South Lake Tahoe Safety Project

El Dorado County, California 03-ED-50-75.4/80.1 03-4H890

Initial Study with Negative Declaration



Prepared by the State of California, Department of Transportation

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



February 2021

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General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study (IS), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in El Dorado County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). 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 are available for review at the 703 B Street Marysville, CA 95901. Copies are also available at the El Dorado County Library/South Lake Tahoe Library, 1000 Rufus Allen Boulevard South Lake Tahoe, CA.
- The document can be viewed digitally via Caltrans weblink: <u>https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental/d3-environmental-docs</u>
- Send comments via postal mail to:

California Department of Transportation Environmental Management, M-3 Branch 703 B Street, Marysville, CA, 95901 Attn: South Lake Tahoe Safety Project

- Submit comments via email to: <u>South.Lake.Tahoe.Safety.Project@dot.ca.gov</u>
- Submit comments by: March 31, 2021

What happens next:

After comments are received from the public and reviewing agencies, Caltrans, as assigned by the FHWA, 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.

Alternative Formats:

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 call or write to Caltrans, Attn: Deanna Shoopman, 703 B Street, Marysville, CA 95901, 530-741-4572, or use the California Relay Service TTY number, 1 (800) 735-2929.

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[SCH Number] 03-ED-50-75.4/80.1 03-4H890-0319000072

Improve pedestrian and bicyclist safety between the U.S. Highway 50/State Route 89 'Y' and Pioneer Trail in the city of South Lake Tahoe from post miles 75.4 to 80.1.

PROPOSED INITIAL STUDY with NEGATIVE DECLARATION

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA Department of Transportation

Mike Bartlett

Mike Bartlett Environmental Office Chief North Region Environmental Management (South) California Department of Transportation

02/17/2021

Date

PROPOSED Initial Study Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number:

District-County-Route-Post Mile: 03-ED-50-75.4 to 80.1

EA/Project Identification: 03-4H890 and 0319000072

Project Description

The California Department of Transportation (Caltrans) proposes to improve the South Lake Tahoe Safety Project (project) on U.S. Highway 50 in El Dorado County from post mile 75.4 to 80.1. This project proposes to improve roadway lighting and implement a complete street vision for the corridor by installing a green bike lane treatment and enhanced visibility crosswalks. The project will also improve bicycle signage throughout the project limits and install a two-stage turn queue box for bike crossings at multiple locations for additional bicycle safety.

Determination

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

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

The project would have no effect with regard to agriculture, forest resources, air quality, biological resources, cultural resources, energy, geology, land use, mineral resources, hydrology and water quality, population and housing, public services, recreation, transportation, utilities, noise, tribal resources, and wildfire.

In addition, the proposed project would have less than significant impacts with regard to aesthetics, greenhouse gas, and hazardous materials.

Mike Bartlett

Mike Bartlett Environmental Office Chief North Region Environmental Management (South) California Department of Transportation

02/17/2021

Date

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1.1 Introduction

Project Description

The California Department of Transportation (Caltrans) is the lead agency under the California Environmental Quality Act (CEQA).

The proposed project is located on U.S. Highway 50 (US 50) in El Dorado County, California, between post miles 75.4 and 80.1 (Figure 1-1 Project Vicinity Map). The project proposes to improve roadway lighting and implement a complete street vision for the corridor by installing a green bike lane treatment and enhanced visibility crosswalks. Placement of the proposed green bike lane treatment will be focused in areas where bike and vehicle conflicts have occurred as well as near driveway areas and in bike lane extensions approaching intersections. The project will also improve bicycle signage throughout the project limits and install a two-stage turn queue box for bike crossings at multiple locations for additional bicycle safety.

In addition, the project scope of work includes installing pedestrian signals at mid-block crossings between Truckee Road and River Drive (PM 76.3), between Brockway Avenue and Blue Lake Avenue (PM 77.0), and between Herbert Avenue and Ski Run Boulevard (PM 79.1). These mid-block crossings will provide cyclists and pedestrians a safe opportunity to cross the highway. A full signalized intersection will be installed at Johnson Avenue (PM 78.8). Typically, bicyclists operate as both vehicles and pedestrians depending on the context, rider abilities, availability, quality, and efficiency of the facilities. This project will mark and color all intersections and pedestrian crossings.

Background

US 50 occurs through the City of South Lake Tahoe, where it functions as a state highway. It conveys interstate traffic between Nevada and California and functions as a main street for the City of South Lake Tahoe. The roadway serves residents, visitors, and commuters by connecting State Route (SR) 89 from the north shore to the California and Nevada state line.

Approximately 10 million vehicles enter the Lake Tahoe Region each year. Numerous transportation issues within the US 50 corridor have created substantial challenges and needs for the South Lake Tahoe community. The area contains approximately 23,000 full-time residents. Transportation issues include fluctuating seasonal traffic volumes that can increase as high as approximately 30,000 (Annual Average Daily Traffic) in some areas during the peak tourism season. Other complexities involve varied land use, highway access points, increasing pedestrian and bicycle demand, and the lack of connectivity in some areas.

Need

There is a need to reduce the number of fatalities and severe injuries of bicycle collisions along this stretch of the corridor. Most of the bicycle collisions occurred at night, and the project's alternatives require corrective action to address the bicyclist involved collision.

Purpose

The purpose of the proposed project is to improve pedestrian and bicyclist safety between the US 50/SR 89 'Y' and Pioneer Trail in South Lake Tahoe.

Complete Streets

Goals associated with Complete Streets are to address the needs of all users of the infrastructure, thereby ensuring safety and connectivity without gaps. This proposed project will address the following Complete Streets components:

Green Bike Lane Treatment:

- Enhances the visibility of non-motorized travelers to motorists
- Clearly delineates space for bicyclists

Pedestrian Signal (Mid-Block):

• Safe and accessible crossing locations are those that improve the visibility for all travelers

Signage:

- Provide infrastructure, in this case, signage, that allows for safe communicable travel for all forms of transportation (vehicle/bicycle/pedestrian):
 - Crosswalk Signage
 - Bicycle Signage

Problem, Deficiencies, Justification

The project corridor includes four lanes (two in each direction) and a continuous two-way left-turn lane. High speed, multi-lane roadways are challenging for pedestrians to cross. Pedestrians are faced with multiple threat situations, particularly on unmarked crosswalks. There are many tourist attractions, shops, and transit loading/unloading locations on both sides of the

corridor. An extensive history of jaywalking exists due to the lack of proper infrastructure.

A substantial amount of bicycle and pedestrian collisions have occurred within the project area. Bicyclists routinely utilize the highway in close proximity to vehicular traffic. There have been six fatal collisions within the last four years; four of the six collisions occurred at night.

Since most of the bicycle traffic occurs during the summer, the missing/faded pavement markings on the bike lanes are a major safety hazard for bicyclists. Additionally, paint does not bond well with retroreflective beads, which reduces night-time visibility of markings.

1.2 **Project Alternatives**

Project alternatives were developed and evaluated to ensure the proposed action addresses the desired purpose and needs, avoids environmental impacts, and takes into account the needs of stakeholders. Data analyzed during preliminary design included project cost, level of service, traffic data, and permanent and temporary environmental impacts.

This project contains a number of standardized project measures which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impacts resulting from the proposed project (See Section 1.4 Standard Measures and Best Management Practices Included In All Alternatives).

Alternative 1:

- Additional roadway lighting at the following locations:
 - From the "Y" to Trout Creek, decorative light poles that meet the City of South Lake Tahoe and TRPA standards will be placed and spaced approximately 100' apart
 - From Trout Creek to Pioneer Trail, decorative light poles that meet the City of South Lake Tahoe and TRPA standards will be placed at locations with no existing lightings and bus stops
 - 10-15 Caltrans standard light poles will be placed at locations where collisions have occurred in dark conditions
- Hybrid Beacon controlled mid-block crossings at three locations with Caltrans standard lighting:
 - Between Truckee Drive and River Drive
 - Between Brockway Avenue and Blue Lake Avenue
 - Between Herbert Avenue and Ski Run Boulevard
- A brand-new traffic signal at Johnson Boulevard
- Continuous Green Bike Lane Treatment throughout the entire project limits
- Intersection Safety Lighting at the following locations:
 - 4th Street

- Winnemucca Ave
- Blue Lake Avenue
- Improved bicycle signage throughout the project limits
- Mark and color all intersections and pedestrian crossings for enhanced visibility
 - Fiber Optic conduit from Trout Creek Bridge to Pioneer Trail
- Two-Stage Turn queue box for bike turning movements at the following intersections:
 - 3rd Street
 - Al Tahoe Boulevard
 - Lakeview Avenue
 - Ski Run Boulevard

No-Build (No-Action) Alternative

This alternative is a no build alternative that would keep the existing structure in place and unchanged. This alternative would not meet the purpose and need of this project as it would not address pedestrian and bicyclist safety.

Alternatives Considered but Rejected

Alternative 2:

- Place approximately 47 Caltrans standard roadway lights at locations where:
 - Collisions have occurred during dark conditions
 - Pedestrian crossing locations with no existing lighting
 - At bus stops with no existing lighting
- Hybrid Beacon controlled mid-block crossings at three locations with Caltrans standard lighting:
 - Between Truckee Drive and River Drive
 - Between Brockway Avenue and Blue Lake Avenue
 - Between Herbert Avenue and Ski Run Boulevard
- A brand-new signalized intersection will be placed at Johnson Boulevard
- Green Bike Lane Treatment at various bicycle and vehicle conflict points, such as driveways and intersections
- Striped bike lane with markings at all other locations
- Intersection Safety Lighting at the following locations:
 - 4th Street
 - Winnemucca Ave
 - Blue Lake Avenue
- Improved bicycle signage throughout the project limits
- Fiber Optic conduit from Trout Creek Bridge to Pioneer Trail
- Mark and color all intersections and pedestrian crossings for enhanced visibility

- Two-Stage Turn queue box for bike turning movements at the following intersections:
 - 3rd Street
 - Al Tahoe Boulevard
 - Lakeview Avenue
 - Ski Run Boulevard

Reason for rejection

This alternative was not supported by the local agency and PDT as this alternative leaves significant portions of the sidewalks unlit. The alternative may not fully satisfy the Purpose and Need of the project.

Alternative 3:

- Continuous Caltrans standard roadway lighting on Hwy 50 from Junction 89 to Pioneer Trail (approximately 210 lights).
- Hybrid Beacon controlled mid-block crossings at three locations:
 - Between Truckee Drive and River Drive
 - Between Brockway Avenue and Blue Lake Avenue
 - Between Herbert Avenue and Ski Run Boulevard
- A brand-new signalized intersection will be placed at Johnson Boulevard
- Continuous Green Bike Lane Treatment throughout the entire project limit
- Intersection Safety Lighting at the following locations:
 - 4th Street
 - Winnemucca Ave
 - Blue Lake Avenue
- Improved bicycle signage throughout the project limits
- Mark and color all intersections and pedestrian crossings for enhanced visibility
- Fiber Optic conduit from Trout Creek Bridge to Pioneer Trail
- Two-Stage Turn queue box for bike turning movements at the following intersections:
 - 3rd Street
 - Al Tahoe Boulevard
 - Lakeview Avenue
 - Ski Run Boulevard

Reason for rejection

This alternative was not supported by the local agencies and PDT due to the visual impact on the corridor and was not considered as a context sensitive solution for the community. This alternative also increased cost of the right of way and required many of the existing City light poles to be replaced with Caltrans standard lights.

1.3 Permits and Approvals Needed

There are no permits, licenses, agreements, and certifications required for project construction.

