efficiency in the United States. EPACT92 consists of 27 titles detailing various measures designed to lessen the nation's dependence on imported energy, provide incentives for clean and renewable energy, and promote energy conservation in buildings. Title III of EPACT92 addresses alternative fuels. It gave the U.S. Department of Energy administrative power to regulate the minimum number of light-duty alternative fuel vehicles required in certain federal fleets beginning in fiscal year 1993. The primary goal of the Program is to cut petroleum use in the United States by 2.5 billion gallons per year by 2020.

Energy Policy Act of 2005 (109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) Indian energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Standards: This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the Corporate Average Fuel Economy (CAFE) program on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

U.S. EPA's authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts* v. *EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence, it found that six GHGs constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and EPA's assessment of the scientific evidence that form the basis for EPA's regulatory actions.

[36] https://www.fhwa.dot.gov/environment/sustainability/resilience/
[37] https://www.sustainablehighways.dot.gov/overview.aspx

U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010[38] and significantly increased the fuel economy of all new passenger cars and light trucks sold in the United States. The standards required these vehicles to meet an average fuel economy of 34.1 miles per gallon by 2016. In August 2012, the federal government adopted the second rule that increases fuel economy for the fleet of passenger cars, light-duty trucks, and medium-duty passenger vehicles for model years 2017 and beyond to average fuel economy of 54.5 miles per gallon by 2025. Because NHTSA cannot set standards beyond model year 2021 due to statutory obligations and the rules' long timeframe, a mid-term evaluation is included in the rule. The Mid-Term Evaluation is the overarching process by which NHTSA, EPA, and ARB will decide on CAFE and GHG emissions standard stringency for model years 2022–2025. NHTSA has not formally adopted standards for model years 2022 through 2025. However, the EPA finalized its mid-term review in January 2017, affirming that the target fleet average of at least 54.5 miles per gallon by 2025 was appropriate. In March 2017, President Trump ordered EPA to reopen the review and reconsider the mileage target.[39]

NHTSA and EPA issued a Final Rule for "Phase 2" for medium- and heavy-duty vehicles to improve fuel efficiency and cut carbon pollution in October 2016. The agencies estimate that the standards will save up to 2 billion barrels of oil and reduce CO_2 emissions by up to 1.1 billion metric tons over the lifetimes of model year 2018–2027 vehicles.

State

With the passage of legislation including State Senate and Assembly bills and executive orders, California has been innovative and proactive in addressing GHG emissions and climate change.

Assembly Bill 1493, Pavley Vehicular Emissions: Greenhouse Gases, 2002: This bill requires the California Air Resources Board to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year.

Executive Order S-3-05 (June 1, 2005): The goal of this executive order (EO) is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill 32 in 2006 and SB 32 in 2016.

Assembly Bill 32 (AB 32), Chapter 488, 2006: Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals as outlined in EO S-3-05, while further mandating that ARB create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code Section

[38] https://one.nhtsa.gov/Laws-&-Regulations/CAFE-%E2%80%93-Fuel-Economy
[39] http://www.nbcnews.com/business/autos/trump-rolls-back-obama-era-fuel-economy-standards-n734256 and https://www.federalregister.gov/documents/2017/03/22/2017-05316/notice-of-intention-to-reconsider-the-final-determination-of-the-mid-term-evaluation-of-greenhouse

38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

Executive Order S-20-06 (October 18, 2006): This order establishes the responsibilities and roles of the Secretary of the California Environmental Protection Agency (Cal/EPA) and state agencies with regard to climate change.

Executive Order S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the Governor's 2030 and 2050 GHG reduction goals.

Senate Bill 97 (SB 97), Chapter 185, 2007, Greenhouse Gas Emissions: This bill requires the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the California Environmental Quality Act (CEQA) Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Senate Bill 375 (SB 375), Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

Senate Bill 391 (SB 391), Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to meet California's climate change goals under AB 32.

Executive Order B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

Executive Order B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$). Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

Senate Bill 32, (SB 32) Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

Environmental Setting

In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 (AB 32), which created a comprehensive, multi-year program to reduce GHG emissions in California. AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020. The Scoping Plan was first approved by ARB in 2008 and must be updated every 5 years. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32.

The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions. As part of its supporting documentation for the updated Scoping Plan, ARB released the GHG inventory for California.[40] ARB is responsible for maintaining and updating California's GHG Inventory per H&SC Section 39607.4. The associated forecast/projection is an estimate of the emissions anticipated to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented.

An emissions projection estimates future emissions based on current emissions, expected regulatory implementation, and other technological, social, economic, and behavioral patterns. The projected 2020 emissions provided in Figure 22 represent a business-as-usual (BAU) scenario assuming none of the Scoping Plan measures are implemented. The 2020 BAU emissions estimate assists ARB in demonstrating progress toward meeting the 2020 goal of 431 $MMTCO_2e$[41]. The 2018 edition of the GHG emissions inventory found total California emissions of 429 $MMTCO_2e$ for 2016.

The 2020 BAU emissions projection was revisited in support of the First Update to the Scoping Plan (2014). This projection accounts for updates to the economic forecasts of fuel and energy demand as well as other factors. It also accounts for the effects of the 2008 economic recession and the projected recovery. The total emissions expected in the 2020 BAU scenario include reductions anticipated from Pavley I and the Renewable Electricity Standard (30 $MMTCO_2e$ total). With these reductions in the baseline, estimated 2020 statewide BAU emissions are 509 $MMTCO_2e$.

[40] 2018 Edition of the GHG Emission Inventory (July 2018): https://www.arb.ca.gov/cc/inventory/data/data.htm
[41] The revised target using Global Warming Potentials (GWP) from the IPCC Fourth Assessment Report (AR4)

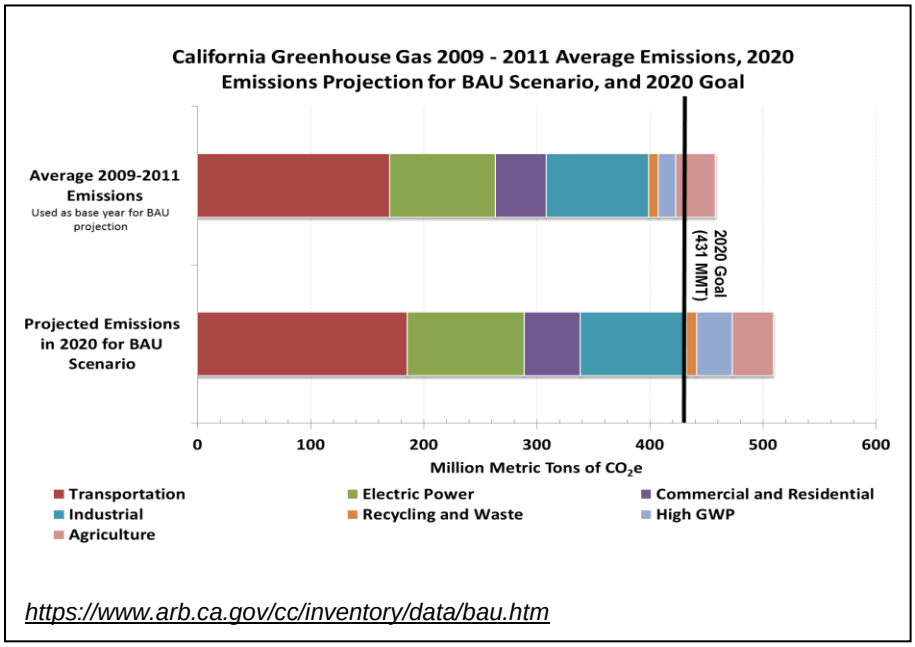

Figure 22: 2020 Business as Usual (BAU) Emissions Projection 2014 Edition

Project Analysis

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of GHG.[42] In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130). To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects to make this determination is a difficult, if not impossible, task.

GHG emissions for transportation projects can be divided into those produced during operations and those produced during construction. The following represents a best faith effort to describe the potential GHG emissions related to the proposed project.

Operational Emissions

The purpose of the I-5 Freight Corridor Improvement Project is to improve mobility by providing for a goods movement freight corridor that can be operated efficiently and continuously. The project addresses restrictions from reduced vertical clearance as established in Caltrans' Highway Design Manual and load capacity restrictions as identified in federal

[42] This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

guidelines. The project will not increase the capacity of the roadway, add or reduce the number of travel lanes, or permanently alter existing travel patterns. It will not induce growth that could create additional traffic. Therefore, there will likely be minimal or no increase in operational GHG emissions. Some construction GHG emissions are unavoidable and are described in the next section.

Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities. Contractors are also required to comply with the requirements applicable state and local air quality regulations to minimize construction emissions.

Construction emissions for the proposed project were estimated using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, version 9.0 combined with the emission factors from EMFAC. The project would produce approximately 35,000 tons of CO_2 over the 24-month construction period. (For a summary of construction GHG emissions, refer to Tables 24-32 in Section 2.2.4, Air Quality).

Caltrans Standard Specifications, a part of all construction contracts, includes requirements for contractors to comply with CARB and local air pollution control district rules, ordinances, and regulations for air quality. Measures such as minimizing idling time, keeping equipment maintained, and using equipment with CARB-permitted engines contribute to reducing GHGs by minimizing construction vehicle emissions. The TMP and other measures described in Section 2.1.5, Traffic and Transportation, would help minimize delays and associated idling GHG emissions during construction.

CEQA Conclusion

While the project will result in a slight increase in GHG emissions during construction, it is anticipated that the project will not result in any increase in operational GHG emissions. While it is Caltrans' determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct impact and its contribution on the cumulative scale to climate change, Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

Statewide Efforts

In an effort to further the vision of California's GHG reduction targets outlined an AB 32 and SB 32, Governor Brown identified key climate change strategy pillars (concepts). These pillars highlight the idea that several major areas of the California economy will need to reduce emissions to meet the 2030 GHG emissions target. These pillars are (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farm and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*.

Figure 23: The Governor's Climate Change Pillars: 2030 Greenhouse Gas Reduction Goals

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that we build on our past successes in reducing criteria and toxic air pollutants from transportation and goods movement activities. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled. One of Governor Brown's key pillars sets the ambitious goal of reducing today's petroleum use in cars and trucks by up to 50 percent by 2030.

Governor Brown called for support to manage natural and working lands, including forests, rangelands, farms, wetlands, and soils, so they can store carbon. These lands have the ability to remove carbon dioxide from the atmosphere through biological processes, and to then sequester carbon in above- and below-ground matter.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set a new interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

California Transportation Plan (CTP 2040)
The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. The CTP defines performance-based goals, policies, and strategies to achieve our collective vision for California's future statewide, integrated, multimodal transportation system. It serves as an umbrella document for all of the other statewide transportation planning documents.

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

Caltrans Strategic Management Plan
The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT per capita
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

Funding and Technical Assistance Programs
In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several funding and technical assistance programs that have GHG reduction benefits. These include the Bicycle Transportation Program, Safe Routes to School, Transportation Enhancement Funds, and Transit Planning Grants. A more extensive description of these programs can be found in *Caltrans Activities to Address Climate Change* (2013).

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a department policy that will ensure coordinated efforts to incorporate climate change into departmental decisions and activities.

Caltrans Activities to Address Climate Change (April 2013) provides a comprehensive overview of activities undertaken by Caltrans statewide to reduce GHG emissions resulting from agency operations.

Project-Level GHG Reduction Strategies

The following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

The Build Alternative would improve pedestrian and bicycle facilities, enabling use of alternative modes that would reduce vehicle travel and associated GHG emissions.

- AIR-1: The construction contractor shall comply with Caltrans' Standard Specifications in Section 14-9 (2015). Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including SCAQMD rules and regulations and local ordinances.
- AIR-5: Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.
- AIR-12: Route and schedule construction traffic to avoid peak travel times as much as possible, to reduce congestion and related air quality and GHG impacts caused by idling vehicles along local roads.

Adaptation Strategies

"Adaptation strategies" refer to how Caltrans and others can plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage—or, put another way, planning and design for resilience. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds from longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. These types of impacts to the transportation infrastructure may also have economic and strategic ramifications.

Federal Efforts

At the federal level, the Climate Change Adaptation Task Force, co-chaired by the CEQ, the Office of Science and Technology Policy (OSTP), and the National Oceanic and Atmospheric Administration (NOAA), released its interagency task force progress report on October 28, 2011[43], outlining the federal government's progress in expanding and strengthening the nation's capacity to better understand, prepare for, and respond to extreme events and other climate change impacts. The report provided an update on actions in key areas of federal adaptation, including: building resilience in local communities, safeguarding critical natural resources such as fresh water, and providing accessible climate information and tools to help decision-makers manage climate risks.

The federal Department of Transportation issued *U.S. DOT Policy Statement on Climate Adaptation* in June 2011, committing to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that

[43] https://obamawhitehouse.archives.gov/administration/eop/ceq/initiatives/resilience

taxpayer resources are invested wisely and that transportation infrastructure, services and operations remain effective in current and future climate conditions."[44]

To further the DOT Policy Statement, on December 15, 2014, FHWA issued order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*).[45] This directive established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. The FHWA will work to integrate consideration of these risks into its planning, operations, policies, and programs in order to promote preparedness and resilience; safeguard federal investments; and ensure the safety, reliability, and sustainability of the nation's transportation systems.

FHWA has developed guidance and tools for transportation planning that fosters resilience to climate effects and sustainability at the federal, state, and local levels.[46]

State Efforts

On November 14, 2008, then-Governor Arnold Schwarzenegger signed EO S-13-08, which directed a number of state agencies to address California's vulnerability to sea-level rise caused by climate change. This EO set in motion several agencies and actions to address the concern of sea-level rise and directed all state agencies planning to construct projects in areas vulnerable to future sea-level rise to consider a range of sea-level rise scenarios for the years 2050 and 2100, assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea-level rise. Sea-level rise estimates should also be used in conjunction with information on local uplift and subsidence, coastal erosion rates, predicted higher high water levels, and storm surge and storm wave data.

Governor Schwarzenegger also requested the National Academy of Sciences to prepare an assessment report to recommend how California should plan for future sea-level rise. The final report, *Sea-Level Rise for the Coasts of California, Oregon, and Washington* (Sea-Level Rise Assessment Report)[47] was released in June 2012 and included relative sea-level rise projections for the three states, taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge, and land subsidence rates; and the range of uncertainty in selected sea-level rise projections. It provided a synthesis of existing information on projected sea-level rise impacts to state infrastructure (such as roads, public facilities, and beaches), natural areas, and coastal and marine ecosystems; and a discussion of future research needs regarding sea-level rise.

In response to EO S-13-08, the California Natural Resources Agency (Resources Agency), in coordination with local, regional, state, federal, and public and private entities, developed *The California Climate Adaptation Strategy* (Dec 2009),[48] which summarized the best available science on climate change impacts to California, assessed California's vulnerability to the identified impacts, and outlined solutions that can be implemented within and across state

[44] https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm
[45] https://www.fhwa.dot.gov/legsregs/directives/orders/5520.cfm
[46] https://www.fhwa.dot.gov/environment/sustainability/resilience/
[47] *Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future* (2012) is available at: http://www.nap.edu/catalog.php?record_id=13389.
[48] http://www.climatechange.ca.gov/adaptation/strategy/index.html

agencies to promote resiliency. The adaptation strategy was updated and rebranded in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan).

Governor Jerry Brown enhanced the overall adaptation planning effort by signing EO B-30-15 in April 2015, requiring state agencies to factor climate change into all planning and investment decisions. In March 2016, sector-specific Implementation Action Plans that demonstrate how state agencies are implementing EO B-30-15 were added to the Safeguarding California Plan. This effort represents a multi-agency, cross-sector approach to addressing adaptation to climate change-related events statewide.

EO S-13-08 also gave rise to the *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance), produced by the Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT), of which Caltrans is a member. First published in 2010, the document provided "guidance for incorporating sea-level rise (SLR) projections into planning and decision making for projects in California," specifically, "information and recommendations to enhance consistency across agencies in their development of approaches to SLR."[49]

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation, and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. Caltrans is actively engaged in in working towards identifying these risks throughout the state and will work to incorporate this information into all planning and investment decisions as directed in EO B-30-15.

The proposed project is outside the coastal zone and not in an area subject to sea-level rise. Accordingly, direct impacts to transportation facilities due to projected sea-level rise are not expected.

