Lindsay Route 65 and Route 198/245 Operational Improvements Project

TULARE COUNTY, CALIFORNIA
06-TUL-65, 198, 245-PM 29.0-R30.4, R19.5-20.0, 0.0-0.2
Project EA: 06-43080 Project ID: 0600000426

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 U.S.C. 327 and the Memorandum of Understanding dated December 23, 2016 and executed by the Federal Highway Administration (FHWA) and Caltrans.

June 2020

Caltrans

General Information About This Document

What's in this document:
The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration, has prepared this Initial Study/Environmental Assessment, which examines the potential environmental impacts of alternatives being considered for the proposed project in Tulare County in California. The document explains why the project is being proposed, the alternatives being considered for the project, the existing environment that could be affected by the project, potential impacts of each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document. Additional copies of the document and the related technical studies are available for review at the Caltrans district office at 1352 West Olive Avenue, Fresno, CA 93728, Tulare County Public Library, Exeter Branch Library, 230 East Chestnut Avenue, Exeter, CA 93221; and the Tulare County Public Library, Lindsay Branch Library, 157 North Mirage Street, Lindsay, CA 93247.
- Attend the public hearing on July 22, 2020.
- Tell us what you think. If you have any comments regarding the proposed project, please attend the public hearing and/or send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to: Richard Putler, Senior Environmental Planner, Central Region Environmental, California Department of Transportation, 855 M Street, Suite 200, Fresno, CA 93721. Submit comments via email to: richard.putler@dot.ca.gov.
- Submit comments by the deadline: August 7, 2020.

What happens next:
After comments are received from the public and reviewing agencies, Caltrans, as assigned by the Federal Highway Administration, may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

Printing this document: To save paper, this document has been set up for two-sided printing (to print the front and back of a page). Blank pages occur where needed throughout the document to maintain proper layout of the chapters and appendices.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Richard Putler, Senior Environmental Planner, Central Region Environmental, 855 M Street, Fresno, CA 93721; phone number 559-445-5286 (Voice), or use the California Relay Service 1-800-735-2929 (TTY), 1-800-735-2929 (Voice), or 711.

Make operational improvements on State Route 65 from post miles 29.0 to R30.4, State Route 198 from post miles R19.5 to 20.0, and State Route 245 from post miles 0.0 to 0.2 in Tulare County

INITIAL STUDY with Proposed Negative Declaration/ ENVIRONMENTAL ASSESSMENT

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C)

THE STATE OF CALIFORNIA
Department of Transportation

J. Vespermann

Juergen Vespermann
Acting Office Chief, Southern San Joaquin Valley
California Department of Transportation
NEPA and CEQA Lead Agency

06-25-2020
Date

DRAFT
Proposed Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) in cooperation with the Tulare County Association of Governments is proposing operational improvements on State Route 65 from post miles 29.0 to R30.4, State Route 198 from post miles R19.5 to 20.0, and State Route 245 from post miles 0.0 to 0.2 in Tulare County.

Determination

This proposed Negative Declaration is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a Negative Declaration for this project. This does not mean that Caltrans' decision on the project is final. This Negative Declaration is subject to change based on comments received from 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 project would have no effect on: aesthetics, cultural resources, energy, geology and soils, land use and planning, mineral resources, paleontological resources, public services, recreation, transportation, tribal cultural resources, wetlands and other waters and wildfire.

The project would have no significant effect on: air quality, biological resources, population and housing, utilities and service systems, agricultural and forest resources, greenhouse gas emissions, hazards and hazardous waste, hydrology and water quality, and noise.

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Juergen Vespermann
Acting Office Chief, Southern San Joaquin Valley
California Department of Transportation
NEPA and CEQA Lead Agency

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Date

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Chapter 1 Proposed Project

1.1 Introduction

California participated in the "Surface Transportation Project Delivery Pilot Program" (Pilot Program) pursuant to 23 U.S. Code 327 for more than five years, beginning July 1, 2007 and ending September 30, 2012. MAP-21 (P.L. 112-141), signed by President Barack Obama on July 6, 2012 amended 23 U.S. Code 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, the California Department of Transportation (Caltrans) entered into a Memorandum of Understanding pursuant to 23 U.S. Code 327 (NEPA Assignment MOU) with the Federal Highway Administration. 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 Federal Highway Administration 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, the Federal Highway Administration assigned and Caltrans assumed all of the U.S. Department of Transportation Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that the Federal Highway Administration assigned to Caltrans under the 23 U.S. Code 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

Caltrans in cooperation with the Tulare County Association of Governments is proposing several operational improvements on State Route 65, State Route 198 and State Route 245 in Tulare County.

Caltrans, as assigned by the Federal Highway Administration, is the lead agency under the National Environmental Policy Act (NEPA). Caltrans is the lead agency under the California Environmental Quality Act (CEQA).

This project is included in the 2019 Federal Transportation Improvement Program and the 2018 State Transportation Improvement Program/Regional Transportation Improvement Program. The project is included in the Tulare County 2018 Regional Transportation Improvement Program as a financially constrained project and as an operational improvements project with construction of the first phase beginning in 2026.

Figure 1-1 Project Vicinity Map

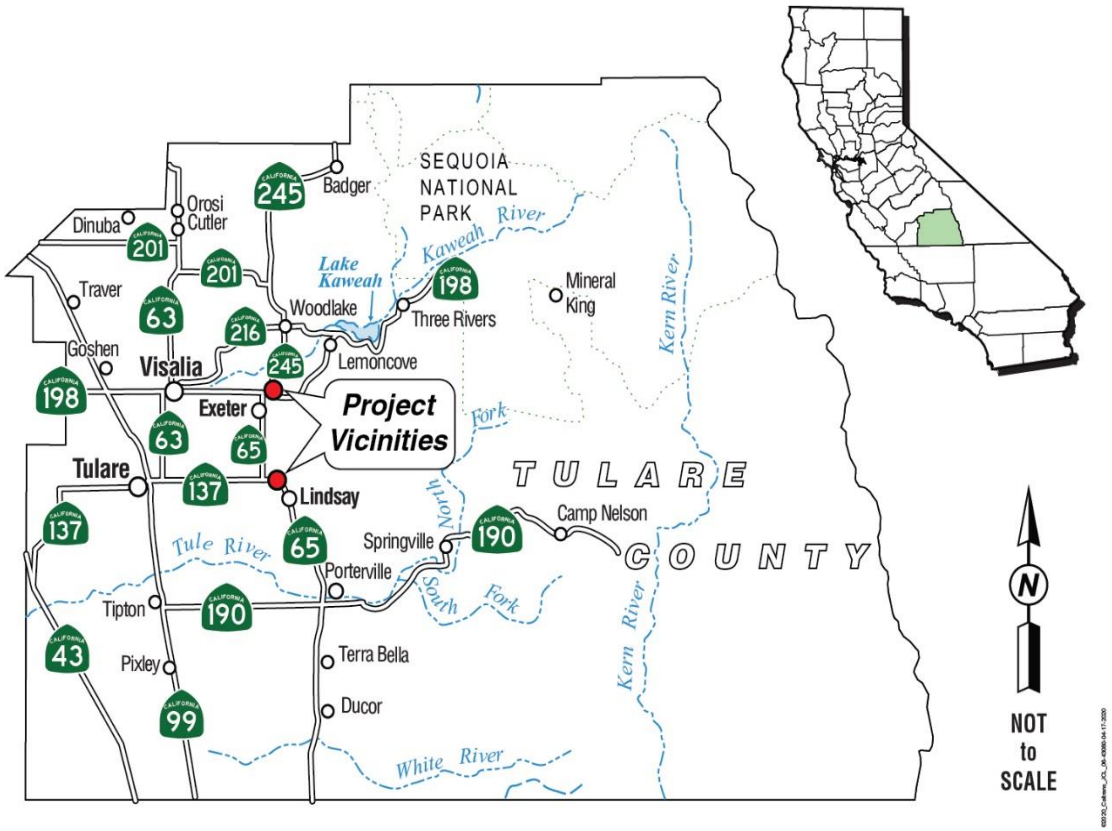
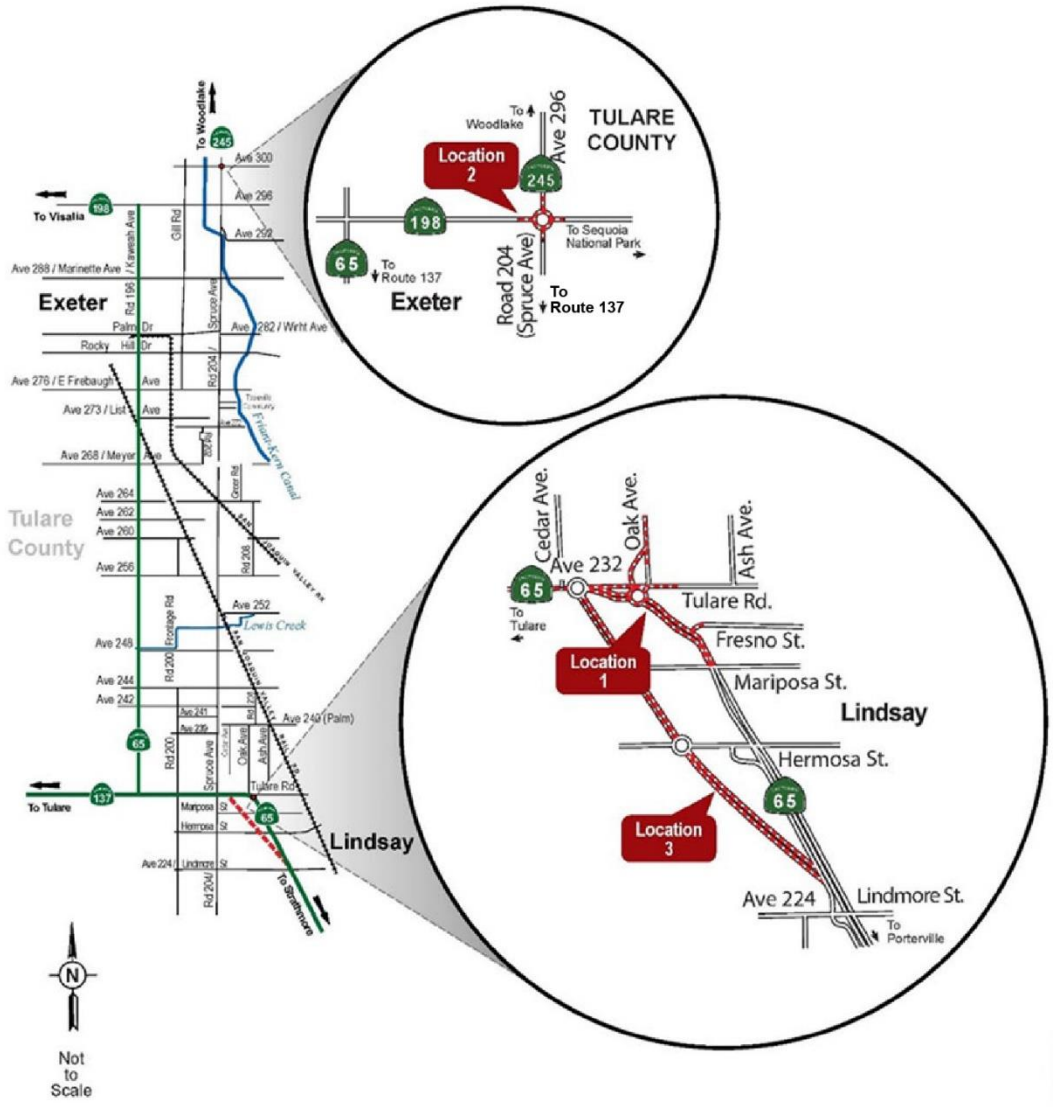


Figure 1-2 Project Location Map



1.1.1 Project History and Background

In 2000, Caltrans approved a Project Study Report that evaluated transportation alternatives for the State Route 65 corridor between Lindsay and Exeter. In addition, the Tulare County Association of Governments had a major investment study completed to evaluate alternative transportation options for the region. The major investment study process involved extensive public meetings to discuss and evaluate transportation alternatives, including the State Route 65 corridor between Lindsay and Exeter.

In 2009, Caltrans in cooperation with the Tulare County Association of Governments proposed the “Tulare 2-Lane Expressway” project. The project proposed to realign State Route 65 in Tulare County from Hermosa Street (post mile 29.5) in the city of Lindsay to State Route 245 northeast of the city of Exeter or about one-half mile (post mile 0.5) north of State Route 198 (post mile R38.6). The total length of the project was 9.3 miles and proposed construction of a two-lane expressway (8.8 miles built on a four-lane right-of-way) that included frontage roads, railroad overhead crossings, new bridges, controlled access, and utility relocations. The project would also have provided about 0.5 mile of transition improvements on State Route 245 starting at State Route 198.

Two build alternatives and a No-Build Alternative were considered in the 2012 Draft Environmental Impact Report/Environmental Assessment and 2013 Supplemental Draft Environmental Impact Report/Environmental Assessment. Both build alternatives proposed bypassing the city of Exeter and realigning State Route 65 to the east, closer to Spruce Avenue. Both new alignments would have paralleled Spruce Avenue, and segments of Spruce Avenue would have become frontage road.

In 2016, Caltrans in cooperation with the Tulare County Association of Governments withdrew from further consideration the build alternatives proposed in the 2012 Draft Environmental Impact Report/Environmental Assessment and 2013 Supplemental Draft Environmental Impact Report/Environmental Assessment.

Caltrans and the Tulare County Association of Governments considered making several operational improvements near the same alignment as the Tulare 2-Lane Expressway project. A meeting took place on March 30, 2016 with the Tulare County Association of Governments, Tulare County, City of Lindsay and Caltrans staff at the Tulare County Association of Governments office in Visalia to discuss and initiate potential operational improvement projects that would replace the previous Lindsay to Exeter Expressway project.

The discussions were focused mainly on how to improve the current traffic circulation at two intersections, primarily on the State Route 65 and Tulare Road intersection in Lindsay and the State Route 198, State Route 245, and Spruce Avenue intersection northeast of Exeter. The City of Lindsay wanted to eliminate the current configuration at the State Route 65 and Tulare Road intersection due to the non-continuous flow of traffic on the eastbound and westbound directions of Tulare Road. Tulare Road is a heavily travelled east-west arterial for local traffic. A roundabout-controlled intersection was proposed at this location and designated as Location 1.

The intersection at State Route 198, State Route 245 and Spruce Avenue was reported by the Tulare County Association of Governments as having an operational deficiency and experiencing long wait times for motorists traveling northbound on Spruce Avenue to westbound on State Route 198. This intersection location was designated as Location 2.

The Tulare County Association of Governments also determined during the meeting that a portion of the State Route 65 realignment from Lindmore Street to Tulare Road covered by the original Tulare 2-Lane Expressway project should still be actively pursued for future development in the area. This improvement was designated as Location 3.

Staff from the Tulare County Association of Governments, Tulare County, City of Lindsay and Caltrans decided during this meeting that the proposed roundabout at Location 1 would be the first project to go into construction. The design and construction of Locations 2 and 3 would depend on the availability of funds.

Several meetings took place after the meeting on March 30, 2016 to comment on the initial design presented by Caltrans for each location. Caltrans reinitiated traffic studies and environmental studies for the project area in 2016 and 2018 respectively.

1.1.2 Overview of State Routes 65, 198, 245, and Spruce Avenue in the Project Area

State Route 65

State Route 65 follows a general north-northeast alignment from its beginning at State Route 99 in Bakersfield until it reaches the project area. State Route 65 in Lindsay transitions from a four-lane expressway to a two-lane divided highway just south of Mariposa Avenue. State Route 65 continues to the north for about one-quarter mile before turning to the west and merging with east-west State Route 137. State Route 65 continues west for about one and one-half miles before turning north and continuing to the city of Exeter. State Route 65 passes through the eastern portion of Exeter and ends at its intersection with State Route 198 east of the city of Visalia.

State Route 198

State Route 198 follows an east-west alignment through the project area. State Route 198 intersects State Route 245 and Spruce Avenue about two and one-half miles northeast of Exeter. State Route 198 transitions from a four-lane expressway to a two-lane divided highway just east of the intersection.

State Route 245

State Route 245 follows a north-south alignment from its beginning at State Route 198 through the city of Woodlake before meandering through the Sierra Nevada foothills. State Route 245 is a two-lane undivided highway on the north side of the intersection with State Route 198. The existing lanes are 12 feet wide with paved shoulders that range from 0 to 2 feet wide. The existing intersection with State Route 198 is signalized and operated at a push-pull phase for the northbound and southbound directions.

Spruce Avenue

Spruce Avenue follows a north-south alignment before intersecting with State Route 198 and State Route 245. Spruce Avenue is a two-lane divided road with 12-foot-wide travel lanes with paved shoulders that range from 0 to 2 feet wide. Spruce Avenue is often used as an alternate to State Route 65 to bypass traffic flow interruptions in Exeter.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of this project is to improve traffic flow, address current and future traffic operational needs, and alleviate congestion.

1.2.2 Need

Traffic projections for the project limits show an increase in traffic volume over time, which will result in longer motorist delays, excessive congestion and queuing (long line of vehicles) at the existing intersections within the project limits, and potential traffic backups onto the State Route 65 mainline in Lindsay. All three project locations would have independent utility and logical termini.

Traffic volume and quality of traffic flow are used to analyze freeway operation and related congestion issues:

- Traffic volumes are represented as average annual daily traffic counts, which are the average number of vehicles that pass a given point within a 24-hour period.
- Quality of traffic flow is represented as Level of Service (also known as LOS). Level of Service ranges from A to F. Level of Service "A" indicates free-flowing traffic, while Level of Service "F" indicates gridlock and stop-and-go conditions.
- A traffic analysis was performed for existing conditions (2016), implementation years (2026-2036) and design-year conditions (2046-2056). Existing conditions (2016) traffic data for Location 3 is not available because the project would be on a new alignment, only implementation-year (2036) and design-year (2056) are available at Location 3.

Traffic Volumes

Tables 1-1 and 1-2 show existing and future traffic volumes as average daily traffic. Table 1-3 shows future traffic volumes as average daily traffic. Increases in traffic volume at the project locations will cause longer delays and long queues at the existing intersections and cause a potential overflow of traffic onto the highway mainline.

Table 1-1 Existing and Future Travel Volumes for Location 1

Year	Total Average Daily Traffic Counts
2016	23,330
2026	28,000
2046	40,000

Source: Caltrans Updated Traffic Operations Analysis 2019

Table 1-2 Existing and Future Travel Volumes for Location 2

Year	Total Average Daily Traffic Counts
2016	26,533
2028	32,600
2048	45,600

Source: Caltrans Updated Traffic Operations Analysis 2019

Table 1-3 Future Travel Volumes for Location 3

Year	Total Average Daily Traffic Counts
2036	33,500
2056	47,500

Source: Caltrans Updated Traffic Operational Analysis, 2019

Level of Service

Highway traffic flow is defined in terms of Level of Service. For highways, there are six defined Levels of Service, ranging from Level of Service A to Level of Service F. Level of Service A represents free traffic flow with low traffic volumes and high speeds. Level of Service F results in forced flow operations at low speeds due to traffic volumes that exceed the capacity of the facility. As shown earlier in Tables 1-1 and 1-2, future average daily traffic will increase between existing (2016) and future No-Build years 2046 and 2048. Table 1-3 shows the future average daily traffic increasing in the No-Build years 2036 and 2056. Level of Service will decrease or will not improve as shown in Tables 1-4 through 1-6 below.

Table 1-4 Future Level of Service for Location 1

Year	Level of Service Morning/Evening
2026	D/E
2046	F/F

Source: Caltrans Updated Traffic Operational Analysis 2019

Table 1-5 Future Level of Service for Location 2

Year	Level of Service Morning/Evening
2028	F/F
2048	F/F

Source: Caltrans Updated Traffic Operational Analysis 2019

Table 1-6 Future Level of Service for Location 3

Year	Level of Service Morning/Evening
2036	D/D
2056	F/F

Source: Caltrans Updated Traffic Operational Analysis 2019

Existing Roadway

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

The Tulare Road alignment that connects to State Route 65 in a curve would be eliminated and improve the existing east-west connection. The City of Lindsay categorizes the Tulare Road corridor in this area as a heavily traveled arterial. The current stop-and-go traffic at this area does not support the function of Tulare Road as a heavily traveled arterial. The proposed project would improve traffic circulation and access to State Route 65 from the eastern portion of the city.

Location 2 – State Route 198/State Route 245 and Spruce Avenue Roundabout Operational Improvement

The signal timing at the intersection causes the intersection to operate less efficiently. Northbound motorists traveling on Spruce Avenue to westbound State Route 198 are experiencing a long delay due to high volumes of left-turn traffic. There is a need for capacity improvements at the intersection due to lack of left-turn channelization for both the northbound and southbound approaches to the intersection. The proposed project would improve the intersection operations and greatly reduce the overall intersection delay.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road with Roundabout Intersections at Hermosa Street and Tulare Road

A growing use of the local street circulation system for regional trips has led to the congestion of many streets connected to State Route 65 and has affected intersections in the area.

The existing intersection of State Route 65 at Hermosa Street is aligned at a skewed angle, which poses challenges to drivers. The proposed improvement would eliminate some of these challenges. It is anticipated that conditions at this intersection would also deteriorate in future years due to growth in the area and imbalance of traffic volumes at the Hermosa Street intersection.

The traffic volume at the Tulare Road intersection is greatly imbalanced at the intersection, with State Route 65 having much higher demand, especially in the northbound movement. The proposed improvement would provide better traffic circulation in the area for many years in the future.

1.3 Project Description

This section describes the proposed action and the Build and No-Build Alternatives developed to meet the purpose and need of the project while avoiding/minimizing environmental impacts. Caltrans in cooperation with the Tulare County Association of Governments is proposing several operational improvements on State Route 65, State Route 198 and State Route 245 in Tulare County. The improvements include construction of a roundabout at the junction of State Route 198 and State Route 245 (post miles 19.5 to 20.0, 0.0 to 0.2), construction of a roundabout on State Route 65 (post miles 29.7 to R30.3) near Tulare Road in the City of Lindsay, and a realignment of State Route 65 (post miles 29.0 to R30.4) near Lindsay from Avenue 224 (Lindmore Street) to just east of Cedar Avenue, which would include construction of two roundabouts. Figures 1-1 and 1-2 show the project vicinity and location maps.

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

The build alternative at Location 1 would construct a roundabout just south of the existing State Route 65 alignment near Lindsay. Tulare Road would be realigned and connect directly into the roundabout. Oak Avenue would also be realigned and connect directly into the roundabout. The roundabout would have a two-lane approach into the roundabout for eastbound and northbound traffic. The westbound and the southbound traffic would have a single-lane approach into the roundabout.

Location 2 – State Route 198/State Route 245 and Spruce Avenue Roundabout Operational Improvement

The build alternative at Location 2 would construct a roundabout at the State Route 198, State Route 245 and Spruce Avenue intersection. The roundabout would have a two-lane approach into the roundabout for eastbound, westbound, and northbound traffic. Southbound traffic would have a single-lane approach into the roundabout.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road with Roundabout Intersections at Hermosa Street and Tulare Road

The build alternative at Location 3 would construct a four-lane expressway on a new alignment to the west of the current State Route 65 location near Lindsay. The new alignment would begin just north of the State Route 65 and

Lindmore Street intersection and continue northbound until it reconnects with State Route 65 about one-quarter mile east of the State Route 65 and Spruce Avenue intersection.

Two roundabouts would be constructed on the new alignment. Roundabouts would be constructed at Hermosa Street and the north end of the new alignment where it reconnects with State Route 65.

The existing portion of State Route 65 would be reconstructed and converted to a two-lane frontage road and would then be connected to the hybrid roundabout control at Location 1, which is assumed to be done by the time this realignment is completed. Due to the proximity of Cedar Avenue to the proposed roundabout control at Tulare Road, a new two-lane frontage road connection would be constructed to provide access to Oak Avenue. The existing signal at the State Route 65 and Hermosa Street intersection would be modified.

1.4 Project Alternatives

Considering the present and the projected future traffic conditions, safety and other local needs and constraints, the following alternatives in terms of locations have been developed and analyzed based on both constructability and cost effectiveness.

1.4.1 Build Alternatives

Three build alternatives (Alternative 1.B, Alternative 2.B and Alternative 3.B) are being considered.

