DRAFT SUPPLEMENTAL

ENVIRONMENTAL IMPACT REPORT

FOR THE

2016 NEVADA COUNTY REGIONAL TRANSPORTATION PLAN

(SCH: 1999072038)

AUGUST 2017

Prepared for:

Nevada County Transportation Commission
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INTRODUCTION

The Nevada County Transportation Commission (NCTC), as the Regional Transportation Planning Agency (RTPA) for Nevada County, has updated the Nevada County Regional Transportation Plan (RTP) in accordance with federal and state law. The NCTC has determined that the 2016 Nevada County Regional Transportation Plan (2016 RTP or proposed project) is a "Project" within the definition of CEQA. CEQA requires the preparation of an environmental impact report (EIR) prior to approving any project, which may have a significant impact on the environment. For the purposes of CEQA, the term "Project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]).

The NCTC prepared a Program EIR in 1999 to address the environmental impacts associated with the Nevada County RTP. An amendment to the Program EIR was prepared in 2001, 2005, and 2010 to address changes that NCTC made to the Nevada County RTP at that time. CEQA Guidelines Section 15162 requires a Supplemental EIR to be prepared for a project if there is a new significant environmental effect or new information of substantial importance that was not known or could not have been known at the time the previous EIR was certified.

Since the 2010 RTP EIR amendment was certified, the legal requirement to address greenhouse gas emissions in an EIR has arisen. The addition of a greenhouse gas analysis to the EIR by itself is considered “new information of substantial importance that was not known or could not have been known at the time the previous EIR was certified” under [CEQA Guidelines Sec 15162(c)], thus requiring a Supplemental EIR. The addition of new projects and/or refinement of existing projects since the 2010 RTP EIR was certified is also new information that can be addressed in a Supplemental EIR. As such, NCTC has decided that a Supplemental EIR (SEIR) is the appropriate CEQA compliance document for the 2016 RTP.

The supplemental-level analysis focuses on the environmental effects from air quality, greenhouse gas emissions, land use, population and housing, and transportation. This SEIR will be used to evaluate subsequent projects and activities under the 2016 RTP. This SEIR is intended to provide the information and environmental analysis necessary to assist public agency decision-makers in considering approval of the RTP, but not to the level of detail to consider approval of each transportation project identified in the RTP.

The EIR contains a description of the project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. Comments received in response to the NOP were considered in preparing the analysis in this EIR.

PROJECT DESCRIPTION

The proposed project is the adoption and implementation of the 2016 Nevada County Regional Transportation Plan (RTP). The RTP has been prepared to fulfill the state requirements of AB 402 (Government Code Title 7, Chapter 2.5, Sections 65080-65082) using specific guidance from the California Transportation Commission Regional Transportation Plan Guidelines. More specifically, the RTP is a twenty year, comprehensive transportation plan for all modes of transportation. NCTC is required to adopt and submit an updated RTP to the California Transportation Commission (CTC) and the Department of Transportation (Caltrans) every five years. In addition, the RTP is used to documents NCTC's priorities for transportation funding in the region.

The secondary purpose of the RTP is to serve as a foundation for the development of the shorter "action" plans called the Regional Transportation Improvement Program (RTIP), which satisfies California transportation planning requirements, and the federal counterpart referred to as the Federal Transportation Improvement Program (FTIP) for all transportation projects that contain federal transportation dollars or require federal approval.

The RTP contains three primary elements: Policy Element, Action Element, and Financial Element.

The **Policy Element** presents guidance to decision-makers of the implications, impacts, opportunities, and foreclosed options that will result from implementation of the RTP. California law (Government Code Section 65080 (b)) states that each RTP shall include a Policy Element that:

1. Describes the transportation issues in the region;
2. Identifies regional needs expressed within both short and long range planning horizons; and,
3. Maintains internal consistency with the Financial Element and fund estimates.

The **Action Element** identifies programs and actions to implement the RTP in accordance with the goals, objectives, and policies set forth in the Policy Element. It includes regionally significant multimodal projects that currently have funding in place or that are projected to have funding in the future (Fiscally Constrained), while it also identifies other improvement projects that are needed but do not have funding (Fiscally Unconstrained).

The **Financial Element** identifies the current and anticipated revenue sources and financing techniques available to fund the fiscally constrained transportation investments described in the Action Element. It also identifies potential funding shortfalls and sources for the unconstrained project list.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

This SEIR addresses environmental impacts associated with the 2016 RTP that are known to NCTC, were raised during the Notice of Preparation (NOP) process, or raised during preparation of the SEIR. This SEIR discusses potentially significant impacts associated with air quality, greenhouse gas emissions, land use, population and housing, and transportation. During the NOP process,

comments were received from the Native American Heritage Commission (NAHC), and the United Auburn Indian Community (UAIC).

The NAHC provides a regulatory framework for addressing cultural and tribal resources within CEQA documents. Additionally, the NAHC provided Pertinent Statutory Information related to consultation requirements, and examples of Mitigation Measures that may be considered to avoid or minimize significant adverse impacts to tribal cultural resources.

The United Auburn Indian Community (UAIC) requested to receive copies of any archaeological reports that are completed for the project, and also copies of environmental documents for the project so they continue to have the opportunity to comment on appropriate identification, assessment and mitigation related to cultural resources as projects are developed. NCTC initiated Native American consultation as a result of the comment and met with representatives from the UAIC on May 23, 2017. A summary of the consultation meeting is provided in the EIR.

ALTERNATIVES TO THE PROPOSED PROJECT

The CEQA Guidelines require an EIR to describe a reasonable range of alternatives to the project or to the location of the project which would reduce or avoid significant impacts, and which could feasibly accomplish the basic objectives of the proposed project. Since the primary objective of the 2016 RTP is to guide short- and long-term transportation improvements countywide, a discussion of alternative sites is not appropriate. The alternatives analyzed in this EIR include the following four alternatives which includes the proposed project:

- No Project Alternative
- Financially Constrained Alternative (Proposed Project)
- Financially Unconstrained Alternative
- Transit Enhanced Alternative

Alternatives are described in detail in Chapter 5.

Table ES-1 provides a comparison of the alternatives using a qualitative matrix that quantifies the impacts of each alternative relative to the other alternatives. As shown in Table ES-1 below, the Transit Enhanced Alternatives has the lowest overall impact (score of 5). The Financially Unconstrained Alternative ranks second with a score of 10, while the Financially Constrained Alternative ranks third with a score of 11, and the No Project Alternative ranks last with a score of 14.

The Financially Unconstrained Alternative has greater transportation benefits related to congestion relief, vehicle delay and safety, while the Transit Enhanced Alternative has the greater emission (Air Quality/Greenhouse Gas) benefits. The Transit Enhanced Alternative is deemed the environmentally superior alternative because it provides the greatest reduction of potential impacts in comparison to the other alternatives. The feasibility of the environmentally superior alternative(s) is/are based on the funding availability over the planning horizon. At this time funding is programmed for a portion of these alternatives (constrained project list), while funding is not programmed for the unconstrained project list, or enhancement of transit. The NCTC will

need to consider the costs and benefits of additional regional roadway projects from the unconstrained list of projects vs. the enhancement of transit service for the region as additional funds become available in the future.

TABLE ES-1: COMPARISON SUMMARY OF ALTERNATIVES

ENVIRONMENTAL ISSUE	*NO PROJECT*	*FINANCIALLY CONSTRAINED*	*FINANCIALLY UNCONSTRAINED*	*TRANSIT ENHANCED*
Air Quality/ Greenhouse Gases	3 (Medium)	3 (Medium)	3 (Medium)	1 (Best)
	The Transit Enhanced Alternative would result in the lowest potential for adverse impacts on air quality and greenhouse gas emission. As regional roadway projects and transit service would increase under this alternative, the vehicle related air quality and greenhouse gas emissions per capita would decrease.			
Land Use/Population	4 (Worst)	3 (Medium)	2 (Better)	1 (Best)
	The Transit Enhanced Alternative would result in a transportation system that reduces congestion and VMT to meet objectives stated in local general plans.			
Transportation	4 (Worst)	3 (Medium)	1 (Best)	2 (Better)
	The Financially Unconstrained Alternative would result in the greatest potential to reduce impacts associated with regional roadway operational and safety conditions in comparison to the other alternatives. As additional regional roadway projects would increase under this alternative, the traffic volume and hours of delay per capita would decrease improving the overall congestion levels.			
Tribal Cultural Resources	3 (Medium)	2 (Better)	4 (Worst)	1 (Best)
	The Transit Enhanced Alternative would result in the greatest potential to reduce impacts associated with Tribal Resources in comparison to the other alternatives. As additional transit projects would increase consolidation of improvements under this alternative, and would be expected to occur in more developed areas, impacts associated with improvements would be less likely to impacts undiscovered resources within the Planning Area.			

SUMMARY OF IMPACTS AND MITIGATION MEASURES

In accordance with the CEQA Guidelines, this EIR focuses on the significant effects on the environment. The CEQA Guidelines defines a significant effect as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project. A less than significant effect is one in which there is no long or short-term significant adverse change in environmental conditions. Some impacts are reduced to a less than significant level with the implementation of mitigation measures and/or compliance with regulations. The definition of "beneficial" effect is not defined in the CEQA Guidelines, but for purposes of this EIR a beneficial effect is one in which an environmental condition is enhanced or improved.

The environmental impacts of the proposed project, the impact level of significance prior to mitigation, the proposed mitigation measures to mitigate an impact, and the impact level of significance after mitigation are summarized in Table ES-2.

TABLE ES-2: PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
AIR QUALITY			
Impact 3.1-1: Long-Term - Conflict with, or Obstruct, the Applicable Air Quality Plan, Cause a Violation of Air Quality Standards, Contribute Substantially to an Existing Air Quality Violation, or Result in a Cumulatively Considerable Net Increase of a Criteria Pollutant in a Non-Attainment Area	LS		--
Impact 3.1-2: Short-term - Conflict with, or Obstruct, the Applicable Air Quality Plan, Cause a Violation of Air Quality Standards, Contribute Substantially to an Existing Air Quality Violation, or Result in a Cumulatively Considerable Net Increase of a Criteria Pollutant in a Non-Attainment Area	PS	***Mitigation Measure 3.1-1:*** *The implementing agency for any construction activities, including dismantling/demolition of structures, processing/moving materials (sand, gravel, rock, dirt, etc.), or operation of machines/equipment, shall prepare a dust control plan in accordance with NSAQMD Rule 226. The dust control plan shall use reasonable precautions to prevent dust emissions, which may include: cessation of operations at times, cleanup, sweeping, sprinkling, compacting, enclosure, chemical or asphalt sealing, and use of wind screens or snow fences, and other recommended actions by the AQMD.* ***Mitigation Measure 3.1-2:*** *The implementing agency shall consult and coordinate with the NSAQMD prior to the construction of each RTP project, to ensure that all applicable and appropriate criteria pollutant control measures are taken. Projects that are especially large or in special circumstances (such as near schools or other sensitive receptors), additional measures (e.g. limits on active disturbance area or grading areas) may be required, as directed by the NSAQMD.*	LS
Impact 3.1-3: Occasional Localized Carbon Monoxide Concentrations from Traffic Conditions at Some Individual Locations	PS	***Mitigation Measure 3.1-3:*** *The implementing agency shall screen individual RTP projects at the time of design for localized CO hotspot concentrations and, if necessary, incorporate project-specific measures into the project design to reduce or alleviate CO hotspot concentrations.*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.1-4: Create Objectionable Odors Affecting a Substantial Number of People	LS		--
Impact 3.1-5: Potential to release asbestos from earth movement or structural asbestos from demolition/renovation of existing structures	PS	***Mitigation Measure 3.1-4:*** *Prior to construction of RTP projects, the implementing agency should assess the site for the presence of asbestos including asbestos from structures such as road base, bridges, and other structures. In the event that asbestos is present, the implementing agency should comply with applicable state and local regulations regarding asbestos, including ARB's asbestos airborne toxic control measure (ATCM) (Title 17, CCR § 93105 and 93106), to ensure that exposure to construction workers and the public is reduced to an acceptable level. This may include the preparation of an Asbestos Hazard Dust Mitigation Plan to be implemented during construction activities.*	LS
GREENHOUSE GASES AND CLIMATE CHANGE			
Impact 3.2-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment	PS	***Mitigation Measure 3.2-1:*** *The NCTC should explore the feasibility of a transportation pricing policy for the transit system and selected portions of the road network to encourage people to drive less and increase use of transit, walking and bicycling modes. Such a policy may include: free or reduced transit fares during high pollution days; fare-free zones on the transit system; transit vouchers; days on which transit is free; congestion pricing options for portions of the road system, such as tolls on freeways and highways; and parking fees to park in certain high-traffic areas served by public transit.* ***Mitigation Measure 3.2-2:*** *The NCTC should consider a complete streets policy with a strong focus on identifying opportunities to create more active transportation within the region (i.e. bike and pedestrian facilities), in accordance with the following Statewide programs:* • *The Complete Streets Act of 2008 (AB 1358); and* • *Active Transportation Program (SB 99 and AB 101).* ***Mitigation Measure 3.2-3:*** *Consistent with Appendix F of the CEQA Guidelines, the*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		agencies implementing RTP projects should: • *Promote measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal. As the individual RTP projects are designed there should be an explanation as to why certain measures were incorporated in the RTP project and why other measures were dismissed.* • *Site, orient, and design projects to minimize energy consumption, increase water conservation and reduce solid-waste.* • *Promote efforts to reduce peak energy demand in the design and operation of RTP projects.* • *Promote the use of alternate fuels (particularly renewable ones) or energy systems for RTP projects.* • *Promote efforts to recycle materials used in the construction (including demolition phase) of RTP projects.* ***Mitigation Measure 3.2-4:*** *The NCTC should coordinate with local and regional agencies to assist in efforts to develop local and regional CAPs (Climate Action Plans) that address climate change and greenhouse gas emissions. Local and regional CAPs should include the following components:* • *Baseline inventory of GHG emissions from community and municipal sources.* • *A target reduction goal consistent with AB 32.* • *Policies and measures to reduce GHG emissions.* • *Quantification of the effectiveness of the proposed policies and measures.* • *A monitoring program to track the effectiveness and implementation of the CAP(s).* *NCTC's role in the development of local and regional CAPs should include:*	

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		• *Assistance in seeking and securing funding for the development of local and regional CAPs.* • *Collaboration with local and regional agencies throughout their respective planning processes.* ***Mitigation Measure 3.2-5:*** *NCTC should assist local agencies with the development of an Alternative Fuel Vehicle and Infrastructure Policy. The policy should include provisions that address best practices, and standards related to saving energy and reducing GHG emissions through AFV use, including:* • *A procurement policy for using AFV by franchisees of these cities, such as trash haulers, green waste haulers, street sweepers, and curbside recyclable haulers. Such AFVs should have GHG emissions at least 10 percent lower than comparable gasoline- or diesel- powered vehicles.* • *A fleet purchase policy to increase the number of AFVs (i.e., vehicles not powered strictly by gasoline or diesel fuel) for municipally owned fleets.* • *A public education policy to encourage the use of alternative fuel vehicles and development of supporting infrastructure.*	
Impact 3.2-2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases	LS		--
Impact 3.2-3: Project implementation may result in the inefficient, wasteful, or unnecessary use of energy resources	LS		--
LAND USE AND POPULATION			
Impact 3.3-1: Physical Division of an	PS	***Mitigation Measure 3.3.1:*** *Prior to approval of RTP projects, the implementing agency shall consult with local planning staff to ensure that the project will not physically divide*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Established Community		*a community. The consultation should include a more detailed project-level analysis of land uses adjacent to proposed improvements to identify specific impacts. The analysis should consider new road widths and specific project locations in relation to existing roads. If it is determined that a project could physically divide a community, the implementing agency shall redesign the project to avoid the impact, if feasible. The measures could include realignment of the improvements to avoid the affected community. Where avoidance is not feasible, the implementing agency shall incorporate minimization measures to reduce the impact. The measures could include: alignment modifications, right-of-way reductions, provisions for bicycle, pedestrian, and vehicle facilities, and enhanced landscaping and architecture.*	
Impact 3.3-2: Conflicts with Applicable Land Use Plan, Policy, or Regulation Adopted to Avoid or Mitigate an Environmental Effect	LS		--
Impact 3.3-3: Induce Substantial Population Growth in an Area	LS		--
Impact 3.3-4: Displace Substantial Numbers of People or Existing Housing, Necessitating the Construction of Replacement Housing Elsewhere	LS		--
TRANSPORTATION AND CIRCULATION			
Impact 3.4-1: Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system	PS		SU
Impact 3.4-2: Result in a change in the air traffic patterns, including either an increase in traffic levels or a change in location that	LS		--

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
results in substantial safety risks			
Impact 3.4-3: Substantially increase hazards due to design features (e.g. sharp curves or dangerous intersections) or incompatible uses	LS		--
Impact 3.4-4: Interfere substantially with implementation of any adopted non-motorized transportation plan	LS		--
Impact 3.4-5: Result in inadequate emergency access	PS	***Mitigation Measure 3.4.1:*** *The implementing agencies shall develop a traffic control plan for construction projects to reduce the effects of construction on the roadway system throughout the construction period. As part of the traffic control plan for individual projects, project proponents shall coordinate with emergency service providers to ensure that emergency routes are identified and remain available during construction activities.*	LS
Tribal Cultural Resources			
Impact 3.5-1: Cause a substantial adverse change in the significance of a Tribal cultural resource, pursuant to Assembly Bill 52	PS	***Mitigation Measure 3.5.1:*** *Prior to approval of individual RTP projects, the implementing agency shall consult with local tribes who have requested consultation per AB 52 to ensure that the project will not substantially impact tribal resources. Tribal consultation shall specifically include, but not be limited to, consultation with the United Auburn Indian Community (UAIC). The tribal consultation should include a more detailed project-level analysis of proposed improvements to identify specific impacts. Additionally, projects literature and data including cultural reports, records searches, and maps prepared for the project should be provided to local tribes as requested to help facilitate the identification and potential mitigation for resources present.* *If cultural resources are discovered during project-related construction activities, all ground disturbances within a minimum of 50 feet of the find shall be halted until a qualified professional archaeologist can evaluate the discovery. The archaeologist shall*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		examine the resources, assess their significance, and recommend appropriate procedures to the lead agency to either further investigate or mitigate adverse impacts. If the find is determined by the lead agency in consultation with the Native American tribe traditionally and culturally affiliated with the geographic area of the project site to be a tribal cultural resource and the discovered archaeological resource cannot be avoided, then applicable mitigation measures for the resource shall be discussed with the geographically affiliated tribe. Applicable mitigation measures that also consider the cultural values and meaning of the discovered tribal cultural resource, including confidentiality if requested by the tribe, shall be completed (e.g., preservation in place, data recovery program pursuant to PRC §21083.2[i]). During evaluation or mitigative treatment, ground disturbance and construction work could continue on other parts of the project site.	
CUMULATIVE IMPACTS			
Impact 4.1: Cumulative Impact on the Region's Air Quality	LCC		--
Impact 4.2: Increased Transportation Greenhouse Gas Emissions May Contribute to Climate Change	LS		--
Impact 4.3: Cumulative Impact on Communities and Local Land Uses	LS		--
Impact 4.4: Cumulative Impacts on Population and Housing	LS		--
Impact 4.5: Cumulative Impact on the Transportation Network	B		--

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 4.6: Cumulative Impact on Tribal Resources	PS	Implement Mitigation Measure 3.5.1	LS

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1.1 NEVADA COUNTY TRANSPORTATION COMMISSION

The Nevada County Transportation Commission (NCTC) is the Regional Transportation Planning Agency (RTPA) for Nevada County, which includes the Cities of Grass Valley and Nevada City, the Town of Truckee, and the County of Nevada. As the RTPA, California State law requires the NCTC to prepare, adopt, and submit an updated Regional Transportation Plan (RTP) to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) every five years.

1.2 PLANNING FRAMEWORK

The purpose of the RTP is to document the short-term (2015-2025) and long-term (2025-2035) regional transportation needs covering the RTP horizon and set forth an effective, cost-feasible action plan to meet these needs. The RTP documents the policy direction, actions, and funding strategies designed to maintain and improve the regional transportation system. The RTP promotes a continuous, comprehensive, and cooperative transportation planning process that facilitates the efficient development and implementation of projects while maintaining Nevada County's commitment to public health and environmental quality.

PROCESS

The NCTC is responsible for the preparation of the Nevada County RTP every five years. NCTC must ensure that all requirements of the RTP process are met. The NCTC prepares a draft RTP that includes all of the required elements, and solicits public comment from the Technical Advisory Committee (TAC), jurisdictions, neighboring RTPAs, and a wide variety of groups, including the general public.

Caltrans encourages the consideration of transportation related concerns of Native American Tribal Governments within the RTP boundaries. The United Auburn Indian Community (UAIC) is a federally recognized tribe whose ancestral territory includes Nevada County and beyond. The historic Auburn Rancheria is located in the Sierra Nevada foothills near Auburn, California. The UAIC is comprised of both Miwok and Maidu Indians. The UAIC and the NCTC have consulted on this project at the request of the UAIC and in accordance with the state law.

The RTP undergoes environmental documentation, in conformance with the California Environmental Quality Act (CEQA), and then it is considered for adoption by the NCTC Commission. After the RTP is adopted, NCTC remains responsive to changing conditions throughout the County on an ongoing basis, and as new or redefined projects are needed, the action and financial sections of the RTP are amended.

Government Participation

Planning the County-wide transportation system is accomplished through coordination with various governmental agencies, advisory committees and public input as follows:

- The Nevada County Transportation Commission, serving as the RTPA, is made up of seven Commissioners and four staff. The Commission is made up of the following representatives: Four members are appointed by the Board of Supervisors and three are appointed by the incorporated municipalities in the County. The Board of Supervisors appoints two members of the Board of Supervisors and two county at-large representatives. The municipalities appoint the other three city/town representatives, one each from Grass Valley, Nevada City and the Town of Truckee. The Commission holds meetings the third Wednesday of every other month, and the public is welcome.
- The Technical Advisory Committee (TAC) is made up of representatives of local public works and planning departments, Caltrans, public airport operators, the air pollution control district and public transit operators. Membership consists of individuals assigned by staff of local jurisdictions and other participating organizations. The Committee provides technical input on transportation issues and ensures there is coordination and cooperation in the transportation planning process.
- The Transit Services Commission provides policy direction and advises the transit operator in western Nevada County on matters relating to the daily operations of the transit and paratransit services. The Transit Services Commission is made up of the following representatives: the Nevada County Board of Supervisors appoints two representatives from the Board of Supervisors, as well as two county-at-large representatives; the City Councils of Grass Valley and Nevada City each have one representative, and jointly appoint one city-at-large representative.
- The Western Nevada County Conformity Working Group is made up of representatives from the Nevada County Transportation Commission, Northern Sierra Air Quality Management District, Caltrans, California Air Resources Board, U.S. Environmental Protection Agency, Federal Highway Administration, and Federal Transit Administration. The purpose of this technical working group is to provide interagency consultation and coordination on transportation conformity.

Citizen Participation

Public involvement is a major component of the transportation planning process. The NCTC makes a concerted effort to solicit public input in many aspects of transportation planning within Nevada County. Specific examples of community participation are listed below:

- Grass Valley Thursday Night Market (August 6, 2015).
- Truckee Thursdays (August 13, 2015).
- Nevada City Farmers Market (August 15, 2015)
- NCTC RTP Online Survey
- Citizens are encouraged to attend and speak at the NCTC meetings on any matter included for discussion on the agenda at that meeting.
- The NCTC produces and distributes a bi-monthly newsletter and maintains a website in an effort to keep the public informed of transportation planning efforts underway in Nevada County.

- The Social Services Transportation Advisory Council (SSTAC) consists of appointed citizens representing a wide range of transit dependent groups. The SSTAC recommends action to the NCTC relative to the unmet transit needs finding and advise the Commission on transit issues. 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 the local social service providers for seniors.
    - Two representatives of local social service providers for the disabled.
    - One representative of a local social service provider for persons of limited means.
    - Two representatives from the local consolidated transportation service agency.
    - Two representatives of transit users in western Nevada County.
    - One representative of transit drivers in western Nevada County.

Every person in Nevada County is affected by transportation and, as such, is an important component of the transportation planning process. All interested parties are encouraged to provide input into the transportation planning process.

1.3 PURPOSE OF THE EIR

NCTC, as lead agency, determined that the proposed project is a "Project" within the definition of CEQA. CEQA requires the preparation of an environmental impact report (EIR) prior to approving any project, which may have a significant impact on the environment. For the purposes of CEQA, the term "Project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]).

An EIR must disclose the expected environmental impacts, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the proposed project that could reduce or avoid its adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize environmental impacts of proposed development, and an obligation to balance a variety of public objectives, including economic, environmental, and social factors.

1.4 TYPE OF EIR

The State CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a Supplemental EIR (SEIR) pursuant to CEQA Guidelines Section 15162. Section 15162 states that a SEIR must be prepared for a project if there is a new significant environmental effect or new information of substantial importance that was not known or could not have been known at the time the previous EIR was certified [CEQA Guidelines Sec 15162(c)]. Furthermore, the CEQA Guidelines provide that a SEIR may be prepared if the project has only minor revisions [CEQA Guidelines Sec 15162(c)].

The legal requirements to address greenhouse gas emissions and climate change, and tribal resources in an EIR has changed since the 2010 RTP EIR was certified. The additional analysis required by the EIR is considered "new information of substantial importance that was not known or could not have been known at the time the previous EIR was certified" under [CEQA Guidelines Sec 15162(c)], thus requiring an SEIR. The addition of new projects and/or refinement of existing projects since the 2010 RTP EIR was certified is also new information that must be addressed in the SEIR.

The supplemental-level analysis focuses on the environmental effects from air quality, greenhouse gas emissions, transportation, land use, population, and tribal resources. This SEIR will be used to evaluate subsequent projects and activities under the 2016 RTP. This SEIR is intended to provide the information and environmental analysis necessary to assist public agency decision-makers in considering approval of the RTP, but not to the level of detail to consider approval of each transportation project identified in the RTP.

Additional environmental review under CEQA will be required and would be generally based on the subsequent project's consistency with the 2016 RTP and the analysis in this SEIR, as well as the analysis in the original 1999 Program EIR with 2001, 2005, and 2010 amendments. It may be determined that some future improvements may be exempt from environmental review. When individual subsequent projects or activities under the 2016 RTP are proposed, the lead agency that would approve and/or implement the individual project will examine the projects or activities to determine whether their effects were adequately analyzed in the 1999 Program EIR (CEQA Guidelines Section 15168). If the projects or activities would have no effects beyond those disclosed in this SEIR, no further CEQA compliance would be required.

1.5 INTENDED USE OF THE SEIR

NCTC, as the lead agency, has prepared this SEIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from adoption of the proposed project ("2016 RTP") and subsequent implementation of individual projects identified in the proposed project. The environmental review process enables interested parties to evaluate the proposed project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the project. While CEQA requires that consideration be given to avoiding adverse environmental effects, the lead agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

This SEIR may be used for the following direct and indirect approvals and permits associated with adoption and implementation of the 2016 RTP.

NEVADA COUNTY TRANSPORTATION COMMISSION

The NCTC is the lead agency for the 2016 RTP. The 2016 RTP will be presented to NCTC's Commission for comment, review, and recommendations. The NCTC Commission has the sole discretionary authority to adopt the 2016 RTP. In order to approve the 2016 RTP, the NCTC Commission would consider the following actions:

- Certification of the 2016 Regional Transportation Plan SEIR;
- Adoption of required CEQA findings for the above action;
- Adoption of a Mitigation Monitoring and Reporting Program; and
- Adoption of the 2016 Regional Transportation Plan.

OTHER GOVERNMENTAL AGENCY APPROVALS

The NCTC approval of the 2016 RTP would not require any actions by other public agencies. Subsequent infrastructure projects and other actions to support implementation of the 2016 RTP would require actions, including permits and approvals, by other public agencies that may include, but are not necessarily limited to:

- California Department of Fish and Wildlife (CDFW) approval of potential future streambed alteration agreements, pursuant to Fish and Game Code. Approval of any future potential take of state-listed wildlife and plant species covered under the California Endangered Species Act.

- California Department of Transportation (Caltrans) approval of projects and encroachment permits for projects affecting state highway facilities.

- Regional Water Quality Control Board (RWQCB) approval for National Pollution Discharge Elimination System compliance, including permits and Storm Water Pollution Prevention Plan approval and monitoring.

- Northern Sierra Air Quality Management District (NSAQMD) finding of RTP conformance with the State Implementation Plan if Nevada County becomes non-attainment for federal air quality standards, as well as approval of dust control plans and other permits for subsequent projects.

- U.S. Army Corps of Engineers (USACE) approval of any future wetland fill activities, pursuant to the Clean Water Act.