[49] http://www.opc.ca.gov/2013/04/update-to-the-sea-level-rise-guidance-document/

Chapter 4 – Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency, tribal consultation, and public participation for this project have been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings and early coordination with relevant stakeholders. This chapter summarizes the results of the Department's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

Notice of Initiation of Studies

A Notice of Initiation of Studies was sent to relevant public agencies, organizations, elected officials, native tribal contacts, and other interested individuals on September 14, 2018 as part of the early coordination process. Approximately 350 property owners within the project area were notified by mail as part of the project. These communities were located in the City of Glendale, City of Los Angeles-Sun Valley, and unincorporated Los Angeles County-Castaic area. Letters were sent out on September 14, 2018, and comments from the public were accepted until October 14, 2018.

Three comments were received during the early coordination process. Comments from the Los Angeles Unified School District, the United States EPA, and Matt Casella, a resident in Sun Valley, were submitted during the public scoping period submitted by US mail. The comments are summarized below:

- LAUSD is concerned about the potential impacts of construction to students, staff, and parents traveling to and from school. They have suggested a list of mitigation measures to include in the language of the environmental document to reduce traffic-related impacts and ensure pedestrian safety during construction. Caltrans will coordinate with LAUSD prior construction to implement an appropriate Traffic Management Plan.

- The U.S. EPA provided recommendations and suggestions to improving the environmental document. The Purpose and Need statement, Alternatives Analysis, Air Quality, Environmental Justice and Title VI, and Near-Roadway Health Impacts are discussed in the letter. Caltrans Environmental Planning follows many of the recommendations stated by the U.S. EPA as standard procedures when preparing the environmental document. Caltrans Environmental Planning will continue to follow the standard procedures when preparing the environmental document.

- Shirley and Matt Casella commented on the traffic safety and truck issues currently present in Roscoe Blvd./Wheatland Blvd. They discussed the problems they currently face living on Roscoe Blvd. and would like to see some changes in the area. Caltrans has read the letter and will forward the information to the appropriate authority. The area of concern is not within Caltrans jurisdiction and can only be addressed by local planning authorities.

Native American Consultation
A search of the Sacred Lands File of the Native American Heritage Commission (NAHC) did not indicate the presence of Native American cultural sites within or in the vicinity of the APE. Caltrans contacted 12 Native American representatives from Fernandeño, Luiseño, Gabrieleño, and Tongva Indian communities via letters and phone calls for information on any issues of concern related to the proposed project. Responses were received from two representatives: Mr. Jairo Avila of the Fernandeño Tataviam Band of Mission Indians and Mr. Andrew Salas of the Gabrieleño Band of Mission Indians – Kizh Nation. In phone call and email correspondences, Mr. Salas deferred consultation for the project to the Fernandeño community. Mr. Avila requested information on the extent and maximum depth of ground disturbance at the project locations. This information was provided to (and reviewed by) Mr. Avila. To date, the Tribe has not voiced any concerns for the project.

State Historic Preservation Officer (SHPO) Consultation
A Section 106 consultation letter was sent to SHPO on October 19, 2018 regarding the eligibility determinations for the Los Angeles River and the electrical transmission towers owned by the Los Angeles Department of Water & Power. Written concurrence was received on November 27, 2018.

Federal Endangered Species Act Consultation Summary
Since no listed species are expected to occur within the 10 project sites, no formal federal endangered species consultation with the USFWS was conducted. This project will have no effect on Federal and State endangered/threatened species. Refer to Appendix E for the species lists for the 10 locations.

Essential Fish Habitat Consultation Summary
There are no federal fisheries or essential fish habitat associated with this project. Jay Ogawa of the National Marine Fisheries Service (NMFS) was contacted via email on October 30, 2017 to determine if there would be impacts to aquatic resources, namely steelhead trout *(Oncorhychus mykiss)* at the Los Angeles River Bridge and Separation. NMFS does not expect steelhead to be present at the Los Angeles River location.

California Endangered Species Act Consultation Summary
Since no listed species are expected to occur within the 10 project sites, there was no California endangered species consultation with the Department of Fish and Wildlife.

Section 4(f)
A phone conversation with Koko Panossian, Deputy Director of Community Services and Parks for the City of Glendale was conducted on 11/6/18 for early coordination informing him of the proposed work that will be done at the Glendale Narrows Riverwalk. An email was sent on the same day for follow-up.

Coordination is currently being conducted with the City of Los Angeles regarding the proposed work at Sheldon Skatepark.

A meeting was held on 11/27/18 with the City of Los Angeles Department of Transportation regarding the proposed temporary closure of the Los Angeles River Bicycle Path. Coordination is currently being conducted with the County of Los Angeles regarding the temporary closure of the bicycle path.

Circulation of this IS/EA environmental document will mark the beginning of further outreach to elected officials, additional governmental agencies, local stakeholders, and other interested and potentially affected parties – reference Chapter 6 of this environmental document (Distribution List) for a full listing.

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The following Caltrans District 7 staff contributed to the preparation of this environmental document.

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Distribution List begins on next page.

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Occupant
10813 CROCKETT ST
SUN VALLEY, CA 91352-4031

Occupant
10821 CROCKETT ST
SUN VALLEY, CA 91352-4031

Occupant
10842 CROCKETT ST
SUN VALLEY, CA 91352-4030

Occupant
10838 CROCKETT ST
SUN VALLEY, CA 91352-4030

Occupant
10828 CROCKETT ST
SUN VALLEY, CA 91352-4030

Occupant
10832 CROCKETT ST
SUN VALLEY, CA 91352-4030

Occupant
10824 CROCKETT ST
SUN VALLEY, CA 91352-4030

Occupant
10803 CROCKETT ST
SUN VALLEY, CA 91352-4031

Occupant
8258 CLYBOURN AVE
SUN VALLEY, CA 91352-4025

Occupant
8250 CLYBOURN AVE
SUN VALLEY, CA 91352-4025

Occupant
8325 WHEATLAND AVE
SUN VALLEY, CA 91352-3562

Occupant
8330 WHEATLAND AVE
SUN VALLEY, CA 91352-3561

Occupant
8355 DE GARMO AVE
SUN VALLEY, CA 91352-3569

Occupant
8328 WHEATLAND AVE
SUN VALLEY, CA 91352-3561

Occupant
8326 WHEATLAND AVE
SUN VALLEY, CA 91352-3561

SOLANGE WITTEVEEN
11261 BLIX ST
NORTH HOLLYWOOD, CA 91602-1263

Occupant
8275 WHEATLAND AVE
SUN VALLEY, CA 91352-4161

Occupant
8267 WHEATLAND AVE
SUN VALLEY, CA 91352-4161

Occupant
10554 ROSCOE BLVD
SUN VALLEY, CA 91352-4152

MICHELLE CAMPOS
11010 VENA AVE
MISSION HILLS, CA 91345-1839

Occupant
10558 ROSCOE BLVD
SUN VALLEY, CA 91352-4152

Occupant
8264 WHEATLAND AVE
SUN VALLEY, CA 91352-4160

Occupant
8370 DE GARMO AVE
SUN VALLEY, CA 91352-3568

Occupant
8362 DE GARMO AVE
SUN VALLEY, CA 91352-3568

Occupant
8366 DE GARMO AVE
SUN VALLEY, CA 91352-3568

Occupant
8356 DE GARMO AVE
SUN VALLEY, CA 91352-3568

GEVORG BAKMAZIAN
10535 ALSKOG ST
SUN VALLEY, CA 91352-2804

Occupant
8425 GLENOAKS BLVD
SUN VALLEY, CA 91352-3517

RUBEN A GONZALEZ
8827 ENFIELD AVE
SHERWOOD FOREST, CA 91325-3130

Occupant
8415 GLENOAKS BLVD
SUN VALLEY, CA 91352-3516

SHAO YAN XIE
9629 QUAKERTOWN AVE
CHATSWORTH, CA 91311-5523

Occupant
8409 GLENOAKS BLVD
SUN VALLEY, CA 91352-3515

DAVID VIET TRUONG
7547 BELLINGHAM AVE
NORTH HOLLYWOOD, CA 91605-3682

Occupant
8350 DE GARMO AVE
SUN VALLEY, CA 91352-3568

Occupant
8351 DE GARMO AVE
SUN VALLEY, CA 91352-3569

Occupant
8405 GLENOAKS BLVD
SUN VALLEY, CA 91352-3514

RUBEN BALAYAN
12135 WILCOX ST
NORTH HOLLYWOOD, CA 91605

Occupant
10467 ROSCOE BLVD
SUN VALLEY, CA 91352-4101

Occupant
8340 DE GARMO AVE
SUN VALLEY, CA 91352-3568

ROBERT ARCHER
509 ANDOVER DR
BURBANK, CA 91504-3906

Occupant
8344 DE GARMO AVE
SUN VALLEY, CA 91352-3568

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PO BOX 10623
BURBANK, CA 91510-0623

Occupant
8350 GLENOAKS BLVD
SUN VALLEY, CA 91352-3509

Occupant
8346 GLENOAKS BLVD
SUN VALLEY, CA 91352-3509

Occupant
8340 GLENOAKS BLVD
SUN VALLEY, CA 91352-3509

Occupant
8345 GLENOAKS BLVD
SUN VALLEY, CA 91352-3511

Occupant
8330 GLENOAKS BLVD
SUN VALLEY, CA 91352-3509

Occupant
8334 GLENOAKS BLVD
SUN VALLEY, CA 91352-3509

Occupant
10548 ROSCOE BLVD
SUN VALLEY, CA 91352-4152

MATT CASELLA
10538 ROSCOE BLVD
SUN VALLEY, CA 91352-4152

Occupant
10532 ROSCOE BLVD
SUN VALLEY, CA 91352-4152

Occupant
10528 ROSCOE BLVD
SUN VALLEY, CA 91352-4152

Occupant
10520 ROSCOE BLVD
SUN VALLEY, CA 91352-4152

GWEN S MAYEKAWA
10516 ROSCOE BLVD
SUN VALLEY, CA 91352-4152

Occupant
10516 ROSCOE BLVD
SUN VALLEY, CA 91352-4152

Occupant
10512 ROSCOE BLVD
SUN VALLEY, CA 91352-4152

Occupant
8333 GLENOAKS BLVD
SUN VALLEY, CA 91352-3510

Occupant
8365 GLENCREST DR
SUN VALLEY, CA 91352-3540

Occupant
8359 GLENCREST DR
SUN VALLEY, CA 91352-3540

Occupant
8353 GLENCREST DR
SUN VALLEY, CA 91352-3540

Occupant
8347 GLENCREST DR
SUN VALLEY, CA 91352-3540

DONALD PISANO
10570 ART ST
SUNLAND, CA 91040-1302

Occupant
8341 GLENCREST DR
SUN VALLEY, CA 91352-3540

Occupant
8337 GLENCREST DR
SUN VALLEY, CA 91352-3540

Occupant
8333 GLENCREST DR
SUN VALLEY, CA 91352-3540

Occupant
8327 GLENCREST DR
SUN VALLEY, CA 91352-3540

Occupant
8321 GLENCREST DR
SUN VALLEY, CA 91352-3540

Occupant
8311 GLENCREST DR
SUN VALLEY, CA 91352-3538

Occupant
8265 WHEATLAND AVE
SUN VALLEY, CA 91352-4161

Occupant
8257 WHEATLAND AVE
SUN VALLEY, CA 91352-4161

Occupant
8256 WHEATLAND AVE
SUN VALLEY, CA 91352-4160

Occupant
10557 CROCKETT ST
SUN VALLEY, CA 91352-4121

Occupant
10551 CROCKETT ST
SUN VALLEY, CA 91352-4121

FAOUZI ZEINEDDINE
13966 SADDLE RIDGE RD
SYLMAR, CA 91342-1149

Occupant
8252 WHEATLAND AVE
SUN VALLEY, CA 91352-4160

Occupant
10542 CROCKETT ST
SUN VALLEY, CA 91352-4120

Occupant
10547 CROCKETT ST
SUN VALLEY, CA 91352-4121

Occupant
10539 CROCKETT ST
SUN VALLEY, CA 91352-4121

Occupant
10533 CROCKETT ST
SUN VALLEY, CA 91352-4121

Occupant
10527 CROCKETT ST
SUN VALLEY, CA 91352-4121

Occupant
10523 CROCKETT ST
SUN VALLEY, CA 91352-4121

Occupant
10517 CROCKETT ST
SUN VALLEY, CA 91352-4121

Occupant
10511 CROCKETT ST
SUN VALLEY, CA 91352-4121

Occupant
10519 CROCKETT ST
SUN VALLEY, CA 91352-4121

DENYS VLADIMIR CRUZ
19872 VIA KALBAN
NEWHALL, CA 91321-2191

Occupant
10538 CROCKETT ST
SUN VALLEY, CA 91352-4120

Occupant
10534 CROCKETT ST
SUN VALLEY, CA 91352-4120

Occupant
10528 CROCKETT ST
SUN VALLEY, CA 91352-4120

RECON DEVELOPMENT LLC
2775 S BROOK DR APT 110
DENVER, CO 80222-6761

Occupant
10508 CROCKETT ST
SUN VALLEY, CA 91352-4120

Occupant
10512 CROCKETT ST
SUN VALLEY, CA 91352-4120

Occupant
10524 CROCKETT ST
SUN VALLEY, CA 91352-4120

Occupant
10520 CROCKETT ST
SUN VALLEY, CA 91352-4120

Occupant
10435 CROCKETT ST
SUN VALLEY, CA 91352-4119

ROGER A STARKEY
15920 WHITEWATER CANYON RD
CANYON COUNTRY, CA 91387-5305

Occupant
10507 CROCKETT ST
SUN VALLEY, CA 91352-4121

Occupant
10506 ROSCOE BLVD
SUN VALLEY, CA 91352-4152

Occupant
10427 CROCKETT ST
SUN VALLEY, CA 91352-4119

GUADALUPE LEOS
13741 OXNARD ST APT 4
VAN NUYS, CA 91401-3911

Occupant
10431 CROCKETT ST
SUN VALLEY, CA 91352-4119

Occupant
10421 CROCKETT ST
SUN VALLEY, CA 91352-4119

Occupant
10411 CROCKETT ST
SUN VALLEY, CA 91352-4119

Occupant
10417 CROCKETT ST
SUN VALLEY, CA 91352-4119

Occupant
10436 CROCKETT ST
SUN VALLEY, CA 91352-4118

Occupant
10424 CROCKETT ST
SUN VALLEY, CA 91352-4118

Occupant
10500 CROCKETT ST
SUN VALLEY, CA 91352-4120

Occupant
10430 CROCKETT ST
SUN VALLEY, CA 91352-4118

Occupant
10420 CROCKETT ST
SUN VALLEY, CA 91352-4118

Occupant
10410 CROCKETT ST
SUN VALLEY, CA 91352-4118

TAMARA GARCIA
10400 CROCKETT ST
SUN VALLEY, CA 91352-4118

Occupant
10414 CROCKETT ST
SUN VALLEY, CA 91352-4118

Occupant
10404 CROCKETT ST
SUN VALLEY, CA 91352-4118

ANTONIO GUTIERREZ
10350 CROCKETT PL
SUN VALLEY, CA 91352-4116

Occupant
10400 CROCKETT ST
SUN VALLEY, CA 91352-4118

Occupant
10511 CANTARA ST
SUN VALLEY, CA 91352-4115

Occupant
10501 CANTARA ST
SUN VALLEY, CA 91352-4115

CHRISDAVE LLC
1776 THURBER PL
BURBANK, CA 91501-1638

Occupant
10507 CANTARA ST
SUN VALLEY, CA 91352-4115

Occupant
10465 CANTARA ST
SUN VALLEY, CA 91352-4113

Occupant
10461 CANTARA ST
SUN VALLEY, CA 91352-4113

Occupant
10345 CROCKETT PL
SUN VALLEY, CA 91352-4117

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1301 NORTON AVE
GLENDALE, CA 91202-2044

Occupant
10350 CROCKETT ST
SUN VALLEY, CA 91352-4168

Occupant
10351 CROCKETT PL
SUN VALLEY, CA 91352-4117

ANTONIO GUTIERREZ
10350 CROCKETT PL
SUN VALLEY, CA 91352-4116

Occupant
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WALT DISNEY WORLD CO
PO BOX 313
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Occupant
1000 FLOWER ST
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LA HANA OW LLC
2101 ROSECRANS AVE STE 3270
EL SEGUNDO, CA 90245-4736

Occupant
500 CIRCLE SEVEN DR
GLENDALE, CA 91201-2331

Occupant
8731 LANKERSHIM BLVD
SUN VALLEY, CA 91352-2509

SARKIS M GABIKYAN
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GLENDALE, CA 91201-1110

