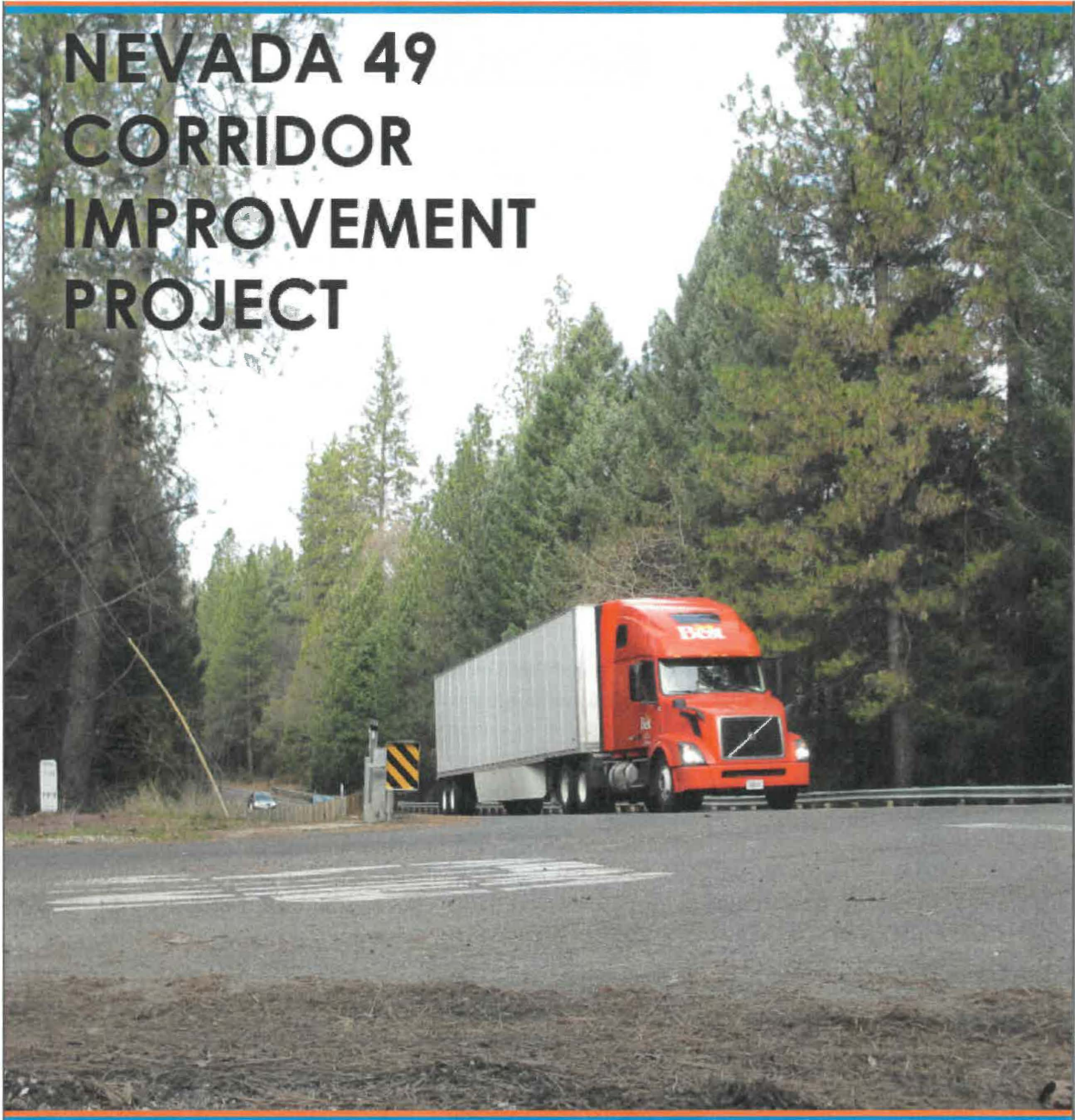


**Nevada County Transportation Commission
2022 Regional Transportation Improvement Program**

**NEVADA 49
CORRIDOR
IMPROVEMENT
PROJECT**





The Nevada County Transportation Commission hereby submits the following projects and recommendations to the California Transportation Commission as NCTC's 2022 Regional Transportation Improvement Program:

1. Add \$3,000,000 for Right of Way in FY 2022/23 for the SR 49 Corridor Improvement Project (Phase 1).

This project proposes to enhance operations, pedestrian and bicycle mobility, and safety by adding a southbound truck climbing lane outside and urbanized area and widening shoulders, from La Barr Meadows Road to McKnight Way in Nevada County. The purpose of this project is to enhance connectivity for the rural community in Nevada County including AB 1550 rural communities along SR 49. The project will enhance access, connectivity, safety and mobility of vehicular, pedestrian, and cyclist traffic on SR 49. This project will enhance daily commuting, mobility, freight, transit (Nevada County Connects Route 5 Commuter Service to Auburn Multi-modal Station), access and connections to essential services, and provide a long-term benefit for emergency readiness for evacuations caused by climate change stressors.

The project accomplishes the goals of the Nevada County Regional Transportation Plan and the 2021 Interregional Transportation Strategic Plan (ITSP) by balancing local community and interregional travel needs for all users and improves emergency evacuation. The project also addresses the needs identified in the SR 49 Comprehensive Multimodal Corridor Plan and the Nevada County Active Transportation Plan.

In previous STIPs, Nevada County RIP funds were programmed for the project as follows: \$3.9 million for Project Approval and Environmental Documentation (PA/ED), and \$3 million for Plans, Specifications, & Estimates (PS&E), \$1.2 million for Right of Way Support. PA/ED was completed in November of 2021.

2. \$177,000 for STIP Planning, Programming, and Monitoring Activities - Apportioned as follows:

<u>FY 2025/26</u>	<u>FY 2026/27</u>	<u>TOTAL</u>
\$88,500	\$88,500	\$177,000

2022 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (2022 RTIP)

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A. Overview and Schedule

Section 1. Executive Summary

The Nevada County Transportation Commission (NCTC) hereby submits the following projects and recommendations to the California Transportation Commission as NCTC's 2022 Regional Transportation Improvement Program: 1.) Add \$3,000,000 of Regional Improvement Program funding for Right of Way in FY 2022/23 for the SR 49 Corridor Improvement Project. 2.) Add \$177,000 for STIP Planning, Programming, and Monitoring Activities, programmed as follows: \$88,500 in FY 2025/26 and \$88,500 in FY 2026/27.

Section 2. General Information

Insert contact information in the text fields below.

- **Regional Agency Name**
Nevada County Transportation Commission

- **Agency website links for Regional Transportation Improvement Program (RTIP) and Regional Transportation Plan (RTP).**
Regional Agency Website Link: <http://www.nctc.ca.gov>
RTIP document link: <http://www.nctc.ca.gov>
RTP link: <http://www.nctc.ca.gov/Reports/Regional-Transportation-Plan/index.html>

- **Regional Agency Executive Director/Chief Executive Officer Contact Information**
Name Mike Woodman
Title Executive Director
Email mwoodman@nccn.net
Telephone 916-716-2559

- **RTIP Manager Staff Contact Information**
Name Mike Woodman Title Executive Director
Address 101 Providence Mine Road, Suite
City/State Nevada City, CA
Zip Code 95959
Email mwoodman@nccn.net
Telephone 916-716-2559 Fax 530-265-3260

- **California Transportation Commission (CTC) Staff Contact Information**
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Programming
Address 1120 N Street
City/State Sacramento, CA

Zip Code 95814
Email teresa.favila@catc.ca.gov
Telephone 916-653-2064 Fax 916-653-2134

Section 3. Background of Regional Transportation Improvement Program (RTIP)

A. What is the Regional Transportation Improvement Program?

The Regional Transportation Improvement Program (RTIP) is a program of highway, local road, transit and active transportation projects that a region plans to fund with State and Federal revenue programmed by the California Transportation Commission in the State Transportation Improvement Program (STIP). The RTIP is developed biennially by the regions and is due to the Commission by December 15 of every odd numbered year. The program of projects in the RTIP is a subset of projects in the Regional Transportation Plan (RTP), a federally mandated master transportation plan which guides a region's transportation investments over a 20 to 25 year period. The RTP is based on all reasonably anticipated funding, including federal, state and local sources. Updated every 4 to 5 years, the RTP is developed through an extensive public participation process in the region and reflects the unique mobility, sustainability, and air quality needs of each region.

B. Regional Agency's Historical and Current Approach to developing the RTIP

The RTIP historically is developed based on the regional priorities identified in the development of the Nevada County Regional Transportation Plan (RTP). Development of the RTP includes a significant public outreach process to engage the public and local and state officials in order to gain consensus on the top regional priorities. Other regional planning documents that are developed through public input, such as the SR 49 Comprehensive Multimodal Corridor Plan and Nevada County Active Transportation Plan are also taken into consideration. NCTC staff develop recommendations for projects to be funded in the RTIP based on the RTP priorities and ensure consistency with other regional planning documents, such as the SR 49 CMCP and Nevada County ATP. The Nevada County Transportation Commission after consideration of public input received at the RTIP public hearing determine what projects and funding amounts are then adopted into the RTIP. Completion of the Nevada 49 Corridor Improvement Project (CIP) is the top regional priority of the NCTC and there is strong local support for improvements that will improve safety and operations for all users on SR 49. There is also a strong local desire to have the highway improved to address evacuation needs in the event of a major wildland fire. This project was originally programmed for PA/ED and PS&E in the 2014 STIP. Caltrans District 3 is the implementing agency and PA/ED was completed in November 2021.

Section 4. Completion of Prior RTIP Projects (Required per Section 68)

Provide narrative on projects completed between the adoption of the RTIP and the adoption of the previous RTIP in text field below as is required per Section 68 of the STIP Guidelines.

No other projects were programmed or completed between adoption of the 2020 RTIP and the 2022 RTIP.

Insert project information for completed projects in table below.

Project Name and Location	Description	Summary of Improvements/Benefits

Section 5. RTIP Outreach and Participation

Insert dates below – Regional agencies can add rows to the schedule – Rows included below should remain for consistency.

A. RTIP Development and Approval Schedule

Action	Date
CTC adopts Fund Estimate and Guidelines	August 18, 2021
Caltrans identifies State Highway Needs	September 15, 20121
Caltrans submits draft ITIP	October 15, 2021
CTC ITIP Hearing, North	November 1, 2021
CTC ITIP Hearing, South	November 8, 2021
Regional Agency adopts 2022 RTIP	November 17, 2021
Regions submit RTIP to CTC (postmark by)	December 15, 2021
Caltrans submits ITIP to CTC	December 15, 2021
CTC STIP Hearing, North	January 27, 2022
CTC STIP Hearing, South	February 3, 2022
CTC publishes staff recommendations	February 28, 2022
CTC Adopts 2020 STIP	March 23-24, 2022

B. Public Participation/Project Selection Process

Provide narrative on your agency’s public participation process and project selection process for your RTIP in the text field below.

Public involvement is a major component of the transportation planning process. Every person in Nevada County is affected by transportation and, as such, is an important component of the transportation planning process. The NCTC makes a concerted effort to solicit public input from all Nevada County residents, including underrepresented groups, to transportation planning within Nevada County. Specific examples include:

- Public hearings were held and noticed in the main newspapers in western and eastern Nevada County prior to adoption of both the RTP and RTIP.