Common Design Features of the Build Alternatives

The following are common design features of the build alternatives (Alternative 1.B, Alternative 2.B and Alternative 3.B):

- Construction of roundabouts at Location 1, Location 2 and Location 3 to maximize the efficiency of traffic flow in the project area.
- Pedestrian crossings and sidewalks would be provided at the Location 1, Location 2 and Location 3 roundabout.
- Lighting facilities for traffic and pedestrian safety would be provided at the Location 1, Location 2 and Location 3 roundabouts.
- The center island of the roundabouts at Locations 1 and 2 would be 180 feet in diameter and 200 feet in diameter at Location 3.
- The roundabouts at Location 1, Location 2 and Location 3 would be designed and constructed to accommodate the movement of large vehicles.

- A Class II Bike Lane facility would be provided at Location 1, Location 2 and Location 3.

This project contains a number of standardized project measures that are used 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.

Unique Features of the Build Alternatives

Alternative 1.B

- Partial acquisition of new right-of-way would be required from 20 parcels.
- Full acquisition of 3 parcels would be required.
- One single-family residence and two garages would be displaced and require assistance under the Relocation Assistance Program.
- Tulare Road and Oak Avenue would be connected directly to State Route 65.
- The roundabout would have two-lanes at the eastbound and northbound approaches.
- The roundabout would have a single-lane at the westbound and southbound approaches.

Alternative 2.B

- Partial acquisition of new right-of-way would be required from 5 parcels.
- The roundabout would have two-lanes at the eastbound, westbound and northbound approaches.
- The roundabout would have a single-lane at the southbound approach.

Alternative 3.B

- Partial acquisition of new right-of-way would be required from 23 parcels.
- Full acquisition of 1 parcel would be required.
- One single-family residence would be displaced and require assistance under the Relocation Assistance Program.
- A 30-foot utility easement would be required on the east side of the proposed alignment.
- The existing portion of State Route 65 would be reconstructed and converted to a two-lane frontage road that would be connected to the roundabout control at Location 1, which is assumed to be open to traffic by the time this realignment is completed.

- Due to the proximity of Cedar Avenue to the proposed roundabout control at Tulare Road, a new two-lane frontage road connection would be constructed to provide access to Oak Avenue.
- The existing signal at State Route 65 and Hermosa Street would be modified.

1.4.2 No-Build (No-Action) Alternative

Three No-Build (No Action) Alternatives (Alternative 1.A, Alternative 2.A and Alternative 3.A) are being considered. The No-Build Alternatives consist of those transportation projects that are already planned for construction by or before Open to Traffic Year 2026 for Location 1, Open to Traffic Year 2028 for Location 2, and Open to Traffic Year 2036 For Location 3. Consequently, the No-Build Alternatives represent future travel conditions near the City of Lindsay and City of Exeter area without the Lindsay Route 65 and Route 198/245 Operational Improvements project.

The No-Build Alternatives do not meet the purpose and need for the project. No improvements would be made to State Route 65, State Route 198 or State Route 245. No measures would be taken to improve traffic flow, address operational deficiencies or alleviate traffic congestion.

Deterioration in level of service would be reasonably expected to occur in the foreseeable future with the No-Build Alternatives. Air quality within the project area would worsen because traffic congestion would not be addressed.

1.5 Comparison of Alternatives

When alternatives are evaluated, the purpose and need of the project, as well as the locations where environmental impacts could occur, need to be considered.

The build alternatives would satisfy the purpose of the project because they would improve traffic flow, address current and future traffic operational needs, and alleviate congestion. Although the build alternatives would result in changes to existing conditions, the changes will not be substantial with incorporation of avoidance, minimization, and mitigation measures. Chapter 2 of this environmental document provides information on the proposed project's potential environmental impacts.

The No-Build alternatives would not satisfy the purpose or need of the project because they would not address the projected increases in traffic volume over time, which would result in longer motorist delays, excessive congestion and queuing (long line of vehicles) at the existing intersections within the project limits, and potential traffic backups onto the State Route 65 mainline in Lindsay. The No-Build Alternatives would not result in any construction or

changes to existing conditions. Therefore, it would not result in any temporary, permanent, or indirect impacts to environmental resources. With the No-Build Alternatives, longer motorist delays, excessive congestion and queuing (long line of vehicles) at the existing intersections within the project limits would be expected.

1.6 Alternatives Considered but Eliminated from Further Discussion

A build alternative was considered at Location 2 that proposed reconstructing the State Route 198, State Route 245 and Spruce Avenue intersection. The proposed alternative would have widened Spruce Avenue and constructed two northbound turn lanes. State Route 245 would have been widened to accommodate a southbound left-turn lane. The existing storage length on the east and west legs of State Route 198 would have been extended along with the existing right-turn storage length on eastbound State Route 198.

In July 2019, the Caltrans Traffic Operations team completed an Intersection Control Evaluation for several intersections in the project area. The evaluation included the comparison between the widening/signal modification intersection mentioned above with the proposed roundabout-controlled intersection. The results of the comparison revealed that the roundabout-controlled intersection outperforms both the No-Build Alternative and the widening/signal alternative in all performance measures including: level of service, project cost, intersection delay, traffic delay cost and projected savings in collision costs.

1.7 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications (known as PLACs) are required for project construction:

Agency	Permit/Approval	Status
San Joaquin Valley Unified Air Pollution Control District	National Emissions Standards for Hazardous Air Pollutants Notification	Contractor will be required to notify the air district 10 days prior to start of construction

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

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

- Visual/Aesthetics—The project will not result in noticeable changes to the visual environment. (Visual Impact Assessment–Update, May 12, 2020)
- Cultural Resources—No Historic Properties Affected by this project and No Historic Resources are present within the project area. (Second Supplemental Historic Property Survey Report, October 2019)
- Coastal Zone—The project is not in the coastal zone (Field visit, February 12, 2019)
- Wild and Scenic Rivers—There are no wild or scenic rivers in the project area. (National Wild and Scenic River Systems Interactive Map, March 2020)
- Timberlands—No timberlands are present within or adjacent to the proposed project area. (Field visit, February 12, 2019)
- Community Character and Cohesion—An established community will not be affected due to the nature of the proposed project, so community character and cohesion will not be affected. (Field Visit, February 12, 2019)
- Environmental Justice—No minority or low-income populations will be adversely affected by the project. Therefore, the project is not subject to the provisions of Executive Order 12898. (2010 Census Data; Field visit, February 12, 2019)
- Hydrology and Floodplain—This project is not in the 100-year base floodplain. (Updated Location Hydraulic Study, June 2020)
- Geology/Soils/Seismic/Topography—No project impacts related to geology, soils, seismicity or topography are anticipated. There are no major topographic or geologic features located within the project area. (Field Visit, February 12, 2019), (Cal OES, Governor's Office of Emergency Services, My Hazards interactive map January 2020), (California Geological Survey, Seismic Hazard Zones and Alquist-Priolo Earthquake Fault Zone Interactive Map January 2020)

- Mineral Resources—The project is not located in an area that is classified as a Mineral Resource Zone according to the State Geologist. (California Department of Conservation Mineral Land Classification Interactive Map, February 2020)
- Paleontological Resources—Excavation of the project would require shallow (not more than 6 feet) excavation in high and moderate sensitivity Modesto and Riverbank Formations. Significant paleontological resources are not expected to be encountered. (Updated Paleontological Evaluation Report, June 2020)
- Public Services (Parks and Schools)—There is one school in the immediate vicinity of the project. Jefferson Elementary School at 333 North Westwood Avenue is at the east edge of the project. The school would not be impacted by project activities.

  The nearest park, Lindsay Olive Bowl Park, is about 0.5 mile east of the project area. The project will not affect access to the school or park. (Field Visit, February 12, 2019)
- Fisheries Resources—The project is outside of National Marine Fisheries Service jurisdiction; therefore, a National Marine Fisheries species list is not required, and no effect to National Marine Fisheries Service species are anticipated. (Natural Environment Study Minimal Impacts, June 2020)
- Wetlands and Other Waters—No wetlands or other waters would be impacted by project activities. (Natural Environment Study Minimal Impacts, June 2020)
- Wildfire—The project is not within or near a very high fire hazard severity zone. (CAL FIRE online Fire Hazard Severity Zones Maps)

2.1 Human Environment

2.1.1 Existing and Future Land Use

The existing and future land use discussion was prepared using information from the Tulare County General Plan Update 2030, the City of Lindsay General Plan, field surveys, public information meeting comments, and online mapping resources.

Affected Environment

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

Existing Land Use

Two commercial properties including an automotive dealership and an automotive body shop sit at the southeast corner of the State Route 65 and Fresno Street intersection. A self-storage facility is at the northeast corner of the State Route 65 and Fresno Street intersection. Vacant properties with

billboard advertising sit on the east side of State Route 65 between Fresno Street and Tulare Road. Single-family residential properties are east of Oak Avenue and north of Tulare Road. Property on the west side of State Route 65 in the project area is entirely farmland.

Properties next to the east side of State Route 65 at Location 1 are zoned as "highway commercial"; the properties on the west side are zoned as "highway commercial reserve," including the area where existing State Route 65 turns to the west between Oak and Cedar avenues. The area north of Tulare Road is zoned for "low- and medium-density" residential development.

Future Land Use

Future land use in this area is anticipated to be commercial properties that will serve the traveling public along the State Route 65 corridor as well as residents of Lindsay and the surrounding areas. A proposed residential development of about 30 single-family homes just north of Tulare Road next to the east side of Oak Avenue is in the planning stage but has not been constructed.

Location 2 – State Route 198/State Route 245 and Spruce Avenue Roundabout Operational Improvement

Existing Land Use

According to the Tulare County General Plan Update 2030, land use at this location is designated "valley agricultural." The project area is about 2.5 miles northeast of the city of Exeter and was the northern end of the Tulare 2-Lane Expressway project that was previously discussed in Chapter 1. The project area is bordered on all sides by agricultural lands and is within the jurisdiction of Tulare County. The project area falls outside of the City of Exeter Sphere of Influence, Urban Area Boundary, and Urban Development Boundary.

Future Land Use

As mentioned above, lands next to the project area are within the jurisdiction of Tulare County and are designated "valley agricultural." Land use policies in the Tulare County General Plan Update 2030 restrict activities other than intensive agriculture for lands with the "valley agricultural" designation. Land use activities near the project area are not anticipated to change in the foreseeable future.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road with Roundabout intersections at Hermosa Street and Tulare Road

Existing Land Use

Properties west and south of the State Route 65 and Hermosa Street intersection include a gas station, large truck repair facility, irrigation supply and an automotive body shop. There are a few single-family residential

properties mixed into the commercial properties next to the South Fremont Drive frontage road that serves this area. The remaining land use in this area is agricultural.

Properties northwest of the intersection are farmlands with a small number of scattered residences.

Properties northeast of the intersection include farmlands, a hotel, restaurant, gas station and fast-food services.

Properties southeast of the intersection include a large commercial development with fast-food and retail outlets, two apartment complexes, a residence and farmlands.

Properties next to the west side of State Route 65 at Location 3 are zoned as "highway commercial" and "highway commercial reserve." Properties on the east side of State Route 65 are zoned as "highway commercial" and "medium-density residential."

Future Land Use

Future land use in this area is anticipated to be commercial properties that will serve the traveling public along the State Route 65 corridor as well as residents of Lindsay and the surrounding areas. Two projects are in the planning stages near Location 3, including a Family Dollar Store near the intersection of State Route 65 and Mariposa Street and a sports-complex at the intersection of State Route 65 and Hermosa Street. These projects are in the planning stages and have not been approved for construction.

Environmental Consequences

Alternative 1.B

The build alternative at Location 1 would cross the Urban Area Boundary and the Urban Development Boundary of Lindsay. The build alternative involves changes to an existing transportation facility but would not add new access points and would not increase capacity. The surrounding land uses would not change because of the project.

Alternative 2.B

The build alternative at Location 2 involves changes to an existing transportation facility but would not change or add new access points and would not increase capacity. The surrounding land uses are agricultural and would not change because of the project. No changes to land use and development density are anticipated.

Alternative 3.B

The build alternative at Location 3 would cross the Urban Area Boundary and the Urban Development Boundary of Lindsay. The build alternative involves

changes to an existing transportation facility but would not add new access points. Lands between the proposed realignment and existing State Route 65 could provide opportunities for commercial development because of project activities. As mentioned previously, current zoning in this area is designated for “highway commercial” and “highway commercial reserve” use.

Avoidance, Minimization, and/or Mitigation Measures

The project would not result in any changes to the land use designations. No avoidance, minimization, or mitigation is required.

2.1.2 Consistency with State, Regional, and Local Plans and Programs

Affected Environment

Land use and zoning are guided by general plans and other agency plans for the cities and the unincorporated areas of the project corridor. The following plans contain guidelines for developing the study area: Tulare County General Plan, City of Lindsay General Plan, and the Tulare County Regional Transportation Plan.

Tulare County General Plan

The Tulare County General Plan, originally adopted in 1964, was most recently updated in August 2012. According to the general plan, the safe and efficient transport of people and goods within the county is of critical importance to the well-being of residents and the economic viability of the county; and the mobility of people and goods will continue to be one of the important issues the county has to face in the future (Transportation and Circulation Section, 2030 Update Tulare County General Plan).

City of Lindsay General Plan

The Circulation Element of the City of Lindsay General Plan describes State Route 65 as an essential link with other transportation facilities serving the region and the state.

Tulare County Regional Transportation Plan

Development of the Tulare County transportation system is guided by the Regional Transportation Plan. This plan is a 25-year planning document required by state and federal law that is comprehensively updated every four years and includes programs to better maintain, operate and expand transportation. The plan was updated in 2018 and includes the project as a realignment and operational improvements project.

Environmental Consequences

Alternative 1.B

Tulare County General Plan

The build alternative at Location 1 is consistent with the Tulare County General Plan. The build alternative would address the need for the mobility of people and goods by making operational improvements at intersections on State Route 65 near Lindsay.

City of Lindsay General Plan

The build alternative at Location 1 is consistent with the City of Lindsay General Plan. The build alternative would address the need for State Route 65 to serve as an essential link with other transportation facilities serving the region and the state. Operational Improvements on State Route 65 near Lindsay would improve traffic circulation and alleviate congestion for local and regional traffic.

Tulare County Regional Transportation Plan

The build alternative at Location 1 is consistent with the Tulare County Regional Transportation Plan. The build alternative would address the need for operational improvements at intersections on State Route 65 in Tulare County.

Alternative 2.B

Tulare County General Plan

The build alternative at Location 2 is consistent with the Tulare County General Plan. The build alternative would address the need for the mobility of people and goods by making operational improvements at the intersection of State Route 198, State Route 245 and Spruce Avenue in Tulare County.

Tulare County Regional Transportation Plan

The build alternative at Location 2 is consistent with the Tulare County Regional Transportation Plan. The build alternative would address the need for operational improvements at the intersection of State Route 198, State Route 245 and Spruce Avenue in Tulare County.

Alternative 3.B

Tulare County General Plan

The build alternative at Location 3 is consistent with the Tulare County General Plan. The build alternative would address the need for the mobility of people and goods by making operational improvements at intersections on State Route 65 near Lindsay.

City of Lindsay General Plan

The build alternative at Location 3 is consistent with the City of Lindsay General Plan. The build alternative would address the need for State Route 65 to serve as an essential link with other transportation facilities serving the region and the state. Operational Improvements on State Route 65 near Lindsay would improve traffic circulation and alleviate congestion for local and regional traffic.

Tulare County Regional Transportation Plan

The build alternative at Location 3 is consistent with the Tulare County Regional Transportation Plan. The build alternative would address the need for operational improvements at intersections on State Route 65 in Tulare County.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are required.

2.1.3 Farmland

Regulatory Setting

The National Environmental Policy Act and the Farmland Protection Policy Act (7 U.S. Code 4201-4209; and its regulations, 7 Code of Federal Regulations Part 658) require federal agencies, such as the Federal Highway Administration, to coordinate with the Natural Resources Conservation Service if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of the Farmland Protection Policy Act, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

The California Environmental Quality Act requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to discourage the early conversion of agricultural and open space lands to other uses.

Affected Environment

Tulare County is one of California's largest agricultural counties. Important Farmland—farmland classified by the California Department of Conservation's Farmland Mapping and Monitoring Program as prime farmland, farmland of statewide importance, farmland of local importance, and unique farmland—comprises 1,250,121 acres in Tulare County (US Census of Agriculture 2017). The top commodities are fruits, tree nuts, berries, milk from cows, and cattle and calves. The County's gross value from

agricultural production was $4,474,809,000 in 2017 (US Census of Agriculture 2017).

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

Farmlands at this location are citrus crops to the south of State Route 65, and vacant farmland just north of State Route 65 near Tulare Road.

Location 2 – State Route 198/245 and Spruce Avenue Roundabout Operational Improvement

Farmlands at this location are citrus crops on the northwest and northeast corners of the intersection, vacant farmland on the southwest corner of the intersection, and orchards on the southeast corner of the intersection.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road (Avenue 232) with Roundabout intersections at Hermosa Street and Tulare Road

Farmlands at this location are mainly citrus crops.

Environmental Consequences

Research and consultation with the Natural Resources Conservation Service were conducted to evaluate the possible effects of the proposed project on local farmlands. Documents reviewed included California Department of Conservation Farmland Mapping and Monitoring Program data and aerial photographs. The current Tulare County General Plans, zoning ordinances and maps were also reviewed.

The Natural Resources Conservation Service Farmland Conversion Impact Rating (see Appendix D) was completed for all three locations in September 2019. This rating determines the relative value of farmland to be converted by using a formula that weighs farmland classification, soil characteristics, irrigation, acreage, creation of non-farmable land, availability of farm services, and other factors. If the rating is more than 160 points, Caltrans may consider measures that will minimize or mitigate farmland impacts.

The Farmland Mapping and Monitoring Program designates and tracks “important farmland” in California, including four categories of agricultural land:

- Prime Farmland—Land with the best combination of physical and chemical characteristics for producing agricultural crops.
- Unique Farmland—Land other than prime farmland that has lesser quality soils that is used for production of high-value specialty crops.

- Farmland of Statewide Importance—Land that does not qualify as Prime or Unique Farmlands but is currently irrigated, is pastureland, or produces non-irrigated crops, and is important as determined by the state.
- Farmland of Local Importance—Land that does not qualify as Prime or Unique Farmlands but is currently irrigated, is pastureland, or produces non-irrigated crops, and is important as determined by the local government.

Alternative 1.B

The build alternative at Location 1 would convert 9 acres of Farmland Mapping and Monitoring Program-designated "Farmland of Statewide Importance" to nonagricultural use in addition to 0.50 acre of Farmland Mapping and Monitoring Program-designated "Prime and Unique Farmland." Also, 2.94 acres of this Farmland Mapping and Monitoring Program-designated farmland would be converted indirectly to nonagricultural use. Please see Appendix F for a copy of the Preliminary Plan at Location 1. An indirect conversion of agricultural land can occur when agricultural parcels are bisected or isolated by project activities and are no longer considered viable for agricultural activities. The Natural Resources Conservation Service conversion impact rating for this site is 97.

Alternative 2.B

The build alternative at Location 2 would convert 1.50 acres of Farmland Mapping and Monitoring Program-designated "Farmland of Statewide Importance" to nonagricultural use. No agricultural land would be converted indirectly to nonagricultural use. Please see Appendix F for a copy of the Preliminary Plan at Location 2. The Natural Resources Conservation Service conversion impact rating for this site is 103.

Alternative 3.B

The build alternative at Location 3 would convert 12 acres of Farmland Mapping and Monitoring Program-designated "Farmland of Statewide Importance" to nonagricultural use in addition to 15 acres of Farmland Mapping and Monitoring Program-designated "Prime and Unique Farmland." Also, 5.67 acres of this Farmland Mapping and Monitoring Program-designated farmland would be converted indirectly to nonagricultural use. Please see Appendix F for a copy of the Preliminary Plan at Location 3. The Natural Resources Conservation Service conversion impact rating for this site is 146.

Williamson Act

The California Land Conservation program was formulated by the State Legislature to protect the agricultural, wetland and scenic areas of the state from unnecessary or premature conversion to urban uses. In Tulare County, the program is enforced through the provisions of the Land Conservation Act

of 1965 and Sections 421 and 429 of the State Revenue and Taxation Code. Locally, the program is referred to as the Agricultural Preserve Program (http://www.co.tulare.ca.us/).

Properties under the Agricultural Reserve Program must be in agricultural or related use. The minimum size of a new Agricultural Preserve is 20 acres or 1/32 of a section, whichever is less.

Individual parcels less than 20 acres must be combined to meet the minimum size requirements. In the event a landowner has a parcel less than the minimum 20 acres and the land qualifies in terms of land use, the property owner may elect to annex to an already existing Agricultural Preserve if the parcel is adjacent or bordering their parcel (http://www.co.tulare.ca.us/).

No cancellation of any Agricultural Preserve Program contracts is expected to occur because the right-of-way needed for the project from each parcel would be partial acquisitions, and the smaller parcels can be annexed into adjacent Agricultural Preserves, according to Tulare County's Agricultural Preserve Program. Annexing smaller properties into an existing Agricultural Preserve appears to be an option property owners have already used as indicated by the number of smaller Agricultural Preserve parcels in the project area.

Alternative 1.B

The build alternative at Location 1 would not require acquisition of new right-of-way from any parcels enrolled in the Agricultural Preserve Program.

Alternative 2.B

The build alternative at Location 2 would require partial acquisition of new right-of-way from one parcel that is enrolled in the Agricultural Preserve Program. The project would require acquisition of 0.14 acre of new right-of-way from this parcel. However, the parcel is 23.6 acres, and the amount of new right-of-way required would not cause a cancellation of the Agricultural Preserve Program.

Alternative 3.B

The build alternative at Location 3 would require partial acquisition of new right-of-way from five parcels that are enrolled in the Agricultural Preserve Program. Partial acquisition of new right-of-way from these five parcels totals about 12 acres. One parcel would remain above the 20-acre minimum mentioned above after partial acquisition of new right-of-way. The remaining four parcels, three of which are all below 10 acres in size would not meet the 20-acre minimum requirement to remain in the Agricultural Preserve Program. However, these properties are all adjacent to Agricultural Preserve properties and could be annexed.

Avoidance, Minimization, and/or Mitigation Measures

The impact rating for all three locations is less than 160 points; therefore, no further avoidance, minimization or mitigation measures are necessary.

2.1.4 Growth

This section addresses the relationship between the proposed project and area growth patterns. Growth inducement is defined as the relationship between the proposed project and growth within the project area. Factors affecting growth patterns depend on a range of economic forces that can be local, statewide, or even national in scope.

Regulatory Setting

The Council on Environmental Quality regulations, which established the steps necessary to comply with the National Environmental Policy Act 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 Council on Environmental Quality regulations (40 Code of Federal Regulations 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 2030 Tulare County General Plan Update states that Urban Area Boundaries "establish areas around incorporated cities where the County and cities may coordinate plans and policies relating to street and highway construction, public utility systems, and future right of way preservation, affecting the orderly development of urban fringe areas." The General Plan Update also states that Urban Development Boundaries establish areas "delineating the area expected for urban growth over a 20-year period."

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

This project location lies within the Urban Area Boundary and the Urban Development Boundary for the City of Lindsay.

Location 2 – State Route 198/245 and Spruce Avenue Roundabout Operational Improvement

This project location lies outside of the Urban Area Boundary and Urban Development Boundary for the City of Exeter. The project is within the jurisdiction of Tulare County.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road (Avenue 232) with Roundabout intersections at Hermosa Street and Tulare Road

This project location lies within the Urban Area Boundary and the Urban Development Boundary for the City of Lindsay.

Environmental Consequences

Caltrans did a preliminary analysis to determine whether there would be potential for project-related growth. Caltrans considered the interrelated factors of accessibility, project type, project location, and growth pressure. The screening process also took into consideration the General Plans of Tulare County and the City of Lindsay.

For the following reasons, based on the first-cut screening, no further analysis is required:

Alternative 1.B

The build alternative at Location 1 would modify access to State Route 65 near Lindsay from Tulare Road. Currently, Oak Avenue intersects with Tulare Road just west of the Tulare Road intersection with State Route 65. The project would reconfigure this area, and Tulare Road and Oak Avenue would link directly into the roundabout. The access to State Route 65 would be modified for Oak Avenue and Tulare Road, but no new access points would be created. This type of project is consistent with accommodating growth and not influencing growth.