Occupant
11762 RIALTO ST
SUN VALLEY, CA 91352-2526

Occupant
11756 RIALTO ST
SUN VALLEY, CA 91352-2526

Occupant
11752 RIALTO ST
SUN VALLEY, CA 91352-2526

KENNETH MOHLENKAMP
10251 STRATHERN ST
SUN VALLEY, CA 91352-4155

Occupant
11715 PENDLETON ST
SUN VALLEY, CA 91352-2523

Occupant
11656 PENDLETON ST
SUN VALLEY, CA 91352-2501

DAVID MARTINYAN
6318 BEEMAN AVE
NORTH HOLLYWOOD, CA 91606-3123

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8710 TELFAIR AVE
SUN VALLEY, CA 91352-2530

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11684 PENDLETON ST
SUN VALLEY, CA 91352-2503

Occupant
PO BOX 1152
SAN FERNANDO, CA 91341-1152

Occupant
11666 PENDLETON ST
SUN VALLEY, CA 91352-2503

Occupant
11666 PENDLETON ST
SUN VALLEY, CA 91352-2503

Occupant
8640 TAMARACK AVE
SUN VALLEY, CA 91352-2504

ZIV ENTERPRISES LLC
28104 WITHERSPOON PKWY
VALENCIA, CA 91355-4175

Occupant
11721 PENDLETON ST
SUN VALLEY, CA 91352-2523

Occupant
11717 PENDLETON ST
SUN VALLEY, CA 91352-2523

PEDRO RANGEL
8707 LANKERSHIM BLVD
SUN VALLEY, CA 91352-2513

Occupant
8706 LANKERSHIM BLVD
SUN VALLEY, CA 91352-2512

MAIER FAMILY LIMITED PARTNERSH
11999 SAN VICENTE BLVD STE 335
LOS ANGELES, CA 90049-5073

Occupant
8700 LANKERSHIM BLVD
SUN VALLEY, CA 91352-2512

MAIER FAMILY LIMITED PARTNERSH
11999 SAN VICENTE BLVD STE 335
LOS ANGELES, CA 90049-5073

Occupant
8655 TAMARACK AVE
SUN VALLEY, CA 91352-2505

LAINER BROTHERS
PO BOX 1
VAN NUYS, CA 91408-0001

Occupant
8711 TAMARACK AVE
SUN VALLEY, CA 91352-2507

GUNN MAGNUSEN
8185 E DEL MARINO
SCOTTSDALE, AZ 85258-2310

Occupant
8660 TELFAIR AVE
SUN VALLEY, CA 91352-2529

ALLEN KWAWER
8611 BURTON WAY APT 19
LOS ANGELES, CA 90048-3932

Occupant
8672 TELFAIR AVE
SUN VALLEY, CA 91352-2529

RUDY M PACAL
4755 YARMOUTH AVE
ENCINO, CA 91316-3729

LARRY J HIGGINS
8610 CAYUGA AVE
SUN VALLEY, CA 91352-3116

KAZUAKI YOKOYAMA
8611 LANKERSHIM BLVD
SUN VALLEY, CA 91352-3129

CHARLES KNAFO
6917 OAK PARK AVE
VAN NUYS, CA 91406-4534

SSMK PROPERTIES
11676 TUXFORD ST
SUN VALLEY, CA 91352-3134

Occupant
8610 CAYUGA AVE
SUN VALLEY, CA 91352-3116

Occupant
8566 CAYUGA AVE
SUN VALLEY, CA 91352-3114

PEDRO RANGEL
8707 LANKERSHIM BLVD
SUN VALLEY, CA 91352-2513

Occupant
8611 TELFAIR AVE
SUN VALLEY, CA 91352-3132

DAVID B HASHEMI
PO BOX 10272
GLENDALE, CA 91209-3272

Occupant
8546 CAYUGA AVE
SUN VALLEY, CA 91352-3114

MAIER FAMILY LIMITED PARTNERSH
11999 SAN VICENTE BLVD STE 335
LOS ANGELES, CA 90049-5073

Occupant
8621 KEWEN AVE
SUN VALLEY, CA 91352-3123

Occupant
8601 LANKERSHIM BLVD
SUN VALLEY, CA 91352-3129

Occupant
8610 LANKERSHIM BLVD
SUN VALLEY, CA 91352-3140

Occupant
8604 LANKERSHIM BLVD
SUN VALLEY, CA 91352-3140

DAVID B HASHEMI
PO BOX 10272
GLENDALE, CA 91209-3272

PEDRO RANGEL
15745 SAN FERNANDO MISSION BLVD
GRANADA HILLS, CA 91344-4306

Occupant
8562 CAYUGA AVE
SUN VALLEY, CA 91352-3114

Occupant
8617 TELFAIR AVE
SUN VALLEY, CA 91352-3132

Occupant
8552 CAYUGA AVE
SUN VALLEY, CA 91352-3114

Occupant
8606 TELFAIR AVE
SUN VALLEY, CA 91352-3132

Occupant
8620 CAYUGA AVE
SUN VALLEY, CA 91352-3116

JOHN MRASZ
10015 BARLING ST
SHADOW HILLS, CA 91040-1512

Occupant
8620 LANKERSHIM BLVD
SUN VALLEY, CA 91352-3140

Occupant
8600 LANKERSHIM BLVD
SUN VALLEY, CA 91352-3140

Occupant
8606 CAYUGA AVE
SUN VALLEY, CA 91352-3116

Occupant
8567 CAYUGA AVE
SUN VALLEY, CA 91352-3115

Occupant
8600 CAYUGA AVE
SUN VALLEY, CA 91352-3116

JUAN MORON NAVARRO
9711 OBECK AVE
ARLETA, CA 91331-5320

Occupant
8621 TELFAIR AVE
SUN VALLEY, CA 91352-3132

Occupant
8556 CAYUGA AVE
SUN VALLEY, CA 91352-3114

Occupant
8601 TELFAIR AVE
SUN VALLEY, CA 91352-3132

Occupant
8607 TELFAIR AVE
SUN VALLEY, CA 91352-3132

Occupant
8611 KEWEN AVE
SUN VALLEY, CA 91352-3123

MAYER MAJID ROOFIAN
1061 SHADOW HILL WAY
BEVERLY HILLS, CA 90210-2306

Occupant
8541 LANKERSHIM BLVD
SUN VALLEY, CA 91352-3127

LANKERSHIM BUSINESS PROPERTIES
9265 GLENOAKS BLVD
SUN VALLEY, CA 91352-2614

Occupant
8531 LANKERSHIM BLVD
SUN VALLEY, CA 91352-3127

KROWECH PROPERTIES LTD
699 ENSENADA AVE
BERKELEY, CA 94707-1510

Occupant
8520 KEWEN AVE
SUN VALLEY, CA 91352-3120

ANTHONY SERVERA
9168 ONEIDA AVE
SUN VALLEY, CA 91352-1319

Occupant
8548 LANKERSHIM BLVD
SUN VALLEY, CA 91352-3126

Occupant
8547 CAYUGA AVE
SUN VALLEY, CA 91352-3115

YOLANDA M AVILES
8510 KEWEN AVE
SUN VALLEY, CA 91352-3120

Occupant
8553 CAYUGA AVE
SUN VALLEY, CA 91352-3115

Occupant
8557 CAYUGA AVE
SUN VALLEY, CA 91352-3115

Occupant
8543 CAYUGA AVE
SUN VALLEY, CA 91352-3115

AMANDA SNOKE
25532 OAK MEADOW DR
VALENCIA, CA 91381-0761

Occupant
8542 CAYUGA AVE
SUN VALLEY, CA 91352-3114

Occupant
8536 CAYUGA AVE
SUN VALLEY, CA 91352-3114

SALMA SAIFEE
6303 OWENSMOUTH AVE # 10THFL
WOODLAND HILLS, CA 91367-2264

Occupant
8537 CAYUGA AVE
SUN VALLEY, CA 91352-3115

Occupant
8508 KEWEN AVE
SUN VALLEY, CA 91352-3120

ENEIDA SPANGLER
8500 KEWEN AVE
SUN VALLEY, CA 91352-3120

Occupant
8615 TAMARACK AVE
SUN VALLEY, CA 91352-2505

LANIER INVESTMENTS
PO BOX 1
VAN NUYS, CA 91408-0001

Occupant
11529 TUXFORD ST
SUN VALLEY, CA 91352-3113

Occupant
1400 VISTA MORAGA
LOS ANGELES, CA 90049-6839

Occupant
11447 TUXFORD ST
SUN VALLEY, CA 91352-2639

CALMAT CO
PO BOX 385014
BIRMINGHAM, AL 35238-5014

Occupant
8777 SAN FERNANDO RD
SUN VALLEY, CA 91352-1406

Occupant
8757 SAN FERNANDO RD
SUN VALLEY, CA 91352-1406

MARSHALL FRANKEL
5095 CASA DR
TARZANA, CA 91356-4444

Occupant
8723 SAN FERNANDO RD
SUN VALLEY, CA 91352-1406

STEPHEN A YOUNG
14620 JOANBRIDGE ST
BALDWIN PARK, CA 91706-1750

Occupant
8701 SAN FERNANDO RD
SUN VALLEY, CA 91352-1406

YOUNG PROPERTIES SV LLC
14620 JOANBRIDGE ST
BALDWIN PARK, CA 91706-1750

Occupant
11501 TUXFORD ST
SUN VALLEY, CA 91352-3113

Occupant
127 E 9TH ST STE 801
LOS ANGELES, CA 90015-1738

Occupant
8647 SAN FERNANDO RD
SUN VALLEY, CA 91352-3105

Occupant
8637 SAN FERNANDO RD
SUN VALLEY, CA 91352-3151

SUN VALLEY LAND LLC
14185 DALLAS PKWY STE 300
DALLAS, TX 75254-1327

ITZHAK FIROUZMAN
4148 TARRYBRAE TER
TARZANA, CA 91356-5446

Occupant
8426 SAN FERNANDO RD
SUN VALLEY, CA 91352-3227

Occupant
11067 OLINDA ST
SUN VALLEY, CA 91352-3302

Occupant
8414 SAN FERNANDO RD
SUN VALLEY, CA 91352-3227

Occupant
8400 SAN FERNANDO RD
SUN VALLEY, CA 91352-3227

BETTY EDITH JOHN
15410 CHINA RAPIDS DR
RED BLUFF, CA 96080-9632

Occupant
8521 ROBERT AVE
SUN VALLEY, CA 91352-3354

Occupant
11450 TUXFORD ST
SUN VALLEY, CA 91352-2638

DANIEL D SADEH
12714 HORTENSE ST
STUDIO CITY, CA 91604-1121

RAE BERGER
9970 GLENOAKS BLVD STE C
SUN VALLEY, CA 91352-1070

SOLOMON ARYEH
8460 SAN FERNANDO RD
SUN VALLEY, CA 91352-3227

Occupant
8438 SAN FERNANDO RD
SUN VALLEY, CA 91352-3227

Occupant
11085 OLINDA ST
SUN VALLEY, CA 91352-3302

MICHAEL FRANKOVICH
1090 N WILSON AVE
PASADENA, CA 91104-3830

Occupant
8404 SAN FERNANDO RD
SUN VALLEY, CA 91352-3227

JOSE DANIEL ARANA
2927 WALTON AVE
LOS ANGELES, CA 90007-2942

Occupant
11023 OLINDA ST
SUN VALLEY, CA 91352-3322

Occupant
11043 OLINDA ST
SUN VALLEY, CA 91352-3322

MARIO ANTONINI
11374 TUXFORD ST
SUN VALLEY, CA 91352-2636

Occupant
8600 TUJUNGA AVE
SUN VALLEY, CA 91352-3971

Occupant
8520 TELFAIR AVE
SUN VALLEY, CA 91352-3927

Occupant
8446 SAN FERNANDO RD
SUN VALLEY, CA 91352-3227

LEVIN A J COMPANY INC
3108 W VALHALLA DR
BURBANK, CA 91505-1235

KENNETH L ROSENBLOOD
PO BOX 5000
RANCHO SANTA FE, CA 92067-5000

Occupant
8358 SAN FERNANDO RD
SUN VALLEY, CA 91352-3222

REFF HERBERT L TRS
13107 VENTURA BLVD STE 202
STUDIO CITY, CA 91604-2241

Occupant
11033 OLINDA ST
SUN VALLEY, CA 91352-3322

Occupant
11004 OLINDA ST
SUN VALLEY, CA 91352-3321

Occupant
11042 OLINDA ST
SUN VALLEY, CA 91352-3305

G & G MARBLE AND QUARTZ INC
1482 SUNSHINE DR
GLENDALE, CA 91208-2433

Occupant
11022 OLINDA ST
SUN VALLEY, CA 91352-3321

Occupant
8450 BRADLEY AVE
SUN VALLEY, CA 91352-3308

Occupant
8511 ROBERT AVE
SUN VALLEY, CA 91352-3354

Occupant
8436 BRADLEY AVE
SUN VALLEY, CA 91352-3308

Occupant
8426 BRADLEY AVE
SUN VALLEY, CA 91352-3308

Occupant
8416 BRADLEY AVE
SUN VALLEY, CA 91352-3308

Occupant
8445 ROBERT AVE
SUN VALLEY, CA 91352-3352

Occupant
10945 NETTLETON ST
SUN VALLEY, CA 91352-3317

HAROUT BROUTIAN
12301 BRANFORD ST
SUN VALLEY, CA 91352-1012

Occupant
10865 FES ST
SUN VALLEY, CA 91352-3341

Occupant
11040 OLINDA ST
SUN VALLEY, CA 91352-3305

SUN VALLEY PROPERTY OWNER LLC
1732 AVIATION BLVD # 217
REDONDO BEACH, CA 90278-2810

Occupant
8446 BRADLEY AVE
SUN VALLEY, CA 91352-3308

Occupant
8507 ROBERT AVE
SUN VALLEY, CA 91352-3354

Occupant
8501 ROBERT AVE
SUN VALLEY, CA 91352-3354

DAVID W TILNEY
PO BOX 110208
NAPLES, FL 34108-0104

Occupant
8455 ROBERT AVE
SUN VALLEY, CA 91352-3352

Occupant
8441 ROBERT AVE
SUN VALLEY, CA 91352-3352

Occupant
10991 ROSCOE BLVD
SUN VALLEY, CA 91352-3335

Occupant
10951 NETTLETON ST
SUN VALLEY, CA 91352-3317

RCWS L
8300 SAN FERNANDO RD
SUN VALLEY, CA 91352-3222

HAROUT H BROUTIAN
12301 BRANFORD ST
SUN VALLEY, CA 91352-1012

Occupant
11018 OLINDA ST
SUN VALLEY, CA 91352-3321

Occupant
8517 ROBERT AVE
SUN VALLEY, CA 91352-3354

Occupant
8440 BRADLEY AVE
SUN VALLEY, CA 91352-3308

Occupant
8430 BRADLEY AVE
SUN VALLEY, CA 91352-3308

Occupant
8420 BRADLEY AVE
SUN VALLEY, CA 91352-3308

Occupant
8451 ROBERT AVE
SUN VALLEY, CA 91352-3352

Occupant
8410 BRADLEY AVE
SUN VALLEY, CA 91352-3308

ROSCOE STORAGE PARTNERS
2681 WALNUT AVE
TUSTIN, CA 92780-7005

Occupant
10922 NETTLETON ST
SUN VALLEY, CA 91352-3315

Occupant
10954 NETTLETON ST
SUN VALLEY, CA 91352-3315

Occupant
10946 NETTLETON ST
SUN VALLEY, CA 91352-3315

Occupant
10928 NETTLETON ST
SUN VALLEY, CA 91352-3315

Occupant
10938 NETTLETON ST
SUN VALLEY, CA 91352-3315

Occupant
10932 NETTLETON ST
SUN VALLEY, CA 91352-3315

Occupant
10881 FES ST
SUN VALLEY, CA 91352-3341

Occupant
10871 FES ST
SUN VALLEY, CA 91352-3341

Occupant
10875 FES ST
SUN VALLEY, CA 91352-3341

Occupant
10880 FES ST
SUN VALLEY, CA 91352-3340

Occupant
10876 FES ST
SUN VALLEY, CA 91352-3340

Occupant
10870 FES ST
SUN VALLEY, CA 91352-3340

Occupant
8365 LEHIGH AVE
SUN VALLEY, CA 91352-3343

Occupant
8407 LEHIGH AVE
SUN VALLEY, CA 91352-3345

Occupant
8401 LEHIGH AVE
SUN VALLEY, CA 91352-3345

Occupant
10864 FES ST
SUN VALLEY, CA 91352-3340

Occupant
10945 ROSCOE BLVD
SUN VALLEY, CA 91352-3335

Occupant
10935 ROSCOE BLVD
SUN VALLEY, CA 91352-3335

Occupant
10926 ROSCOE BLVD
SUN VALLEY, CA 91352-3359

Occupant
10928 ROSCOE BLVD
SUN VALLEY, CA 91352-3359

Occupant
10936 ROSCOE BLVD
SUN VALLEY, CA 91352-3359

Occupant
10940 ROSCOE BLVD
SUN VALLEY, CA 91352-3359

Occupant
10916 ROSCOE BLVD
SUN VALLEY, CA 91352-3359

Occupant
10908 ROSCOE BLVD