- The NCTC produces and maintains a website, www.nctc.ca.gov, to keep the public informed of transportation planning efforts in Nevada County. Planning documents, including the RTIP and RTP, are posted to this site. NCTC also maintains a social media presence via Facebook and Twitter, which are also utilized to disseminate information.
- In June 2006, as a result of input from the SR 49 Stakeholder Committee the Caltrans Office of Traffic Operations designated SR 49 from Dry Creek Road to near McKnight Way in Grass Valley as a Safety Corridor and a daylight/headlight section. A Safety Corridor is a segment of highway with a history of high fatal collisions (McKnight to Combie) or a segment of highway with potential for fatal and severe collisions (Combie to Dry Creek) that is identified and focused on by state and local officials with increased enforcement, public awareness measures, short-term improvements and long-term improvements in order to reduce and prevent fatal and severe collisions.
- In 2009, Caltrans in coordination with the Nevada County Transportation Commission and SR 49 Stakeholder Committee developed the SR 49 Corridor System Management Plan (CSMP). The development of the 2009 SR 49 CSMP was a unique “first generation CSMP” because two large major capital projects located in the corridor were redefined into eight smaller projects based on a phasing plan developed by Caltrans and NCTC. In 2018 the SR 49 CSMP was updated through a public process and in 2021 in coordination with Caltrans District 3 and public process was started to update and prepare the SR 49 Comprehensive Multimodal Corridor Plan.
- An initial public workshop was held on August 4, 2015 to collect public input on design alternatives to be further evaluated in the Draft Environmental Document for the SR 49 Corridor Improvement Project.
- Caltrans hosted an Open House at GV City Hall to provide information on the SR 49 Corridor Improvement Project on September 16, 2015
- Public outreach was held as part of development of the 2015 Regional Transportation Plan to get input on proposed transportation improvements, including the SR 49 Corridor Improvement Project, and held at public events widely attended by a broad cross-section of the population at transit accessible locations. These events include, local farmers markets, Grass Valley Thursday Night Market, Summer Nights (Nevada City), Cornish Christmas (Grass Valley), and Victorian Christmas (Nevada City).
- On March 22, 2017, in response to five fatalities in the SR 49 corridor that occurred between mid-December 2016 and mid-February 2017, the Citizens for Highway 49 Safety organized another community meeting to re-address safety concerns with state and local officials. In addition to the efforts of the Citizens for Highway 49 Safety, Jolee Allen a 12 year old 7th grader at Nevada City School of the Arts created the Fix49.org campaign, that included studying statistics, interviewing experts, creating a website to raise awareness, gather input, and provide public information for her Science, Technology, Engineering, Art, and Math project (STEAM). Through her efforts she has collected approximately 2,900 signed petitions requesting funding for improvements identified in the RTP and RTIP in the SR 49 corridor.
- An online virtual public workshop was held on Tuesday, September 7, 2021 from 6 to 7 p.m. (All workshops are publicized through the methods below)

- Information on meetings and workshops, as well as presentations provided to the Social Service Advisory Committee (SSTAC) and Accessible Transportation Coalition Initiative Mobility Action Partners Coalition (ATCI-MAPCO) groups consisting of representatives of many underserved populations.
- The SSTAC consists of appointed citizens representing a wide range of transit dependent groups. In compliance with Public Utilities Code 99238, the current SSTAC consists of the following representatives:
 - One representative of potential transit users who are 60 years of age or older.
 - One representative of potential transit users who are disabled.
 - Two representatives of local social service providers for seniors.
 - One representative of a local social service provider for persons of limited means.
 - Two representatives from local consolidated transportation service agency.
 - One representative of transit users in western Nevada County.
 - One representative of the Hispanic community in the Truckee area.
- Spanish translation services were available upon request for all public workshops.
- All in-person meetings were held in transit-accessible locations (prior to COVID).
- Information of public meetings was distributed to the three mobile home parks adjacent to the SR 49 corridor (Tall Pines, Forest Springs, Ponderosa Pines).
- Information was provided to interested citizen and environmental groups, such as the Citizens for Highway 49 Safety, SR 49 Stakeholder Committee, Highway 49 Safety.org, and the Sierra Fund.
- While there are no lands held in trust of federally recognized tribes within Nevada County, a number of tribes and Native American individuals with historic or cultural interests regarding lands in Nevada County have been consulted. This consultation was based on the list of interested parties pertaining to Nevada County, maintained by Native American Heritage Commission.
- NCTC produces and maintains a website, www.nctc.ca.gov, to keep the public informed of transportation planning efforts and public workshops. Planning documents, such as the SR 49 Corridor Improvement Project Draft Environmental Impact Report/Environmental Assessment are posted and made available for review. Hard copies are made available at the Nevada County Eric Rood Administrative Center for public review. Caltrans District 3 also posts the project documents on their Nevada County associated website.
- Press releases were sent to regional newspapers, radio stations, and local online internet news sources (TheUnion newspaper, Auburn Journal, Yubanet.com, KNCO radio, KVMR radio, and Lake Wildwood Independent).

C. Consultation with Caltrans District (Required per Section 17)

Caltrans District: 3

Provide narrative on consultation with Caltrans District staff in the text field below as is required per Section 17 of the STIP Guidelines.

Caltrans District 3 is the implementing agency and NCTC maintains regular communication with staff and the District Director regarding planned and programmed improvements and planning activities in relation to implementation of the RTP and RTIP. Caltrans District 3 in coordination with NCTC conduct Project Development Team (PDT) meetings for the SR 49 Corridor Improvement Project on a regular basis to coordinate the actions necessary for delivery of the project.

B. 2022 STIP Regional Funding Request

Section 6. 2022 STIP Regional Share and Request for Programming

A. 2022 Regional Fund Share Per 2022 STIP Fund Estimate

Insert your agency's target share per the STIP Fund Estimate in the text field below. COVID Relief shares should be listed separately from traditional STIP shares as they are being tracked separately.

NCTC's total RIP share target per the STIP Fund Estimate available through FY 2026/27 to program in the STIP is \$3,239,000.

B. Summary of Requested Programming – Insert information in table below. Identify any proposals for the Advanced Project Development Element (APDE) share, if identified in the fund estimate, by including “(APDE)” after the project name and location. Identify requests to advance future county shares for a larger project by including “(Advance)” after the project name and location.

Project Name and Location	Project Description	Requested RIP Amount
SR 49 Corridor Improvement Project	Enhance operations, pedestrian and bicycle mobility, and safety by adding truck climbing lane outside an urbanized area and shoulders on SR 49 from La Barr Meadows Road to McKnight Way in Nevada County.	\$3,000,000
PPM	PPM	\$177,000

Section 7. Overview of Other Funding Included With Delivery of Regional Improvement Program (RIP) Projects

Provide narrative on other funding included with the delivery of projects included in your RTIP. Discuss if project’s other funds will require Commission approval for non-proportional spending allowing for the expenditure of STIP funds before other funds (sometimes referred to as sequential spending). **Insert information in the table below.**

Click here to enter text.

Proposed 2022 RTIP	Total RTIP	Other Funding					Total Project Cost
		ITIP	STBG/ CMAQ	Fund Source 1	Fund Source 2	Fund Source 3	
SR 49 Corridor Improvement Project (ROW)	\$3,000,000	\$3,000,000					\$6,000,000
							-
							-
							-
							-
							-
							-
							-
							-
Totals	\$3,000,000	\$3,000,000	-	-	-	-	\$6,000,000

Notes: In partnership with NCTC, Caltrans has proposed an ITIP match of \$3,000,000 for Right of Way for the SR 49 Corridor Improvement Project that will be matched by the \$3,000,000 of RIP funding requested in the 2022 RTIP.

Section 8. Interregional Transportation Improvement Program (ITIP) Funding and Needs

The purpose of the Interregional Transportation Improvement Program (ITIP) is to improve interregional mobility for people and goods in the State of California. As an interregional program, the ITIP is focused on increasing the throughput for highway and rail corridors of strategic importance outside the urbanized areas of the state. A sound transportation network between and connecting urbanized areas ports and borders is vital to the state's economic vitality. The ITIP is prepared in accordance with Government Code Section 14526, Streets and Highways Code Section 164 and the STIP Guidelines. The ITIP is a five-year program managed by Caltrans and funded with 25% of new STIP revenues in each cycle. Developed in cooperation with regional transportation planning agencies to ensure an integrated transportation program, the ITIP promotes the goal of improving interregional mobility and connectivity across California.

- If requesting ITIP funding, provide narrative on your request in the text field below. Or state that no ITIP funding was requested.

In partnership with NCTC, Caltrans has proposed \$3,000,000 of ITIP funding for the Right of Way for the SR 49 Corridor Improvement project in the 2022 ITIP in FY 2022/23 and NCTC will be submitting a matching RTIP request of \$3,000,000 for Right of Way in FY 2022/23.

- Include a discussion of what the region believes are the most significant interregional highway and intercity rail needs within the region (see section 20G)..

Completion of the SR 49 Corridor for the segment between the Placer/Nevada County line and the McKnight Way Interchange is the most significant interregional highway need within the region. Improving safety, operations, and multimodal options in the corridor are critical to providing connectivity and accessibility for all modes of travel (AB 1550 populations adjacent to the corridor) and are also needed to safely facilitate I-80 emergency detour events, as well as provide emergency readiness for wildfire or other evacuation events. The most significant intercity rail need within the region would be the desired expansion of Capital Corridor Passenger service to the Truckee/Tahoe region and Reno.

Section 9. Projects Planned Within Multi-Modal Corridors

Provide a description of the project's impact on other projects planned or underway within the corridor as required per Section 20 of the STIP Guidelines.

Improving operations, safety, and multi-modal mobility in the State Route (SR) 49 corridor between the cities of Grass Valley (Nevada County) and Auburn (Placer County) has been a focus of the Nevada County Transportation Commission (NCTC) and Caltrans since the mid 1990's. In 2009, Caltrans in coordination with the NCTC and the SR 49 Stakeholder Committee developed the SR 49 Corridor System Management Plan (CSMP). The development of the 2009 SR 49 CSMP was a unique "first generation CSMP." The two large major capital projects planned for the corridor, were redefined into eight smaller, more fundable projects based on a phasing plan developed by Caltrans and NCTC. The plan also focused on implanting smaller interim safety and operational improvements on the corridor. The State Route 49 Corridor System Management Plan was updated in 2018.

The State Route 49 Corridor System Management Plan (CSMP) 2018 Update focused on system management strategies and coordinated capital investments, so that all the pieces of the corridor function as an efficient transportation system and include performance evaluation measures to track the effectiveness of the strategies and projects. The goal of the CSMP is to improve mobility along the SR 49 Corridor by focusing on the integrated management of a subset of the entire transportation network within the corridor, including select highways and freeways, parallel and connector roadways, transit, and bicycle facilities. The objectives of the CSMP are to improve safety on the transportation system, reduce travel time or delay on all modes, improve connectivity between modes and facilities, improve travel time reliability, increase access to jobs, housing, and commerce, and expand mobility options along the corridor in a cost-effective manner.

The Nevada 49 Corridor Improvement Project (CIP) is the next phase of several planned long-term capital improvements that are focused on improving safety, operations, connectivity, and mobility within the corridor. This project will address the section of SR 49 that, due to funding limitations, was not able to be addressed as part of the previously constructed (April 2014) SR 49/La Barr Meadows Road signalization and frontage road system project.

Completion of this project is the top regional priority of the NCTC and there is strong local support for improvements that will improve safety and operations on SR 49. There is also a strong local desire to have the highway improved to facilitate and handle the traffic capacity associated with a mass-evacuation in the event of a major wildland fire and I-80 emergency detour events.

The SR 49 CIP will also implement bicycle and pedestrian improvements identified in the Nevada County Active Transportation Plan and SR 49 Comprehensive Multi-Modal Corridor Plan (CMCP) including the addition of 10' shoulders along the SR 49 corridor to improve pedestrian and bicycle safety that will help to encourage additional mode shift within the corridor and provide enhanced mobility through the elimination of gaps in shoulder and provide safe and continuous network of facilities. Bicyclists and pedestrians frequently observed navigating the project segment.

Mapping developed by ARB identifies that the residential areas adjacent to the SR 49 CIP on both sides of project are identified as AB 1550 low-income communities. The Nevada County Active Transportation Plan (2019) identifies the need for Class III Multi-use shoulders along SR 49 from the current northern project limits, south of the McKnight Way Interchange, all the way to the Nevada County/Placer County Line. The SR 49 Corridor Improvement Project eliminates the gap that currently exists between SR 49 south of the McKnight Way Interchange and the previously completed SR 49/La Barr Meadows improvement project (Post Mile 10.8), creating a Class III bicycle and pedestrian connection between the residential areas adjacent to La Barr Meadows Road, Lode Line Way, Young American Mine Road, Cornette Way, Wellswood Way, Upward Way, Smith Road, and the commercial land uses located in the vicinity of the McKnight Way Interchange in the City of Grass Valley.

Adjacent to the project there is an existing Class III multi-use bicycle lane on Dog Bar Road from the La Barr Meadows Road/Dog Bar Road transition to Rattlesnake Road. This segment of SR 49 south of the McKnight Way Interchange is also utilized by recreational cyclists who travel along the shoulder of the highway to access Auburn Road as part of a popular recreational loop. Auburn Road is also identified in the Nevada County ATP as planned for segments of Class III multi-use

shoulder and Class II Bike Lanes, connecting to McCourtney Road near the Nevada County Fairgrounds.

Once the SR 49 Corridor Improvement Project is completed the next key bicycle/pedestrian improvement planned on SR 49 will be to construct 10' shoulders from the southern terminus of the previous SR 49/La Barr Meadows Road improvement project to the commercial land uses located off of SR 49/Alta Sierra Drive. This would provide pedestrian and bicycle connectivity between the unincorporated community of Alta Sierra (census designated place, approximately 7,207 population) and the City of Grass Valley, as well as connections for residents to transit stops.

Section 10. Highways to Boulevards Conversion Pilot Program

One potential candidate for the Highways to Boulevards Conversion Pilot Program would be the segment of SR 174 within the Grass Valley City limits that is currently in the process of relinquishment in order to make complete street type improvements.

C. Relationship of RTIP to RTP/SCS/APS and Benefits of RTIP

Section 11. Regional Level Performance Evaluation (per Section 19A of the guidelines)

The SR 49 Corridor Improvement Project begins at the limits of the previous La Barr Meadows Signalization Project (PM 11.1) and ends just south of the McKnight Way Interchange (PM 13.3), connecting to the four lane Golden Center Freeway. This project is exempt from SB 375, NCTC is not required to prepare a SCS. The project (STIP 4E170) will make improvements to this segment focused on safety, evacuation capacity, operations, goods movement, and multi-modal mobility improvements. This project is designed to be funded in three phases as state and federal transportation funding allow.