Alternative 2.B

The build alternative at Location 2 would not change access to State Route 198, State Route 245 or Spruce Avenue. The project would change the current signalized intersection into a roundabout. This type of project is consistent with accommodating growth and not influencing growth. This area is within the jurisdiction of Tulare County and is an intensive agricultural area that has strong policies that ensure planned development in these areas.

Alternative 3.B

The build alternative at Location 3 proposes to realign State Route 65 near Lindsay with access control. According to the Caltrans Highway Design Manual, access control is achieved by acquiring rights of access to the highway from adjoining property owners and by permitting arriving and exiting

only at locations determined by the state. Currently, State Route 65 is a two-lane conventional highway with access into and out of driveways, local roads, and farm roads. This project would not create new access and would limit access to the new expressway. The project is not expected to make the areas east of the new alignment any more accessible than what currently exists. The project is not being proposed to support major new unplanned development. Transportation improvements to the corridor have been on record since 1994 (2012 Caltrans Project Report). The project would help current planned land use within the city of Lindsay and Tulare County. This type of project is consistent with accommodating growth and not influencing growth.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are required.

2.1.5 Community Character and Cohesion

Regulatory Setting

The National Environmental Policy Act 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 U.S. Code 4331[b][2]). The Federal Highway Administration in its implementation of the National Environmental Policy Act (23 U.S. Code 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, 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 character and cohesion in assessing the significance of the project's effects.

Affected Environment

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

The project lies near the northwest corner of the city of Lindsay. A portion of the project lies within the city limits, and another portion is farmland located outside the city limits. The City of Lindsay was incorporated in 1910 and has a primary economy based on agricultural production and processing. This is a cohesive community with public facilities and services overseen by the city

council and administered by various city departments, such as City Services, Planning and Economic Development, Public Safety and Human Resources.

Location 2 – State Route 198/245 and Spruce Avenue Roundabout Operational Improvement

The project is about 2.5 miles northeast of the city of Exeter in an unincorporated area within Tulare County. The area is surrounded by farmland and retains a rural character.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road (Avenue 232) with Roundabout intersections at Hermosa Street and Tulare Road

The project is just west of the City of Lindsay. A portion of the project would cross the city limits just north of Hermosa Street. The City of Lindsay was incorporated in 1910 and has a primary economy based on agricultural production and processing. This is a cohesive community with public facilities and services overseen by the city council and administered by various city departments, such as City Services, Planning and Economic Development, Public Safety and Human Resources.

Environmental Consequences

Alternative 1.B

The build alternative at Location 1 would require State Route 65 to shift south into adjacent farmland to allow construction of the proposed roundabout at Location 1. This area is mainly farmland that lies outside of the city limits. The project would not disrupt or destroy human-made resources or result in substantial physical impacts to the community. The availability of public facilities and services would remain intact.

Alternative 2.B

The build alternative at Location 2 would not disrupt or destroy human-made resources or result in substantial physical impacts to the community of Exeter or other nearby communities. The rural character of the project area would remain after construction of the roundabout at Location 2.

Alternative 3.B

The build alternative at Location 3 would require realigning State Route 65 to the west of its current location. Because the project would bypass the city of Lindsay, the expectation is the project would enhance community cohesion by removing interregional truck and automobile traffic, leaving the existing roadway to slower moving local traffic. The project would not result in substantial physical impacts to the community. The project is on the city outskirts and would not destroy or disrupt human-made resources, existing community cohesion, and the availability of public facilities and services.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are required.

2.1.6 Relocations and Real Property Acquisition

Regulatory Setting

The Caltrans Relocation Assistance Program 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 Part 24. The purpose of the Relocation Assistance Program 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 Relocation Assistance Program.

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 the Caltrans Title VI Policy Statement.

Affected Environment

The information used in this discussion is gathered from the Caltrans Right-of-Way Data Sheets completed in February 2019.

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

Acquisition of new right-of-way would be required along the west edge of State Route 65 in the adjacent farmland near the curve. Commercial properties along the east side of State Route 65 between Fresno Street and Tulare Road would be affected, and residential properties next to Tulare Road and Oak Avenue just north of the curve would be affected. The acquisition of new right-of-way at Location 1 is distinct from the acquisition of new right-of-way at Location 2 and Location 3.

Location 2 – State Route 198/245 and Spruce Avenue Roundabout Operational Improvement

Partial acquisition of new right-of-way would be required at the four corners of the intersection to allow for construction of the roundabout. These properties are all agricultural properties. The acquisition of new right-of-way at Location 2 is distinct from the acquisition of new right-of-way at Location 1 and Location 3.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road (Avenue 232) with Roundabout intersections at Hermosa Street and Tulare Road

Acquisition of new right-of-way would be required from farmland west of the existing State Route 65 alignment just west of Lindsay. Additional right-of-way would be required from commercial properties near the intersection of State Route 65 and Hermosa Street, and residential properties near Hermosa Street and Mariposa Street on the proposed alignment. The acquisition of new right-of-way at Location 3 is distinct from the acquisition of new right-of-way at Location 1 and Location 2.

A 30-foot utility easement would be required on the east side of the new alignment. Agricultural, commercial and residential properties would be affected by the easement.

Environmental Consequences

Alternative 1.B

The build alternative at Location 1 would require partial acquisition of new right-of-way from 20 parcels and full acquisition of three parcels. The total acreage of new right-of-way that would be required is about 9.9 acres. One single-family home and two garages would be acquired and require assistance under the Relocation Assistance Program. The new right-of-way that would be required from the parcels at Alternative 1.B is shown below in Table 2-1.

Table 2-1 Alternative 1.B Right-of-Way Acquisition

Assessor's Parcel Number	Right-of-Way (acres)
199-270-003	0.34
199-260-002	0.07
199-260-001	0.58
119-100-052 (Full Acquisition)	1.96
199-080-003	2.67
199-080-002	2.00
199-050-067	0.19
199-050-065	1.15
199-050-055	0.13
199-050-056 (Full Acquisition)	0.04
199-050-039 (Full Acquisition)	0.06

Assessor's Parcel Number	Right-of-Way (acres)
199-240-009	0.04
199-240-010	0.16
199-250-029	0.01
199-250-028	0.01
199-250-027	0.02
199-100-020	0.02
199-100-019	0.02
199-100-016	0.05
199-260-003	0.14
199-260-004	0.05
199-260-005	0.06
199-260-006	0.15

Source: Caltrans Updated Right-of-Way Data Sheet, February 2019

Alternative 2.B

The build alternative at Location 2 would require partial acquisition of new right-of-way from five parcels, no full acquisitions are anticipated. The total acreage of new right-of-way that would be required is about 1.3 acres. The new right-of-way that would be required from the parcels at Alternative 2.B is shown in Table 2-2.

Table 2-2 Alternative 2.B Right-of-Way Acquisition

Assessor's Parcel Number	Right-of-Way (acres)
112-200-008	0.23
112-210-005	0.14
112-140-012	0.05
112-140-013	0.25
112-150-022	0.60

Source: Caltrans Updated Right-of-Way Data Sheet, February 2019

Alternative 3.B

The build alternative at Location 3 would require partial acquisition of new right-of-way from 23 parcels and full acquisition of one parcel. The total acreage of new right-of-way that would be required is about 28.6 acres. One single-family home would be acquired and require assistance under the

Relocation Assistance Program. The new right-of-way that would be required from the parcels at Alternative 3.B is shown below in Table 2-3.

Table 2-3 Alternative 3.B Right-of-Way Acquisition

Assessor's Parcel Number	Right-of-Way (acres)
199-210-013	0.11
199-210-012	3.30
199-210-052	3.58
199-210-053	2.36
199-210-016 (Full Acquisition)	2.32
199-110-004	0.42
199-090-005	1.20
199-090-004	2.54
199-090-006	0.21
199-080-006	3.28
199-080-002	3.09
199-080-009	0.01
199-050-067	0.46
199-050-001	0.18
199-050-029	1.03
199-050-055	0.90
199-280-003	2.69
199-270-003	0.30
199-210-053	0.43
199-210-071	0.04
199-210-072	0.01
199-210-051	0.01
199-210-059	0.10
199-080-008	0.03

Source: Caltrans Updated Right-of-Way Data Sheet, February 2019

Avoidance, Minimization, and/or Mitigation Measures

All activities would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended (see Appendix C).

2.1.7 Utilities and Emergency Services

Affected Environment

The information used in this discussion is gathered from the Caltrans Right-of-Way Data Sheets completed in February 2019.

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout

Operational Improvement

Utilities

Utilities in the project area are owned and administered by several different entities, including Southern California Edison, Lindmore Irrigation District and the City of Lindsay. Types of utilities in the project area include overhead power lines, farmland irrigation facilities and underground utilities.

Emergency Services

Police and fire services for the City of Lindsay are provided through the City of Lindsay Public Safety Department. Ambulance services for the city of Lindsay and the surrounding area are provided by American Ambulance of Visalia. The Tulare County Sheriff's Department provides public protection and criminal investigations that occur within the unincorporated areas of Tulare County. The closest sub-stations are in Visalia and Porterville. Tulare County Fire Station Number 15 serves the project area and sits about 1.2 miles west of the project site. The California Highway Patrol has specific jurisdiction over State Route 65 and all public roads in unincorporated parts of the county.

Location 2 – State Route 198/245 and Spruce Avenue Roundabout

Operational Improvement

Utilities

Utilities in the project area are owned and administered by several different entities, including Southern California Edison, AT&T and the Exeter Irrigation District. Types of utilities in the project area include overhead power lines, farmland irrigation facilities and underground utilities.

Emergency Services

Ambulance services for the project area are provided by American Ambulance of Visalia. The Tulare County Sheriff's Department provides public protection and criminal investigations that occur within the unincorporated areas of Tulare County. The closest sub-stations are in Visalia

and Porterville. Tulare County Fire Station Number 11 serves the project area and sits about 2.4 miles southwest of the project site in the city of Exeter. The California Highway Patrol has specific jurisdiction over State Route 198, State Route 245 and all public roads in unincorporated parts of the county.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road (Avenue 232) with Roundabout intersections at Hermosa Street and Tulare Road

Utilities

Utilities in the project area are owned and administered by several different entities, including Southern California Edison, Lindmore Irrigation District and the City of Lindsay. Types of utilities in the project area include overhead power lines, farmland irrigation facilities and underground utilities.

Emergency Services

Police and fire services for the City of Lindsay are provided through the City of Lindsay Public Safety Department. Ambulance services for the city of Lindsay and the surrounding area are provided by American Ambulance of Visalia. The Tulare County Sheriff's Department provides public protection and criminal investigations that occur within the unincorporated areas of Tulare County. Tulare County Fire Station Number 15 serves the project area and sits about 1.2 miles west of the project site. The California Highway Patrol has specific jurisdiction over State Route 65 and all public roads in unincorporated parts of the county.

Environmental Consequences

Alternative 1.B

Utilities

Several parcels that would be acquired for project construction have above-ground and underground utilities present that would have to be moved.

Emergency Services

During construction, fire protection, law enforcement, emergency, and other public services may be detoured to local roads but would be given priority access. Upon completion of the project, emergency response times are expected to improve.

Alternative 2.B

Utilities

About 14 power poles would need to be relocated. Most of these poles are outside of the state's right-of-way. Two wells, irrigation pipes and an AT&T service pole would also be affected.

Emergency Services

During construction, fire protection, law enforcement, emergency, and other public services may be detoured to local roads but would be given priority access. Upon completion of the project, emergency response times are expected to improve.

Alternative 3.B

Utilities

About 32 power poles would need to be relocated. Most of the power poles are located outside of the state's right-of-way.

Emergency Services

During construction, fire protection, law enforcement, emergency, and other public services may be detoured to local roads but would be given priority access. Upon completion of the project, emergency response times are expected to improve.

Avoidance, Minimization, and/or Mitigation Measures

During the design phase of the project, a more detailed study would be conducted to determine the necessary relocation of utilities. Caltrans would meet with the effected utilities to coordinate the details for relocations and easements to avoid or minimize any interruption in service.

A detailed traffic management plan will be developed during the Plans, Specifications, and Estimates phase of the project to minimize delays and maximize safety during construction. The traffic management plan may include, but is not limited to, the following:

- Release of information through brochures and mailers, press releases and media alerts, and planned lane closure notices from the Caltrans website.
- Use of portable changeable message signs.
- Incident management through the Construction Zone Enhancement Enforcement Program (also known as COZEEP) and the transportation management plan.

The Construction Zone Enhancement Enforcement Program is a program that uses California Highway Patrol officers during construction to improve the safety of construction crews and the motoring public. The officers may be used for traffic control and provide needed emergency response support services. Caltrans coordinates and manages road user information such as identifying the fixed changeable message signs and highway advisory radio on the state highway system that will be used during construction.

2.1.8 Traffic and Transportation/Pedestrian and Bicycle Facilities

Regulatory Setting

Caltrans, as assigned by the Federal Highway Administration, 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 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 issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the U.S. Department of Transportation regulations (49 Code of Federal Regulations 27) implementing Section 504 of the Rehabilitation Act (29 U.S. Code 794). The Federal Highway Administration has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (also referred to as ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the Americans with Disabilities Act requirements to federal-aid projects, including Transportation Enhancement Activities.

Affected Environment

Traffic and Transportation

In 2019, Caltrans completed a Roundabout Improvement Intersection Analysis for intersections along the two main arterial roadways in the project area, State Route 65 and State Route 198. The intersections identified in the analysis included the State Route 65 and Tulare Road intersection (Location 1), the State Route 198 and Spruce Avenue intersection (Location 2), and the State Route 65 and Hermosa Street intersection (Location 3).

For comparison, quality of traffic flow ranges from Level of Service A (free flowing) to Level of Service F (gridlock).

Table 2-4 summarizes the type of intersection control and the morning and afternoon Level of Service for the existing year (2018).

Table 2-4 Existing Intersection Level of Service

Location	Traffic Control Type	Morning Level of Service 2018	Afternoon Level of Service 2018
State Route 65 and Tulare Road	One-way stop control	A	A
State Route 198 and Spruce Avenue	Signal	D	D
State Route 65 and Hermosa Street	Signal	A	A

Source: Caltrans Updated Traffic Operational Analysis 2019

Pedestrian Facilities

There are no pedestrian facilities on existing State Route 65 except within the city limits of Lindsay. The City of Lindsay has provided sidewalks, pedestrian crossings and curb ramps. No pedestrian facilities such as sidewalks and pedestrian crossings were identified during field reviews for the project at the State Route 198 and Spruce Avenue intersection (Location 2).

Bicycle Facilities

No bicycle facilities exist on State Route 198, Spruce Avenue or existing State Route 65, but bicyclists and pedestrians still use the roadways. Within the city limits of Lindsay, sidewalks for pedestrians and bicycle paths are provided.

Environmental Consequences

Traffic and Transportation

Tables 2-5 through 2-10 show the traffic conditions with and without the project for the construction year and future conditions.

Table 2-5 Level of Service at the State Route 65 and Tulare Road Intersection (Alternative 1.A) No-Build Alternative

Location	Morning Level of Service 2026	Afternoon Level of Service 2026	Morning Level of Service 2046	Afternoon Level of Service 2046
1	D	E	F	F

Source: Caltrans Updated Traffic Operational Analysis 2019

Table 2-6 Level of Service at the State Route 65 and Tulare Road Intersection (Alternative 1.B) Build Alternative

Location	Morning Level of Service 2026	Afternoon Level of Service 2026	Morning Level of Service 2046	Afternoon Level of Service 2046
1	B	B	C	D

Source: Caltrans Updated Traffic Operational Analysis 2019

Table 2-7 Level of Service at the State Route 198 and Spruce Avenue Intersection (Alternative 2.A) No-Build Alternative

Location	Morning Level of Service 2028	Afternoon Level of Service 2028	Morning Level of Service 2048	Afternoon Level of Service 2048
2	F	F	F	F

Source: Caltrans Updated Traffic Operational Analysis 2019

Table 2-8 Level of Service at the State Route 198 and Spruce Avenue Intersection (Alternative 2.B) Build Alternative

Location	Morning Level of Service 2028	Afternoon Level of Service 2028	Morning Level of Service 2048	Afternoon Level of Service 2048
2	B	A	C	C

Source: Caltrans Updated Traffic Operational Analysis 2019

Table 2-9 Level of Service at the State Route 65 and Hermosa Street Intersection (Alternative 3.A) No-Build Alternative

Location	Morning Level of Service 2036	Afternoon Level of Service 2036	Morning Level of Service 2056	Afternoon Level of Service 2056
3	C	D	E	E

Source: Caltrans Updated Traffic Operational Analysis 2019

Table 2-10 Level of Service at the State Route 65 and Hermosa Street Intersection (Alternative 3.B) Build Alternative

Location	Morning Level of Service 2036	Afternoon Level of Service 2036	Morning Level of Service 2056	Afternoon Level of Service 2056
3	B	B	C	D

Source: Caltrans Updated Traffic Operational Analysis 2019

Based on the data presented, without the project, level of service at Location 1 would worsen to Level of Service F by 2046 for both morning and afternoon traffic. Location 2 Level of Service would remain at F for both morning and afternoon traffic in 2048, and Level of Service at Location 3 would deteriorate to E for both morning and afternoon traffic by 2056. Without the proposed project, traffic is expected to be congested and operate with considerable delays.

With the project, all three project locations would see an improved Level of Service for the construction year. A decrease in Level of Service is expected for the future conditions at each project location. However, all project locations would avoid Level of Service designations below D in future conditions.

Construction impacts on traffic and transportation would not be substantial. Access to and from State Route 65, State Route 198 and State Route 245 would be available during construction.

Pedestrian Facilities

The proposed roundabouts at Location 1, Location 2 and Location 3 would include the construction of sidewalks. Addressing the safety and mobility needs of bicyclists, pedestrians, and transit users within the project limits will be part of this project and is facilitated by creating “complete streets,” which will require collaboration among Caltrans’ functional units and stakeholders during the design phase of the project.

Bicycle Facilities

The proposed roundabouts at Location 1, Location 2 and Location 3 would include the construction of Class II bike lanes.

Avoidance, Minimization, and/or Mitigation Measures

Traffic and Transportation

During construction, a Traffic Management Plan would be developed to handle local traffic patterns and reduce delay, congestion, and the likelihood of accidents during construction. The Traffic Management Plan includes notifying the public of construction activities via media outlets, using

changeable message signs and construction strategies, and using the Central Valley Traffic Management Center, which reduces congestion by monitoring traffic and informing the public via media outlets, such as radio and television. Traffic delays are expected to be minimal because most of the build alternatives would be built on new alignments. By building the proposed project in construction phases and rerouting traffic to local roads, disruption to local and regional traffic would be minimized with all the build alternatives.

Pedestrian Facilities

Curb ramps that comply with the Americans with Disabilities Act requirements would be provided at all improved intersections or new local road intersections.

Bicycle Facilities

Class II bike lanes would be provided at the proposed roundabout locations.

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 unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (known as NPDES) permit. This act and its amendments are known today as the Clean Water Act. 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 National Pollutant Discharge Elimination System permit scheme. The following are important Clean Water Act 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 National Pollutant Discharge Elimination System, 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 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 (known as 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.

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

The U.S. Army Corps of Engineers 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 the U.S. Army Corps of Engineers' Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the U.S. Army Corps of Engineers' 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 Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines were developed by the U.S. EPA in conjunction with the U.S. Army Corps of Engineers, 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 U.S. Army Corps of Engineers may not issue a permit if there is a least environmentally damaging practicable alternative (also known as the acronym 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 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 U.S. Army Corps of Engineers, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the least environmentally damaging practicable alternative 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 Clean Water Act 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. Also, it prohibits discharges of "waste" as defined, and this definition is broader than the Clean Water Act definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements and may be required even when the discharge is already permitted or exempt under the Clean Water Act.

The State Water Resources Control Board and Regional Water Quality Control Boards are responsible for establishing the water quality standards (objectives and beneficial uses) required by the Clean Water Act 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 Regional Water Quality Control Board Basin Plan. In California, Regional Water Quality Control Boards 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 State Water Resources Control Board identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with Clean Water Act 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 (National Pollutant Discharge Elimination System permits or Waste Discharge Requirements), the Clean Water Act requires the establishment of Total Maximum Daily Loads (also known as TMDLs). Total Maximum Daily Loads 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 State Water Resources Control Board 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, Total Maximum Daily Loads, and National Pollutant Discharge Elimination System permits. Regional Water Quality Control Boards 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 Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the Clean Water Act requires the issuance of Pollutant Discharge Elimination System permits for five categories of storm water

discharges, including Municipal Separate Storm Sewer Systems (known as 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 State Water Resources Control Board has identified Caltrans as an owner/operator of an MS4 under federal regulations. The Caltrans MS4 permit covers all Caltrans rights-of-way, properties, facilities, and activities in the state. The State Water Resources Control Board or the Regional Water Quality Control Board issues National Pollutant Discharge Elimination System permits for five years, and permit requirements remain active until a new permit has been adopted.

The Caltrans MS4 Permit, Order Number 2012-0011-DWQ (adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order Number 2014-0006-EXEC (effective January 17, 2014), Order Number 2014-0077-DWQ (effective May 20, 2014) and Order Number 2015-0036-EXEC (conformed and effective April 7, 2015) has three basic requirements:

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

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

3. Caltrans storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices, to the maximum extent practicable, and other measures as the State Water Resources Control Board determines to be necessary to meet the water quality standards.

To comply with the permit, Caltrans developed the Statewide Storm Water Management Plan to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The Statewide Storm Water Management Plan assigns responsibilities within Caltrans 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 plan describes the minimum procedures and practices Caltrans 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 Best Management Practices. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest Statewide Storm Water Management Plan to address storm water runoff.

Construction General Permit

Construction General Permit, Order Number 2009-0009-DWQ (adopted on September 2, 2009 and effective on July 1, 2010), as amended by Order Number 2010-0014-DWQ (effective February 14, 2011) and Order Number 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 General Construction 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 Regional Water Quality Control Board. Operators of regulated construction sites are required to develop Storm Water Pollution Prevention Plans; implement sediment, erosion, and pollution prevention control measures; and obtain coverage under the Construction General Permit.

The Construction General Permit separates projects into Risk Levels 1, 2, and 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 Storm Water Pollution Prevention Plan. In accordance with the Caltrans Statewide Storm Water Management Plan and Standard Specifications, a Water Pollution Control Program is necessary for projects with Statewide Storm Water Management Plan less than one acre.

Section 401 Permitting

Under Section 401 of the Clean Water Act, 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 comply with state water quality standards. The most common federal permits triggering 401 Certification are Clean Water Act Section 404 permits issued by the U.S. Army Corps of Engineers. The 401 permit certifications are obtained from the appropriate Regional Water Quality Control Board, depending on the project location, and are required before the U.S. Army Corps of Engineers issues a 404 permit.

In some cases, the Regional Water Quality Control Board may have specific concerns with discharges associated with a project. As a result, the Regional Water Quality Control Board may issue a set of requirements known as

Waste Discharge Requirements 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. Waste Discharge Requirements can be issued to address both permanent and temporary discharges of a project.

Affected Environment

A Water Compliance Study was completed for the project in October 2018 to evaluate the potential effect of the project on water quality and storm water runoff.

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

This location is within a dry land area where crisscrossing rivers, creeks, and streams are absent.

Location 2 – State Route 198/245 and Spruce Avenue Roundabout Operational Improvement

The nearest major water body is the human-made Friant-Kern Canal, which is about 0.3 mile west of the project area. The canal was built in both concrete-lined and unlined earth sections. The canal is up to 128 feet wide at the top, and the channel width varies. The canal is about 24 feet wide at the bottom of the concrete-lined segments, and 40 to 64 feet wide in the unlined or earth segments. Water depths in the canal range from about 11 to 20 feet.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road (Avenue 232) with Roundabout intersections at Hermosa Street and Tulare Road

This location is within a dry land area where crisscrossing rivers, creeks, and streams are absent.

Environmental Consequences

Alternative 1.B

Considering the absence of nearby natural water bodies at this location, no long-term water quality impacts for surface water and groundwater are anticipated. However, short-term impacts to groundwater quality could occur due to accidental spills or poor management when handling hazardous materials, fuels, and other chemicals used during construction. These activities should be anticipated and addressed in the Design and Construction phases of the project.

Caltrans Standard Specification Section 13.1 requires the contractor to address all potential water quality impacts that may occur during construction. Potential impacts such as erosion, accidental spills of hazardous materials, and disruption of natural drainage patterns must be eliminated or minimized

to the maximum extent practicable during the design and construction phases of the project by incorporating the appropriate permanent and temporary Best Management Practices into the project.