1.4 Standard Measure and Best Management Practices Included In All Alternatives

Utilities and Emergency Services

UE-1: All emergency response agencies in the project area would be notified of the project construction schedule and would have access to US 50 throughout the construction period.

UE-2: Caltrans would coordinate with the utility providers before relocation of any utilities to ensure potentially affected utility customers would be notified of potential service disruptions before relocations.

Traffic and Transportation

TT-1: Pedestrian and bicycle access would be maintained during construction.

TT-2: The Contractor would be required to reduce any access delays to driveways or public roadways within or near the work zones.

TT-3: A Traffic Management Plan (TMP) would be applied to project.

Visual Aesthetics

VA-4: Alterations to the existing contours of any temporary construction staging areas created by the contractor would be graded to previous conditions and revegetated with appropriate native plants.

Cultural Resources

CR-1: If cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find in consultation with the State Historic Preservation Officer.

CR-2: If human remains were discovered, State Health and Safety Code § 7050.5 states that further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to CA Public Resources Code (PRC) § 5097.98, if the remains were thought to be Native American, the coroner would notify the

Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD).

At this time, the person who discovered the remains would contact the Environmental Senior and Professionally Qualified Staff, so they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC § 5097.98 would be followed as applicable.

Water Quality and Stormwater Runoff

WQ-1: The project would comply with the Provisions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order 2012-0011-DWQ), which became effective July 1, 2013, and the Construction General Permit (Order 2009-0009-DWQ).

Before any ground-disturbing activities, the contractor would prepare a Stormwater Pollution Prevention Plan (SWPPP) (per the Construction General Permit Order 2009-0009-DWQ) that includes erosion control measures and construction waste containment measures so that waters of the State are protected during and after project construction.

The SWPPP would identify the sources of pollutants that may affect the quality of stormwater; include construction site Best Management Practices (BMPs) to control sedimentation, erosion, and potential chemical pollutants; provide for construction materials management; include non-stormwater BMPs; and include routine inspections and a monitoring and reporting plan. All construction site BMPs would follow the latest edition of the *Storm Water Quality Handbooks: Construction Site BMPs Manual* to control and reduce the impacts of construction-related activities, materials, and pollutants on the watershed.

The project SWPPP would be continuously updated to adapt to changing site conditions during the construction phase.

Construction would likely require the following temporary construction site BMPs:

- Any spills or leaks from construction equipment (i.e., fuel, oil, hydraulic fluid, and grease) shall be cleaned up in accordance with applicable local, state, and/or federal regulations.
- Water would be removed by means of dewatering the individual pipe piles or cofferdams.
- Water generated from the dewatering operations would be trucked offsite to an appropriate facility or treated and used on-site for dust

control and/or discharged to an infiltration basin or used to irrigate agricultural lands.

- Fiber rolls or silt fences would be installed.
- Existing vegetated areas would be maintained to the maximum extent practicable.
- Clearing, grubbing, and excavation would be limited to specific locations, as delineated on the plans, to maximize the preservation of existing vegetation.
- Vegetation reestablishment or other stabilization measures would be implemented on disturbed soil areas, per the Erosion Control Plan.
- Soil disturbing work would be limited during the rainy season.

WQ-2: The project would incorporate pollution prevention and design measures consistent with the 2003 Caltrans Storm Water Management Plan to meet Water Quality Objectives (WQOs). This plan complies with the requirements of the Caltrans Statewide NPDES Permit (Order 2012-0011-DWQ).

The project design would likely include the following permanent stormwater treatment BMPs:

- Vegetated surfaces would feature native plants and revegetation would use the seed mixture, mulch, tackifier, and fertilizer recommended in the Erosion Control Plan prepared for the project.
- Existing roadway and bridge drainage systems discharge stormwater to receiving waters through bridge deck drains and/or discharge to vegetated slopes adjacent to the highway facility. The current design for stormwater management, post construction, is to perpetuate existing drainage patterns. Stormwater will continue to sheet flow to vegetated slopes providing stormwater treatment in accordance with Caltrans NPDES Permit.

Hazardous Waste and Material

HW-1: Per Caltrans requirements, the contractor(s) would prepare a projectspecific Lead Compliance Plan (CCR Title 8, § 1532.1, the "Lead in Construction" standard) to reduce worker exposure to lead-impacted soil. The plan would include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for handling lead-impacted soil. **HW-2**: Low levels of aerially deposited lead from the historic use of leaded gasoline exist along roadways throughout California. The project would adhere to Caltrans' Standard Special Provision Section 7-1.02K(6)(i)(iii) "Earth Material Containing Lead."

HW-3: Thermoplastic paint may contain lead of varying concentrations depending upon color, type, and year of manufacturer. Traffic stripes would be removed and disposed of in accordance with Caltrans' Standard Special Provision Section 36-4 "Residue Containing Lead from Paint and Thermoplastic."

HW-4: Treated wood waste comes from old wood treated with chemical preservatives to prevent fungal decay and insect attacks. Potential sources of treated wood waste within the project area are sign posts and guardrail. If treated wood waste is generated during this project, it would be disposed of in accordance with Standard Special Provision 14-11.14 "Treated Wood Waste."

Geology and Seismic/Topography

GS-1: Temporary construction site BMPs including fiber rolls, silt fences, temporary gravel berms, stabilized entrances/exits to construction areas, temporary cover for stockpiles, streambed stabilization, and street sweeping would be implemented as necessary to reduce the amount of erosion and topsoil loss. In addition to temporary BMPs. Permanent BMPs would be implemented to final slopes and disturbed areas. Erosion control fabric or netting and hydroseed would be used to stabilize newly graded slopes. Climate appropriate landscaping that reduces runoff and promotes surface infiltration would be planted prior to completion of construction.

GS-2: In the unlikely event that fossils are encountered during project excavations, Caltrans Standard Specification 14-7 would be followed. This standard specification states that if unanticipated paleontological resources were discovered at the job site, all work within 60 feet would stop, the area around the fossil would be protected, and the Resident Engineer would be notified.

Figure 1-1 Project Vicinity Map



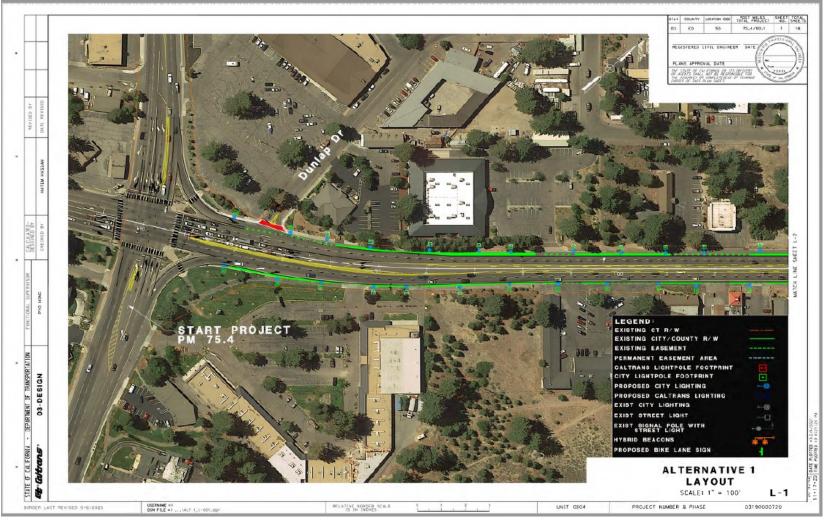
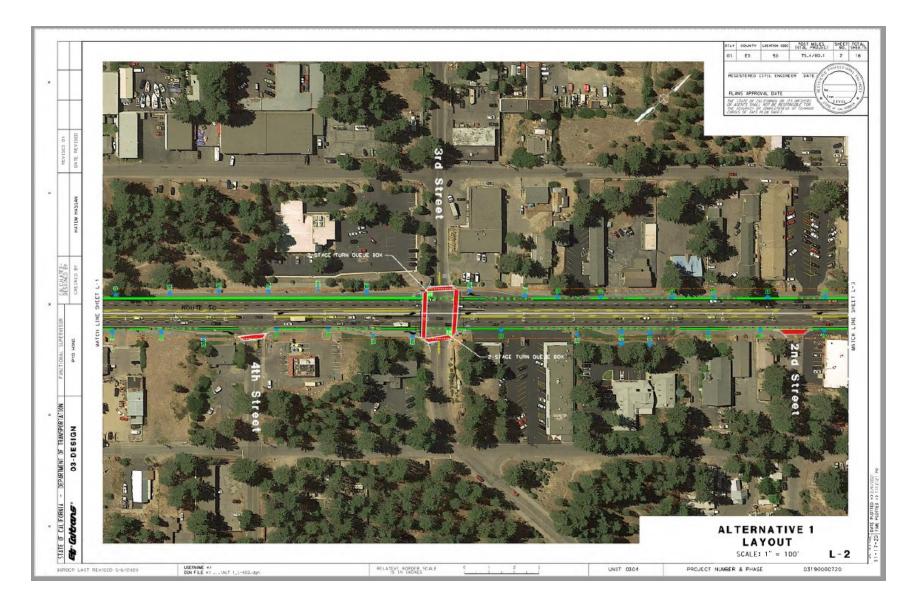
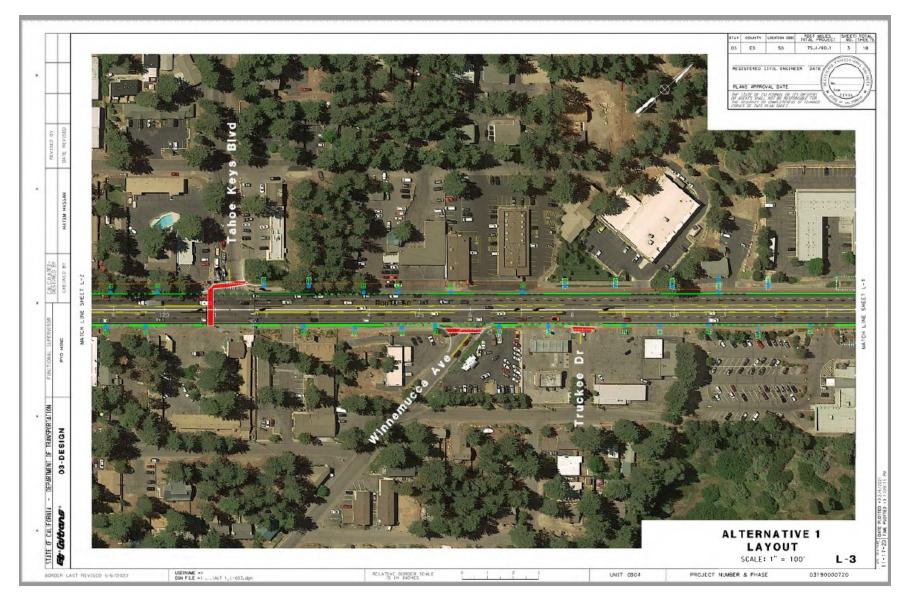