- U.S. Fish and Wildlife Service (USFWS) approvals involving any future potential take of federally listed wildlife and plant species and their habitats, pursuant to the Federal Endangered Species Act.

SUBSEQUENT PROJECTS

This SEIR provides a review of environmental effects associated with implementation of the 2016 RTP. Agencies considering approval of subsequent activities under the 2016 RTP project would utilize the 1999 Program EIR, 2001 EIR Addendum, 2005 EIR Addendum, and 2010 EIR Addendum as well as this SEIR, as the basis in determining potential environmental effects and the appropriate level of environmental review of a subsequent activity.

The NCTC and agencies within the NCTC's jurisdiction, including Caltrans District 3, Nevada County, the Cities of Grass Valley and Nevada City, and Town of Truckee, may perform or consider the following subsequent activities to implement the 2016 RTP:

- Tier off of the 1999 Program EIR, 2001 EIR Addendum, 2005 EIR Addendum, and 2010 EIR Addendum, as well as this SEIR, for project-level environmental analysis;
- Further focused feasibility, planning and design studies;
- Various fee and financing programs; and
- Carrying out various infrastructure improvement projects.

1.6 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

The term "Responsible Agency" includes all public agencies other than the Lead Agency that have discretionary approval power over the project or an aspect of the project (CEQA Guidelines Section 15381). For the purpose of CEQA, a "Trustee" agency has jurisdiction by law over natural resources that are held in trust for the people of the State of California (CEQA Guidelines Section 15386). While no Responsible Agencies or Trustee Agencies are responsible for approvals associated with adoption of the RTP, implementation of projects identified in the RTP will require permits and approvals from the Lead Agency, and Trustee, and Responsible Agencies, which may include the following:

- County of Nevada
- City of Nevada City
- Northern Sierra Air Management District
- California Department of Transportation
- California Department of Conservation
- State Water Resources Control Board
- U.S. Army Corps of Engineers
- City of Grass Valley
- Town of Truckee
- California Transportation Commission
- California Department of Fish and Wildlife
- Regional Water Quality Control Board
- Native American Heritage Commission
- U.S. Fish and Wildlife Service

1.7 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the SEIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION AND INITIAL STUDY

The NCTC circulated a Notice of Preparation (NOP) of an EIR for the proposed project on February 23, 2017 to trustee and responsible agencies, the State Clearinghouse (SCH# 1999072038), and the public. The NOP and comments are presented in Appendix A.

DRAFT SEIR

This document constitutes the Draft SEIR, in accordance with CEQA Guidelines Section 15162. The analysis in this document focuses on "new information" of substantial importance that was not known or could not have been known at the time the 2010 RTP EIR was certified. This includes the addition of new projects and/or refinement of existing projects from the 2010 RTP project lists, as well as the requirement for an analysis of greenhouse gas emissions.

The Draft SEIR contains a description of the project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. This Draft SEIR provides detailed analysis of potentially significant and significant and unavoidable impacts that result from the new information. Comments received in response to the NOP were considered in preparing the analysis in this SEIR. Upon completion of the Draft SEIR, the NCTC will file the Notice of Completion (NOC) with the State Clearinghouse of the Governor's Office of Planning and Research to begin the public review period.

PUBLIC NOTICE/PUBLIC REVIEW

Concurrent with the NOC, the NCTC will provide a public notice of availability for the Draft SEIR, and invite comment from the general public, agencies, organizations, and other interested parties. Consistent with CEQA requirements, the review period for this Draft SEIR is forty-five (45) days. Public comment on the Draft SEIR will be accepted both in written form and oral form. All comments or questions regarding the Draft SEIR should be addressed to:

Attn: Dan Landon Executive Director
Nevada County Transportation Commission
101 Providence Mine Road, Suite 102
Nevada City, CA 95959
(530) 265-3260

RESPONSE TO COMMENTS/FINAL SEIR

Following the public review period, a Final SEIR will be prepared. The Final SEIR will respond to written comments received during the public review period and to oral comments during such review period.

CERTIFICATION OF THE SEIR/PROJECT CONSIDERATION

The NCTC will review and consider the Draft SEIR together with the Final SEIR. If the NCTC finds that the Final SEIR is "adequate and complete", the NCTC may certify the Final SEIR in accordance with CEQA. The rule of adequacy generally holds that an SEIR can be certified if:

1) The SEIR shows a good faith effort at full disclosure of environmental information; and

2) The SEIR provides sufficient analysis to allow decisions to be made regarding the proposed project in contemplation of environmental considerations.

Upon review and consideration of the Final SEIR, the NCTC may take action to approve, revise, or reject the project. A decision to approve the proposed project, for which this SEIR identifies significant environmental effects, must be accompanied by written findings in accordance with State CEQA Guidelines Sections 15091 and 15093. A Mitigation Monitoring Program, as described below, would also be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. The Mitigation Monitoring Program will be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the SEIR.

1.8 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the State CEQA Guidelines identify the content requirements for Draft and Final SEIRs. An SEIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. Discussion of the environmental issues addressed in the Draft SEIR was established through review of environmental and planning documentation developed for the project, environmental and planning documentation prepared for recent projects located within Nevada County, and responses to the Notice of Preparation (NOP). This Draft SEIR is organized in the following manner:

EXECUTIVE SUMMARY

The Executive Summary summarizes the characteristics of the proposed project, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the project's environmental impacts and possible mitigation measures. This chapter identifies alternatives that reduce or avoid at least one significant environmental effect of the proposed project.

CHAPTER 1.0 – INTRODUCTION

Chapter 1.0 briefly describes the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an SEIR, identifies the scope and organization of the Draft SEIR, and summarizes comments received on the NOP.

CHAPTER 2.0 – PROJECT DESCRIPTION

Chapter 2.0 provides a detailed description of the proposed project, including the location, intended objectives, background information, the physical and technical characteristics, including the decisions subject to CEQA, subsequent projects and activities, and a list of related agency action requirements.

CHAPTER 3.0 - ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Chapter 3.0 contains an analysis of environmental topic areas as identified below. Each subchapter addressing a topical area is organized as follows:

Environmental Setting. A description of the existing environment as it pertains to the topical area.

Regulatory Setting. A description of the regulatory environment that may be applicable to the project.

Impacts and Mitigation Measures. Identification of the thresholds of significant by which impacts are determined, a description of project-related impacts associated with the environmental topic, identification of appropriate mitigation measures, and a conclusion as to the significance of each impact. The following environmental topics are addressed in this section:

- Air Quality
- Green House Gases/Climate Change
- Land Use and Population
- Transportation and Circulation
- Tribal Cultural Resources

CHAPTER 4.0 – OTHER CEQA-REQUIRED TOPICS

Chapter 4.0 evaluates and describes the following CEQA required topics: impacts considered less-than-significant, significant and irreversible impacts, growth-inducing effects, cumulative, and significant and unavoidable environmental effects.

CHAPTER 5.0 - ALTERNATIVES TO THE PROJECT

Chapter 5.0 provides a comparative analysis between the merits of the proposed project and the selected alternatives. State CEQA Guidelines Section 15126.6 requires that an SEIR describe a range of reasonable alternatives to the project, which could feasibly attain the basic objectives of the project and avoid and/or lessen any significant environmental effects of the project.

CHAPTER 6 - REPORT PREPARERS

Chapter 6.0 lists all authors and agencies that assisted in the preparation of the SEIR, by name, title, and company or agency affiliation.

APPENDICES

This section includes all notices and other procedural documents pertinent to the SEIR, as well as technical material prepared to support the analysis.

1.9 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The NCTC received two comment letters on the NOP. A copy of each letter is provided in Appendix A of this Draft SEIR and the comments are summarized below.

Native American Heritage Commission (NAHC). NAHC discussed the potential for adverse effects to historical resources and provided details relative to AB 52 and SB 18 compliance.

United Auburn Indian Community (UAIC). UAIC provided their concerns with development within their aboriginal territory and requested consultation with NCTC.

The proposed project is the 2016 Nevada County Regional Transportation Plan (2016 RTP or RTP). This section describes the primary components of the 2016 RTP and provides the following information: (1) The location and boundaries of the proposed project on a regional map; (2) A statement of objectives sought by the proposed project; and (3) A general description of the project's technical, economic and environmental characteristics. Figures referenced throughout this section are located at the end of the section.

2.1 PROJECT LOCATION

Project Location and Setting

The study area includes the entire County of Nevada. Nevada County lies within the northern portion of California, stretching from the eastern end of the Sacramento Valley across the Sierra Nevada to the State of Nevada. Figure-2.0-1 illustrates the regional location and Figure-2.0-2 illustrates the project vicinity (i.e. Nevada County).

Nevada County's geography has led to distinctive development patterns in the eastern and western portions of the County. Western Nevada County is very attractive for residential and commercial developments due to the rural character of the area and the quality of life it affords.

The Grass Valley/Nevada City area has become the primary population center in western Nevada County. This foothill area of the Sierras is a combination of tree-covered rolling hills and stream channels, which have greatly affected road and utility locations. The major transportation facilities in western Nevada County are State Routes 20, 49, and 174.

Eastern Nevada County is known for its many recreational opportunities. This mountainous area of the Sierra Nevada offers a full range of winter and summer recreational activities, such as skiing, camping, hiking, and kayaking. These recreational opportunities and the proximity of this area to Reno and Lake Tahoe increase its popularity as a tourist attraction.

The Town of Truckee is the major population center for eastern Nevada County. In addition to being a station for rail freight and passenger service, Truckee is at the crossroads of Interstate 80 and State Routes 89 and 267. Interstate 80 is a major transcontinental route, and the two state routes are the northern entrances to the Tahoe Basin.

General Plan and Zoning Designations

The Nevada County RTP is a regional transportation planning document and covers all of Nevada County. The Nevada County Transportation Commission (NCTC) does not have land use authority. The applicable General Plan land use and zoning designations for the areas covered by the RTP include the General Plan land use designations and zoning established by the Nevada County General Plan, Nevada County Zoning Ordinance, and the General Plans and zoning ordinances of the cities of Grass Valley, Nevada City, and the Town of Truckee.

Purpose and Need

State law requires that the RTP be updated and submitted to the California Transportation Commission (CTC) every five years. The RTP needs to be updated in order to demonstrate the progress made toward implementing the 2010 RTP, to reflect any changing conditions, and to determine if changes are warranted to the NCTC's policies, programs, and projects for the next 20 years.

The purpose of the Regional Transportation Plan (RTP) is to establish transportation policy and to document the short-term (2015-2025) and long-term (2025-2035) regional transportation needs covering the RTP horizon and to set forth an effective, cost-feasible Action Plan to meet these needs.

A key focus of the 2016 RTP is to transform the document to a performance-based planning approach that will bring a more systematic method of using information on transportation system performance. This approach will assist NCTC in developing investment priorities and will guide outcomes for the transportation plan and related planning documents. The update is also intended to create a better alignment of performance monitoring and transportation planning between state agencies, NCTC, and its regional partners.

2.2 PROJECT DESCRIPTION

The proposed project is the adoption and implementation of the 2016 Nevada County Regional Transportation Plan (RTP). The RTP has been prepared to fulfill the state requirements of AB 402 (Government Code Title 7, Chapter 2.5, Sections 65080-65082) using specific guidance from the California Transportation Commission Regional Transportation Plan Guidelines. More specifically, the RTP is a twenty year, comprehensive transportation plan for all modes of transportation. NCTC is required to adopt and submit an updated RTP to the California Transportation Commission (CTC) and the Department of Transportation (Caltrans) every five years. In addition, the RTP is used to documents NCTC's priorities for transportation funding in the region.

The RTP contains three primary elements: Policy Element, Action Element, and Financial Element.

The **Policy Element** presents guidance to decision-makers of the implications, impacts, opportunities, and foreclosed options that will result from implementation of the RTP.

California law (Government Code Section 65080 (b)) states that each RTP shall include a Policy Element that:

1. Describes the transportation issues in the region;
2. Identifies regional needs expressed within both short and long range planning horizons; and,
3. Maintains internal consistency with the Financial Element and fund estimates.

The Policy Element of the RTP provides goals, and policies to reflect the region's needs and priorities, and to guide the development and management of the region's transportation systems. The goals,

and policies in the 2016 RTP will update those in the existing 2010 RTP. The 2016 NCTC RTP identifies the following project goals.

- Provide for the safe and efficient movement of all people, goods, and services, on the roadway network.
- Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life.
- Develop an economically sustainable transportation system.
- Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.

The **Action Element** identifies programs and actions to implement the RTP in accordance with the goals, objectives, and policies set forth in the Policy Element. It includes regionally significant multimodal projects that currently have funding in place or that are projected to have funding in the future (Fiscally Constrained), while it also identifies other improvement projects that are needed but do not have funding (Fiscally Unconstrained) and actions that address regional transportation issues and needs. The Action Element of the RTP consists of short-term (2015-2025) and long-term (2025-2035) projects.

The **Financial Element** discusses the financial issues involved with implementing the transportation projects and programs contained in the RTP. To qualify for federal or state funding, projects must be included in or consistent with the RTP. The Financial Element provides estimates of the costs and revenues necessary to implement the projects identified in the Action Element. It also identifies the funding constrained list of short-term and long-term projects, anticipated funding sources, including federal, state, and local sources, and potential funding shortfalls. The Financial Element identifies the candidate projects or fiscally unconstrained projects if additional funding becomes available.

2.3 PROJECT LISTS

REGIONAL ROADWAY PROJECTS

Short-term Financially Constrained Roadway Projects

Short-term financially constrained improvements are those that can reasonably be expected to be funded and begin construction prior to 2025. Financially constrained (funded) RTP projects for Eastern County and Western County are shown on Table-2.3-1 and Table-2.3-2 below.

TABLE-2.3-1: WESTERN NEVADA COUNTY: FINANCIALLY CONSTRAINED (FUNDED) RTP PROJECTS - SHORT TERM IMPROVEMENTS 2015-2025

LOCATION	PROPOSED IMPROVEMENT	OBJECTIVES SUPPORTED	TOTAL COST	FUNDING SOURCE(S)		ESTIMATED CONSTRUCTION DATE
SR 174 from Maple Way to You Bet Road	Realign curves, widen shoulders, add a left turn lane at Greenhorn Access Rd., and improve clear recovery zone (St. Hwy)	1.A	$28,456,000	Caltrans State Highway Operations and Protection Program (SHOPP)		2018/19
Combie Rd. from SR 49 to Magnolia Rd.	Widen to 5 Lanes from SR 49 to Magnolia Rd. (R)[2]	1.A 1.B	$4,600,000	$3,697,171 $902,829	Co. Dev. Fee Local Funds	2017/18
Combie Rd. at Higgins Rd.	Intersection improvements	1.A 1.B	$250,000	$111,761 $138,239	Co. LTMF Local Funds	2017/18
SR 49 Widening – North of La Barr Meadows Road to McKnight Way Interchange	Project Development for the future construction of frontage road system and widening of SR 49 (St. Hwy)	1.A 1.B	$6,000,000	Regional Improvement Program (RIP)		TBD[3]
			Total	**$39,306,000**		

Notes:
[2](R) indicates regionally significant project
[3]TBD = To be determined. NCTC currently has $3,000,000 programmed for the Project Approval/Environmental Documentation in FY 2015/16 and $3,000,000 programmed for Plans, Specifications, and Estimates in FY 2019/20. The estimated construction date has not yet been determined
Source: NCTC, 2016.

TABLE-2.3-2: EASTERN NEVADA COUNTY: FINANCIALLY CONSTRAINED (FUNDED) RTP PROJECTS SHORT TERM IMPROVEMENTS 2015-2025

LOCATION	PROPOSED IMPROVEMENT	OBJECTIVES SUPPORTED	TOTAL COST	FUNDING SOURCE(S)		ESTIMATED CONSTRUCTION DATE
Donner Pass Rd./Cold Stream Rd./I-80 EB Ramps	Construct 1-lane roundabout (R)[2]	1.A 1.B	$3,500,000	$3,500,000	Truckee TIF[3]	2015-2025
Donner Pass Rd./Bridge St.	Construct 1-lane roundabout or equivalent improvement (R)	1.A 1.B	$2,500,000	$2,500,000	Truckee TIF	2015-2025
Bridge St./West River St.	Construct 1-lane roundabout or equivalent improvement (R)	1.A 1.B	$2,500,000	$2,500,000	Truckee TIF	2015-2025
Donner Pass Rd./Pioneer Trail	Convert to 2-lane roundabout (R)	1.A 1.B	$750,000	$742,000 $8,000	Truckee TIF Local Funding	2015-2025
SR 267/Brockway Rd./Soaring Way	Construct 3-lane roundabout (R)	1.A 1.B	$4,000,000	$3,640,000 $360,000	Truckee TIF Local Funding	2015-2025

LOCATION	*PROPOSED IMPROVEMENT*	*OBJECTIVES SUPPORTED*	*TOTAL COST*	*FUNDING SOURCE(S)*		*ESTIMATED CONSTRUCTION DATE*
Glenshire Dr./Dorchester Rd. (West)	Eastbound left turn lane (R)	1.A 1.B	$500,000	$260,000 $240,000	Truckee TIF Local Funding	2015-2018
SR 89 North/Rainbow Dr.	Southbound left turn lane (R)	1.A 1.B	$500,000	$455,000 $45,000	Truckee TIF Local Funding	2015-2025
Brockway Rd./Reynolds Wy.	Eastbound left turn lane (R)	1.A 1.B	$500,000	$485,000 $15,000	Truckee TIF Local Funding	2017-2018
Donner Pass Rd./South Shore Dr.	Westbound left turn lane (R)	1.A 1.B	$500,000	$500,000	Truckee TIF	2015-2025
Church St. Extension	Extend Donner Pass Rd. to Glenshire Dr. (R)	1.B	$5,500,000	5,500,000	Truckee TIF	2015-2025
Glenshire Dr.	Add shoulders from Berkshire Circle to Wiltshire Ln. (R)	1.A	$2,650,000	$1,049,400 $1,600,600	Truckee TIF Local Funding	2016-2018
Donner Pass Rd.	Widening and add bike lanes from I-80 to Truckee Town limits (R)	1.A 1.B 2.A 2.B	$10,300,000	$310,000 $155,000 $9,835,000	Nevada Co. Placer Co. FLAP[4]	2019-2020
Donner Pass Rd.	Add shoulders from South Shore Dr. to Truckee Town limits (R)	1.A 1.B	$1,300,000	$547,300 $752,700	Truckee TIF Local Funding	2015-2025
West River St.	Add shoulders entire length (R)	1.A	$3,250,000	$1,248,000 $2,002,000	Truckee TIF Local Funding	2015-2025
Glenshire Dr./Hirschdale Rd.	Add shoulders Truckee Town limits to I-80 WB ramps (R)	1.A 1.B	$3,000,000	$2,490,000 $510,000	Truckee TIF Local Funding	2015-2025
Northwoods Blvd./Donner Pass Rd.	Construct 1-lane roundabout (R)	1.A 1.B	$2,490,000	$2,490,000	Local Funding	2017-2019
Donner Pass Rd./Church St.	Construct 1-lane roundabout (R)	1.A 1.B	$2,000,000	$1,000,000 $1,000,000	Truckee TIF Private Funds	2015-2025
			Total	**$45,740,000**		

Notes:
[2](R) indicates regionally significant project
[3]TIF = Transportation Impact Fee
[4]FLAP = Federal Lands Access Program
Source: NCTC, 2016.

Long-term Financially Constrained Roadway Projects

The "Financially Constrained" long-term project list identifies projects that can reasonably be expected to be funded and constructed between 2025-2035. Long-term Financially constrained (funded) RTP projects for Eastern County and Western County are shown on Table-2.3-3 and Table-2.3-4 below.

TABLE-2.3-3: WESTERN NEVADA COUNTY: FINANCIALLY CONSTRAINED (FUNDED) RTP PROJECTS LONG TERM IMPROVEMENTS 2025-2035

LOCATION	*PROPOSED IMPROVEMENT*	*OBJECTIVES SUPPORTED*	*TOTAL COST*	*FUNDING SOURCE(S)*		*ESTIMATED CONSTRUCTION DATE2*
McKnight Way Interchange SR 49 SB and NB Ramps	Intersection improvements	1.A 1.B	$8,000,000	$4,918,526 $3,081,474	RTMF[3] Local Funds	TBD
SR 20/49 at Uren St.	Intersection improvements	1.A 1.B	$1,088,655	$225,911 $862,745	RTMF Local Funds	TBD
East Main St. at Bennett St. and Richardson St.	Intersection improvements	1.A 1.B	$1,500,000	$1,458,645 $41,355	RTMF Local Funds	TBD
South Auburn St. at SR 20/49 NB Ramps	Install traffic signal	1.A 1.B	$1,033,842	$999,125 $34,717	RTMF Local Funds	TBD
SR 49 at Coyote St.	Intersection improvements	1.A	$350,000	$115,283 $234,717	RTMF Local Funds	TBD
SR 20/49 SB Off Ramp at Ridge Rd./Gold Flat Rd	Widen SB off ramp and add right turn lane (R)	1.A 1.B	$670,000	$338,466 $331,534	RTMF Local funds	TBD
SR 20/49 NB Ramps/Idaho Maryland Rd.	Install coordinated signals at ramps and Railroad Ave. (R)[4]	1.A 1.B	$1,380,043	1,333,700 $46,342	RTMF Local Funds	TBD
SR 20 EB Ramp at McCourtney Rd.	Install signal or single lane roundabout (R)	1.A 1.B	$1,556,515	$483,627 $1,072,888	RTMF Local Funds	TBD
Rough and Ready Hwy. at Ridge Road	Install signal or roundabout	1.A 1.B	$975,000	Co. LTMF[5]		TBD
SR 20 at Pleasant Valley Rd.	Add additional SB left-turn lane and receiving lane on SR-20	1.A 1.B	$600,000	Co. LTMF		TBD
Ridge Rd.	Widen to 4 lanes and install bike lanes, curb gutter, and sidewalks from Hughes Rd. to Sierra College Dr.	1.A 1.B	$751,376	$173,394 $577,981	GVTIF[6] Local Funds	TBD
Dorsey Dr. at Sutton Way	Install a single lane roundabout at intersection (R)	1.A 1.B	$1,121,115	GVTIF		TBD

LOCATION	*PROPOSED IMPROVEMENT*	*OBJECTIVES SUPPORTED*	*TOTAL COST*	*FUNDING SOURCE(S)*		*ESTIMATED CONSTRUCTION DATE2*
East Main St.- Bennett St. to Idaho-Maryland Rd.	Widen roadway to provide 12' travel lanes and sidewalks on south side (R)	1.A 1.B 2.A 2.B	$1,849,391	GVTIF		TBD
East Main St.- Idaho-Maryland Rd. to Hughes Rd.	Widen to provide three travel lanes and bike lanes. Install curb, gutter, and sidewalk on the west side of the street. (R)	1.A 1.B 2.A 2.B	$1,335,148	$130,258 $1,204,890	GVTIF Local Funds	TBD
Ophir St. at Bennett St.	Install traffic signal (R)	1.A 1.B	$828,953	GVTIF		TBD
Idaho Maryland Dr./Centennial Dr.	Realign Centennial Dr. to intersect Idaho Maryland Rd. at the Spring Hill intersection and install traffic signal (R)	1.A 1.B	$3,082,724	GVTIF		TBD
Idaho Maryland from East Main St. to SR 20/49 Ramps	Intersection improvements	1.A 1.B	$213,879	GVTIF		TBD
Brunswick Rd. at Idaho Maryland Rd.	Re-align roadway and intersection improvements	1.A 1.B	$1,299,107	$958,091 $341,016	GVTIF Local Funds	TBD
Dorsey Dr. Extension to Brunswick Rd.	Extend two lane road from Sutton Way to Brunswick Road	1.A 1.B	$5,464,511	GVTIF		TBD
Railroad Ave. Extension to Bennett Rd.	Extend two lane road from Railroad Avenue to Bennett Road	1.B	$2,011,362	GVTIF		TBD
Bank St. Bridge	Bridge replacement	1.A 1.B	$549,773	$142,941 $406,832	GVTIF Local Funds	TBD
		Total	**$35,661,394**			

Notes:
[1]Map ID refers to Figure
[2]Specific funding and implementation years for long-term projects will be determined by the responsible jurisdiction/agency and dependent on available revenues and adopted priorities.
[3]RTMF = Regional Transportation Mitigation Fee
[4](R) indicates regionally significant project
[5]LTMF = Local Transportation Mitigation Fee
[6]GVTIF = Grass Valley Transportation Impact Fee
Source: NCTC, 2016.

TABLE-2.3-4: EASTERN NEVADA COUNTY: FINANCIALLY CONSTRAINED (FUNDED) RTP PROJECTS LONG TERM IMPROVEMENTS 2025-2035

LOCATION	*PROPOSED IMPROVEMENT*	*OBJECTIVES SUPPORTED*	*TOTAL COST*	*FUNDING SOURCE(S)*		*ESTIMATED CONSTRUCTION DATE*
SR 89 N/I-80 WB Ramps	Construct 2-lane roundabout (R)[2]	1.A 1.B	$4,000,000	$4,000,000	Truckee TIF	2025-2035
SR 267/I-80 EB Ramps	Construct 2-lane roundabout (R)	1.A 1.B	$4,000,000	$4,000,000	Truckee TIF	2025-2035
Donner Pass Rd./I-80 WB Ramps (Western Interchange)	Construct 1-lane roundabout (R)	1.A 1.B	$3,500,000	$3,500,000	Truckee TIF	2025-2035
West River St./McIver Crossing	Construct 1-lane roundabout (R)	1.A 1.B	$2,500,000	$2,480,000 $20,000	Truckee TIF Local Funding	2025-2035
Donner Pass Rd./I-80 EB Off Ramp (Eastern Interchange)	Construct 1-lane roundabout (R)	1.A 1.B	$3,500,000	$3,465,000 $35,000	Truckee TIF Local Funding	2025-2035
Pioneer Trail & Bridge Street Extension	Provide 2 travel lanes from Pioneer Commerce Center to Northwoods Blvd. and from Jiboom St. to Pioneer Trails (R)	1.A 1.B	$20,000,000	$20,000,000	Truckee TIF	2025-2035
SR 267	Widen to 4 lanes from Brockway Rd. to Placer County line (R)	1.B	$4,100,000	$3,280,000 $820,000	Truckee TIF Local Funding	2025-2035
			Total	**$41,600,000**		

Notes:
[1]Map ID refers to Figure
[2](R) indicates regionally significant project
[1]TIF = Transportation Impact Fee
Source: NCTC, 2016.

AVIATION PROJECTS

Capital improvements for both the Nevada County Airport and Truckee-Tahoe Airport are listed in Table-2.3-5 and Table-2.3-6, which represent the projects submitted in the most recent airport Capital Improvement Plans (CIPs) that are eligible for funding from State and Federal funding programs.

TABLE-2.3-5: NEVADA COUNTY AIRPORT CIP LIST 2017-2021

PROJECT DESCRIPTION	TOTAL COST (2015 PRICES)	FUNDING SOURCES		ESTIMATED DATE OF CONSTRUCTION
		FAA	OTHER	
Terminal Building Improvements (Design & Construction)	$945,000	$47,250	$57,750	2017-2018
Runway 25 PAPI Installation (Design & Construction)	$157,500	$7,875	$9,625	2017-2018
Taxiway A, Ramps 1, 2, and 5 and Service Road Reconstruction (Design) - Phase I	$135,000	$6,750	$8,250	2017-2018
Taxiway A, Ramps 1, 2, and 5 and Service Road Reconstruction (Constr.) - Phase II	$1,170,000	$58,500	$71,500	2018-2019
Ramps 3 & 4 repair (Design) - Phase I	$63,000	$3,150	$3,850	2019-2020
Ramps 3 & 4 repair (Construction) - Phase II	$360,000	$18,000	$22,000	2020-2021
Runway Pavement Preservation - Crack Seal, Seal Coat & Re-stripe (Design)	$76,500	$3,825	$4,675	2021-2022
Total	**$2,907,000**			
Source: NCTC, 2016.				