SUN VALLEY, CA 91352-3359

Occupant
8261 SUNLAND BLVD
SUN VALLEY, CA 91352-3363

SUNOAKS LLC
8840 GLENOAKS BLVD
SUN VALLEY, CA 91352-2836

Occupant
10842 ROSCOE BLVD
SUN VALLEY, CA 91352-4011

Occupant
8274 SUNLAND BLVD
SUN VALLEY, CA 91352-3301

MICHAEL KOUTSOUKOS
3605 VIEWCREST DR
BURBANK, CA 91504-1860

Occupant
10919 CROCKETT ST
SUN VALLEY, CA 91352-3337

Occupant
10923 CROCKETT ST
SUN VALLEY, CA 91352-3337

Occupant
10915 CROCKETT ST
SUN VALLEY, CA 91352-3337

HOVANNES BAGDASARIAN
8235 SUNLAND BLVD
SUN VALLEY, CA 91352-3363

Occupant
8259 SUNLAND BLVD
SUN VALLEY, CA 91352-3363

SUNOAKS LLC
8840 GLENOAKS BLVD
SUN VALLEY, CA 91352-2836

Occupant
8249 SUNLAND BLVD
SUN VALLEY, CA 91352-3363

TERRIE E MCINTEE
504 DATE CT
MONROVIA, CA 91016-4676

Occupant
8246 SUNLAND BLVD
SUN VALLEY, CA 91352-3301

RAUL MARCO
25624 MAGNOLIA LN
STEVENSON RANCH, CA 91381-1842

Occupant
10853 CROCKETT ST
SUN VALLEY, CA 91352-4031

RAUL MARCO
25624 MAGNOLIA LN
STEVENSON RANCH, CA 91381-1842

Occupant
10858 CROCKETT ST
SUN VALLEY, CA 91352-4030

Occupant
8431 SUNLAND BLVD
SUN VALLEY, CA 91352-3437

VIVIENNE WEBBER
6925 CHISHOLM AVE
VAN NUYS, CA 91406-5112

Occupant
8360 SUNLAND BLVD
SUN VALLEY, CA 91352-3477

Occupant
10720 PAWNEE ST
SUN VALLEY, CA 91352-3434

TAREK HILLO
8360 SUNLAND BLVD
SUN VALLEY, CA 91352-3477

Occupant
8341 TERHUNE AVE
SUN VALLEY, CA 91352-3560

GHATTOS HILLO
18126 SUPERIOR ST
NORTHRIDGE, CA 91325-1763

Occupant
8258 SUNLAND BLVD
SUN VALLEY, CA 91352-3301

ZHANNA SHAHUMYAN
10883 OLINDA ST
SUN VALLEY, CA 91352-3431

Occupant
10870 CROCKETT ST
SUN VALLEY, CA 91352-4030

Occupant
10848 CROCKETT ST
SUN VALLEY, CA 91352-4030

FAY STALMER
5660 KATELLA AVE STE 100
CYPRESS, CA 90630-5058

Occupant
8370 SUNLAND BLVD
SUN VALLEY, CA 91352-3477

Occupant
18126 SUPERIOR ST
NORTHRIDGE, CA 91325-1763

Occupant
8340 CLYBOURN AVE
SUN VALLEY, CA 91352-3463

Occupant
10720 PAWNEE ST
SUN VALLEY, CA 91352-3434

FELIPE DIAZ
8527 LEHIGH AVE
SUN VALLEY, CA 91352-3348

CHARLES BAKER
PO BOX 329
BEVERLY HILLS, CA 90213-0329

BABIOR ADRIANNA M TR
2032 6TH ST APT B
SANTA MONICA, CA 90405-6329

Occupant
10857 CROCKETT ST
SUN VALLEY, CA 91352-4031

Occupant
10866 CROCKETT ST
SUN VALLEY, CA 91352-4030

Occupant
10852 CROCKETT ST
SUN VALLEY, CA 91352-4030

Occupant
8351 SUNLAND BLVD
SUN VALLEY, CA 91352-3478

GHATTOS HILLO
18126 SUPERIOR ST
NORTHRIDGE, CA 91325-1763

Occupant
8350 CLYBOURN AVE
SUN VALLEY, CA 91352-3463

Occupant
8346 CLYBOURN AVE
SUN VALLEY, CA 91352-3463

Occupant
10714 PAWNEE ST
SUN VALLEY, CA 91352-3434

Occupant
8334 CLYBOURN AVE
SUN VALLEY, CA 91352-3463

Occupant
8335 TERHUNE AVE
SUN VALLEY, CA 91352-3560

Occupant
10836 ROSCOE BLVD
SUN VALLEY, CA 91352-4011

Occupant
10826 ROSCOE BLVD
SUN VALLEY, CA 91352-4011

RICHARD YSAIS
719 S BRAND BLVD
SAN FERNANDO, CA 91340-4201

RONALD W WHEELER
9170 HADDON AVE
SUN VALLEY, CA 91352-1308

Occupant
10740 ROSCOE BLVD
SUN VALLEY, CA 91352-4009

Occupant
10730 ROSCOE BLVD
SUN VALLEY, CA 91352-4009

Occupant
10837 CROCKETT ST
SUN VALLEY, CA 91352-4031

Occupant
10847 CROCKETT ST
SUN VALLEY, CA 91352-4031

Occupant
10809 CROCKETT ST
SUN VALLEY, CA 91352-4031

ALFONSO LUCAS AGUILAR
15519 SADDLEBACK RD
CANYON COUNTRY, CA 91387-4708

Occupant
36060 GOLDEN STATE HWY
CASTAIC, CA 91384-4401

MICHAEL GOULIS
30606 VIA RIVERA
RANCHO PALOS VERDES, CA 90275-5367

MELVIN W HILL
10009 BEVIS AVE
MISSION HILLS, CA 91345-3103

ARA PAPAZIAN
1776 THURBER PL
BURBANK, CA 91501-1638

Occupant
10812 ROSCOE BLVD
SUN VALLEY, CA 91352-4011

Occupant
8261 CLYBOURN AVE
SUN VALLEY, CA 91352-4024

Occupant
10736 ROSCOE BLVD
SUN VALLEY, CA 91352-4009

Occupant
10726 ROSCOE BLVD
SUN VALLEY, CA 91352-4009

ZHANNA SHAHUMYAN
10883 OLINDA ST
SUN VALLEY, CA 91352-3431

Occupant
10827 CROCKETT ST
SUN VALLEY, CA 91352-4031

GENRIK SINANYAN
2000 DUBLIN DR
GLENDALE, CA 91206-1005

Occupant
36059 GOLDEN STATE HWY
CASTAIC, CA 91384-4401

Occupant
36200 PARADISE RANCH RD
CASTAIC, CA 91384-4402

RONALD SCHWEIGER
22 SHERWOOD DR
WESTLAKE VILLAGE, CA 91361-4811

Occupant
10830 ROSCOE BLVD
SUN VALLEY, CA 91352-4011

Occupant
10822 ROSCOE BLVD
SUN VALLEY, CA 91352-4011

Occupant
10808 ROSCOE BLVD
SUN VALLEY, CA 91352-4011

Occupant
10816 ROSCOE BLVD
SUN VALLEY, CA 91352-4011

Occupant
8264 CLYBOURN AVE
SUN VALLEY, CA 91352-4025

Occupant
10831 CROCKETT ST
SUN VALLEY, CA 91352-4031

Occupant
10841 CROCKETT ST
SUN VALLEY, CA 91352-4031

Occupant
10817 CROCKETT ST
SUN VALLEY, CA 91352-4031

Occupant
35817 GOLDEN STATE HWY
CASTAIC, CA 91384-4418

SFEIR FAMILY TRUST
1675 ROYAL BLVD
GLENDALE, CA 91207-1557

PARADISE RANCH LLC
801 N SIERRA DR
BEVERLY HILLS, CA 90210-2644

ELENA AREVALO
8545 HAYVENHURST AVE
NORTH HILLS, CA 91343-5605

PAUL MICHAEL LIEN
36243 BYWATERS ST
CASTAIC, CA 91384

ANAVASSI GROUP LLC
10624 S EASTERN AVE # A109
HENDERSON, NV 89052-2982

ALFONSO AGUILAR
35817 GOLDEN STATE HWY
CASTAIC, CA 91384-4418

Occupant
9041 LAUREL CANYON BLVD
SUN VALLEY, CA 91352-1734

SUN VALLEY SENIOR VETERANS LP
530 S BOYLE AVE
LOS ANGELES, CA 90033-3817

Occupant
9009 LAUREL CANYON BLVD
SUN VALLEY, CA 91352-1734

UKA G SOLANKI
2690 S OAK KNOLL AVE
SAN MARINO, CA 91108-2433

Occupant
PO BOX 51111
LOS ANGELES, CA 90051-5700

Occupant
12511 SHELDON ST
SUN VALLEY, CA 91352-1745

LOS ANGELES CITY
221 N FIGUEROA ST # 1STFL
LOS ANGELES, CA 90012-2639

Occupant
12515 SHELDON ST
SUN VALLEY, CA 91352-1745

EARLY BIRD ENCINO INC
6311 VAN NUYS BLVD # 448
VAN NUYS, CA 91401-2611

Occupant
8863 REMICK AVE
SUN VALLEY, CA 91352-1739

CRESTLINE PROPERTY GROUP INC
9018 BALBOA BLVD # 334
NORTHRIDGE, CA 91325-2610

Occupant
8855 REMICK AVE
SUN VALLEY, CA 91352-1739

Occupant
8840 CRANFORD AVE
SUN VALLEY, CA 91352-1726

Occupant
8834 CRANFORD AVE
SUN VALLEY, CA 91352-1726

Occupant
8828 CRANFORD AVE
SUN VALLEY, CA 91352-1726

Occupant
8851 REMICK AVE
SUN VALLEY, CA 91352-1739

2018 1 IH BORROWER LP
1717 MAIN ST STE 2000
DALLAS, TX 75201-4657

Occupant
8976 LAUREL CANYON BLVD
SUN VALLEY, CA 91352-1731

Occupant
8987 LAUREL CANYON BLVD
SUN VALLEY, CA 91352-1732

HEALTHCARE INVESTMENT PROP LLC
11550 INDIAN HILLS RD STE 371
MISSION HILLS, CA 91345-1252

Occupant
8981 LAUREL CANYON BLVD
SUN VALLEY, CA 91352-1732

FELIPE LOPEZ
12443 VICTORY BLVD
NORTH HOLLYWOOD, CA 91606-3139

Occupant
8969 LAUREL CANYON BLVD
SUN VALLEY, CA 91352-1732

HRATCH M SARKIS
1140 GRACE LN
LOS ANGELES, CA 90049-1555

JOHN KABESSOS
8950 LAUREL CANYON BLVD
SUN VALLEY, CA 91352-1731

Occupant
12411 SHELDON ST
SUN VALLEY, CA 91352-2442

EQUITY PROPERTIES LLC
12439 MAGNOLIA BLVD # 185
VALLEY VILLAGE, CA 91607-2450

Occupant
12386 SHELDON ST
SUN VALLEY, CA 91352-2434

Occupant
12378 SHELDON ST
SUN VALLEY, CA 91352-2434

Occupant
12342 THELMA ST
SUN VALLEY, CA 91352-2451

Occupant
8886 MOREHART AVE
SUN VALLEY, CA 91352-1736

Occupant
8864 REMICK AVE
SUN VALLEY, CA 91352-1738

Occupant
8899 MOREHART AVE
SUN VALLEY, CA 91352-1737

Occupant
8891 MOREHART AVE
SUN VALLEY, CA 91352-1737

VICTOR C RAMPULLA
1333 SHOREBIRD LN
CARLSBAD, CA 92011-4885

Occupant
8881 MOREHART AVE
SUN VALLEY, CA 91352-1737

Occupant
8844 REMICK AVE
SUN VALLEY, CA 91352-1738

Occupant
8845 REMICK AVE
SUN VALLEY, CA 91352-1739

Occupant
8861 MOREHART AVE
SUN VALLEY, CA 91352-1737

Occupant
8820 REMICK AVE
SUN VALLEY, CA 91352-1738

Occupant
8874 MOREHART AVE
SUN VALLEY, CA 91352-1736

Occupant
8862 MOREHART AVE
SUN VALLEY, CA 91352-1736

IGLESIA NUEVA FILADELFIA
PO BOX 1125
SUN VALLEY, CA 91353-1125

VARTAL RED LLC
2100 RIMCREST DR
GLENDALE, CA 91207-1057

Occupant
8854 REMICK AVE
SUN VALLEY, CA 91352-1738

Occupant
8885 MOREHART AVE
SUN VALLEY, CA 91352-1737

HORTENSIA PINEDA
PO BOX 1794
SUN VALLEY, CA 91353-1794

Occupant
8840 REMICK AVE
SUN VALLEY, CA 91352-1738

Occupant
8839 REMICK AVE
SUN VALLEY, CA 91352-1739

Occupant
8834 REMICK AVE
SUN VALLEY, CA 91352-1738

Occupant
8903 LAUREL CANYON BLVD
SUN VALLEY, CA 91352-1730

Occupant
8868 MOREHART AVE
SUN VALLEY, CA 91352-1736

Occupant
8856 MOREHART AVE
SUN VALLEY, CA 91352-1736

Occupant
8893 LAUREL CANYON BLVD
SUN VALLEY, CA 91352-2944

Occupant
8857 MOREHART AVE
SUN VALLEY, CA 91352-1737

Occupant
8850 REMICK AVE
SUN VALLEY, CA 91352-1738

Occupant
8880 MOREHART AVE
SUN VALLEY, CA 91352-1736

Occupant
8873 MOREHART AVE
SUN VALLEY, CA 91352-1737

RAFAEL MARTINEZ
8834 REMICK AVE
SUN VALLEY, CA 91352-1738

Occupant
8869 MOREHART AVE
SUN VALLEY, CA 91352-1737

Occupant
8828 REMICK AVE
SUN VALLEY, CA 91352-1738

GEORGETTE SODERLUND
10321 PENROSE ST
SUN VALLEY, CA 91352-2119

BRIAN RICHARDS
13158 OTSEGO ST
SHERMAN OAKS, CA 91423-1520

Occupant
8897 LAUREL CANYON BLVD
SUN VALLEY, CA 91352-2944

Occupant
8850 MOREHART AVE
SUN VALLEY, CA 91352-1736

Occupant
8851 MOREHART AVE
SUN VALLEY, CA 91352-1737

Occupant
8879 LAUREL CANYON BLVD
SUN VALLEY, CA 91352-2959

STEVE Y KIM
18212 COLCHESTER WAY
PORTER RANCH, CA 91326-2030

Occupant
8844 MOREHART AVE
SUN VALLEY, CA 91352-1736

Occupant
8838 MOREHART AVE
SUN VALLEY, CA 91352-1736

Occupant
8866 LAUREL CANYON BLVD
SUN VALLEY, CA 91352-2920

TEMPCO ENGINEERING INC
PO BOX 4003
CHATSWORTH, CA 91313-4003

Occupant
8822 CRANFORD AVE
SUN VALLEY, CA 91352-1726

Occupant
8816 CRANFORD AVE
SUN VALLEY, CA 91352-1726

JOAQUIN GODINEZ
8816 OTANFORD AVE
SUN VALLEY, CA 91352

Occupant
8833 REMICK AVE
SUN VALLEY, CA 91352-1739

Occupant
8827 REMICK AVE
SUN VALLEY, CA 91352-1739

Occupant
8821 REMICK AVE
SUN VALLEY, CA 91352-1739

Occupant
8814 REMICK AVE
SUN VALLEY, CA 91352-1738

EDUARDO SALAZAR
8809 REMICK AVE
SUN VALLEY, CA 91352-1739

Occupant
8808 REMICK AVE
SUN VALLEY, CA 91352-1738

Occupant
8845 MOREHART AVE
SUN VALLEY, CA 91352-1737

SOPHIE POWERS
12036 WICKS ST
SUN VALLEY, CA 91352-2455

Occupant
8839 MOREHART AVE
SUN VALLEY, CA 91352-1737

Occupant
12331 THELMA ST
SUN VALLEY, CA 91352-2452

Occupant
12372 SHELDON ST
SUN VALLEY, CA 91352-2434

Occupant
12336 THELMA ST
SUN VALLEY, CA 91352-2451

Occupant
12325 THELMA ST
SUN VALLEY, CA 91352-2452

AZUCENA CONTRERAS
8344 FLORENCE AVE STE F
DOWNEY, CA 90240-3943

Occupant
12330 THELMA ST
SUN VALLEY, CA 91352-2451

Occupant
12324 THELMA ST
SUN VALLEY, CA 91352-2451

Occupant
12261 ALLEGHENY ST
SUN VALLEY, CA 91352-2405

Occupant
8802 REMICK AVE
SUN VALLEY, CA 91352-1738

Occupant
8855 ONEIDA AVE
SUN VALLEY, CA 91352-2431

Occupant
8842 ONEIDA AVE
SUN VALLEY, CA 91352-2430

DAVID VANZYL
8547 DE CELIS PL
NORTH HILLS, CA 91343-5603

Occupant
8836 ONEIDA AVE
SUN VALLEY, CA 91352-2430

Occupant
11951 SNELLING ST
SUN VALLEY, CA 91352-2439

BELLA BAYDIAN
1044 E ANGELENO AVE
BURBANK, CA 91501-1421

Occupant