Since the project is anticipated to disturb more than 1 acre of soil, the following is required:

- A Notification of Intent (NOI) will be submitted to the appropriate Regional Water Quality Control Board at least 30 days prior to the start of construction.
- A Stormwater Pollution Prevention Plan will be prepared and implemented during construction to the satisfaction of the Resident Engineer.
- A Notice of Termination (NOT) will be submitted to the Regional Board upon completion of construction and site stabilization. A project will be considered complete when the criteria for final stabilization in the Construction General Permit are met.

Alternative 2.B

Considering the absence of nearby natural water bodies at this location, no long-term water quality impacts for surface water and groundwater are anticipated. However, short-term impacts to groundwater quality could occur due to accidental spills or poor management when handling hazardous materials, fuels, and other chemicals used during construction. These activities should be anticipated and addressed in the Design and Construction phases of the project.

Caltrans Standard Specification Section 13.1 requires the contractor to address all potential water quality impacts that may occur during construction. Potential impacts such as erosion, accidental spills of hazardous materials, and disruption of natural drainage patterns must be eliminated or minimized to the maximum extent practicable during the design and construction phases of the project by incorporating the appropriate permanent and temporary Best Management Practices into the project.

Since the project is anticipated to disturb more than 1 acre of soil, the following is required:

- A Notification of Intent (NOI) will be submitted to the appropriate Regional Water Quality Control Board at least 30 days prior to the start of construction.
- A Stormwater Pollution Prevention Plan will be prepared and implemented during construction to the satisfaction of the Resident Engineer.
- A Notice of Termination (NOT) will be submitted to the Regional Board upon completion of construction and site stabilization. A project will be

considered complete when the criteria for final stabilization in the Construction General Permit are met.

Alternative 3.B

Considering the absence of nearby natural water bodies at this location, no long-term water quality impacts for surface water and groundwater are anticipated. However, short-term impacts to groundwater quality could occur due to accidental spills or poor management when handling hazardous materials, fuels, and other chemicals used during construction. These activities should be anticipated and addressed in the Design and Construction phases of the project.

Caltrans Standard Specification Section 13.1 requires the contractor to address all potential water quality impacts that may occur during construction. Potential impacts such as erosion, accidental spills of hazardous materials, and disruption of natural drainage patterns must be eliminated or minimized to the maximum extent practicable during the design and construction phases of the project by incorporating the appropriate permanent and temporary Best Management Practices into the project.

Since the project is anticipated to disturb more than 1 acre of soil, the following is required:

- A Notification of Intent (NOI) will be submitted to the appropriate Regional Water Quality Control Board at least 30 days prior to the start of construction.
- A Stormwater Pollution Prevention Plan will be prepared and implemented during construction to the satisfaction of the Resident Engineer.
- A Notice of Termination (NOT) will be submitted to the Regional Board upon completion of construction and site stabilization. A project will be considered complete when the criteria for final stabilization in the Construction General Permit are met.

Avoidance, Minimization, and/or Mitigation Measures

By incorporating proper and accepted engineering practices and Best Management Practices, the project will not result in significant impacts to water quality during construction or its operation.

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

- Community Environmental Response Facilitation Act of 1992 (CERFA)
- 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 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 California Health and Safety Code and is also authorized by the federal government to implement Resource Conservation and Recovery Act 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

An Initial Site Assessment was completed for the project areas in August 2019. The Initial Site Assessment identified and evaluated possible hazardous waste sites and includes the following tasks:

- Review of previous environmental reports about the project site, including the original Initial Site Assessment.
- Geologic evaluation regarding naturally occurring asbestos within the project limits.
- Review of government databases of hazardous waste sites.
- Preparation of a written report summarizing the records search results.

A Preliminary Site Investigation was completed in December 2019 to evaluate lead concentrations in surface soils next to the highways for proper handling and disposal. This study also addressed the discolored soil at the northwest corner of the State Route 198 and State Route 245 intersection (APN 112-210-005). The Preliminary Site Investigation was completed for Location 1 and Location 2 only. Location 3 would need to be investigated prior to construction in 2036.

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

The Preliminary Site Investigation showed that total lead concentrations ranged from 2.7 milligrams per kilogram to 260 milligrams per kilogram with an average total lead value of 23 milligrams per kilogram and a 95% Upper Confidence Limit for total lead of 31 milligrams per kilogram. Four of the samples exceeded 50 milligrams per kilogram and were further analyzed for soluble lead using a citric acid extraction method.

Soluble lead values ranged from non-detect to 19 milligrams per kilogram; the 95% Upper Confidence Limit for soluble lead is 2.1 milligrams per liter. One sample was above the Soluble Threshold Limit Concentration of 5 milligrams per liter and was further analyzed using deionized water as the extraction method. The deionized water extraction method and Toxicity Characteristic Leaching Procedure concentrations were below regulatory levels. Based on total and soluble 95% Upper Confidence Limit values, soil from either location from the surface to a depth of 2 feet or shallower would be considered non-regulated/non-hazardous and could be reused on-site, relinquished to the contractor, or disposed of as non-regulated soil. Total lead concentrations are also below the residential land use California Human Health Screening Level of 80 milligrams per kilogram and the Environmental Screening Level of 80 milligrams per kilogram mg/kg.

Location 2 – State Route 198/245 and Spruce Avenue Roundabout Operational Improvement

Total lead concentrations ranged from 2.2 milligrams per kilogram to 120 milligrams per kilogram with an average total lead value of 19 milligrams per kilogram and a 95% Upper Confidence Limit of 31 milligrams per kilogram. Three of the samples exceeded 50 milligrams per kilogram and were further analyzed for soluble lead using the citric acid extraction method. Soluble lead values ranged from non-detect to 3.9 milligrams per liter; the soluble lead 95% Upper Confidence Limit is 1.1 milligrams per liter. The Soluble Threshold Limit Concentration of 5 milligrams per liter was not exceeded; therefore, further analyses were not conducted. Based on total and soluble 95% Upper Confidence Limit values, soil from either location from the surface to a depth of 2 feet or shallower would be considered non-regulated/non-hazardous and could be reused on-site, relinquished to the contractor, or disposed of as non-regulated soil. Total lead concentrations are also below the residential land use California Human Health Screening Level of 80 milligrams per kilogram and the Environmental Screening Level of 80 milligrams per kilogram.

Three borings were collected. Samples were taken at 0.0-0.5 foot, 1.0-1.5 feet, and 4.5-5.0 feet below ground surface. One sample could not be obtained due to soil refusal. Soil samples were analyzed for total petroleum hydrocarbons, oil and grease, and dioxins; none were reported to exceed their hazardous waste thresholds or their human health screening levels. Samples were also analyzed for heavy metals. Except for arsenic, heavy metals were not reported above the thresholds or screening levels. Arsenic was reported to be 46 milligrams per kilogram in one sample. This is below state and federal hazardous waste criteria, but greater than the published background concentration range for arsenic in California (0.6 milligrams per kilogram to 12.0 milligrams per kilogram). If soil from this area is excavated, surface soils to 0.5 feet should be excavated and transported to the appropriate landfill as a non-hazardous waste.

Records Search

A hazardous materials site records search included information gathered from several government environmental databases compiled by federal, state, and local governmental agencies. No sites were identified within the search area that are likely to have adversely impacted the three project locations.

Aerially Deposited Lead

A Preliminary Site Investigation was completed in December 2019 to evaluate lead concentrations in surface soils next to the highways at Location 1 and Location 2. The evaluation was conducted to determine proper handling and disposal of these soils if the lead concentrations are at or above harmful levels. Aerially deposited lead is attributed to the historic use of leaded gasoline. Areas of primary concern are soils along routes that have had high vehicle emissions from large traffic volumes or congestion during the time

when leaded gasoline was in use (generally prior to1986). Along roads where the shoulder subgrade has not been disturbed, the presence of aerially deposited lead is generally limited to the upper 24 inches. Lead concentrations typically drop rapidly with increasing depth below the ground surface.

Naturally Occurring Asbestos

A geologic evaluation for naturally occurring asbestos was conducted within the project limits. This evaluation included a review of geologic maps and reports including data prepared by the California Geological Survey and the U.S. Geological Survey, previous studies conducted by Caltrans and their consultants. The evaluation found no presence of altered ultramafic bedrock, alluvium derived from ultramafic rock, or rock commonly associated with naturally occurring asbestos at all three project locations.

Yellow Thermoplastic Striping

State Route 65, State Route 198, State Route 245 and Spruce Avenue have yellow pavement striping and markings. Yellow thermoplastic striping and yellow painted markings may contain elevated concentrations of lead chromate and hexavalent chromium manufactured before 2005 and painted markings manufactured before 1997.

Agricultural Land Uses

A Preliminary Site Investigation was completed in December 2019 to evaluate the discolored surface soils at the northwest corner of the State Route 198 and State Route 245 intersection. Much of the project area consists of agricultural properties. Activities conducted on agricultural parcels involve the use of agricultural chemicals, including pesticides, insecticides, and herbicides. It is possible that arsenic would be present in surface soils because historical agricultural practices used herbicides that were organic compounds containing arsenic.

Treated Wood Waste

Treated wood is wood with preservative chemicals that protect it from insect attack and fungal decay during its use. Typical uses in the highway environment include sign posts, metal beam guardrail wood posts, and lagging on retaining walls. The chemical preservatives used are hazardous and pose a risk to human health and the environment. Arsenic, chromium, copper, creosote, and pentachlorophenol are among the chemicals used. These chemicals are known to be toxic or carcinogenic. Harmful exposure to these chemicals may result from skin contact with treated wood waste or from inhalation or ingestion of treated wood waste particulate (e.g., sawdust and smoke) as this material is handled.

Cortese List

The Cortese List is a compilation of contaminated and potentially contaminated sites. This list was reviewed as part of the initial screening for this project. The list, or a property's presence on the list, has bearing on the local permitting process as well as on compliance with the California Environmental Quality Act. There were no sites in the project area listed on the Cortese List.

Environmental Consequences

Alternative 1.B

The build alternative at Location 1 would require the acquisition of right-of-way from several parcels along State Route 65. The following two parcels that have potential for hazardous waste issues were identified in the Initial Site Assessment.

- APN 199-260-003: The area to be acquired is pavement and is considered low risk for potential of hazardous waste issues.
- APN 199-260-004: The area to be acquired is pavement and is considered low risk for potential of hazardous waste issues.

Alternative 2.B

The build alternative at Location 2 would require acquisition of right-of-way from parcels adjacent to the State Route 198, State Route 245, Spruce Avenue intersection. The following two parcels that have potential for hazardous waste issues were identified in the Initial Site Assessment.

- APN 112-200-002: The area to be acquired has little to no contamination and is considered low risk for potential of hazardous waste issues.
- APN 112-210-005: The area to be acquired is agricultural land with discolored soil and surface staining. This area is considered a moderate risk for potential of hazardous waste issues.

Alternative 3.B

The build alternative at Location 3 would require acquisition of right-of-way from several parcels along the proposed realignment. The following seven parcels that have potential for hazardous waste issues were identified in the Initial Site Assessment.

- APN 199-220-012: The area to be acquired consists of orchards and is considered low risk for potential of hazardous waste issues.
- APN's 199-210-071, 199-210-072, 199-210-073: The area to be acquired is an existing gas station and is considered high risk for potential of hazardous waste issues.
- APN 199-210-051: The area to be acquired is an automotive paint and body, repair, and storage facility. There is no visible evidence of a former

service station as the current land use description indicates. This facility handles and stores small quantities of hazardous materials and shows some staining of the soil surface. This area is considered low risk for potential of hazardous waste issues.

- APN 199-210-051: The area to be acquired is a former irrigation supply business. The area stores pipes and parts for business as well as miscellaneous personal items. There is no visible evidence of a former service station as the land use description indicates. This area is considered low risk for potential of hazardous waste issues.
- APN 199-210-059: The area to be acquired is a residence that stores miscellaneous items, scrap wood, equipment and parts. There is no visible evidence of a former service station as the current land use description indicates. This area is considered low risk for potential of hazardous waste issues.
- APN 199-210-016: The area to be acquired is a residence and possible agricultural business that handles and stores small quantities of hazardous materials for automotive and equipment repair. There is visible staining on the soil surface. This area is considered low risk for potential of hazardous waste issues.
- APN l99-090-006: The area to be acquired is a residence and possible agricultural business that handles and stores small quantities of hazardous materials for automotive and equipment repair. There is visible staining on the soil surface. This area is considered low risk for potential of hazardous waste issues.

Avoidance, Minimization, and/or Mitigation Measures

Caltrans Standard Specifications and Non-Standard Specifications pertaining to hazardous waste would be provided during the Project Specifications and Estimates phase of the project prior to construction.

2.2.3 Air Quality

Regulatory Setting

The Federal Clean Air Act, as amended, is the main federal law that governs air quality, while the California Clean Air Act is its companion state law. These laws, and related regulations by the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board, set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (also known as NAAQS).

National and state ambient air quality standards have been established for six criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), Lead (Pb), and sulfur dioxide (SO2), and particulate matter (PM)—which is broken down for

regulatory purposes into particles of 10 micrometers or smaller (PM10) and particles of 2.5 micrometers and smaller (PM2.5). In addition, state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H2S), and vinyl chloride.

The national 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 federal and state 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. In addition to this environmental analysis, a parallel “conformity” requirement under the Federal Clean Air Act also applies.

The conformity requirement is based on Federal Clean Air Act Section 176(c), which prohibits the U.S. Department of Transportation and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan for attaining the National Ambient Air Quality Standards. “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 National Ambient Air Quality Standards, and only for the specific National Ambient Air Quality Standards that are or were violated. U.S. EPA regulations at 40 Code of Federal Regulations 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for National Ambient Air Quality Standards 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 National Ambient Air Quality Standards for carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), particulate matter (PM10 and PM2.5), and in some areas (although not in California), sulfur dioxide (SO2). California has nonattainment or maintenance areas for all of these transportation-related “criteria pollutants” except SO2, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the Federal Clean Air Act to be covered in transportation conformity analysis.

Regional conformity is based on emission analysis of Regional Transportation Plans and Federal Transportation Improvement Programs that include all transportation projects planned for a region over a period of at least 20 years (for the Regional Transportation Plan) and 4 years (for the Federal

Transportation Improvement Program). Regional Transportation Plan and Federal Transportation Improvement Program 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 Federal Clean Air Act and the State Implementation Plan are met. If the conformity analysis is successful, the Metropolitan Planning Organization, Federal Highway Administration, and Federal Transit Administration make the determinations that the Regional Transportation Plan and Federal Transportation Improvement Program are in conformity with the State Implementation Plan for achieving the goals of the Federal Clean Air Act. Otherwise, the projects in the Regional Transportation Plan and/or Federal Transportation Improvement Program 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 Regional Transportation Plan and Federal Transportation Improvement Program, 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 Regional Transportation Plan and Transportation Improvement Program; the project has a design concept and scope that has not changed significantly from those in the Regional Transportation Plan and Transportation Improvement Program; project analyses have used the latest planning assumptions and Environmental Protection Agency-approved emissions models; and in particulate matter areas, the project complies with any control measures in the State Implementation Plan. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in carbon monoxide and particulate matter nonattainment or maintenance areas to examine localized air quality impacts.

Affected Environment

An Air Quality Report was completed for the project in March 2020. The purpose of the report was to document the anticipated air quality effects of the proposed project and addressed both state and federal air quality standards with the intent to satisfy the requirements of the California Environmental Quality Act and the National Environmental Policy Act.

The project is near the cities of Lindsay and Exeter in Tulare County within the San Joaquin Valley Air Basin. The San Joaquin Valley, almost 300 miles long, stretches from the Tehachapi Mountains in the south to the San Joaquin-Sacramento River Delta in the north. The Sierra Nevada Mountain Range forms the eastern boundary, while the lower coastal ranges form the boundary on the west.

The San Joaquin Valley is characterized by hot, dry summers and cool winters. Precipitation is directly related to latitude and elevation, with the southern portion of the San Joaquin Valley accumulating an average of less

than 6 inches of rain per year and the northern portion receiving about 16 inches per year. Average annual rainfall for Tulare County is about 12.7 inches per year. The rainy season is typically between November and April.

Weather and terrain influence the air quality in the San Joaquin Valley Air Basin. Seasonal differences in wind direction and temperature can provide relatively stable or stagnant weather conditions, or unstable and varying weather conditions. Furthermore, the San Joaquin Valley Air Basin is surrounded by mountains to the south, east and west, which can act to channel and restrict air movement.

The closest air monitor, the Visalia North Church Street air quality monitor at 310 North Church Street in Visalia, is about 10 miles from the project site at Location 2 and about 15 miles from Location 1 and Location 3. Tulare County is in attainment status for both the state and federal carbon monoxide ambient air standards (see Table 2-8), so an analysis is not needed. Table 2-11 shows the state and federal attainment status for regulated pollutants.

Table 2-11 State and Federal Attainment Status for Regulated Pollutants

Pollutant	State Attainment Status	Federal Attainment Status
One-Hour Ozone (O_3)	Nonattainment	Nonattainment
Eight-Hour Ozone (O_3)	Nonattainment	Nonattainment/Extreme
Respirable Particulate Matter (PM_{10})	Nonattainment/Severe	Not Applicable
Fine Particulate Matter ($PM_{2.5}$)	Nonattainment	Nonattainment/Extreme
Carbon Monoxide (CO)	Nonattainment	Attainment
Nitrogen Dioxide (NO_2)	Nonattainment	Nonattainment
Sulfur Dioxide (SO_2)	Attainment/Unclassified	Attainment/Unclassified
Lead (Pb)	Attainment	Attainment/Unclassified
Visibility-Reducing Particles	Attainment	Nonattainment/Unclassified
Sulfates	Attainment	No Designation/Classification
Hydrogen Sulfide	Unclassified	Not Applicable
Vinyl Chloride	Attainment	Not Applicable

Source: Air Quality Report, March 2019

The project is in an area that is in attainment-maintenance for the federal PM10 standard and in nonattainment for the federal PM2.5 standard (see Table 2-11). It is nonattainment for both PM10 and PM2.5 state standards. A conformity analysis for this project as "Not a Project of Air Quality Concern" was conducted and submitted to the San Joaquin Valley Council of Governments' Directors' Association Interagency Consultation Group. The Interagency Consultation Partners concurred on October 7, 2019 that this is "Not a Project of Air Quality Concern." Figure 2-1 shows the state and federal ambient air quality standards.

Figure 2-1 State and Federal 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.

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

Environmental Consequences

Regional Conformity

This project is included in the Tulare County Association of Government's 2020 Federal Transportation Implementation Program (page 12) and is proposed for funding from the State Transportation Improvement Program. This project is also included in the Tulare County Association of

Government's Year 2018 Regional Transportation Plan (Action Element page B-29).

Project Conformity

The project is subject to conformity and is considered a regionally significant project. The project sits within the San Joaquin Valley Air Basin and is under the jurisdiction of the San Joaquin Valley Air Pollution Control District. Tulare County is in nonattainment for the federal 8-hour ozone and PM2.5 standards, and in attainment for the federal PM10 standard.

Under 40 Code of Federal Regulations Section 93.109, a project-level hot-spot analysis for conformity is required. The project was submitted for Interagency Consultation on July 10, 2019. The Environmental Protection Agency concurred on September 6, 2019, and the Federal Highway Administration concurred on September 16, 2019 that the project is not a "Project of Air Quality Concern" in September 2019.

For project-level conformity, a project may not contribute to any new localized CO, PM2.5, and/or PM10 violations or delay timely attainment of any National Ambient Air Quality Standards or any required interim emission reductions or other milestones during the timeframe of the transportation plan (or regional emissions analysis). No project-level conformity requirements apply to O3 since it is considered a regional pollutant. The project would not interfere with the implementation of any transportation control measures.

Particulate Matter Analysis

The project is in a federal PM2.5 non-attainment area and a federal attainment-maintenance PM10 area and requires a full qualitative PM2.5 and PM10 hot-spot analysis under 40 Code of Federal Regulations 93.123(b)(1)(i).

A qualitative hot-spot analysis was submitted to the Model Coordinating Committee in July 2019. Concurrence that this was "Not a Project of Air Quality Concern" was received from the Federal Highway Administration and the U.S. Environmental Protection Agency in September 2019 (see Appendix G). As such, it is expected that this project would not cause an increase in particulate matter violations over the state or federal standard.

Mobile Source Air Toxics

These pollutants are a subset of the 188 air toxics defined in the Clean Air Act and are now federally regulated under 40 Code of Federal Regulations 1502.22 by the U.S. Environmental Protection Agency. Mobile source air toxics are 21 compounds emitted from highway vehicles and off-road equipment. The nine priority mobile source toxics are acrolein, acetaldehyde, benzene, butadiene, diesel particulate matter, ethylbenzene, formaldehyde, naphthalene and polycyclic aromatic hydrocarbons (PAH). The Federal

Highway Administration issued interim guidance on October 18, 2016 for analysis in National Environmental Policy Act documents. There are no existing ambient air standards for the nine priority toxics. Currently, available technical tools do not enable us to predict the project-specific health impacts, so only a qualitative analysis is conducted.

The Federal Highway Administration has developed a tiered approach for analyzing mobile source air toxics. Depending on the specific project circumstances, the Federal Highway Administration has identified three levels of analysis:

- No analysis for exempt projects with no potential for meaningful mobile source air toxics effects
- Qualitative analysis for projects with low potential mobile source air toxics effects
- Quantitative analysis to differentiate alternatives for projects with higher potential mobile source air toxics

The Lindsay Operational Improvements project best falls into the category of low potential mobile source air toxics effects, which requires a qualitative analysis. There are no sensitive land uses within 500 feet of the proposed project for either build alternative. For each alternative in this project, the amount of mobile source air toxics emitted would be proportional to the vehicle miles traveled, which equals the annual average daily traffic times miles length of project times 365 days, if other variables such as fleet mix are the same for each alternative. According to the Environmental Protection Agency's MOVES2014 model, as well as the EMFAC (Emissions FACtors) model used in California, emissions of all the priority mobile source air toxics decrease as the vehicle speed increases.

Regardless of the alternative chosen, emissions will likely be lower than present levels in the design year because of the Environmental Protection Agency's national control programs that are projected to reduce annual mobile source air toxics emissions by over 90 percent between 2010 and 2050 (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, October 12, 2016). Local conditions may differ from these national projections in terms of fleet mix and turnover, vehicle miles traveled growth rates, and local control measures. However, the magnitude of the Environmental Protection Agency-projected reductions is so great (even after accounting for vehicle miles traveled growth) that mobile source air toxics emissions in the study area are likely to be lower in the future in nearly all cases.

Construction Conformity

Construction activities will not last for more than 5 years at any of the build alternatives, so construction-related emissions do not need to be included in regional and project-level conformity analysis (40 CFR 93.123(c)(5)).

Avoidance, Minimization, and/or Mitigation Measures

See section 2.4.1 for avoidance, minimization, and/or mitigation measures for construction impacts related to air quality.

2.2.4 Noise and Vibration

Regulatory Setting

The National Environmental Policy Act of 1969 and the California Environmental Quality Act provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between National Environmental Policy Act and California Environmental Quality Act.

California Environmental Quality Act (CEQA)

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless those measures are not feasible. The rest of this section will focus on the NEPA/Title 23 Part 772 of the Code of Federal Regulations (23 CFR 772) noise analysis; please see Chapter 3 of this document for further information on noise analysis under CEQA.

National Environmental Policy Act (NEPA) and 23 CFR 772

For highway transportation projects with Federal Highway Administration involvement (and Caltrans, as assigned), the Federal-Aid Highway Act of 1970 and its implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations include noise abatement criteria that are used to determine when a noise impact would occur.

The noise abatement criteria differ depending on the type of land use under analysis. For example, the noise abatement criteria for residences (67 dBA) is lower than the noise abatement criteria for commercial areas (72 dBA).

The following table lists the noise abatement criteria for use in the NEPA/23 CFR 772 analysis.