TABLE-2.3-6: TRUCKEE AIRPORT CIP LIST 2016-2019

PROJECT DESCRIPTION	TOTAL COST (2015 PRICES)	FUNDING SOURCES		ESTIMATED DATE OF CONSTRUCTION
		FAA	OTHER	
South Jet Apron - 113,500 Sq. Ft. - Reconstruct	$1,005,000	$904,500	$100,500	2016
Remove Taxiway E (19,000 Sq. Ft.) and Widen Apron A1 and A2 (20' x 415')	$295,000	$265,500	$29,500	2016
Runway 11-29 (East) - Saw & Seal Supplemental Joints - 19,000 Ln. Ft.	$203,000	$182,700	$20,300	2017
Hangar Taxilanes CD and DE (East) - 72,000 Sq. Ft. - Reconstruct	$564,000	$507,600	$56,400	2017
Replacement of Alder Hill Beacon Tower	$132,000	$118,800	$13,200	2017
Purchase Snow Removal Equipment - Oshkosh Blower	$510,000	$459,000	$51,000	2017
Widen and Extend Runway 2-20 - Environmental Assessment (EA)	$190,000	$171,000	$19,000	2018
Hangars L & M & Warehouse Area Taxilane - Crack Repair, Seal Cracks - 33,500 Ln. Ft.	$128,200	$115,380	$12,820	2018
Runway 2-20 Blast Pads - 30,300 Sq. Ft. - Reconstruct	$207,000	$186,300	$20,700	2018
Runway 11-29 East Blast Pad - 27,500 Sq. Ft. - Reconstruct	$122,500	$110,250	$12,250	2018
Taxilanes - Hangars A through C - Joint and Crack Repair - 26,700 Ln. Ft.	$101,300	$91,170	$10,130	2018
Update Pavement Maintenance/Management Program	$85,000	$76,500	$8,500	2019
Airport Layout Plan Narrative including Updated ALP Drawings	$145,000	$76,500	$68,500	2019
Taxilane R - 128,240 Sq. Ft. - Reconstruct	$977,500	$879,750	$97,750	2019
Taxiways A, B, C, & D - Crack Repair, Seal Cracks (1,500 Ln. Ft.)	$63,500	$57,150	$6,350	2019
Total	**$4,729,000**			
Source: NCTC, 2016.				

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2016 NEVADA COUNTY RTP Update

Fig. 2.0-1: Regional Location

N
W E
S

0 5 10 20 30 40 Miles

1:1,500,000

Data source: California Spatial Information Library Map date: 2017

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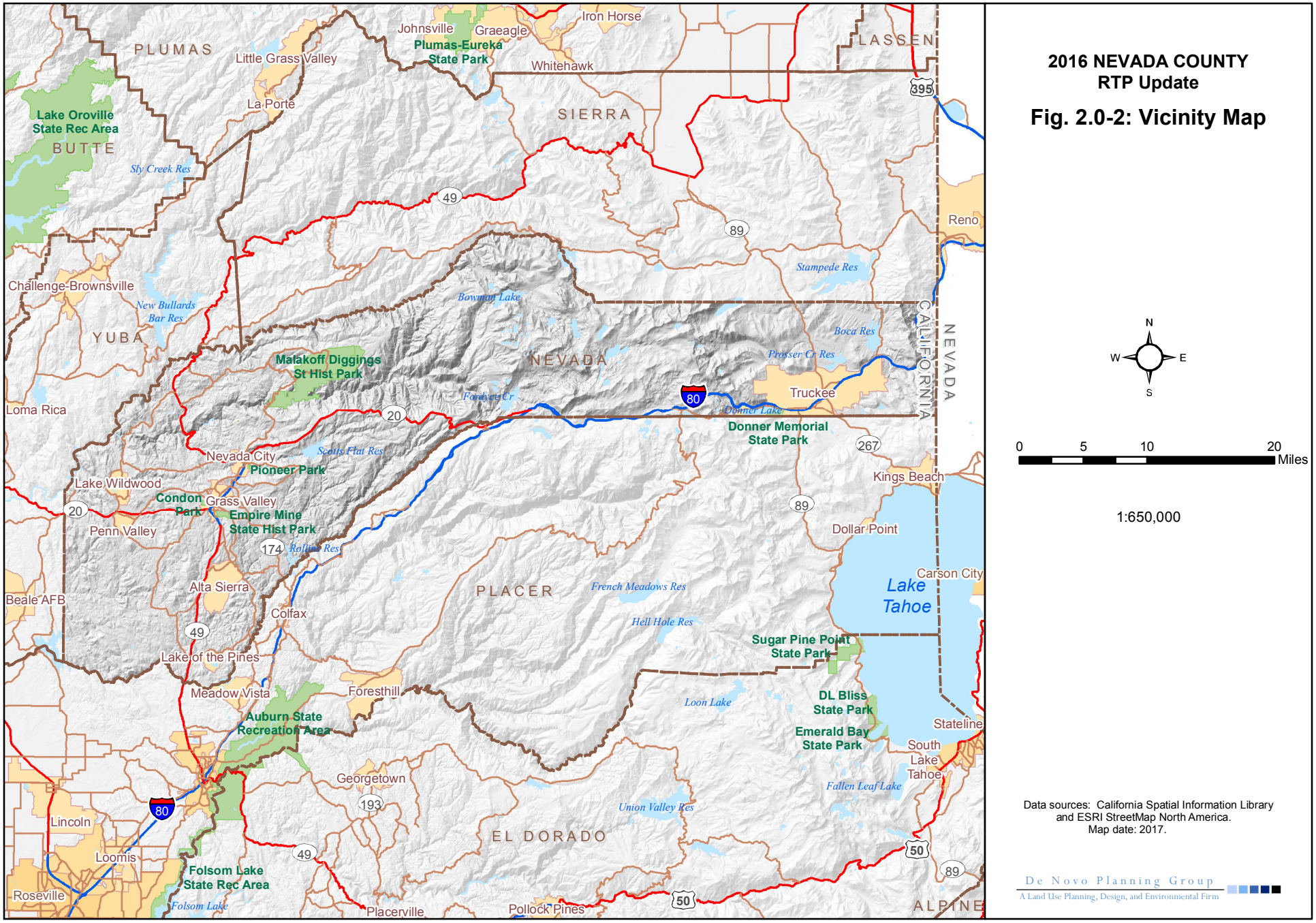

2016 NEVADA COUNTY RTP Update

Fig. 2.0-2: Vicinity Map

N
W E
S

0 5 10 20 Miles

1:650,000

Data sources: California Spatial Information Library and ESRI StreetMap North America.
Map date: 2017.

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This section describes the regional air quality, current attainment status of the air basin, local sensitive receptors, emission sources, and impacts that are likely to result from project implementation. Following this discussion is an assessment of consistency of the proposed project with applicable policies and local plans. The Greenhouse Gases and Climate Change analysis is located in Section 3.2. No comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic.

3.1.1 ENVIRONMENTAL SETTING

MOUNTAIN COUNTIES AIR BASIN

Nevada County is located within the Mountain Counties Air Basin (MCAB), which contains Nevada, Sierra, Plumas, Amador, Calaveras, Tuolumne, Mariposa counties and a portion of El Dorado and Placer Counties (as shown in Figure 3.1-1). California air basin boundary designations generally cover areas that share similar meteorological and geographic conditions. The MCAB includes both the western and eastern slopes of the Sierra Nevada Mountains including much of the Sierra foothills. The area covered is approximately 11,000 square miles.

Topography

Nevada County exhibits large variations in terrain and consequently exhibits large variations in climate. The western portions of the county slopes gradually, with deep river canyons running from northeast to southwest from the crest of the Sierra Nevada range to the Sacramento Valley floor. East of the divide, the slope of the Sierra Nevada is steeper, but river canyons are relatively shallow. Elevations range from about 200 feet at the southwest corner of the county to 9,143 feet at Mt. Lola on the crest of the Sierra.

Temperatures

Winter temperatures in the mountains can be below freezing for weeks at a time, and substantial depths of snow can accumulate, but in the western foothills, winter temperatures usually dip below freezing only at night and precipitation is mixed as rain or light snow. In the summer, temperatures in the mountains are mild, with daytime peaks in the 70s to low 80s F, but the western end of the county can routinely exceed 100 degrees F.

Precipitation

The topography of the county strongly affects temperature and rainfall distributions. The warmest areas are found at the lower elevations along the west side of the county, and the coldest temperatures are found at the highest elevations. Average annual precipitation generally increases with altitude, ranging from about 30 inches in the western portions of the county to over 60 inches near the crest of the Sierra Nevada. East of the crest, annual precipitation drops off rapidly, diminishing to about 30 inches at the eastern end of the county.

Air Movement

The prevailing wind direction over the county is westerly. However, the terrain of the area has a great influence on local winds, so that wide variability in wind direction can be expected. In the foothills, regional airflow patterns are influenced by the mountainous and hill covered terrain, which direct surface air flows, cause shallow vertical mixing, and create areas of high pollutant concentrations by hindering dispersion. Inversion layers, where warm air overlays cooler air, frequently occur and trap pollutants close to the ground.

In the summer, the strong upwind valley air flowing into the basin from the west is an effective transport medium for ozone precursors and ozone generated in the Bay Area and the Sacramento and San Joaquin valleys. These transported pollutants predominate as the cause of ozone in the MCAB and are largely responsible for the exceedances of the state and federal ozone Ambient Air Quality Standards in the MCAB. The California Air Resources Board (CARB) has officially designated the MCAB as “ozone impacted” by transport from those areas.

CRITERIA POLLUTANTS

The United States Environmental Protection Agency (EPA) uses six "criteria pollutants" as indicators of air quality, and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). Each criteria pollutant is described below.

Ozone (O_3) is a photochemical oxidant and the major component of smog. While O_3 in the upper atmosphere is beneficial to life by shielding the earth from harmful ultraviolet radiation from the sun, high concentrations of O_3 at ground level are a major health and environmental concern. O3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (VOC) and oxides of nitrogen (NOx) in the presence of sunlight. These reactions are stimulated by sunlight and temperature so that peak O_3 levels occur typically during the warmer times of the year. Both VOCs and NOx are emitted by transportation and industrial sources. VOCs are emitted from sources as diverse as autos, chemical manufacturing, dry cleaners, paint shops and other sources using solvents.

The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Carbon monoxide (CO) is a colorless, odorless and poisonous gas produced by incomplete burning of carbon in fuels. When CO enters the bloodstream, it reduces the delivery of oxygen to the body's organs and tissues. Health threats are most serious for those who suffer from cardiovascular disease, particularly those with angina or peripheral vascular disease. Exposure to elevated CO levels can

cause impairment of visual perception, manual dexterity, learning ability and performance of complex tasks.

Nitrogen dioxide (NO_2) is a brownish, highly reactive gas that is present in all urban atmospheres. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. Nitrogen oxides are an important precursor both to ozone (O_3) and acid rain, and may affect both terrestrial and aquatic ecosystems. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NOx). NOx plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NOx forms when fuel is burned at high temperatures. The two major emission sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

Sulfur dioxide (SO_2) affects breathing and may aggravate existing respiratory and cardiovascular disease in high doses. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children and the elderly. SO_2 is also a primary contributor to acid deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings and statues. In addition, sulfur compounds in the air contribute to visibility impairment in large parts of the country. This is especially noticeable in national parks. Ambient SO_2 results largely from stationary sources such as coal and oil combustion, steel mills, refineries, pulp and paper mills and from nonferrous smelters.

Particulate matter (PM) includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO_2 and VOCs are also considered particulate matter.

Based on studies of human populations exposed to high concentrations of particles (sometimes in the presence of SO_2) and laboratory studies of animals and humans, there are major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis and premature death.

Respirable particulate matter (PM_{10}) consists of small particles, less than 10 microns in diameter, of dust, smoke, or droplets of liquid which penetrate the human respiratory system and cause irritation by themselves, or in combination with other gases. Particulate matter is caused primarily by dust from grading and excavation activities, from agricultural uses (as created by soil preparation activities, fertilizer and pesticide spraying, weed burning and animal husbandry), and from motor vehicles, particularly diesel-powered vehicles. PM_{10} causes a greater health risk than larger particles, since these fine particles can more easily penetrate the defenses of the human respiratory system.

Fine particulate matter ($PM_{2.5}$) consists of small particles, which are less than 2.5 microns in size. Similar to PM10, these particles are primarily the result of combustion in motor vehicles, particularly diesel engines, as well as from industrial sources and residential/agricultural activities such as burning. It is also formed through the reaction of other pollutants. As with PM_{10}, these particulates

can increase the chance of respiratory disease, and cause lung damage and cancer. In 1997, the EPA created new Federal air quality standards for $PM_{2.5}$.

The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children. Particulate matter also soils and damages materials, and is a major cause of visibility impairment.

Lead (Pb) exposure can occur through multiple pathways, including inhalation of air and ingestion of Pb in food, water, soil or dust. Excessive Pb exposure can cause seizures, mental retardation and/or behavioral disorders. Low doses of Pb can lead to central nervous system damage. Recent studies have also shown that Pb may be a factor in high blood pressure and subsequent heart disease.

ODORS

Typically odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

SENSITIVE RECEPTORS

A sensitive receptor is a location where human populations, especially children, seniors, and sick persons, are present and where there is a reasonable expectation of continuous human exposure to pollutants. Examples of sensitive receptors include residences, hospitals and schools.

AMBIENT AIR QUALITY

Both the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The federal and California state ambient air quality standards are summarized in Table 3.1-1 for important pollutants. The federal and state ambient standards were developed independently, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and particulate matter between 2.5 and 10 microns in diameter (PM_{10}).

The U.S. EPA established new national air quality standards for ground-level ozone and for fine particulate matter in 1997. The 1-hour ozone standard was phased out and replaced by an 8-hour standard of 0.075 PPM. Implementation of the 8-hour standard was delayed by litigation, but was determined to be valid and enforceable by the U.S. Supreme Court in a decision issued in February of 2001. On October 1, 2015, the U.S. EPA strengthened the standard to 0.070 ppm. In April 2005, CARB approved a new eight-hour standard of 0.070 ppm and retained the 1-hour ozone standard of 0.09 for the State, after an extensive review of the literature.

TABLE 3.1-1: FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

POLLUTANT	*AVERAGING TIME*	*STATE STANDARD*	*FEDERAL PRIMARY STANDARD*
Ozone	1-Hour 8-Hour	0.09 ppm 0.070 ppm	-- 0.070 ppm
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm 20.0 ppm	9.0 ppm 35.0 ppm
Nitrogen Dioxide	Annual 1-Hour	0.03 ppm 0.18 ppm	0.053 ppm 0.10 ppm
Sulfur Dioxide	Annual 24-Hour 1-Hour	-- 0.04 ppm 0.25 ppm	-- -- 0.075 ppm
PM_{10}	Annual 24-Hour	20 ug/m^3 50 ug/m^3	-- 150 ug/m^3
$PM_{2.5}$	Annual 24-Hour	12 ug/m^3 --	12 ug/m^3 35 ug/m^3
Lead	30-Day Avg. 3-Month Avg.	1.5 ug/m^3 --	-- 0.15 ug/m^3

NOTES: PPM = PARTS PER MILLION, UG/M3 = MICROGRAMS PER CUBIC METER

SOURCES: CALIFORNIA AIR RESOURCES BOARD, 2015(B); U.S. EPA, 2015.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively

recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated on the basis of risk rather than specification of safe levels of contamination.

Attainment Status

In accordance with the California Clean Air Act (CCAA), the CARB is required to designate areas of the state as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for ozone (O_3), carbon monoxide (CO), and nitrogen dioxide (NO_2) as "does not meet the primary standards," "cannot be classified," or "better than national standards." For sulfur dioxide (SO_2), areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used.

Nevada County has a state designation of nonattainment for ozone and PM_{10}, and is either attainment or unclassified for all other criteria pollutants. The county has a national designation of nonattainment for ozone under the 1-hour standard. The western portion of the County also in non-attainment for ozone under 8-hour standard, while the eastern portion of the County has a national designation of unclassified/attainment for ozone under the 8-hour standard. The County is designated either attainment or unclassified for the remaining national standards. Table 3.1-2 presents the state and national attainment status for Nevada County.

TABLE 3.1-2: STATE AND NATIONAL ATTAINMENT STATUS

CRITERIA POLLUTANTS	*STATE DESIGNATIONS*	*NATIONAL DESIGNATIONS*
Ozone	Nonattainment	Non-Attainment; Unclassified/Attainment[1]
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Unclassified	Unclassified/Attainment
Carbon Monoxide	Unclassified	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Sulfates	Attainment	
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	
Visibility Reducing Particles	Unclassified	

SOURCES: CALIFORNIA AIR RESOURCES BOARD, 2015(A). [1]THE COUNTY IS ONLY IN FEDERAL NON-ATTAINMENT FOR 8-HOUR OZONE IN THE WESTERN PORTION OF THE COUNTY.

On June 15th 2004, the Environmental Protection Agency (EPA) designated western Nevada County as an isolated rural "non-attainment" area under the Federal 8-hour ozone national air quality standard. The primary cause of exceedances of state ozone standards occurs primarily from the transport of pollutants generated outside of Nevada County. The primary source of Nevada County's ozone pollution is from the broader Sacramento area and, to a small degree the San Francisco Bay area.

The standard is designed to protect the public from exposure to ground-level ozone. Ozone is unhealthy to breathe, especially for people with respiratory diseases and for children and adults who are active outdoors. The 8-hour ozone standard is based on averaging air quality measurements over 8-hour blocks of time. EPA uses the average of the annual fourth highest 8-hour daily maximum concentrations of ozone from each of the last three years of air quality monitoring data to determine a violation of the ozone standard.

Western Nevada County was originally classified by EPA as a "basic" non-attainment area. A recent court ruling discarded the "basic" classification, so EPA must reclassify such areas. Western Nevada County's new classification will depend on EPA's process and on how fast the Sacramento Area can demonstrate the ability to reduce emissions. Western Nevada County's attainment is dependent on emission reductions from the Sacramento Area and therefore may be classified to match the recent change in attainment classification approved for the Sacramento Region.

The Sacramento region was originally classified as "serious" non-attainment area, then indicated that it would need to rely on longer-term emission reduction strategies from the State and federal mobile source control programs and could not meet the required 2013 attainment date. CARB, on behalf of the air districts in the Sacramento region, requested EPA approve a voluntary reclassification of the Sacramento Federal Ozone Non-attainment Area from a "serious" to a "severe" eight-hour ozone non-attainment area, with an extended attainment deadline of June 2019. EPA issued its Final Rule approving the Sacramento region's request to reclassify effective June 4, 2010.

Nevada County Air Quality Monitoring

There are currently three air quality monitoring sites in Nevada County: Grass Valley - Litton Building, Truckee Fire Station, and White Cloud Mountain. Each site monitors 1-hour and 24-hour ozone. Two of the sites monitor $PM_{2.5}$. Data obtained from the monitoring sites for the latest years available (2013 and 2015) is shown in Tables 3.1-3 through 3.1-5 (Note: latest data for ozone at the Truckee Fire Station site is for 2008, 2010, and 2011).

TABLE 3.1-3: AMBIENT AIR QUALITY MONITORING DATA (GRASS VALLEY – LITTON BUILDING)

POLLUTANT	CAL. PRIMARY STANDARD	FED. PRIMARY STANDARD	YEAR	MAX CONCENTRATION	DAYS EXCEEDED STATE/FED STANDARD
Ozone (O_3) (1-hour)	0.09 ppm	--	2015 2014 2013	0.101 0.089 0.089	4 / 0 0 / 0 0 / 0
Ozone (O_3) (8-hour)	0.070 ppm	0.070 ppm	2015 2014 2013	0.092 0.085 0.082	30 / 26 36 / 28 24 / 19
Particulate Matter (PM_{10}) (24-hour)	50 ug/m³	150 ug/m³	Not currently collected at this site.		
Fine Particulate Matter ($PM_{2.5}$) (24-hour)	--	35 ug/m³	2015 2014 2013	11.5 61.3 28.5	(N/A) / 0 (N/A) / * (N/A) / 0

SOURCES: CALIFORNIA AIR RESOURCES BOARD (ADAM) AIR POLLUTION SUMMARIES, 2016.

TABLE 3.1-4: AMBIENT AIR QUALITY MONITORING DATA (TRUCKEE – FIRE STATION)

POLLUTANT	CAL. PRIMARY STANDARD	FED. PRIMARY STANDARD	YEAR	MAX CONCENTRATION	DAYS EXCEEDED STATE/FED STANDARD
Ozone (O_3) (1-hour)	0.09 ppm	--	2011 2010 2008	0.058 0.065 0.077	0 / 0 0 / 0 0 / 0
Ozone (O_3) (8-hour)	0.070 ppm	0.070 ppm	2011 2010 2008	0.053 0.053 0.068	0 / 0 0 / 0 0 / 0
Particulate Matter (PM_{10}) (24-hour)	50 ug/m³	150 ug/m³	Not collected at this site.		
Fine Particulate Matter ($PM_{2.5}$) (24-hour)	--	35 ug/m³	2015 2014 2013	12.8 13.2 31.8	(N/A) / * (N/A) / * (N/A) / *

SOURCES: CALIFORNIA AIR RESOURCES BOARD (ADAM) AIR POLLUTION SUMMARIES, 2016.

TABLE 3.1-5: AMBIENT AIR QUALITY MONITORING DATA (WHITE CLOUD MOUNTAIN)

POLLUTANT	CAL. PRIMARY STANDARD	FED. PRIMARY STANDARD	YEAR	MAX CONCENTRATION	DAYS EXCEEDED STATE/FED STANDARD
Ozone (O_3) (1-hour)	0.09 ppm	--	2015 2014 2013	0.082 0.093 0.074	0 / 0 0 / 0 0 / 0
Ozone (O_3) (8-hour)	0.070 ppm	0.070 ppm	2015 2014 2013	0.078 0.080 0.070	6 / 5 18 / 16 0 / 0
Particulate Matter (PM_{10}) (24-hour)	50 ug/m³	150 ug/m³	Not collected at this site.		
Fine Particulate Matter ($PM_{2.5}$) (24-hour)	--	35 ug/m³	Not collected at this site.		

SOURCES: CALIFORNIA AIR RESOURCES BOARD (ADAM) AIR POLLUTION SUMMARIES, 2016.

*NOTES: PPM = PARTS PER MILLION; UG/M3 = MICRONS PER CUBIC METER; N/A= NOT APPLICABLE; * = THERE WAS INSUFFICIENT (OR NO) DATA AVAILABLE TO DETERMINE THE VALUE*

3.1.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control air quality within their jurisdiction. CARB is the state agency that is responsible for preparing the California SIP.

Transportation Conformity Analysis

Transportation conformity requirements were added to the FCAA in the 1990 amendments, and the EPA adopted implementing regulations in 1997. See §176 of the FCAA (42 U.S.C. §7506) and 40 CFR Part 93, Subpart A. Transportation conformity serves much the same purpose as general conformity: it ensures that transportation plans, transportation improvement programs, and projects that are developed, funded, or approved by the United States Department of Transportation or that are recipients of funds under the Federal Transit Act or from the Federal Highway Administration (FHWA), conform to the SIP as approved or promulgated by EPA.

Currently, transportation conformity applies in nonattainment areas and maintenance areas. Under transportation conformity, a determination of conformity with the applicable SIP must be made by the agency responsible for the project, such as the Metropolitan Planning Organization, the Council of Governments, or a federal agency. The agency making the determination is also responsible for all the requirements relating to public participation. Generally, a project will be considered in conformance if it is in the transportation improvement plan and the transportation improvement plan is incorporated in the SIP. If an action is covered under transportation conformity, it does not need to be separately evaluated under general conformity.

Transportation Control Measures

One particular aspect of the SIP development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically also created to address mobile or transportation sources. These are known as transportation control measures (TCMs). TCM strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

STATE

CARB Mobile-Source Regulation

The State of California is responsible for controlling emissions from the operation of motor vehicles in the state. Rather than mandating the use of specific technology or the reliance on a specific fuel, the CARB's motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, the CARB has adopted regulations which required auto manufacturers to phase in less polluting vehicles.

California Clean Air Act

The California Clean Air Act (CCAA) was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. CARB is the agency responsible for administering the CCAA. CARB established ambient air quality standards pursuant to the California Health and Safety Code (CH&SC) [§39606(b)], which are similar to the federal standards.

Air Quality Standards

NAAQS are determined by the EPA. The standards include both primary and secondary ambient air quality standards. Primary standards are established with a safety margin. Secondary standards are more stringent than primary standards and are intended to protect public health and welfare. States have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards.

Federal and state ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM_{10}) and lead. In addition, California has created standards for pollutants that are not covered by federal standards. The state and federal primary standards for major pollutants are shown in Table 3.1-1.

Tanner Air Toxics Act

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB can designate a substance as a TAC. To date, ARB has identified more than 21 TACs and has adopted EPA's list of HAPs as TACs. Most recently, diesel PM was added to the ARB list of TACs. Once a TAC is identified, ARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate BACT to minimize emissions.

The AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. ARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, ARB adopted a new public-transit bus-fleet rule and emission standards for new urban buses. These rules and standards provide for (1) more stringent emission standards for some new urban bus engines, beginning with 2002 model year engines; (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and (3) reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule. Upcoming milestones include the low-sulfur diesel-fuel requirement, and tighter emission standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide.

LOCAL

Air Quality Management District

The Northern Sierra Air Quality Management District (NSAQMD) is the local agency with primary responsibility for compliance with both the federal and state standards and for ensuring that air quality conditions are maintained. They do this through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues.

Activities of the NSAQMD include the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the FCAA and CCAA.

Regional Air Quality Planning

Non-attainment areas are required to prepare and submit a SIP that demonstrates how the area will attain and maintain federal Clean Air Act Standards. The SIP for the non-attainment area in western

Nevada County will identify all sources of emissions of pollutants that exceed the standards in the non-attainment area and detail the strategies the area will utilize to meet the standards. The SIP for Nevada County will be incorporated into a statewide SIP that will also outline the measures that the State will take in order to improve air quality in non-attainment areas.

The NSAQMD works in conjunction with the NCTC and CARB to prepare the air quality attainment plan for western Nevada County. NSAQMD is charged with the responsibility to attain and maintain the State and federal ambient air quality standards, and depend upon local ordinances and/or public education and voluntary programs to prevent the deterioration of ambient air quality.

To ensure the coordination of transportation planning and air quality efforts a Memorandum of Agreement was developed to identify the interagency coordination process and the responsibilities of the agencies involved. Through this process the Western Nevada County Conformity Working Group was established. This group is made up of representatives from the NCTC, NSAQMD, Caltrans, CARB, U.S. EPA, FHWA, and FTA. The purpose of this technical working group is to provide interagency consultation and coordination on transportation conformity.

Fugitive Dust Control

Rule 226 – Dust Control

District Rule 226 states, "A dust control plan must be submitted to and approved by the Air Pollution Control Officer before topsoil is disturbed on any project where more than one (1) acre of natural surface area is to be altered or where the natural ground cover is removed." This applies to any clearing or grading. For smaller projects, "reasonable precautions" (such as watering as necessary) must be taken to prevent dust emissions (NSAQMD, 2015).

Rule 226 is intended to reduce and control fugitive dust emissions to the atmosphere. This rule applies to public and private construction activities, including dismantling/demolition of structures, processing/moving materials (sand, gravel, rock, dirt, etc.), operation of machines/equipment. The rule requires the preparation of a dust control plan the uses of reasonable precautions to prevent dust emissions. Such precautions may include, cessation of operations, cleanup, sweeping, sprinkling, compacting, enclosure, chemical or asphalt sealing, and use of wind screens or snow fences.

Typically, the Dust Control Plan requirement is fulfilled by clearly phrased and enforceable conditions included on the project grading plans, preferably under its own heading. Following is a set of standard minimum Dust Control measures recommended for inclusion in the Plan. If a project is in an area mapped as having ultramafic rock or serpentine, or if these rock types are discovered on site, the statewide Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (Section 93105 of Title 17 of the California Code of Regulations) applies, and specifies more stringent conditions than those listed below. Also, for large projects or in special circumstances (such as near schools or other sensitive receptors), additional measures (e.g. limits on active disturbance area or grading hours) may be required (NSAQMD, 2015).

2010 Nevada County RTP: Air Quality Action Plan

The 2010 RTP includes a variety of short- and long-term action plans as follows:

1. Conduct interagency consultation as needed to review transportation related air quality issues. (NCTC, NSAQMD, CARB, Caltrans, EPA, FHWA, FTA)
2. Complete a Transportation Conformity Analysis on regionally significant transportation projects when federal funding or federal approval is required in coordination with local, state, and federal agencies. (NCTC, NSAQMD, CARB, Caltrans, EPA, FHWA, FTA)
3. Coordinate with NSAQMD during the development of the State Implementation Plan for Nevada County. (NCTC, NSAQMD)
4. Administer the selection of projects eligible for Congestion Mitigation Air Quality funds in western Nevada County for projects that reduce emissions and improve air quality. (NCTC, NSAQMD)
5. Coordinate with member jurisdictions to ensure transportation and land use planning efforts take into to consideration strategies to reduce GHG emissions. (NCTC, Nevada County, Grass Valley, Nevada City, Town of Truckee)
6. Consider and implement transportation planning and investment strategies that may result in GHG emission reductions as appropriate. (NCTC)

3.1.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people.

IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: Long-Term - Conflict with, or Obstruct, the Applicable Air Quality Plan, Cause a Violation of Air Quality Standards, Contribute Substantially to an Existing Air Quality Violation, or Result in a

Cumulatively Considerable Net Increase of a Criteria Pollutant in a Non-Attainment Area (less than significant)

ISOLATED RURAL AREA REGIONAL EMISSIONS ANALYSIS

A finding of conformity is required under Clean Air Act section 176(c) (42 U.S.C. 7506 (c)) to ensure that federally supported highway and transit project activities are consistent with ("conform to") the State Implementation Plan (SIP). Conformity ensures that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant national ambient air quality standards. Additionally, SIPs in California are developed to ensure conformity with the State ambient air quality standards.

While regional transportation conformity findings are required to approve RTPs in most places, they are not required for isolated rural areas, which includes NCTC. As noted earlier, a SIP is currently being prepared by NSAQMD in cooperation with various regulatory agencies. Until the SIP is approved an emissions budget will not be established for Nevada County.

Although this analysis will not require a formal conformity determination from the FHWA in order to approve the RTP, it will undergo public review in accordance with NCTC policies for community input. These procedures ensure that the public has adequate opportunity to be informed of the regional emissions analysis approach and encourages public participation and comment.

Regional Transportation Indicators: EMFAC Inputs

This Isolated Rural Area Regional Emissions Analysis is based on an evaluation of emission trends generated by Nevada County using the latest population, employment, traffic, and congestion estimates obtained from the NCTC Travel Forecasting Model, for western Nevada County, and from the Truckee/Martis Valley TransCAD transportation model, for eastern Nevada County. Fehr & Peers provided the analysis for western Nevada County and LSC Transportation Consultants provided the analysis for eastern Nevada County. Both models were most recently updated in 2014. Fehr & Peers used the data from the NCTC Travel Forecasting Model to model VMT for the western County, and LSC used the data from the Truckee/Martis Valley TransCAD model for the eastern County, for baseline year 2012 and project buildout year 2035. The VMT data was then input into the latest version of the EMFAC model (EMFAC2014 v.1.0.7) to generate emissions results. The EMFAC2014 model, developed by the California Air Resources Board, is the most recent emissions model approved for use in California by the U.S. EPA. Table 3.1-6 presents the basic traffic data that was input into the EMFAC2014 model.

TABLE 3.1-6: EMFAC INPUTS

	2012	*2035*
Average Daily VMT (western County)	1,699,898	1,843,685
Average Daily VMT (eastern County)	937,870	1,591,307
Total Average Daily VMT	**2,368,928**	**3,166,336**

SOURCE: FEHR & PEERS; LSC TRANSPORTATION; DE NOVO PLANNING GROUP (2016; 2017).

Table 3.1-7 shows the number of trips generated by Nevada County, as provided by EMFAC2014. As shown, average daily VMT is projected to increase by approximately 33.7% from 2012 to 2035. On the other hand, trips are projected to increase by approximately 15.2% trips from 2012 to 2035. This

reflects the expectation that VMT per trip is expected to increase by approximately 16.0% between 2012 and 2035.

TABLE 3.1-7: EMFAC OUTPUTS: TRIPS

	2012	*2035*
Total Trips	474,188	546,479

SOURCE: FEHR & PEERS, LSC TRANSPORTATION, DE NOVO PLANNING GROUP, EMFAC2014 V.1.0.7 (2017).

Emission Estimates: EMFAC2014 Outputs

The regional emissions analysis and forecasts for ROGs, $PM_{2.5}$, PM_{10}, CO, NOx, and SOx are summarized in Table 3.1-7. The summary of emissions forecasts is derived from outputs of the EMFAC2014 model (Appendix B).

TABLE 3.1-8: EMFAC OUTPUTS: EMISSION ESTIMATES (TONS PER DAY)

ANALYSIS YEAR	*ROG*	*$PM_{2.5}$*	*PM_{10}*	*CO*	*NOX*	*SOX*
2012	1.684	0.135	0.223	13.002	4.301	0.0141
2035	0.469	0.077	0.187	2.709	0.956	0.012

SOURCES: DE NOVO PLANNING GROUP, EMFAC2014 V.1.0.7.

The results from the emissions outputs show that year 2035 projections emissions of the ROGs, $PM_{2.5}$, PM_{10}, CO, and NOx, and SOx would be substantially less than the baseline year 2012 emissions levels. This significant decrease in emissions of criteria pollutants is related to assumptions in the EMFAC modeling regarding improving fuel efficiency and emission rates for vehicles due to State and federal emission control programs.

Conclusion

While the 2016 RTP provides improvements that will increase transportation system capacity, it should be noted that it does not control land development and population growth, rather, the General Plans for the incorporated and unincorporated communities control growth and development. Implementation of the 2016 RTP will result in some beneficial air quality impacts as a result of the transportation system improvements.

The emission outputs reflect a decreasing trend of criteria pollutant emissions from 2012 through 2035. The results of the emission model reflects the fact that the state and federal EPA's vehicle and fuel regulations that are being phased into place over the study horizon will bring about significantly lower emission levels, which is particularly important for the reduction of emissions in nonattainment areas.

Implementation of the 2016 RTP will not conflict with the Air Quality Plan, cause a violation of Air Quality Standards, contribute substantially to an existing air quality violation, or result in a cumulatively considerable net increase of a criteria pollutant in a nonattainment area. Therefore, this impact is considered ***less than significant***.

Impact 3.1-2: Short-term - Conflict with, or Obstruct, the Applicable Air Quality Plan, Cause a Violation of Air Quality Standards, Contribute Substantially to an Existing Air Quality Violation, or Result in a Cumulatively Considerable Net Increase of a Criteria Pollutant in a Non-Attainment Area (less than significant with mitigation)

Nevada County is currently designated as "non-attainment" for ozone and PM_{10}. Construction activities associated with construction and implementation of the various roadway and other transportation improvement projects identified in the RTP would result in temporary short-term emissions associated with vehicle trips from construction workers, operation of construction equipment, and the dust generated during construction activities. These temporary and short-term emissions would generate additional ozone precursors (ROG and NOx) as well as PM_{10}, which could exacerbate the County's existing non-attainment status for these criteria pollutants.

Construction projects in Nevada County, including the construction of the roadway and other transportation improvements identified in the RTP, are required to receive a permit from the NSAQMD. NSAQMD has existing rules and regulations in place to reduce construction-related emissions and dust impacts. For example, NSAQMD Rule 226 is intended to reduce and control fugitive dust emissions. All future roadway and other transportation construction projects associated with implementation of the RTP would be subject to the existing NSAQMD requirements. Implementation of these measures requires the development of a dust control plan and the construction operators to take special precautions during construction, including grading, paving, and maintenance of roads and other improvements that would reduce emissions of particulate matter, ozone precursors, and other pollutants. In addition, individual projects would be subject to individual project environmental review, prior to their construction. Compliance with all NSAQMD pre-established rules and requirements would ensure that short-term air quality impacts are reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.1-1: *The implementing agency for any construction activities, including dismantling/demolition of structures, processing/moving materials (sand, gravel, rock, dirt, etc.), or operation of machines/equipment, shall prepare a dust control plan in accordance with NSAQMD Rule 226. The dust control plan shall use reasonable precautions to prevent dust emissions, which may include: cessation of operations at times, cleanup, sweeping, sprinkling, compacting, enclosure, chemical or asphalt sealing, and use of wind screens or snow fences, and other recommended actions by the AQMD.*

Mitigation Measure 3.1-2: *The implementing agency shall consult and coordinate with the NSAQMD prior to the construction of each RTP project, to ensure that all applicable and appropriate criteria pollutant control measures are taken. Projects that are especially large or in special circumstances (such as near schools or other sensitive receptors), additional measures (e.g. limits on active disturbance area or grading areas) may be required, as directed by the NSAQMD.*

Impact 3.1-3: Occasional Localized Carbon Monoxide Concentrations from Traffic Conditions at Some Individual Locations (less than significant with mitigation)

The RTP projects are designed to improve traffic flows and reduce congestion system-wide, reducing the potential for CO "hot spots" that can occur from exhaust of idling cars waiting to clear a heavily congested intersection or crossing. The RTP projects are intended to reduce congested conditions throughout the system while accommodating additional traffic generated by the increase in population projected for Nevada County. These are considered beneficial effects.

While the RTP projects will respond to additional traffic and reducing congestion (brought by that additional traffic) system-wide, there is a potential for CO concentrations or hot spots to develop under adverse atmospheric conditions that prevent a rapid dispersion of CO. Currently, the Mountain Counties Air Basin is designated unclassified and unclassified/attainment of federal and State standards for CO, respectively. There is a potential for some, albeit rare, instances of congestion and an occasional hot spot. The following mitigation measure would ensure traffic flows near sensitive receptors are improved in order to reduce the potential for the formation of CO hot spots. Implementation of the following mitigation measure would reduce this impact to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.1-3: *The implementing agency shall screen individual RTP projects at the time of design for localized CO hotspot concentrations and, if necessary, incorporate project-specific measures into the project design to reduce or alleviate CO hotspot concentrations.*

Impact 3.1-4: Create Objectionable Odors Affecting a Substantial Number of People (less than significant)

Implementation of the RTP would not directly create or generate objectionable odors. Persons residing in the immediate vicinity of proposed improvements may be subject to temporary odors typically associated with roadway construction activities (diesel exhaust, hot asphalt, etc.). However, any odors generated by construction activities would be minor and would be short and temporary in duration. This is considered a ***less than significant*** impact.

Impact 3.1-5: Potential to release asbestos from earth movement or structural asbestos from demolition/renovation of existing structures (less than significant with mitigation)

Asbestos is a material that has been used in a variety of transportation facilities, including bridges, walls, and road base. Demolition and excavation activities of facilities containing asbestos requires monitoring to insure that they are properly removed and disposed in accordance with local and State regulations.

Based upon the regional nature of the RTP, development of detailed, site-specific information on this impact at an RTP planning level is not feasible. The implementing agency of each RTP project

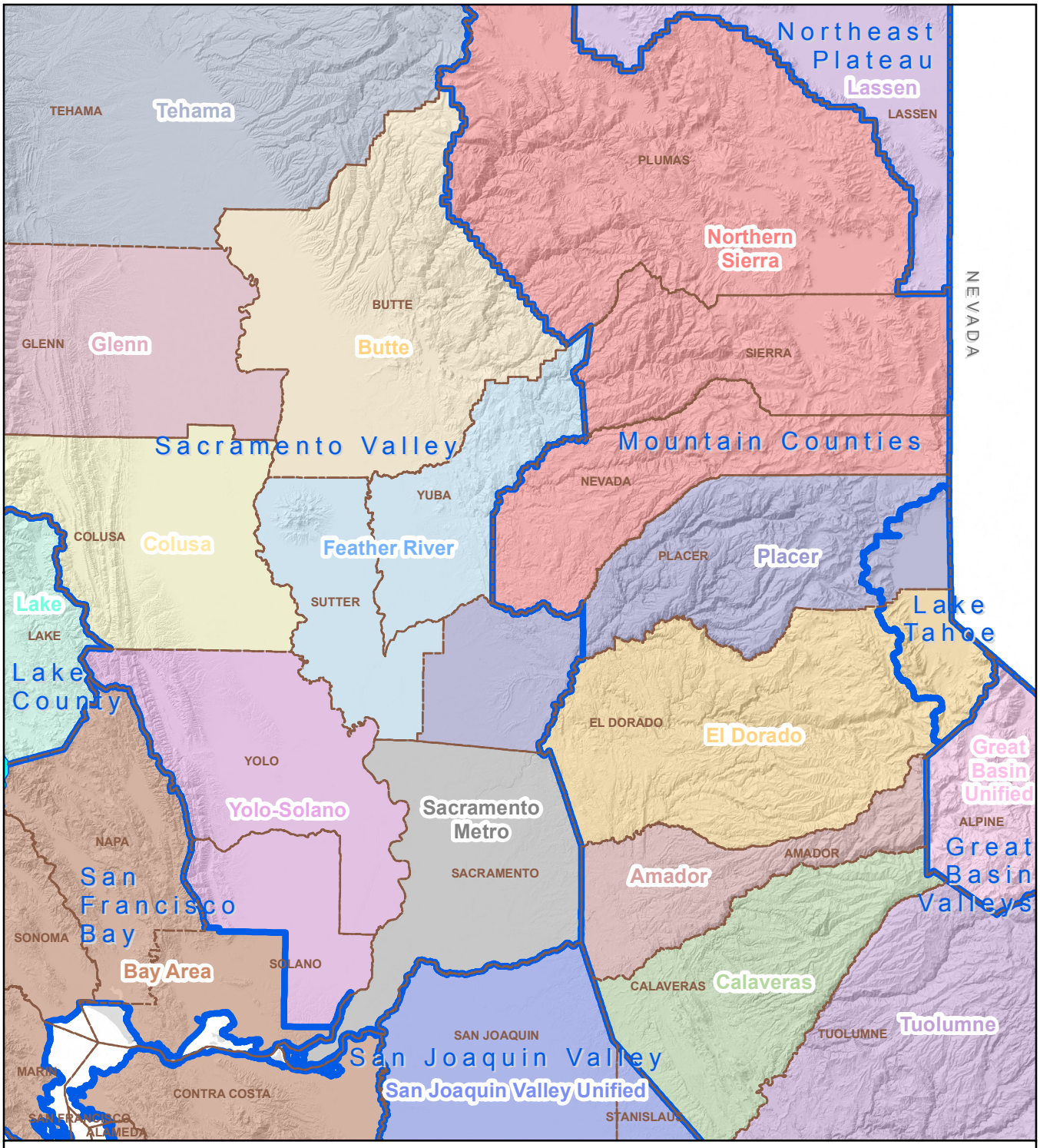
will conduct appropriate project-level assessments and will be responsible for consideration of mitigation measures for significant effects on the environment. If asbestos is deemed present naturally, or in existing facilities, an Asbestos Hazard Dust Mitigation Plan would be prepared to ensure that adequate dust control and asbestos hazard mitigation measures are implemented during project construction. The following mitigation measure would ensure that any construction activities that may result in the release of asbestos would include appropriate measures contained within an Asbestos Hazard Dust Mitigation Plan to ensure that exposure to construction workers and the public is minimized to acceptable State and local levels.

In addition, the Statewide *Asbestos Airborne Toxic Control Measure for Surfacing Applications* (Surfacing ATCM), codified in the California Code of Regulations, Title 17, Section 93106, prohibits the use of material containing 0.25% asbestos or greater for surfacing of trails, playgrounds, pedestrian areas, roads, landscaping, parking lots, etcetera.

Implementation of the following mitigation measure would ensure that this potential impact is reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.1-4: *Prior to construction of RTP projects, the implementing agency should assess the site for the presence of asbestos including asbestos from structures such as road base, bridges, and other structures. In the event that asbestos is present, the implementing agency should comply with applicable state and local regulations regarding asbestos, including ARB's asbestos airborne toxic control measure (ATCM) (Title 17, CCR § 93105 and 93106), to ensure that exposure to construction workers and the public is reduced to an acceptable level. This may include the preparation of an Asbestos Hazard Dust Mitigation Plan to be implemented during construction activities.*



Air District
- Amador
- Bay Area
- Butte
- Calaveras
- Colusa
- El Dorado
- Feather River
- Glenn
- Great Basin Unified
- Lake
- Lassen
- Mariposa
- Northern Sierra
- Placer
- Sacramento Metro
- San Joaquin Valley Unified
- Tehama
- Tuolumne
- Yolo-Solano

Air Basins

County Boundaries

Data sources: California Enviornmental Protection Agency. Air Resources Board.
Shaded relief from the California Spatial Information Library. Map date: April 26, 2017

2016 Nevada County Regional Transportation Plan EIR

Fig. 3.1-1: Air Basins and Districts

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1:1,400,000

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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This section describes the regional greenhouse gas (GHG) emissions, climate change, and impacts that could result from project implementation. Following this discussion is an assessment of consistency of the proposed project with applicable policies and local plans. No comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic.

3.2.1 ENVIRONMENTAL SETTING

Greenhouse Gases and Climate Change Linkages

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring greenhouse gases include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. Although the direct greenhouse gases CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three greenhouse gases have increased globally by 40, 150, and 20 percent, respectively (IPCC, 2013).

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial and electricity generation sectors (California Energy Commission, 2016).

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced 441.5 million gross metric tons of carbon dioxide equivalents (MMTCO2e) in 2014 (California Air Resources Board, 2016). By 2020, under business as usual conditions, California is projected to produce 509 $MMTCO_2e$ per year (California Air Resources Board, 2014).

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also

dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2014, accounting for 37% of total GHG emissions in the state. This category was followed by the industrial sector (24%) and the electricity generation sector (20%) (California Air Resources Board, 2016).

Effects of Global Climate Change

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the state. The snowpack portion of the supply could potentially decline by 70% to 90% by the end of the 21st century (Cal EPA, 2006). This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the state; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and, according to the CEC report, it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels (California Energy Commission, 2006). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands (California Energy Commission, 2006). As the existing climate throughout California changes over times, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. Under the emissions scenarios of the Climate Scenarios report (California Climate Change Center, 2006), the impacts of global warming in California are anticipated to include, but are not limited to, the following.

PUBLIC HEALTH

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation are projected to increase from 25 to 35 percent under the lower warming range, to 75 to 85 percent under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter

that can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

WATER RESOURCES

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snow pack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snow pack, increasing the risk of summer water shortages.

The state's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major state fresh water supply. Global warming is also projected to seriously affect agricultural areas, with California farmers projected to lose as much as 25 percent of the water supply they need; and decrease the potential for hydropower production within the state (although the effects on hydropower are uncertain).

If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snow pack by as much as 70 to 90 percent. Under the lower warming scenario, snow pack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snow pack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snow pack would pose challenges to water managers, and hamper hydropower generation.

AGRICULTURE

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development will change, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures could worsen ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products that could be most affected include wine grapes, fruits and nuts, and milk.

In addition, continued global warming could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued global warming could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

FORESTS AND LANDSCAPES

Global warming is expected to intensify this threat by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30 percent toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90 percent.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the state. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the state's forests is also expected to decrease as a result of global warming.

RISING SEA LEVELS

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the state's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

Energy Consumption

Energy is California is consumed from a wide variety of sources. Fossil fuels (including gasoline and diesel fuel, natural gas, and energy used to generate electricity) are most widely used form of energy in the State. However, renewable source of energy (such as solar and wind) are growing in proportion to California's overall energy mix. A large driver of renewable sources of energy in California is the State's current Renewable Portfolio Standard (RPS), which requires the State to

derive at least 33% of electricity generated from renewable resources by 2020, and 50 percent by 2030.

Overall, in 2013, California's per capita energy usage was ranked 49th in the nation (U.S. EIA, 2016) (lower rank means lower per capita energy consumption). California's per capita rate of energy usage has remained relatively constant since the 1970's. Many State regulations since the 1970's, including new building energy efficiency standards, vehicle fleet efficiency measures, as well as growing public awareness, have helped to keep per capita energy usage in the State in check.

The consumption of non-renewable energy (i.e. fossil fuels) associated with the operation of passenger, public transit, and commercial vehicles, results in GHG emissions that contribute to global climate change. Alternative fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

ELECTRICITY CONSUMPTION

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Approximately 71 percent of the electrical power needed to meet California's demand is produced in the state. Approximately 29 percent of its electricity demand is imported from the Pacific Northwest and the Southwest (California Energy Commission, 2012). In 2010, California's in-state generated electricity was derived from natural gas (53.4 percent), large hydroelectric resources (14.6 percent), coal (1.7 percent), nuclear sources (15.7 percent), and renewable resources that include geothermal, biomass, small hydroelectric resources, wind, and solar (14.6 percent) (California Energy Commission, 2012). The percentage of renewable resources as a proportion of California's overall energy portfolio is increasing over time, as directed the State's Renewable Portfolio Standard (RPS).

According to the California Energy Commission (CEC), total statewide electricity consumption increased from 166,979 gigawatt-hours (GWh) in 1980 to 228,038 GWh in 1990, which is an estimated annual growth rate of 3.66 percent. The statewide electricity consumption in 1997 was 246,225 GWh, reflecting an annual growth rate of 1.14 percent between 1990 and 1997 (California Energy Commission Energy Almanac, 2012). Statewide consumption was 274,985 GWh in 2010, an annual growth rate of 0.9 percent between 1997 and 2010. In 2014, electricity consumption in Nevada County was approximately 633.3 GWh (California Energy Commission, 2015).

OIL

The primary energy source for the United States is oil, which is refined to produce fuels like gasoline, diesel, and jet fuel. Oil is a finite, nonrenewable energy source. World consumption of petroleum products has grown steadily in the last several decades. As of 2009, world consumption of oil had reached 96 million barrels per day. The United States, with approximately five percent of the world's population, accounts for approximately 19 percent of world oil consumption, or approximately 18.6 million barrels per day (CIA, 2009). The transportation sector relies heavily on oil. In California,

petroleum based fuels currently provide approximately 96 percent of the state's transportation energy needs (California Energy Commission, 2012).

NATURAL GAS/PROPANE

The state produces approximately 12 percent of its natural gas, while obtaining 22 percent from Canada and 65 percent from the Rockies and the Southwest (California Energy Commission, 2012). In 2006, California produced 325.6 billion cubic feet of natural gas (California Energy Commission, 2012). PG&E is the largest publicly-owned utility in California and provides natural gas for residential, industrial, and agency consumers within the Nevada County area. In 2015, natural gas consumption in Monterey County was approximately 17.2 million therms (California Energy Commission, 2015).

3.2.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor National Ambient Air Quality Standards (NAAQS) vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States (U.S.). Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Since 1990, the fuel economy standard for new passenger cars has been 27.5 mpg. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the U.S. Environmental Protection Agency (EPA), was created to determine

vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Energy Policy Act of 1992 (EPAct)

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain federal, state, and local government and private fleets to purchase a percentage of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 was signed into law on August 8, 2005. Generally, the act provides for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for a clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Federal Climate Change Policy

According to the EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science." The federal government's goal is to reduce the GHG intensity (a measurement of GHG emissions per unit of economic activity) of the American economy by 18 percent over the 10-year period from 2002 to 2012. In addition, the EPA administers multiple programs that encourage voluntary GHG reductions, including "ENERGY STAR", "Climate Leaders", and Methane Voluntary Programs. However, as of this writing, there are no adopted federal plans, policies, regulations, or laws directly regulating GHG emissions.

STATE

California Strategy to Reduce Petroleum Dependence (AB 2076)

In response to the requirements of AB 2076 (Chapter 936, Statutes of 2000), the CEC and the CARB developed a strategy to reduce petroleum dependence in California. The strategy, *Reducing California's Petroleum Dependence*, was adopted by the CEC and CARB in 2003. The strategy recommends that California reduce on-road gasoline and diesel fuel demand to 15 percent below 2003 demand levels by 2020 and maintain that level for the foreseeable future; the Governor and

Legislature work to establish national fuel economy standards that double the fuel efficiency of new cars, light trucks, and sport utility vehicles (SUVs); and increase the use of non- petroleum fuels to 20 percent of on-road fuel consumption by 2020 and 30 percent by 2030.

Assembly Bill 1493

In response to AB 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and 1961 (CCR 13 1961), and adoption of Section 1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016. For passenger cars and light-duty trucks 3,750 pounds or less loaded vehicle weight (LVW), the 2016 GHG emission limits are approximately 37 percent lower than during the first year of the regulations in 2009. For medium-duty passenger vehicles and light-duty trucks 3,751 LVW to 8,500 pounds gross vehicle weight (GVW), GHG emissions are reduced approximately 24 percent between 2009 and 2016.

CARB requested a waiver of federal preemption of California's GHGs Standards. The intent of the waiver is to allow California to enact emissions standards to reduce carbon dioxide and other GHG emissions from automobiles in accordance with the regulation amendments to the CCRs that fulfill the requirements of AB 1493. The EPA granted a waiver to California to implement its GHG emission standards for cars.

Bioenergy Action Plan – Executive Order #S-06-06

Executive Order #S-06-06 establishes targets for the use and production of biofuels and biopower and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The executive order establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels within California by 2010, 40 percent by 2020, and 75 percent by 2050. The executive order also calls for the state to meet a target for use of biomass electricity.

California Executive Orders S-3-05 and S-20-06, and Assembly Bill 32

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80% below the 1990 levels by the year 2050.

In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

Assembly Bill 1007

Assembly Bill 1007, (Pavley, Chapter 371, Statutes of 2005) directed the CEC to prepare a plan to increase the use of alternative fuels in California. As a result, the CEC prepared the State Alternative Fuels Plan in consultation with the state, federal, and local agencies. The plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Bioenergy Action Plan – Executive Order #S-06-06

Executive Order #S-06-06 establishes targets for the use and production of biofuels and biopower and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The executive order establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels within California by 2010, 40 percent by 2020, and 75 percent by 2050. The executive order also calls for the state to meet a target for use of biomass electricity.

Governor's Low Carbon Fuel Standard (Executive Order #S-01-07)

Executive Order #S-01-07 establishes a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 through establishment of a Low Carbon Fuel Standard. The Low Carbon Fuel Standard is incorporated into the State Alternative Fuels Plan and is one of the proposed discrete early action GHG emission reduction measures identified by CARB pursuant to AB 32.

Climate Action Program at Caltrans

The California Department of Transportation, Business, Transportation, and Housing Agency, prepared a Climate Action Program in response to new regulatory directives. The goal of the Climate Action Program is to promote clean and energy efficient transportation, and provide guidance for mainstreaming energy and climate change issues into business operations. The overall approach to lower fuel consumption and CO2 from transportation is twofold: (1) reduce congestion and improve efficiency of transportation systems through smart land use, operational improvements, and Intelligent Transportation Systems; and (2) institutionalize energy efficiency and GHG emission reduction measures and technology into planning, project development, operations, and maintenance of transportation facilities, fleets, buildings, and equipment.

The reasoning underlying the Climate Action Program is the conclusion that "the most effective approach to addressing GHG emission reduction, in the short-to-medium term, is strong technology policy and market mechanisms to encourage innovations. Rapid development and availability of alternative fuels and vehicles, increased efficiency in new cars and trucks (light and heavy duty), and

super clean fuels are the most direct approach to reducing GHG emissions from motor vehicles (emission performance standards and fuel or carbon performance standards)."

Senate Bill 97 (SB 97)

Senate Bill 97 (Chapter 185, 2007) required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the State CEQA Guidelines for addressing GHGs. OPR prepared its recommended amendments to the State CEQA Guidelines to provide guidance to public agencies regarding the analysis and mitigation of GHG emissions and the effects of GHGs in draft CEQA documents. The Amendments became effective on March 18, 2010.

Senate Bill 375

SB 375 requires the CARB to develop regional GHG emission reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035. The 18 MPOs in California will prepare a "sustainable communities strategy" to reduce the amount of GHG emission in their respective regions and demonstrate the ability for the region to attain CARB's reduction targets. CARB would later determine if each region is on track to meet their reduction targets. In addition, cities would get extra time -- eight years instead of five -- to update housing plans required by the state.

California Building Energy Efficiency Standards

Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards, was established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. On January 1, 2010, the California Building Standards Commission adopted CALGreen and became the first state in the United States to adopt a statewide green building standards code. CALGreen requires new buildings to reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low pollutant-emitting materials. This standard was updated in 2013 and again in 2016.

Executive Order B-30-15 and SB 32

On April 29, 2015, Governor Jerry Brown issued EO B-30-15, which establishes a State GHG reduction target of 40 percent below 1990 levels by 2030. The new emission reduction target provides for a mid-term goal that would help the State to continue on course from reducing GHG emissions to 1990 levels by 2020 (per AB 32) to the ultimate goal of reducing emissions 80 percent under 1990 levels by 2050 (per EO S-03-05). This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius – the warming threshold at which scientists say there will likely be major climate disruptions. EO B-30-15 also addresses the need for climate adaptation and directs State government to:

- Incorporate climate change impacts into the State's Five-Year Infrastructure Plan;
- Update the Safeguarding California Plan, the State climate adaptation strategy, to identify how climate change will affect California infrastructure and industry and what actions the State can take to reduce the risks posed by climate change;

- Factor climate change into State agencies' planning and investment decisions; and
- Implement measures under existing agency and departmental authority to reduce GHG emissions.

On September 8, 2016, Governor Jerry signed SB 32, which requires the State to ensure that statewide greenhouse gas emissions are reduced by 40% below 1990 levels by 2030. This legislation allows the State to adopt rules and regulations to achieve the maximum, technologically feasible, and cost-effective greenhouse gas emissions reductions for the 2030 target year.

CEQA Guidelines Appendix F

In order to assure that energy implications are considered in project decisions, the California Environmental Quality Act requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy. The goal of conserving energy implies the wise and efficient use of energy.