The ultimate project includes redirecting numerous entrances to a newly constructed frontage road system to access the highway at two new at-grade intersections that will either be roundabouts or signalized. It will also construct portions of northbound and southbound truck climbing lanes and will eliminate merge points that currently exist to the north and south of the project limits, connecting to the existing four-lane northbound/southbound sections. This project also proposes to further address safety concerns through the installation of a continuous median barrier, 10' shoulders with rumble strips, animal crossing tunnel with fencing, enhanced wet night visibility striping, and pavement edge treatments.

Phase: 1: Construction of the southbound truck climbing lane, 10' shoulders with rumble strips, and elimination of the lane drop/merge point south of the McKnight Way Interchange improving the southbound highway segment to four lanes and improving evacuation capacity. This phase will also include enhance wet night visibility striping, rumble strips, and pavement edge treatments.

Phase 2: Construction of the northbound truck climbing lane, a 16' wide continuous two way left turn lane, 10' shoulders, and elimination of the northbound merge point improving operations and improving northbound evacuation capacity. This phase also includes southbound right turn lanes at Wellswood Way, Bethel Church Way, Smith Road, and Crestview Drive. Other safety features include enhanced wet night visibility striping, rumble strips, and pavement edge treatments. A

wildlife undercrossing with fencing will be installed as part of this phase to help reduce deer strikes.

Phase 3: Construction of frontage roads, elimination of ingress/egress points, construction of two access-controlled intersections initially proposed in the vicinity of Wellswood Way and Smith Road, and installation of a center median barrier.

The purpose of this project is to enhance connectivity for the rural communities in Nevada County along State Route 49 from La Barr Meadows Road to McKnight Way. The project will enhance safety and mobility of vehicular, pedestrian, and cyclist traffic on State Route 49. The project will also enhance daily commuting, mobility, freight, transit (Nevada County Connects, fixed route transit, Route 5 Commuter Service to Auburn Multi-modal station), access to employment and essential services, and provide a long-term benefit for emergency readiness for evacuations caused by climate change stressors. The project improvements are anticipated to achieve the following outcomes:

- Improving the reliability of travel times by improving operations, eliminating merge points and goods movement bottlenecks, reducing accidents, and providing for truck climbing lanes.
- Improve interactions between roadway users, reducing the likelihood of high consequence events.
- Improving safety by eliminating merge conflict points between freight trucks and passenger cars and reducing rear end accidents (achieve reduction in traffic fatalities and serious injuries related to collisions).
- Improving pedestrian and bicycle mobility and safety through the addition of shoulders, enhancing multimodal connectivity and accessibility.
- Improved traffic flow reducing peak hour vehicle congestion and associated air quality emissions.
- Address equity concerns by improving the multi-modal options and improving the safety of entering and exiting the highway for AB 1550 rural economically disadvantaged populations (identified below the statewide median income) that are adjacent to the project limits.
- Support commerce and economic growth by improving traffic operations and travel times. The proposed project improvements will also ensure that SR 49 is able to handle the forecasted growth of goods movement on the corridor, and address the needed ability to serve as an Emergency Detour Route when I-80 is closed, due to major accidents, wildland fires, construction, and serve as a major evacuation route during wildland fires. When freight and passenger vehicles are re-routed from I-80, additional operational improvements are needed to reduce associated impacts on AB 1550 populations adjacent to the corridor.

- Advances national and regional economic development by improving connections to the nation's transportation network to support the movement of freight and people.
- Reducing corridor traffic congestion improving multi-modal connections to peripheral regions and urban centers and job opportunities.

The proposed RTIP is consistent with the following goals and objectives of the Nevada County Regional Transportation Plan 2015-2035:

Goal 1.0 Provide for the safe and efficient movement of all people, goods, and services on the roadway network.

- Objective 1A: Improve safety
- Objective 1B: Coordinate with Caltrans and the SR 49 Stakeholders Committee to ensure development and implementation, and funding of projects within the SR 49 Corridor System Management Plan (CSMP) that improve safety and operations.

The State Route 49 Corridor System Management Plan 2018 Update identified the following baseline performance metrics. It is anticipated that the proposed RTIP will improve the travel reliability (BTI) to reliable (BTI<0.25) within the project limits of the SR 49 Corridor Improvement Project and reduce accidents and fatalities per million vehicle miles traveled.

Travel time reliability is a transportation performance metric advocated at both the federal and state levels. How predictable travel time is can be critical for commuters, goods movement, and transit provision. As such, the federal National Performance Management Rule now specifically mandates State Departments of Transportation and Metropolitan Planning Organizations to measure travel time reliability on the National Highway System (NHS). Travel time reliability is defined as the variation in travel time for the same trip from day to day ("same trip" implies a trip made with the same purpose, from the same origin, to the same destination, at the same time of the day, using the same mode, and by the same route). If variability is large, the travel time is considered to be unreliable, because it is difficult to generate consistent and accurate estimates for it. If there is little or no variation in the travel time for the same trip, the travel time is considered to be reliable.

There are several measures available to determine travel time reliability. The SR 49 Corridor System Management Plan 2018 Update study utilized the Buffer Time and the Buffer Time Index (BTI) to report reliability. Buffer Time is the amount of extra time a person needs to account for above the average travel time to ensure being on time 95% of the time (approximately one day late per month). If a commute trip usually takes 30 minutes, but there are periodic issues with weather or traffic incidents that can cause the commute to take 45 minutes, the buffer time would be 15 minutes, causing the commuter to be 15 minutes early on an average day, and late only occasionally. Buffer time can be monetized similar to delay. A person's time has a value, and buffer time spent each day to account for unreliable roads has an opportunity cost that could otherwise be spent with family at home or elsewhere. The BTI value normalizes buffer time

against the average travel time controlling for distance and typical daily congestion. The BTI is simply the ratio of Buffer Time against the average travel time and is expressed as an index.

The Highway Capacity Manual (HCM) 6th Edition definitions were used to define congestion and reliability. These thresholds reflect heavy congestion (with observed average speed less than 60 percent of the free-flow speed) and unreliable road segments (with a 95th percentile travel time more than 1.5 times longer than the 50th percentile travel time (i.e., average), quantified by Level of Travel Time Reliability or LOTTR). The scheme below was used to develop the thematic maps of the results. Table 3.1 shows the Buffer Time Index (BTI) range and metrics for reliable, moderately reliable, and unreliable.

Table 3.1 Reliability-Congestion Matrix

	Reliable	Moderately Reliable	Unreliable
BTI A Range	BTI<0.25	0.25>=BTI<0.50	BTI>=0.50
Uncongested B	Predictable and efficient	Not always predictable, but usually efficient	Unpredictable, but not often congested
Congested B	Predictable and inefficient	Not always predictable, but usually inefficient	Unpredictable, and often congested

A BTI: A measure of reliability, measures percentage of travel time devoted to being on time above average travel time.
 B Free flow speeds were estimated for each segment based on NPMRDS data during the hours of midnight and 3:00 AM.

Performance Metrics SR 49 Corridor Improvement Project PM (CSMP Zone 6)

Zone 6 accounts for the remaining 3.1-mile portion of the CSMP study corridor. With the exception of the transition areas at La Barr Meadows and McKnight Way (where SR 49 has two lanes in each direction), SR 49 segment in this zone is a two-lane highway with approximately 14 access points. All of the access points (with the exception of La Barr Meadows Road at the southern terminus) are side-street stop controlled intersections. The majority of those access points do not have dedicated turn lanes on SR 49. Each of these uncontrolled intersections creates multiple conflict points on the corridor. With the growth in traffic on SR 49, this may potentially result in an increase in the number of collisions involving vehicles entering and exiting SR 49 without the benefit of dedicated turn lanes. Based on travel time runs, the average time to traverse the entire length of Zone 6 was determined to be 3 minutes and 36 seconds.

Travel Time Reliability

The travel time reliability (BTI) was broken down for passenger cars and heavy-duty trucks for Zone 6. This zone is from La Barr Meadows Road/Allison Ranch Road to South of McKnight interchange. Per the NPMRDS data segment limits, these limits for Zone 6 were apportioned based on length proportions of the respective segments.

Passenger Cars

As presented in Table 9.1, the passenger car BTI reliability for the southbound direction in PM peak hours showed unreliable conditions. However, the AM peak hour for the southbound direction showed reliable results. This is likely due to the increase in traffic volumes (PM peak hour are almost double the AM peak hour). The other BTI results for the northbound direction showed moderately reliable conditions in the AM peak hour and reliable conditions in the PM peak hour.

Table 9.1 Zone 6 Passenger Car BTI Reliability

Segment	Reliability BTI (Passenger Vehicles)			
	NB		SB	
	AM	PM	AM	PM
La Barr Meadows Road/Allison Ranch Road to S. of McKnight Interchange	0.26	0.18	0.16	0.69

Heavy-Duty Trucks

Table 9.2 presents the BTI reliability for heavy-duty trucks. This showed similar results in comparison to the passenger cars except the trucks had slightly less reliability. The southbound direction in the PM peak hour had a BTI of 0.79 (unreliable) and the AM peak hour had a BTI of 0.20 (reliable). The northbound directions showed moderately reliable conditions for AM and PM peak hours.

Table 9.2 Zone 6 Heavy Duty Trucks BTI Reliability

Segment	Reliability BTI (Trucks)			
	NB		SB	
	AM	PM	AM	PM
La Barr Meadows Road/Allison Ranch Road to S. of McKnight Interchange	0.31	0.28	0.20	0.79

Continued Next Page

Table 9.3 presents the performance measures for Zone 6 for Existing and Future (Year 2035) Conditions without the proposed SR 49 Corridor Improvement Project presented included in the 2020 RTIP.

Table 9.3 Zone 6 Projected Performance Without Improvement

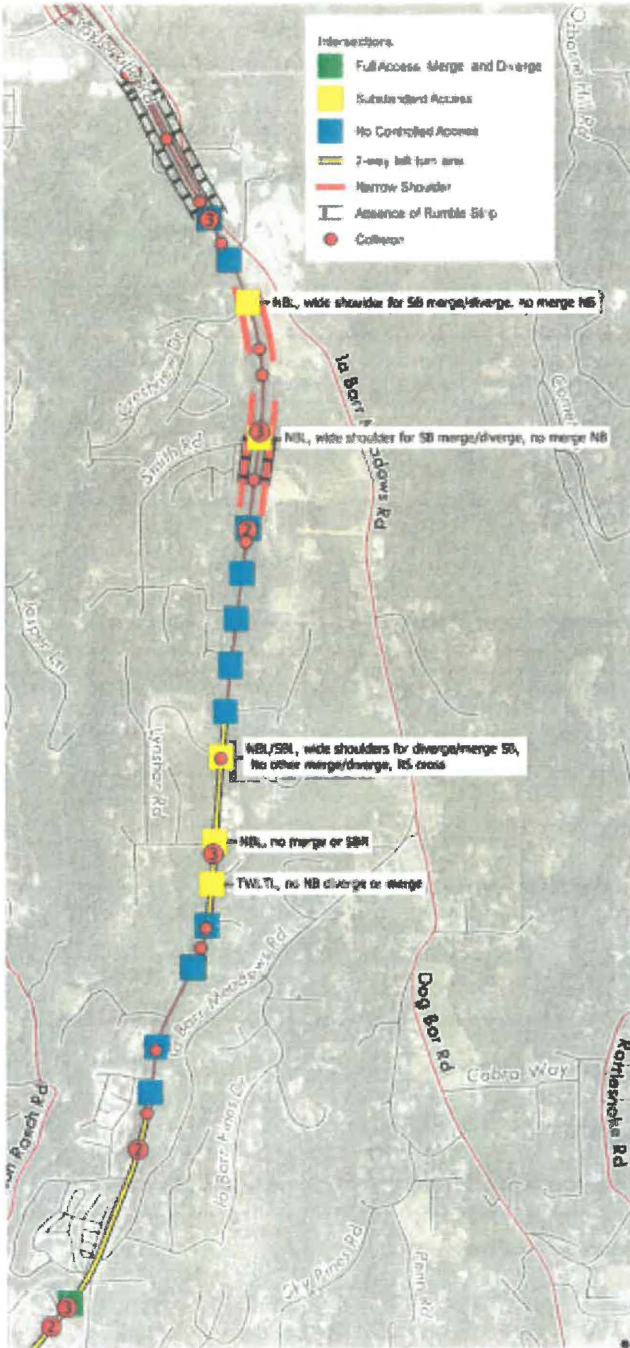
Existing Average Daily Traffic ¹			30,495
Future (Year 2035) Average Daily Traffic ²			33,545
Existing LOS (Year 2018)	AM	NB	E
		SB	E
	PM	NB	E
		SB	E
Future LOS (Year 2035)	AM	NB	E
		SB	E
	PM	NB	E
		SB	E
Total Vehicle Hours of Delay	AM	NB	4.84
		SB	1.65
	PM	NB	4.19
		SB	8.92
Total Person Minutes of Delay ³	AM	NB	333.57
		SB	113.72
	PM	NB	288.66
		SB	614.12
Minutes of Delay per Vehicle	AM	NB	0.23
		SB	0.13
	PM	NB	0.23
		SB	0.38

1

Source: Average Daily Traffic based on 2018 traffic counts

2 Source: Growth Rate used was obtained from the Nevada County Travel Demand Model

3 Source: Delay is the average additional travel time by vehicles traveling is the difference between the average FFS and average speed. A vehicle occupancy factor of 1.15 was used for passenger car and vehicle occupancy factor of 1.0 for trucks.