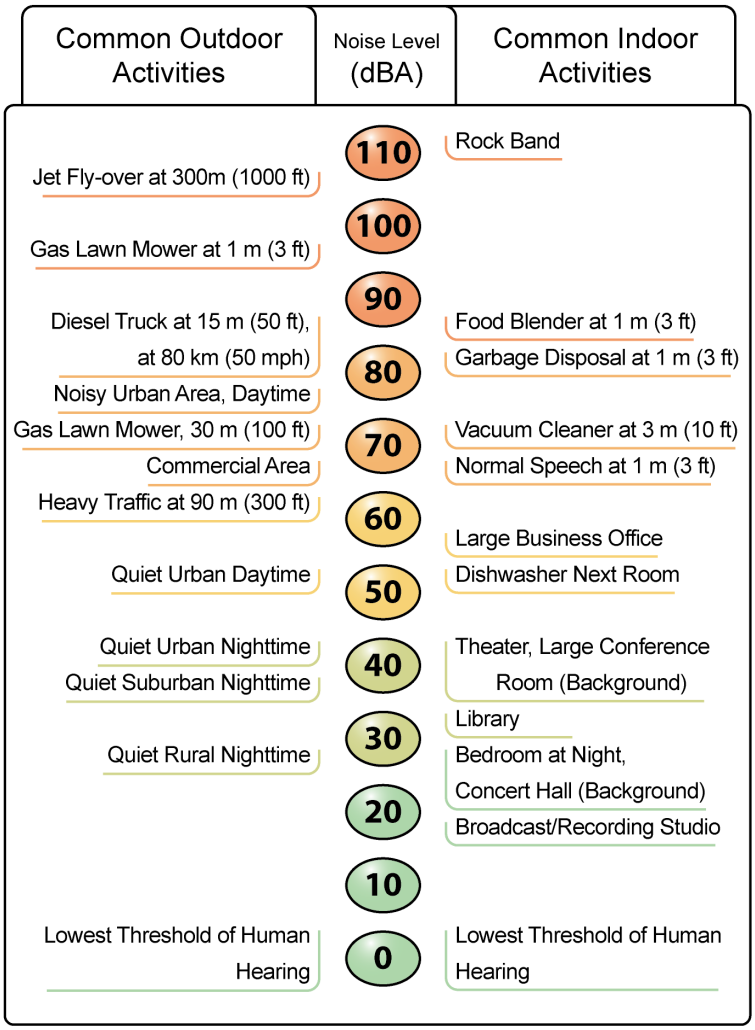
Table 2-12 Noise Abatement Criteria

Activity Category	Noise Abatement Criteria, Hourly A-Weighted Noise Level, Leq(h)	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B[1]	67 (Exterior)	Residential.
C[1]	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F.
F	No Noise Abatement Criteria—reporting only	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing.
G	No Noise Abatement Criteria—reporting only	Undeveloped lands that are not permitted.

[1] Includes undeveloped lands permitted for this activity category.

Figure 2-2 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.

Figure 2-2 Noise Levels of Common Activities



According to the Caltrans *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, May 2011*, a noise impact occurs when the predicted future noise level with the project substantially exceeds the existing noise level (defined as a 12 dBA or more) or when the future noise level with the project approaches or exceeds the noise abatement criteria. A noise level is considered to approach the noise abatement criteria if it is within 1 dBA of the noise abatement criteria.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are

incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

The Caltrans Traffic Noise Analysis Protocol sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. Noise abatement must be predicted to reduce noise by at least 5 dB at an impacted receptor to be considered feasible from an acoustical perspective. It must also be possible to design and construct the noise abatement measure for it to be considered feasible. Factors that affect the design and constructability of noise abatement include, but are not limited to, safety, barrier height, topography, drainage, access requirements for driveways, presence of local cross streets, underground utilities, other noise sources in the area, and maintenance of the abatement measure. The overall reasonableness of noise abatement is determined by the following three factors: 1) the noise reduction design goal of 7 dB at one or more impacted receptors; 2) the cost of noise abatement; and 3) the viewpoints of benefited receptors (including property owners and residents of the benefited receptors).

Affected Environment

A Noise Study Report was completed for the project in December 2019.

The project area consists of four types of receivers as identified in the noise abatement criteria category. The sensitive receptors associated with this project are described below.

Receiver 1 (R1)

This receiver is on the north side of State Route 65 at 1647 West Tulare Road and represents a single-family residence (Activity Category B) land use. The house is about 93 feet from the edge of the shoulder of State Route 65. The noise level measurement at this receiver will assist in determining future noise level impacts as a result of the build alternatives at Location 1 and Location 3.

Receiver 2 (R2)

This receiver is on the east side of State Route 65 and represents an agricultural field (Activity Category F) land use. The receiver was placed about 100 feet from the edge of State Route 65 so existing noise measurements could be defined for this land use. There is no abatement criteria for this activity category, and the noise level measurement was reported at this receiver for informational purposes only. The noise level measurement at this receiver will assist in determining future noise level impacts as a result of the build alternatives at Location 1 and Location 3.

Receiver 3 (R3)

This receiver is on the north side of Tulare Road and just east of Oak Street at 760 Oak Avenue and represents a single-family residence (Activity Category B) land use. The house is about 20 feet from the edge of the shoulder of Oak Street. The noise level measurement at this receiver will assist in determining future noise level impacts as a result of the build alternatives at Location 1 and Location 3.

Receiver 4 (R4)

This receiver is on the north side of State Route 65 and east of Oak Street and represents a single-family residence (Activity Category B) land use. The single-family residence is about 30 feet from the edge of the shoulder of Oak Street. The noise level measurement at this receiver will assist in determining future noise level impacts as a result of the build alternatives at Location 1 and Location 3.

Environmental Consequences

The build alternatives at Location 1 and Location 3 are identified as a Type 1 project and will result in a noise impact that requires consideration of noise abatement.

The build alternative at Location 2 is not identified as a Type 1 project and would not result in a noise impact that requires consideration of noise abatement.

A noise study field investigation was done in May and July 2019 as close as possible to the highest traffic noise hour (10:00 a.m.). Table 2-13 shows results of the existing noise environment measurements.

Table 2-13 Short-Term Noise Measurement Results

Receiver Number	Street Address, City	Land Use	Noise Level Meter Distance from Right-of-Way (feet)	Measure Date	Start Time (AM)	End Time (AM)	Duration (minutes)	Measure, Leq, dBA Equivalent Sound Level (Decibels)
R1	1647 West Tulare Road, Lindsay	Residential	93	5/30/2019	8:55	9:05	10	64
R2	Agricultural field, Lindsay	Agriculture	100	5/30/2019	9:50	10:00	10	63
R3	1260 Delta Street, Lindsay	Residential	20	7/22/2019	10:10	10:20	10	63
R4	760 Oak Avenue, Lindsay	Residential	30	7/22/2019	10:30	10:40	10	61

Source: Caltrans Noise Study Report, December 2019

The noise study was conducted to determine the future traffic noise impacts at receptors in the vicinity of the project. Potential long-term noise impacts associated with project operations are solely from traffic noise. Traffic noise was evaluated for the worst-case traffic condition. With use of a noise model, the four receptor locations were evaluated. The noise model was used to predict future noise levels at sensitive receptors for the design year. The future noise analysis included the design year noise levels for the No-Build Alternatives and the build alternatives. The design-year is 20 years after the project has been opened to traffic. The future noise environment and associated impacts to sensitive receptors are detailed below.

Alternative 1.B

Modeling results indicate that predicted noise levels for the design year do not approach or exceed the noise abatement criteria for the following land uses:

- Activity Category F: There are no noise abatement criteria for land uses associated with this activity category.
- Activity Category B: The predicted noise levels in the design year under this alternative would not approach or exceed the noise abatement criteria for the designated land use. The design year noise levels would not substantially exceed the existing noise level for the designated land use.

Alternative 2.B

- Activity Category F: There are no noise abatement criteria for land uses associated with this activity category.

Alternative 3.B

- Activity Category F: There are no noise abatement criteria for land uses associated with this activity category.
- Activity Categories B and E: The predicted noise levels in the design year under this alternative would not approach or exceed the noise abatement criteria for all the receivers representing these categories except for one residence at 1524 West Mariposa Street. The design year noise level at this receiver is substantial since it will exceed the existing noise level by 15 decibels. Noise abatement must be considered for this alternative.

Measurements taken at the residence on Mariposa Street show that the existing noise level at that location is 49 dBA. The future noise level at this residence with the project is predicted to be 64 dBA. Because the predicted future noise level will exceed the existing noise level by 15 dBA, the home would be adversely affected by noise. To achieve a 7 dBA reduction, a 12-foot-high noise wall would be needed. If the total cost of the wall at this location is less than the total cost allowance, then the wall would likely be incorporated into the project. The total cost allowance, calculated as directed by the Caltrans Traffic Noise Analysis Protocol, is $107,000. The current estimated cost of the wall is $600,000. Therefore, the noise wall would not be incorporated into the project.

Avoidance, Minimization, and/or Mitigation Measures

See section 2.4.2 for avoidance, minimization, and/or mitigation measures for construction impacts related to noise.

2.3 Biological Environment

2.3.1 Natural Communities

Natural communities generally consist of unaltered landscapes dominated by native vegetation. These communities support a diversity of wildlife species, including special-status species.

Regulatory Setting

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 and habitat fragmentation. 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.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in the Threatened and Endangered Species section 2.3.3.

Affected Environment

This section focuses on the issues covered in the Natural Environment Study Minimal Impacts prepared for the project in June 2020.

The Biological Study Area is defined as the project impact area or the area that may be directly, indirectly, temporarily, or permanently affected by construction and construction-related activities. It includes the project footprint and a surrounding buffer.

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

Location 1 and Location 3 are very close geographically, and they share the same Biological Study Area, which is about 493 acres in size.

Both locations are next to the west edge of Lindsay. The topography is flat, and the main land use is agricultural. Some residential and commercial parcels along with their landscaped areas are present, mostly on the east side of State Route 65.

Habitat types in this area include orchards, pasture or agricultural fields, bare or ruderal ground, landscaped areas, and built-up property.

Location 2 – State Route 198/245 and Spruce Avenue Roundabout Operational Improvement

The Biological Study Area for Location 2 is about 215 acres in size. The topography is flat, and the land use is completely agricultural.

Habitat types in this area include orchards and bare or ruderal ground.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road (Avenue 232) with Roundabout intersections at Hermosa Street and Tulare Road

As mentioned above, Location 1 and Location 3 share the same Biological Study Area and habitat types.

Environmental Consequences

Alternative 1.B, Alternative 3.B

The build alternatives at Location 1 and Location 3 would permanently impact about 31.2 acres of orchards, 1.4 acres of pasture or agricultural field, 9.5 acres of bare/ruderal ground, 0.2 acre of landscape area, and 2.2 acres of built up area including portions of several residential properties. An unknown,

but low, number of landscape trees (not including orchard trees) may need to be removed. Temporary impacts may occur to about 26.8 acres of orchards, 5.1 acres of pasture or agricultural field, 5.1 acres of bare or ruderal ground, 1.3 acres of landscape area, and 8.1 acres of built-up area.

Alternative 2.B

The build alternative at Location 2 would permanently impact 0.8 acre of orchard and 4.53 acres of bare or ruderal ground. There may be impacts to about 5.6 acres of orchards, 1.4 acres of agricultural field and 1.9 acre of bare or ruderal ground. The removal of landscape trees is not expected at this location.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization and/or mitigation measures will be required for natural communities.

2.3.2 Plant Species

Regulatory Setting

The U.S. Fish and Wildlife Service and California Department of Fish and Wildlife 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 and/or the California Endangered Species Act. Please see the Threatened and Endangered Species section 2.3.3 in this document for detailed information about these species.

This section of the document discusses all other special-status plant species, including California Department of Fish and Wildlife species of special concern, U.S. Fish and Wildlife Service candidate species, and California Native Plant Society rare and endangered plants.

The regulatory requirements for the Federal Endangered Species Act can be found at 16 U.S. Code Section 1531, et seq. See also 50 Code of Federal Regulations Part 402. The regulatory requirements for the California Endangered Species Act can be found at California Fish and Game Code, Section 2050, et seq. Caltrans projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Sections 1900-1913, and the California Environmental Quality Act, found at California Public Resources Code, Sections 21000-21177.

Affected Environment

A Natural Environment Study Minimal Impacts was completed for the project in June 2020. This section provides a detailed description of one special-status plant that may occur or have the potential to occur within the Biological Study Area.

Special-status plants are considered to be of "special concern" based on federal, state, or local laws regulating their development, limited distributions and/or the presence of habitat required by the special-status plants occurring on-site.

Research conducted by the project biologist showed one record of the spiny-sepaled button-celery near the city of Exeter. However, this record dates from 1905 and it is unlikely that this population is still surviving.

A site visit was made in May 2019 to look for special-status plants, including the spiny-sepaled button-celery and habitat conditions that may support special-status plants.

Spiny-Sepaled Button-Celery (Eryngium spinosepalum)

The spiny-sepaled button-celery is an annual or perennial herb that can live in vernal pools, freshwater wetlands and valley and foothill grassland habitats. This plant can be found in depressions and roadside ditches that retain water longer than other areas. The plant can survive between elevations of 330 feet to 4,170 feet, and it usually blooms from April through May.

This plant can occur from San Joaquin County south to Kern County on both the east and west sides of the San Joaquin Valley. The foothills of the Sierra Nevada, Tehachapi, Transverse and Coast mountain ranges can also provide habitat for this plant.

This plant is considered rare, threatened, or endangered throughout the areas it can survive. The main threats to this plant are habitat loss due to development, water diversions or shortages, agriculture, livestock grazing, and roadside maintenance practices such as mowing, disking and herbicide applications.

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

As previously discussed, habitat types in this area include orchards, pasture or agricultural field, bare or ruderal ground, landscaped areas, and built-up property.

Location 2 – State Route 198/245 and Spruce Avenue Roundabout Operational Improvement

As previously discussed, habitat types in this area include orchards and bare or ruderal ground.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road (Avenue 232) with Roundabout intersections at Hermosa Street and Tulare Road

As previously discussed, habitat types in this area include orchards, pasture or agricultural field, bare or ruderal ground, landscaped areas, and built-up property.

Environmental Consequences

Alternative 1.B, Alternative 3.B

The build alternatives at Location 1 and Location 3 would have temporary and permanent impacts on orchards, pasture or agricultural fields, bare or ruderal ground, landscaped areas, and built-up property. A site visit was made by the project biologist in May 2019; the biologist concluded that this project area does not provide habitat for the spiny-sepaled button-celery. In addition to the lack of habitat, the lack of sightings of the plant make it highly unlikely that the plant would be present within the project area.

Alternative 2.B

The build alternative at Location 2 would have permanent and temporary impacts to orchards and bare or ruderal ground. A site visit was conducted by the project biologist in May 2019; the biologist concluded that this project area may provide habitat for the spiny-sepaled button-celery. The bare or ruderal areas along the road margins and median could provide the depressions or ponding areas that the plant prefers. However, because these areas are maintained by activities such as mowing and herbicide application, the likelihood of the plant occurring at this location is very small.

Avoidance, Minimization, and/or Mitigation Measures

While the likelihood that the spiny-sepaled button-celery would be found at Alternative 2.B is very small, Caltrans proposes the following avoidance and minimization measures to ensure the project will not result in measurable impacts to this species:

- A botanical survey of the project impact area at Alternative 2.B will be performed during the appropriate flowering season prior to the start of project activities.
- Any spiny-sepaled button-celery that is identified during the botanical survey at Alternative 2.B would be protected by an Environmentally Sensitive Area buffer. The Environmentally Sensitive Area would be

marked with bright orange flagging or fencing and provide a minimum 10-foot buffer of the plant population.

- Any spiny-sepaled button-celery within the project impact area at Alternative 2.B that cannot be protected by the Environmentally Sensitive Area would be dug up so the soil around the roots remains intact, kept moist, placed in a protected area and replanted as close to the original discovery location as possible after project construction has been completed. For plants that have already gone to seed, the topsoil layer around the plant would be removed, placed into a protective container, then spread on the ground as close to the original discovery location as possible after project construction has been completed. Replanting and soil spreading would only occur in areas that have spiny-sepaled button-celery habitat, such as depressions and ditches that can hold water longer than other areas.
- Worker Environmental Awareness Training or WEAT would be performed for all project crew members that are involved in ground-disturbing activities at Alternative 2.B. The WEAT would include information about the special-status species in question and the project-specific avoidance and minimization measures that have been implemented into project construction. The WEAT would also provide an opportunity to explain the legal ramifications of not properly performing or of dismissing the implemented avoidance and minimization measures. WEAT participants will document their participation by signing an attendance sheet. WEAT would be required for any new crew members that are introduced to the project.
- Because of the low likelihood of occurrence and relatively small impact area, compensatory mitigation for the spiny-sepaled button-celery is not proposed.

2.3.3 Threatened and Endangered Species

Regulatory Setting

The main federal law protecting threatened and endangered species is the Federal Endangered Species Act: 16 U.S. Code Section 1531, et seq. See also 50 Code of Federal Regulations 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 (and Caltrans, as assigned), are required to consult with the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (known as the 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 the Federal Endangered Species Act 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, California Fish and Game Code Section 2050, et seq. The California Endangered Species Act 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 is the agency responsible for implementing the California Endangered Species Act. 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.” The California Endangered Species Act allows for take incidental to otherwise lawful development projects; for these actions, an incidental take permit is issued by the California Department of Fish and Wildlife. For species listed under both the Federal Endangered Species Act and the California Endangered Species Act requiring a Biological Opinion under Section 7 of the Federal Endangered Species Act, the California Department of Fish and Wildlife may also authorize impacts to the California Endangered Species Act 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

This section focuses on issues covered in the Natural Environment Study Minimal Impacts prepared for the project in June 2020. This section provides a detailed description of two threatened and endangered species that may occur or have the potential to occur within the Biological Study Area.

Research done by the project biologist found that the San Joaquin kit fox has a low potential to occur at Location 1 and Location 3. Although the

Swainson's hawk was not included in the species query results, it has the potential to occur at all three project locations.

San Joaquin Kit Fox (Vulpes macrotis mutica)

The San Joaquin kit fox is federally listed as endangered and state listed as threatened. It is the smallest species of the dog-family in North America. These foxes have a small slim body, and their color can vary from buff or tan to grizzled or yellow-grey.

The San Joaquin kit fox is found mostly in the southern half of the state in dry annual grasslands or grassy open stages of vegetation dominated by scattered shrubs and brush. It is mostly carnivorous, but can also feed on insects and some varieties of vegetation.

San Joaquin kit foxes dig their own dens in open flat areas with loose-textured soils that support scattered, shrubby vegetation. Their litters average about four pups, born usually between February and April. San Joaquin kit foxes are active throughout the year and are mostly nocturnal, but they occasionally can be seen during the daytime during cool weather periods.

Swainson's Hawk (Buteo swainsoni)

The Swainson's hawk is state listed as threatened and is protected by the Migratory Bird Treaty Act. The Swainson's hawk can be found during summer months in the Central Valley of California. During winter months, it can be found in South America.

The Swainson's hawk is a medium-sized, slim bird with long pointed wings and dark flight feathers. It hunts for food in grasslands, grain and alfalfa fields, and livestock pastures. It eats rodents, small mammals, large insects, amphibians, reptiles, other birds, and sometimes fish.

Swainson's hawks generally rest in trees, but they rest on the ground if trees are not present. They breed in open stands of juniper-sage flats, riparian areas and oak savannahs in the Central Valley. Breeding areas are normally close to food sources. The Swainson's hawk can also nest in landscape trees near human structures and rarely in orchards. Breeding occurs from late March to late August with peak activity occurring in late May or July. The Swainson's hawk usually produces about two to four eggs in the nest, and the eggs take 25 to 28 days to hatch.

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

As previously discussed, habitat types in this area include orchards, pasture or agricultural fields, bare or ruderal ground, landscaped areas, and built-up property.

San Joaquin Kit Fox

The project area has two records of San Joaquin kit fox occurrence. One record shows an occurrence about 3 miles northwest of the project area in 1975. Another San Joaquin kit fox was found dead on Spruce Avenue about 1.3 miles north of the project area in 2001 and was presumed to have been killed by a vehicle.

The nearest location that provides large areas of potential San Joaquin kit fox habitat is in the Elephant Back Hills region, 2.8 miles east of the project area. The project area contains just under 41 acres of potential habitat in ruderal and bare areas, a good portion of which is on roadside shoulders and medians. The open parcels are mainly on the north and east sides of State Route 65 and are mixed with agricultural parcels, developed areas, and orchards. Bare or ruderal parcels may be actively maintained, which could limit their ability to provide habitat.

Swainson's Hawk

The nearest record of a Swainson's hawk occurrence (a nesting pair with young, recorded in 2017) is about 3 miles west of the project location. A site visit was made in May 2019, and no Swainson's hawks were seen. However, large landscape trees that could provide nesting and open fields that could provide a food source are present in the project area.

Location 2 – State Route 198/245 and Spruce Avenue Roundabout Operational Improvement

As previously discussed, habitat types located in this area include orchards and bare or ruderal ground.

San Joaquin Kit Fox

The San Joaquin kit fox is not anticipated to occur within or near the project area. No records of occurrence are within a 2-mile radius of the project area. The result of a site visit by the project biologist in May 2019 indicated that the presence of San Joaquin kit fox is unlikely. The closest potential habitat is about 1.1 miles southeast of the project area in the region around Badger Hill. Although the San Joaquin kit fox could travel through orchards and agricultural fields, there is no potential habitat for producing and caring for offspring nearby. The project area lacks vacant parcels or other features that may provide food sources for the San Joaquin kit fox.

Swainson's Hawk

The nearest record of a Swainson's hawk occurrence is the same occurrence recorded at Location 1 and Location 3 (a nesting pair with young, recorded in 2017). This recorded sighting is about 9 miles south of the project location. A site visit was made in May 2019, and no Swainson's hawks were seen. However, a red-tailed hawk was seen flying near the project area. The red-tailed hawk was near some large landscape trees around a residential

property on the west side of the Friant-Kern Canal. The large landscape trees could provide nesting, but the area is lacking open fields that provide a food source for the Swainson's hawk.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road (Avenue 232) with Roundabout intersections at Hermosa Street and Tulare Road

As previously discussed, Location 1 and Location 3 share the same Biological Study Area. The affected environment discussion for this project area is the same as for Location 1 mentioned above.

Environmental Consequences

Alternative 1.B, Alternative 2.B, Alternative 3.B

San Joaquin Kit Fox

The project is anticipated to result in permanent impacts to about 1.4 acres of agricultural fields or pastures, 9.5 acres of bare or ruderal habitat, and 0.2 acre of landscaped areas that may provide some lower quality habitat for the San Joaquin kit fox. Temporary impacts include about 5 acres of agricultural fields or pastures, 5 acres of bare or ruderal land and 1.3 acres of landscaped areas. The habitat quality in all the project areas are likely very low due to ongoing management and the close proximity to heavily traveled roadways and other human activity.

Even though a sub-population of the San Joaquin kit foxes has adapted to living within an urban environment in the Bakersfield area, there is no evidence it has done so within the built-up area of Lindsay. There are no known established dens or burrows or movement corridors for this species within or near the project areas. Impacts to individual kit foxes or to any habitat of moderate to good quality are not anticipated.

Swainson's Hawk

The project is anticipated to result in permanent impacts to about 1.4 acres of open fields or pastures, and about 14 acres of bare or ruderal habitat that may provide foraging habitat for the Swainson's hawk. Temporary impacts include about 6.5 acres of open fields or pastures and about 7 acres of bare or ruderal land. However, bare or ruderal areas next to existing highways are very low-quality foraging habitat due to the risk of vehicle collision.

An unknown, but presumably low, number of potentially suitable nesting trees may need to be removed at these work locations. One group of trees near Location 2 was identified as potentially suitable nesting habitat, but the trees are farther than 600 feet from the project area on the south side of State Route 198 just west of the Friant-Kern Canal.

Orchards are not typical habitat for the Swainson's hawk, but the hawks have been documented to nest in orchard trees on at least one Caltrans project (May 7, 2015, State Route 99, Project Biologist). A total of about 32 acres of orchards will be permanently impacted in the project area. These orchards would be surveyed for nesting raptors during the appropriate season prior to construction, and any nests observed would be avoided per the minimization efforts described below.

Avoidance, Minimization, and/or Mitigation Measures

San Joaquin Kit Fox

While the likelihood that the San Joaquin kit fox would be found on the project site is very small, Caltrans proposes the following avoidance and minimization efforts to ensure the project will not result in measurable impacts to this species:

- Surveys for the San Joaquin kit fox would be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the San Joaquin kit fox.
- Surveys would be conducted within potential habitat areas located in the proposed project boundary in addition to a 200-foot area outside the project footprint, where permitted, to identify habitat features.
- If natal/pupping dens are discovered within the project area or within 200 feet of the project boundary, the U.S. Fish and Wildlife Service would be immediately notified.
- The configuration of exclusion zones around San Joaquin kit fox dens should have a 50-foot radius around potential dens and a 100-foot radius around known dens measured outward from the entrance or cluster of entrances.
- Disturbance to all San Joaquin kit fox dens (if any) would be avoided to the maximum extent possible.
- If any known or potential kit fox dens or burrows are located, or signs of kit fox occupancy observed, within 200 feet of the project areas, a qualified biologist would be present at the construction site during initial ground-disturbing activities.
- To the extent possible, a biologist would be available on-call during all construction periods when not present on-site.
- Due to the low likelihood of occurrence and low quality of impacted habitat, compensatory mitigation for this species is not proposed.