STATE

Nevada County General Plan

The Air Quality Element and the Circulation Element of the Nevada County General Plan includes several goals, objectives and policies with respect to GHG emissions and sustainability, including the following:

AIR QUALITY ELEMENT

Policy 14.2: Encourage and cooperate with the Northern Sierra Air Quality Management District, or any successor agency, to:

a. Work with the County, local public utility districts, other public agencies and the private sector to encourage the development and implementation of educational and incentive programs to encourage energy conservation, house weatherization, solar energy use in new and existing buildings, and provide air quality monitoring and advisory programs (e.g. daily standard air pollution index data).

b. Develop a community biomass program in cooperation with the Nevada County Department of Sanitation and existing homeowner associations, and provide incentives for composting, mulching, grinding, cogeneration, feedstocks, and chipping in-lieu of outdoor burning.

c. Adopt control measures to reduce pollutant emissions from open burning.

d. Develop a program to regulate and control fugitive dust emissions from construction projects.

e. Identify and establish visibility standards for air quality in the County.

Policy 14.7: The County shall cooperate with all appropriate agencies and other regional transportation agencies that include surrounding counties to develop programs designed to maximize the participation of employers in employer-operated van pool and/or ride sharing for employees, and mass transit service for both employees and customers.

CIRCULATION ELEMENT

Goal RD-4.1: Reduce dependence on the automobile.

Goal RD-4.2: Increase the availability of alternative modes of transportation.

Goal RD-4.3: Decrease vehicle miles traveled while encouraging increased transit ridership and vehicle occupancy.

Goal RD-4.4: Encourage land use patterns that reduce the need for new roadways and promote the use of alternative transportation modes.

Policy RD-4.3.4: Minimize the need to commute by:

a. Providing for an adequate amount of residential, commercial, and industrial designations in proper balance, as shown on the General Plan Land Use Maps; and

b. Encouraging Economic Development and Public Facility policies that support local employment opportunities.

Goal EP-4.3: To the extent feasible, encourage the reduction of Greenhouse Gas emissions during the design phase of construction projects.

Goal EP-4.4: To the extent feasible, encourage the development of energy efficient circulation patterns.

HOUSING ELEMENT

Goal EC-8.2: To the extent feasible, encourage the reduction of Greenhouse Gas Emissions during the design phase of construction projects.

Goal EC-8.6.1: Encourage energy efficient site design in new land divisions, particularly in larger subdivisions and planned developments where there is sufficient area for alternate designs as follows:

a. Encourage lot patterns that maximize proper solar orientation;

b. Utilize interconnected streets and traffic calming features to reduce fuel consumption and encourage walkability;

c. Provide adequate on-site usable open space and relate the type, amount and location of open space to the types of households expected to occupy the building;

d. Include in the project, or locate project within walking distance to (generally, one-quarter to one-half mile), needed amenities such as storage, laundry, community rooms, recycling, childcare facilities, and convenient shopping facilities.

3.2.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with greenhouse gas emissions if it will:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment;
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases;

Additionally, consistent with Appendix F of the CEQA Guidelines, energy-related impacts are considered significant if proposed project implementation would do the following:

- Result in significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations, maintenance, and/or removal;
- Result in significant adverse impacts on local and regional energy supplies and on requirements for additional capacity;
- Result in significant adverse impacts on peak and base period demands for electricity and other forms of energy;
- Fail to comply with existing energy standards;
- Result in significant adverse impacts on energy resources;
- Result in significant adverse impacts related to transportation energy use requirements of the project and use of transportation alternatives; or
- Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to energy conservation.

GHG IMPACTS AND MITIGATION MEASURES

Impact 3.2-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (less than significant with mitigation)

NCTC's ability to address and mitigate climate change impacts is limited primarily to policy and funding decisions related to planned roadway and alternative transportation improvements. As described above, the combustion of fossil fuels during vehicle operations is the primary source of

GHG emissions in California. GHG emissions also result from the carbon dioxide, methane, and nitrous oxide that are released during the combustion of gasoline and diesel fuel in construction equipment, vehicles, buses, trucks, and trains; and the use of natural gas to power transit buses and other vehicles. As discussed previously, historical and current global GHG emissions are known by the State and the global scientific community to be causing global climate change, and future increases in GHG emissions associated with the 2016 RTP could exacerbate climate change and contribute to the significant adverse environmental effects described previously. Furthermore, increased GHG emissions associated with the proposed RTP could impact implementation of the State's mandatory requirements under AB 32 to reduce statewide GHG emissions (to 1990 levels by 2020), as well as the requirements under Executive Orders B-30-15 and S-03-05 to reduce statewide GHG emissions to 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050.

Regional Transportation Indicators: EMFAC Inputs and Trips

This analysis is based on an evaluation of emission trends using the latest population, employment, traffic, and congestion estimates obtained from the NCTC Travel Forecasting Model, for western Nevada County, and from the Truckee/Martis Valley TransCAD transportation model, for eastern Nevada County. Fehr & Peers provided the analysis for western Nevada County and LSC Transportation Consultants provided the analysis for eastern Nevada County. Both models were most recently updated in 2014. Fehr & Peers used the data from the NCTC Travel Forecasting Model to model VMT for the western County, and LSC used the data from the Truckee/Martis Valley TransCAD model for the eastern County, for baseline year 2012 and project buildout year 2035. The VMT data was then input into the latest version of the EMFAC model (EMFAC2014 v.1.0.7) to generate emissions results. The EMFAC2014 model, developed by the California Air Resources Board, is the most recent emissions model approved for use in California by the U.S. EPA. Table 3.2-1 presents the basic traffic data that was input into the EMFAC2014 model.

TABLE 3.2-1: EMFAC INPUTS

	2012	*2035*
Average Daily VMT (western County)	1,699,898	1,843,685
Average Daily VMT (eastern County)	937,870	1,591,307
Total Average Daily VMT	**2,368,928**	**3,166,336**

SOURCE: FEHR & PEERS; LSC TRANSPORTATION; DE NOVO PLANNING GROUP (2016; 2017).

Table 3.2-2 shows the number of trips generated by Nevada County, as provided by EMFAC2014. As shown, average daily VMT is projected to increase by approximately 33.7% from 2012 to 2035. On the other hand, trips are projected to increase by approximately 15.2% trips from 2012 to 2035. This reflects the expectation that VMT per trip is expected to increase by approximately 16.0% between 2012 and 2035.

TABLE 3.2-2: EMFAC OUTPUTS: TRIPS PER DAY

	2012	*2035*
Total Daily Trips	474,188	546,479

SOURCE: FEHR & PEERS, LSC TRANSPORTATION, DE NOVO PLANNING GROUP, EMFAC2014 V.1.0.7 (2017).

Emission Estimates: EMFAC Outputs

Energy Consumption: Vehicle fuel consumption generated by Nevada County was projected from a baseline year of 2012 through the 2035 planning horizon. Table 3.2-3 shows the vehicle fuel consumption in gallons per day for this period. The projection shows a decrease in total fuel consumption from a total of approximately 145,917 gallons in 2012 to 122,983 gallons in 2035 (despite the expected increase in total VMT), as shown in Table 3.2-3. The trend reflects that the vehicle fleet is expected to become more fuel efficient throughout the planning horizon. That is, it is expected that the projected vehicle fleet fuel efficiency will be substantially higher in 2035, as compared with baseline year 2012. This estimate incorporated the fuel efficiency improvements from the California "Pavley" and "Low Carbon Fuel Standard (LCFS)" programs. It should be noted that the estimates provided in Table 3.2-3 represent a conservative estimate, given that they do take into account the potential for a large-scale displacement of gasoline and diesel fuel-based vehicles in place of electric vehicles by 2035.

TABLE 3.2-3: NEVADA COUNTY VEHICLE FUEL CONSUMPTION (1000 GALLONS PER DAY)

Analysis Year	*Gasoline Consumption (1000 gallons per day)*	*Diesel Consumption (1000 gallons per day)*	*Total Fuel Consumption (1000 gallons per day)*
2012	111.503403	34.41368429	145.9170873
2035	78.58763312	44.39577928	122.9834124

SOURCES: DE NOVO PLANNING GROUP, EMFAC2014 V.1.0.7 (2017).

GHG EMISSIONS: The regional GHG emissions analysis and forecasts for CO_2 are summarized in Table 3.2-4. The summary of emissions forecasts is derived from outputs of the EMFAC2014 v.1.0.7. (Appendix B). The projection shows a decrease in CO_2 emissions under buildout conditions, as compared with baseline year 2012. The total reduction in overall Nevada County-generated vehicle GHG emissions is related to improvements in fuel efficiency and emission rates for vehicles over the planning horizon due to state and federal emission control programs.

TABLE 3.2-4: GHG EMISSION ESTIMATES (TONS PER DAY)

ANALYSIS YEAR	*CO_2*
2012	1,407.693411
2035	1,226.998713

SOURCES: DE NOVO PLANNING GROUP, EMFAC2014 V.1.0.7 (2017).

Conclusion

While the 2016 RTP provides improvements that will increase transportation system capacity, it should be noted that it does not control land development and population growth, rather, the General Plans for the incorporated and unincorporated communities control growth and development. Therefore, NCTC's ability to control GHG emissions and mitigate for climate change impacts is largely limited to transportation funding decisions that may result in decreases in VMT throughout the County.

The emission outputs reflect a decreasing trend of GHG emissions from 2012 through 2035. The results of the emission model reflects the fact that the state and federal EPA's vehicle and fuel

regulations that are being phased into place over the study horizon will bring about significantly lower emission levels.

As described previously, NCTC does not have land use authority within the County or the incorporated cities; therefore, NCTC's ability to control GHG emissions and mitigate for climate change impacts is largely limited to transportation funding decisions that may result in decreases in VMT throughout the County.

Although a substantial decrease in Nevada County-generated mobile GHG emissions is expected, implementation of the mitigation measures described below will assist in the reduction of per capita VMT levels generated by Nevada County, which will assist in meeting the stated goals of AB 32, SB 375, and the guidance provided by the applicable State Executive Orders. As described throughout this EIR section, NCTC has included numerous projects and programs to promote the use and expansion of alternative transportation systems throughout the County and they continue to coordinate with local land use agencies to assist in the development of plans and policies aimed at reducing VMT. After implementation of all of the policies, action plans, and mitigation measures included in the RTP and this EIR, the proposed project would not contribute to an overall significant increase in GHG emission generated by Nevada County. Therefore, with mitigation incorporated, this is considered a ***less than significant*** impact.

MITIGATION MEASURES

Mitigation Measure 3.2-1: *The NCTC should explore the feasibility of a transportation pricing policy for the transit system and selected portions of the road network to encourage people to drive less and increase use of transit, walking and bicycling modes. Such a policy may include: free or reduced transit fares during high pollution days; fare-free zones on the transit system; transit vouchers; days on which transit is free; congestion pricing options for portions of the road system, such as tolls on freeways and highways; and parking fees to park in certain high-traffic areas served by public transit.*

Mitigation Measure 3.2-2: *The NCTC should consider a complete streets policy with a strong focus on identifying opportunities to create more active transportation within the region (i.e. bike and pedestrian facilities), in accordance with the following Statewide programs:*

- *The Complete Streets Act of 2008 (AB 1358); and*
- *Active Transportation Program (SB 99 and AB 101).*

Mitigation Measure 3.2-3: *Consistent with Appendix F of the CEQA Guidelines, the agencies implementing RTP projects should:*

- *Promote measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal. As the individual RTP projects are designed there should be an explanation as to why certain measures were incorporated in the RTP project and why other measures were dismissed.*
- *Site, orient, and design projects to minimize energy consumption, increase water conservation and reduce solid-waste.*
- *Promote efforts to reduce peak energy demand in the design and operation of RTP projects.*

- *Promote the use of alternate fuels (particularly renewable ones) or energy systems for RTP projects.*
- *Promote efforts to recycle materials used in the construction (including demolition phase) of RTP projects.*

Mitigation Measure 3.2-4: *The NCTC should coordinate with local and regional agencies to assist in efforts to develop local and regional CAPs (Climate Action Plans) that address climate change and greenhouse gas emissions. Local and regional CAPs should include the following components:*

- *Baseline inventory of GHG emissions from community and municipal sources.*
- *A target reduction goal consistent with AB 32.*
- *Policies and measures to reduce GHG emissions.*
- *Quantification of the effectiveness of the proposed policies and measures.*
- *A monitoring program to track the effectiveness and implementation of the CAP(s).*

NCTC's role in the development of local and regional CAPs should include:

- *Assistance in seeking and securing funding for the development of local and regional CAPs.*
- *Collaboration with local and regional agencies throughout their respective planning processes.*

Mitigation Measure 3.2-5: *NCTC should assist local agencies with the development of an Alternative Fuel Vehicle and Infrastructure Policy. The policy should include provisions that address best practices, and standards related to saving energy and reducing GHG emissions through AFV use, including:*

- *A procurement policy for using AFV by franchisees of these cities, such as trash haulers, green waste haulers, street sweepers, and curbside recyclable haulers. Such AFVs should have GHG emissions at least 10 percent lower than comparable gasoline- or diesel- powered vehicles.*
- *A fleet purchase policy to increase the number of AFVs (i.e., vehicles not powered strictly by gasoline or diesel fuel) for municipally owned fleets.*
- *A public education policy to encourage the use of alternative fuel vehicles and development of supporting infrastructure.*

Impact 3.2-3: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases (less than significant)

As described previously, the State Legislature and the global scientific community have found that global climate change poses significant adverse effects to the environment. To mitigate these adverse effects the State Legislature enacted AB 32, which requires statewide GHG reductions to 1990 levels by 2020. Subsequent State Executive Orders have further provided the GHG reduction targets of a statewide 40% reduction below 1990 levels by 2030, and an 80% reduction below 1990 levels by 2050.

While AB 32 is the legislation that targets the reduction of statewide GHG emissions, SB 375 is the implementing legislation that establishes regional GHG emission reduction targets. AB 32 does not specify that the emissions reductions should be achieved through uniform reduction by geographic location or by emission source characteristics. It is generally accepted that significant GHG emission reductions are more achievable in larger urban and metropolitan areas, compared to rural areas. As such, CARB established reduction targets principally in urban and metropolitan areas of California.

On September 23, 2010 CARB approved GHG reduction targets for each of the 18 metropolitan planning organizations (MPOs) in California. Each MPO now must prepare a "sustainable communities strategy (SCS)" that demonstrates how the region will meet its GHG reduction target through integrated land use, housing and transportation planning.

Nevada County is not covered by an MPO, and is not subject to SB 375 or the emission reduction targets established by CARB. Rather, Nevada County is considered an isolated rural regional transportation planning area. NCTC does not have land use planning authority within Nevada County to control population growth, which is directly responsible for increases in GHG emissions. However, NCTC does coordinate with the local land use agencies and support transportation funding decisions that result in improvements and efficiencies in the transportation systems. An overreaching goal for this coordination effort is to minimize VMT and trips per capita throughout the County, which ultimately translates into improvements of GHG emissions per capita.

As discussed above, implementation of the 2016 RTP will not conflict with AB 32 or SB 375. There are no other plans, policies or regulations adopted for the purpose of reducing the emissions of greenhouse gases in Nevada County. Therefore, this is impact is considered ***less than significant***.

Impact 3.2-4: Project implementation may result in the inefficient, wasteful, or unnecessary use of energy resources (less than significant)

Appendix F of the State CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce “wasteful, inefficient and unnecessary” energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix F of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed project would be considered “wasteful, inefficient, and unnecessary” if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The amount of energy used by the proposed project directly correlates with the amount of fuel used by vehicles generated in Nevada County. Other project energy usage includes construction-generated fuel (by on and off-road vehicles) during the construction phase of individual RTP projects. Estimated gallons of diesel and gasoline fuel generated by Nevada County vehicles in 2012 (baseline

year) and projections for 2035 (buildout of the proposed project) are provided in Table 3.2-3 (see above). As shown, both gasoline and diesel fuel consumption generated by Nevada County vehicles are expected to substantially decrease over this timeframe. Additionally, construction-related usage of gasoline and diesel fuel (for on-road and off-road vehicles) would not differ substantially from other similar projects, and would depend heavily on the specifics of the individual projects built in accordance with the 2016 RTP. The 2016 RTP could also generate additional electricity consumption, dependent on the amount of lighting that could be used during project construction activities and during operation of the individual 2016 RTP projects (e.g. outdoor lighting). There would not be any substantial new natural gas usage correlated with the construction of operation of the projects built through the 2016 RTP.

Conclusion

The proposed project is in compliance with all applicable Federal, State, and local regulations regulating energy usage. For example, PG&E, the electricity and natural gas supplier to the proposed project, is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. PG&E is expected to achieve at least a 33% mix of renewable energy resources by 2020, and 50% by 2030. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standard ("part 6"), last updated in 2016, would be applicable to the proposed project. Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

Furthermore, as described previously, the implementation of Mitigation Measures 3.2-1 through 3.2-7 would reduce the energy usage of individual RTP projects (from on-road vehicle gasoline and diesel sources). The 2016 RTP would not be expected to result in adverse impacts related to project energy requirements, energy use efficiencies, and/or energy intensiveness of materials. Given the limited use of electricity, significant adverse impacts on peak and base period demands for electricity is not expected. There is not expected to be a significant adverse impact on local and regional energy supplies and on requirements for additional capacity, or otherwise result in significant impacts on energy resources. The proposed project would be required to comply with all existing energy standards and policies, including those of Nevada County, the NSAQMD, and CARB. The proposed project would also be in compliance with all applicable planning documents, as described previously. Given that individual projects would be evaluated prior to the beginning of their project construction, and with implementation of the mitigation measures previously described, this is a ***less than significant*** impact.

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This section describes the existing land uses in Nevada County and its incorporated communities, describes the land use regulations for each jurisdiction, and evaluates the environmental effects of implementation of the 2016 RTP. No Notice of Preparation comments regarding land use and population were received.

3.3.1 ENVIRONMENTAL SETTING

EXISTING PHYSICAL ENVIRONMENT

The study area includes the entire County of Nevada. Nevada County lies within the northern portion of California, stretching from the eastern end of the Sacramento Valley across the Sierra Nevada to the State of Nevada. Section 2.0 Project Description includes Figure-2.0-1 which illustrates the regional location and Figure-2.0-2 which illustrates the project vicinity (i.e. Nevada County).

Nevada County's geography has led to distinctive development patterns in the eastern and western portions of the County. Western Nevada County is very attractive for residential and commercial developments due to the rural character of the area and the quality of life it affords.

The Grass Valley/Nevada City area has become the primary population center in western Nevada County. This foothill area of the Sierras is a combination of tree-covered rolling hills and stream channels, which have greatly affected road and utility locations. The major transportation facilities in western Nevada County are State Routes 20, 49, and 174.

Eastern Nevada County is known for its many recreational opportunities. This mountainous area of the Sierra Nevada offers a full range of winter and summer recreational activities, such as skiing, camping, hiking, and kayaking. These recreational opportunities and the proximity of this area to Reno and Lake Tahoe increase its popularity as a tourist attraction.

The Town of Truckee is the major population center for eastern Nevada County. In addition to being a station for rail freight and passenger service, Truckee is at the crossroads of Interstate 80 and State Routes 89 and 267. Interstate 80 is a major transcontinental route, and the two state routes are the northern entrances to the Tahoe Basin.

Incorporated Cities with the County

Grass Valley. The City of Grass Valley is the largest city in the western region of Nevada County, California, United States. Situated at roughly 2,500 feet (760 m) elevation in the western foothills of the Sierra Nevada mountain range. The City of Grass Valley participates in a variety of ways with other governments and agencies. It has a representative on the Sierra Economic Development District Board, which covers Sierra, Nevada, and Placer and El Dorado counties. It is also represented on the Nevada County Transportation Commission which works on transportation issues of countywide concern, the Local Agency Formation Commission (LAFCo) and the Solid and Hazardous Waste Commission.

Nevada City. Nevada City is located about 60 miles northeast of Sacramento and is Nevada County's government seat. It was first settled in 1849 during the California Gold Rush and by 1850 had become the most important and well known mining town in California. With a population of approximately 3,060 the city is characterized today as a small well-preserved California Gold Rush town.

Town of Truckee. Truckee is located in the Sierra Nevada Mountains of California, just west of the Nevada state line. Donner Lake is located within the Town Limits and Donner Pass over the summit of the Sierra Nevada is just west of Town. Interstate 80, the major east-west trans-Sierra "all-weather" highway, passes through the Town on its way between California and Nevada. The Town incorporated as a municipality by a vote of the people in 1993. The incorporated boundaries are nearly 34 square miles and range in elevation from 5500 feet at the Town's eastern boundary to 7500 feet in the northwestern corner. The Town has a population of approximately 16,000.

General Plan and Zoning Designations

The Nevada County RTP is a regional transportation planning document and covers all of Nevada County. The Nevada County Transportation Commission (NCTC) does not have land use authority. The applicable General Plan land use and zoning designations for the areas covered by the RTP include the General Plan land use designations and zoning established by the Nevada County General Plan, Nevada County Zoning Ordinance, and the General Plans and zoning ordinances of the cities of Grass Valley, Nevada City, and the Town of Truckee.

POPULATION, HOUSING, EMPLOYMENT, AND OTHER DEMOGRAPHICS

Based on data from the latest U.S. Census American Community Survey[1], Nevada County is expected to remain a commuter-oriented county, with 76.4 percent of the workforce driving alone to work. The average daily commute time in Nevada County was approximately 25 minutes, and approximately 57 percent of the commuters left their home between 6 a.m. and 8:30 a.m. About 9.4 percent have a commute that is one hour or longer each way.

Population

Since 2000, the County has seen an increase in its overall population by approximately 5,000 people. Consistent with population trends in the three incorporated areas within the County, the unincorporated area of Nevada County has seen a slight decline in population over the last three years. In 2016, the State of California Department of Finance estimated that Nevada County had a population of 98,095 and has experienced an annual percent change of approximately -0.32 percent over the last five years. This declining population can be attributed to several factors including social

[1] U.S. Census Bureau (2015). *2011-2015 5-year American Community Survey.*

and economic factors and the fact that a large portion of Nevada County's population is 65 and older.

In the last 15 years, more of the growth has been in the unincorporated portion of the county. The incorporated areas of the county are home to 32 percent of the population, with 16 percent in Truckee, 13 percent in Grass Valley, and 3 percent in Nevada City. The remaining 68 percent live in outlying unincorporated areas.

As described in the California Department of Transportation County-Level Economic Forecast 2015-2040 population growth during 2015 to 2020 is expected to average 0.5 percent per year. All of this growth will be the result of net migration, as the county will continue to experience a natural decrease. These estimates show that Nevada County will see limited growth by 2035. [2]

Housing

An estimated 84 percent of county dwellings are single-family units, and 10 percent are multi-family units. An estimated 60 percent of all housing is in the unincorporated area of the County, with Truckee representing the most housing units among the incorporated cities/town, at 24 percent.

Employment

Employment by sector paints a picture of economic health by industry and of the overall County. The Service-Providing sector leads in the number of people employed (72%), followed by Government (21%), and Goods Producing (7%) sectors. Average weekly wages range from $379 in Leisure and Hospitality to $1,214 in Federal Government. This year the number of jobs increased from 25,836 to 26,149. The increase of jobs in the service-providing and government industries led to a slight .5% increase in the Average Weekly Wage. As of January 2015, an estimated 3,020 workers in Nevada County were unemployed, making up 6.2 percent of the local labor force.[3]

As described in the California Department of Transportation County-Level Economic Forecast between 2015 and 2020, the momentum for employment growth will be in construction, leisure and hospitality, education and healthcare, and professional services. Together, these sectors will account for 67 percent of net job creation in the county.

[2] Economic Analysis Branch Office of State Planning California Department of Transportation California County-Level Economic Forecast 2015-2040

[3] *Nevada County Demographic and Statistical Profile for 2015/2016*

3.3.2 REGULATORY SETTING

FEDERAL AND STATE

Department of Transportation Act - Section 4(f)

The Department of Transportation Act of 1966, which was previously discussed in the Biological Resources section of this EIR, is set forth in Title 49 United States Code (U.S.C.). This law established that it is the policy of the United States Government to make a special effort to preserve the natural beauty of the countryside and public parks and recreation lands, wildlife and waterfowl refuges, and historic sites. The Secretary of Transportation may approve a transportation program or project that requires the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of a historic site of national, state, or local significance only if: a) There is no prudent and feasible alternative to using that land; and b) The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

California Department of Transportation

The jurisdiction of the California Department of Transportation (Caltrans) includes right-of-ways of state and interstate routes within California. Any work within the right-of-way of a federal or state transportation corridor is subject to Caltrans' regulations governing allowable actions and modifications to the right-of-way. Caltrans issues permits to encroach on land within their jurisdiction to ensure encroachment is compatible with the primary uses of the State Highway System, to ensure safety, and to protect the State's investment in the highway facility. The encroachment permit requirement applies to persons, corporations, cities, counties, utilities, and other government agencies.

LOCAL

At the local levels, a number of agencies, including the Local Area Formation Commission, Nevada County, and the cities of Grass Valley, Nevada City, and the Town of Truckee all have a role in land use and planning throughout the County. The County and cities typically serve as a lead agency with the discretionary approval authority for land use projects and specific infrastructure improvements within their jurisdiction.

Local Area Formation Commission

The Nevada Local Agency Formation Commission (LAFCO) is a legislatively established commission responsible for coordinating logical and timely changes in local governmental boundaries, conducting special studies that review ways to reorganize, simplify, and streamline governmental structure, and preparing a sphere of influence for each city and special district within each county. LAFCO is directed to see that services are provided efficiently and economically while agricultural and open-space lands are protected.

General Plans

California state law requires each city and county to adopt a general plan "for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning" (Government Code §65300). The California Supreme Court has called the general plan the "constitution for future development." The general plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, both public and private.

The policies of the general plan are intended to underlie most land use decisions. Pursuant to state law, subdivisions, capital improvements, development agreements, and many other land use actions must be consistent with the adopted general plan. In counties and general law cities, zoning and specific plans are also required to conform to the general plan.

Nevada County and each of the incorporated Cities have adopted general plans that govern the land use decisions within their respective jurisdictions. The general plans include numerous goals, objectives, policies, and implementation measures that control land uses and population growth.

Zoning

The zoning code of the county and each incorporated community is the set of detailed requirements that implement the general plan land use designations and policies at the individual parcel level. The zoning code presents standards for different uses and identifies which uses are allowed in the various zoning districts of the jurisdiction. Since 1971, state law has required the city or county zoning code to be consistent with the jurisdiction's general plan, except in charter cities.

Specific and Community Plans

The county or the incorporated communities may also provide additional specificity in land use planning beyond that identified in their respective General Plans by developing community or specific plans for smaller, more specific areas within their jurisdiction. These more localized plans, which are often referred to as "Master Planned Communities", provide for focused guidance for developing a specific area, with development standards tailored to the area, as well as systematic implementation of the general plan. Specific and community plans are required to be consistent with the city or county's general plan.

3.3.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on land use and planning and population and housing if it will:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan,

local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;

- Conflict with any applicable habitat conservation plan or natural community conservation plan (this topic was found to have No Impact during the initial IS/NOP analysis, therefore, will not be further discussed in this section. For additional information on this impact refer to the IS/NOP included within Appendix a);
- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

IMPACTS AND MITIGATION MEASURES

Impact 3.3-1: Physical Division of an Established Community (less than significant with mitigation)

The majority of RTP projects would involve transportation system improvements to existing facilities, which would mostly occur within or in close proximity to existing rights-of-way. Some RTP projects will involve new facilities that will occur within or adjacent to existing communities. New facilities may include roadway widening, roadway extensions, bicycle lanes, bicycle/pedestrian paths, bridges, and interchanges. Additionally, the 2016 RTP includes measures that are intended to provide the existing land uses with a complete transportation system that has a broader level of safe transportation choices for the citizens. A complete transportation system with more safe choices provides an enhancement to the quality of life within the community.

In many cases, improvements to facilities will occur where communities may already physically divided by existing facilities, including highways, roadways, intersections, interchanges, transit routes, and airports. The 2016 RTP is intended to improve inter- and intra-regional connectivity and new or improved land use linkages. However, specific projects, such as multimodal improvements have the potential to divide existing contiguous land uses. Additionally, intersection and interchange improvements may create visual and physical barriers between adjacent land uses.