9.2 Safety Analysis (81 Collisions)

In Zone 6, out of 81 total collisions recorded from 2012 to 2016, one was fatal and 34 resulted in injury. In the undivided four-lane section of Zone 6, the overall collision rate is 0.65 per MVM (lower than the statewide rate of 0.9 per MVM). In the two-lane section of Zone 6, the overall collision rate is 0.52 per MVM (lower than the statewide rate is 1.08 per MVM). In the undivided four-lane section of Zone 6, the fatal rate is 8.3%, higher than the statewide rate of 1.1%. There are four collision areas of primary concern:

SR 49 & Allison Ranch Road/La Barr Meadows Road

This is a signalized intersection with standard access. Four of the eight injury collisions at the intersection are rear-end collisions. One of the collisions is a severe injury sideswipe collision. Another collision is a fatal pedestrian collision.

SR 49 & Wellswood Way

This is a side-street stop controlled intersection with substandard access with three injury collisions.

SR 49 & Smith Road

This a side-street stop controlled intersection with substandard access. Of the four injury collisions, two are sideswipes, likely due to the left turn from Smith Road not having a merge lane. One of the sideswipe collisions is a severe injury collision.

Northern Segment of Zone 6

The northern segment of Zone 6 does not have any significant access points, but it has ten collisions. One of those collisions was a severe injury sideswipe collision 910 feet north of Crestview Drive.

Other Significant Collision

In addition to the fatal and severe injury collisions at the intersections discussed above, the following collision occurred:

- A severe injury sideswipe collision on SR 49 occurred 900 feet south of Smith Road

This project will improve safety, traffic operations, goods movement, transit, bicycle, and pedestrian mobility throughout the project limits. The ultimate project proposes to construct SB and NB truck climbing lanes and eliminate unsafe merge features and installation of a concrete median barrier and 8-foot shoulders with rumble strips, EWNV striping, and pavement edge treatments. This improvement will reduce rear-end and sideswipe accidents that, for the existing two-lane configuration, are often due to either congestion or traffic slowing or stopping for vehicles

preparing to make turning movements. Rumble strips will alert fatigued or distracted drivers who start to leave the roadway.

Widening shoulders to standard widths will provide additional recovery area for drivers who stray outside the roadway. Pavement edge treatments allow vehicles that leave the roadway a gentler slope to navigate when re-entering the roadway. The median barrier will eliminate the potential for head-on accidents and will reduce broadside accidents in this segment of SR 49.

The project will also eliminate numerous access points adjacent to SR 49, which create low speed versus high-speed conflicting movements, which have resulted in collisions, serious injuries and fatalities, and many other “near misses” that have occurred at these locations. Frontage road segments will be constructed to collect and funnel access to SR 49 at two at-grade intersections. Animal crossing tunnels with fencing at the right-of-way line should reduce the number of deer or other animal strikes. This project will remove the existing merge points at each end of the project limits, reducing rear-end and sideswipe accidents and connect to the existing four-lane section to the south and the existing four-lane Golden Center Freeway in Grass Valley to the north.

This project will reduce congestion, improve operations, enhance multi-modal options, improve safety and achieve reductions in broadside, rear end, and head-on accidents. The segment of SR 49 that includes the proposed project serves as the gateway to the Grass Valley/Nevada City area, which serve as the economic hub of western Nevada County. The existing two-lane highway’s current Level-of-Service (LOS) is E during peak hours, and cannot accommodate future traffic increases. The volumes of both local traffic and goods movement freight traffic have increased and the State highway facility have become an integral part of the local circulation system in addition to serving tourist, interregional, and interstate traffic. Growth forecasts for the corridor indicate that traffic congestion and delays will only increase if SR 49 in Nevada County is not improved. It is estimated that 30% of the County workforce is using this route as a primary commute route to major employment centers outside of the County, resulting in over-capacity traffic demand during peak commute periods. Historical and recreational tourism traffic also increases congestion in the project area throughout the year.

The planned improvements will accommodate existing and projected future traffic volumes at LOS D or better through the year 2030. It is anticipated this project will reduce 96 collisions over 20 years. Operations will be improved through the installation of Traffic Management Systems. Existing culverts in poor condition within the project limits will be rehabilitated and extended, pavement will be rehabilitated, and lighting will be upgraded to standard.

Goal 2.0 Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.

- **Objective 2A:** Reduce dependence on the automobile by emphasizing transit, ridesharing, working from home, and pedestrian and bicycle travel.
- **Objective 2B:** Create bicycle, pedestrian, and transit networks that provide access and connections between key destinations including schools and commercial centers.

The project will also address the need for adequate continuous shoulders to accommodate pedestrians, bicyclists and disabled vehicles by widening the shoulder to 8 feet. The existing highway has paved and/or gravel shoulders that vary from 0 to 8-foot wide; but more typically, these shoulders are non-existent or are much narrower than 8-foot. The Nevada County Active Transportation Plan identifies the need for shoulders on this segment of SR 49 to improve safety, eliminate existing gaps, and provide connectivity. This project will correct roadway deficiencies within the project limits by bringing this segment of SR 49 up to current design standards.

The SR 49 corridor also plays a key role in providing interregional multi-modal connectivity as an interregional public transit corridor, providing Gold Country Stage fixed-route transit connections between Nevada and Placer County and access to the Amtrak Capital Corridor Inner-City Passenger Rail station in Auburn. The planned improvements in these corridors will improve the quality of life by providing mobility options, increasing reliability and accessibility to all modes of transportation and enhance connections to local and regional economic centers.

Goal 3.0: Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life.

- Objective 3B: Reduce regional emissions of criteria pollutants and greenhouse gases.

Emission Reduction Estimates

Emission Reduction	Total Over	Average	Total Over	Average
	20 Years*	Annual*	20 Years**	Annual **
CO Emissions Saved	113	6	\$0.0	\$0.0
CO2 Emissions Saved	25,696	1,285	\$0.0	\$0.0
NOX Emissions Saved	35	2	\$0.1	\$0.0
PM10 Emissions Saved	0	0	\$0.1	\$0.0
PM2.5 Emissions Saved	0	0		
SOX Emissions Saved	0	0	\$0.0	\$0.0
VOC Emissions Saved	8	0	\$0.0	\$0.0

Investment Analysis Summary

* Tons

** Value in millions of dollars

*** Includes value for CO2e

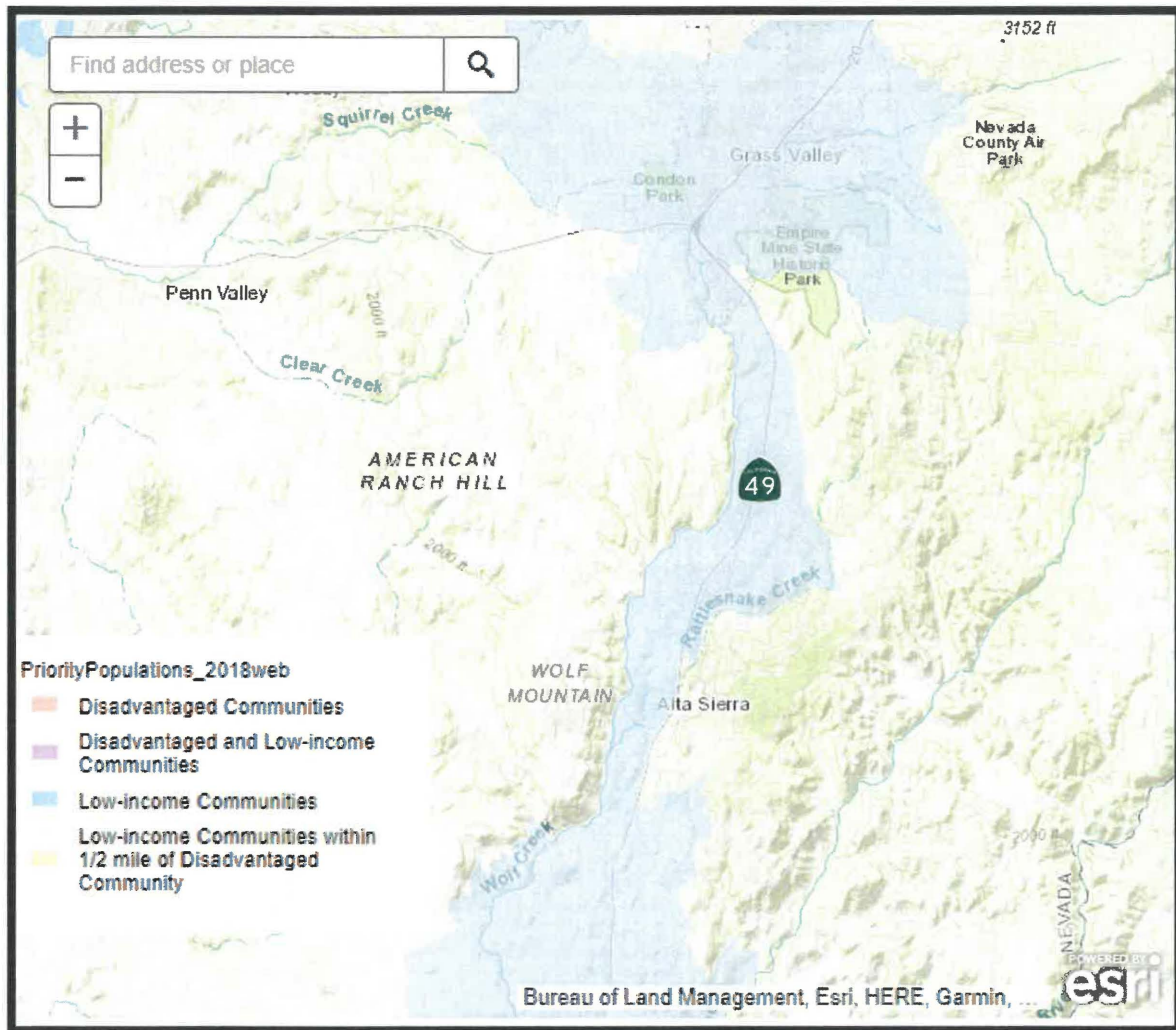
Performance measures included in the Regional Transportation Plan are monitored and progress towards goals are measured and updated every four years.

The majority of the residential development and communities adjacent to the SR 49 corridor in Nevada County have been identified as “Low-income households” and “Low-income communities” in Nevada County per the AB 1550 definitions defined below:

“Low-income households” are those with household incomes at or below 80 percent of the statewide median income or with household incomes at or below the threshold designated as low income by the Department of Housing and Community Development’s list of state income limits adopted pursuant to Section 50093.

“Low-income communities” are census tracts with median household incomes at or below 80 percent of the statewide median income or with median household incomes at or below the threshold designated as low income by the Department of Housing and Community Development’s list of state income limits adopted pursuant to Section 50093.

See Map below of the AB 1550 Low-Income Communities (depicted in light blue shading) adjacent to the SR 49 Corridor.



The SR 49 Corridor Improvement Project will improve multimodal accessibility and connectivity for AB 1550 populations adjacent to the project limits and provide for safer access to the highway and reduce emissions (Ozone precursors and GHG). Western Nevada County is non-attainment for the Federal Ozone Standards.

Compared to existing conditions, GHG emissions will decrease by opening (2024) and horizon (2044) year conditions for all project phases/alternatives due to planned improvements in fuel efficiency and anticipated changes to alternate fuels (such as, electric vehicles). Under horizon year (2044) conditions, the build phases/alternatives would have less GHG emissions than

Alternative 4/No Build based on increased speeds on network links. EMFAC2017 emissions factors were used to develop GHG emissions estimates for the alternatives. The emissions factors do not include off-model adjustment factors to account for the SAFE Vehicles Rule Part One from the US EPA and NHTSA. The SR 49 CIP is forecasted to save 113 tons of CO emissions, 25,696 tons of CO2 emissions, and 35 tons of NOX emissions over twenty years.

Click here to enter text.

Section 12. Regional and Statewide Benefits of RTIP

Provide qualitative narrative on the Regional and Statewide benefits of RTIP in text field below.

SR 49 acts as a lifeline route to several communities in Nevada, Placer, and Sierra Counties, and is the major interregional state highway connecting to the Interstate 80 gateway. This project is the top regional priority of Nevada County Transportation Commission (NCTC) and strong local support exists for improvements that will increase safety and improve operations on SR 49, which has a history accidents and fatalities in the corridor. The project segment serves as the gateway to the City of Grass Valley, the economic hub of western Nevada County. Volumes of both local traffic, interregional, and goods movement freight traffic have increased, and the State highway facility have become an integral part of the local circulation system in addition to serving tourist, goods movement, and interregional traffic. It is estimated that 30% of the County work force is using this route as a primary commute route to major employment centers outside of the County, resulting in over-capacity traffic demand during peak commute periods. The corridor also provides a key connection to specialized medical services provided outside Nevada County, access to higher education institutions, and access to goods and services within and outside of the county.