11935 SNELLING ST
SUN VALLEY, CA 91352-2439

Occupant
11934 SNELLING ST
SUN VALLEY, CA 91352-2438

Occupant
11869 PEORIA ST
SUN VALLEY, CA 91352-1923

Occupant
8801 HADDON AVE
SUN VALLEY, CA 91352-2311

LEONEL VALENCIA
8793 HADDON AVE
SUN VALLEY, CA 91352-2309

Occupant
8777 HADDON AVE
SUN VALLEY, CA 91352-2309

Occupant
12001 PEORIA ST
SUN VALLEY, CA 91352-2319

Occupant
12027 PEORIA ST
SUN VALLEY, CA 91352-2319

Occupant
12019 PEORIA ST
SUN VALLEY, CA 91352-2319

Occupant
12016 PEORIA ST
SUN VALLEY, CA 91352-2318

Occupant
12026 PEORIA ST
SUN VALLEY, CA 91352-2318

Occupant
11987 NEENACH ST
SUN VALLEY, CA 91352-3014

Occupant
11922 SNELLING ST
SUN VALLEY, CA 91352-2436

Occupant
8850 KEWEN AVE
SUN VALLEY, CA 91352-2460

Occupant
11856 PEORIA ST
SUN VALLEY, CA 91352-1924

Occupant
8793 HADDON AVE
SUN VALLEY, CA 91352-2309

Occupant
8770 HADDON AVE
SUN VALLEY, CA 91352-2308

ARAM MATEVOSYAN
8771 HADDON AVE
SUN VALLEY, CA 91352

Occupant
12013 PEORIA ST
SUN VALLEY, CA 91352-2319

HOWARD TANNER
15455 SAN FERNANDO MISSION BLVD
STE 402
MISSION HILLS, CA 91345-1356

Occupant
12006 PEORIA ST
SUN VALLEY, CA 91352-2318

Occupant
12012 PEORIA ST
SUN VALLEY, CA 91352-2318

Occupant
11983 NEENACH ST
SUN VALLEY, CA 91352-3014

Occupant
11952 SNELLING ST
SUN VALLEY, CA 91352-2438

RAMON HUEZO
722 N BRIGHTON ST
BURBANK, CA 91506-1710

Occupant
11875 PEORIA ST
SUN VALLEY, CA 91352-1923

Occupant
8805 HADDON AVE
SUN VALLEY, CA 91352-2311

Occupant
8785 HADDON AVE
SUN VALLEY, CA 91352-2309

Occupant
8785 HADDON AVE
SUN VALLEY, CA 91352-2309

Occupant
8765 HADDON AVE
SUN VALLEY, CA 91352-2309

Occupant
12007 PEORIA ST
SUN VALLEY, CA 91352-2319

Occupant
12023 PEORIA ST
SUN VALLEY, CA 91352-2319

Occupant
12022 PEORIA ST
SUN VALLEY, CA 91352-2318

Occupant
12032 PEORIA ST
SUN VALLEY, CA 91352-2318

Occupant
12003 NEENACH ST
SUN VALLEY, CA 91352-3017

Occupant
11944 SNELLING ST
SUN VALLEY, CA 91352-2438

Occupant
11936 SNELLING ST
SUN VALLEY, CA 91352-2438

Occupant
11903 PEORIA ST
SUN VALLEY, CA 91352-2317

Occupant
11917 PEORIA ST
SUN VALLEY, CA 91352-2317

Occupant
11911 PEORIA ST
SUN VALLEY, CA 91352-2317

Occupant
11883 PEORIA ST
SUN VALLEY, CA 91352-1923

Occupant
11888 PEORIA ST
SUN VALLEY, CA 91352-1924

Occupant
11843 NEENACH ST
SUN VALLEY, CA 91352-1920

Occupant
11870 PEORIA ST
SUN VALLEY, CA 91352-1924

Occupant
11860 PEORIA ST
SUN VALLEY, CA 91352-1924

Occupant
11866 PEORIA ST
SUN VALLEY, CA 91352-1924

Occupant
11876 PEORIA ST
SUN VALLEY, CA 91352-1924

Occupant
11880 PEORIA ST
SUN VALLEY, CA 91352-1924

Occupant
8817 KEWEN AVE
SUN VALLEY, CA 91352-2463

Occupant
11902 PEORIA ST
SUN VALLEY, CA 91352-2316

BLANCA RUIZ
11050 RUNNYMEDE ST
SUN VALLEY, CA 91352-4738

Occupant
11857 NEENACH ST
SUN VALLEY, CA 91352-1920

Occupant
11853 NEENACH ST
SUN VALLEY, CA 91352-1920

Occupant
11847 NEENACH ST
SUN VALLEY, CA 91352-1920

Occupant
8811 KEWEN AVE
SUN VALLEY, CA 91352-2463

Occupant
11961 PEORIA ST
SUN VALLEY, CA 91352-2336

RICHARD SOLLMAN
22341 QUINTA RD
WOODLAND HILLS, CA 91364-5042

Occupant
11950 PEORIA ST
SUN VALLEY, CA 91352-2335

Occupant
11946 PEORIA ST
SUN VALLEY, CA 91352-2335

Occupant
8724 HADDON AVE
SUN VALLEY, CA 91352-3011

Occupant
11940 PEORIA ST
SUN VALLEY, CA 91352-2335

Occupant
11935 NEENACH ST
SUN VALLEY, CA 91352-3019

Occupant
12002 PEORIA ST
SUN VALLEY, CA 91352-2318

Occupant
11967 NEENACH ST
SUN VALLEY, CA 91352-3014

Occupant
11963 NEENACH ST
SUN VALLEY, CA 91352-3014

Occupant
8700 HADDON AVE
SUN VALLEY, CA 91352-3011

Occupant
11947 NEENACH ST
SUN VALLEY, CA 91352-3019

Occupant
11953 NEENACH ST
SUN VALLEY, CA 91352-3019

Occupant
11943 NEENACH ST
SUN VALLEY, CA 91352-3019

Occupant
11932 NEENACH ST
SUN VALLEY, CA 91352-3013

Occupant
11942 NEENACH ST
SUN VALLEY, CA 91352-3013

Occupant
11936 NEENACH ST
SUN VALLEY, CA 91352-3013

Occupant
11946 NEENACH ST
SUN VALLEY, CA 91352-3013

LUIS DAVILA
12071 ADELPHIA AVE
SAN FERNANDO, CA 91340-1501

Occupant
11887 REDBANK ST
SUN VALLEY, CA 91352-3028

Occupant
11893 REDBANK ST
SUN VALLEY, CA 91352-3028

Occupant
11835 NEENACH ST
SUN VALLEY, CA 91352-1920

ANDRE TOROSYAN
1426 MERRIMAN DR
GLENDALE, CA 91202-1709

Occupant
11827 NEENACH ST
SUN VALLEY, CA 91352-1920

Occupant
11846 NEENACH ST
SUN VALLEY, CA 91352-1919

Occupant
11852 NEENACH ST
SUN VALLEY, CA 91352-1919

Occupant
11836 NEENACH ST
SUN VALLEY, CA 91352-1919

Occupant
11856 NEENACH ST
SUN VALLEY, CA 91352-1919

DEAN STRICKER
11866 NEENACH ST
SUN VALLEY, CA 91352

Occupant
11851 REDBANK ST
SUN VALLEY, CA 91352-2525

Occupant
11977 NEENACH ST
SUN VALLEY, CA 91352-3014

Occupant
11973 NEENACH ST
SUN VALLEY, CA 91352-3014

Occupant
11972 NEENACH ST
SUN VALLEY, CA 91352-3015

Occupant
11956 NEENACH ST
SUN VALLEY, CA 91352-3013

Occupant
11952 NEENACH ST
SUN VALLEY, CA 91352-3013

Occupant
11966 NEENACH ST
SUN VALLEY, CA 91352-3015

Occupant
11962 NEENACH ST
SUN VALLEY, CA 91352-3015

Occupant
11976 NEENACH ST
SUN VALLEY, CA 91352-3015

MICHAEL LOPEZ
1208 BUSHWICK AVE
BROOKLYN, NY 11221-4814

Occupant
11982 NEENACH ST
SUN VALLEY, CA 91352-3015

Occupant
11937 REDBANK ST
SUN VALLEY, CA 91352-3031

Occupant
8681 HADDON AVE
SUN VALLEY, CA 91352-3010

Occupant
11911 REDBANK ST
SUN VALLEY, CA 91352-3030

Occupant
11901 REDBANK ST
SUN VALLEY, CA 91352-3030

Occupant
11907 REDBANK ST
SUN VALLEY, CA 91352-3030

Occupant
11917 REDBANK ST
SUN VALLEY, CA 91352-3030

Occupant
11921 REDBANK ST
SUN VALLEY, CA 91352-3030

Occupant
11766 RIALTO ST
SUN VALLEY, CA 91352-2526

Occupant
11773 PENDLETON ST
SUN VALLEY, CA 91352-3044

Occupant
11781 PENDLETON ST
SUN VALLEY, CA 91352-3044

Occupant
11777 PENDLETON ST
SUN VALLEY, CA 91352-3044

ROZA KARAPETYAN
11846 BLYTHE ST
NORTH HOLLYWOOD, CA 91605-2505

Occupant
11786 PENDLETON ST
SUN VALLEY, CA 91352-3020

Occupant
11780 PENDLETON ST
SUN VALLEY, CA 91352-3020

Occupant
8750 TELFAIR AVE
SUN VALLEY, CA 91352-2508

8750 TELFAIR LLC
267 S SAN PEDRO ST UNIT 213
LOS ANGELES, CA 90012-3876

Occupant
8730 LANKERSHIM BLVD
SUN VALLEY, CA 91352-2515

SHETFIELD HOLDING
500 S ALAMEDA ST
LOS ANGELES, CA 90013-1708

Chapter 7 – List of Studies and Technical Reports

Preliminary Foundation Reports, April 13, 2018 – September 7, 2018

Community Impact Assessment, December 10, 2018

Natural Environment Study (NES), October 29, 2018

Area of Potential Effects (APE) Map, August 8, 2018

Archaeological Survey Report (ASR), October 10, 2018

Historic Properties Survey Report (HPSR), October 10, 2018

Historical Resources Evaluation Report (HRER), October 10, 2018

Visual Impact Assessment (VIA), October 22, 2018

Stormwater Data Report, October 1, 2018

Air Quality Report, December 14, 2018

Hazardous Waste Assessment, October 25, 2018

The associated studies and technical reports are available upon request.

Appendix A: Section 4(f) *De Minimis* Determination

Introduction

This section of the document discusses *de minimis* impact determinations under Section 4(f). Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 United States Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This amendment provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 USC 326 and 327, including *de minimis* impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

Section 4(f) Use

As defined in 23 *Code of Federal Regulations* (CFR) Section 774.17, use of a protected Section 4(f) property occurs when any of the following conditions is met:

- Land is permanently incorporated into a transportation facility through partial or full acquisition (i.e., direct use).
- There is temporary occupancy of land that is adverse in terms of the preservationist purposes of Section 4(f) (i.e., temporary use).
- There is no permanent incorporation of land, but the proximity of a transportation facility results in impacts so severe that the protected activities, features, and/or attributes that qualify a property for protection under Section 4(f) are substantially impaired. This is referred to as a constructive use.

The use, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a *de minimis* impact when there would be either:

1. A Section 106 finding of no adverse effect or no historic properties affected on a historic property; or
2. A determination that the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f).

For the purposes of Section 4(f), temporary construction easements do not normally constitute "use" if ALL of the following five conditions are met for temporary occupancy [(23 CFR 774.13(d)]:

1. Duration must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land;
2. Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) property are minimal;
3. There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis;
4. The land being used must be fully restored, i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project; and
5. There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) property regarding the above conditions.

List of Section 4(f) Properties

Properties subject to the provisions of the requirements of Section 4(f) are publicly owned parks and recreation areas, wildlife and waterfowl refuges of national, State, or local significance, and historic sites of national, State, or local significance.

In total, there are 17 Section 4(f) properties within 0.5 mile of the project footprints. It is anticipated that the project build alternative would result in a Temporary Occupancy Exception finding for 3 recreational properties, a *De Minimis* Determination for 1 historic property, and no use to the remaining properties. It should be noted that because no physical change would occur under the No Build Alternative, there would be no use or impact to any Section 4(f) properties. Therefore, there would be no further discussion regarding impacts of the No-Build Alternative. The following sections will focus on discussing impacts of the Build Alternative only.

The 10 structures that are included in the project scope are not eligible for the National Register of Historic Places (NRHP). Therefore, they are not considered significant on the national, State, or local level. However, two properties within the Area of Potential Effects (APE) are currently being assumed for National Register eligibility. These properties are the Los Angeles River and Los Angeles Department of Water & Power electrical transmission towers.

Table 34 provides a summary of Section 4(f) properties and use status.

Figures 24 and 25 show the locations of the Section 4(f) properties that may be affected within the project area.