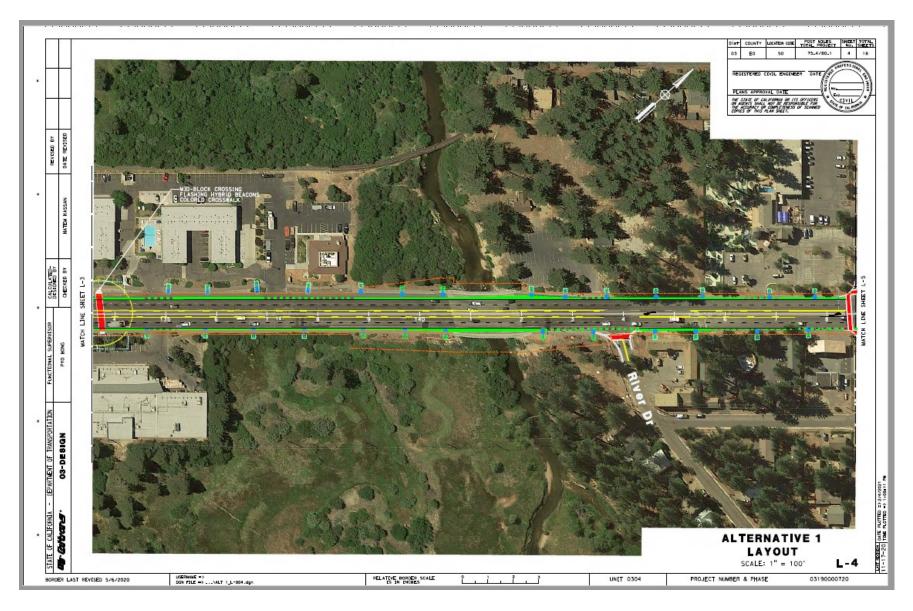
Figure 1-2 Environmental Study Limit Alternative 1



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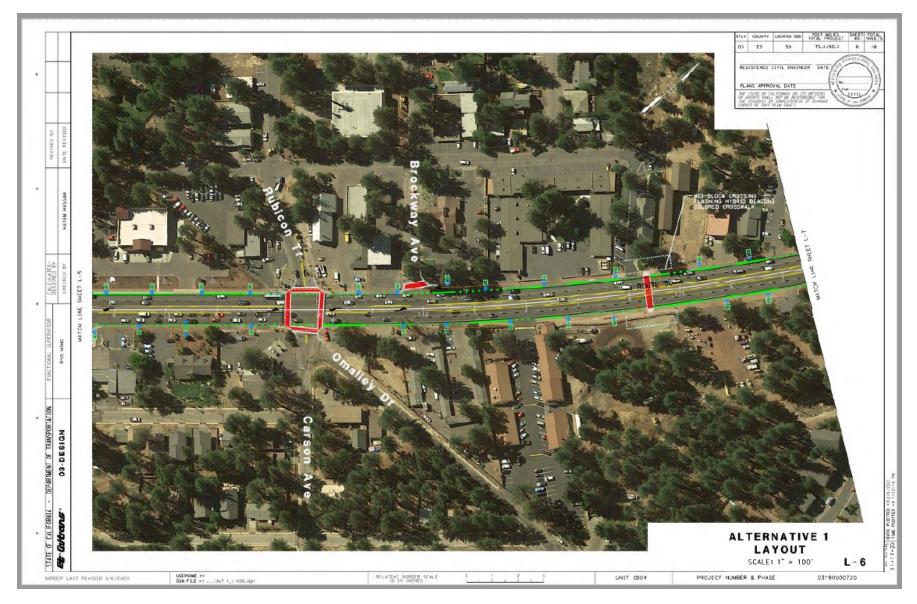
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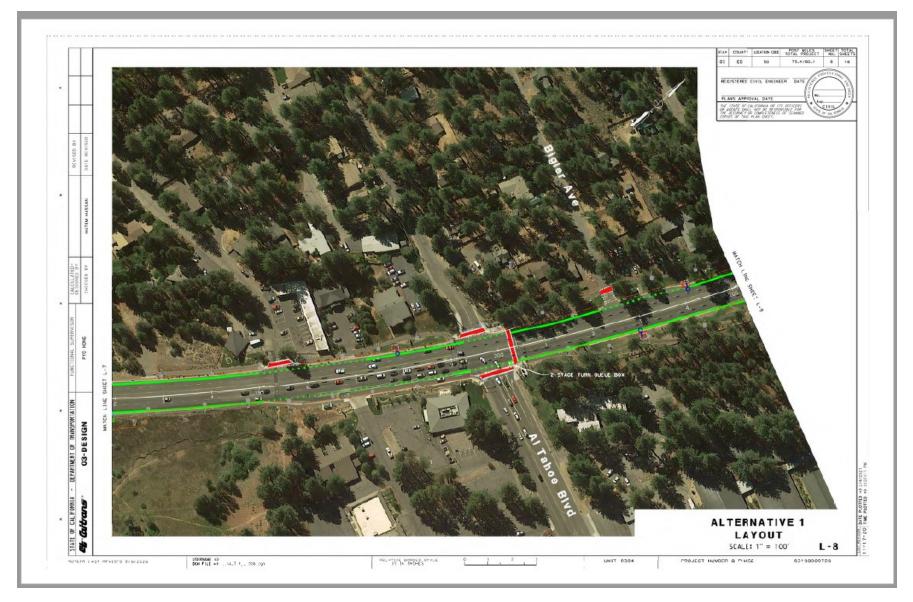
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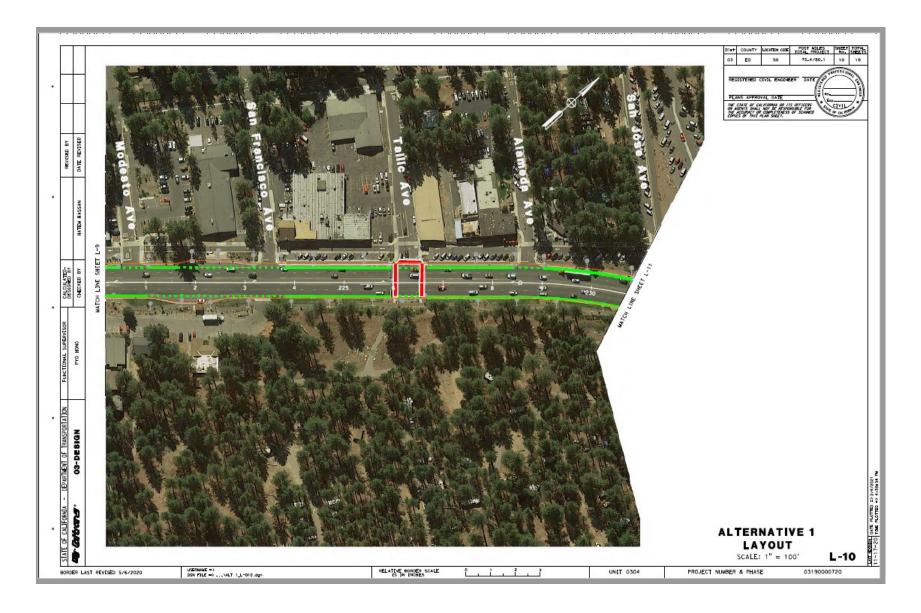


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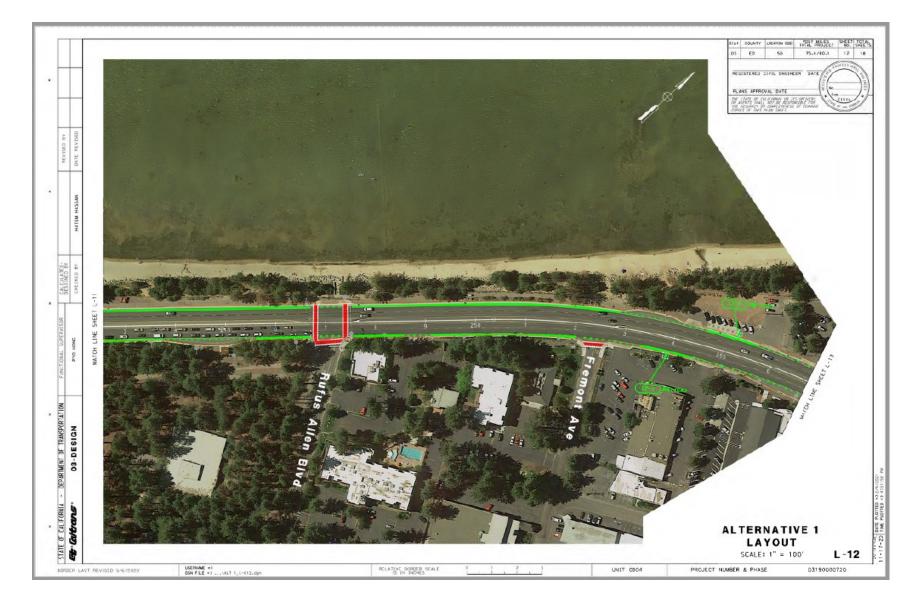
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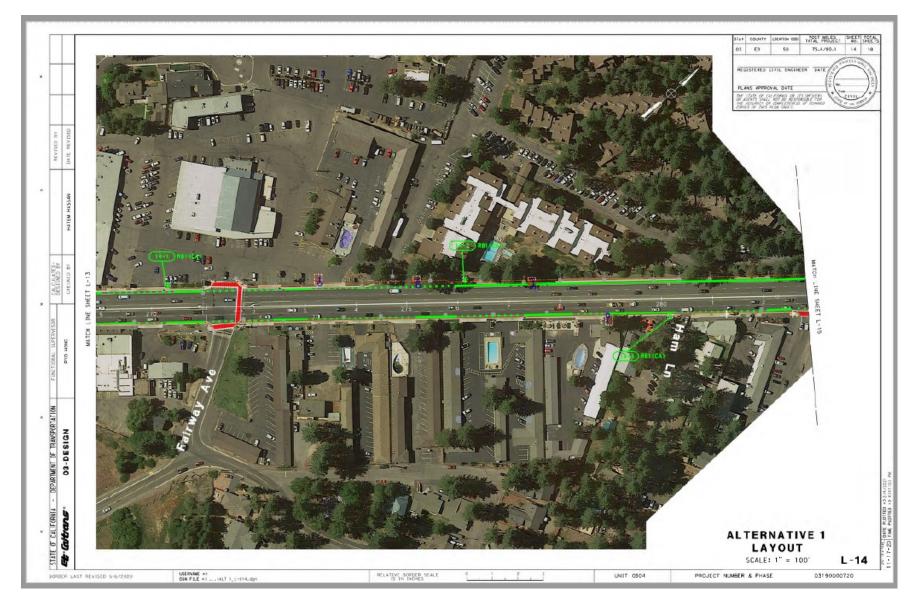


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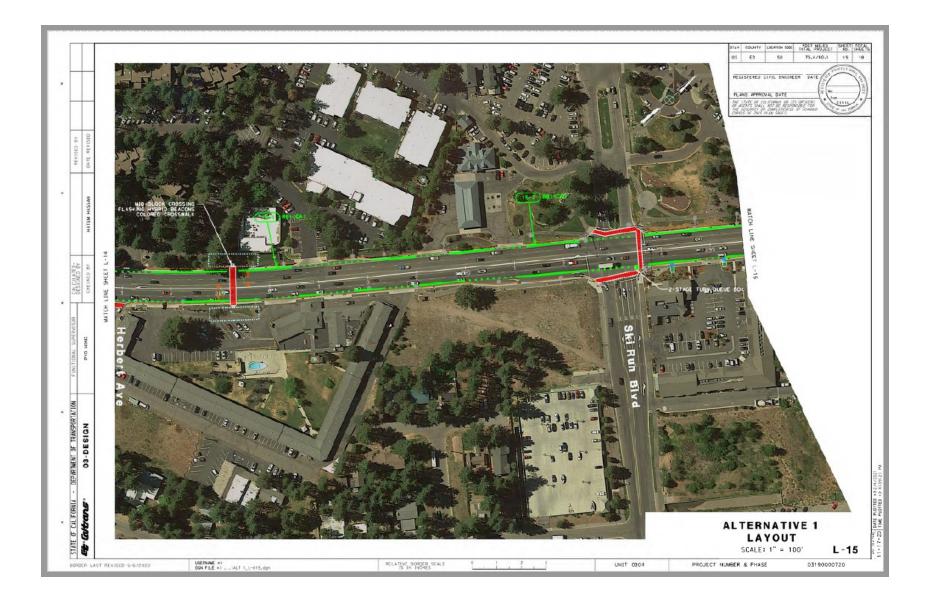








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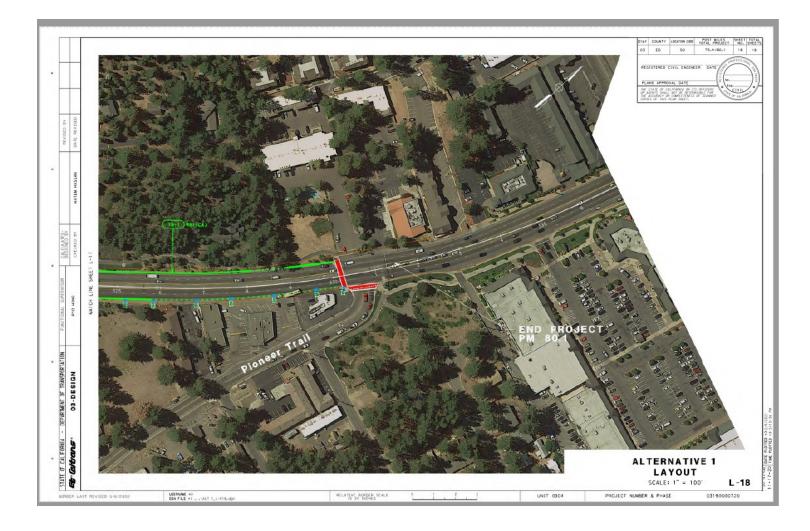


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2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below.