Tourism traffic that is important to the regional and state economy increase congestion and exacerbate safety issues throughout the year. The 2014 Bay to Tahoe Basin Tourism Impact Study indicated that during the summer peak tourism season approximately 34% of the traffic on SR 49 is tourism related traffic. Tourism spending over the ten-year study period showed steady increase of tourism spending in Nevada County and indicated that the City of Grass Valley has experienced a strong Transient Occupancy Tax (TOT) collection growth of 15% per year. It is reasonable to assume that as tourism increases and associated traffic increases, increases in tourism related traffic contribute to the further deterioration of Level of Service (LOS) for SR 49, which currently operates at LOS E during peak periods.

The SR 20 and SR 49 corridors function as part of the major east/west interregional movement for people and goods across the northern Central Valley, linking U.S. 101, Interstate 5, SR 99, SR 70, and providing connections to Interstate 80. These routes are part of a North state "transportation crossroads" or "hub" for agricultural goods movement in the North Valley and through the Yuba City/Marysville urbanized area for connections to SR 99 and SR 70; and connecting via the north/south SR 20 and SR 49 corridor in Nevada and Placer County to the Interstate 80 corridor. The closest east-west strategic interregional corridor to SR 20 is 100 miles north on I-5 (SR 44 in Redding) or 50 miles south (I-80 in Sacramento). Daily truck volume on SR 49 is estimated at about 1,050 trucks per day, using the total volume measured in May 2018 and the reported truck percentage of 3.6 percent. According to a recent count reported in Annual Average Daily Truck Traffic on the California State Highway System (Caltrans 2016) at Lorensen Road in Placer County (about 13 miles south of the study area), the truck volume is divided among 79 percent 2-axle trucks, 9 percent 3 or 4-axles trucks, and 12 percent trucks with 5 or more axles. (03-4E170 EIR).

The project segment is designated by FHWA as Critical Rural Freight Corridor under 23 U.S.C. 167(g). Both SR 20 and SR 49 are utilized in combination as an Emergency Detour Route when Interstate 80 between Emigrant Gap and Colfax is closed due to major accidents, wildfires, maintenance activities, and construction; and both are designated to be able to handle STAA oversize and CA Legal Trucks. The SR 49 corridor is also identified in the Caltrans California Freight Mobility Plan as a Tier 3 freight facility on the Highway Freight Network and is designated as a terminal access route for STAA trucks.

Anytime Interstate 80 is closed north of Colfax, truck traffic and passenger vehicles are able to be detoured onto SR 20 to SR 49 and back onto I-80. When I-80 is closed south of Colfax truck traffic and passenger vehicles are able to be detoured onto SR 174 connecting them to SR 20/SR 49 and back onto I-80. Data collected by the Caltrans District 3 Traffic Management Center indicate that between 2004 and 2014 there were 188 closures of Interstate 80 where truck traffic and passenger vehicles were rerouted onto SR 20 and SR 49. The most recent I-80 emergency detour occurred on July 3, 2021. Data collected by the Caltrans District 3 Traffic Management Center, indicate that between 2004 and 2021 there were 218 closures of I-80, where truck traffic and passenger vehicles were detoured onto SR 20 and SR 49. Estimates indicate \$4 to \$8 million dollars of commerce travel over I-80 at Donner Pass every hour throughout the year and emergency detours help to reduce freight costs related to delays. I-80, both directly and via connections from SR 49, provides interregional access to Sacramento, San Francisco, Reno, and continues eastward outside of California toward the northeastern United States before terminating in New Jersey. It is important for NCTC and Caltrans to continue to partner in order to deliver improvements that reduce congestion, improve air quality, improve safety, reduce GHG, and facilitate goods movement through these corridors (see attached letter 2015 ITSP Update California Trucking Association).

The *2015 Caltrans District 3 Goods Movement Study* identifies SR 49 as having a high deficiency for goods movement mobility in the base year, and in the no-build forecast, both SR 20 and SR 49 are identified as having high deficiency for goods movement mobility. SR 20, east of the Yuba County/Nevada County border, is identified as a segment of high priority in Caltrans District 3 for improving goods movement mobility. Improving freight transportation infrastructure and maintaining an efficient transportation system that provides for effective goods movement, allows local businesses to transport goods within Nevada County, and to markets outside of the area

The SR 49 corridor also plays a key role in providing interregional multi-modal connectivity as an interregional public transit corridor, providing Gold Country Connects (formerly Gold Country Stage) Route 5 express fixed route transit service between Nevada and Placer County and connections to the Amtrak Capital Corridor Inner-City Passenger Rail, Auburn Transit, and Placer County Transit at the Auburn Conheim Multimodal Station in Auburn. Gold Country Connects Route 5 passengers can transfer to Placer County Transit, which provides access to the Watt Ave. Light Rail Station or via Amtrak Thruway buses access the Capitol Corridor to Sacramento and the Bay Area.

The SR 49 Corridor Improvement Project will eliminate a significant choke point through elimination of the southbound lane drop and provide the necessary lane configurations to allow for implementation of innovative contra flow lane utilization to provide additional capacity necessary to efficiently evacuate the major population centers of Grass Valley, Nevada City, and surrounding areas safely beyond the major forested canopy below Alta Sierra. Emergency and hazard mitigation plans for liability reasons no longer identify evacuation routes due to the risk of someone assuming the route is safe simply because it is on a map when in fact it is dependent on the location and direction of the fire. Nevada County Office of Emergency Services in coordination with the Nevada County Sheriff's office utilizes CodeRED notification system, Zonehaven evacuation software, and developed the Nevada County READY Dashboard platform to quickly disseminate information to individual evacuation zones with specific information and instructions. Letters are attached from CALFIRE, CHP, and FIREWISE Community Groups acknowledging support for and the strategic need to construct the SR 49 Corridor Improvement Project.

The project segment of SR 49 is located within a CAL FIRE Very High Fire Hazard Severity Zone. The construction of the planned improvements to SR 49 will make this segment of SR 49 more resilient to the risk of wildfire by reducing roadside vegetation fuel loads and providing capacity to handle evacuation events and allow contra flow lane management to facilitate evacuation egress and the ingress of emergency responders. The additional roadway width will create additional distance between the forested tree canopy that currently overhangs the highway in several segments of the corridor. Through the removal of the existing lane-drops at the merge points that the northern and southern project limits existing design features that would constrict traffic flow in the event of evacuation will be eliminated. Local residents continue to express both safety and evacuation concerns and the desire to have the SR 49 corridor improved.

Evacuees from the Paradise Fire, as well as the Oroville Dam evacuation used both SR 20 West connecting to SR 49 to evacuate and seeking lodging alternatives and services. SR 49 is one of the main evacuation routes in the event of a wildfire that threatens the Cities of Grass Valley and Nevada City, as well as unincorporated areas and the existing SB merge is a significant concern that has been identified by fire agencies, law enforcement, the California Highway Patrol, Nevada County, and Nevada County Transportation Commission. One of the major evacuation centers, Bear River High School, is located south of the project segment on Magnolia Road.

During the recent evacuations for the August 2021 River Fire the previous concerns raised by local partner agencies and emergency responders were verified when the current highway configuration experienced accidents and operations broke down at the lane drops and accidents resulted along the length of the corridor. This was with only approximately 4,000 residents evacuated. Local social media feeds were full of comments how SR 49 was a failure of the River Fire and traffic was stuck and could not move due to accidents and congestion resulting from the current highway configuration resulting in frustration and panic. The evacuations from the River Fire, which originated in the Bear River Canyon while significant, were small compared to the potential need to evacuate 17,000+ residents in the event of a fast-moving wildfire starting in the Yuba River Canyon advancing on the City of Grass Valley and Nevada City. The 1988 49er Fire and the recent Jones Fire in 2020, originating in the Yuba River Canyon, are examples of the

wildfire/evacuation threat to the communities of Grass Valley and Nevada City and surrounding unincorporated areas.

The *Nevada County Hazard Mitigation Plan 2017* determined likelihood of future occurrence of wildfire in Nevada County as highly likely and classified the hazard risk as a priority hazard for the Nevada County Planning Area. Compounded by current drought conditions, the wildfire hazard in Nevada County has substantially increased and is no longer just a seasonal issue. The wildfire season, including the potential for a catastrophic wildfire, is now a year around concern. The vulnerability of Nevada County to increased occurrence of a devastating wildfire has increased as exacerbated by the recent drought, increases in tree mortality, and overall increase in wildfire conditions.

From May to October of each year, Nevada County faces a serious wildland fire threat. Fires will continue to occur on an annual basis in the Nevada County Planning Area. The threat of wildfire and potential losses are constantly increasing as human development and population increase and the Nevada County Local Hazard Mitigation Plan Update August 2017 wildland urban interface areas expand. Due to its high fuel load and long, dry summers, most of Nevada County continues to be at risk from wildfire. When fire does return to the dense, dry forests of Nevada County, they are more likely to burn uncharacteristically, at moderate and high intensity, rather than the historic low intensity level.

The increased fuel accumulation results in greater flame lengths, more crown fires and greater resistance to control. Tree mortality is often high, even for the fire-resistant ponderosa pine and large Douglas firs. Soils, understory vegetation, and wildlife populations, which evolved with low intensity fires, are at risk of long-term damage from uncharacteristic fire intensity. Climate Change and Wildfire Warmer temperatures can exacerbate drought conditions. Drought often kills plants and trees, which serve as fuel for wildfires. Warmer temperatures could increase the number of wildfires and pest outbreaks, such as the western pine beetle. Cal-Adapt's wildfire tool predicts the potential increase in the amount of burned areas for the year 2085, as compared to current (2010) conditions. Based on this model, Cal-Adapt predicts that wildfire risk in Nevada County will increase slightly in the near-term, and subside during mid-to late century. However, wildfire models can vary depending on the parameters used. Cal-Adapt does not take landscape and fuel sources into account in their model. In all likelihood, in Nevada County, precipitation patterns, high levels of heat, topography, and fuel load will determine the frequency and intensity of future wildfire.

The Nevada County Transportation Commission in coordination with Caltrans District 3, Nevada County Office of Emergency Services, and emergency responders is currently underway with the development of the *Ready Nevada County Extreme Climate Event Mobility Adaptation Plan*. The draft plan indicates that the extent and intensity of wildfires increase as temperatures rise, and warming is one of the primary projected impacts of climate change. The National Oceanic and Atmospheric Administration's Fourth National Climate Assessment, released in 2018, reported that climate change factors alone roughly doubled the area burned by wildfire in the western United States between 1984 and 2015. Nevada County has been affected by several wildfires in recent years, such as the McCourtney Fire (2018), Lobo Fire (2018), Jones Fire (2020), River Fire

(August 2021), and Bennet Fire (August 2021) resulted in evacuations of portions of Grass Valley, Nevada City, and unincorporate communities. Warming and drying trends in Nevada County as a result of climate change are projected to increase the frequency and severity of wildfires in Nevada County. Increasing wildfires are likely to lead to more transportation disruptions, affecting access to local communities, commerce, tourism and other essential functions throughout the Nevada County (Dettinger, 2018). These effects could be particularly acute near bottle necks in the transportation system, such as highways through forested areas and other principal arterials in high-risk wildfire areas. Input from CALFIRE, CHP, Nevada County Sheriff, and citizens has identified the current project limits as a major evacuation concern.

In Nevada County, 92 percent of County residents live within high fire severity zones (Nevada County OES, 2020). Many wildfires occur in rural areas, which often have more low-income households than the state average, and disproportionately affect disadvantaged and low-income communities. Older adult residents and those with disabilities may be unable to quickly evacuate themselves during a wildfire, requiring them to receive additional assistance. Funding transportation improvements to ensure that these households can be effectively evacuated when wildfires threaten them, as well as providing resources for recovery in these areas afterwards, is a challenge to government agencies in Nevada County at all levels.

D. Performance and Effectiveness of RTIP

Section 13. Evaluation of Cost Effectiveness of RTIP (Required per Section 19)

Investment Analysis: Summary of Results

Itemized Benefits (mil. \$)	Passenger	Freight	Total Over	Average
	Benefits	Benefits	20 Years	Annual
Travel Time Savings	\$76.3	\$6.7	\$83.1	\$4.2
Vehicle Op. Savings	-\$0.6	\$0.0	-\$0.6	-\$0.0
Accident Cost Savings	\$2.0	\$0.1	\$2.1	\$0.1
Emission Cost Savings	\$0.1	\$0.1	\$0.2	\$0.0
TOTAL BENEFITS	\$77.8	\$7.0	\$84.8	\$4.2
Time Saved (Person-Hrs)			13,021,235	651,062

Life-Cycle Costs (mil. \$)	\$105.2
Life-Cycle Benefits (mil. \$)	\$84.8
Net Present Value (mil. \$)	-\$20.4
Benefit/Cost Ratio:	0.8
Ratio of Return on Investment	4.9%
Payback Period:	14 Years

In 2015, Governor Jerry Brown signed Executive Order B-30-15, which established a new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by the year 2030. The objective of the executive order was to ensure California is able to meet its long-term target of reducing GHG emissions to 80 percent below 1990 levels by the year 2050. The Nevada County Transportation Commission's RTIP is supports Executive Order B-30-15 by increasing multi-modal options and connectivity and reducing emissions related congestion. Compared to existing conditions, GHG emissions will decrease by opening (2024) and horizon (2044) year conditions for all project phases/alternatives due to planned improvements in fuel efficiency and anticipated changes to alternate fuels (such as, electric vehicles). Under horizon year (2044) conditions, the build phases/alternatives would have less GHG emissions than Alternative 4/No Build based on increased speeds on network links. EMFAC2017 emissions factors were used to develop GHG emissions estimates for the alternatives. The emissions factors do not include off-model adjustment factors to account for the SAFE Vehicles Rule Part One from the US EPA and NHTSA. The SR 49 CIP is forecasted to save 113 tons of CO emissions, 25,696 tons of CO2 emissions, and 35 tons of NOX emissions over twenty years.