Table 34: Summary of Section 4(f) Properties and Use Status

	Name of Property	Location	Type of Property	4(f) Use Conclusion
1	Glendale Narrows Riverwalk	Los Angeles	Park	Temporary Occupancy Exception
2	Bette Davis Picnic Area	Los Angeles	Park	No Use
3	Griffith Park	Los Angeles	Park	No Use
4	Griffith Park Dog Park	Los Angeles	Park	No Use
5	John Ferraro Athletic Fields	Los Angeles	Park	No Use
6	Los Angeles River Bicycle Path	Los Angeles	Recreational Bike Path	Temporary Occupancy Exception
7	Griffith Park Hiking and Horseback Trail	Los Angeles	Recreational Trail	No Use
8	Sheldon Skate Park	Sun Valley	Park	Temporary Occupancy Exception
9	Sheldon Arleta Park	Sun Valley	Park	No Use
10	Fernangeles Recreation Center	Sun Valley	Recreation Center	No Use
11	Sun Valley Recreation Center	Sun Valley	Recreation Center	No Use
12	Fernangeles Elementary School	Sun Valley	Public School	No Use
13	Sun Valley High School	Sun Valley	Public School	No Use
14	Robert H. Lewis High School	Sun Valley	Public School	No Use
15	Glenwood Elementary	Sun Valley	Public School	No Use
16	Los Angeles River	Los Angeles	Historic Resource	*De minimis*
17	Los Angeles Department of Water & Power electrical transmission towers	Los Angeles	Historic Resource	No Use

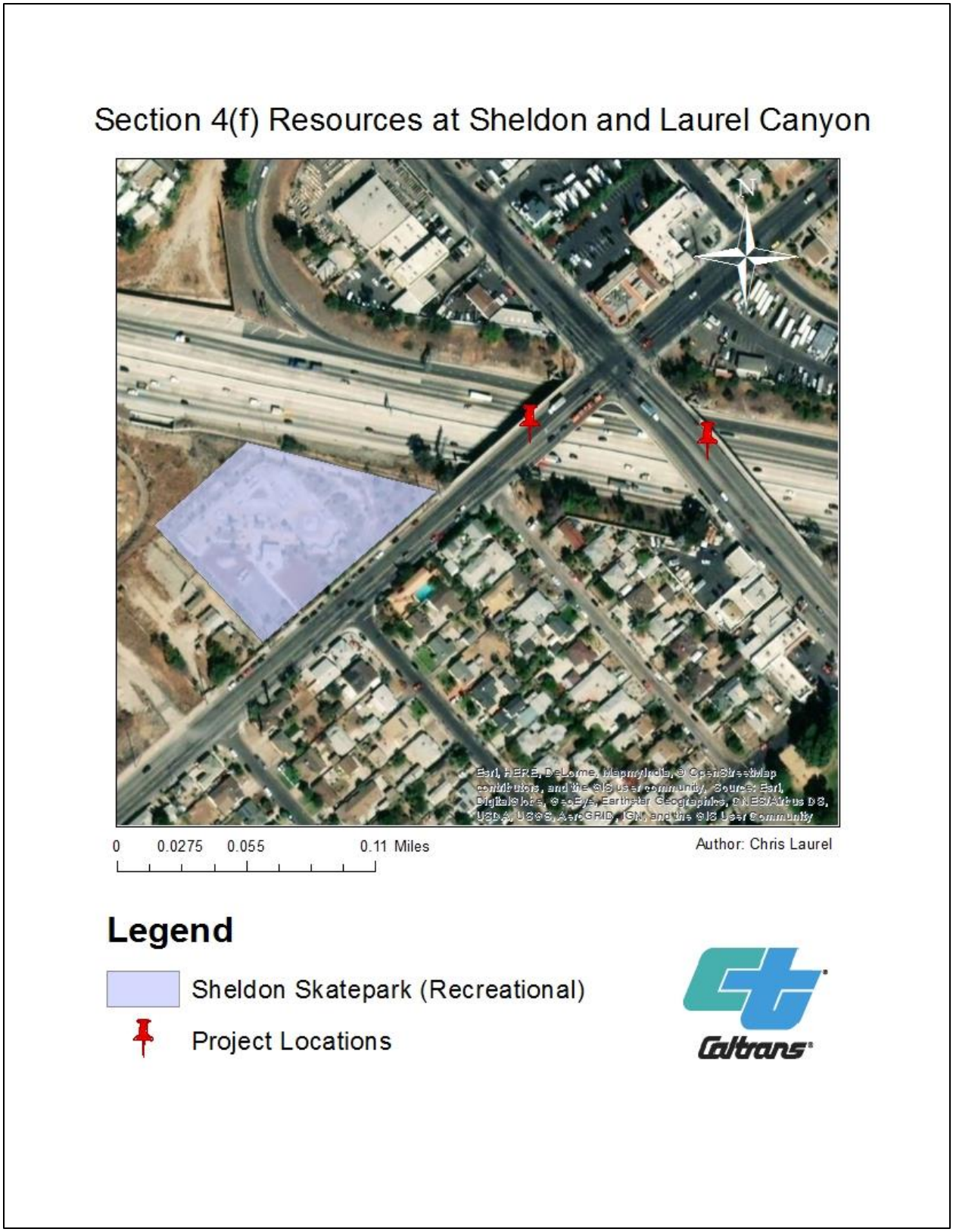

Figure 24: Section 4(f) Resources at Sheldon and Laurel Canyon

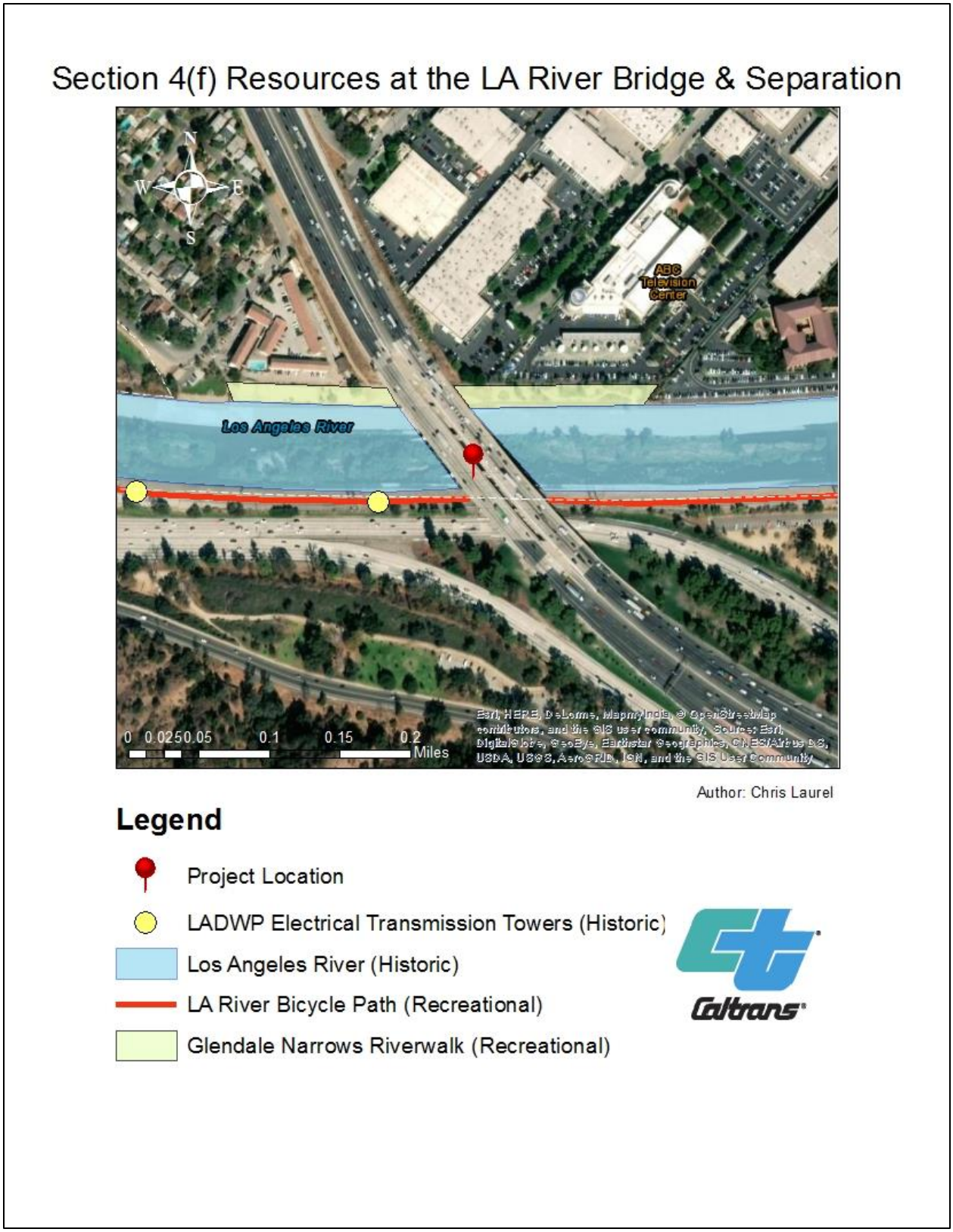

Figure 25: Section 4(f) Resources at the LA River Bridge & Separation

Section 4(f) De Minimis Determination

This section documents a *de minimis* determination for one historic property.

Los Angeles River
A segment of the Los Angeles (LA) River, between Riverside Dr. on the west side and Flower St. on the east side, in Los Angeles and Glendale, is being assumed eligible for the National Register for the purpose of the project at the local level of significance under Criterion A for its association with the development of federal and Los Angeles County flood control efforts. Its importance under Criterion C is as an engineering and construction archetype. The larger resource is a 51-linear-mile, concrete lined flood channel. Its period of significance is from 1938 to 1960. Flowing roughly east and south from the confluence of Bell Creek and Arroyo Calabasas in Canoga Park, it terminates at Los Angeles Harbor in Long Beach. The assumed-eligible resource boundaries are from Riverside Dr. to Flower St., between the north and south paved banks, including parallel roadways at the tops of the banks. It is not otherwise designated and has not been evaluated for historic significance in reviewed surveys.

Effects
Work at the LA River Bridge and Separation will require access to the LA River. On-going coordination with the U.S. Army Corps of Engineers and the California Regional Water Quality Control Board is being conducted to meet federal and state criteria to enter waters of the U.S.

During construction, a temporary platform will need to be built using gravel bags placed in the river in order to create a diversion channel. The platform will then be built on top of the gravel bags so that equipment may access the underside of the bridge. This method is a requirement for the US Army Corps of Engineers and has been previously approved by the California Regional Water Quality Board in past projects.

The portions of the Los Angeles River being used for the proposed project would not be directly affected by its temporary use as a staging area on its existing, paved, level roads at the tops of the levees. None of the roads, sloped side walls or the center channel would be altered by the temporary staging area and there is no other practical way to reach the bridges' undersides, abutments, piers or bents to perform project construction. While vehicles, materials and equipment may be stored in the project area, all vehicles, materials and equipment would be removed at the end of the construction process. Its ownership would not change. The construction process would be temporary, and the river in that area (immediately beneath the freeway) is not sensitive to short term indirect, additional temporary noise, or setting changes. After the project is completed, the Los Angeles River in this area and its setting would be unchanged.

Avoidance, Minimization, and/or Mitigation Measures
Since the Los Angeles River will not be affected according to Section 106 consultation, no avoidance, minimization, and/or mitigation measures are proposed.

Public Notice Process

As stated above, Section 4(f) is a federal process and must comply with National Environmental Policy Act (NEPA) requirements. The appropriate NEPA approval for this project is an Environmental Assessment (EA) which requires public circulation. A public notice and opportunity for review and comment will be provided, and all comments received from the public will be incorporated into the Final Environmental Document. A public hearing will also be held as part of the public review process.

Coordination
Caltrans has consulted with the State Historic Resources Preservation Officer (SHPO) about a "No Historic Properties Affected" finding in regards to the LA River. SHPO has been informed of Caltrans' intent to make a *de minimis* determination and has concurred with the Section 106 determination of "No Historic Properties Affected" for this property on November 20, 2018. Please refer to Appendix F, Key Correspondence, for the concurrence letter from SHPO.

Conclusion
Section 106 consultation resulted in a finding of "No Historic Properties Affected" (pursuant to Stipulation IX.A.2 of the *Section 106 PA*). Therefore, a *de minimis* determination is appropriate for Section 4(f).

Resources Evaluated Relative to the Requirements of Section 4(f)

This section discusses parks, recreational facilities, wildlife refuges and historic properties found within or adjacent to the project area that do not trigger Section 4(f) protection either because: (1) they are not publicly owned, (2) they are not open to the public, (3) they are not eligible historic properties, (4) the project does not permanently use the property and does not hinder the preservation of the property, or (5) the proximity impacts do not result in constructive use.

Section 4(f) Properties
Below is a discussion of Section 4(f) properties within approximately 0.5 miles of the proposed project limits and the impacts that the proposed project will have on them. The discussion for each property applies to the Build Alternative.

Sheldon Skatepark
Sheldon Skatepark is a 25,000 sq. foot skatepark located in Sun Valley, CA open to the public for recreational activity. It is one of the 21 parks owned and managed by the City of Los Angeles Department of Recreation and Parks. The 2-acre site was acquired in 2011 to build the skatepark, making it the largest skatepark in the Southeast Valley.

Effects
Raising the profile of Sheldon St. Bridge (Bridge #53-1120) will require the removal of a portion of fence on the northeast corner of Sheldon Skate Park. This fence will be replaced during construction and there will be no other effects to the park's features.

These activities are consistent with the Temporary Occupancy Exception under Section 4(f).

1. The duration is temporary. Sheldon Skatepark will experience impacts only during the construction timeframe.
2. The scope of work is minor. The proposed work at Sheldon Skatepark involves replacing a portion of fence on the northeast corner of the property.
3. There are no permanent adverse impacts and no impact to activities, features, or attributes. The Build Alternative will not impact activities, features, or attributes.
4. The land will be fully restored to existing or better conditions. The portion of fence will be replaced following construction.
5. It is anticipated that the City of Los Angeles will provide written agreement of the above conditions.

Los Angeles River Bicycle Path

The Los Angeles River Bicycle Path is a Class I bicycle and pedestrian path in the greater Los Angeles area running north/east along the Los Angeles River through Griffith Park in an area known as the Glendale Narrows open to the public for recreational activity. The 7.4-mile section of bikeway through the Glendale Narrows is known as the Elysian Valley Bicycle & Pedestrian Path. The bike path also runs from the city of Vernon to Long Beach, CA.

Effects

Work at the LA River Bridge and Separation will require a closure of a portion of the LA River Bicycle Path. The portion of the LA River Bicycle Path located adjacent to the LA River Bridge and Separation will be used temporarily during construction to move equipment in and out of the construction zone, as well as for staging purposes. Bicyclists will be rerouted using a detour located on Zoo Drive in Griffith Park. The proposed project will have no long-term effects to the bike path as its features and ownership will remain the same.

These activities are consistent with the Temporary Occupancy Exception under Section 4(f).

1. The duration is temporary. The LA River Bike Path will experience an impact only during the construction timeframe.
2. The scope of work is minor. This section of the LA River Bike Path will be used for moving construction equipment and for staging and storing.
3. There are no permanent adverse impacts and no impact to activities, features, or attributes. Recreational activity will be temporarily affected during construction. Bicyclists will be routed around the construction zone through Griffith Park. However, the proposed detour will be temporary and the Build Alternative will not affect the LA River Bike Path's activities, features, or attributes following construction.
4. The land will be fully restored to existing or better conditions. Following construction, the bicycle path will be restored to its original condition and the proposed temporary detour will be removed.
5. It is anticipated that the County of Los Angeles will provide written agreement of the above conditions.

Glendale Narrows Riverwalk

Glendale Narrows Riverwalk is a carefully constructed half mile recreational trail for pedestrians and bicyclists located on the north bank of the Los Angeles River in the City of Glendale across

from Griffith Park, open to the public for recreational activity. The trail is paved with asphalt and includes a small entry park that serves as a staging area for hikers and bicyclists; a separate staging area for equestrians using local trails; another small park area for walking and picnicking. Included within the setting is the enhancement of the wildlife habitat in the river channel, and educational and interpretive exhibits.[50]

Effects

A portion of the Glendale Narrows Riverwalk that goes underneath the Los Angeles River Bridge and Separation will be used as an area for staging and storing of construction equipment, as well as moving equipment in and out of the construction zone. Temporary signage and a flagger will be placed in the area to route pedestrians and bicyclists around the work site under the bridge. There will be ample space for pedestrian and bicyclists to move around the work zone.

These activities are consistent with the Temporary Occupancy Exception under Section 4(f).

1. The duration is temporary. The Glendale Narrows Riverwalk will experience impacts only during the construction timeframe.
2. The scope of work is minor. This section of the Glendale Narrows Riverwalk will be used for the movement of construction equipment and staging and storing.
3. There are no permanent adverse impacts and no impact to activities, features, or attributes. Recreational activity will be temporarily affected during construction. Users of the Glendale Narrows Riverwalk will be routed to a dirt path adjacent to the paved path underneath the LA River Bridge. However, the proposed detour will be temporary and the Build Alternative will not affect the Glendale Narrows Riverwalk's activities, features, or attributes following construction.
4. The land will be fully restored to existing or better conditions. Following construction, the Glendale Narrows Riverwalk will be restored to its original condition.
5. It is anticipated that the City of Glendale will provide written agreement of the above conditions.

Other Properties

The Bette Davis Picnic Area, Griffith Park, Griffith Park Dog Park, John Ferraro Athletic Fields, Griffith Park Hiking and Horseback Trail, and Los Angeles Department of Water and Power Transmission Towers are located adjacent or near the Los Angeles River Bridge project location.

Sheldon Arleta Park, Fernangeles Recreation Center, Sun Valley Recreation Center, Fernangeles Elementary School, Sun Valley High School, Robert H. Lewis High School, and Glenwood Elementary are located near the project locations in Sun Valley.