Because the proposed project is a planning document individual projects are not currently available for review at the design level, however, it is assumed that RTP projects that affect roads and interchanges present the greatest potential for impacts regarding the division of an established community. The following mitigation measure would ensure that all RTP projects are designed to maintain the cohesiveness of the existing communities to the greatest extent feasible. Where full design mitigation is not feasible, measures would be incorporated into the design to minimize the impacts associated with project implementation. Adherence to the requirements of this mitigation measure would reduce this impact to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.3.1: *Prior to approval of RTP projects, the implementing agency shall consult with local planning staff to ensure that the project will not physically divide a community. The consultation should include a more detailed project-level analysis of land uses adjacent to proposed improvements to identify specific impacts. The analysis should consider new road widths and specific project locations in relation to existing roads. If it is determined that a project could physically divide a community, the implementing agency shall redesign the project to avoid the impact, if feasible. The measures could include realignment of the improvements to avoid the affected community. Where avoidance is not feasible, the implementing agency shall incorporate minimization measures to reduce the impact. The measures could include: alignment modifications, right-of-way reductions, provisions for bicycle, pedestrian, and vehicle facilities, and enhanced landscaping and architecture.*

Impact 3.3-2: Conflicts with Applicable Land Use Plan, Policy, or Regulation Adopted to Avoid or Mitigate an Environmental Effect (less than significant)

As described above under Regulatory Setting, each of the jurisdictions in Nevada County has an adopted General Plan to guide land use and development decisions, including circulation patterns and improvements. The RTP projects responds to growth anticipated in adopted general plans, as well as address safety and rehabilitation issues necessary to maintain the existing transportation system. The RTP projects will also enhance mobility within established communities, and provide connectivity between established communities and throughout the county. The 2016 RTP includes several objectives, policies, and implementation measures intended to coordinate regional transportation planning with local planning efforts.

RTP projects would be generally compatible with existing land uses and policies; however, specific RTP projects, such as improvements to existing transportation corridors (mainline highway and regional street segments, interchanges, railroad underpasses and overpasses, multimodal facilities, airport taxiways, and bike and pedestrian facilities) could conflict with county and city land use policies and designations by encroaching on incompatible land uses. Individual design level project information is currently not available. However, each individual RTP project will be evaluated by the implementing agency on a project-specific level during the design and engineering stage of the process. Each RTP project will be reviewed for conformance with the general plan of the jurisdiction(s) in which the project will be located, as well as conformance with the policies of the 2016 RTP.

The 2016 RTP is intended to accommodate growth envisioned by the General Plans of Nevada County and its incorporated communities by providing multimodal circulation infrastructure necessary to meet community needs. The 2016 RTP includes policies that ensure consistency with local plans and regulations and a conformance review of individual RTP projects will ensure consistency with adopted policies and regulations. The 2016 RTP would not result in significant conflicts with plans, policies, and regulations adopted to mitigate an environmental effect. Therefore, this impact is considered ***less than significant***. No mitigation measures are necessary.

Impact 3.3-3: Induce Substantial Population Growth in an Area (less than significant)

Given projected population, housing, and employment trends, modest growth in the region is anticipated to occur over the planning horizon. However, as described in the environmental setting section above, growth is expected to be well below the State average growth rates.

The 2016 RTP has been planned to accommodate anticipated levels of growth, including growth associated with adopted general plans. The RTP does not involve approvals associated with any development projects, or designate lands for development, change land uses within the county, and does not provide additional water sewer or other infrastructure that could facilitate additional development in the region. The RTP does not induce growth beyond the growth that is planned or being planned by local jurisdictions both locally and regionally. Therefore, implementation of the 2016 RTP will have a ***less than significant*** impact on growth inducement.

Impact 3.3-4: Displace Substantial Numbers of People or Existing Housing, Necessitating the Construction of Replacement Housing Elsewhere (less than significant)

The 2016 RTP would not, in and of itself, displace substantial numbers of housing units or people. The majority of RTP projects involve work within or adjacent to existing rights-of-way and would not involve acquisition of land and displacement of substantial numbers of persons or housing. This is true of most widenings, modifications to interchanges/intersections, and new undercrossings/overcrossings. These transportation projects will generally not require the displacement of any residences or businesses since the right-of-way has already been acquired.

Some of the RTP projects (i.e. new highway/street segments, intersections may involve land acquisition. While most of the additional right-of-way acquisition is anticipated to be vacant or undeveloped land, however as design level information is currently not available for individual project it is possible that the land necessary for the improvement could include existing residential units or businesses. This is anticipated to be rare and involve a limited number of residences or businesses, which can only be determined on a project-by-project basis.

State and federal law require due compensation for property taken to carry out the infrastructure projects. Also required by law, relocation and assistance must be provided to displaced residents and businesses in accordance with the Federal Uniform Relocation and Real Property Acquisition Policies Act of 1970 and the State of California Relocation Assistance Act.

As noted above, RTP projects would not result in displacement or relocation of a substantial number of homes, businesses, or people. Growth planned in the general plans of the jurisdictions within Nevada County would result in additional housing opportunities and would more than offset any units potentially removed in association with RTP projects. Therefore, impacts related to a substantial displacement of housing units or persons as a result of the 2016 RTP are ***less than significant***. No mitigation measures are necessary.

This section describes existing and future regional multi-modal transportation related conditions associated with implementation of the 2016 RTP. The analysis in this section addresses existing and future transportation conditions both with and without the 2016 RTP. Information in this section is derived from the 2016 Draft RTP and from analysis prepared by Fehr & Peers Transportation Consultants, and LSC Transportation Consultants. There were no comments received during the public review period for the Notice of Preparation regarding this topic.

3.4.1 ENVIRONMENTAL SETTING

The RTP is a key element in maintaining and improving the transportation system in Nevada County as well as responding to the transportation needs of those residing in or traveling through Nevada County. The 2016 RTP is developed to improve traffic and transportation conditions for travelers within Nevada County.

PHYSICAL SETTING

The study area includes the entire County of Nevada. Nevada County lies within the northern portion of California, stretching from the eastern end of the Sacramento Valley across the Sierra Nevada to the State of Nevada. Nevada County's geography has led to distinctive development patterns in the eastern and western portions of the County. Western Nevada County is very attractive for residential and commercial developments due to the rural character of the area and the quality of life it affords.

The Grass Valley/Nevada City area has become the primary population center in western Nevada County. This foothill area of the Sierras is a combination of tree-covered rolling hills and stream channels, which have greatly affected road and utility locations. The major transportation facilities in western Nevada County are State Routes 20, 49, and 174.

Eastern Nevada County is known for its many recreational opportunities. This mountainous area of the Sierra Nevada offers a full range of winter and summer recreational activities, such as skiing, camping, and hiking. These recreational opportunities and the proximity of this area to Reno and Lake Tahoe increase its popularity as a tourist attraction.

The Town of Truckee is the major population center for eastern Nevada County. In addition to being a station for rail freight and passenger service, Truckee is at the crossroads of Interstate 80 and State Routes 89 and 267. Interstate 80 is a major transcontinental route, and the two state routes are the northern entrances to the Tahoe Basin.

DEMOGRAPHICS

Population Changes

In the period between 1975 and 1990, the average annual population growth rate in Nevada County exceeded five percent. This growth rate was one of the highest in the state and did not allow local governments to keep pace with infrastructure, maintenance, and improvements.

Fortunately, the growth rate slowed significantly between 1990 and 2000 and continues to be the trend.

In 2000, the total county population was reported at 92,033. After 2005, when population was 97,454, growth slowed significantly, and population peaked at 98,764 in 2010 when the last RTP update was prepared. The 2010 population represented a 7.3% increase overall since 2000 and translates to approximately 0.7% per year growth during the period. Between 2010 and 2012, population declined slightly to 97,637, or approximately -1.1%. Since 2012, population has increased slightly to 98,193. The increase from 2012 to 2015 was 0.6%, or about 0.2% annually. Table 3.4-1 presents the population distribution in Nevada County by location.

TABLE 3.4-1: NEVADA COUNTY POPULATION DISTRIBUTION

AREA OF RESIDENCE	POPULATION					
	JAN 1995	APR 2000	JAN 2005	APR 2010	JAN 2012	JAN 2015
Grass Valley	9,332	10,922	12,864	12,860	12,731	12,925
Nevada City	2,855	2,996	3,019	3,068	3,085	3,194
Truckee	11,775	13,864	15,364	16,180	15,981	16,211
Unincorporated Area	62,464	64,251	66,207	66,656	65,840	65,863
Total County	**86,426**	**92,033**	**97,454**	**98,764**	**97,637**	**98,193**

SOURCE: REPORT E-4 POPULATION ESTIMATES FOR CITIES, COUNTIES, AND THE STATE, SACRAMENTO, CALIFORNIA (DOF MAY 2015), E-4 HISTORICAL POPULATION ESTIMATES FOR CITY, COUNTY AND THE STATE, 1991-2000, WITH 1990 AND 2000 CENSUS COUNTS. SACRAMENTO, CALIFORNIA (DOF SEPTEMBER 2015).

Population Projections

Since 2000, the County has seen an increase in its overall population by approximately 5,000 people. Consistent with population trends in the three incorporated areas within the County, the unincorporated area of Nevada County has seen a slight decline in population over the last three years. In 2016, the State of California Department of Finance estimated that Nevada County had a population of 98,095 and has experienced an annual percent change of approximately -0.32 percent over the last five years. This declining population can be attributed to several factors including social and economic factors and the fact that a large portion of Nevada County's population is 65 and older.

In the last 15 years, more of the growth has been in the unincorporated portion of the county. The incorporated areas of the county are home to 32 percent of the population, with 16 percent in Truckee, 13 percent in Grass Valley, and 3 percent in Nevada City. The remaining 68 percent live in outlying unincorporated areas.

As described in the California Department of Transportation County-Level Economic Forecast 2015-2040 population growth during 2015 to 2020 is expected to average 0.5 percent per year. All

of this growth will be the result of net migration, as the county will continue to experience a natural decrease. [1] These estimates show that Nevada County will see limited growth by 2035.

Population Age Distribution

Based on 2010 Census data, approximately 21.5% of the county's population is under the age of 20. Persons between 20 and 54 years of age account for 40.9% of the population, compared to 49.7% for the state as a whole. Persons between 55 and 64 years of age account for 18.2% of the population, which is the largest demographic group when reviewing ten-year subsets. The elderly population (persons over 65 years) account for 19.4%, compared to 11.4% for the state as a whole.

As shown in Table 3.4-2, the population of Nevada County is projected to increase from 98,193 in 2015 to approximately 105,389 in 2025 and 110,224 in 2035. This represents an increase of 12,031 persons or 12% over 20 years, or about 0.6% annually. Annual growth is expected to average about 0.7% from 2015 to 2025 but slow to 0.6% from 2025 to 2035. As Nevada County's population increases, additional demand will be placed on the existing transportation infrastructure.

TABLE 3.4-2: POPULATION PROJECTIONS BY AGE

YEAR	65 YEARS AND OLDER	75 YEARS AND OLDER	TOTAL
2015	24,155	9,751	98,193
2025	32,125	15,648	105,389
2035	32,937	20,083	110,224

SOURCE: DOF DEMOGRAPHIC RESEARCH UNIT, 2015.

Vehicles per Household

Vehicles per household data from the 2009-2013 American Community Survey are shown in Table 3.4-3. Approximately 1,830 or 4.5% of Nevada County households have no vehicles available, comparable to the 4.7% share reported in the 2000 U.S. Census and in the last RTP update.

TABLE 3.4-3: NUMBER OF VEHICLES PER HOUSEHOLD (HH)

PLACE OF WORK	2000	2013
None	4.7%	4.5% ± 0.9%
1	27.7%	27.6% ± 1.5%
2	42.1%	38.8% ± 1.8%
3 or more	25.4%	29.0% ± 1.5%

SOURCE: U.S. CENSUS BUREAU, 2009-2013 AMERICAN COMMUNITY SURVEY AND 2000 U.S. CENSUS.

Journey-to-Work Mode Split

Based on data from the latest U.S. Census American Community Survey[2], Nevada County is expected to remain a commuter-oriented county, with 76.4 percent of the workforce driving alone

[1] Economic Analysis Branch Office of State Planning California Department of Transportation California County-Level Economic Forecast 2015-2040. Note DOT and DOF estimates differ slightly.

[2] U.S. Census Bureau (2015). *2011-2015 5-year American Community Survey.*

to work. The average daily commute time in Nevada County was approximately 25 minutes, and approximately 57 percent of the commuters left their home between 6 a.m. and 8:30 a.m. About 9.4% have a commute that is one hour or longer each way.

Travel characteristics within Nevada County vary widely according to the region in which it occurs. The western portion of the County contains a large number of trip producing (residential) land uses in relation to trip-attracting (office and commercial) land uses.

Travel within the eastern portion of the County, however, is driven by a greater quantity of trip attracting land uses than trip-producing uses. This area is characterized by many recreational and tourist attractions, which causes large amounts of traffic to originate outside the area with destinations either inside or through the area.

Travel Time to Work

The mean travel time to work for Nevada County residents is 25 minutes. Approximately 55% of Nevada County workers that commute travel less than 20 minutes to their place of employment. The Census data indicates that 35.6% of workers commute between 20 – 59 minutes and 9.4% commuted from more than 60 minutes to work.

Since the 2000 Census data indicates that Nevada County residents commute time has slightly been reduced and mean travel times have been reduced by approximately 1 minute. Table 3.4-4 presents the Travel Time to Work according to the 2000 U.S. Census and the 2015 U.S. Census American Community Survey.

TABLE 3.4-4: TRAVEL TIME TO WORK (2015 ACS AND 2000 U.S. CENSUS)

NEVADA COUNTY WORKERS WHO DID NOT WORK AT HOME	2015	2000
Less than 10 minutes	18.5%	17.4%
10 to 14 minutes	19.0%	18.8%
15 to 19 minutes	17.6%	16.0%
20 to 24 minutes	11.3%	14.2%
25 to 29 minutes	5.1%	4.5%
30 to 34 minutes	9.0%	8.4%
35 to 44 minutes	4.5%	4.2%
45 to 59 minutes	5.7%	5.7%
60 or more minutes	9.4%	10.9%
Mean Travel Time to Work	**25.0 Min**	**26.0 Min**

SOURCES: U.S. CENSUS BUREAU 2011-2015 ACS CENSUS, JOURNEY-TO-WORK; U.S. CENSUS BUREAU 2000 CENSUS, JOURNEY-TO-WORK

REGIONAL ROADWAYS

State Highways

State highways in Nevada County are the backbone of the region's roadway system, connecting the major population centers within the county, and connecting the county with other regions throughout the State. All of the State highways in Nevada County are regionally significant. Figure 3.4-1 illustrates the major transportation facilities throughout the County. The State highways in Nevada County include:

Interstate 80 (I-80) is a major route on the Federal Interstate System that runs in California from its western limits in the San Francisco Bay area to the eastern California/Nevada Border. It continues eastward outside of California toward the northeastern United States and terminates in New Jersey. As one of three major all-weather trans-Sierra routes in the winter (others include U.S. 50 and California 88), Interstate 80 is always busy with commercial traffic, tourists, skiers, commuters, and others. Interstate 80 crosses the Donner Summit, one of the highest points on the freeway, and then descends into Truckee, a gateway to scenic Lake Tahoe. Passing by a few small towns, Interstate 80 enters Nevada just east of Farad.

State Route 20 (SR 20) connects the City of Grass Valley with Yuba County to the west of Grass Valley and continues north of Nevada City, connecting to I-80. The highway portion between SR 20 to the west of Grass Valley and SR 20 north of Nevada City is signed as a shared SR 49/20, and is a principal arterial. This shared route is named the "Golden Center Freeway" between Route 49 south of Grass Valley and SR 20 north of Nevada City.

State Route 49 (SR 49) runs north/south and is a principal arterial for Nevada County, connecting the cities of Grass Valley and Nevada City with I-80 in Auburn to the south. It is the lifeline for much of Nevada County's freight and lumber traffic and also provides access to recreational attractions. To the west of Nevada City, this route continues in a northerly direction to the Nevada/Yuba County line.

State Route 174 (SR 174) extends approximately 13 miles northward from I-80 near Colfax in Placer County to SR 20 in Grass Valley. This route is a minor arterial and serves mostly local rural residential populations and some regional traffic traveling to the Grass Valley or Nevada City area. SR 174 is also an alternative connection to I-80 for residents in the Grass Valley and Nevada City area.

State Route 89 (SR 89) is a north/south route, which serves as a key facility for interregional travel. From I-80 in Truckee heading south, SR 89 provides the primary access to the Tahoe Basin's North/West Shore, as well as Squaw Valley and Alpine Meadows. SR 89 to the north of I-80 provides a connection to Sierra County.

State Route 267 (SR 267) is a north/south undivided two-lane conventional highway 12.69 miles in length that connects I-80 near Truckee to SR 28 near Kings Beach in Placer County. The route is of local and regional significance providing access to residential, commercial, industrial, and recreational land uses and serves inter-regional, local commuter, and recreational traffic traveling between the Tahoe Basin, Martis Valley, Truckee, and I-80.

Interregional Road System "High Emphasis Routes" and "Focus Routes"

The IRRS was first identified by statute in 1989 as part of the Blueprint Legislation (a 10-year transportation funding package including AB 471, SB 300, and AB 973). It is a subset of the entire 265 SHS routes that provides connectivity among all of California's regions. There are currently 93 statutory IRRS routes. The IRRS was conceived as part of the larger effort to address the critical transportation system funding and development needs of the State. The implementation of IRRS improvements is dependent on prioritization of State transportation revenues. Most interstates are included in the IRRS.

The 2015 Caltrans Interregional Transportation Strategic Plan identifies I-80, SR 20, and SR 49 between I-80 and SR 20 as "priority interregional highways," therefore among the most significant intercity highways that serve intercity travel. These facilities are expected to be the focus of future Interregional Transportation Improvement Program (ITIP) investment. However, the plan notes that funding to address the needs of the system is a real and significant challenge.

This funding is particularly important for Nevada County. As noted in the 2014 Bay to Tahoe Basin Recreation and Tourism Travel Impact Study, tourism has more significant impacts, such as congestion, on rural roads, yet funding is largely based on lane miles and resident populations. Thus, rural areas such as Nevada County that serve significant tourism traffic are at a disadvantage compared to other areas.

Scenic Highways

California's Scenic Highway Program was created by the Legislature in 1963. The purpose of the program is to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of the lands adjacent to highways. A highway may be designated scenic depending on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes on the traveler's enjoyment of the view.

In Nevada County, SR 20 from Skillman Flat Campground (14 miles east of Nevada City) to one-half mile east of Lowell Hill Road is an officially designated state scenic highway. Additionally, most other highways within the county have been identified as eligible state scenic highways but have not been officially designated. These highways include much of I-80, SR 20, SR 49, SR 89, and SR 174. The status of a State Scenic Highway changes from eligible to officially designated when the local jurisdiction adopts a scenic corridor protection program that is approved by Caltrans.

County Roads

The County maintains approximately 569 miles of roadways.[3]. Numerous county roadways provide intermediate and localized access to rural areas of the county, as well as the more populated cities of Grass Valley, Nevada City, and Truckee and the communities of Lake Wildwood, Alta Sierra, Lake of the Pines, and others. Most roads are two lanes.

Forest Service Roads

Nevada County has an extensive network of roads used by off-highway vehicles. The US Forest Service manages 166 miles of roads in Nevada County. Most of these roads are within the Tahoe National Forest. Humboldt-Toiyabe National Forest also administers a small amount of National Forest lands along the eastern edge of the county.

Level of Services

The operations of roadway facilities are described in terms of Level of Service (LOS). LOS is a qualitative description of traffic flow based on factors such as speed, travel time, delay, and

[3] Caltrans High Performance Monitoring System, 2012.

freedom to maneuver. Six levels are defined, from LOS A and B, which represent uncongested operating conditions, to LOS C and D, which represent moderate levels of congestion, to LOS E, which represents at-capacity conditions. Operations are designated as LOS F when volumes exceed capacity, resulting in stop-and-go conditions.

TABLE 3.4-5 LEVEL OF SERVICE (LOS) DEFINITIONS/CHARACTERISTICS

LOS	*DESCRIPTION*
A	Free flow conditions; individual users are virtually unaffected by the presence of other vehicles.
B	Stable flow, but the presence of other vehicles in the traffic stream becomes noticeable.
C	Stable flow, but the operation of individual users becomes affected by interaction with other vehicles.
D	Stable flow, but higher density with maneuverability restricted by congestion and reduced travel speed.
E	Operating conditions at or near the capacity level.
F	Represents forced or a breakdown in traffic flow.

SOURCE: HIGHWAY CAPACITY MANUAL – TRANSPORTATION RESEARCH BOARD.

GOODS MOVEMENT

The primary mode of goods movement in Nevada County is by truck. The highest volumes occur on I-80 near SR 89 in the Truckee area and on I-80 near SR 20. Whether products are shipped by rail, ship, air, or truck, regional highways, and local roads are very likely to be used for some part of the trip. Traffic congestion on the Interstate and State Highways in Nevada County particularly affects goods movement through the region.

The 2014 California Freight Mobility Plan (CFMP) identifies the state's freight network and prioritizes this network by section. The CFMP categorizes the designated highway and freight rail networks into three tiers for each facility type with those portions of the network having the highest truck and rail volumes being Tier 1 and those with lower volumes being Tier 2 or Tier 3. Priority consideration is also given for some freight network components having lower freight volumes but providing key interstate or international connections. I-80 is classified as Tier 1, while SR 20 and SR 49 between SR 20 and I-80 are classified as Tier 3. I-80 is also classified as part of the proposed US DOT National Freight Network, with a section near Truckee considered part of the Primary Freight Network.

TRANSIT SERVICES

Western Nevada County

Transit services in western Nevada County are provided through a Joint Powers Agreement executed between Nevada County, the City of Grass Valley, and Nevada City. The Nevada County Transit Services Division (TSD) is responsible for the operation and management of the two public transit systems in western Nevada County. The Transit Services Commission (TSC) is a seven-member policy board that has the following powers and duties:

- Establish fares.
- Approve level of service.
- Monitor public response.

- Provide recommendation on proposed purchase of additional vehicles.
- Regularly oversee and advise as necessary on the daily operations of the transit system, in conjunction with public response, to make the proper adjustments in the program in order to serve the public with maximum efficiency and service.
- Review and recommend to TSD staff regarding the annual budgets for transit and paratransit operations.
- Recommend to the County to apply for grants for usual operation and/or for demonstration or study projects.

The two public transit systems operating in western Nevada County are

- *Gold Country Stage:* a fixed route system serving the cities of Grass Valley and Nevada City, the adjacent unincorporated sections of the County, and portions of Placer County.
- *Gold Country LIFT:* a nonprofit organization contracted with by the County to provide demand response paratransit service for disabled residents in western Nevada County. LIFT also provides paratransit services throughout an outlying defined paratransit area as service hours and resources are available.

Gold Country Stage Fixed Route Transit Service (GCS) is a fixed route transit system that connects population, commercial, and employment centers throughout western Nevada County. GCS operates six routes that serve the Nevada City/Grass Valley area and the unincorporated area of western Nevada County, and also provide regional connections to Placer County. Transfers can be made in Placer County at the Auburn Depot between Gold Country Stage Route 5, Placer County Transit, Auburn Transit, and Amtrak Capital Corridor trains. Service is provided on weekdays from 6:00 AM to 8:00 PM and on Saturdays from 7:15 AM to 5:30 PM.

Gold Country Stage's entire fleet of buses is equipped with wheelchair lifts and bike racks. The fixed route system is designed on a combination of coverage and productivity goals that seek to provide the level of service that can be reasonably financially supported to each part of the service area. More frequent and direct service is provided to areas that generate higher ridership, while retaining other routes to provide coverage where needed.

Gold Country LIFT Demand Response Paratransit Service is responsible for the transit system administration in western Nevada County and contracts with Gold Country LIFT, a private nonprofit organization to provide demand response paratransit services for Americans with Disabilities Act (ADA) eligible individuals in western Nevada County.

Gold Country LIFT provides on demand paratransit service Monday through Friday 6:30 AM – 8:00 PM and Saturday 7:30 AM – 5:00 PM. The paratransit service area is a 3/4-mile corridor on either side of Gold Country Stage fixed routes and includes the Grass Valley/Nevada City urban area as well as the communities of Penn Valley, Rough and Ready, Lake Wildwood, Cedar Ridge, and Alta Sierra. Service to outlying areas is also provided as resources allow. Reservations must be made at least one day in advance.

All paratransit vehicles are accessible and are equipped with wheelchair lifts.

Sierra Services for the Blind and Visually Impaired is a non-profit organization for the Blind and Visually Impaired offers programs and services designed to help persons with visual disabilities to continue living independently in their homes. The organization offers transportation services to medical appointments, to pick up prescriptions and to meetings/events. Clients can use the service for trips within Western County, as well as Placer County and Sacramento.

Hospice of the Foothills is a non-profit hospice in Grass Valley for persons diagnosed with a terminal illness and a prognosis of one year or less. The facility provides transportation services for their Transitions clients, free of charge.

Senior Housing Communities Western Nevada County is home to a number of senior living facilities, including Eskaton Village, Hilltop Commons Senior Residence, and Atria Grass Valley, all of which provide some level of transportation for residents. Eskaton Village provides scheduled shuttle service locally within Grass Valley for shopping or other trips. The Hilltop Commons Senior Residences provide free transportation for shopping and medical/doctor appointments locally. The Atria Grass Valley community provides residents with free transportation within the Grass Valley and Nevada City areas for medical appointments, shopping, and religious services and to other local destinations.

Eastern Nevada County

Eastern Nevada County has had a variety of public transit services since 1991. The Town of Truckee began operating transit services after its incorporation in March 1993 by contracting with the private sector for transit management, supervision, vehicle maintenance, and operations. There are two public transit systems operating in eastern Nevada County:

Truckee TART is the primary fixed route transit system serving the Town of Truckee and portions of Placer County, and is provided by the Town of Truckee through a contract with Paratransit Services.

Placer County TART provides fixed route service between the Town of Truckee and Tahoe City via SR 89. Placer County TART also operates year-round SR 267 service connecting Kings Beach and Northstar to the Town of Truckee.

Truckee Dial-A-Ride is the demand response transportation service for the elderly and disabled as well as the general public in the Town of Truckee. This service is also provided through a contract with Paratransit Services.

The Town of Truckee performs direct oversight of transit services provided in eastern Nevada County. Day-to-day operations are provided under contract. Placer County operates the TART Truckee to Tahoe City service and SR 267 service.

Truckee North Tahoe - Transportation Management Association

The Truckee North Tahoe - Transportation Management Association (TNT/TMA) is a regional organization important to transportation in eastern Nevada County. This non-profit public-private partnership provides a framework for private sector participation in solving traffic congestion and air quality problems in the greater Truckee-North Tahoe-Incline Village Resort Triangle. Established

in 1989, the TNT/TMA has been instrumental in garnering support from employers, property owners, and residents in establishing the Truckee-Tahoe City bus service, as well as, transit marketing efforts.

Truckee Transit Fixed Route Transit Services

The Truckee TART fixed route service is operated by the Town of Truckee under contract with Paratransit Services and provided through a public-private partnership between the Town of Truckee and several private organizations. Service is provided during the winter season (mid-December through mid-April) between Henness Flats, downtown Truckee, Donner Lake, and Boreal, Sugar Bowl, Donner Ski Ranch, and Soda Springs ski resorts. During winter, routes run seven days a week between approximately 6:05 AM and 6:05 PM. During the non-winter season (mid-April through mid-December) buses serve the Truckee-Tahoe Airport, Recreation Center, Downtown Truckee, Gateway Shopping Center, Crossroads Shopping Center, Donner State Park and the west end of Donner Lake on a fixed hourly schedule from 9:05 AM to 5:13 PM every day except Sunday. All buses are equipped with bike racks.

Tahoe Area Regional Transit (TART) Service

The Placer County Department of Public Works operates the Placer County TART fixed route transit service with a route between the Town of Truckee and Tahoe City. The service has been operating between Truckee and Tahoe City since December of 1991. Because the route serves two different counties, the Town of Truckee contributes a portion of the funding, with Placer County funding the remaining operating costs.

Placer County TART operates hourly route service between Tahoe City, Squaw Valley, and Truckee along SR 89 with additional runs during the winter and summer months. Service is offered generally between 6:00 AM and 6:52 PM during the winter and summer months between Tahoe City and Truckee. Bus service is provided on SR 267 between Crystal Bay and Truckee only from 7:00 AM to 5:50 PM. Riders traveling from the Truckee area can transfer for free in Tahoe City to other TART routes. All buses serving Truckee are equipped with bike racks.

Truckee Dial-A-Ride Service

The Town contracts Paratransit Services for operations of the Truckee Dial-A-Ride program under Truckee TART. The Truckee Dial-A-Ride is a general public demand response service that operates over the same hours and days as the fixed route service. This service complements the fixed route service, for areas not served by fixed routes, in addition to serving ADA passengers. Passengers are asked to make reservations 24 hours in advance.

Placer County Complementary Paratransit Service

Complementary Paratransit Service (CPS) for TART is provided in neighboring Placer County by Tahoe Blue Taxi under a contract with the Placer County Department of Public Works. This service is provided from 6:00 AM to 6:30 PM seven days a week (excluding Christmas Day), for trips with origins and destinations in an area defined as within three-quarters of a mile of all TART routes (including those areas within the Town of Truckee). Eligible riders are required to request service 24 hours in advance.