Section 14. Project Specific Evaluation (Required per Section 19D)

Each RTIP shall include a project specific benefit evaluation for each new project proposed that estimates its benefits to the regional system from changes to the built environment, including, but limited to the items listed on page 10 of the STIP Guidelines. A project level evaluation shall be submitted for projects for which construction is proposed if:

- The total amount of existing and proposed STIP for right-of-way and/or construction of the project is \$15 million or greater, or
- The total project cost is \$50 million or greater.

The project level benefit evaluation shall include a Caltrans generated benefit/cost estimate, including life cycle costs for projects proposed in the ITIP. For the RTIP, the regions may choose between the Caltrans estimate and their own estimate (explain why the Caltrans estimate was not used). The project level benefit evaluation must explain how the project is consistent with Executive Order B-30-15 (Climate Change), including a description of any actions taken to protect the state’s most vulnerable populations. The evaluation shall be conducted by each region and by Caltrans before the RTIPs and the ITIP are submitted to the Commission for incorporation into the STIP.

E. Detailed Project Information

Section 15. Overview of Projects Programmed with RIP Funding

Provide summary of projects programmed with RIP funding including maps in the text field below as required per the STIP Guidelines.

The only project submitted in the NCTC 2022 RTIP is the funding request to add \$3,000,000 of RIP funding in partnership with \$3,000,000 of IIP funding for Right of Way to the previously programmed SR 49 Corridor Improvement Project and programming \$177,000 of PPM (\$88,500 FY 2025/26 and \$88,500 FY 2026/27)

The SR 49 Corridor Improvement Project begins at the limits of the previous La Barr Meadows Signalization Project (PM 11.1) and ends just south of the McKnight Way Interchange (PM 13.3), connecting to the four lane Golden Center Freeway. This project is exempt from SB 375, NCTC is not required to prepare a SCS. The project (STIP 4E170) will make improvements to this segment focused on safety, evacuation capacity, operations, goods movement, and multi-modal mobility improvements. This project is designed to be funded in three phases as state and federal transportation funding allow.

The ultimate project includes redirecting numerous entrances to a newly constructed frontage road system to access the highway at two new at-grade intersections that will either be roundabouts or signalized. It will also construct portions of northbound and southbound truck climbing lanes and will eliminate merge points that currently exist to the north and south of the project limits, connecting to the existing four-lane northbound/southbound sections. This project also proposes to further address safety concerns through the installation of a continuous median barrier, 10’ shoulders with rumble strips, animal crossing tunnel with fencing, enhanced wet night visibility striping, and pavement edge treatments.

Phase: 1: Construction of the southbound truck climbing lane, 10’ shoulders with rumble strips, and elimination of the lane drop/merge point south of the McKnight Way Interchange improving the southbound highway segment to four lanes and improving evacuation capacity. This phase will also include enhance wet night visibility striping, rumble strips, and pavement edge treatments.

Phase 2: Construction of the northbound truck climbing lane, a 16' wide continuous two way left turn lane, 10' shoulders, and elimination of the northbound merge point improving operations and improving northbound evacuation capacity. This phase also includes southbound right turn lanes at Wellswood Way, Bethel Church Way, Smith Road, and Crestview Drive. Other safety features include enhanced wet night visibility striping, rumble strips, and pavement edge treatments. A wildlife undercrossing with fencing will be installed as part of this phase to help reduce deer strikes.

Phase 3: Construction of frontage roads, elimination of ingress/egress points, construction of two access-controlled intersections initially proposed in the vicinity of Wellswood Way and Smith Road, and installation of a center median barrier.

The purpose of this project is to enhance connectivity for the rural communities in Nevada County along State Route 49 from La Barr Meadows Road to McKnight Way. The project will enhance safety and mobility of vehicular, pedestrian, and cyclist traffic on State Route 49. The project will also enhance daily commuting, mobility, freight, transit (Nevada County Connects, fixed route transit, Route 5 Commuter Service to Auburn Multi-modal station), access to employment and essential services, and provide a long-term benefit for emergency readiness for evacuations caused by climate change stressors and make improvements needed to continue to safely facilitate I-80 emergency detour events.



Project Location Nevada County



SR 49 Widening (Nevada 49 Corridor Improvement Project) PM 11.1 to PM 13.3

F. Appendices

Section 16. Projects Programming Request Forms (Provide Cover Sheet) – Regional Agencies will add their PPRs in this section for each project included in the RTIP, whether it is a project reprogrammed from the 2022 STIP, or a new project.

Section 17. Board Resolution or Documentation of 2022 RTIP Approval (Provide Cover Sheet) – Agencies will add their resolution or meeting minutes.

Section 21. Additional Appendices (Letters of Support)

Appendix: SECTION 16 – PROJECT PROGRAMMING REQUEST (PPR) FORMS

- **NCTC PPM – Project ID: 0321000037 PPNO: OL83**
- **NCTC RIP – EA 4E170 Project ID: 0315000064 PPNO: 4117**

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
PROJECT PROGRAMMING REQUEST (PPR)
 PRG-0010 (REV 08/2020)

PPR ID ePPR-6144-2022-0001 v0

Amendment (Existing Project) YES NO Date 12/17/2021 11:17:12

Programs LPP-C LPP-F SCCP TCEP STIP Other

District	EA	Project ID	PPNO	Nominating Agency	
03		0321000037	0L83	Nevada County Transportation Commission	
County	Route	PM Back	PM Ahead	Co-Nominating Agency	
Nevada					
				MPO	Element
				NON-MPO	Local Assistance
Project Manager/Contact			Phone	Email Address	
Mike Woodmanb			916-716-2559	mwoodman@nccn.net	

Project Title
 Planning, Programming and Monitoring

Location (Project Limits), Description (Scope of Work)
 Planning, programming and monitoring - Nevada County, CA

Component	Implementing Agency
PA&ED	
PS&E	
Right of Way	
Construction	Nevada County Transportation Commission

Legislative Districts			
Assembly:	Senate:	Congressional:	
1	1	1,4	
Project Milestone	Existing	Proposed	
Project Study Report Approved			
Begin Environmental (PA&ED) Phase			
Circulate Draft Environmental Document Document Type			
Draft Project Report			
End Environmental Phase (PA&ED Milestone)			
Begin Design (PS&E) Phase			
End Design Phase (Ready to List for Advertisement Milestone)			
Begin Right of Way Phase			
End Right of Way Phase (Right of Way Certification Milestone)			
Begin Construction Phase (Contract Award Milestone)			
End Construction Phase (Construction Contract Acceptance Milestone)			
Begin Closeout Phase			
End Closeout Phase (Closeout Report)			

Date 12/17/2021 11:17:12

Purpose and Need

NHS Improvements YES NO Roadway Class Reversible Lane Analysis YES NO
Inc. Sustainable Communities Strategy Goals YES NO Reduce Greenhouse Gas Emissions YES NO

Project Outputs

Category	Outputs	Unit	Total

Additional Information

Performance Indicators and Measures						
Measure	Required For	Indicator/Measure	Unit	Build	Future No Build	Change

District	County	Route	EA	Project ID	PPNO
03	Nevada			0321000037	0L83

Project Title
 Planning, Programming and Monitoring

Existing Total Project Cost (\$1,000s)									Implementing Agency
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total	
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									Nevada County Transportation Comm
R/W									
CON	1,671	60	59	60				1,850	Nevada County Transportation Comm
TOTAL	1,671	60	59	60				1,850	

Proposed Total Project Cost (\$1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON	1,671	60	59	60	89	89		2,028	
TOTAL	1,671	60	59	60	89	89		2,028	

Fund #1:	RIP - State Cash (Committed)								Program Code
	Existing Funding (\$1,000s)								20.30.600.670
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total	Funding Agency
E&P (PA&ED)									Nevada County Transportation Comm
PS&E									\$55 CON voted 01/03/00
R/W SUP (CT)									\$55 CON voted 07/01/00
CON SUP (CT)									\$55 CON voted 07/01/01
R/W									\$55 CON voted 10/03/02
CON	1,671	60	59	60				1,850	\$55 CON voted 02/26/04
									\$85 CON voted 03/03/05
TOTAL	1,671	60	59	60				1,850	\$85 CON voted 08/18/05
									\$85 CON voted 07/20/06

Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON	1,671	60	59	60	89	89		2,028	
TOTAL	1,671	60	59	60	89	89		2,028	

Complete this page for amendments only

Date 12/17/2021 11:17:12

District	County	Route	EA	Project ID	PPNO
03	Nevada			0321000037	0L83

SECTION 1 - All Projects

Project Background

N/A

Programming Change Requested

Reason for Proposed Change

N/A

If proposed change will delay one or more components, clearly explain 1) reason for the delay, 2) cost increase related to the delay, and 3) how cost increase will be funded

Other Significant Information

SECTION 2 - For SB1 Project Only

Project Amendment Request (Please follow the individual SB1 program guidelines for specific criteria)

N/A

Approvals

I hereby certify that the above information is complete and accurate and all approvals have been obtained for the processing of this amendment request.

Name (Print or Type)	Signature	Title	Date

SECTION 3 - All Projects

Attachments

- 1) Concurrence from Implementing Agency and/or Regional Transportation Planning Agency
- 2) Project Location Map

Amendment (Existing Project) YES NO Date 12/17/2021 12:27:48

Programs LPP-C LPP-F SCCP TCEP STIP Other

District	EA	Project ID	PPNO	Nominating Agency	
03	4E170	0315000064	4117	Nevada County Transportation Commission	
County	Route	PM Back	PM Ahead	Co-Nominating Agency	
Nevada	49	11.100	13.300	Caltrans District 3	
				MPO	Element
				NON-MPO	Capital Outlay
Project Manager/Contact			Phone	Email Address	
Sam Vandell			530-741-4593	sam.vandell@dot.ca.gov	

Project Title

Rt 49, Corridor Improvement Project

Location (Project Limits), Description (Scope of Work)

In Nevada County, on SR 49 from La Bar Meadows Road to McKnight Way. The project proposes to improve operations, mobility, and safety through the addition of a Southbound Truck Climbing Lane outside an Urbanized Area.

Component	Implementing Agency
PA&ED	Caltrans District 3
PS&E	Caltrans District 3
Right of Way	Caltrans District 3
Construction	Caltrans District 3

Legislative Districts

Assembly: 1 Senate: 1 Congressional: 1,4

Project Milestone	Existing	Proposed
Project Study Report Approved		
Begin Environmental (PA&ED) Phase	01/12/2015	04/12/2015
Circulate Draft Environmental Document Document Type EIR	02/24/2019	07/30/2021
Draft Project Report	02/28/2019	08/16/2021
End Environmental Phase (PA&ED Milestone)	07/15/2020	10/04/2021
Begin Design (PS&E) Phase	07/16/2020	10/05/2021
End Design Phase (Ready to List for Advertisement Milestone)	06/20/2024	10/10/2025
Begin Right of Way Phase	08/15/2022	10/05/2021
End Right of Way Phase (Right of Way Certification Milestone)	06/06/2024	09/25/2025
Begin Construction Phase (Contract Award Milestone)	11/15/2024	01/20/2026
End Construction Phase (Construction Contract Acceptance Milestone)	11/02/2027	12/01/2028
Begin Closeout Phase	11/02/2027	12/02/2028
End Closeout Phase (Closeout Report)	11/02/2028	06/03/2030

Date 12/17/2021 12:27:48

Purpose and Need

The purpose of this project is to improve safety, traffic operations, and pedestrian and bicyclist mobility through the project limits, as well as, upgrade shoulder widths to current standard. There is a need for wider shoulders to accommodate pedestrians, bicyclists, and disabled vehicles. The existing highway has paved and/or gravel shoulders that vary from 0 to 8-foot wide; but typically shoulders are non-existent or are much narrower than 8-feet.