There is potential for these properties to encounter proximity impacts relating to visual impacts and noise due to construction, however these impacts would be temporary in nature and would be minimized through Caltrans Standard Specifications. There will be no entry or use of these

[50] http://rposd.lacounty.gov/2017/07/06/glendale-narrows-riverwalk/

properties for the proposed project. The facilities, functions, and activities of these properties will not be affected.

Coordination

Early coordination has been conducted with the City of Glendale, the City of Los Angeles, and the County of Los Angeles regarding the temporary use of Glendale Narrows Riverwalk, the Los Angeles River Bicycle Path, and Sheldon Skatepark. It is anticipated that written agreement will be provided by these officials with jurisdiction to meet the conditions stated in the Temporary Occupancy Exception.

Conclusion

Sheldon Skatepark, the Los Angeles River Bicycle Path, and the Glendale Narrows Riverwalk are anticipated to meet the requirements for the Temporary Occupancy Exception under Section 4(f) pending written agreements from the officials with jurisdiction. All other Section 4(f) properties mentioned in the previous section will result in no use.

Appendix B: Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

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Making Conservation a California Way of Life.

April 2018

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Related federal statutes and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone (916) 324-8379, TTY 711, email Title.VI@dot.ca.gov, or visit the website www.dot.ca.gov.

LAURIE BERMAN
Director

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Appendix C: Summary of Relocation Benefits

DECLARATION OF POLICY

"The purpose of this title is to establish a ***uniform policy for fair and equitable treatment*** of persons displaced as a result of federal and federally assisted programs in order that such persons ***shall not suffer disproportionate injuries*** as a result of programs designed for the benefit of the public as a whole."

The Fifth Amendment to the U.S. Constitution states, "No Person shall…be deprived of life, liberty, or property, without due process of law, nor shall private property be taken for public use without just compensation." The Uniform Act sets forth in statute the due process that must be followed in Real Property acquisitions involving federal funds. Supplementing the Uniform Act is the government-wide single rule for all agencies to follow, set forth in 49 Code of Federal Regulations (CFR) Part 24. Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments, as discussed below.

FAIR HOUSING

The Fair Housing Law (Title VIII of the Civil Rights Act of 1968) sets forth the policy of the United States to provide, within constitutional limitations, for fair housing. This act, and as amended, makes discriminatory practices in the purchase and rental of most residential units illegal. Whenever possible, minority persons shall be given reasonable opportunities to relocate to any available housing regardless of neighborhood, as long as the replacement dwellings are decent, safe, and sanitary and are within their financial means. This policy, however, does not require the Department to provide a person a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the initiation of negotiations (usually the first written offer to purchase), owner-occupants are given a detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted soon after the initiation of negotiations and also are given a detailed explanation of the Caltrans Relocation Assistance Program. To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Department relocation advisor.

RELOCATION ASSISTANCE ADVISORY SERVICES

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, the Department will provide relocation advisory assistance to any person, business, farm, or nonprofit organization displaced as a result of the acquisition of real property for public use, so long as they are legally present in the United States. The Department

will assist eligible displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are "decent, safe, and sanitary." Nonresidential displacees will receive information on comparable properties for lease or purchase (for business, farm, and nonprofit organization relocation services, see below).

Residential replacement dwellings will be in a location generally not less desirable than the displacement neighborhood at prices or rents within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include the supplying of information concerning federal and state assisted housing programs and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90 days written notice. Residential occupants eligible for relocation payment(s) will not be required to move unless at least one comparable "decent, safe, and sanitary" replacement dwelling, available on the market, is offered to them by the Department.

RESIDENTIAL RELOCATION PAYMENTS

The Relocation Assistance Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of a replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Assistance Program can be summarized as follows:

Moving Costs
Any displaced person, who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule. Lawful occupants who move into the displacement property after the initiation of negotiations must wait until the Department obtains control of the property in order to be eligible for relocation payments.

Purchase Differential
In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their property for 90 days or more prior to the date of the initiation of negotiations (usually the first written offer to purchase the property), may qualify to receive a price differential payment and may qualify to receive reimbursement for

certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate.

Rent Differential
Tenants and certain owner-occupants (based on length of ownership) who have occupied the property to be acquired by the Department prior to the date of the initiation of negotiations may qualify to receive a rent differential payment. This payment is made when the Department determines that the cost to rent a comparable "decent, safe, and sanitary" replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the *Down Payment* section below. To receive any relocation benefits, the displaced person must buy or rent and occupy a "decent, safe and sanitary" replacement dwelling within one year from the date the Department takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

Down Payment
The down payment option has been designed to aid owner-occupants of less than 90 days and tenants in legal occupancy prior to the Department's initiation of negotiations. The one-year eligibility period in which to purchase and occupy a "decent, safe and sanitary" replacement dwelling will apply.

Last Resort Housing
Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program on Federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation as explained above. Last Resort Housing has been designed primarily to cover situations where a displacee cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances.

After the initiation of negotiations, the Department will within a reasonable length of time, personally contact the displacees to gather important information, including the following:

- Number of people to be displaced.
- Specific arrangements needed to accommodate any family member(s) with special needs.
- Financial ability to relocate into comparable replacement dwelling which will adequately house all members of the family.
- Preferences in area of relocation.
- Location of employment or school.

NONRESIDENTIAL RELOCATION ASSISTANCE

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business's specific relocation needs. The types of payments available to eligible businesses, farms, and nonprofit organizations are: searching and moving expenses, and possibly reestablishment expenses; or a fixed in lieu payment instead of any moving, searching and reestablishment expenses. The payment types can be summarized as follows:

Moving Expenses
Moving expenses may include the following actual, reasonable costs:

- The moving of inventory, machinery, equipment and similar business-related property, including: dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property. Items acquired in the right-of-way contract may not be moved under the Relocation Assistance Program. If the displacee buys an Item Pertaining to the Realty back at salvage value, the cost to move that item is borne by the displacee.
- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move.
- Expenses related to searching for a new business site, up to $2,500, for reasonable expenses actually incurred.

Reestablishment Expenses
Reestablishment expenses related to the operation of the business at the new location, up to $25,000 for reasonable expenses actually incurred.

Fixed In Lieu Payment
A fixed payment in lieu of moving, searching, and reestablishment payments may be available to businesses that meet certain eligibility requirements. This payment is an amount equal to half the average annual net earnings for the last two taxable years prior to the relocation and may not be less than $1,000 nor more than $40,000.

ADDITIONAL INFORMATION

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or for the purpose of determining the extent of eligibility of a displacee for assistance under the Social Security Act, or any other law, *except* for any federal law providing local "Section 8" Housing Programs.

Any person, business, farm or nonprofit organization that has been refused a relocation payment by the Department relocation advisor or believes that the payment(s) offered by the agency are inadequate may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from the relocation advisor.

California law allows for the payment for lost goodwill that arises from the displacement for a public project. A list of ineligible expenses can be obtained from the Department's Division of Right of Way and Land Surveys. California's law and the federal regulations covering relocation assistance provide that no payment shall be duplicated by other payments being made by the displacing agency.

For more information, please visit http://www.dot.ca.gov/hq/row/rap/index.htm

Appendix D: Avoidance, Minimization, and/or Mitigation Summary

In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] which follows) would be implemented. During project design, avoidance, minimization, and /or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following ECR is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented. Note: Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR.

Description of Commitment	Commitment Source	Timing	Responsible Staff	CEQA Mitigation
Community Impacts				
COM-1 Caltrans will conform to the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations (CFR) Part 24 through Caltrans RAP.	Environmental Document	PS&E/Before RTL	Caltrans Division of Right of Way / Project Manager	
Utilities/Emergency Services				
U-1 Caltrans would coordinate with all affected private and public service utilities during the design stage to identify any potential conflicts with existing utilities. This process would include an evaluation of ways to avoid utility relocations by refining the project design and/or protecting existing utilities in place. After seeking approval from utility providers, final relocation/protection measures would be incorporated into the final plans and specifications. Per Caltrans requirements, all linear underground utilities within Caltrans' right of way (ROW) would be encased from ROW to ROW in either steel or concrete.	Environmental Document	PS&E/Before RTL	Project Engineer	
U-2 Coordination with the California Public Utilities Commission (CPUC) would be conducted during final design and throughout construction of the Project.	Environmental Document	PS&E/Before RTL	Project Engineer	

Traffic and Transportation/Pedestrian and Bicycle Facilities				
T-1 Transportation Management Plan (TMP). A TMP shall be developed to implement practical measures to minimize any traffic delays that may result from lane restrictions or closures in the work zone. TMP strategies shall be planned and designed to improve mobility, as well as increase safety for the traveling public and highway workers. These strategies include, but are not limited to, dissemination of information to motorists and the greater public, traffic incident management, construction management strategies, traffic demand management, and alternative route planning/detouring. The TMP would include coordination with local residents, businesses, local agencies, and emergency responders.	Environmental Document	PS&E/Before RTL	Project Engineer/Caltrans Division of Traffic Management	
T-2 Roadway Closure Planning. Closure plans shall be developed to minimize traffic disruption during peak periods, and to the extent possible, such closures (when required) shall occur during off-peak and/or overnight periods. In advance of any closure periods, appropriate temporary signage (in accordance with Caltrans and City guidelines) shall be used to alert motorists of the closure and direct them to alternate routes.	Environmental Document	PS&E/Before RTL	Project Engineer/Caltrans Division of Traffic Management	
T-3 Temporary Traffic Controls. Temporary traffic controls, signage, barriers, and flagmen shall be deployed as necessary and appropriately for the	Environmental Document	Construction	Resident Engineer/Caltrans	

efficient movement of traffic (in accordance with standard traffic engineering practices) to facilitate construction of the project improvements while maintaining traffic flows and minimizing disruption.			Division of Traffic Management	
Visual/Aesthetics				
V-1 Design to minimize property acquisitions.	Environmental Document	PA&ED	Project Engineer	
V-2 Stage the work to avoid or minimize impacts to the LA River, minimize slope impacts at Templin Highway, and include aesthetic features including stamped and colored concrete, bridge rail pattern and retaining wall patterns that match others throughout the corridor.	Environmental Document	PS&E	Project Engineer	
Cultural Resources				
C-1 If cultural materials are discovered during construction, all earth-moving activities within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.	Environmental Document	Construction	Resident Engineer/Caltrans District Cultural Specialist	
C-2 If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will	Environmental Document	Construction	Resident Engineer/Caltrans District Cultural Specialist	

then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Caltrans District Environmental Cultural Branch Chief, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.				
Geology and Soils				
GEO-1: Additional geologic testing will be required to provide appropriate recommendations to ensure the design of the proposed structures, foundation, pacing, and grading associated with the proposed project is geologically sound as the current report is preliminary, and a final Foundation Report (FR) will be required.	Environmental Document	PS&E/Before RTL	Caltrans Office of Geotechnical Engineering/Project Engineer/Project Manager	
Hazardous Waste/Materials				
HAZ-1: A project-specific Lead Compliance Plan and Debris Containment and Disposal Work Plan will be prepared to address the removal, containment, storage, sampling, transport, and disposal of yellow thermoplastic and lead-based painted traffic strip and/or pavement markings, and to prevent or minimize worker exposure to lead while handling the debris/residue (California Code of Regulations [CCR], Title 8, Section 1532.1, “Lead,” and California Occupational Safety and Health Administration [Cal OSHA] Construction Safety Order).	Environmental Document	PS&E/Before RTL	Resident Engineer/ Caltrans Office of Environmental Engineering	

HAZ-2: During construction, excess ADL soils require special handling and waste management, especially when disturbed during earthmoving activities. The California Department of Transportation (Caltrans) Office of Environmental Engineering will initiate a project-specific aerially deposited lead (ADL) investigation to evaluate whether the excess ADL soils generated can be reused on the project site and/or along the project corridor by adhering to the requirements of the Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils (ADL Agreement) that the Department entered into with the California Department of Toxic Substances Control (July 2016). If the excess ADL soils cannot be reused on the project site and/or along the project corridor, the site investigation will also determine whether they are classified as federal or state hazardous waste that requires off-site disposal at a permitted Class I California hazardous waste disposal facility or can be relinquished to the contractor with or without restrictions on land use.	Environmental Document	Construction	Resident Engineer/ Caltrans Office of Environmental Engineering	
HAZ-3 Surveying and sampling will be required to determine procedures for the proper removal, handling, and disposal of asbestos-containing materials (ACM) and lead-based paint (LBP) during construction. Upon completion and analyses of surveys and sampling, an Asbestos Compliance Plan, Asbestos Removal Work Plan, and Lead-Based	Environmental Document	PS&E/Before RTL	Project Engineer/ Caltrans Office of Environmental Engineering	

Paint Compliance Plan, and Lead-Based Paint Removal Work Plan shall be completed and signed by a Certified Industrial Hygienist that outlines potential risks and appropriate monitoring plans, as well as safety measures, to reduce the risk of worker exposure to contamination.				
HAZ-4 Groundwater testing will be required to determine the extent of potential contamination in groundwater that will be encountered during construction, and to confirm whether contamination, if any, can be attributed to nearby sources and impacts from previous releases. Appropriate non-Standard Special Provisions for excavation, air monitoring, management, and disposal of soil and groundwater (perched, if encountered) shall be included in the PS&E package.	Environmental Document	PS&E/Before RTL	Project Engineer/ Caltrans Office of Environmental Engineering	
HAZ-5 If dewatering is required for the project, the groundwater will need to be sampled and analyzed during the PS&E phase to determine disposal options.	Environmental Document	PS&E/Before RTL	Project Engineer/ Caltrans Office of Environmental Engineering	
HAZ-6 If imported borrow is needed, it must be tested and found to be free of contaminants prior to acceptance and placement. The appropriate non-Standard Special Provisions shall be included in the PS&E package.	Environmental Document	PS&E/Before RTL	Project Engineer/ Caltrans Office of Environmental Engineering	

HAZ-7 If new right-of-way will be acquired for the proposed improvements as fee or easement, permanent or temporary, including full acquisition, partial acquisition, permanent easement, maintenance easement, aerial easement, or TCE, a site investigation (SI) needs to be performed on the parcels for all contaminants to comply with Caltrans requirement for acquisition of uncontaminated property. The SI will be performed after right-of-way appraisal maps are received and entry permits are obtained by the Division of Right of Way.	Environmental Document	PS&E/Before RTL	Project Engineer/ Caltrans Office of Environmental Engineering	
HAZ-8 All electrical equipment requiring disposal shall be packaged and transported to an appropriate permitted disposal facility. A Non-Standard Specification (NSSP) that requires the contractor to inspect the existing electrical components to determine if any hazardous materials are present prior to starting construction shall be included in the PS&E package.	Environmental Document	PS&E/Before RTL	Project Engineer/ Caltrans Office of Environmental Engineering	
HAZ-9 Caltrans shall follow the appropriate Standard Special Provisions for the handling, storage, transportation, and disposal of Treated Wood Waste.	Environmental Document	Construction	Resident Engineer/ Caltrans Office of Environmental Engineering	
Air Quality				
AIR-1 The construction contractor shall comply with Caltrans' Standard Specifications in Section 14-9 (2015). Section 14-9.02 specifically requires	Environmental Document	Construction	Resident Engineer	

compliance by the contractor with all applicable laws and regulations related to air quality, including SCAQMD rules and regulations and local ordinances.				
AIR-2 Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a “no visible dust” criterion either at the point of emission or at the right of way line as required by the SCAQMD.	Environmental Document	Construction	Resident Engineer	
AIR-3 Spread soil binder on any unpaved roads used for construction purposes, and all project construction parking areas.	Environmental Document	Construction	Resident Engineer	
AIR-4 Wash off trucks as they leave the R/W as necessary to control fugitive dust emissions.	Environmental Document	Construction	Resident Engineer	
AIR-5 Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.	Environmental Document	Construction	Resident Engineer	
AIR-6 Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.	Environmental Document	Construction	Resident Engineer	

AIR-7 Locate equipment and materials storage sites at least 500 feet from the sensitive receptors. Keep construction areas clean and orderly.	Environmental Document	Construction	Resident Engineer	
AIR-8 Establish environmentally sensitive areas (ESAs) or their equivalent at least 500 feet away from sensitive air receptors within which construction activities such as extended idling, material storage, and equipment maintenance, would be prohibited, to the extent feasible.	Environmental Document	Construction	Resident Engineer	
AIR-9 Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic.	Environmental Document	Construction	Resident Engineer	
AIR-10 Cover all transported loads of soils and wet materials prior to transport, or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emission of dust (particulate matter) during transportation.	Environmental Document	Construction	Resident Engineer	
AIR-11 Promptly and regularly remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease particulate matter.	Environmental Document	Construction	Resident Engineer	
AIR-12 Route and schedule construction traffic to avoid peak travel times as much as possible, to reduce congestion and related air quality impacts caused by idling vehicles along local roads.	Environmental Document	Construction	Resident Engineer	