"Less Than Significant Impact" determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical analysis, and no further discussion is included in this document.

2.1.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
 a) Have a substantial adverse effect on a scenic vista? 				\square
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			\boxtimes	
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?			\boxtimes	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			\boxtimes	

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?

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

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 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?

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

a – <u>No Impact</u>. The determination is based on the Visual Impact Assessment prepared on May 4, 2020.

A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. In addition, some scenic vistas are officially designated by public agencies, or informally designated by

tourists and tourist guides. A substantial adverse effect to such a scenic vista is one that degrades the view from a designated view spot.

Within the City of South Lake Tahoe, US 50 provides few views that could potentially be considered a vista point along the main roadway. In addition, Caltrans has not officially designated a scenic vista in the general vicinity of the project location, nor has an informal scenic vista been established and utilized by the general public for viewing the broader Truckee River area.

In general, the proposed project activities will only require minor roadway surface work to facilitate the upgrades. Moreover, the proposed improvements are highly visually compatible to the existing roadway infrastructure. Therefore, the proposed project would have no impact on a scenic vista.

b, c, and d – Less Than Significant

At the project location, California US 50 is an Officially Designated State Scenic Highway. This Route, supported by the local community, consists of a scenic corridor characterized by substantial natural beauty including an intact landscape with minimal visual intrusions that break the unity and continuity of the viewshed. Additionally, the roadside improvements will require minor roadway work and no significant quantities of unique landscape features will be removed that would potentially affect the Route's eligibility as a State Scenic Highway. The proposed project would not diminish the views that make the highway eligible for scenic status. Therefore, the project, as designed, would not substantially degrade the visual character and quality of the site. Thus, the proposed project would have less than significant impacts to scenic resources and visual character. No mitigation is required.

The most visually noticeable aspect of the project will be new roadside infrastructure within the limits of disturbance; however, it is expected that these proposed elements would not create adverse visual effects to the environment. The proposed improvements generally match the existing visual elements currently fixed in the surroundings.

Access and staging may impact vegetation along or adjacent to the project site. However, the loss of vegetation would result in a minor effect on the aesthetic quality of the visual corridor. With appropriate restoration of the disturbed and cleared zones along with implementation of the recommended minimization measures, any impacts to the visual quality of the site would result in a less than significant impact. No mitigation is required.

The proposed work is expected to be completed during normal working daylight hours but may necessitate some nighttime working hours. However, all nighttime illumination sources would comply with standard Caltrans practices controlling illumination for public safety and any light and glare from construction activities would be temporary. New lighting will permanently increase the quantity of illumination within the project limits. However, the surrounding area is urbanized with many light sources. The proposed lighting fixtures will be down lit to reduce night sky pollution in compliance with TRPA's rules and regulations. Therefore, no substantial new source of lighting or glare is proposed as part of the project and there will be a less than significant impact. No mitigation is required.

Measures to Minimize the Visual Effects of the Project

The majority of the work will be within the limits of Caltrans right-of-way. Temporary construction easements will be required to accommodate construction activities. The project development process considered measures to preserve and/or enhance the scenic resources identified within the limits of the proposed project. Additionally, these minimization measures outlined below will further reduce any aesthetic impacts as a result of the proposed action:

- Areas that require ground disturbance and vegetation removal must be restored before completion of the construction project. BMP's will reduce vegetation loss and, where practicable, mature trees shall be protected. Vegetation removal shall be limited to the immediate vicinity of the project and replaced in accordance with Caltrans Standard Specification 5-1.36E, Landscape.
- If the project requires equipment/staging areas, all areas used for staging, access, or other construction activities shall be repaired and restored pursuant to Caltrans Standard Specification 5-1.36, Property and Facility Preservation.
- Temporary construction activities that require nighttime illumination sources for staging, access, or other construction activities shall comply with Caltrans Standard Specification 7-1.04, Public Safety.

2.1.2 Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\square
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))?				\boxtimes
d) Result in the loss of forest land or conversion of forest land to non-forest use?				\square
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				

CEQA Significance Determinations for Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and 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?

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

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

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

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

a, b, c, d, and e – No Impact. The determinations in this section are based on the scope, description, and location of the proposed project, as well as the California Department of Conservation Farmland Maps.

Although permanent acquisition of land is anticipated as part of this project, no Prime Farmland would be acquired. There is no land classified as Prime Farmland in the project area. The project would not convert any land currently used for agriculture to non-agricultural use.

There are no parcels under the Williamson Act contract within the project limits. No forest land, timber, or timber zoned Timberland Production was identified within the project limits.

No forest land was identified within the project limits, and no conversion of forest land to non-forest use is associated with this project. There would be no other changes to farmland or forest land.

2.1.3 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:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				\square
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?				
c) Expose sensitive receptors to substantial pollutant concentrations?				\square
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				\square

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?

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?

c) Expose sensitive receptors to substantial pollutant concentrations?

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

a, b, and c - <u>No Impact</u>. The determination is based on the Air Quality Analysis prepared on August 4, 2020 and the Air Quality Analysis completed on January 27, 2021. This project is exempt from air quality conformity analysis requirements. The purpose of this project is to provide continuous roadway lighting to help improve nighttime visibility for pedestrians, bicyclists, and motorist's safety. The proposed modifications in the project area would not result in changes to the traffic volume, fleet mix, speed, location of existing facility or any other factor that would cause an increase in emissions relative to the no build alternative. The project will not conflict

with or obstruct implementation of the applicable air quality plan. The proposed action will not 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. The project will not expose sensitive receptors to substantial pollutant concentrations.

d - Less Than Significant Impact. The proposed actions will not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. The city of South Lake Tahoe ordinance requires pedestrians wishing to cross US 50 between the "Wye" at the junction of SR 89 and the California-Nevada border, do so only at properly marked crosswalks. The installation of new traffic control and enhanced crosswalk features are intended to promote better pedestrian and bicycle access to crossing US 50 in South Lake Tahoe. These features also encourage transit use by providing crossing opportunities near established transit stops.

The features include three new Pedestrian Hybrid Beacons near Whiskey Dick's/Sunray Hotel, Motel Six/Grocery Outlet, and Lakeland Village/Whole Foods, as well as a new traffic signal at the intersection of Johnson Blvd. and US 50. While there will be a change in vehicle delay at these locations, the new features will be part of a newly combined single coordinated traffic signal system, and any increase in delay will be minimized in the process of optimizing the signal timing. These additional lighting features and traffic signals will have a minimum adverse impacts for air quality. Therefore, this project will have less than significant impact.

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?				
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?				
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?				

2.1.4 Biological Resources

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

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, U.S. Fish and Wildlife Service, or NOAA Fisheries?

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?

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?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

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

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

a, b, c, d, e, and f - <u>No Impact</u>. The determinations are based on the Natural Environmental Study (Minimal Impacts) prepared on November 4, 2020.

The project will have no effect on any species identified as candidate, sensitive, or special status under state in local or regional plans, policies, regulations, or by the

California Department of Fish and Wildlife (CDFW) or the US Fish and Wildlife Service (USFWS).

The project will not have any effects on sensitive natural communities identified in local or regional plans, policies, and regulations or by CDFW or USFWS.

The project will not affect federally protected wetlands or waters of the US under section 404/401 of the Clean Water Act (CWA) or waters of the State under Porter-Cologne Water Quality Control Act.

The project will not interfere with the movement of any native resident or migratory fish or wildlife species nor will it interfere with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

The project does not conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.

The project does not conflict with any provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

2.1.5 Cultural Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				\square
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
c) Disturb any human remains, including those interred outside of dedicated cemeteries?				\square

CEQA Significance Determinations for Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

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

a, b, and c – <u>No Impact.</u> The determination is based on the project scope and purpose, which propose to improve pedestrian and bicyclist safety. The proposed project does not have the potential to affect any archaeological sites or built environment properties based on the investigation of the project areas and the work scope.

Based on this review, it is concluded that the proposed project has no potential to affect any historic properties and can be treated as a screened undertaking pursuant to Stipulation VII and Attachment 2 under the following classes of the FHWA Section 106 Programmatic Agreement.

2.1.6 Energy

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				\square

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?

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

a and b – <u>No Impact.</u> The determination is based on the project scope and purpose, which propose to improve pedestrian and bicyclist safety. The project does not increase capacity or provide congestion relief when compared to the no-build alternative. It may contribute to roadway enhancement that would improve vehicle fuel economy and thus benefit long-term energy consumption. The proposed project does not include maintenance activities which would result in long-term indirect energy consumption by requiring equipment use to operate and maintain in the roadway. The proposed action is unlikely to increase energy consumption through increased fuel usage. Therefore, the project would not result in inefficiency, waste, and unnecessary consumption of energy. The project will not conflict with state or local plans for renewable energy or energy efficiency.

2.1.7 Geology and Soils

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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. 				
ii) Strong seismic ground shaking?				\square
iii) Seismic-related ground failure, including liquefaction?				
iv) Landslides?				
b) Result in substantial soil erosion or the loss of topsoil?				\square
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				\square
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?				
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				\square

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? ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

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

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

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

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

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

a, **b**, **c**, **d**, **e**, **and f** - <u>No Impact.</u> The determination for geology and soil is based on the project scope, field reviews, California Geological Survey Maps, U.S. Geological Survey Landslide Inventory, Department of Conservation/Caltrans Highway Corridor Landslide Hazard Mapping program, California Geological Survey (CGS), and Earthquake Zones of Required Investigation map.

The project is not in a fault zone. The area is not in a liquefaction zone; the general composition of the soils is marine and nonmarine (continental) sedimentary rocks. The proposed project would not expose people to injury.

Considerable earth-moving activities would be necessary to construct the project. The scope of work would include the construction of access roads and staging areas, placing of fill into trenches, excavation to remove existing pavement for cut and cover operations, and excavation for drainage work as well as other activities.