NON-AUTO FACILITIES

Non-Motorized Transportation

Walking and bicycling are the most prevalent forms of non-motorized transportation in Nevada County. In addition to helping reduce traffic congestion and automobile emissions, providing safe facilities that encourage walking and bicycling can enhance the quality of life for Nevada County residents. In the incorporated jurisdictions in Nevada County, pedestrian facilities most often consist of sidewalks and shared bicycle facilities, while in the unincorporated more rural areas, unpaved trails and shared bicycle/pedestrian paths are the most common facilities.

Walking represents about 2% and bicycling represents 0.6% of journeys to work in Nevada County. However, this data does not include trips for purposes other than work. Many walking and biking trips are made for shopping, to school, or for recreation, which are all more difficult to measure. Additionally, public outreach for the plan indicated strong interest in providing more and safer walking and bicycling facilities.

The limited amount of pedestrian and bicycle facilities in Nevada County may be discouraging residents from walking and bicycling. For walking and bicycling to be a viable transportation option for most people, it must be safe, attractive, and easy to utilize. Generally this includes use of pathway design techniques that promote safety and eliminate barriers, and the placement of paths in sufficient locations and numbers to connect important activity centers such as schools, commercial centers, parks, and residential areas.

To address this need, NCTC adopted the 2013 Bicycle Master Plan in July 2013. NCTC also adopted a Pedestrian Improvement Plan in March 2011. The pedestrian plan was subsequently amended in May 2012 and July 2014 to add two projects. Projects are prioritized into three tiers for each jurisdiction (the three cities and the unincorporated county). Many of these projects have been completed since the plans were released. Truckee adopted a Trails and Bikeways Master Plan in September 2015. The Nevada County Bicycle Master Plan was amended in January 2016 to incorporate the Truckee Trails and Bikeways Master Plan.

In June 2010, the Nevada County Board of Supervisors adopted an update to the Western Nevada County Recreational Trails Master Plan. The Recreational Trails Master Plan is a long-range policy document providing a framework to guide the review of discretionary trail projects in Western Nevada County and a tool for the Planning Department and decision-makers to work with developers to dedicate recreational trails consistent with a regional system. The primary components of the Trails Plan include a map depicting existing trails and identifying potential non-

motorized recreational trail routes to achieve a regional trails system; goals and policies developed through collaboration and public involvement; design guidelines for trail development; and programs to facilitate and enhance recreational trail opportunities.

In June 2014, Measure R was approved by two-thirds of those voting in the Town of Truckee. This measure added an additional one-quarter cent to the sales tax currently collected in the Town. The funds raised by this tax can be used only for the purposes listed in the ballot measure, including completing the Truckee River Legacy Trail, building and maintaining paved and dirt trails, and protecting the environment and natural open space along trail corridors. Other specific uses allowed include pavement maintenance, erosion control, sweeping, litter removal, snow removal and other winter maintenance, and repair or replacement of bridges, signs, bike racks, sanitation facilities, and other amenities.

Multi-Modal and Intermodal Facilities

Multimodal and intermodal facilities and services enable transportation users to switch easily between modes and support efficient use of transportation resources. Nevada County supports this effort with the following:

- The Tinloy Transit Center, which opened in 2013, is located in downtown Grass Valley and supports transfer between Gold Country bus lines. Located near SR 20/49, it is also easily accessible by pedestrians and bicyclists.
- The Truckee Intermodal Center, located in downtown Truckee, serves transit, rail, automobiles, bicycles, and pedestrians.
- All fixed-route buses have bicycle racks.
- Gold Country Transit has a stop at the train station in Auburn, connecting to Capitol Corridor, Amtrak and Placer County transit.
- The Capitol Corridor train allows bikes on board.
- Four park-and-ride lots are located within the county:
  - SR 20 at Pleasant Valley Road
  - SR 20 at Penn Valley Drive
  - SR 20/49 at South Auburn Street
  - SR 49 at the Crossroads Church, Wolf and Combie Roads

INTELLIGENT TRANSPORTATION SYSTEMS

Intelligent transportation systems (ITS) integrate information technology and communication technologies into the transportation system to maximize the efficient use of transportation infrastructure. The implementation of ITS technologies is aimed at improving safety and enhancing the capacity of the existing transportation facilities through more effective management and operation of the transportation system.

I-80 is supported by the 511 Sacramento Regional Travel Information System. This system provides traffic information online and via telephone. Traffic cameras, accessible online, are available along I-80 in eastern Nevada County. Message signs and highway advisory radio also provide information to travelers.

The 511 information system also provides information on ridesharing, supporting the Sacramento Region Commuter Club, which offers tools and information for carpooling, vanpooling, walking, bicycling, and transit. The system also directs drivers to other regional resources for carpools and vanpools. The Truckee North Tahoe Transportation Management Association also provides transit, shuttle, vanpool, and carpool information. Other online services support ridesharing, both formally for larger institutions and informally through sites such as Facebook, message boards, and email lists.

211 Nevada County is a free referral service available seven days per week, 24 hours per day, that helps the public find the best options for transportation. The information is made available on the 211 Nevada County website in the form of a transportation resource guide and via telephone or instant message.

Additionally, Caltrans provides road information for state highways online and via telephone.

Tahoe Gateway Counties Intelligent Transportation Systems

In 2002, the Tahoe Gateway Counties ITS Strategic Deployment Plan (SDP) was adopted by the four Tahoe area Regional Transportation Planning Agencies (NCTC, Placer County Transportation Planning Agency, El Dorado County Transportation Commission, and Tahoe Regional Planning Agency). ITS applications will be included to address the unique aspects of the rural environment where challenges include rapid changes in weather, limited alternative routes, and difficulties in developing effective communication systems.

One of the outcomes of this planning process was the development of the Tahoe Gateway Regional Architecture. The regional architecture provides the foundation to integrate the region's ITS systems to form information gathering, processing, and dissemination procedures, and also defines potential ITS equipment packages. The Tahoe Gateway Regional Architecture was developed to serve as a blueprint to ensure the coordinated development and deployment of compatible ITS applications in the Tahoe Gateway region. The Tahoe Gateway Regional Architecture is intended to be flexible and will be modified as ITS projects are deployed, the communications infrastructure is expanded, and the region's needs are addressed or changed. The Tahoe Gateway Regional Architecture meets federal requirements to qualify ITS projects in the region for federal funding.

Implementation and coordination of ITS efforts with these partner agencies is particularly important due to the large tourist population traversing I-80 and the many state routes connecting each agency’s service area. ITS elements are key to getting information to visitors about travel delays, parking availability at ski resorts, and potential future park and rides.

The following list summarizes the high priority need areas in the Tahoe Gateway Region:

- Enhanced traveler information within and beyond project boundaries
- Improved cooperation and coordination among transportation agencies and others
- Improved traffic flow and system operation monitoring
- Advanced technology uses to more effectively and efficiently operate traffic signal systems
- Coordinated, efficient transit and public transportation systems
- Coordinated incident/emergency management plans and procedures (including HAZMAT)
- Improved traveler safety
- Enhanced access and availability of tourist information
- Accurate, early traffic information to commercial vehicle operators
- Active fleet management of state/locally owned highway maintenance vehicles
- Improved integration of information and systems to better manage the transportation assets

The proposed ITS projects identified for Nevada County in the Tahoe Gateway Counties ITS Strategic Deployment Plan were as follows:

- Town of Truckee congestion management and signal system upgrade
- Installation of highway advisory radio and a dynamic message sign near SR 20 north of Nevada City
- I-80 freeway surveillance near the Town of Truckee
- I-80 traveler information
- Automatic vehicle identification and location systems for emergency vehicles
- Automatic vehicle identification and location systems, as well as computer aided dispatch technologies for public transit
- Ice detection and warning systems on I-80 and SR 89
- Rock/mudslide and avalanche detection and warning system at SR 20, SR 49, and SR 89 as appropriate
- Animal/vehicle collision avoidance systems where applicable

Caltrans District 3 released an Intelligent Transportation System (ITS) / Operational Improvement Plan in July 2014. This plan supports items identified in the Tahoe Gateway Counties plan for Nevada County:

- Implement and expand Automatic Vehicle Locator systems utilizing GPS technology to track in real-time the location of transit vehicles, motor transit schedules, and dispatch transit vehicles (in transit plans)
- Install ITS components on SR 49 from Auburn to Grass Valley; Traffic monitoring and detection systems near key intersections (programmed, part of SR 49 CSMP, estimated cost $2.5 million, expected completion 2022) (funded by Caltrans)
- Roadway Weather Information Systems (RWIS) upgrade. One of 18 locations is on SR 267 in Nevada County (programmed, part of 2016 SHOPP, SCVP PID, estimated cost $1.6 million for all locations, expected completion 2022) (funded by Caltrans)

TRANSPORTATION SYSTEMS MANAGEMENT

Transportation Systems Management (TSM) describes a variety of strategies used maximize the efficiency of the existing transportation system. Techniques used for TSM are generally low-cost measures to reduce travel demand or improve the utilization of existing transportation facilities.

Transportation Demand Management

Transportation Demand Management systems focus on reducing or shifting transportation demand to off-peak hours to reduce the need for transportation system capacity increases, reduce congestion, and improve air quality. Telecommuting and working at home is a means of providing workers electronic access to employers from home.

Broadband internet service is available in much of the county via cable and DSL services; however, many regions outside of population centers have slower access via fixed wireless services or satellite. Nevada County Connected is leading an effort to bring fiber optic connectivity to some areas of the county.

Transportation Management Associations

In September of 1998, the Nevada County Business Association, acting as the Western Nevada County Transportation Management Association (WNC/TMA), made the financial decision that it could no longer provide the necessary human resource subsidization to manage the TeleBusiness Center and Employer Trip Reduction Programs. WNC/TMA's status remains as inactive. The Nevada County Transportation Commission will continue to work with the Northern Sierra Air Quality Management District (NSAQMD) and other appropriate agencies to promote the implementation of TSM/TDM measures within Nevada County in the absence of the WNC/TMA.

The Truckee – North Tahoe Transportation Management Association (TNT/TMA) in eastern Nevada County, as a public/private partnership, is uniquely positioned to coordinate implementation of TDM programs. The TNT/TMA has taken a leadership role in the development and implementation of TDM strategies in eastern Nevada County, including, but not limited to, ridesharing, vanpooling, and expanded transit.

As the population of Nevada County increases, TDM actions will become increasingly important to ensure efficient utilization of the transportation system, to assist in the achievement of air quality standards.

AIR TRANSPORTATION

Airports

There are two general aviation airports in Nevada County. The Nevada County Airport, located east of Grass Valley, serves western Nevada County, and the Truckee Tahoe Airport, located southeast of Truckee, serves eastern Nevada County. Both of these airports are included in the National Plan of Integrated Airport Systems (NPIAS) 2015-2019, which includes approximately 3,345 airports that are important to national air transportation. Both airports are classified in the California Aviation System Plan as Regional General Aviation airport facilities.

The operational uses at the two airports are similar. The facilities provide a range of services to general aviation customers. The two airports predominately serve as a base for local personal and recreational flyers, a point of access for personal and recreational visitors to the community, a transportation facility for business/corporate aviation, a place to conduct aviation-related business, and a site for emergency access to the community. The Nevada County Airport also serves as a base for CAL FIRE attack aircraft.

The Nevada County Airport and the Truckee Tahoe Airport do not provide commercial airline passenger service. The two airports located in Nevada County emphasize recreational, business, and emergency needs.

No scheduled airline service is offered at Nevada County Airport or the Truckee Tahoe Airport. The lack of local commercial air passenger service in Nevada County means that local area residents must travel to Sacramento, San Francisco, or Reno to access their commercial air travel needs. Air taxi service on a non-scheduled charter basis has been and continues to be available through both airports' fixed-base operations.

The Nevada County Airport and the Truckee-Tahoe Airport do not serve as hubs for cargo service. The Chico, Redding, Sacramento, and Reno Airport facilities provided a full complement of cargo services to the northern California area.

Nevada County also has two heliports, one at the Sierra Nevada Memorial Hospital in Grass Valley and another at the Tahoe Forest Hospital in Truckee.

Truckee Tahoe Airport

Truckee Tahoe Airport is the primary airport serving the entire north Lake Tahoe region (including Incline Village, Nevada), the Truckee area, and the Donner Summit area of Nevada County. The airport is located in a prime year-round recreational area, situated near the center of a 70-square mile area known as the Martis Valley. The valley is bound on the east, south, and west by ridges of the Sierra Nevada Range, which rise in some areas to elevations exceeding 9,500 feet. The elevation of the airfield is 5,901 feet.

The airport is located approximately two miles southeast of the Town of Truckee, along SR 267 two miles south of I-80. The area lies 211 miles east of San Francisco, 114 miles east of Sacramento, 502 miles north of Los Angeles, and 35 miles west of Reno.

The Truckee Tahoe Airport is classified in the Airport Reference Code (ARC) as a B-II Airport, which can handle larger general aviation aircraft with approach speeds less than 121 knots and wingspans less than 79 feet. The airport has the capability to handle larger aircraft due to runway size. The Truckee Tahoe Airport encompasses 2,526 acres, with a total of 220 hangars and paved tie-downs for 210 aircraft. 123 aircraft are based at the airport. 35,000 annual operations were reported in the FAA Airport IQ 5010 Master Log for the year ending March 31, 2015. The airport is owned and operated by a special airport district, which includes portions of eastern Nevada and Placer Counties.

Nevada County Airport

Nevada County Airport is located in the western end of Nevada County, within five miles of the County's major cities of Grass Valley and Nevada City. The runway is 4,351 feet long and 75 feet wide and lies at an elevation of 3,152 feet in the foothills of the Sierra Nevada Mountain Range. 151 aircraft are based at the airport. As the sole public-use general aviation airport in western Nevada County, the Nevada County Airport is both a vital local transportation facility and a key link to the statewide air transportation system. The California Division of Forestry and Fire Protection also utilizes the Nevada County Airport as a base for CAL FIRE attack aircraft, allowing quick response to fires in the surrounding foothills and mountains.

The airport lies 150 miles east of San Francisco, 50 miles east of Sacramento, 450 miles north of Los Angeles, and 95 miles southwest of Reno. The Nevada County Airport lies 2.75 miles to the east of State Route 49 and 2.5 miles northwest of SR 174 off Brunswick Road in Grass Valley.

The Nevada County Airport is a small aircraft airport classified in the Airport Reference Code as B-I, meaning it generally accommodates aircraft with approach speeds less than 121 knots, weights less than 12,500 pounds, and wingspans less than 49 feet. However, the airport is capable of accommodating larger and heavier aircraft at the pilot's discretion. The designated design aircraft is the twin-engine Cessna 421. The airport encompasses 117 acres, with a total of 102 hangars and 85 aircraft tie-downs. 27,750 annual operations were reported in the California Aviation System Plan 2013 Inventory Element. The airport is owned by Nevada County.

The airport is currently updating its layout plan to facilitate an extension of its runway.

RAIL TRANSPORTATION

Rail Facilities

Union Pacific Railroad (UPRR) owns and operates tracks that roughly follow I-80 along the southern and eastern borders of Nevada County. The rail line is used heavily for the shipment of goods and also utilized for passenger service. The tracks do not cross into the western portion of the county, but are located a few miles south of the southern boundary in Placer County. Sixty-

seven miles of track are located in eastern Nevada County. After entering the eastern half of the county, the tracks pass through Truckee and eventually cross into Sierra County near the Nevada border.

Roadways with at-grade crossings and the collision history at each crossing are shown in Table 3.4-6. All crossings are gated.

TABLE 3.4-6 AT-GRADE RAILROAD CROSSINGS AND COLLISIONS

ROADWAY	CROSS STREET	COLLISIONS, 2005-2014	YEAR OF LAST COLLISION
Soda Springs Road	Donner Pass Road	1	2006
Bridge Street	Donner Pass Road	0	1985
Stampede Meadows Road	I-80	1	2008

SOURCE: FEDERAL RAILROAD ADMINISTRATION OFFICE OF SAFETY ANALYSIS

Freight Rail

The connections to Union Pacific allow goods to be shipped within their network that serves 23 states in the western two-thirds of the United States and beyond via their connections to other railroads. Transported commodities include intermodal-wholesale containers, stone and gravel, food and beverages, assembled autos and auto parts, grain, and corn. However, there are currently no freight rail loading and unloading facilities in Nevada County. Key facilities are located in Roseville and Reno.

Passenger Rail

Currently, Amtrak's California Zephyr serves the San Francisco to Chicago Corridor with a daily train in each direction, through stations in Sacramento, Roseville, Colfax, Truckee, and Reno. The Capitol Corridor also serves the Auburn to Oakland and San Jose corridor. Amtrak California Thruway bus connections to the train are available in Colfax, Auburn, Rocklin, and Roseville. The 2013 California State Rail Plan includes potential future service additions for the Capitol Corridor or San Joaquin service to Truckee and Reno.

SAFETY

The Nevada County Transportation Commission’s role in transportation safety and security is limited to the following roles:

- Planning and programming transportation infrastructure improvements;
- Coordinating implementation of the SR 49 Corridor System Management Plan;
- Serve as a resource of information on transportation system capacities and resulting level of services that might be experienced in relation to certain planned emergency responses;
- Identify opportunities to leverage resources for planning and construction of transportation infrastructure projects that can enhance transportation and security efforts; and
- Coordinate with Caltrans and local jurisdictions to identify safety and security concerns on key facilities and work to identify funding and implement solutions.

Fatal and Injury Collision Statistics

In order to assess roadways safety needs in the County, a three-year summary of collision data was compiled (Table 3.4-7). The table summarizes total collisions by year, including number of persons killed and number of persons injured.

TABLE 3.4-7: THREE-YEAR COLLISION SUMMARY (2011 – 2013)

YEAR	TOTAL COLLISIONS	NUMBER OF FATALITIES	NUMBER INJURED
2011	1,131	7	549
2012	1,159	17	507
2013	922	15	478
Total	**3,212**	**39**	**1,534**

SOURCE: CALTRANS TRAFFIC INFORMATION SYSTEM (TIMS 2011); STATEWIDE INTEGRATED TRAFFIC RECORDS SYSTEM (CHP 2015).

Table 3.4-8 summarizes the total and percentage of collisions by type between 2011 and 2013. As shown in Table 3.4-8, hit object collisions account for the highest number and percentage of collisions between 2011 and 2013. Rear-end collisions show the second highest occurrence over the same three-year period. Of the 3,212 collisions, 286 or 9% involved trucks, 49 or about 2% involved pedestrians, and 41 or about 1% involved bicycles. 13% of the collisions also involved driving under the influence of alcohol and/or drugs.

TABLE 3.4-8: THREE-YEAR COLLISION SUMMARY (2011 – 2013) BY COLLISION TYPE

TYPE	TOTAL COLLISIONS	PERCENT OF TOTAL
Hit Object	1,227	38%
Read-End	628	20%
Sideswipe	392	12%
Broadside	353	11%
Overturned	232	7%
Other	156	5%
Head On	134	4%
Pedestrian	49	2%
Bicycle	41	1%
Total	**3,212**	**100%**
Involved trucks	**422**	**9%**
Involved alcohol	**286**	**13%**

SOURCE: CALTRANS TRAFFIC INFORMATION SYSTEM (TIMS 2011); STATEWIDE INTEGRATED TRAFFIC RECORDS SYSTEM (CHP 2015).

3.4.2 REGULATORY SETTING

FEDERAL

National Environmental Policy Act (NEPA)

The National Environment Policy Act of 1969 (NEPA) requires federal agencies to assess the possible environmental consequences of projects which they propose to undertake, fund, or approve. While the RTP is not subject to NEPA, individual federally-funded programs or projects requiring federal approval will be subject to a NEPA evaluation at the time of project implementation.

STATE

The State requirements largely mirror the Federal requirements, and are primarily reflected in Government Code Section 65080. The California Transportation Commission (CTC) adopted RTP guidelines on April 7, 2010, and recently adopted the 2017 RTP Guidelines on January 18, 2017.

Regional Transportation Plan (RTP) Requirements

State planning guidelines call for the adoption and submittal of a RTP to the CTC and Caltrans every four years for nonattainment regions, and every five years for attainment regions. If the current RTP is determined to be adequate such that an update is not warranted, an MPO may re-adopt the current RTP. The Government Code requires that the RTP address three distinct elements: a policy element, an action element, and a financial element. A public hearing must be noticed and held prior to adopting the RTP. Additionally, the RTP must comply with the following provisions:

- Compliance with CEQA;
- Consistency with the State Transportation Improvement Program;
- Use of program level performance measures that include goals and objectives; and
- Development of three specific elements in the RTP including a policy element, an action element, and a financial element.

AB 32 and SB 375

In 2006, the California State Legislature passed Assembly Bill (AB) 32—The Global Warming Solutions Act of 2006—which requires the State to reduce greenhouse gas (GHG) emissions to 1990 levels no later than 2020. This legislation directly affects MPOs due to the heavy percentage of GHG emissions from the transportation sector; according to the California Air Resources Board (CARB), the transportation sector contributes over 40 percent of the GHGs throughout the State.

In 2008, the State of California adopted Senate Bill (SB) 375. This bill is intended as an implementation tool for AB 32 to lower GHG emissions from passenger vehicles by reducing VMT

through transportation and land use strategies. SB 375 will play a key role in California's efforts to reach the GHG reduction goals set out in AB 32.

SB 375 requires CARB to provide each region with GHG reduction targets by September 2010, and also requires MPOs to adopt a Sustainable Communities Strategy (SCS) as part of future RTPs to achieve these GHG targets. A SCS is an integrated land use and transportation plan that can be modeled to quantitatively demonstrate its compliance with GHG emission reduction goals. The requirements of SB 375, including the CARB GHG reduction targets and the preparation of an SCS, does not apply to transportation planning areas that are not covered by an MPO (i.e. Nevada County).

California Strategic Highway Safety Plan

As a result of the requirements contained in the 2005 SAFETEA-LU, each State was required to have a Strategic Highway Safety Plan (SHSP) in place by October 1, 2007 to receive its full share of federal transportation funds. The purpose of the SHSP is to provide a comprehensive framework for reducing fatalities and serious injuries on all public roads.

California's SHSP was completed and approved in September 2006. The SHSP establishes statewide goals, objectives, challenge areas, and key actions to address California's most pressing safety problems on public roadways. The SHSP set a goal for California of less than one roadway fatality per 100 million vehicle miles traveled.

LOCAL

Regional Transportation Planning Agency

The Nevada County Transportation Commission (NCTC) is the Regional Transportation Planning Agency (RTPA) for Nevada County, which includes the Cities of Grass Valley and Nevada City, the Town of Truckee, and the County of Nevada. As the RTPA, California State law requires the NCTC to prepare, adopt, and submit an updated Regional Transportation Plan (RTP) to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) every five years. Additionally, they develop Regional Transportation Improvement Program (RTIP) and Federal Transportation Improvement Program (FTIP) for all transportation projects in the County.

Pedestrian and Bicycle Planning

NCTC adopted the 2013 Bicycle Master Plan in July 2013. NCTC also adopted a Pedestrian Improvement Plan in March 2011. The pedestrian plan was subsequently amended in May 2012 and July 2014 to add two projects. Projects are prioritized into three tiers for each jurisdiction (the three cities and the unincorporated county). Many of these projects have been completed since the plans were released. Truckee adopted a Trails and Bikeways Master Plan in September 2015. The Nevada County Bicycle Master Plan was amended in January 2016 to incorporate the Truckee Trails and Bikeways Master Plan.

In June 2010, the Nevada County Board of Supervisors adopted an update to the Western Nevada County Recreational Trails Master Plan. The Recreational Trails Master Plan is a long-range policy

document providing a framework to guide the review of discretionary trail projects in Western Nevada County and a tool for the Planning Department and decision-makers to work with developers to dedicate recreational trails consistent with a regional system.

Nevada County Transit Services Division (TSD)

Transit services in western Nevada County are provided through a Joint Powers Agreement executed between Nevada County, the City of Grass Valley, and Nevada City. The Nevada County Transit Services Division (TSD) is responsible for the operation and management of the two public transit systems in western Nevada County.

Consolidated Transportation Services Agency

Consolidated Transportation Services Agencies (CTSAs) coordinate social services and carry out intents of the Social Services Transportation Improvement Act of 1979. The purpose of the act was to improve the quality of transportation services to low mobility groups while achieving cost savings and more efficient use of resources. The County of Nevada and the Town of Truckee, are the designated CTSAs for Nevada County.

Short Range Transit Plans

Five-Year Transit Development Plans (TDP) are an important planning tool used to analyze the current transit services and provide recommendations on improvements necessary to meet future demand. The major issues facing both western and eastern Nevada County transit and paratransit services are that rising operating costs coupled with the need to replace aging vehicle fleets over the period of the plan are outpacing the projected revenues.

Nevada County Coordinated Public Transit-Human Services Transportation Plan

In 2014, NCTC adopted the Nevada County Coordinated Public Transit-Human Services Transportation Plan. This plan identified available public, private, and non-profit services. It also assessed transportation needs and strategies to address gaps between current services and needs.

This plan created a transit needs index to identify census tracts with the highest relative transit needs for disabled, senior, and low-income populations. The census tracts with the highest relative need are a mix of outlying areas (Chicago Park, Lake of the Pines, Lake Wildwood) as well as the eastern and northern portions of Grass Valley. Relatively low need is found in Truckee, South Grass Valley and the southwestern portion of the county. However, residents with transit needs are located within all portions of the county, and individual needs in more outlying or mountainous areas may be especially significant. Strategies identified in the RTP are consistent with the *Nevada County Coordinated Public Transit-Human Services Transportation Plan*.

Airport Land Use Commission

The NCTC is designated as the Airport Land Use Commission (ALUC) for the Nevada County Airport. The Truckee Tahoe Airport Land Use Commission (TTALUC) is designated as the Airport Land Use Commission (ALUC) for the Truckee-Tahoe Airport. Requirements for the creation of ALUCs were

first established under the California Sate Aeronautics (Public Utility Code Sections 21670 et seq.) in 1967. The fundamental purpose of the ALUCs is to promote land use compatibility in the areas surrounding airports.

Airport Compatibility Land Use Plans

The Comprehensive Airport Land Use Plans for both airports identify the common goals of orderly growth of the airports and the areas surrounding the airports within the identified planning boundary, to protect the general welfare of the inhabitants within the vicinity of the airport and the public in general. The airport land use plans have guidelines that identify compatible land uses in the various safety zones. The airport land use plans also identify noise compatibility criteria for development projects within the airport land use planning area. The Nevada County plan was updated in 2011, and the Truckee Tahoe plan was updated in 2016.

Nevada County Office of Emergency Services

The Nevada County Office of Emergency (OES) is responsible for the day-to-day administration of the County's disaster preparedness and response program. In addition, it is responsible for maintaining the County's Emergency Operations Center (EOC), as well as coordinating EOC activities during a disaster. Per the California Emergency Services Act, the Nevada County OES is responsible for directing the County's overall emergency response to natural disasters, man-made incidents, or acts of terrorism, in cooperation with local jurisdictions and agencies. The Nevada County OES also coordinates on-going preparedness, including emergency drills and simulations with agencies, including those that provide transportation services.

3.4.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project is considered to have a significant impact on the environment associated with transportation and circulation if it will:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- Result in a change in the air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Interfere substantially with implementation of any adopted non-motorized transportation plan;
- Result in inadequate emergency access;

IMPACTS AND MITIGATION MEASURES

Impacts associated with the RTP have been analyzed based upon full implementation of the Short-term and Long-term Action Plans. Because this is a programmatic level environmental document,

the analysis is based on the multi-modal projects collectively, rather than impacts associated with each mode of travel individually.

Impact 3.4-1: Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (Significant and Unavoidable)

Implementation of the 2016 RTP would support a number of transportation projects throughout the County. Some of the projects involve capacity expansion, while others involve safety enhancements or maintenance. Due to the nature of these projects, transportation- and circulation-related impacts could result from construction activities, as well as from the ongoing operation of the completed facilities. Construction activities would generally result in temporary impacts to the adjacent land uses and the traveling public. The long-term operation of these facilities may have both beneficial and adverse impacts; the new roadway capacity may result in reduced congestion and smoother traffic flows at higher speeds, but it also has the potential to encourage additional traffic in the County, which could result in increased vehicle emissions and other environmental impacts.

REGIONAL TRANSPORTATION INDICATORS

As development in the County grows during the next 20 years, more residents, housing units, and jobs will result in additional person and vehicle trips and increased traffic volumes. As a result, the county can anticipate an increase in vehicle miles traveled (VMT) within the County. Adding more vehicular traffic to the regional road system without making capacity enhancements may create an increase in overall vehicle delay. Table 3.4-9 shows the projected (year 2035) VMT in Nevada County based on the NCTC Travel Forecasting Model to model VMT for the western County, and the Truckee/Martis Valley TransCAD model for the eastern County, with a baseline year 2012 and project buildout year 2035. As shown in Table 3.4-9 total average daily VMT will increase from 2,368,928 in 2012 to 3,166,336 in 2035.