AIR-13 Install mulch or plant vegetation as soon as practical after grading to reduce windblown particulate in the area. Be aware that certain methods of mulch placement, such as straw blowing, may themselves cause dust and visible emission issues, and may need to use controls such as dampened straw.	Environmental Document	Construction	Resident Engineer	
AIR-14 Unpaved areas subject to vehicle traffic must be stabilized by being kept adequately wetted, treated with a chemical dust suppressant, or covered with material that contains less than 0.25 percent asbestos.	Environmental Document	Construction	Resident Engineer	
AIR-15 The speed of any vehicles and equipment traveling across unpaved areas must be no more than fifteen (15) miles per hour unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust that is visible crossing the project boundaries.	Environmental Document	Construction	Resident Engineer	
AIR-16 Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept adequately wetted, treated with a chemical dust suppressant, or covered with material that contains less than 0.25 percent asbestos.	Environmental Document	Construction	Resident Engineer	

AIR-17 Activities must be conducted so that no track-out from any road construction project is visible on any paved roadway open to the public.	Environmental Document	Construction	Resident Engineer	
AIR-18 Rule 401 requires no visible emissions be discharged in the atmosphere of such opacity for a period of periods aggregating more than three minutes in any one hour as to obscure an observer's view to a degree equal to or greater than the dark shade of smoke as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines. Rule 402 requires that air pollutant emissions not be a nuisance off-site.	Environmental Document	Construction	Resident Engineer	
AIR-19 Measures to control fugitive dust caused by project construction are presented in SCAQMD Rule 403 – Fugitive Dust. The project construction will need to comply with these control measures and any other local or regional applicable rules, guidance, and measures.	Environmental Document	Construction	Resident Engineer	
AIR-20 SCAQMD's Rule 403 requires that fugitive dust be controlled with the best available control measures (BACM) in order to reduce dust so that it does not remain visible in the atmosphere beyond the property line of the proposed project. It also requires a dust control plan to be submitted and approved prior to construction. The dust control plan should describe all applicable dust control measures that will be implanted at the project; and	Environmental Document	Construction	Resident Engineer	

should describe types of dust suppressant, surface treatments and other measures to be utilized at the construction sites to comply with the Rule.				
Biology				
BIO-1 A stabilized construction access will be used.	Environmental Document	Construction	Resident Engineer	
BIO-2 Vehicle Equipment Cleaning procedures and practices will be used to minimize or eliminate the discharge of pollutants from vehicle and equipment cleaning operations to storm drain system or to watercourses.	Environmental Document	Construction	Resident Engineer	
BIO-3 Vehicle Equipment Fueling procedures and practices will be used to minimize or eliminate the discharge of fuel spills and leaks into storm drain systems or to water courses.	Environmental Document	Construction	Resident Engineer	
BIO-4 Vehicle Equipment Maintenance procedures and practices will be used to eliminate the discharge of pollutants to the storm drain systems or to watercourses from vehicle and equipment maintenance procedures. This includes drip pans under equipment when not in use.	Environmental Document	Construction	Resident Engineer	
BIO-5 Material Delivery procedures and practices for the proper handling and storage of material in a manner that minimizes or eliminates the discharge of these materials to the storm drain systems or to water courses will be used.	Environmental Document	Construction	Resident Engineer	

BIO-6 Stockpile Management procedures and practices will be used to reduce or eliminate air and stormwater pollution from stock piles of soil and paving materials such as Portland cement concrete (PCC) rubble, Asphalt Concrete (AC), AC rubble, aggregate base, aggregate sub-base or pre-mixed aggregate, asphalt binder and pressure treated wood.	Environmental Document	Construction	Resident Engineer	
BIO-7 Spill Prevention and Control will be implemented to prevent and control spills in a manner that minimizes or prevents the discharge of spilled material to the drainage system or watercourse.	Environmental Document	Construction	Resident Engineer	
BIO-8 Solid Waste Management procedures and practices will be used to minimize or eliminate the discharge of pollutants to the drainage system or to watercourse as a result of creation, stockpiling or removal of construction site wastes.	Environmental Document	Construction	Resident Engineer	
BIO-9 Concrete Waste Management procedures and practices will be used to minimize or eliminate the discharge of concrete waste materials within the waters.	Environmental Document	Construction	Resident Engineer	
BIO-10 Permits from regulatory resource agencies (i.e. USACE, CDFW, and RWQCB) must be acquired at the Design phase in order to perform work at the Los Angeles River Bridge.	Environmental Document	PS&E/Before RTL	Biologist; Generalist/ Project Engineer	

BIO-11 A focused plant survey will be conducted prior to construction. Should pre-construction surveys determine presence of special status plant species, a qualified biologist will establish Environmentally Sensitive Area fencing surrounding the areas where individuals of plant species are found. If impacts cannot be avoided, individual specimens of species shall be collected and propagated at preapproved nurseries and replanted onsite, whenever possible.	Environmental Document	Pre-Construction	Biologist	
BIO-12 Nesting bird and bat surveys must be conducted within 3 days of work. The Resident Engineer (RE) must inform the district biologist 7 days before construction is to begin. If there is a pause in construction, the site may need to be re-surveyed for bats and birds. If nesting birds are present on a bridge, the district biologist will recommend a 150-ft buffer for songbirds and 500-ft for raptors. Work will not be conducted in the buffer zone until the nesting birds fledge and can flee the project site.	Environmental Document	Pre-Construction	Resident Engineer; Biologist	
BIO-13 Caltrans Landscape Architects will include a plant palette that will not include any known invasive plants, adjacent to the Los Angeles River.	Environmental Document	PS&E/Before RTL	Biologist/ Caltrans Landscape Architecture/ Project Engineer	
BIO-14 Landscape Specialists will recognize the issue of invasive plants and will require construction crews to eradicate them.	Environmental Document	Construction	Resident Engineer/ Biologist/ Caltrans Landscape Architecture	

Appendix E: U.S. Fish and Wildlife Species Lists

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
http://www.fws.gov/carlsbad/

In Reply Refer To:
Consultation Code: 08ECAR00-2018-SLI-0095
Event Code: 08ECAR00-2019-E-00362
Project Name: I-5 Freight Corridor

October 31, 2018

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2018-SLI-0095

Event Code: 08ECAR00-2019-E-00362

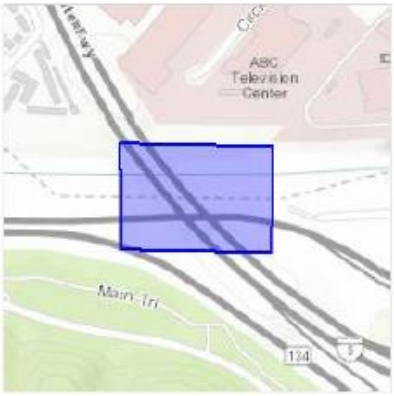
Project Name: I-5 Freight Corridor

Project Type: TRANSPORTATION

Project Description: Location: The project extends from Glendale, CA to just north of Casatic, CA along I-5. Size: 6.79 acres. Scope: The scope for this portion of the project is to repair existing cracks and welds and un-stagger cross bracing from abutments and Los Angeles River. Timing: 9.30.20 to 3.29.27.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/34.155687933251606N118.289291770837W



Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened

Flowering Plants

NAME	STATUS
Nevin's Barberry *Berberis nevinii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Project Summary

Consultation Code: 08ECAR00-2018-SLI-0115

Event Code: 08ECAR00-2019-E-00360

Project Name: I-5 Freight Corridor

Project Type: TRANSPORTATION

Project Description: Location: Sun Valley, CA Size: 4.59 acres Scope: Bridge Replacement. Timing: 9.30.20 to 3.29.27.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/34.22173640236962N118.35912012693568W

Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened

Flowering Plants

NAME	STATUS
Nevin's Barberry *Berberis nevinii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Project Summary

Consultation Code: 08ECAR00-2018-SLI-0060

Event Code: 08ECAR00-2019-E-00105

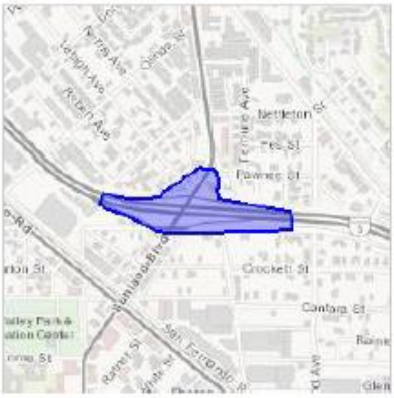
Project Name: I-5 Freight Corridor Project

Project Type: TRANSPORTATION

Project Description: Location: Sun Valley Size: 15.11 acres Scope: Replace bridge. Timing: 9.30.20 to 3.29.27.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/34.22231525379952N118.36732439517738W



Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened

Flowering Plants

NAME	STATUS
Nevin's Barberry *Berberis nevinii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Project Summary

Consultation Code: 08ECAR00-2018-SLI-0063

Event Code: 08ECAR00-2019-E-00102

Project Name: I-5 Freight Corridor Project

Project Type: TRANSPORTATION

Project Description: Location: Sun Valley, CA Size: 1.60 acres Scope: Bridge replacement. Timing: 9.30.20 to 3.29.27.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/34.223024955476745N118.37111595637295W

Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened

Flowering Plants

NAME	STATUS
Nevin's Barberry *Berberis nevinii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Project Summary

Consultation Code: 08ECAR00-2018-SLI-0064

Event Code: 08ECAR00-2019-E-00100

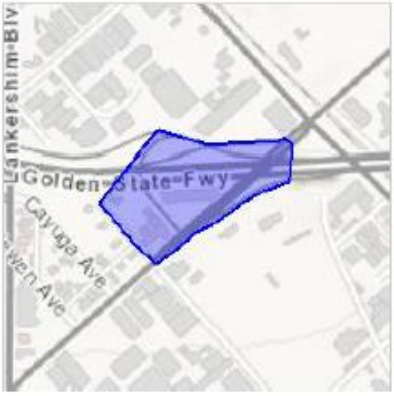
Project Name: I-5 Freight Corridor Project

Project Type: TRANSPORTATION

Project Description: Location: Sun Valley, CA Size: 12.23 acres Scope: Bridge replacement. Timing: 9.30.20 to 3.29.27.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/34.22607658227068N118.38403050662583W



Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered

Flowering Plants

NAME	STATUS
Gambel's Watercress *Rorippa gambellii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4201	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Project Summary

Consultation Code: 08ECAR00-2018-SLI-0067

Event Code: 08ECAR00-2019-E-00099

Project Name: I-5 Freight Corridor

Project Type: TRANSPORTATION

Project Description: Location: Sun Valley, CA. Size: 13.41 Acres Scope: Roadway Profile Lowering. This would require lowering the roadway by 12", which is very possible. Timing: 9.30.20 to 3.29.27.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/34.22591246138055N118.38789867393322W

Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered

Flowering Plants

NAME	STATUS
Gambel's Watercress *Rorippa gambellii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4201	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Project Summary

Consultation Code: 08ECAR00-2018-SLI-0068

Event Code: 08ECAR00-2019-E-00098

Project Name: I-5 Freight Corridor Project

Project Type: TRANSPORTATION

Project Description: Location: Sun Valley, CA. Size: 12.56 Acres Scope: Raise profile, replace bridge. Timing: 9.30.20 to 3.29.27.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/34.2291813161732N118.39281211902193W

Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered

Flowering Plants

NAME	STATUS
Gambel's Watercress *Rorippa gambellii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4201	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Project Summary

Consultation Code: 08ECAR00-2019-SLI-0150

Event Code: 08ECAR00-2019-E-00365

Project Name: I-5 Freight Corridor Project

Project Type: TRANSPORTATION

Project Description: Location: Sun Valley Size: 16.52 acres Scope: Bridge Replacement Timing: N/A.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/34.23212185300018N118.40345333291499W

Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered

Flowering Plants

NAME	STATUS
Gambel's Watercress *Rorippa gambellii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4201	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Project Summary

Consultation Code: 08EVEN00-2018-SLI-0028

Event Code: 08EVEN00-2019-E-00046

Project Name: I-5 Freight Corridor Project

Project Type: TRANSPORTATION

Project Description: Location: Castaic, CA Size: 12.14 acres Scope: Remove deck to access girders, strengthen girders for shear. Timing: 9.30.20 to 3.29.27.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/34.569747345112035N118.68852466918315W

Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad *Anaxyrus californicus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3762	Endangered
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened

Crustaceans

NAME	STATUS
Riverside Fairy Shrimp *Streptocephalus woottoni* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8148	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
California Orcutt Grass *Orcuttia californica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4923	Endangered
Slender-horned Spineflower *Dodecahema leptoceras* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4007	Endangered
Spreading Navarretia *Navarretia fossalis* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1334	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix F: Key Correspondence

SHPO Concurrence:

State of California • Natural Resources Agency
Edmund G. Brown Jr., *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Lisa Ann L. Mangat, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

November 20, 2018

VIA EMAIL

In reply refer to: FHWA_2018_1022_001

Ms. Kelly Ewing-Toledo
Senior Environmental Planner
Environmental Branch Chief, Cultural Resources Unit
Caltrans, District 7
100 S Main Street, MS 16A
Los Angeles, CA 90012

Subject: Determinations of Eligibility for the Proposed Interstate 5 Freight Corridor, Cities of Glendale and Los Angeles and Angeles National Forest, Los Angeles County, CA

Dear Ms. Ewing-Toledo:

Caltrans is initiating consultation for the above project in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). As part of your documentation, Caltrans submitted a Historic Property Survey Report (HPSR), Historical Resource Evaluation Report (HRER), and an Archaeological Survey Report (ASR) for the project.

The proposed undertaking is a Freight Corridor Improvement Project along I-5 in Los Angeles County between State Route 134 and Templin Highway Undercrossing that would provide higher standard vertical clearances and eliminate capacity restrictions for heavy loads. The proposed project would provide standard vertical clearance at Roscoe Blvd Overcrossing (OC), Sunland Blvd OC, Olinda St. Pedestrian Overcrossing (POC), Tuxford Off-ramp OC, Lankershim Blvd OC, Peoria St OC, Laurel Canyon Blvd OC and the Sheldon St OC. It would be accomplished by replacing the bridges and raising their profiles by 1 to 2 feet and by about 4 feet at Olinda St POC. It would eliminate load capacity restrictions at the Los Angeles River Bridge and Separation and at Templin Highway Undercrossing by repairing steel girders and unstaggering the steel cross frames at the LA River Bridge and Separation and by replacing the Templin Highway Undercrossing. The complete project description is on pages 5 and 6 of the HRER.

Ms. Ewing-Toledo FHWA_2018_1022_001
November 20, 2018
Page 2

Pursuant to Stipulation VIII.C.6 of the PA, Caltrans request the SHPO's concurrence that the following properties, located in Los Angeles, are not eligible for the National Register of Historic Places (NRHP) or as California Historic Landmarks:

- Angle Computer Company, Padway Aircraft Products, 11040 Olinda St
- Barrett Acoustics, Pete's Draperies & Blinds, 8707 Lankershim Blvd
- 8600 Telfair Ave
- Vasco Electric and High Tech Diagnostic & Repair, 8542-48 N Lankershim Blvd and 8520 Kewen Ave
- Domenica and John Billi Sr. House, 11903 W Peoria St
- Margarita Billi Guadino House, 11911 W Peoria St
- Mr. and Mrs. John Basso House, 11961-11969 W Peoria St
- 8724 Haddon St
- Fernangeles Park Recreation Center Pool House, 8851 Laurel Canyon Blvd

Caltrans is also assuming the two following properties eligible for the NRHP for the purposes of this project:

- Los Angeles River, between Riverside Dr (Los Angeles) on the west side and Flower St (Glendale) on the east side
- Los Angeles Department of Water and Power electrical transmission towers, between Riverside Drive on the west side and I-5, on the south bank of the Los Angeles River

Based on my review of the submitted documentation, I concur with the foregoing determinations.

If you have any questions, please contact Natalie Lindquist at (916) 445-7014 with e-mail at natalie.lindquist@parks.ca.gov or Alicia Perez at (916) 445-7020 with e-mail at alicia.perez@parks.ca.gov .

Sincerely,

Julianne Polanco
State Historic Preservation Officer