Due to earth-moving activities having the potential to cause soil erosion or loss of topsoil, construction site best management practices (BMPs) will be implemented to reduce the amount of erosion and tops soil loss. The project is not located on unstable or expansive soils. The primary scope of work is located on engineered soils consisting of silty sand and gravel material used for pavement subgrade. Moreover, the project will not include septic or water disposal systems, and there are no paleontological resources or geologic features. Therefore, there would be no impact to geology and soils.

2.1.8 Greenhouse Gas Emissions

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\square	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

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?

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

a - Less Than Significant

During construction, the project would result in generation of short-term construction related GHG emissions. Construction GHG emissions consist of emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays and detours due to construction. These emissions would be generated at different levels throughout the construction phase.

The Caltrans Construction Emission Tool (CAL-CET2018 version 1.3) was used to estimate average carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), Hydrofluorocarbons (HFCs) emissions from construction activities.

The determination for Greenhouse Gas Emissions is based on the project scope emission modeling, and field reviews. The construction Greenhouse Gas emissions will consist of short-term emissions produced by materials processing, on-site construction equipment, and temporary traffic delays

b - No Impact

The purpose of the proposed project is to is to improve pedestrian and bicyclist safety between the US 50/SR 89 'Y' and Pioneer Trail in South Lake Tahoe. The project would not be adding additional travel lanes, change roadway capacity, or vehicle miles traveled. Due to the project scope, there would be no capacity or travel demand increase nor changes in traffic patterns. Although greenhouse gas

emissions would be produced during the construction period, the project once completed will not lead to an increase in operational greenhouse gas emissions. Thus, the project does not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			\boxtimes	
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?				
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				\boxtimes
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				

2.1.9 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?

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

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

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

f) 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?

a, b, c, e, f, and g - <u>No Impact.</u> The no impact determination is based on the project scope and Initial Site Assessment (ISA), prepared on August 23, 2019.

Lead contaminated soil may exist within and near the projects Right of Way (ROW) due to the historical use of leaded gasoline, leaded airline fuels, waste incineration, and other causes. The areas of concern are due to large traffic volumes, congestion, or stop-and-go situations. The excess soils will be relinquished to the contractor, and an Aerially Deposited Lead and a Lead Compliance Plan (LCP) investigation shall be required.

Also, hazardous levels of lead and chromium are known to exist in the yellow color traffic stripes. Since these traffic stripes will be removed along with the roadway, the levels of lead and chromium will become non-hazardous. The grindings (which consist of the roadway material and the yellow color traffic stripes) shall be removed and disposed of in accordance with Standard Special Provision 36-4 (Residue Containing High Lead Concentration Paints).

The non-hazardous levels of lead are known to exist in white traffic striping, so grindings shall be removed and disposed following Special Provision 36-4; in addition, it requires an LCP to address the hazardous and non-hazardous levels of lead.

d – <u>Less than significant Impact</u>. The determination is this section is based on the hazardous waste study. There are properties within the project limits which are on the Cortese List site. Measures will be taken to ensure compliance with federal, state and local laws in handling this property.

2.1.10 Hydrology and Water Quality

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				\square
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
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;				\square
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				\boxtimes
(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				
(iv) impede or redirect flood flows?				\square
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

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?

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

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;

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

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

iv) Impede or redirect flood flows?

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

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

a, b, c, d, and e – <u>No Impact</u>. The determination in this section is based on the Water Quality Assessment Report completed on August 14, 2020. The report found that no water quality impacts are expected. Additionally, the project will be accordance with the following regionals policies.

Tahoe Regional Planning Agency (TRPA)

TRPA and Caltrans have had a long-standing agreement or Memorandum of Understanding (MOU) that (in short) defines activities, applicable BMPs, design review guidelines, and other provisions (related to TRPA code of ordinances) that the Department is mandated to adhere to. As a result, Department staff is required to coordinate design and field efforts for all project work within the Tahoe Basin. These actions are typically vetted prior to construction so the risk of project delays is minimized or eliminated.

Lahontan Regional Water Quality Control Board

Lahontan's General Waste Discharge Permit requires the Department to comply with the requirements of the Regional Board's Construction General Permit (CGP), Order No. R6T-2016-0010, for construction work that involves 1 acre or more of land disturbance area. During construction, compliance with the Lahontan CGP requires the appropriate selection and deployment of both structural and non-structural BMPs that achieve the performance standards of Best Available Technology (BAT) and Best Conventional Pollutant Control Technology (BCT) economically achievable to reduce or eliminate storm water pollution.

During construction, site BMPs will be implemented for construction activities to avoid and reduce potential water quality to project limits and storm water runoff resulting from construction. BMPs will facilitate National Pollutant Discharge Elimination System (NPDES) Permit compliance and further prevent potential receiving water pollution due to construction activities and/or operations related to the project.

- All temporary equipment and material storage sites on State property must be accounted for and included in the total land disturbance estimate, unless a stabilization method has been implemented, reviewed, and approved by NPDES or Storm Water staff.
- The project shall adhere to the conditions of the Caltrans Statewide NPDES MS4 Permit CAS No. 000003, Order No. 2012-0011-DWQ, and adopted amendments.
- The project lies within the Tahoe Basin and Placer County's MS4 area (Lahontan Water Board's Order No. R6T-2017-0010). Therefore, per Caltrans' MS4 Permit, additional project coordination with the County and the Lahontan Regional Board (i.e. storm water staff) may be necessary.
- If the project involves 1 acre or more of land disturbance, Lahontan's Construction General Permit (Order No. R6T-2016-0010) will be the guiding permit that the project be regulated under.
- All project work and operations with the Tahoe Basin requires TRPA Coordination and approval. Caltrans' TRPA Coordinator will address issues and concerns (specific to this agency) prior to the start of construction.
- The Contractor prepared and Caltrans approved SWPPP or WPCP will provide and incorporate appropriate approved Temporary Construction Site BMPs that address the effective implementation, placement, handling, storage, use, and disposal practices of all BMPs used during construction operations and field activities for the duration of the project.
- The project must follow all applicable guidelines and requirements listed in the 2018 Caltrans Standard Specifications (2018 CSS), Section 13, regarding water pollution control and general specifications for preventing, controlling, and abating pollutant discharges into streams, waterways, and other bodies of water.
 - Specifically, a concerted effort and focus should be placed on 2018 CSS, Section 13-4 (Job Site Management), to control potential sources of water pollution before they encounter storm water conveyance systems or receiving waters. This can be accomplished by controlling and managing materials, discarded waste, and non-storm water pollution at the construction site and within the project boundaries.
 - Some operations may require attention to Sections 13-9.02C and 13-9.02D, of the 2018 CSS, which relates to and addresses the handling of concrete waste during construction operations.
- Prior to the start of construction, existing drainage facilities should be identified and protected by the application of appropriate Temporary Construction Site BMPs.

2.1.11 Land Use and Planning

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				\square
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?				

CEQA Significance Determinations for Land Use and Planning

Would the project:

a) 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?

a and b — <u>No Impact.</u> The no impact determinations in this section are based on the scope, description, and the location of the proposed project. The area is in the tourist core area of the City of South Lake Tahoe. As described in the Tourist Core Area Plan 2013, the tourist core is in centered within city along US 50 and Ski Run Boulevard from Fairway Avenue to the California and Nevada Stateline. The area is surrounded by businesses and tourist attractions. Due to the scope of the project and location, the project would not divide an established community.

The project is zoned Mixed-Use, Residential, and Tourist. Potential impacts to Land Use Planning are not anticipated as the proposed project would not divide an established community nor conflict with the Lake Tahoe land use policies (2013).

The project complies with the Community Design in the South Lake Tahoe Tourist Core Area Plan. The following are some of the policies that supports the project:

Policy LU-2.3 Establish pedestrian-scaled and strategically placed lighting along sidewalks and multiuse paths that promotes pedestrian safety and comfort and enhances architectural and site design concepts. Prevent unnecessary and intrusive lighting that detracts from the nighttime dark skies.

Policy LU-1.2 Connectivity - Create bike, pedestrian and open space connections from the Tahoe Valley Area Plan to the adjacent residential neighborhoods and nearby recreation.

Policy T-2.2 Provide adequate pedestrian and bicycle facilities such as continuous sidewalks, bike paths and bike lanes throughout the plan area that connect commercial, entertainment and recreation areas of the plan.

Policy LU-1.5 – Auto-Oriented Commercial Use Consolidation. Encourage the consolidation of existing auto-oriented commercial development into pedestrian oriented development.

Policy T-3.1 – Connectivity - Provide adequate pedestrian and bicycle facilities such as continuous sidewalks, bike paths and bike lanes throughout the Tahoe Valley area that connect commercial, health services, entertainment, residential, and recreation areas.

Policy T-3.2 – Pedestrian Priority - Give pedestrian safety and convenience highest priority in site planning and roadway design.

Policy T-3.3 – Pedestrian/Automobile Buffer - Develop landscape strips between sidewalks and arterial roadways to buffer pedestrians from vehicular traffic.

Policy LU-3.6 – Lighting - Establish pedestrian-scaled and strategically-placed lighting along US 50, SR 89, and Lake Tahoe Boulevard. Lighting must promote pedestrian safety and comfort and enhance architectural and site design. Prevent unnecessary and intrusive lighting that detracts from the beauty and view of the night sky.

2.1.12 Mineral Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\square
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

CEQA Significance Determinations for Mineral Resources

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?

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?

a and b — <u>No Impact</u>. The determinations in this section are based on the scope, description, and location of the proposed project, as well as the mineral resource maps from the California Department of Conservation. Potential impacts to mineral resources are not anticipated. No mineral resources were identified within the project limits or would be affected by the proposed project. There would be no impact to mineral resources.

2.1.13 Noise

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				
b) Generation of excessive groundborne vibration or groundborne noise levels?				\square
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?				

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?

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

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?

a b and c — <u>No Impact</u>. The determinations in this section are based on the scope, description, and location of the proposed project, and the Noise Assessment dated August 4, 2020. Potential impacts to are not anticipated due to the following:

Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies is not anticipated.

Based on the scope of work, this project is considered a Type III project. A Type III project, is not required to complete a noise analysis or consider abatement measures. Noise impacts due to the project is not expected to occur; therefore, mitigation is not considered.

During construction, noise may be generated from construction activity. Caltrans requires the Contractor to conform to the provisions of Standard Specification, Section 14-8.02 "Noise Control" which states "Control and monitor noise from work activities" and "Do not exceed 86 dBA LMax at 50 feet from the job site activities from 9 p.m. to 6 a.m."

The project is not expected to produce excessive groundborne vibration or groundborne noise. Vibration levels could be perceptible and cause disturbances at residences near the project area during operation of heavy equipment. However, these effects would be short-term and intermittent and would cease once construction is completed.

The project is not located within the vicinity of a private, public or public use airport. There would be no impact from airport noise.

2.1.14 Population and Housing

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial 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)?				\boxtimes
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

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)?

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

a and b — <u>No Impact.</u> The no impact determination is based on the scope of work, description, and location of the proposed project. Potential impacts to population and housing are not anticipated due to the following:

The proposed project would not increase capacity or access; therefore, the proposed project would not directly or indirectly induce population growth in the area. The project would not add new homes or businesses and would not extend any roads or other infrastructure. There would be no impact.

Although some of the areas surrounding the project are urban in residential communities, there will be no housing replacement. There would be no impact.

2.1.15 Public Services

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?				\square
Police protection?				\boxtimes
Schools?				\square
Parks?				\square
Other public facilities?				\square

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?

a — <u>No Impact</u>. The no impact determination in this section are based on the scope, description and the location of the prosed project. Potential impacts to public resources are not anticipated due to the following:

During construction, any emergency service agency whose ability to respond to incidents may be affected by traffic control would be notified prior to any closure. All emergency vehicles would be accommodated through the work area. There would be no impact to emergency services resulting from the project.