Swainson's Hawk

While the likelihood that the Swainson's hawk would be found on the project site is low, Caltrans proposes the following avoidance and minimization

efforts to ensure the project will not result in measurable impacts to this species:

- Protocol nesting surveys would be conducted during the appropriate season prior to the start of construction to determine if any Swainson's hawks are nesting in proximity (0.5 mile) to the project areas.
- If nesting Swainson's hawks are observed on-site, then the nest site would be designated an Environmentally Sensitive Area, with a 500-foot radius no-work area around the nest until it has been determined by a qualified biologist that the young have fledged.
- A qualified biologist would monitor active nests during construction activities.
- A special provision for migratory birds would be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact areas would be done outside of the nesting season.
- Since orchards are an artificial, managed, and atypical habitat type, impacts to orchards are not proposed to be mitigated as loss of natural nesting habitat.

2.3.4 Invasive Species

Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order 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 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 analysis for a proposed project.

Affected Environment

This section focuses on the issues covered in the Natural Environment Study Minimal Impacts prepared for the project in June 2020.

Several non-native species were identified in the Biological Study Area. Eight are listed as invasive by the California Department of Food and Agriculture and California Invasive Plant Council. Table 2-14 lists the eight invasive species observed in the Biological Study Area along with their California

Department of Food and Agriculture and California Invasive Plant Council ratings.

Table 2-14 Invasive Species in the Biological tudy Area

Common Name	Scientific Name	Food and Agriculture Rating	Invasive Plant Council Rating
Wild oat	*Avena fatua*	Not applicable	Moderate
Black mustard	*Brassica nigra*	Not applicable	Moderate
Ripgut brome	*Bromus diandrus*	Not applicable	Moderate
Red brome	*Bromus madritensis ssp. rubens*	Not applicable	High
Yellow star thistle	*Centaurea solstitialis*	C	High
Russian thistle	*Salsola tragus*	C	Limited
London rocket	*Sisymbrium irio*	Not applicable	Limited
Soft brome	*Bromus hordeaceus*	Not applicable	Limited

Source: Caltrans Natural Environment Study Minimal Impacts, November 2019

Of the species listed, the Russian thistle and yellow star thistle are the only species assigned with a rating of C by the California Department of Food and Agriculture. This rating designated these species as a pest of known economic or environmental detriment and, if present in California, they are usually widespread. If found in the state, they are subject to regulations designed to retard spread or to suppress at the discretion of the individual county agricultural commissioner. There is no state-enforced action other than providing for pest cleanliness.

The following are invasive species ratings assigned by the California Invasive Plant Council:

- High: Species with severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. They are identified as having moderate to high rates of dispersal and establishment and most are widely distributed.
- Moderate: Species with substantial and apparent, but generally not severe, ecological impacts on physical processes, plant and animal communities, and vegetation structure. They are identified as having moderate to high rates of dispersal, though their establishment is

generally dependent upon disturbance. Their size and distribution may range from limited to widespread.

- Limited: Species that are invasive, but their impacts are minor on a statewide level, or there was not enough information to justify a higher score. They are identified as having low to moderate rates of invasiveness. Their size and distribution are generally limited, but they may be locally persistent and problematic.

Red brome and yellow star thistle are the only invasive species in the Biological Study Area with a rating of High by the California Invasive Plant Council.

Environmental Consequences

Alternative 1.B, Alternative 2.B, Alternative 3.B

An indirect impact that could occur due to construction activities is a further reduction of available habitat due to the introduction or spread of invasive species within the project footprint.

In compliance with the Executive Order 13112 on Invasive Species and guidance from the Federal Highway Administration, the landscaping and erosion control included in the project will not use species listed as invasive. None of the species on the California list of invasive species is used by Caltrans for erosion control or landscaping. All equipment and materials will be inspected for the presence of invasive species and cleaned if necessary. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

A Standard Special Provision will be included in the construction contract that requires construction equipment and vehicles to be cleaned prior to entering and exiting the project.

Avoidance, Minimization, and/or Mitigation Measures

To prevent the further spread of these species, as well as the introduction of new invasive species, the following measures will be implemented for the project:

- All areas disturbed by project construction will be re-seeded with duff collected from non-native grassland during clearing and grubbing activities followed by a native mix hydroseed and compost.
- Additional specifications to prevent the spread of, or to eradicate, invasive species may be included in the construction contract.

2.4 Construction Impacts

2.4.1 Air Quality

Environmental Consequences

During construction, the project will generate air pollutants. The exhaust from construction equipment contains hydrocarbons, oxides of nitrogen, carbon monoxide, suspended particulate matter, and odors. However, the largest percentage of pollutants would be windblown dust generated during excavation, grading, hauling, and various other activities. The impacts of these activities would vary each day as construction progresses. Dust and odors during construction could cause occasional annoyance and complaints from residences along the state right-of-way.

Avoidance, Minimization, and/or Mitigation Measures

Caltrans Standard Specifications pertaining to dust control and dust palliative requirements are a required part of all construction contracts and should effectively reduce and control emission impacts during construction. The provisions of Caltrans Standard Specifications, Section 14-9.02 “Air Pollution Control” and Section 10-5 “Dust Control,” require the contractor to comply with the air pollution control rules, ordinances, and regulations and statutes that apply to work performed under the contract, including those provided in Government Code Section 11017.

Some minimization measures for short-term construction-related emissions include:

- Application of the most stringent available regulations or best practices even if not required by local/state regulations at the site
- Possible designation of areas where construction equipment servicing and storage are not allowed (near sensitive receptors)
- Construction staging
- Temporary programs to reduce detour and construction-related traffic congestion such as special transit programs and subsidies
- A construction equipment emission reduction program to encourage or require the contractor to use cleaner (newer) diesel engines or retrofit older engines.

2.4.2 Noise

Environmental Consequences

Noise from construction activities may periodically dominate the noise environment in the immediate area. However, adverse noise impacts from construction are not anticipated because construction would be done in

accordance with Caltrans Standard Specifications Section 14.8.02 and applicable local noise standards. Construction noise would be short term, intermittent, and overshadowed by local traffic noise. Construction is anticipated to last about 125 working days at Location 1, 120 working days at Location 2, and 270 working days at Location 3. Night construction is not expected except in rare circumstances.

Avoidance, Minimization, and/or Noise Abatement Measures

The following are possible control measures that can be implemented to minimize noise disturbances at sensitive areas during construction:

- All equipment will have sound-control devices no less effective than those provided on the original equipment. Each internal combustion engine used for any purpose on the job or related to the job will be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine should be operated on the job site without an appropriate muffler.
- Construction methods or equipment that will provide the lowest level of noise impact (for example, avoid impact pile driving near residences and consider alternative methods that are also suitable for the soil condition) should be used.
- Idling equipment will be turned off.
- Truck loading, unloading, and hauling operations will be restricted so that noise and vibration are kept to a minimum through residential neighborhoods to the greatest possible extent.

The contractor will be required to adhere to the following administrative noise control measures:

- Once details of the construction activities become available, the contractor will work with local authorities to develop an acceptable approach to minimize interference with the business and residential communities, traffic disruptions, and the total duration of the construction.
- Good public relations will be maintained with the community to minimize objections to unavoidable construction impacts. Frequent activity updates of all construction activities will be provided. A construction noise monitoring program to track sound levels and limit the impacts will be implemented.
- In case of construction noise complaints by the public, the Resident Engineer will coordinate with the construction manager, and the specific noise-producing activity may be changed, altered, or temporarily suspended, if necessary.

It is possible that certain construction activities such as clearing and compacting could cause intermittent localized concern from vibration in the project area. During certain construction phases, processes such as earth

moving with bulldozers, the use of vibratory compaction rollers, demolition activities, or pavement breaking may cause construction-related vibration impacts such as human annoyance or, in some cases, building damages.

The following are procedures that can be used to minimize the potential impacts from construction vibration:

- Restrict the hours of vibration-intensive equipment or activities such as vibratory rollers so that impacts to residents are minimal (e.g., weekdays during daytime hours only when as many residents as possible are away from home).
- The owner of a building close enough to a construction vibration source that damage to that structure due to vibration is possible, would be entitled to a pre-construction building inspection to document the pre-construction condition of that structure.
- Conduct vibration monitoring during vibration-intensive activities.

A combination of the mitigation techniques for equipment vibration control as well as administrative measures, when properly implemented, can be selected to provide the most effective means to minimize the effects of construction activity.

Application of the mitigation measures will reduce the construction impacts; however, temporary increases in vibration would likely occur at some locations.

Chapter 3 CEQA Evaluation

3.1 Determining Significance under CEQA

The project is a joint project by Caltrans and the Federal Highway Administration and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The Federal Highway Administration'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 U.S. Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016 and executed by the Federal Highway Administration and Caltrans. Caltrans is the lead agency under NEPA and CEQA.

One of the main differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an Environmental Impact Statement, or a lower level of documentation, will be required. NEPA requires that an Environmental Impact Statement be prepared when the proposed federal action (the 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 Environmental Impact Statement, 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 document.

CEQA, on the other hand, does require 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 Environmental Impact Report must be prepared. Each and every significant effect on the environment must be disclosed in the Environmental Impact Report and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an Environmental Impact Report. 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.

3.2 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant With Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The words “significant” and “significance” used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this checklist 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 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 to provide you 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.

3.2.1 Aesthetics

CEQA Significance Determinations for Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

No Impact—There are no scenic vistas within the project area. (Visual Impact Assessment, May 2020)

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact—The project area is not within a state scenic highway designated area. (Visual Impact Assessment, May 2020)

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the

project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact—The project would not substantially degrade the existing visual character or quality of public views. The project would not conflict with applicable zoning and other regulations governing scenic quality. (Visual Impact Assessment, May 2020)

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact—The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. (Visual Impact Assessment, May 2020)

3.2.2 Agriculture and Forest Resources

CEQA Significance Determinations for 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 Department 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:

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?

Less Than Significant Impact—The project would convert about 15.5 acres of Prime Farmland and 22.5 acres of Farmland of Statewide Importance to non-agricultural use. This is approximately 0.0013 percent of the total important farmland that is subject to the Farmland Protection Policy Act in Tulare County and is negligible when compared to the available farmland in the area.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less Than Significant Impact—The project will not conflict with existing zoning for agricultural use or a Williamson Act contract. The existing zoning and Williamson Act contracts will remain in place with the project. A letter will be sent to the Department of Conservation as notification that Caltrans proposes to acquire land that is under Williamson Act contract in accordance with Government Code Section 51291(b).

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))?

No Impact—There is no forest land or timberland in the project area.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact—There is no forest land or timberland in the project area.

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?

Less Than Significant Impact—The purpose of the project is to improve traffic circulation and relieve congestion in the project area. Though improvements will require partial acquisition of right-of-way from adjoining parcels, the project would not increase capacity. Therefore, the project itself could not result in further conversion of farmland to non-agricultural use. There is no forest land or timberland in the project area.

3.2.3 Air Quality

CEQA Significance Determinations for Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact—The project would not conflict with or obstruct implementation of an air quality plan (Air Quality Report, March 2020)

b) 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?

No Impact—The project would not result in a cumulatively considerable net increase of any criteria pollutant because it is the type of project found by the U.S. Environmental Protection Agency to be neutral from an air quality or emissions standpoint and is exempt from conformity requirements according to 40 Code of Federal Regulations Section 93.126 Table 2. (Air Quality Report, March 2020)

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact—The project would not expose sensitive receptors to substantial pollutant concentrations. (Air Quality Report, March 2020)

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact—The project would not result in other emissions that would adversely affect a substantial number of people. (Air Quality Report, March 2020)

3.2.4 Biological Resources

CEQA Significance Determinations for Biological Resources

Would the project:

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 Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact—While the likelihood that the Swainson's hawk or San Joaquin kit fox would be found on the project site is low, Caltrans will adopt avoidance and minimization efforts to ensure the project will not result in measurable impacts to these species. (Natural Environment Study Minimal Impacts, June 2020)

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 Wildlife or U.S. Fish and Wildlife Service?

No Impact—No natural communities of concern or special-status habitats occur within or near the project areas. (Natural Environment Study Minimal Impacts, June 2020)

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact—Except for the Friant-Kern Canal, which will not be impacted, wetlands and other waters do not occur within or near any of the three project locations. (Natural Environment Study Minimal Impacts, June 2020)

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?

No Impact—The California Essential Habitat Connectivity Project (Spencer, et.al. 2010) does not locate any natural habitat blocks or essential connectivity corridors within or near the project areas. (Natural Environment Study Minimal Impacts, June 2020)

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact—This project will not conflict with any local policies or ordinances protecting biological resources. (Natural Environment Study Minimal Impacts, June 2020)

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?

No Impact—There are no conservation plans in the project area according to the U.S. Fish and Wildlife Service's Environmental Conservation online system; therefore, the project is not in conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or regional or state habitat conservation plan. (Natural Environment Study Minimal Impacts, June 2020)

3.2.5 Cultural Resources

CEQA Significance Determinations for Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section15064.5?

No Impact—No Historical Resources are present in the project area. (Second Supplemental Historic Property Survey Report, October 2019)

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section15064.5?

No Impact—No Historical Resources are present in the project area. (Second Supplemental Historic Property Survey Report, October 2019)

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

No Impact—The project would not disturb human remains, including those interred outside of dedicated cemeteries. (Second Supplemental Historic Property Survey Report, October 2019)

3.2.6 Energy

CEQA Significance Determinations for Energy

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Impact—The project will not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact—The project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.2.7 Geology and Soils

CEQA Significance Determinations for Geology and Soils

Would the project:

a) Directly or indirectly cause 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?

No Impact—The project is not in a known earthquake fault area. (California Geological Survey, Seismic Hazard Zones and Alquist-Priolo Earthquake Fault Zone Interactive Map January 2020)

ii) Strong seismic ground shaking?

No Impact—Strong seismic ground shaking is not anticipated since the project is not in a known earthquake fault area. (U.S. Geological Survey U.S. Quaternary Faults interactive map, January 2020)

iii) Seismic-related ground failure, including liquefaction?

No Impact—The project is in an area with low potential for seismically related ground failure, including liquefaction, because the project area does not contain soil that is prone to liquefaction or seismic-related ground failure. (Cal OES, Governor's Office of Emergency Services, My Hazards interactive map January 2020)

iv) Landslides?

No Impact—The project area would not be subject to landslides because of the generally flat topography and because the project would not involve large cuts and fills or steep excavation.

b) Result in substantial soil erosion or the loss of topsoil?

No Impact—Construction of the project would not result in substantial soil erosion or the loss of topsoil because the project will include appropriate Best Management Practices to prevent soil erosion or 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-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact—Construction of the project, which consists mostly of operational improvements on an existing facility, would not cause the area to become unstable, or cause landslides, lateral spreading, or collapse, or cause subsidence. The soil in the project area is not subject to liquefaction.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact—The soil in the project area is not subject to liquefaction.

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?

No Impact—The project would not include septic tanks or alternative waste water disposal systems; therefore, there would be no impact.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact—The project would not directly or indirectly destroy paleontological resources because none are anticipated to be found within the project limits. There are no geologic features within the project limits.

3.2.8 Greenhouse Gas Emissions

CEQA Significance Determinations for Greenhouse Gas Emissions

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact—The project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Greenhouse gas emissions impacts of operational improvements projects such as this are considered less than significant under CEQA because there would be no increase in operational emissions. While some greenhouse gas emissions during the construction period would be unavoidable, with implementation of standard conditions or Best Management Practices designed to reduce or eliminate emissions as part of the project, the impact would be less than significant. (Air Quality Report, March 2020)

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact—The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. (Air Quality Report, March 2020)

3.2.9 Hazards and Hazardous Materials

CEQA Significance Determinations for Hazards and Hazardous Materials

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact—Applicable standard special provisions and/or non-standard special provisions addressing proper handling and disposal of aerially deposited lead, asbestos-containing materials, lead-based paint, and treated wood waste will be included in the construction contract to

protect construction personnel and the public. (Initial Site Assessment, August 2019)

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?

Less Than Significant Impact—The implementation of applicable standard special provisions and/or non-standard special provisions addressing proper handling and disposal of aerially deposited lead, asbestos-containing materials, lead-based paint, and treated wood waste would reduce this risk. (Initial Site Assessment, August 2019)

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact—A public school (Jefferson Elementary School) sits just east of Location 3, less than 0.25 mile from the project area. As stated in Section 2.2.3, Alternative 3.B would not involve the transport or use of hazardous materials, substances or waste. The contractor will be required to comply with Caltrans standard specifications as well as the Regional Air Quality Control Board regulations to limit the amount of hazardous emissions emitted during construction. Alternative 3.B would also require site-specific investigations for hazardous materials and would provide recommendations for proper disposal in the event that hazardous materials are present. Therefore, impacts related to the emission or handling of hazardous materials near a school would be less than significant. (Initial Site Assessment, August 2019)

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?

No Impact—The project is not on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. (Initial Site Assessment, August 2019)

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 or excessive noise for people residing or working in the project area?

No Impact—The project would not result in a safety hazard or excessive noise for people residing or working in the project area because there is no airport within 2 miles of the project.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact—The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact—The project is not in a very high fire hazard severity zone, according to the California Department of Forestry and Fire Protection online map. There is the potential that construction activities could create an unintended fire. However, the project would use adequate precautions to prevent fire incidents during construction as part of the code of safe practices.

3.2.10 Hydrology and Water Quality

CEQA Significance Determinations for Hydrology and Water Quality

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

No Impact—With the implementation of Best Management Practices and standard specifications, the project would not violate any water quality standards or waste discharge requirements or degrade water quality. Adherence to construction provisions and precautions described in the National Pollutant Discharge Elimination System permit would be upheld.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact—The construction or operation of the project would not impede sustainable groundwater management of the basin since the project would not use groundwater or interfere with groundwater recharge.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site;

No Impact—Soils within the study area are composed of very well-drained alluvium with slow subsoil permeability and low potential for erosion. This soil tends to be evident in gently sloping environments. (U.S. Department of Agriculture, Soil Conservation Service)

Construction of the project would not result in substantial soil erosion or the loss of topsoil because the project will include appropriate Best Management Practices to prevent soil erosion or loss of topsoil.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site;

Less Than Significant Impact—This project will moderately increase the impervious surface area, causing additional volume and velocity of flow to the side of the roadway. Placement of side ditches is proposed to infiltrate the Water Quality Volume (WQV) prior to discharge to the existing cross culverts or any water bodies within the project limits.

iii) 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; or

Less Than Significant Impact—This project will require the preparation of a Storm Water Pollution Prevention Plan. The Storm Water Pollution Prevention Plan will be developed by the contractor and submitted to the Caltrans resident engineer for review and acceptance prior to the start of construction. The Storm Water Pollution Prevention Plan incorporates the applicable temporary construction site best management practices for the project to reduce or eliminate pollutants in construction site storm water runoff.

iv) Impede or redirect flood flows?

No Impact—The project would not alter the course of any channel or alter drainage patterns within the project study area.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact—Due to the topography of the project location, it would not be possible for construction of the project to cause inundation of an area by seiche, tsunami, or mudflow.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact—The project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. Water quality during construction would be protected by provisions as described in the National Pollutant Discharge Elimination System permit.

3.2.11 Land Use and Planning

CEQA Significance Determinations for Land Use and Planning

Would the project:

a) Physically divide an established community?

No Impact—The project would not physically divide an established community.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact—The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

3.2.12 Mineral Resources

CEQA Significance Determinations for Mineral Resources

Would the project:

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?

No Impact—The project would not 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. The project is not in land that is classified as a Mineral Resource Zone according to the State Geologist. (California Department of Conservation Mineral Land Classification Interactive Map, January 2020)

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?

No Impact—This project would not 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. The project is not within a locally important mineral resource recovery site. (Tulare County General Plan Update 2030)

3.2.13 Noise

CEQA Significance Determinations for Noise

Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact—The project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Caltrans Noise Study Report, December 2019)

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact—Equipment noise control measures would be implemented to avoid or minimize potential groundborne vibration or noise levels. Any increase in vibration and noise would be temporary during construction. (Caltrans Noise Study Report, December 2019)

c) For a project located within the vicinity of a private airstrip or 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?

No Impact—The project is not located within the vicinity of a private airstrip or an airport land use plan. The project is not located in an area where such a plan has not been adopted or within 2 miles of a public airport or public use airport.

3.2.14 Population and Housing

CEQA Significance Determinations for Population and Housing

Would the project:

a) Induce substantial unplanned 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)?

No Impact—The project would not induce substantial unplanned population growth in the area, either directly or indirectly, because the project does not add capacity or extend roads or other infrastructure.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Less Than Significant Impact—The project would displace two single-family residences. Theses displacements would be conducted in accordance with

the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (see Appendix C).

3.2.15 Public Services

CEQA Significance Determinations for 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:

Fire protection? Police protection? Schools? Parks? Other public facilities?

No Impact—The project does not propose or require the provision of new governmental facilities or physical alteration of existing governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any public service.

Impacts on response times for emergency services would be negligible with implementation of the Caltrans incident management plan described in Section 2.1.7 Utilities and Emergency Services. Priority would be given to emergency responders to pass through to alleviate any delays.

3.2.16 Recreation

CEQA Significance Determinations for Recreation

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?

No Impact—The purpose of the project is to relieve congestion and improve the flow of traffic in the project area. Parks and recreational facilities near the project area are not expected to receive increased usage.

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?

No Impact—The project does not propose any recreational facilities or require the construction or expansion of recreational facilities.

3.2.17 Transportation

CEQA Significance Determinations for Transportation

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Impact—The project would not conflict with any applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Rather, the project would ensure safe operation of the highway system for motorists, bicyclists, and emergency responders.

b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

No Impact—The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) because it is an operational improvement project, so it will not have an impact on vehicle miles traveled.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact—The project design addresses existing operational deficiencies in the project area. The existing curve on State Route 65 near Lindsay would be improved, and the proposed roundabouts would accommodate large vehicles, including farm equipment.

d) Result in inadequate emergency access?

No Impact—The project would have no long-term impacts to access. The project will be constructed in stages with traffic control. This would involve some delays for motorists. However, emergency access would always be available.

3.2.18 Tribal Cultural Resources

CEQA Significance Determinations for 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:

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

No Impact—No resources in the proposed project area are 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). (Second Supplemental Historic Property Survey Report, October 2019)

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.

No Impact—There are no resources in the proposed project area that are significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, significance of a resource to a California Native American tribe. (Second Supplemental Historic Property Survey Report, October 2019)

3.2.19 Utilities and Service Systems

CEQA Significance Determinations for Utilities and Service Systems

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact—The project would require relocation of existing storm water drainage, electrical power and telecommunication facilities. These facilities would be relocated as needed within the project area, which would not cause significant environmental effects.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact—The project would have sufficient water supplies for construction and would not require additional water supplies in future years.

c) 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?

No Impact—The project would not generate significant amounts of wastewater or require future capacity for wastewater treatment.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact—The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact—The construction contractor will be responsible for controlling/ disposing of solid waste in accordance with federal, state and local statutes and regulations.

3.2.20 Wildfire

CEQA Significance Determinations for Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact—This project is not within a very high fire hazard severity zone. (CAL FIRE online Fire Hazard Severity Zones Maps)

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact—This project is not within a very high fire hazard severity zone. (CAL FIRE online Fire Hazard Severity Zones Maps)

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact—This project is not within a very high fire hazard severity zone. (CAL FIRE online Fire Hazard Severity Zones Maps)

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact—This project is not within a very high fire hazard severity zone. (CAL FIRE online Fire Hazard Severity Zones Maps)

There is the potential that construction activities could create an unintended fire. However, the contractor would use adequate precautions and procedures as outlined in the contract's standard specifications to prevent and extinguish fire incidents during construction.

3.2.21 Mandatory Findings of Significance

CEQA Significance Determinations for Mandatory Findings of Significance

a) Does the project have the potential to substantially 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?