NHS Improvements <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Roadway Class 2	Reversible Lane Analysis <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Inc. Sustainable Communities Strategy Goals <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Reduce Greenhouse Gas Emissions <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

Project Outputs

Category	Outputs	Unit	Total
Pavement (lane-miles)	Truck climbing lanes constructed	Miles	1

Additional Information

Performance Indicators and Measures						
Measure	Required For	Indicator/Measure	Unit	Build	Future No Build	Change
Congestion Reduction	LPPF, LPPC, SCCP	Daily Vehicle Hours of Delay	Hours	0	0	0

District	County	Route	EA	Project ID	PPNO
03	Nevada	49	4E170	0315000064	4117

Project Title
 Rt 49, Corridor Improvement Project

Existing Total Project Cost (\$1,000s)									Implementing Agency
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total	
E&P (PA&ED)	3,900							3,900	Caltrans District 3
PS&E	3,000							3,000	Caltrans District 3
R/W SUP (CT)	1,200							1,200	Caltrans District 3
CON SUP (CT)									Caltrans District 3
R/W	7,000							7,000	Caltrans District 3
CON	19,000							19,000	Caltrans District 3
TOTAL	34,100							34,100	

Proposed Total Project Cost (\$1,000s)									Notes
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total	
E&P (PA&ED)	3,900							3,900	
PS&E	3,000							3,000	
R/W SUP (CT)	1,200							1,200	
CON SUP (CT)									
R/W		6,000						6,000	
CON					19,000			19,000	
TOTAL	8,100	6,000			19,000			33,100	

Fund #1:	RIP - National Hwy System (Committed)								Program Code
	Existing Funding (\$1,000s)								20.XX.075.600
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total	Funding Agency
E&P (PA&ED)	3,900							3,900	Nevada County Transportation Comm
PS&E	3,000							3,000	
R/W SUP (CT)	1,200							1,200	
CON SUP (CT)									
R/W									
CON									
TOTAL	8,100							8,100	

Proposed Funding (\$1,000s)									Notes
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total	
E&P (PA&ED)	3,900							3,900	
PS&E	3,000							3,000	
R/W SUP (CT)	1,200							1,200	
CON SUP (CT)									
R/W									
CON									
TOTAL	8,100							8,100	

Fund #2:		Future Need - Future Funds (Uncommitted)							Program Code
		Existing Funding (\$1,000s)							FUTURE
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W	7,000							7,000	
CON	19,000							19,000	
TOTAL	26,000							26,000	
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON					19,000			19,000	
TOTAL					19,000			19,000	
Fund #3:		IIP - State Cash (Uncommitted)							Program Code
		Existing Funding (\$1,000s)							
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total	Funding Agency
E&P (PA&ED)									Caltrans District 3
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W		3,000						3,000	
CON									
TOTAL		3,000						3,000	

Fund #4:	RIP - National Hwy System (Uncommitted)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total	Funding Agency
E&P (PA&ED)									Nevada County Transportation Comm
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W		3,000						3,000	
CON									
TOTAL		3,000						3,000	

Complete this page for amendments only

Date 12/17/2021 12:27:48

District	County	Route	EA	Project ID	PPNO
03	Nevada	49	4E170	0315000064	4117

SECTION 1 - All Projects

Project Background

Highway 49 in Nevada County is a critical lifeline from rural western Nevada, Sierra and Yuba counties. This lifeline provides for goods movement and freight; service industry access; access for residents to critical medical care, higher education, jobs and commercial needs. Collectively, the residents along the corridor represent a disadvantaged population and they currently lack direct access to the highway and alternate transportation modes; are directly affected by travel delays, substandard intersections and driveway connections; and lack bicycle and pedestrian connections to goods and services in the community. From La Barr Meadows to McKnight Way Highway 49 experiences significant vehicle collisions due to high-speed movements conflicting with low-speed movements, significant stress to pedestrians and cyclists at public intersections, and a high rate of vehicle-wildlife conflict. Moreover, the Caltrans Freight Mobility Plan identifies State Route 49 highly deficient for freight economic competitiveness and efficiencies. Due to the rolling terrain within the project limits, there are elevation gains that reduce truck and transit speeds creating a differential in vehicle speeds, promoting unsafe passing. These challenges result in the inability to address climate and equity goals in this rural community.

Programming Change Requested

Reason for Proposed Change

The purpose of this project is to enhance connectivity for the rural community in Nevada County including rural communities along State Route 49 from La Barr Meadows Road to McKnight Way. The project will improve safety, and mobility of vehicular, pedestrian, and cyclist traffic on State Route 49. This project will enhance daily commuting, mobility, freight, transit (Nevada County Connects, fixed route transit, Route 5 Commuter Service to Auburn Multi-modal Station), essential services and provide a long-term benefit for emergency readiness for evacuations caused by climate change stressors through construction of roundabouts, and intersection signalization. Providing access management and bringing the facility to current standards will provide safer travel and better mobility for cyclists and pedestrians. The proposed 8 to 10-foot shoulders and the installation of rumble strips will alert drivers leaving the travel way and shoulders, as well as provide additional recovery area for drivers to self-correct, as well as providing space for cyclists, pedestrians, local services, disabled vehicles, enforcement vehicles and emergency responders. The project will allow vehicles to move on their way as slower moving vehicles use climbing lanes. This will provide safer travel to buses and automobiles by eliminating the conflict of high-speed vehicle movements with low speed movements. Additionally, safe space refuge is proposed for left-turn movements away from the through traffic lanes also known as "Two-Way Left-Turn Lanes". A proposed wildlife crossing will allow wildlife to move through the landscape more successfully and better adapt as climate changes alter vegetation types. If proposed change will delay one or more components, clearly explain 1) reason for the delay, 2) cost increase related to the delay, and 3) how cost increase will be funded

Other Significant Information

SECTION 2 - For SB1 Project Only

Project Amendment Request (Please follow the individual SB1 program guidelines for specific criteria)

The Nevada 49 Corridor Improvement project will be developed in a multi-phased approach. To date, the Nevada Corridor Improvement Project has garnered \$11,000,000. The \$3,000,000 in Interregional Transportation Improvement Funds will complete critical right of way and construction activities for the truck climbing lane in the southbound direction.

Approvals

I hereby certify that the above information is complete and accurate and all approvals have been obtained for the processing of this amendment request.

Name (Print or Type)	Signature	Title	Date

SECTION 3 - All Projects

Attachments

- 1) Concurrence from Implementing Agency and/or Regional Transportation Planning Agency
- 2) Project Location Map

SECTION 17 – BOARD RESOLUTION 2022 RTIP APPROVAL

**RESOLUTION 21-26
OF THE
NEVADA COUNTY TRANSPORTATION COMMISSION**

ADOPTION OF THE FY 2021/22 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM

WHEREAS, the Nevada County Transportation Commission (NCTC) is responsible for the preparation of the Regional Transportation Plan and Regional Transportation Improvement Program (RTIP); and

WHEREAS, prior to the adoption of the FY 2021/22 RTIP, a public hearing was conducted on November 17, 2021; and

WHEREAS, NCTC has considered the relationship between the proposed RTIP, Caltrans recommendations for the Interregional Transportation Improvement Program, and the Nevada County Regional Transportation Plan; and

WHEREAS, NCTC is responsible for the programming of Regional Improvement Program funds, and Caltrans is responsible for the programming of Interregional Improvement Program funds.

NOW, THEREFORE, BE IT RESOLVED, that the Nevada County Transportation Commission hereby submits the following projects and recommendations to the California Transportation Commission as NCTC's FY 2021/22 Regional Transportation Improvement Program:

1. Program \$3,000,000 for Right-of-Way in FY 2022/23 for the State Route 49 Corridor Improvement Project.
2. \$177,000 for STIP Planning, Programming, and Monitoring Activities - Apportioned as follows:

<u>FY 2025/26</u>	<u>FY 2026/27</u>	<u>TOTAL</u>
\$88,500	\$88,500	\$177,000

BE IT FURTHER RESOLVED, that the Executive Director of the Nevada County Transportation Commission is authorized and directed to complete the necessary information regarding the FY 2021/22 Regional Transportation Improvement Program to the California Transportation Commission for inclusion in the 2022 State Transportation Improvement Program.

PASSED AND ADOPTED by the Nevada County Transportation Commission on November 17, 2021, by the following vote:

Ayes: Commissioner Arbuckle, Commissioner Hoek, Commissioner Strawser,
Commissioner Zabriskie

Noes: None

Absent: Commissioner Burton, Commissioner Scofield

Abstain: None



Andrew Burton, Chair
Nevada County Transportation Commission

Attest:



Dale D. Sayles
Administrative Services Officer

SECTION 21 – SUPPORT LETTERS

Appendix SECTION 21 – SUPPORT LETTERS

- **Western Nevada County Accessible Transportation Coalition Initiative – Mobility Action Partners**
- **CALFIRE**
- **Grass Valley Area Highway Patrol**
- **California Trucking Association**
- **Nevada County Coalition of Firewise Communities**



Western Nevada County Accessible Transportation Coalition Initiative – Mobility Action Partners Coalition

September 9, 2021

Scott Sauer
Chief, Office of Multimodal System
Planning
Division of Transportation Planning
California Department of Transportation
1120 N Street
Sacramento, CA 95814

Hilary Norton
Chairwoman
California Transportation
Commission
1120 N Street, MS 52
Sacramento, CA 95814

Mitch Weiss
Executive Director
California Transportation
Commission
1120 N Street, MS 52
Sacramento, CA 95814

Dear Caltrans and California Transportation Commission:

In 2010, the County of Nevada Transit Services Division was awarded an Easter Seals Project Action grant to look at opportunities to improve the accessibility of transportation options in western Nevada County. The initiation of this project involved establishing a coalition of stakeholders with knowledge of the available transportation options and social service needs in western Nevada County. This coalition is known as the Accessible Transportation Coalition – Mobility Action Partners Coalition (ATCI-MAPCO) and continues to meet and work collaboratively to improve the accessibility of transportation options.

The ATCI-MAPCO is happy to express our support for the funding of Nevada 49 Corridor Improvement Project (03-4E170) through Interregional Transportation Improvement Program (ITIP) as it provides direct benefits to rural communities through improved safety, and mobility of vehicular, pedestrian, and cyclist traffic on State Route 49 as the corridor provides connectivity to rural disadvantaged populations. This is needed for a corridor that is the lifeline of a region which facilitates goods movement, access to service industries, residential, medical, jobs, and higher education facilities. The SR 49 corridor also plays a key role in providing interregional multi-modal connectivity as an interregional public transit corridor, providing Gold Country Connects Route 5 express fixed route transit service between Nevada and Placer County and connections to the Amtrak Capital Corridor Inner-City Passenger Rail, Auburn Transit, and Placer County Transit at the Auburn Conheim Multimodal Station in Auburn.

The ATCI-MAPCO also writes in support of the California Department of Transportation (Caltrans) District 3 recommendation to include the strategies outlined below to the Interregional Transportation Strategic Plan (ITSP) for the State Route 20 and State Route 49 corridors in Caltrans District 3. The improvements and strategies outlined below are critical to ensuring the long-term direction for the corridor is inclusive and accounts for the needs within our organization.

- For both State Route 20 and State Route 49 please include **Access Management** as improved access and connections between the local and regional transportation system is important to management the movement of people and freight. This enhances community livability by reducing vehicular and modal conflict points and improving emergency services overall.
- For both State Route 20 and State Route 49 please include **Support Freight Alternatives to Trucks to Decrease Vehicle Miles Traveled (VMT)**. This strategy supports the expansion of rail and aeronautical services and facilities for goods movement in an area that is predominately

reliant on trucks. This will help to reduce congestion and greenhouse gas emissions along the roadways.