No neighborhood parks, regional parks, schools or other public facilities are present within the project limits.

2.1.16 Recreation

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				\boxtimes
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

CEQA Significance Determinations for Recreation

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

a and b — <u>No Impact.</u> The determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to recreation are not anticipated due to the following:

The project would not increase the use of existing neighborhood parks, regional parks, or other recreation facilities. No neighborhood parks, regional parks, or other recreational facilities are present within the project limits. There would be no impact to neighborhood or regional parks.

The project does not include recreational facilities or require the construction or expansion of recreational facilities. No neighborhood parks, regional parks or other reaction facilities are present within the project limits. There would be no impact from the construction of recreational facilities.

2.1.17 Transportation

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				\square
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d) Result in inadequate emergency access?				\square

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?

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

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

d) Result in inadequate emergency access?

a, b, c and d — <u>No Impact.</u> The no impact determination in this section are based on the scope, description, and location of the proposed project, as well as the circulation element in the City of South Lake Tahoe Circulation Element of the 2013City of South Lake Tahoe General Plan. Potential impacts to transportation/traffic are not anticipated due to the following:

The project is not anticipated to conflict with a program, plan, ordinance, or policy addressing the circulation system; therefore, there would be no impact.

The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b). There would be no impact.

The alternatives would improve pedestrian and bicyclist safety between the US 50/SR 89 'Y' and Pioneer Trail in South Lake Tahoe. The following is the City of South Lake Tahoe's vision for future Transportation and Circulation in Element in the City of South Lake Tahoe 2013 General Plan:

"In 2030 Highway 50 has been redesigned into a multi-modal corridor that connects areas within South Lake Tahoe to neighboring communities. New investment has improved pedestrian, bike, and transit facilities. There are connected and geographically distributed sidewalks and bike routes that provide convenient access to commercial and social centers. There are also low-emission transit vehicles, modes of transportation systems, and strategic convenient access to walking and transit. Transit centers have been built which function as popular social gathering places. There are multiple options for convenient travel between home, work, schools, and activity centers. There is also improved water-borne transit between South Lake Tahoe and neighboring communities and Federal/State parks. The City's "green" and environmentally-friendly airport provides convenient commercial air service options as an alternative to inter-regional automobile travel",

Policy TC-3.3: Implement the Bicycle Master Plan and Improve Connections. The City shall maintain and implement the Bicycle Master Plan and shall improve bicycle and pedestrian connections between all neighborhoods. This shall include linking residential neighborhoods, shopping districts, recreation facilities, employment centers, schools, and other public facilities with a network of safe, continuous, and attractive pedestrian sidewalks, paths, and bikeways.

Project geometric design features do not include sharp curves, creation of dangerous intersections, improvements that are incompatible with existing use or impacts to emergency access.

2.1.18 Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
 b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. 				

CEQA Significance Determinations for Tribal Cultural Resources

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

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.

a and b — <u>No Impact.</u> The no impact determinations are based on information provided in the Cultural Resources Compliance Memo, prepared November 4, 2020. There are no listed or eligible tribal cultural resources in the project area.

2.1.19 Utilities and Service Systems

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry 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?				
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??				
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

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?

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

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?

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

a, **b**, **c**, **d**, **and e** — <u>No Impact.</u> The no impact determination is based on the scope, description, and location of the proposed project. If utility poles or lines conflict with the proposed work, they would be relocated or protected in place during construction. Caltrans would verify the location of any underground gas, electric water, or sewer lines within the project area. Caltrans would coordinate with utility owners to relocate or protect utilities prior to construction. A utility relocation plan would be finalized in the design phase of the project. Due to the measures stated above; relocation or construction of utilities will have no impacts.

The project would have sufficient water supplies during construction and would not have an effect on water supplies for future development. There would be no impact. The project would not have a demand for wastewater treatment; there would be no impact. The project would comply with all statutes and regulations related to the disposal of solid waste generated during construction; there would be no impact. The project will adhere to all federal, state, and local management and reduction statutes and regulations related to solid waste; no impacts are expected.

2.1.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				\square
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?				
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?				
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?				

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?

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?

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?

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?

a, b, c, and d — <u>No Impact.</u> The no impact determinations are based on the proposed project scope. The safety project will not impair the Lake Tahoe Basin Community Wildfire Protection Plan. The plan focuses on reducing and eliminating

risk to people and create fire-adapted communities. The project would not substantially impair the county plan; no impacts are expected. Existing structures and roadway would remain open to traffic during the proposed project.

Project occupants will not be exposed to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. In addition, the project would not require installation or maintenance of additional infrastructure that would result in temporary or ongoing impacts to the environment. No impacts are expected

The project will improve the conditions of the roadway. Furthermore, the work will primarily be within the existing roadway and right of way; it will not expose people to fire related landslides and flooding. Therefore, there is no impact.

Less Than Significant Significant Less Than No and Significant with Unavoidable Impact Mitigation Impact Impact Incorporated 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- \square sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a \boxtimes project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? c) Does the project have environmental effects which will cause substantial adverse \mathbb{N} effects on human beings, either directly or indirectly?

2.1.21 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? b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

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

a, b, and c — No Impact. The proposed project does not have the potential to directly or indirectly degrade the quality of the environment. The proposed project will not impact sensitive biological resources including sensitive plants/vegetation communities, wildlife, and their respective habitats. The project will not impact any jurisdictional waters or wetlands.

The proposed project would not result in any adverse effects that, when considered in connection with other projects, would be considered cumulatively considerable. Based on the description of the proposed project and consideration of potential effects, the project would not cause substantial adverse effects on human beings, either directly or indirectly.

2.2 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 primarily concerned with the emissions of greenhouse gases generated by human activity, including carbon dioxide, methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, and various hydrofluorocarbons. Carbon dioxide 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 carbon dioxide.

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.

2.2.1 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 (NEPA) (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 (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. 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 (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability" (FHWA n.d.). 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 promulgated 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 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 based on 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 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. Fuel efficiency standards directly influence greenhouse gas emissions.

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 Executive 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 32 in 2006 and Senate Bill 32 in 2016.

Assembly Bill 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: Assembly Bill 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 California Air Resources Board to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and costeffective greenhouse gas reductions.

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

Senate Bill 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the California 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.

Senate Bill 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 Assembly Bill 32.

Executive Order B-16-12 (March 2012) orders State entities under the direction of the Governor, including the California 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) 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 California 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. Greenhouse gases differ in how much heat each trap in the atmosphere (global warming potential). Carbon dioxide is the most important greenhouse gas, so amounts of other gases are expressed relative to carbon dioxide, using a metric called "carbon dioxide equivalent." The global warming potential of carbon dioxide is assigned a value of 1, and the global warming potential of other gases is assessed as multiples of carbon dioxide. Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, Safeguarding California, every three years, and to ensure that its provisions are fully implemented.

Senate Bill 32, Chapter 249, 2016, 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.

Senate Bill 1386, Chapter 545, 2016, 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."

Assembly Bill 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, 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 travelled, 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 California Air Resources Board to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

Executive Order B-55-18 (September 2018) 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.

Executive Order N-19-19 (September 2019) advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce greenhouse gas emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This Executive Order also directs the California Air Resources Board to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

2.2.2 Environmental Setting

This proposed project is located on US 50 in El Dorado County from the junction of Route 89/US 50 to the Pioneer Trail. US 50 runs directly through the City of South Lake Tahoe, where it functions as both a state highway, serving traffic from Nevada and California and the city's main street. This roadway serves residents, visitors, and commuters by connecting State Route 89 from the West shore to the California and Nevada Stateline.

Numerous complexities in this corridor have created new challenges and needs for the South Lake Tahoe community, which has about 23,00 full-time local residents. Some complexities include fluctuating seasonal traffic volumes that cans well, to as high as approximately 30,000 AADT, in some areas during times of peak visitation. Other complexities involve; varied land use, highway access points, increasing pedestrian and bicycle demand, and missing connectivity in some areas. About 10 million vehicles enter the Lake Tahoe Region each year.

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. Environmental Protection Agency is responsible for documenting greenhouse gas emissions nationwide, and the California Air Resources Board does so for the state, as required by Health and Safety Code Section 39607.4.

National Greenhouse Gas Inventory

The U.S. Environmental Protection Agency 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 carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride. It also accounts for emissions of carbon dioxide that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store carbon dioxide (carbon sequestration).

The 1990–2016 inventory found that of 6,511 million metric tons of carbon dioxide equivalent greenhouse gas emissions in 2016, 81 percent consist of carbon dioxide, 10 percent are methane, and six percent are nitrous oxide; the balance consists of fluorinated gases (EPA 2018a). In 2016, greenhouse gas emissions from the transportation sector accounted for nearly 28.5 percent of U.S. greenhouse gas emissions. See Figure 2-1.

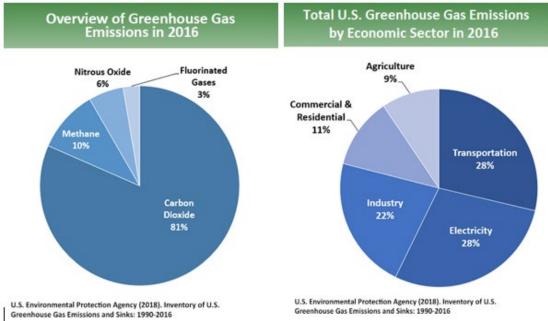


Figure 2-1 U.S. 2016 Greenhouse Gas Emissions

State Greenhouse Gas Inventory

The California 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 major annual changes and trends to demonstrate the state's progress in meeting its greenhouse gas reduction goals. The 2019 edition of the greenhouse gas emissions inventory found total California emissions of 424.1 million metric tons of carbon dioxide

equivalent for 2017, with the transportation sector responsible for 41 percent of total greenhouse gases. It also found that overall statewide greenhouse gas emissions declined from 2000 to 2017 despite growth in population and state economic output (ARB 2019a). See Figures 2-2 and 2-3.

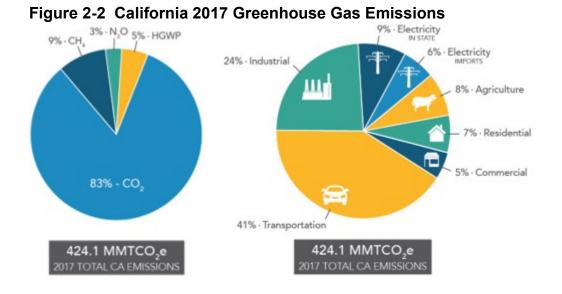
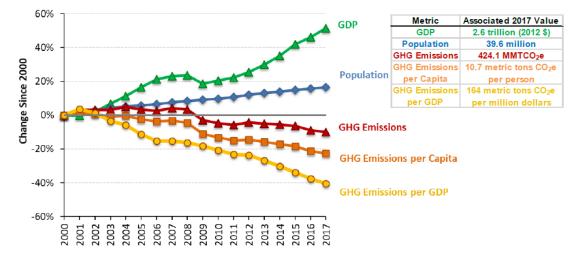


Figure 2-3 Change in California Gross Domestic Product, Population, and Greenhouse Gas Emissions since 2000



Assembly Bill 32 required the California 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 five years. The California 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 Senate Bill 32. The Assembly Bill 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce greenhouse gas emissions.

Regional Plans

The California Air Resources Board sets regional targets for California's 18 Metropolitan Planning Organizations to use in their Regional Transportation Plan/Sustainable Communities Strategy 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 proposed project is associated with in the Regional Transportation Plan/Sustainable Communities Strategy for Regional Transportation Plan Mobility 2035, 2012.