No Impact—The project does not 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. (Natural Environment Study, November 2019 and Caltrans Second Supplemental Historic Property Survey Report, October 2019)

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.)

No Impact—The project does not have impacts that are individually limited, but cumulatively considerable.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact—The project would not cause substantial adverse effects on human beings, either directly or indirectly.

3.3 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 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 by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to greenhouse gas emissions reduction and climate change research and policy. These efforts are mainly concerned with the emissions of greenhouse gases generated by human activity, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant greenhouse gas; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2.

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 greenhouse gas 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). This analysis will include a discussion of both.

Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce greenhouse gas emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source greenhouse gas reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and greenhouse gas emissions reduction at the project level.

The National Environmental Policy Act (42 U.S. Code 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 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. The Federal Highway Administration therefore supports a sustainability

approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices.[1] This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability."[2] 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.

Various efforts have been made at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 U.S. Code Section 6201) and Corporate Average Fuel Economy (CAFE) 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 program on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

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) the establishment of the Office of Indian Energy Policy and Programs within the Department of 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.

The U.S. Environmental Protection Agency (EPA)[3] in conjunction with the National Highway Traffic Safety Administration is responsible for setting greenhouse gas emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. The current standards require vehicles to meet an average fuel economy of 34.1 miles per gallon by 2016. The EPA and National Highway Traffic Safety Administration are currently considering

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1 https://www.fhwa.dot.gov/environment/sustainability/resilience/

2 https://www.sustainablehighways.dot.gov/overview.aspx

3 U.S. EPA's authority to regulate greenhouse gas emissions stems from the U.S. Supreme Court decision in Massachusetts v. EPA (2007). The Supreme Court ruled that greenhouse gases 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, the U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence, it found that six greenhouse gases constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing act and the EPA's assessment of the scientific evidence that form the basis for EPA's regulatory actions.

appropriate mileage and greenhouse gas emissions standards for 2022–2025 light-duty vehicles for future rulemaking.

The National Highway Traffic Safety Administration 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

California has been innovative and proactive in addressing greenhouse gas emissions and climate change by passing multiple Senate and Assembly bills and executive orders including, but not limited to, the following:

Executive Order S-3-05 (June 1, 2005): The goal of this order is to reduce California's greenhouse gas 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 (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

AB 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 greenhouse gas emissions reduction goals outlined in Executive Order S-3-05, while further mandating that the California Air Resources Board create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020 (Health and Safety Code Section 38551(b)). The law requires the Air Resources Board to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective greenhouse gas reductions.

Executive Order S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. The Air Resources Board re-adopted the low carbon fuel standard 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 greenhouse gas reduction goals.

SB 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the Air Resources Board to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization for each region must then develop a "Sustainable

Communities Strategy" that integrates transportation, land use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

Executive Order B-16-12 (March 2012): This order directs State entities under the direction of the Governor, including the Air Resources Board, 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): This order establishes an interim statewide greenhouse gas emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of greenhouse gas emissions to implement measures, pursuant to statutory authority, to achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets. It also directs the Air Resources Board to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$).[4] 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.

SB 32, Chapter 249, 2016: This bill codifies the greenhouse gas reduction targets established in Executive Order B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016: This bill declared "it to be the policy of the state that the protection and management of natural and working lands … is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

AB 134, Chapter 254, 2017: This bill allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs,

[4] Greenhouse gases differ in how much heat each trap in the atmosphere (global warming potential, or GWP). CO_2 is the most important greenhouse gas, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent" (CO_2e). The global warming potential of CO_2 is assigned a value of 1, and the global warming potential of other gases is assessed as multiples of CO_2.

demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

Senate Bill 743**,** Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles traveled, to promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

Senate Bill 150**,** Chapter 150, 2017, Regional Transportation Plans: This bill requires the Air Resources Board to prepare a report that assesses progress made by each metropolitan planning organization in meeting its established regional greenhouse gas emission reduction targets.

Executive Order B-55-18 (September 2018): This order sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing greenhouse gas emissions.

Environmental Setting

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

Land use surrounding the project area is mainly agricultural with limited commercial and residential land use. A residential development near Lindsay is in the planning stages, in addition to a retail facility and sports complex. These projects are in the early stages of development.

Location 2 – State Route 198/245 and Spruce Avenue Roundabout Operational Improvement

Land use surrounding the project area is agricultural.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road (Avenue 232) with Roundabout intersections at Hermosa Street and Tulare Road

Land use surrounding the project area is mainly agricultural with limited commercial and residential land use. A residential development near Lindsay is in the planning stages, in addition to a retail facility and sports complex. These projects are in the early stages of development.

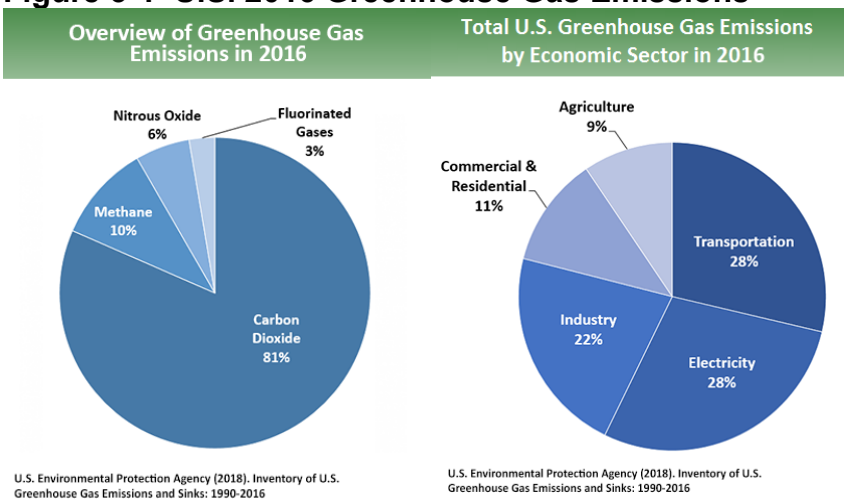
A greenhouse gas emissions inventory estimates the amount of greenhouse gases discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual greenhouse gas emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission

reduction goals. The U.S. EPA is responsible for documenting greenhouse gas emissions nationwide, and the Air Resources Board does so for the state, as required by Health and Safety Code Section 39607.

National Greenhouse Gas Inventory

The U.S. EPA prepares a national greenhouse gas inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of greenhouse gases in the United States, reporting emissions of CO_2, CH_4, N_2O, HFCs, perfluorocarbons, SF_6, and nitrogen trifluoride. It also accounts for emissions of CO_2 that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO_2 (carbon sequestration). The 1990–2016 inventory found that of 6,511 $MMTCO_2e$ greenhouse gas emissions in 2016, 81% consist of CO_2, 10% are CH_4, and 6% are N_2O; the balance consists of fluorinated gases (EPA 2018a).[5] In 2016, greenhouse gas emissions from the transportation sector accounted for nearly 28.5% of U.S. greenhouse gas emissions. See Figure 3-1.

Figure 3-1 U.S. 2016 Greenhouse Gas Emissions



State Greenhouse Gas Inventory

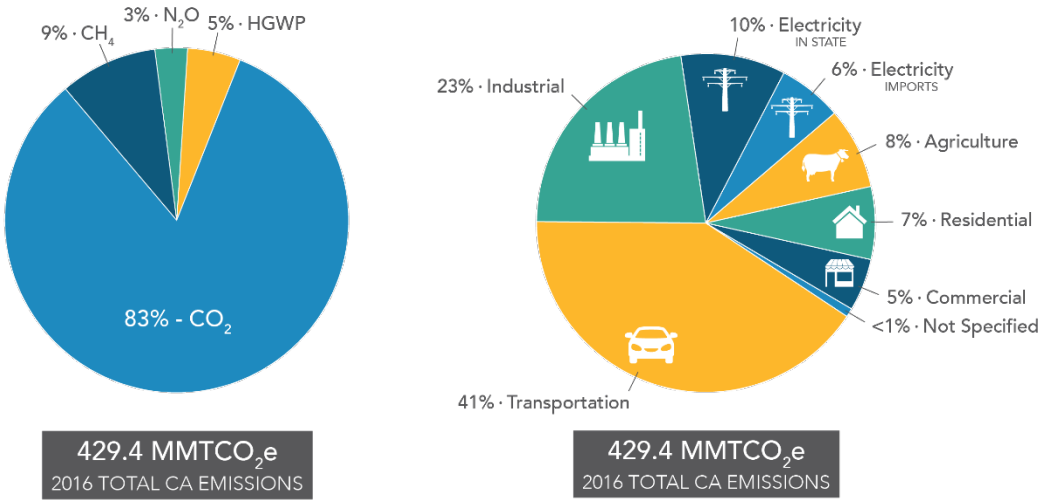
The Air Resources Board collects greenhouse gas emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights

[5] U.S. Environmental Protection Agency. 2018. Inventory of U.S. Greenhouse Gas Emissions and Sinks. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks

major annual changes and trends to demonstrate the state's progress in meeting its greenhouse gas reduction goals.

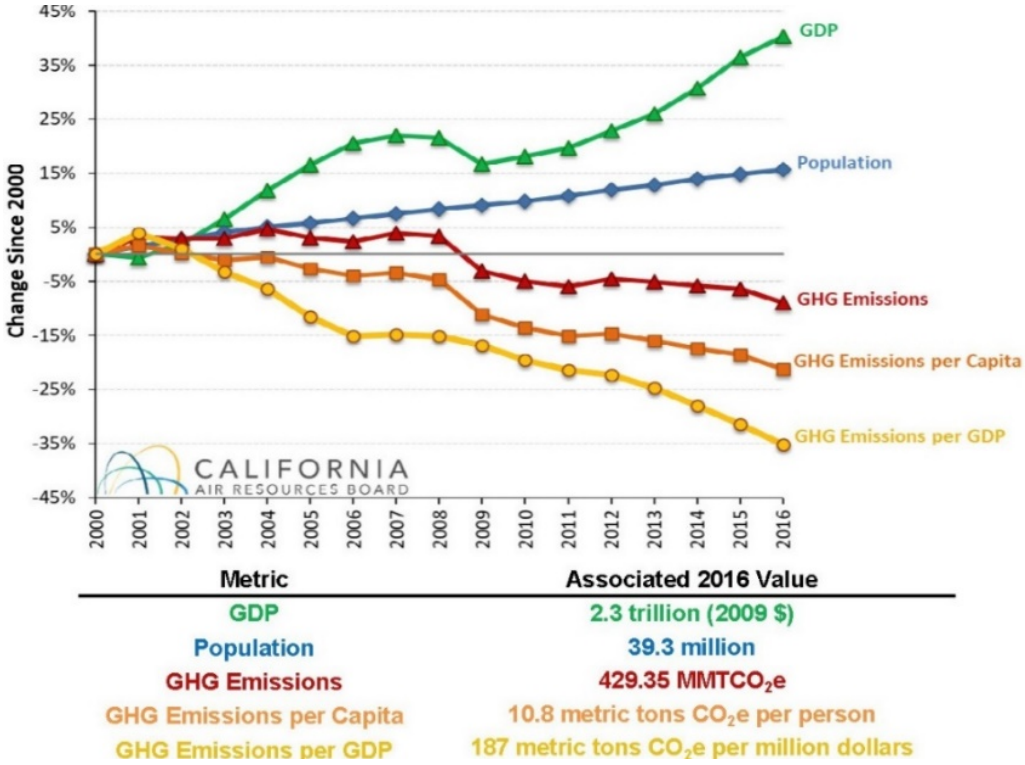
The 2018 edition of the greenhouse gas emissions inventory found total California emissions of 429 MMTCO2e for 2016, with the transportation sector responsible for 41% of total greenhouse gases. It also found that overall statewide greenhouse gas emissions have declined from 2000 to 2016 despite growth in population and state economic output.[6] See Figures 3-2 and 3-3.

Figure 3-2 California 2016 Greenhouse Gas Emissions



[6] 2018 Edition of the Greenhouse Gas Emission Inventory (July 2018). https://www.arb.ca.gov/cc/inventory/data/data.html

Figure 3-3 Change in California Gross Domestic Product, Population, and Greenhouse Gas Emissions since 2000



AB 32 required the Air Resources Board to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing greenhouse gas emissions to 1990 levels by 2020, and to update it every 5 years. The Air Resources Board adopted the first scoping plan in 2008. The second updated plan, California's 2017 Climate Change Scoping Plan, adopted on December 14, 2017, reflects the 2030 target established in Executive Order B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce greenhouse gas emissions.

Regional Plans

The Air Resources Board sets regional targets for California's 18 Metropolitan Planning Organizations to use in their Regional Transportation Plan/Sustainable Communities Strategies to plan future projects that will cumulatively achieve greenhouse gas reduction goals. Targets are set at a percent reduction of passenger vehicle greenhouse gas emissions per person from 2005 levels.

The Tulare County Association of Governments is the Metropolitan Planning Organization for the project area. The regional reduction targets for Tulare County are 5 percent by 2020 and 10 percent by 2035. The Tulare County

Association of Governments 2018 Regional Transportation Plan/Sustainable Communities Strategy details how the region will reduce greenhouse gas emissions to state-mandated levels over time. The project is not required to be listed in the Regional Transportation Plan/Sustainable Communities Strategy document because it is not considered a regionally significant project. The inclusion of the Sustainable Communities Strategy is required by Senate Bill 375 and stresses the importance of meeting greenhouse gas per capita emission reduction targets set by the California Air Resources Board.

The Tulare County Association of Governments participated in the Tulare County Regional Blueprint (Blueprint), adopted in 2009, which encourages smart growth principles, improving the existing public transportation system, and investing in active transportation infrastructure such as new bicycle and pedestrian paths. These strategies, together with transportation system management and trip reduction programs, are projected to reduce per capita passenger vehicle greenhouse gas emissions in the region.

Project Analysis

Greenhouse gas emissions from transportation projects can be divided into those produced during operation of the state highway system and those produced during construction. The main greenhouse gases produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH_4 and N_2O are emitted during fuel combustion. In addition, a small amount of HFC emissions is included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Public Resources Code, Section 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project’s contribution is unlikely to be significant by itself” (Cleveland National Forest Foundation versus San Diego Association of Governments (2017) 3 California 5th 497, 512.). 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. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

Operational Emissions

Location 1 – State Route 65/Tulare Road/Oak Avenue Roundabout Operational Improvement

This operational improvement would allow local traffic to move through this area more efficiently. While some greenhouse gas emissions during construction would be unavoidable, the project once completed would not lead to an increase in operational greenhouse gas emissions.

Location 2 – State Route 198/245 and Spruce Avenue Roundabout Operational Improvement

This operational improvement would allow local and interregional traffic to move through this intersection more efficiently. While some greenhouse gas emissions during construction would be unavoidable, the project once completed would not lead to an increase in operational greenhouse gas emissions.

Location 3 – State Route 65 4-lane Expressway Realignment from Lindmore Street to Tulare Road (Avenue 232) with Roundabout intersections at Hermosa Street and Tulare Road

This operational improvement would change the alignment of State Route 65 but would not add capacity. Improved interregional traffic flow would improve operation of local intersections in Lindsay. While some greenhouse gas emissions during the construction period would be unavoidable, the project once completed would not lead to an increase in operational greenhouse gas emissions.

Construction Emissions

Construction greenhouse gas 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 would, where possible, 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 greenhouse gas emissions produced during construction would be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Carbon dioxide (CO_2) emissions generated from construction equipment were estimated using the Caltrans Construction Emissions Tool (CAL-CET). The estimated emissions would be about 359 tons for Location 1, 212 tons for Location 2, and 918 tons for Location 3.

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all Air Resources Board emission reduction regulations. All projects also include Caltrans Standard Specification 14-9.02, Air Pollution Control, which requires contractors to comply with all air-pollution control rules, regulations, ordinances, and statutes, including those of the San Joaquin Valley Air Pollution Control District.

The project will also implement Caltrans standardized measures (such as construction best management practice) that apply to most or all Caltrans projects. Certain common regulations, such as equipment idling restrictions and development and implementation of a traffic control plan that reduce construction vehicle emissions, also help reduce greenhouse gas emissions.

CEQA Conclusion

While the proposed project will result in greenhouse gas emissions during construction, it is anticipated that the project will not result in any increase in operational greenhouse gas emissions. The project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction greenhouse gas-reduction measures, the impact would be less than significant.

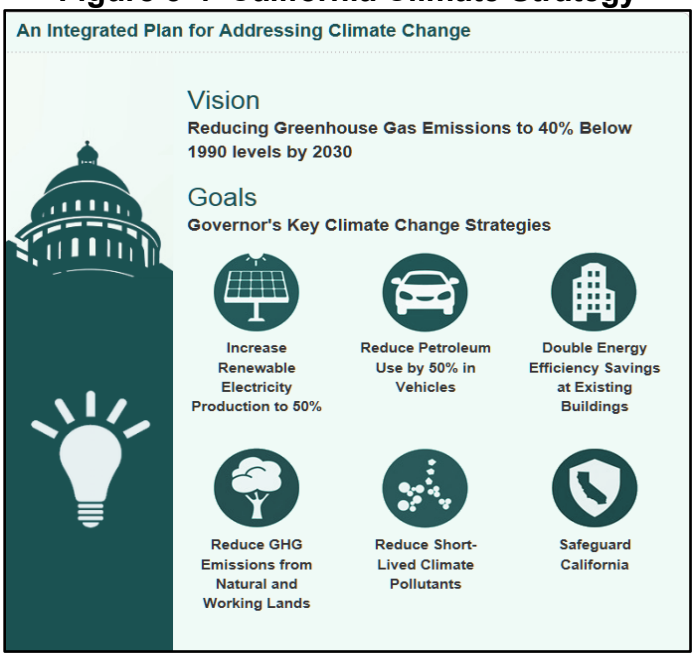
Caltrans is firmly committed to implementing measures to help reduce greenhouse gas emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 greenhouse gas emissions targets. Former Governor Edmund G. Brown Jr. promoted greenhouse gas reduction goals that involved (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 farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*. See Figure 3-4.

Figure 3-4 California Climate Strategy



The transportation sector is integral to the people and economy of California. To achieve greenhouse gas emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. Greenhouse gas emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled. A key state goal for reducing greenhouse gas emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030.

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forest lands, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the Air Resources Board works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Executive Order B-30-15, issued in April 2015, and SB 32 (2016) set an interim target to cut greenhouse gas 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 greenhouse gas emissions. In 2016, Caltrans completed the *California Transportation Plan 2040*, which establishes a new model for developing ground transportation systems, consistent with CO_2 reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

SB 391 (Liu 2009) requires the California Transportation Plan to meet California's climate change goals under AB 32. Accordingly, the California Transportation Plan 2040 identifies the statewide transportation system needed to achieve maximum feasible greenhouse gas emission reductions while meeting the state's transportation needs. While Metropolitan Planning Organizations have primary responsibility for identifying land use patterns to help reduce greenhouse gas emissions, the California Transportation Plan 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 greenhouse gas emissions, among other goals. Specific performance targets in the plan that will help to reduce greenhouse gas emissions include:

- Increasing percentage of non-auto mode share
- Reducing vehicle miles traveled
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) greenhouse gas emissions

Funding and Technical Assistance Programs

In addition to developing plans and performance targets to reduce greenhouse gas emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's Regional Transportation Plan/Sustainable Communities Strategy; contribute to the State's greenhouse gas reduction targets and advance transportation-related greenhouse gas emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

Caltrans Policy Directives and Other Initiatives

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 Caltrans' statewide activities to reduce greenhouse gas emissions resulting from agency operations.

Project-Level Greenhouse Gas Reduction Strategies

The following measures will also be implemented in the project to reduce greenhouse gas emissions and potential climate change impacts from the project. Caltrans staff would enhance the environmental training provided for contractor staff by adding a module on greenhouse gas reduction strategies, including limiting equipment idling time as much as possible.

The contractor will be required to:

- Reduce construction waste and maximize the use of recycled materials wherever possible.
- Incorporate measures to reduce the use of potable water.
- Seek to operate construction equipment with improved fuel efficiency by:
    - Properly tuning and maintaining equipment
    - Limiting equipment idling time
    - Using the right-size equipment for the job
- Caltrans Standard Specification 14-9.02, Air Pollution Control requires contractors to comply with all air-pollution control rules, regulations, ordinances, and statutes. Measures that reduce construction vehicle emissions also help reduce greenhouse gas emissions.

Adaptation

Reducing greenhouse gas emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and variability in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate

stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under National Environmental Policy Act assignment, Caltrans is obligated to comply with all applicable federal environmental laws and Federal Highway Administration National Environmental Policy Act regulations, policies, and guidance.

The U.S. Global Change Research Program delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 U.S. Code Chapter 56A Section 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime."

The U.S. Department of Transportation Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of Department of Transportation in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions."[7]

Federal Highway Administration Order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events,* December 15, 2014)[8] established Federal Highway Administration policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems.

The Federal Highway Administration has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels.[9]

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7 https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm

8 https://www.fhwa.dot.gov/legsregs/directives/orders/5520.cfm

9 https://www.fhwa.dot.gov/environment/sustainability/resilience/

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (2018) is the state's latest effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- Resilience is the "capacity of any entity—an individual, a community, an organization, or a natural system—to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience." Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

Executive Order S-13-08, issued by then-Governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations

and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

Executive Order S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate "sea-level rise (SLR) projections into planning and decision making for projects in California" in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on Sea-Level Rise Science* was published in 2017, and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.[10]

Executive Order B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This order recognizes that effects of climate change other than sea-level rise also threaten California's infrastructure. At the direction of Executive Order B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans is conducting climate change vulnerability assessments to identify segments of the state highway system vulnerable to climate change effects, including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

[10] http://www.opc.ca.gov/updating-californias-sea-level-rise-guidance/

- *Exposure*—Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence*—Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization*—Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the state highway system, allowing Caltrans to both reduce the costs of storm damage and provide and maintain transportation that meets the needs of all Californians.

Project Adaptation Analysis

Sea Level Rise

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.

Floodplains Analysis

Most climate scientists predict increased frequency and intensity of rain events related to global climate change, although how frequent and how intense such storms are likely to be is unclear.

Wildfire

The proposed project is not in a very high fire hazard severity zone (California Department of Forestry and Fire Protection, 2007). The project is about 1.5 miles west of the westernmost boundary of the nearest fire hazard severity zone. Construction activities could create an unintended fire in roadside vegetation; however, precautions and construction best practices would be implemented to prevent fire during construction.

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Chapter 4 Comments and Coordination

Early and continuing coordination with the public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures, and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including project development team meetings, interagency coordination meetings, and public contact. This chapter summarizes the results of Caltrans' efforts to identify, address, and resolve project-related issues through early and continuing coordination.

Public Information Meeting

A public information meeting was held at the Lindsay Wellness Center in Lindsay on December 5, 2019 from 5:30 p.m. to 7:30 p.m. The meeting was conducted in an open house format with the goal of providing information about the proposed project and gathering information and feedback from the public. The program schedule was unstructured, and the public could attend at any time during the two-hour period, view the informational display boards, and address Caltrans staff with their questions and comments.

Invitations for the public to participate in the meeting were published in several local newspapers: the *Visalia Times-Delta*, on November 20, 2019; the *Porterville Recorder*, on November 20, 2019; and the *Sun-Gazette*, on November 20, 2019. Invitation letters were mailed to local businesses; public agencies; federal, state, and local officials; and property owners along the proposed project alignments.

Three build alternatives and three No-Build Alternatives at three locations were under consideration. About 20 residents and interested parties attended the meeting, and two comment cards were submitted along with two comments given to the court reporter. Comments were also accepted by mail or email, and an additional four comments were received in this manner.

During the circulation period for the draft environmental document, a public information meeting/open house would be scheduled in Lindsay to gather comment from the public. The meeting would follow the same format as previous meetings held for the project.

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Appendix A Resources Evaluated Relative to the Requirements of Section 4(f)

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S. Code 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that the Secretary of Transportation may approve a transportation program or project . . . "requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use."

Section 4(f) further requires coordination with the Department of the Interior and, as appropriate, the involved offices of the Department of Agriculture and the Department of Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer is also needed.

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 U.S. Code 326 and 327, including determinations and approval of Section 4(f) evaluations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

Resources Evaluated

This evaluation considered publicly owned recreational resources within 0.5 mile of the project site. Although no qualifying wildlife and waterfowl refuges are within 0.5 mile of the project area, one school and one public park are present that allow the public access to their recreational facilities.