- For both State Route 20 and State Route 49 please include **Truck Climbing and/or Passing Lanes in Locations with Steep Grades** as the creation of truck climbing lanes reduces recurrent congestion along rural routes where vehicles are unable to consistently pass freight trucks and slow-moving vehicles. This increases safety by reducing conflicts because of speed differentials and reduces the need for vehicles to pass trucks in the opposite direction.
- For both State Route 20 and State Route 49 please include **Expand Express Bus Service Consistent with the California Intercity Bus Study**. The expansion of express bus services for interregional travelers and commuters will reduce congestion, greenhouse gas emissions and vehicle miles traveled along the corridor while providing benefits to people and goods movement.
- For State Route 49 please include **Expand Truck Parking** as creating or expanding truck parking yields multiple benefits but not limited to safety for both trucks and travelers to reduce conflicts along the roadway. This enhances community economic opportunities by consolidating truck parking into specific locations. Further enhances greenhouse gas emissions by reducing idling times by providing truckers electrical options for refrigeration and heating.
- For State Route 49 please include **Balance Local Community and Interregional Travel Needs**. By implementing corridor-based approaches that consider all modes of travel, the corridor will enhance local, regional, and statewide economy and equity while preserving community livability by reducing greenhouse gas emissions, vehicle miles traveled, and congestion

Regards,

Robin Van Valkenburg

Robin Van Valkenburg, Chair
ATCI-MAPCO

**DEPARTMENT OF FORESTRY AND FIRE PROTECTION**

Nevada – Yuba – Placer Unit
13760 Lincoln Way
Auburn, CA 95602
(530) 889-0111
Website: www.fire.ca.gov



April 29, 2021

Mike Woodman, Executive Director
Nevada County Transportation Commission
101 Providence Mine Road, Suite 102
Nevada City, California 95959

RE: CAL FIRE Nevada-Yuba-Placer support for SR 49 Corridor Improvement Project - Phase 1 (STIP 4E170)

Dear Mr. Woodman:

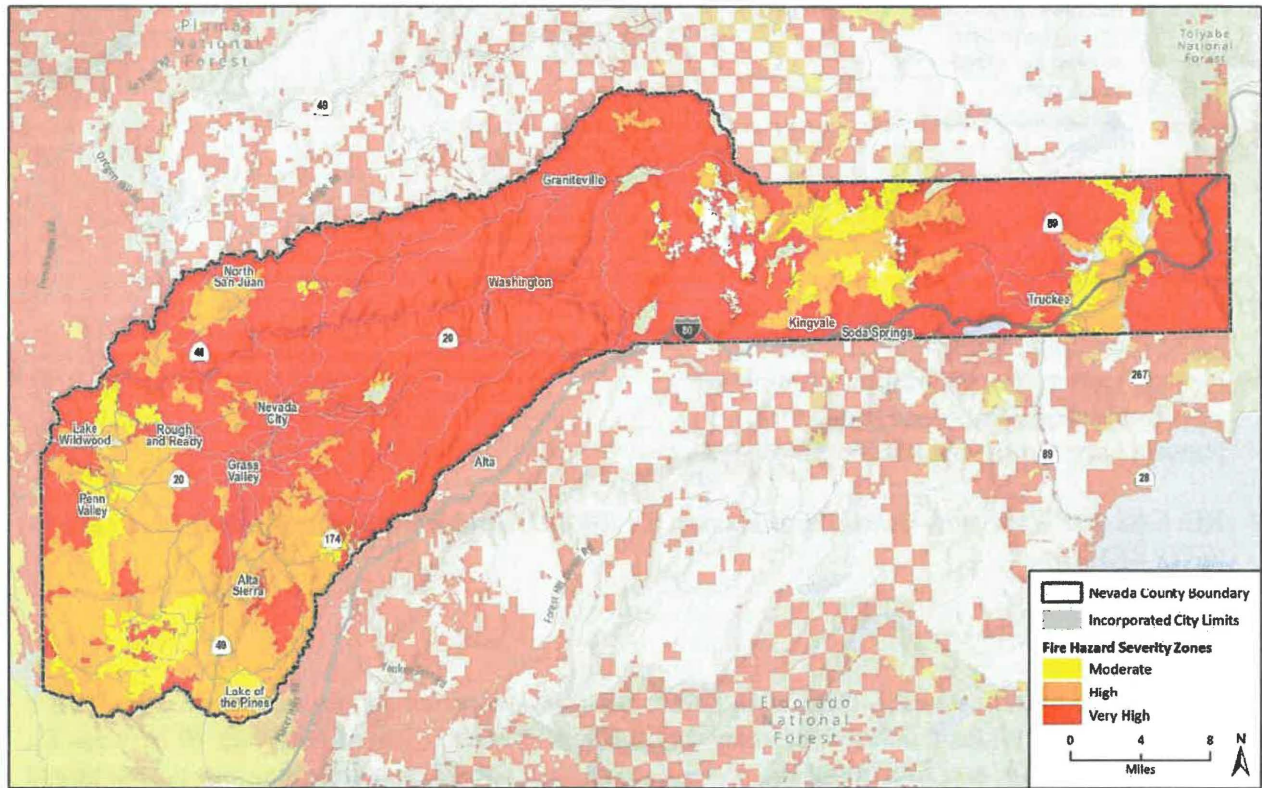
I am pleased to indicate CAL FIRE's support for the SR 49 Corridor Improvement Project – Phase 1, which would widen a currently narrow and accident-prone section of Highway 49 between La Barr Meadows Dr. and McKnight Way. This segment of SR 49 includes numerous access points adjacent to SR 49, which create low-speed versus high-speed conflicting movements, which have resulted in collisions, serious injuries and fatalities, and many other “near misses”. The proposed 16' median and planned right turn pockets will allow a safe refuge for vehicles entering highway and exiting the highway reducing rear-end and sideswipe accidents that, for the existing two-lane configuration, are often due to either congestion or traffic slowing or stopping for vehicles preparing to make turning movements.

This corridor is also part of a critical evacuation route out of the Nevada City / Grass Valley area and I am concerned about the ability of traffic to safely and efficiently flow through that area. During morning and evening “rush hour,” traffic along this route bottlenecks at the existing merge sections that this project will eliminate. Improving traffic flow and safety along this section of Highway 49 is very important to increasing our ability to evacuate residents in the event of a major wildfire.

Sincerely,

Brian Estes
Fire Chief
CAL FIRE Nevada-Yuba-Placer Unit

2021 CALFIRE – FIRE HAZARD SEVERITY ZONE – NEVADA COUNTY, CA



Basemap provided by Esri and its licensors © 2021.
Additional data provided by CALFIRE, 2021.

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

**11363 McCourtney Rd.
Grass Valley, CA 95949
(530) 477-4900
(800) 735-2929 (TT/TDD)
(800) 735-2922 (Voice)**



May 13, 2021

File No.: 230.14307

Mike Woodman, Executive Director
Nevada County Transportation Commission
101 Providence Mine Road, Suite 102
Nevada City, CA 95959

Amarjeet Benipal, District 3 Director
California Department of Transportation
703 B Street
Marysville, CA 95901

Subject: Acknowledgement of Continued Focus on Safety within the State Route (SR) 49 Corridor in Nevada County.

Dear Mr. Woodman and Mr. Benipal:

The Grass Valley Area California Highway Patrol (CHP) would like to thank the Nevada County Transportation Commission (NCTC) and Caltrans District 3 for their continued partnership and planning efforts focused on reducing fatal/injury accidents within the SR 49 corridor. These efforts include, but are not limited to, the coordination of the ongoing SR 49 Stakeholder Committee, the current planning efforts to development of the SR 49 Safety Assessment, the SR 49 Comprehensive Multi-Modal Corridor Plan, the Nevada County Extreme Climate Event Mobility Adaptation Plan, and the planning and programming of funding for the SR 49 Corridor Improvement Project gap closure between PM 10.8 and 13.3.

The Grass Valley Area CHP recognizes the significant challenges faced by Nevada County communities regarding emergencies and/or evacuations and their subsequent impact on roadways throughout the county. This is especially true with all primary traffic corridors accessing the county. The Grass Valley Area CHP remains committed to working with the NCTC and Caltrans on all future projects that will improve the safety of people utilizing roadways and corridors throughout the county. I hope that the collaborative, proactive efforts of all entities involved in planning future project enhancements will result in increased state and federal funding for improving traffic safety and evacuations.

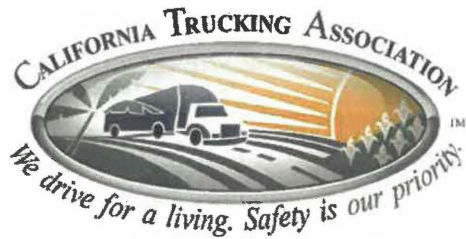
Should you have any questions, please don't hesitate to call me at (530) 477-4900.

Sincerely,

A handwritten signature in blue ink, appearing to read "G.A. Steffenson".

G.A. STEFFENSON, Lieutenant
Commander
Grass Valley Area





September 12, 2021

Toks Omishakin, Director
California Department of Transportation
1120 N Street, MS-52
Sacramento, CA 95814

Dear Mr. Omishaken:

SUBJECT: Comments on the Draft 2021 Interregional Transportation Strategic Plan (ITSP)

The California Trucking Association (CTA) is writing in support of improvements in both the State Route (SR) 20 and SR 49 corridors to ensure they can adequately handle the large volumes of trucks that are re-routed to these corridors during detour events, as a result of closure to Interstate 80. Both SR 20 and SR 49 priority interregional facilities that are part of the Bay Area – Sacramento – Northern Nevada Strategic Interregional Corridor. With truck volumes forecasted to increase over the next twenty years, it will remain important for the aforementioned segments of SR 20 and SR 49 to be identified for improvements in the Interregional Transportation Strategic Plan (ITSP) and prioritized for Interregional Transportation Improvement Program (ITIP) funding to provide opportunities for strategic partnership with the Nevada County Transportation Commission to construct the needed improvements, to reduce costly delays, and ensure goods movement efficiency.

CTA also expresses our support for the Nevada County Transportation Commission's State Route (SR) 49 Corridor Improvement Project (03-4E170), which proposes both northbound and southbound truck climbing lanes, as well as other safety, operational, and multi-modal mobility corridor improvements. In order to fulfill the State of California's commitment of enhancing the flow of interregional goods movement the CTA supports the Nevada County Transportation Commission's request for 2021 ITIP funding for the SR 49 Corridor Improvement Project (03-4E170).

CTA also asks for your consideration of the California Department of Transportation (Caltrans) District 3 recommendation to include the strategies outlined below to the Interregional Transportation Strategic Plan (ITSP) for the State Route 20 and State Route 49 corridors in Caltrans District 3. The improvements and strategies outlined below are critical to ensuring the long-term direction for the corridor accounts for the needs within our organization.

- For both State Route 20 and State Route 49 please include ***Access Management*** as improved access and connections between the local and regional transportation system is

important to management the movement of people and freight. This enhances community livability by reducing vehicular and modal conflict points and improving emergency services overall.

- For both State Route 20 and State Route 49 please include ***Truck Climbing and/or Passing Lanes in Locations with Steep Grades*** as the creation of truck climbing lanes reduces recurrent congestion along rural routes where vehicles are unable to consistently pass freight trucks and slow-moving vehicles. This increases safety by reducing conflicts because of speed differentials and reduces the need for vehicles to pass trucks in the opposite direction.
- For State Route 49 please include ***Expand Truck Parking*** as creating or expanding truck parking yields multiple benefits, but not limited to safety for both trucks and travelers to reduce conflicts along the roadway. This enhances community economic opportunities by consolidating truck parking into specific locations. Further enhances greenhouse gas emissions by reducing idling times by providing truckers electrical options for refrigeration and heating.

In order to fulfill the State of California's commitment to enhancing the flow of interregional goods movement, the CTA respectfully requests your consideration.

Sincerely,



Eric Sauer
Senior Vice President
California Trucking Association

Cc: David Kim, Secretary, California State Transportation Agency
Amarjeet Benipal, Director, Caltrans District 3
Hilary Norton, Chair, California Transportation Commission
Mitch Weiss, Executive Director, California Transportation Commission



FIREWISE USA™

Residents reducing wildfire risks

**NEVADA COUNTY
COALITION of
FIREWISE
COMMUNITIES**

*The list below includes NFPA-certified
and those pending assessment.*

*An additional 29 communities are considered
"in training" and working on becoming certified.*

- 6B and Friends
- Ananda Village
- Bear River Pines
- Bear River Ranch
- Bitney Springs
- Cascade Shores
- Dalmatian Drive Neighbors
- Darkhorse
- Deer Creek Southside
- Echo Ridge
- Foxwood-Slate Creek
- Friends of Banner Mountain
- Glenshire-Devonshire
- Glenwood-Maidu-Charlene Nghbrs
- Golden Oaks
- Greater Alta Sierra Community
- Greater Cement Hill Neighbors
- Greater Champion Neighborhood
- Greenhorn
- Grizzly
- Hyatt Blue Sage
- Jones Bar Neighborhoods
- Juniper Hills
- Kentucky Flat
- Lake of the Pines Association
- Lake Vera Round Mountain
- Lake Wildwood
- Lower Colfax
- Martis Peak
- Montezuma Ridge
- Mountain Lakes Estates
- Outer Jackass Flats
- Pine Forest
- Rattlesnake Ridge Estates
- Ridgeview Woodlands
- Salmon Mine – East Sages
- Serene Lakes
- Sherwood Forest
- Sierra Knolls Estates
- Stonebridge HOA
- Tahoe-Donner Association
- The Cedars
- The Gazebos HOA
- Toller Ridge Court
- Upper Rough & Ready
- Town of Washington
- West End Donner Lake
- Wolf Mountain
- You Bet Community



Coalition mailing address:
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Email c/o: susanrogers@nccn.net

October 8, 2021

Scott Sauer
Chief, Office of Multimodal System Planning
Division of Transportation Planning
California Department of Transportation
1120 N Street
Sacramento, CA 95814

SUBJECT: State Route 49 Corridor Improvement Project Interregional Transportation Improvement Program Funding Request

Dear Mr. Sauer:

The Nevada County Coalition of Firewise Communities is pleased to support the Nevada County Transportation Commission's request for Interregional Transportation Improvement Program funding for the State Route 49 Corridor Improvement Project (03-4E170). The planned improvement helps further Nevada County's readiness and resiliency in the event of a major wildfire requiring evacuation. This will be accomplished directly by the planned operational and safety improvements that are needed to facilitate the flow of traffic out of the population centers of Grass Valley/Nevada City and surrounding communities in the event of evacuations related to wildfire events.

Indirectly, the clearing of brush and organic material along the roadway will make the region safer by providing a potentially larger fuel break in the corridor. An investment in this vital risk reduction project makes Nevada County a safer place to live and work. I encourage you to invest in the project to reduce the potential harm caused by wildfire in in our state.

Thank you for consideration,

Scott Beesley
Chair
Nevada County Coalition of Firewise Communities