The proposed project is within the jurisdiction of the Tahoe Regional Planning Agency. The 2013 Regional Transportation Plan states the purpose of the plan, which is to identify ways to reduce greenhouse gas reductions.

The Tahoe Metropolitan Planning Organization's (TMPO) Regional Transportation Plan: Mobility 2035 is Lake Tahoe's blueprint for a regional transportation system that enhances the quality of life in the Tahoe Region, promotes sustainability, and offers improved mobility options for people and goods. Important directions of the plan are to reduce the overall environmental impact of transportation in the Region, create walkable, vibrant communities, and provide real alternatives to driving. The plan will also support an update of the Transportation Element of the Tahoe Regional Planning Agency (TRPA) Regional Plan. Finally, the plan meets the challenge of California's Senate Bill 375 by presenting an integrated land use and transportation strategy that will allow the Region to achieve targets for reducing greenhouse gas (GHG) emissions by 2035.

2.2.3 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 primary greenhouse gases produced by the transportation sector are carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons. Carbon dioxide emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of methane and nitrous oxide are emitted during fuel combustion. In addition, a small amount of hydrofluorocarbon 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 *v*. San Diego Assn. of Governments (2017) 3 Cal.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

The purpose of the proposed project is to improve pedestrian and bicyclist safety between the US 50/SR 89 'Y' and Pioneer Trail in South Lake Tahoe. There is a need to reduce the number of fatalities and severe injuries of bicycle collisions along this stretch of the corridor. Most of the bicycle collisions occurred at night, and the project's alternatives require corrective action to address the bicyclist involved collision.

The project corridor includes four lanes (two in each direction) and a continuous twoway left-turn lane. High speed, multi-lane roadways are challenging for pedestrians to cross. Pedestrians are faced with multiple threat situations, particularly on unmarked crosswalks. There are many tourist attractions, shops, and transit loading/unloading locations on both sides of the corridor; an extensive history of jaywalking exists due to the lack of proper infrastructure.

A substantial amount of bicycle and pedestrian collisions have occurred within the project area. Bicyclists routinely utilize the highway in proximity to vehicular traffic. There have been six fatal collisions within the last four years; four of the six collisions occurred at night.

While some greenhouse gas emissions during the construction period would be unavoidable, the proposed project once completed would not lead to an increase in operational greenhouse gas emissions.

The project would not be adding additional travel lanes, change roadway capacity, or vehicle miles traveled. Although greenhouse gas emissions would be produced during the construction period, the project once completed will not lead to an increase in operational greenhouse gas emissions

Construction Emissions

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

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the greenhouse gas emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

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 the California Air Resources Board emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce greenhouse gas emissions.

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 expected that the project will not result in any increase in operational greenhouse gas emissions. The proposed 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.

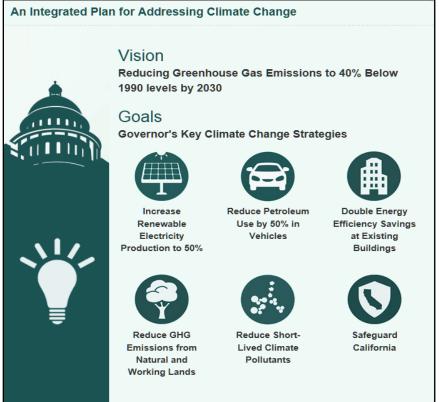
Caltrans is firmly committed to implementing measures to help reduce greenhouse gas emissions. These measures are outlined in the following section.

2.2.4 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 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 2-4.





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 (State of California 2019).

In addition, Senate Bill 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 forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above-ground and belowground matter.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the California Air Resources Board works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in Assembly Bill 32. Executive Order B-30-15, issued in April 2015, and Senate Bill 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 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 carbon dioxide 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.

Senate Bill 391 (Liu 2009) requires the California Transportation Plan to meet California's climate change goals under Assembly Bill 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, 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; and
- 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 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.

The following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

- The construction contractor must comply with the 2018 Caltrans' Standard Specifications Section 14-9. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.
- Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of construction vehicles and equipment to no more than 5 minutes.
- Caltrans' Standard Specification 7-1.02C "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California ARB.
- Utilize a traffic management plan to minimize vehicle delays and idling emissions.
- Construction traffic would be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.

2.2.5 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 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 NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and Federal Highway Administration NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program delivers a report to Congress and the president every four 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" (USGCRP 2018).

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 the U.S. 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" (U.S. DOT 2011).

Federal Highway Administration order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events,* December 15, 2014) 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 (FHWA 2019).

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 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. Executive Order B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This Executive 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.

Assembly Bill 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:

- *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 to 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 sealevel rise. Accordingly, direct impacts to transportation facilities due to projected sealevel rise are not expected.

Floodplains Analysis

The project is located between the US 50/SR 89 'Y' and Pioneer Trail in South Lake Tahoe. The roadway at some locations in the project are adjacent to the Lake Tahoe. In the project area, the annual precipitation ranges from over 55 inches for watersheds on the west side of the Basin to about 26 inches near the Lake on the east side. Most of the precipitation falls as snow between November and April, and rainstorms combined with rapid snowmelt can cause flooding.

The project will adhere to the <u>FHWA publication *Highways in the River Environment-Floodplains, Extreme Events, Risk, and Resilience.* Hydraulic Engineering Circular No. 17, 2nd Edition. Chapter 6.65.040 describes Methods of reducing flood losses by detailing the following:</u>

A. Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities;

B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

C. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;

D. Control filling, grading, dredging, and other development which may increase flood damage; and

E. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas. (Ord. 910 § 1 (1-4). Code 1997 § 34-4).

Wildfire

The proposed project is located in state and local responsibility areas of moderate fire hazard severity. The design features improve pedestrian and bicyclist safety between the US 50/SR 89 'Y' and Pioneer Trail in South Lake Tahoe. The region also uses the Fire Adapted Community Assessment tool, designed to assist communities assess the threats wildfire poses to the community and the resources

available or necessary to mitigate that risk. The tool assists communities identify the resources, leadership, networks, motivation, skill sets and partnerships that can be organized to address wildfire hazard with prioritized actions designed to reduce the threat wildfire poses to the community.

Climate Change References

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Chapter 3 Comments and Coordination

Coordination between Caltrans and the city of South Lake Tahoe

Caltrans coordinated with the city of South Lake Tahoe by sharing designs and alternatives to the city of the South Lake Tahoe Safety Project.

The City of South Lake Tahoe provided feedback on September 1, 2020 (See letter from city of South Lake Tahoe).

Caltrans responded to the comments of South Lake Tahoe on October 26, 2020 with changes to the alternatives (see letter from Caltrans).

On November 19, 2020, Caltrans coordinated with the city of South Lake Tahoe, Federal Highway Administration, Tahoe Regional Planning Agencies, and Lahontan Regional Water Quality Control Board to obtain input for the project alternatives and design features.



We will reflect the National Treasure in which we live"

September 1, 2020

Daniel Cuellar Caltrans District 3 703 B Street Marysville, CA 95901 SENT VIA EMAIL

Dear Mr. Cuellar:

Subject: US Highway 50 Lighting and Ped/Bicycle Safety Improvement Project

The City of South Lake Tahoe (City), Department of Public Works has reviewed the proposed plans for the subject project and has solicited comments and input from the Tahoe Regional Planning Agency as well as FHWA staff that participated in the HWY50 Road Safety Audit in 2017. Overall, the Caltrans proposal is a start to address serious safety concerns along the Hwy 50 corridor that have been identified in the TRPA Safety Strategy and the recently completed Road Safety Audit (RSA). While we appreciate Caltrans' response in initiating a project to address some safety elements on the corridor, there remains the need to invest the necessary time to appropriately design the project and communicate with the public and local stakeholders during the development of the project to ensure success. TRPA's Safety Strategy, developed with regional stakeholders and Caltrans, provides regional context and guidance on many of the recommended treatments listed in the RSA. We highly recommend Caltrans' consideration of the TRPA Safety Strategy.

The following questions/concerns are based on the initial drawings provided by Caltrans and necessitate additional discussion. There were a few similar comments submitted; however, the comments from each agency are listed as provided:

- The proposed lighting/safety plan appears to be a blanket approach with little or no regard to existing lighting. A more intelligent approach to eliminating unlit dark areas along U.S. 50 involves a light study. Light sensing instrumentation may be able to determine where additional lighting is necessary and only installing lighting in identified unlit sections of the highway.
- 2. Instead of making it "safe" to cross the highway anywhere a jaywalker might desire to cross, the bright overhead lighting should be thinned out to a spacing resulting in far less light pollution. The City's standard streetlight should provide enough light for the Class 2 bike lanes, sidewalks, and Class 1 bike paths running along the edge of the travelled way. Existing overhead lighting and existing City standard lighting may already exist on sections between

Daniel Cuellar September 1, 2020 Page 2

> the South Y and Pioneer Trail. A night evaluation of lighting (possibly the lighting study described in item 1) might identify the right proportion of lighting that can be duplicated along similar sections of the highway.

- Will Caltrans run traffic modeling scenarios to synchronize mid-block crossings with adjacent traffic signal timing to limit impacts to traffic flow.
- 4. Please verify the type of flashing beacon to be used at the mid-block crossings.
- 5. Is a traffic signal a better option for the Herbert Street crossing as a means of synchronizing the traffic signals to minimize the impact to traffic flow?
- Did Caltrans complete a project study before the proposed plans were developed? If so, the City is interested in reviewing the study.
- 7. Are mid-blocks lit correctly and thoughtfully in terms of other light spacing?
- 8. Has lighting location relative to transit stops been completely thought through?
- Snow storage at mid-block crossings needs to be managed to provide good visibility to pedestrians and motorists.
- 10. It is assumed a lighting study was completed to identify/warrant lighting along the corridor. How is the spacing, location, warmth, lumens, and type fixtures informed by the lighting study?
- TRPA will be reviewing the project to meet current TRPA code and design guidelines. Relevant Code Sections are as follows:

66.2.4.B.1: Guardrails and other highway fixtures, including but not limited to retaining walls, safety barriers, traffic signals and controllers, light standards, and other structures shall be limited to the minimum length, height, and bulk necessary to adequately provide for the safety of the highway user.

36.8: Exterior Lighting: minimize exterior lighting to protect dark sky views, yet adequately provide for public safety and be consistent with architectural design of surrounding area. The overall lighting should be compatible with neighborhood light level.

- 12. Is there a need for highway lighting between Trout Creek and Stateline, since there is pedestrian lighting along this section and significant commercial lighting?
- 13. Consideration of rural "Mainstreet" context light fixtures as opposed to freeway standard cobra-head style fixtures?
- Design and specific locations of mid-block crossings need further discussion and public outreach.
- 15. How does a HAWK crossing coordinate with traffic signals?
- 16. When will Caltrans complete the synchronization of the signals along US 50 as previously stated?
- 17. Ensure the project is clearly identified as a safety project.
- Consider other RSA recommendations, including reducing speed in the corridor (and intern reducing the speed limit).
- TRPA encourages Caltrans to partner with the City of South Lake Tahoe to conduct public outreach for this project, which will be a dramatic change for the community.

Daniel Cuellar September 1, 2020 Page 3

In addition to the above comments, the City of South Lake Tahoe and Caltrans should revisit the specific roles and responsibilities of each agency as it relates to the proposed US Highway 50 Lighting and Ped/Bicycle Safety Improvement Project. It's been a little over a year since former City Manager, Frank Rush and Tom Brannon, Caltrans District 3 Deputy Director, agreed in principal to move forward with a project. Mr. Rush left the City in December 2019 and Mr. Brannon has since retired from Caltrans. The project proposal was not introduced to the City of South Lake Tahoe City Council during Mr. Rush's tenure nor since he's left the City.