School

Jefferson Elementary School at 333 Westwood in Lindsay has playground equipment, basketball courts and a soccer field along Hermosa Avenue east of the project area. These areas are surrounded by a fence, and access is limited to a different area east of the facilities mentioned above. Because the

project would avoid impacting these areas or access to these areas, Section 4(f) provisions are not triggered.

Park

Olive Bowl Park at 18 North Olive Avenue in Lindsay has three baseball or softball facilities along Olive Avenue east of the project area. Because the project would avoid impacting the park or access to the park, Section 4(f) provisions are not triggered.

Appendix B Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

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Making Conservation a California Way of Life.

November 2019

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, remedies, 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, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page: https://dot.ca.gov/programs/business-and-economic-opportunity/title-vi.

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, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin
Director

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Appendix C Summary of Relocation Benefits

California Department of Transportation Relocation Assistance Program

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 additional information, visit the Division of Right of Way's Relocation Assistance Program website at: http://www.dot.ca.gov/hq/row/rap/index.htm

Appendix D Farmland Conversion Impact Rating

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request 8/7/19	4. Sheet 1 of _____
1. Name of Project **Lindsay and Route 198/245 Operational**	5. Federal Agency Involved **FHWA**	
2. Type of Project **Transportation**	6. County and State **Tulare County, CA**	
PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS 8/7/19	2. Person Completing Form **Luis Alvarez**
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐	4. Acres Irrigated **557,361** Average Farm Size **251**	
5. Major Crop(s) **Orchards, Corn**	6. Farmable Land in Government Jurisdiction Acres: **677,506** % **21.8**	7. Amount of Farmland As Defined in FPPA Acres: **971,730** % **31.3**
8. Name Of Land Evaluation System Used **CA Revised Storie Index**	9. Name of Local Site Assessment System **None**	10. Date Land Evaluation Returned by NRCS **9/6/19**

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	6.14	1.27	21.09	
B. Total Acres To Be Converted Indirectly, Or To Receive Services	2.94	0	5.67	
C. Total Acres In Corridor	9.08	1.27	26.76	
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	0.5	0	15	
B. Total Acres Statewide And Local Important Farmland	9	1.5	12	
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0.0010	0.0002	0.0028	
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	57.20	61.11	29.36	
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*	38	35	68	
PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	Maximum Points			
1. Area in Nonurban Use	15	7	15	9
2. Perimeter in Nonurban Use	10	7	10	9
3. Percent Of Corridor Being Farmed	20	14	20	20
4. Protection Provided By State And Local Government	20	0	0	0
5. Size of Present Farm Unit Compared To Average	10	3	2	0
6. Creation Of Nonfarmable Farmland	25	8	0	15
7. Availablility Of Farm Support Services	5	5	3	5
8. On-Farm Investments	20	15	18	20
9. Effects Of Conversion On Farm Support Services	25	0	0	0
10. Compatibility With Existing Agricultural Use	10	0	0	0
TOTAL CORRIDOR ASSESSMENT POINTS	160	59	68	78	0
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland (From Part V)	100	38	35	68	0
Total Corridor Assessment (From Part VI above or a local site assessment)	160	59	68	78	0
TOTAL POINTS *(Total of above 2 lines)*	260	97	103	146	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES ☐ NO ☐

5. Reason For Selection:

Signature of Person Completing this Part: DATE

NOTE: Complete a form for each segment with more than one Alternate Corridor

Appendix E Avoidance, Minimization and/or Mitigation Summary

To ensure 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 that 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 the Environmental Commitments Record are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. Because the following Environmental Commitments Record is a draft, some fields have not been completed; they will be filled out as each of the measures is implemented.

Note: Some measures may apply to more than one resource area. Duplicated or redundant measures have not been included in this Environmental Commitments Record.

Utilities and Emergency Services

During the design phase of the project, a more detailed study would be conducted to determine the necessary relocation of utilities. Caltrans would meet with the effected utilities to coordinate the details for relocations and easements to avoid or minimize any interruption in service.

A detailed traffic management plan will be developed during the Plans, Specifications, and Estimates phase of the project to minimize delays and maximize safety during construction. The traffic management plan may include, but is not limited to, the following:

- Release of information through brochures and mailers, press releases and media alerts, and planned lane closure notices from the Caltrans website.
- Use of portable changeable message signs.
- Incident management through the Construction Zone Enhancement Enforcement Program (known as COZEEP) and the transportation management plan.

The COZEEP is a program that uses California Highway Patrol officers during construction to improve the safety of construction crews and the motoring public. The officers may be used for traffic control and provide needed emergency response support services. Caltrans coordinates and manages road user information such as identifying the fixed changeable message signs

and highway advisory radio on the state highway system that will be used during construction.

Traffic and Transportation

During construction, a Traffic Management Plan would be developed to handle local traffic patterns and reduce delay, congestion, and the likelihood of accidents during construction. The Traffic Management Plan includes notifying the public of construction activities via media outlets, using changeable message signs, construction strategies, and use of the Central Valley Traffic Management Center that reduces congestion by monitoring traffic and informing the public via media outlets, such as radio and television. Traffic delays are expected to be minimal because most of the build alternatives would be built on new alignments. By building the proposed project in construction phases and rerouting traffic to local roads, disruption to local and regional traffic would be minimized with all the build alternatives.

Pedestrian Facilities

Curb ramps that are compliant with the Americans with Disabilities Act requirements would be provided at all improved intersections or new local road intersections.

Bicycle Facilities

Class II bike lanes would be provided at the proposed roundabout locations.

Plant Species

While the likelihood that the spiny-sepaled button-celery would be found at Alternative 2.B is very small, Caltrans proposes the following avoidance and minimization measures to ensure the project will not result in measurable impacts to this species:

- A botanical survey of the project impact area at Alternative 2.B will be performed during the appropriate flowering season prior to the start of project activities.
- Any spiny-sepaled button-celery that is identified during the botanical survey at Alternative 2.B would be protected by an Environmentally Sensitive Area buffer. The Environmentally Sensitive Area would be marked with bright orange flagging or fencing and provide a minimum 10-foot buffer of the plant population.
- Any spiny-sepaled button-celery within the project impact area at Alternative 2.B that cannot be protected by the Environmentally Sensitive Area would be dug up so the soil around the roots remains intact, kept moist, placed in a protected area and replanted as close to the original discovery location as possible after project construction has been completed. For plants that have already gone to seed, the topsoil layer around the plant would be removed, placed into a protective container,

then spread on the ground as close to the original discovery location as possible after project construction has been completed. Replanting and soil spreading would occur only in areas that have spiny-sepaled button-celery habitat such as depressions and ditches that can hold water longer than other areas.

- Worker Environmental Awareness Training or WEAT would be performed for all project crew members that are involved in ground-disturbing activities at Alternative 2.B. The WEAT would include information about the special-status species in question and the project-specific avoidance and minimization measures that have been implemented into project construction. The WEAT would also provide an opportunity to explain the legal ramifications of not properly performing or dismissing the implemented avoidance and minimization measures. WEAT participants will document their participation by signing an attendance sheet. WEAT would be required for any new crew members that are introduced to the project.
- Because of the low likelihood of occurrence and relatively small impact area, compensatory mitigation for the spiny-sepaled button-celery is not proposed.

Threatened and Endangered Species

San Joaquin Kit Fox

While the likelihood that the San Joaquin kit fox would be found on the project site is very small, Caltrans proposes the following avoidance and minimization efforts to ensure the project will not result in measurable impacts to this species:

- Surveys for the San Joaquin kit fox would be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the San Joaquin kit fox.
- Surveys would be conducted within potential habitat areas located in the proposed project boundary in addition to a 200-foot area outside the project footprint, where permitted, to identify habitat features.
- If natal/pupping dens are discovered within the project area or within 200 feet of the project boundary, the U.S. Fish and Wildlife Service would be immediately notified.
- The configuration of exclusion zones around San Joaquin kit fox dens should have a 50-foot radius around potential dens and a 100-foot radius around known dens measured outward from the entrance or cluster of entrances.
- Disturbance to all San Joaquin kit fox dens (if any) would be avoided to the maximum extent possible.

- If any known or potential kit fox dens or burrows are located, or signs of kit fox occupancy observed, within 200 feet of the project areas, a qualified biologist would be present at the construction site during initial ground-disturbing activities.
- To the extent possible, a biologist would be available on-call during all construction periods when not present on-site.
- Due to the low likelihood of occurrence and low quality of impacted habitat, compensatory mitigation for this species is not proposed.

Swainson's Hawk

While the likelihood that the Swainson's hawk would be found on the project site is low, Caltrans proposes the following avoidance and minimization efforts to ensure the project will not result in measurable impacts to this species:

- Protocol nesting surveys would be conducted during the appropriate season prior to the start of construction to determine if any Swainson's hawks are nesting in proximity (0.5 mile) to the project areas.
- If nesting Swainson's hawks are observed on-site, then the nest site would be designated an Environmentally Sensitive Area, with a 500-foot radius no-work area around the nest until it has been determined by a qualified biologist that the young have fledged.
- A qualified biologist would monitor active nests during construction activities.
- A special provision for migratory birds would be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact areas would be done outside of the nesting season.
- Since orchards are an artificial, managed, and atypical habitat type, impacts to orchards are not proposed to be mitigated as loss of natural nesting habitat.

Air Quality

Caltrans Standard Specifications pertaining to dust control and dust palliative requirements are a required part of all construction contracts and should effectively reduce and control emission impacts during construction. The provisions of Caltrans Standard Specifications, Section 14-9.02 "Air Pollution Control" and Section 10-5 "Dust Control," require the contractor to comply with the air pollution control rules, ordinances, and regulations and statutes that apply to work performed under the contract, including those provided in Government Code Section 11017.

Some minimization measures for short-term construction-related emissions include:

- Application of most stringent available regulations or best practices even if not required by local/state regulations at the site (identify)
- Possible designation of areas where construction equipment servicing and storage are not allowed (near sensitive receptors)
- Construction staging
- Temporary programs to reduce detour- and construction-related traffic congestion such as special transit programs and subsidies
- A construction equipment emission reduction program to encourage or require the contractor to use cleaner (newer) diesel engines or retrofit older engines.

Noise

The following are possible control measures that can be implemented to minimize noise disturbances at sensitive areas during construction:

- All equipment will have sound-control devices no less effective than those provided on the original equipment. Each internal combustion engine used for any purpose on the job or related to the job will be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine should be operated on the job site without an appropriate muffler.
- Construction methods or equipment that will provide the lowest level of noise impact (for example, avoid impact pile driving near residences and consider alternative methods that are also suitable for the soil condition) should be used.
- Idling equipment will be turned off.
- Truck loading, unloading, and hauling operations will be restricted so that noise and vibration are kept to a minimum through residential neighborhoods to the greatest possible extent.

The contractor will be required to adhere to the following administrative noise control measures:

- Once details of the construction activities become available, the contractor will work with local authorities to develop an acceptable approach to minimize interference with the business and residential communities, traffic disruptions, and the total duration of the construction.
- Good public relations will be maintained with the community to minimize objections to unavoidable construction impacts. Frequent activity updates of all construction activities will be provided. A construction noise

monitoring program to track sound levels and limit the impacts will be implemented.

- In case of construction noise complaints by the public, the Resident Engineer will coordinate with the construction manager, and the specific noise-producing activity may be changed, altered, or temporarily suspended, if necessary.
- It is possible that certain construction activities such as clearing and compacting could cause intermittent localized concern from vibration in the project area. During certain construction phases, processes such as earth moving with bulldozers, the use of vibratory compaction rollers, demolitions, or pavement braking may cause construction-related vibration impacts such as human annoyance or, in some cases, building damages.

The following are procedures that can be used to minimize the potential impacts from construction vibration:

- Restrict the hours of vibration-intensive equipment or activities such as vibratory rollers so that impacts to residents are minimal (e.g., weekdays during daytime hours only when as many residents as possible are away from home).
- The owner of a building close enough to a construction vibration source that damage to that structure due to vibration is possible would be entitled to a pre-construction building inspection to document the pre-construction condition of that structure.
- Conduct vibration monitoring during vibration-intensive activities.

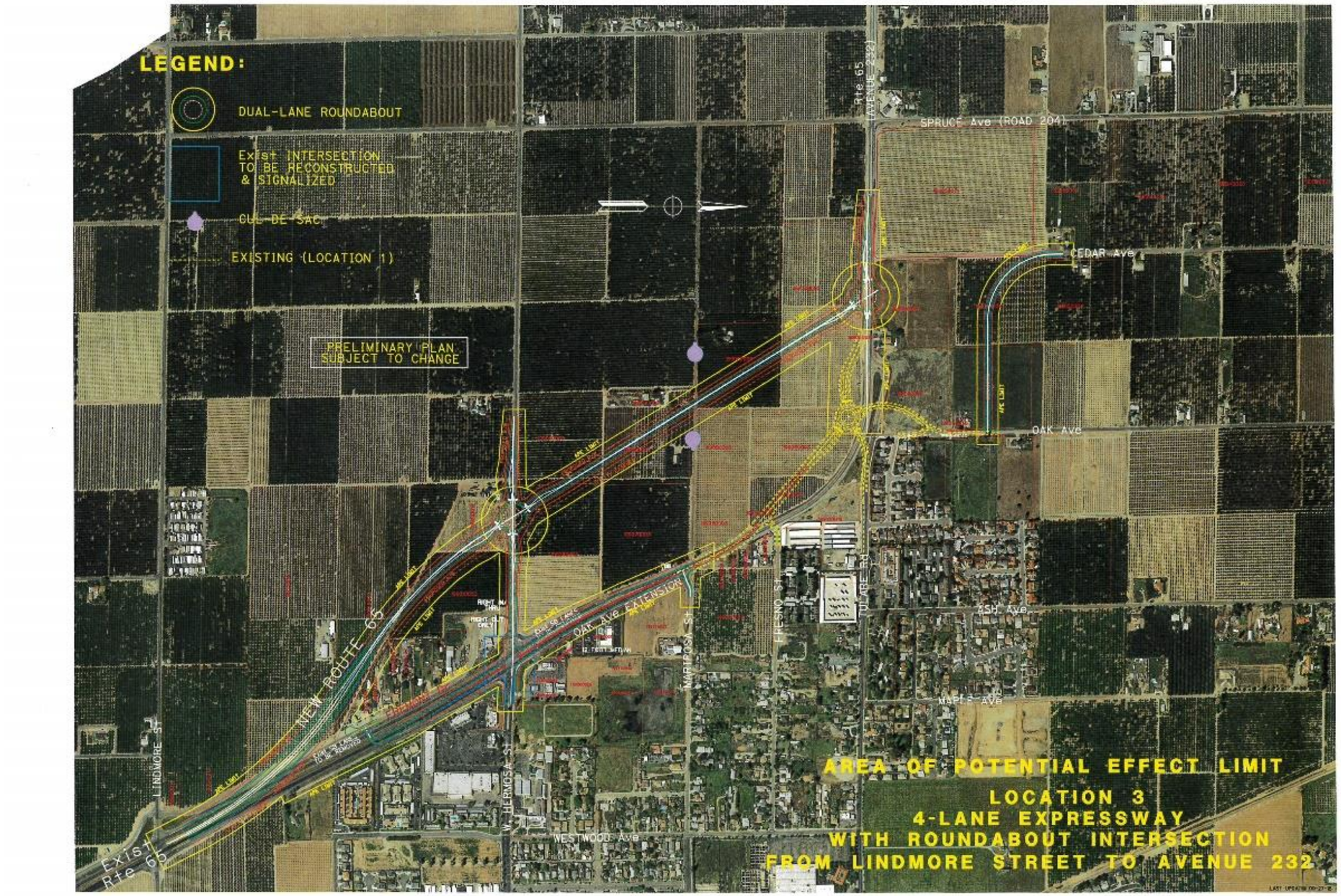
A combination of the mitigation techniques for equipment vibration control as well as administrative measures, when properly implemented, can be selected to provide the most effective means to minimize the effects of construction activity.

Application of the mitigation measures will reduce the construction impacts; however, temporary increases in vibration would likely occur at some locations.

Appendix F Preliminary Plans


LEGEND:
HYBRID ROUNDABOUT
CLOSE ACCESS & Exist PAVEMENT TO BE OBLITERATED
CUL-DE-SAC
WITH SB LEFT TURN POCKET
CEDAR Ave
OAK Ave
Exist SR 65
NEW SR 65
TULARE Rd
199060002
199050067
199050029
199050004
199050065
199050055
199080003
199260002
199100052
199260001
199260003
199260004
180-FOOT DIA ROUNDABOUT
400' RADIUS
800' RADIUS
TWO-LANE APPROACH
ONE-LANE APPROACH
APE LIMIT
CITY LIMIT
COUNTY LIMIT
PROPOSED R/W
EXISTING R/W
MONTE CIRCLE
MARIE ANTHONY PL
MARIPOSA ST
CYPRESS ST
Mt WHITNEY MINI-STORAGE
HOUSE OF GLASS
EXIST SR 65
CITY LIMIT
NEED TO WIDEN 2-LANE TO 4-LANE
TRANSITION TO 2-LANE
PRELIMINARY PLAN
SUBJECT TO REVISION
AREA OF POTENTIAL EFFECT LIMIT
LOCATION 1
SR 65/TULARE/OAK ROUNDABOUT
LAST UPDATE: 09-28-18


FRIANT-KERN CANAL
LEGEND:
HYBRID ROUNDABOUT
(180-FOOT ICD)
LIMIT OF SIDEWALK
PRELIMINARY PLAN
SUBJECT TO CHANGE
APE LIMIT
ROAD 204 (SPRUCE Ave)
ROUTE 198
ROUTE 245
STATE OWNED PARCEL
112150010
112150022
LOCATION 2
ROUTE 198/ROUTE 245/SPRUCE Ave
WITH ROUNDABOUT INTERSECTION
LAST UPDATE: 06-05-19


LEGEND:
DUAL-LANE ROUNDABOUT
Exist INTERSECTION TO BE RECONSTRUCTED & SIGNALIZED
CUL-DE-SAC
EXISTING (LOCATION 1)
PRELIMINARY PLAN SUBJECT TO CHANGE
Rte 65 (AVENUE 232)
SPRUCE Ave (ROAD 204)
CEDAR Ave
OAK Ave
OAK AVE EXTENSION
NEW ROUTE 65
Exist Rte 65
LINDMORE ST
W HERMOSA ST
MARIPOSA ST
FRESNO ST
D ST
ASH Ave
MAPLE Ave
WESTWOOD Ave
AREA OF POTENTIAL EFFECT LIMIT
LOCATION 3
4-LANE EXPRESSWAY
WITH ROUNDABOUT INTERSECTION
FROM LINDMORE STREET TO AVENUE 232

Appendix G Air Quality Conformity

Hildebrand, Maya@DOT

From: Vaughn, Joseph (FHWA) <Joseph.Vaughn@dot.gov>
Sent: Monday, October 7, 2019 11:01 AM
To: Hildebrand, Maya@DOT; Alex Marcucci; Bagde, Abhijit J@DOT; Ahron Hakimi (ahakimi@kerncog.org); chesley sjcog.org; Anita Lee; Mahaney, Ann@DOT; Anna Myers; Johnson, Antonio (FHWA); Becky Napier (bnapier@kerncog.org); Ben Giuliani (BGiuliani@tularecog.org); Ben Raymond; Braden Duran; De Terra, Bruce W@DOT; Brock, Caleb@DOT; Knecht, Carey@ARB; Chay Thao; Chris Jasper; Christopher Xiong; Deel, David@DOT; Cheser, Dawn@CATC; Debbie Trujillo; Derek Winning; Diane Nguyen (nguyen@sjcog.org); Dylan Stone (dylan@maderactc.org); Ed Flickinger; Edith Robles; Elisabeth Hahn; Elizabeth Wright (EWright@tularecog.org); Thompson, Erin M@DOT; Gabriel Gutierrez (ggutierrez@tularecog.org); Valencia, Gilbert@DOT; King, Heather@ARB; External, IOjeda@DOT; Kahrs, Jacqueline J@DOT; Gentry, Jamaica@DOT; Perrault, James R@DOT; Jeff Findley (Jeff@maderactc.org); Jennifer Soliz; Jessica Fierro (Jessica.Fierro@valleyair.org); Joseph Stramaglia (jstramaglia@kerncog.org); Josey Oshana; Swearingen, Joshua B@DOT; Kai Han (khan@fresnocog.org); Karina O'Connor (OConnor.Karina@epamail.epa.gov); Kasia Poleszcuk; Romero, Ken J@DOT; Kevin Wing; Vu, Khanh D@DOT; Kim Kloeb (kloeb@sjcog.org); Kristine Cai (kcai@fresnocog.org); Lang Yu; Carr, Laura@ARB; Kimura, Lezlie@ARB; Green, Lilibeth I@DOT; Huy, Lima A@DOT; Mendibles, Lorena@DOT; Sanchez, Lucas@DOT; Evans, Marcus B@DOT; Mortenson, Marilee C@DOT; Mark Hays; Matt Fell; Navarro, Michael@DOT; Aljabiry, Muhaned M@DOT; Kalandiyur, Nesamani@ARB; Fung, Nicholas@DOT; patricia maderactc.org; Marquez, Paul Albert@DOT; Ramirez, Pedro@DOT; Martinez-Velez, Priscilla@DOT; Raquel Pacheco (rpacheco@kerncog.org); Rob Ball (rball@kerncog.org); Robert Phipps; Roberto Brady (RBrady@tularecog.org); Rochelle Invina; Tavitas, Rodney A@DOT; Rory Mays; Rosa Park (rpark@stancog.org); Ryan Niblock (niblock@sjcog.org); Yazdi, Sadegh@DOT; Scherr, Sandra L@DOT; Santosh Bhattarai; Carson, Scott (FHWA); Christian, Shalanda M@DOT; Tracey, Stephen R@DOT; Martinez, Steven R@DOT; Suzanne Martinez; Vanderspek, Sylvia@ARB; Clemons, Tashia (FHWA); Matley, Ted (FTA); Ted Smalley (tsmalley@tularecog.org); terri.king co.kings.ca.us; Dumas, Thomas A@DOT; Tom Jordan; Tony Boren; Ty Phimmasone (ty.phimmasone@mcagov.org); Vincent Liu (vliu@kerncog.org); Tasat, Webster@ARB; Choi, Yoojoong@DOT; Yunsheng Luo
Subject: RE: a PM 2.5 and PM 10 Hot-spot Conformity Assessment TUL-65/198/245 - Lindsay and SR-198/245 Operational Improvements

FHWA concurs that these projects are not projects of air quality concern. Thanks

Joseph Vaughn
Environmental Specialist
FHWA, CA Division
(916) 498-5346

From: Hildebrand, Maya@DOT [mailto:Maya.Hildebrand@dot.ca.gov]
Sent: Friday, October 4, 2019 2:33 PM
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Subject: a PM 2.5 and PM 10 Hot-spot Conformity Assessment TUL-65/198/245 - Lindsay and SR-198/245 Operational Improvements

Dear Interagency Consultation Partners,

The California Department of Transportation (Caltrans) is providing a PM 2.5 and PM 10 Hot-spot Conformity Assessment memo for interagency consultation. The project is the TUL-65/198/245 - Lindsay and SR-198/245 Operational Improvements located in Tulare County. It is requested that

the Interagency Consultation Partners concur that this project is not a "Project of Air Quality Concern" (POAQC). Comments on the assessment are due on October 21, 2019. An interagency conference call will be held upon request.

An interagency conference call will be held upon request**.** The NEPA document for this project is Routine EA (23 USC 327). A Public Hearing will be held during the circulation period of the Draft Environmental Document. FHWA and EPA concurrence is requested.

Please contact me if you have questions regarding this email or the attached memo/mapping.

Maya Hildebrand
Associate Environmental Planner/Air Quality Coordinator
Environmental Engineering Branch
Caltrans Central Region
559.445.6426

List of Technical Studies

Air Quality Report (March 2020)

Noise Study Report (December 2019)

Water Quality Report (October 2018)

Natural Environment Study Minimal Impacts (June 2020)

Second Supplemental Historic Property Survey Report (October 2019)

Hazardous Waste Reports

- Initial Site Assessment (August 2019)
- Preliminary Site Investigation (December 2019)

To obtain a copy of one or more of these technical studies/reports or the Initial Study/Environmental Assessment, please send your request to the following email address: d6.public.info@dot.ca.gov.

Please indicate the project name and project identifying code (under the project name on the cover of this document) and specify the technical report or document you would like a copy of. Provide your name and email address or U.S. postal service mailing address (street address, city, state and zip code).