Sincerely,

Ray Jarvis, PE Director of Public Works City of South Lake Tahoe

C: Joe Irvin, City Manager, City of South Lake Tahoe David Stevenson, Chief, City of South Lake Tahoe PD Clive Savacool, Chief, City of South Lake Tahoe FD Hilary Roverud, Interim Director Development Services, City of South Lake Tahoe Stan Hill, Engineering Division Manager, City of South Lake Tahoe Jim Marino, Capital Projects Manager, City of South Lake Tahoe Nick Haven, Long Range and Transportation Planning Division Manager, TRPA Shannon Friedman, Senior Planner, TRPA Hillary Isebrands, Senior Safety Engineer/Team Leader, FHWA STATE OF CALIFORNIA-CALIFORNIA STATE TRANSPORTATION AGENCY

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DEPARTMENT OF TRANSPORTATION DISTRICT 3 703 B STREET MARYSVILLE, CA 95901 PHONE (530) 741-4233 FAX (530) 741-4245



Making Conservation a California Way of Life.

October 26, 2020

TTY 711

www.dot.ca.gov/dist3

03-ED-050, P.M. 75.4/80.0 US Highway 50 Lighting and Ped/Bicycle Safety Improvement Project

Mr. Ray Jarvis Director of Public Works City of South Lake Tahoe 1740 D Street S Lake Tahoe, CA 96150

Dear Mr. Jarvis:

Thank you for reviewing and providing comments for the proposed project on US 50 from the intersection of US 50/SR 89 to the intersection of US 50/Pioneer Trail. This project is being funded as a Safety Improvement Project under the 2018 Bicyclist Safety Improvement Monitoring (Pilot) Program and the safety countermeasures follow the program's recommendations. The corridor lighting safety countermeasures that Caltrans proposes should serve as a starting point for consideration in addressing and reducing the number of fatality and injury collisions along this section of the corridor. The Project Development team (PDT) is aware of TRPA's Safety Strategy and the Road Safety Audit (RSA) guideline and attached are updated alternatives that would address stakeholder concerns while adhering to the project's purpose and need. Caltrans agrees that there needs to be public and local stakeholder engagement to ensure successful delivery of the project.

The Caltrans project development team has also reviewed the City's, TRPA's and FHWA's questions/concerns, listed with the accompanying letter, with the team's responses provided as follows:

 Previously presented alternative was following 2018 Bicyclist Safety Improvement Monitoring (Pilot) Program's recommendations in lieu of performing a lighting study. The lighting locations were based on collision data thus no lighting study was conducted. The PDT developed two additional alternatives with a more strategic lighting approach that will be shared with you along with this letter.

- 2. A night evaluation of the existing lighting was performed recently to identify unlit areas and consequently two additional alternatives were created. These alternatives will consider the use of decorative lighting fixtures as requested by the City. An existing maintenance agreement between Caltrans and the City would have to be amended and executed before decorative lighting fixtures can be approved and included as part of the project.
- 3. This project affords the opportunity to connect all the signals into one coordinated signal system, rather than the two existing systems. This, in addition to the new mid-block crossings, will require a reevaluation of the signal timing of the entire corridor. This will require a new data collection effort of all the signals on the corridor.
- Due to the high volume of traffic on US 50 and the wide crossing distance, a Pedestrian Hybrid Beacon (PHB) is the appropriate type of control for the mid-block crossings.
- Herbert Ave intersection did not meet traffic signal warrants for the four days counted in June 2020. Signalization of the intersection would require relocating the resort driveway to eliminate the stagger. Installing PHB east of the intersection will help pedestrians cross US 50.
- 6. Caltrans Traffic Safety completed a field investigation based on locations identified in the Bike Monitoring Report with the additional collisions that happened during the field investigation. A Project Initiation Report is available for this project including collision data.
- Yes. An analysis was conducted regarding the mid-block crossing lighting placement.
- Design already reconsidered the proposed lighting locations based on transit stops. The PDT will continue to evaluate lighting locations during the design phase of the project.
- Mid-Block Crossings will be treated as an intersection with regards to snow storage.

- 10. Continuous bike lanes require continuous lighting and therefore no lighting study was conducted. As mentioned, the PDT developed two other alternatives with a strategic lighting approach which will be shared with you
- 11. The strategic lighting alternatives will consider the use of decorative lighting fixtures as requested by the City if there is an amended and executed maintenance agreement in place prior to their approval. Caltrans recognizes the regional context lighting provides to the Tahoe community and will work with local partners to achieve that. The local partners should note though, that Caltrans does not typically maintain local lighting per policy because it is difficult to maintain and replace local decorative lighting since such equipment is not part of the state inventory. The existing Maintenance Agreement that Caltrans has with the City of South Lake Tahoe identifies assets that appear to apply only to intersections where the state has entered into an agreement for maintenance. Decorative lighting at proposed mid-block crossings are not covered in the existing agreement and will have to be maintained by the City per Caltrans policy.
- 12. Continuous lighting is required for the proposed continuous bike lanes per the 2018 Bicyclist Safety Improvement Monitoring (Pilot) Program. City pedestrian lighting does not provide sufficient lighting to illuminate the shoulders or the proposed bike lanes for safety purposes. Also, the City lighting illuminates the mixed-use path and does not illuminate the highway travelled way. The PDT has developed two alternatives with a strategic lighting approach.
- 13. The strategic lighting alternatives will consider the use of decorative lighting fixtures as requested by the City if the City agrees to maintain them through an approved and executed maintenance agreement. Caltrans standard lighting will be used at various locations where collisions were documented.
- 14. Mid-block locations have been selected based on a variety of factors, including pedestrian collision history, previous discussion with TRPA and the City, and in concurrence with the PDT. Caltrans will coordinate with the City to conduct public outreach engagement during the public circulation of the environmental document.

- Mid-block crossings will be coordinated with existing traffic signals throughout the corridor.
- 16. After completion of the project.
- Noted. This is a safety project, funded as a Safety Improvement project based on the 2018 Bicycle Monitoring Report.
- 18. Speeds can only be reduced if Engineering and Traffic Surveys support it. There is currently a 40 MPH speed zone from PM 75.12 to PM 79.66, which is supported by Engineering and Traffic Survey.
- 19. Caltrans agrees that there needs to be public and local stakeholder engagement to ensure successful delivery of the project. Caltrans plans to conduct public outreach during the public circulation of the environmental document

The PDT also noted the City's request in revisiting the specific roles and responsibilities of each agency as it relates to this project. We understand that the City of South Lake Tahoe has a new City Manager and Caltrans has a new Acting Deputy District Director, Patrick Bishop, who took over the role of Tom Brannon. We look forward to presenting the project to your team and the City Council.

Sincerely,

Daniel Cuellas

Daniel Cuellar, P.E. Project Manager - Program/Project Management Caltrans – District 3 703 B Street Marysville, CA 95901

Cc: Nadarajah "Sutha" Suthahar, Chief, Office of Project Management D3 Anand Maganti, Acting Office Chief, Design A, NR Seung "Pyo" Hong, Branch Chief, Design Hatem Hassan, Transportation Engineer, Design

> Teresa Limon, Chief, Office of Highway Operations Eric Royer, Transportation Engineer, Office of Traffic Operations Fernando Rivera, Chief, Office of Traffic Safety Masha Bokova, Transportation Engineer, Office of Traffic Safety

City, TRPA and FHWA comment list from letter to Caltrans dated 9-1-2020

- The proposed lighting/safety plan appears to be a blanket approach with little or no regard to existing lighting. A more intelligent approach to eliminating unlit dark areas along U.S. 50 involves a light study. Light sensing instrumentation may be able to determine where additional lighting is necessary and only installing lighting in identified unlit sections of the highway.
- 2. Instead of making it "safe" to cross the highway anywhere a jaywalker might desire to cross, the bright overhead lighting should be thinned out to a spacing resulting in far less light pollution. The City's standard streetlight should provide enough light for the Class 2 bike lanes, sidewalks, and Class 1 bike paths running along the edge of the travelled way. Existing overhead lighting and existing City standard lighting may already exist on sections between the South Y and Pioneer Trail. A night evaluation of lighting (possibly the lighting study described in item 1) might identify the right proportion of lighting that can be duplicated along similar sections of the highway.
- Will Caltrans run traffic modeling scenarios to synchronize mid-block crossings with adjacent traffic signal timing to limit impacts to traffic flow.
- Please verify the type of flashing beacon to be used at the mid-block crossings.
- Is a traffic signal a better option for the Herbert Street crossing as a means of synchronizing the traffic signals to minimize the impact to traffic flow?
- Did Caltrans complete a project study before the proposed plans were developed? If so, the City is interested in reviewing the study.
- Are mid-blocks lit correctly and thoughtfully in terms of other light spacing?
- Has lighting location relative to transit stops been completely thought through?
- Snow storage at mid-block crossings needs to be managed to provide good visibility to pedestrians and motorists.

- 10. It is assumed a lighting study was completed to identify/warrant lighting along the corridor. How is the spacing, location, warmth, lumens, and type fixtures informed by the lighting study?
- TRPA will be reviewing the project to meet current TRPA code and design guidelines. Relevant Code Sections are as follows:

66.2.4.B.1: Guardrails and other highway fixtures, including but not limited to retaining walls, safety barriers, traffic signals and controllers, light standards, and other structures shall be limited to the minimum length, height, and bulk necessary to adequately provide for the safety of the highway user.

36.8: Exterior Lighting: minimize exterior lighting to protect dark sky views, yet adequately provide for public safety and be consistent with architectural design of surrounding area. The overall lighting should be compatible with neighborhood light level.

- 12. Is there a need for highway lighting between Trout Creek and Stateline, since there is pedestrian lighting along this section and significant commercial lighting?
- 13. Consideration of rural "Mainstreet" context light fixtures as opposed to freeway standard cobra-head style fixtures?
- Design and specific locations of mid-block crossings need further discussion and public outreach.
- 15. How does a HAWK crossing coordinate with traffic signals?
- When will Caltrans complete the synchronization of the signals along US 50 as previously stated?
- 17. Ensure the project is clearly identified as a safety project.
- Consider other RSA recommendations, including reducing speed in the corridor (and intern reducing the speed limit).
- TRPA encourages Caltrans to partner with the City of South Lake Tahoe to conduct public outreach for this project, which will be a dramatic change for the community.

Chapter 4 List of Preparers

This following individual performed the work on the project:

Marta Martinez-Topete - Associate Environmental Planner. Contribution: Environmental Coordinator and Document Writer.

Cara Lambirth - Senior Environmental Planner. Contribution: Environmental Branch Chief.

William Larson - Associate Environmental Planner (Architectural History). Contribution: Cultural Resource Compliance Memo.

Sonia Miller - Associate Environmental Planner (Arch History). Contribution: Cultural Resource Compliance Memo.

Sydney Eto - Environmental Planner (Natural Sciences) or Project Biologist.

Jonathan Sampson - Landscape Architect. Contribution: Visual Impact Assessment.

Youngil Cho - Air and Noise Specialist. Contribution: Traffic Noise and Air Quality Impact Assessment and Greenhouse Gas Construction Emission Analysis.

Mark Melani - Hazardous Waste Specialist. Contribution: Initial Site Assessment (ISA) for Hazardous Waste.

Hatem Hassan - Project Engineer. Contribution: Project Design.

Sean Cross - Transportation Engineer Water Quality Assessment.

Appendix A Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

DEPARTMENT OF TRANSPORTATION

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Making Conservation a California Way of Life.

Gavin Newsom, Governor

November 2019

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Toks Omishakin Director