TABLE 3.4-9: PROJECTED REGIONAL VMT SUMMARY- NEVADA COUNTY

	2012	2035
Average Daily VMT (western County)	1,699,898	1,843,685
Average Daily VMT (eastern County)	937,870	1,591,307
Total Average Daily VMT	**2,368,928**	**3,166,336**

SOURCE: FEHR & PEERS; LSC TRANSPORTATION; DE NOVO PLANNING GROUP (2016; 2017).

REGIONAL LOS ANALYSIS

The analysis of roadway operations takes the existing and forecasted traffic volumes on the study roadway segments and compares it to established level of service volume thresholds used by NCTC in their regional planning capacity. LOS criteria take into account variables such as traffic volumes, roadway capacity, grade, environment (urban versus rural), and other considerations as appropriate. For State highways, the general Caltrans standard is LOS C in rural areas and LOS D in urban/developed areas. Local agencies throughout Nevada County apply their own LOS standards for roadways in their jurisdictions.

NCTC updated its travel demand model for western Nevada County in 2014. Figure 3.4-2, and Figure 3.4-3, provide the current and estimated future traffic conditions for significant county roads and highways based on this model.

As shown on Figure 3.4-2, and Figure 3.4-3, future traffic conditions are forecasted to worsen largely due to the projected increase in development. The 2016 RTP has been developed to support planned and proposed growth in the region, but does not involve approvals of development projects. Forecasted growth in the County will result in increased vehicle miles traveled and daily trips regardless of the proposed project.

Local roadway segments were evaluated by comparing peak hour roadway segment traffic volumes (two-way total) to service thresholds based on the *Highway Capacity Manual* (2010). Table 3.4-10 summarizes daily roadway segment capacity thresholds by operational class.

TABLE 3.4-10: WESTERN NEVADA COUNTY PEAK HOUR LEVEL OF SERVICE THRESHOLDS

OPERATIONAL CLASS	LOS B	LOS C	LOS D	LOS E
Minor Two-Lane Highway	330	710	1,310	2,480
Major Two-Lane Highway	330	710	1,310	2,480
Two-Lane Arterial	-	850	1,540	1,650
Four-Lane Arterial, Undivided	-	1,760	3,070	3,130
Four-Lane Arterial, Divided	-	1,850	3,220	3,290

Notes: Based on Highway Capacity Manual, Transportation Research Board, 2010.
Two-lane highway and arterial LOS based on HCM 2010, Exhibit 15-30, Class II Rolling, 0.09 K-factor, and D-factor of 0.6
Four-lane arterial LOS based on HCM 2010, Exhibit 16-14, K-factor of 0.09, posted speed 45 mi/h

A travel demand model for Truckee estimated traffic at key local intersections based on a 2012 base year and 2032 general plan buildout. Thresholds in this model were based on Highway Capacity Manual (2010) methodology and SimTraffic analysis. Table 3.4-11, and Table 3.4-12 presents a roadway segment level of service analysis for selected roadways in Eastern Nevada County for years 2012 and 2032 based on the travel demand model for the Town of Truckee.

TABLE 3.4-11: EASTERN COUNTY 2012 TRAFFIC CONDITIONS (TRUCKEE)

ROADWAY SEGMENT	CLASSIFICATION	LOS THRESHOLD	PEAK-HOUR VOLUME PER LANE AT THRESHOLD	PEAK-HOUR TWO-WAY VOLUME	PEAK-HOUR PEAK-DIRECTION VOLUME	LOS THRESHOLD EXCEEDED?
Bridge St, across RR tracks	Minor Arterial	E	1,600	1,077	580	No
Donner Pass Rd, South of SR 89 North	Minor Arterial	D	1,420	907	523	No
Donner Pass Rd, South of I-80 Eastern Interchange	Minor Arterial	E	1,600	916	475	No
Donner Pass Rd, East of Bridge St (Commercial Row)	Minor Arterial	E	1,200	990	639	No
Donner Pass Rd, West of Bridge St (Commercial Row)	Minor Arterial	E	1,200	1,068	717	No
SR 89, North of I-80	Highway	D	N/A[1]	771	413	No
SR 267, between I-80 and Brockway Rd	Highway	D	N/A[1]	1,291	766	No
SR 267, between Brockway Rd	Highway	D	N/A[1]	1,493	846	No

and Town Limit						
Brockway Rd, between SR 267 and project access	Minor Arterial	D	1,420	945	505	No
Brockway Rd, between project access and Martis Valley Rd	Minor Arterial	D	1,420	935	496	No
Brockway Rd, between Martis Valley Rd and Palisades Dr	Minor Arterial	D	1,420	1,249	733	No
Brockway Rd, between Palisades Dr and West River St	Minor Arterial	E	1,600	1,609	997	No

Note: [1]Threshold Volume is not applicable to these roadway segments , as traffic conditions on these segments were evaluated using a SimTraffic microsimulation

SOURCE: 2016 RTP (NCTC 2017)

TABLE 3.4-12: EASTERN COUNTY 2032 TRAFFIC CONDITIONS (TRUCKEE)

ROADWAY SEGMENT	CLASSIFICATION	LOS THRESHOLD	PEAK-HOUR VOLUME PER LANE AT THRESHOLD	PEAK-HOUR TWO-WAY VOLUME	PEAK-HOUR PEAK-DIRECTION VOLUME	LOS THRESHOLD EXCEEDED?
Bridge Street, across railroad tracks	Minor Arterial	E	1,600	1,686	853	No
Donner Pass Road, South of SR 89 North	Minor Arterial	D	1,420	2,433	1,268	No
Donner Pass Road, South of I-80 Eastern Interchange	Minor Arterial	E	1,600	1,161	671	No
Donner Pass Road, East of Bridge Street (Commercial Row)	Minor Arterial	E	1,200	1,248	711	No
Donner Pass Road, West of Bridge Street (Commercial Row)	Minor Arterial	E	1,200	730	402	No
SR 89, North of I-80	Highway	D	N/A[1]	1,791	955	No
SR 267, between I-80 and Brockway Road	Highway	D	N/A[1]	2,376	1,330	No
SR 267, between Brockway Road and Town Limit	Highway	D	N/A[1]	2,869	1,567	No
Brockway Road, between SR 267 and project access	Minor Arterial	D	1,420	2,832	1,533	No
Brockway Road, between project access and Martis Valley Road	Minor Arterial	D	1,420	2,33 1	1,246	No
Brockway Road, between Martis Valley Road and Palisades Drive	Minor Arterial	D	1,420	2,237	1,248	No
Brockway Road, between Palisades Drive and West River Street	Minor Arterial	E	1,600	1,505	753	No

Note: [1]Threshold Volume is not applicable to these roadway segments , as traffic conditions on these segments were evaluated using a SimTraffic microsimulation

SOURCE: 2016 RTP (NCTC 2017)

The proposed project includes funding and other strategies that are aimed at improving transportation conditions, including level of service on roadways throughout the county. These are beneficial impacts to the transportation system in Nevada County; however, there will be funding shortfalls due to funding constraints. It will not be possible to fund all transportation improvements that are needed in the region. Ultimately it will be the responsibility for local land use agencies to collect development fees to fund projects that are needed, but not able to be funded through the 2016 RTP. The collection of development fees by local agencies to finance

needed improvements would ensure that levels of service are maintained in their jurisdiction; however, this is not something that NCTC can control or guarantee. Therefore, implementation of the proposed project would still be considered to have a **significant and unavoidable** impact.

(Note: This significant impact would be reduced to a less than significant impact if each land use agency does in fact fund improvements that maintain their respective roadways to their level of service standard under future conditions.)

Impact 3.4-2: Result in a change in the air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks (less than significant)

The RTP includes aviation projects that are intended to maintain existing operations and accommodate future growth at the public aviation facilities in the County. These projects would not result in a change in air traffic patterns; rather, implementation of the RTP is intended to safely accommodate anticipated levels of air traffic. The air traffic levels are not expected to cause a substantial safety risk. Implementation of the proposed project would have a ***less than significant*** impact on air safety. No mitigation measure is required.

Impact 3.4-3: Substantially increase hazards due to design features (e.g. sharp curves or dangerous intersections) or incompatible uses (less than significant)

Safety on roadways is a major concern for all regional transportation planning agencies, including NCTC, which plans and programs transportation safety improvements in the region. NCTC is responsible for coordinating their efforts with Caltrans and local jurisdictions to identify safety concerns on key facilities and work to identify funding sources to implement improvements to the facility.

The 2016 RTP includes roadway projects designed to alleviate existing and anticipated future congestion issues and to reduce traffic hazards throughout the County. Consistent with agency practice, all improvements will be designed to the standards and specifications of Caltrans or the appropriate implementing agency. Once operational, these transportation network improvements would serve to maintain or create better operational conditions on regional and local roadways than would exist without the improvements. As such, the proposed project is not anticipated to cause a substantial increase in hazards due to design features or incompatible uses, rather, it is expected to reduce safety concerns. Therefore, potential indirect impacts on safety and compatibility are considered ***less than significant***. No mitigation measure is required.

Impact 3.4-4: Interfere substantially with implementation of any adopted non-motorized transportation plan (less than significant)

The 2016 RTP includes transit and non-motorized transportation projects for the region, including bicycle/pedestrian projects that carry out goals of the RTP. The 2016 RTP allocates funding for transit, rail, and bicycle/pedestrian projects and includes policies associated with alternative

modes of transportation. Therefore, implementation of the RTP would have a ***less than significant*** impact on this environmental topic. No mitigation measure is required.

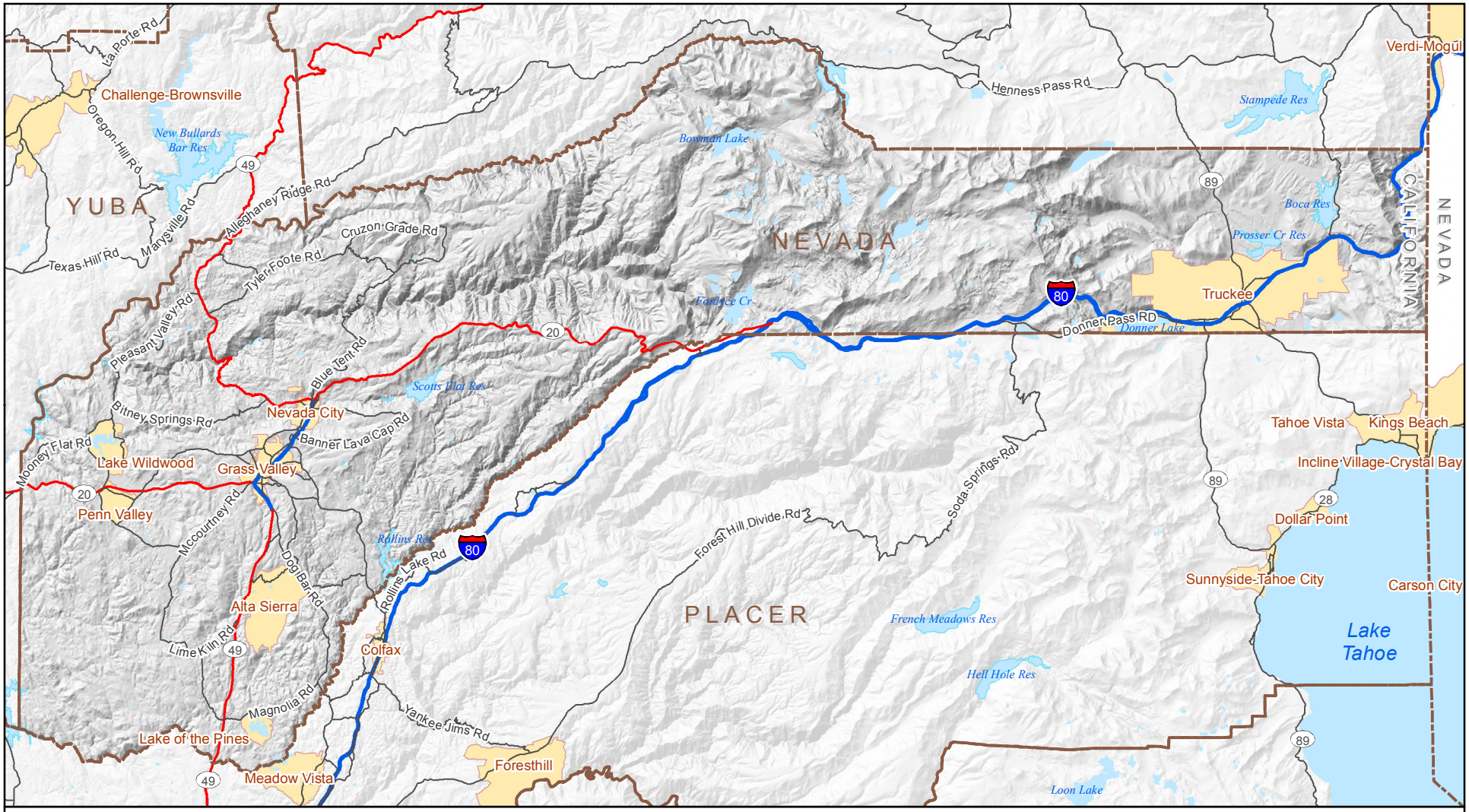
Impact 3.4-5: Result in inadequate emergency access (less than significant with mitigation)

The transportation network, specifically the roadway network, plays a key role in the ability of emergency service providers to respond to emergencies in an acceptable amount of time. In developed areas, arterials and local roadways are the main transportation facilities used by service providers to access emergencies as most emergency services are provided from local locations. Access to large regional highways and freeways also is key to service emergencies that occur on those roadways and to accommodate emergency travel to other regional facilities, such as hospitals. Increased congestion on roadways would hinder the ability of emergency service vehicles to travel to and access emergencies in a quick and timely manner. During construction activities on roadways, emergency access can be impeded due to resulting congestion and delays, detours, lane closures, and other traffic altering situations.

The RTP does not propose any specific projects that are known to result in inadequate emergency access. In some cases, the RTP would provide increased regional connectivity and should improve movement of emergency vehicles. However, emergency access could potentially be affected during construction activities associated with implementation of the various roadway, transit, and bicycle/pedestrian improvement projects identified in the RTP. The implementing agency for each improvement project would be responsible for coordinating with the emergency providers to ensure that emergency routes remain available during construction activities. This is a potentially significant impact. Implementation of the Mitigation Measure 3.4.1 would reduce this impact to a ***less-than-significant*** level. Once operational, these transportation network improvements would serve to maintain or create better operational conditions on regional and local roadways than would exist without the improvements and would benefit emergency access throughout the county.

MITIGATION MEASURES

Mitigation Measure 3.4.1: *The implementing agencies shall develop a traffic control plan for construction projects to reduce the effects of construction on the roadway system throughout the construction period. As part of the traffic control plan for individual projects, project proponents shall coordinate with emergency service providers to ensure that emergency routes are identified and remain available during construction activities.*



Primary Limited Access or Interstate
Primary US or State Highway
Secondary State or County Highway
County Boundaries
Population Areas

N
W E
S

0 2 4 8 Miles

1:450,000

Data sources: California Spatial Information Library and ESRI StreetMap North America.
Map date: De Novo Planning Group Jan 27, 2017.

2016 NEVADA COUNTY REGIONAL TRANSPORTATION EIR

Fig. 3.4-1: TRANSPORTATION NETWORK

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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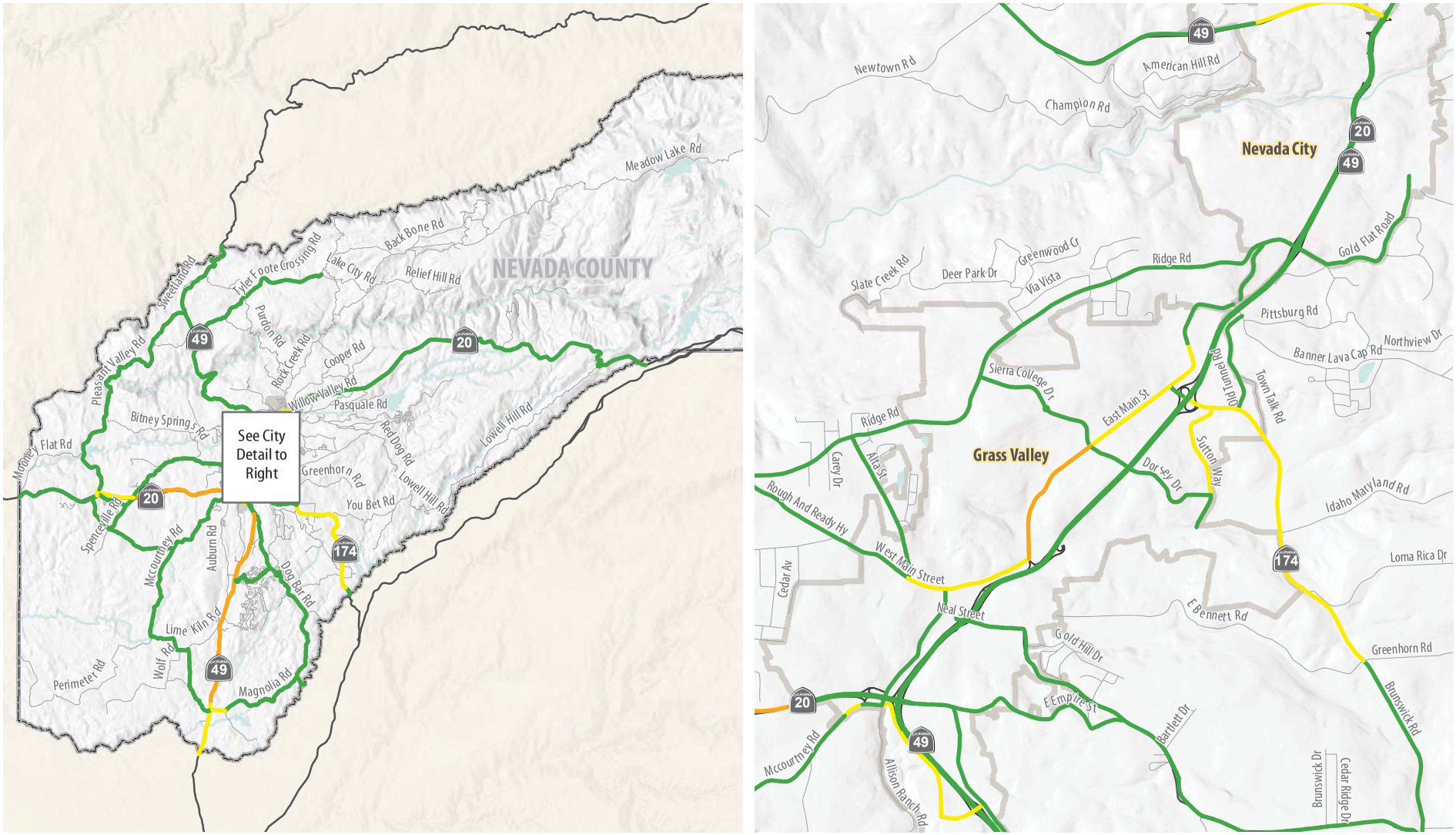

Level of Service

- A - C
- D
- E

Incorporated City Limits

Nevada County Boundary

N

NEVADA COUNTY TRANSPORTATION COMMISSION
REGIONAL TRANSPORTATION PLAN

Figure 3.4-2. 2012 Roadway Level of Service

Source: Nevada County Transportation Commission. Map date: May 9, 2017.

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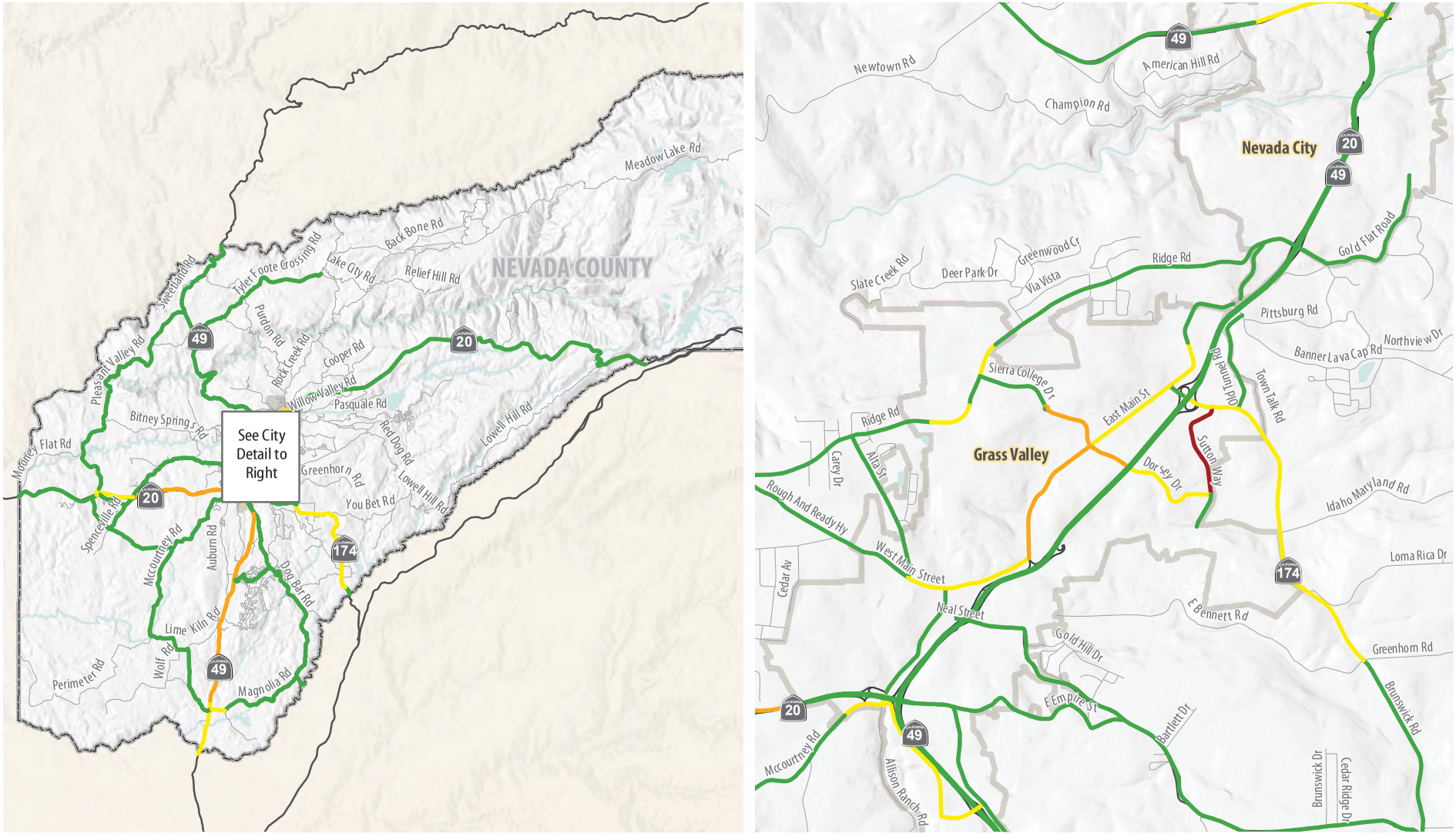

Level of Service

- A - C
- D
- E
- F

Incorporated City Limits

Nevada County Boundary

N

NEVADA COUNTY TRANSPORTATION COMMISSION
REGIONAL TRANSPORTATION PLAN

Figure 3.4-3. 2035 Roadway Level of Service (LOS)

Source: Nevada County Transportation Commission. Map date: May 9, 2017.

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A Land Use Planning, Design, and Environmental Firm

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This section evaluates the potential impacts to tribal resources associated with implementation of the 2016 RTP. There were two comments received during the public review period for the Notice of Preparation regarding this topic. Comments were received from the United Auburn Indian Community (UAIC), and the Native American Heritage Commission (NAHC). Comment letters are included within Appendix A, and summarized below:

United Auburn Indian Community (UAIC): UAIC, has requested to receive copies of any archaeological reports that are completed for the project, and also copies of environmental documents for the project so they continue to have the opportunity to comment on appropriate identification, assessment and mitigation related to cultural resources.

Native American Heritage Commission (NAHC): The NAHC provides a regulatory framework for addressing cultural and tribal resources within CEQA documents. Additionally, the NAHC provided Pertinent Statutory Information related to consultation requirements, and examples of Mitigation Measures that may be considered to avoid or minimize significant adverse impacts to tribal cultural resources.

CONSULTATION MEETING

NCTC met with representatives from the United Auburn Indian Community (UAIC) on May 23, 2017 In relation to the Nevada County Regional Transportation Plan Update. A summary of the consultation meeting is provided below:

Meeting Participants:

- Daniel B. Landon, Executive Director, NCTC
- Mike Woodman, Transportation Planner, NCTC
- Steve McMurtry, Principal, De Novo Planning Group
- Charles Hutcheson, Archeologist, Representing UAIC

Meeting Summary/Notes:

Mike Woodman gave an overview of the Nevada County Regional Transportation Plan (RTP). He stated that the RTP is a program level planning document that sets forth the regional transportation policy direction, identifies the short-term (10-year) and long-term (20-year) multi-modal transportation needs, and identifies projects that based on revenue projections are anticipated to be able to be funded to meet those needs. It also identifies unconstrained list of projects that could be implemented if additional funding becomes available. He stated that because the RTP is a program level document, specific project design details and project limits have not been determined at this point in time and those details will be determined in the future by the implanting lead agency (i.e. Caltrans, City of Gras Valley, City of Nevada City, Nevada County, or the Town of Truckee). Once a lead agency moves forward with implementation of a project, that agency will be responsible for the project specific environmental review to determine

potential impacts. Mr. Woodman noted that NCTC does not have land use authority and that the RTP only addresses transportation projects at a plan level. Mr. Woodman explained that the RTP is typically updated every five years and after adoption of this plan NCTC will be switching to a four-year update cycle.

Mr. Woodman indicated that because the changes from the previous RTP were considered minor that a program level supplemental environmental impact report was being prepared and would be addressing only those changes and areas where new information was available, such as traffic circulation and air quality and greenhouse gases.

Steve McMurtry with De Novo Planning Group, provided a background and overview of the approach to the environmental review for the RTP update. He indicated that a program level environmental impact report (EIR) had been initially prepared in 1999 and that due to the fact that the plan is updated every five years with relatively minor changes supplemental program level EIRs had been prepared since that time in 2001, 2005, and 2010 and that there are not any major changes to cultural resources section that are necessitated by this update of the RTP. Mr. McMurtry mentioned that typically for these types of program level supplemental EIRs for RTPs the cultural resources section is not something that is included for because the specific project details and footprint are not known. The local jurisdictions or Caltrans will implement the projects and have to follow AB 52 consultation procedures and the project level environmental process will include historical and archeological review and sacred land and record searches.

Mr. McMurtry stated that the supplemental program level EIR for the RTP will include a section on Tribal Consultation that will document the consultation process and the meeting being held today. Mr. Hutcheson requested that language be included that references the key parts of the law as it relates to AB 52. Mr. Woodman recommended to Mr. McMurtry that this type of language be included and also a discussion of how it will relate to future implanting agencies. Mr. McMurtry stated that he would incorporate some language to that affect and that he anticipated completing the supplemental EIR in the next week. He stated that with NCTC's approval he would like to provide an administrative draft to Mr. Hutcheson for review prior to finalizing and releasing the Draft Supplemental EIR for the 45-day public review period. Mr. McMurtry indicated that it would be preferred to be able to get comments back within a week or two in order to keep the project on schedule. Representatives from NCTC concurred with that approach and stated they will email Mr. Hutcheson and Marco Guerrero, UAIC Cultural Resources Manager the administrative draft for review.

Charles Hutcheson indicated that the tribe is very proactive and likes to be engaged early in the review of any projects that might impact or result in the loss of tribal cultural resources, including culturally significant plant species. He indicated that early consultation is always a best practice to follow and to be sure and send by certified mail to Gene Whitehouse UAIC Chairman and also to email to Mr. Guerrero and himself for review. Mr. Hutcheson stated that the UAIC has information on sacred and sensitive sites, as well as types of vegetation that are culturally significant that may not be available from the Native American Heritage Commission and other available records searches, so early coordination is the best way help avoid the loss sensitive cultural resources.

Mr. Woodman restated that the next steps would be for De Novo Planning Group to finalize the preparation of the draft supplemental program level EIR and expand the language in the Tribal Consultation section to document the meeting held today and include a discussion of requirements of AB 52 and the related responsibilities of future implementing lead agencies. Mr. Woodman stated that NCTC will provide Mr. Hutcheson and Mr. Guerrero with an administrative draft of the draft supplemental program level EIR for their review and comment on the language included in the tribal consultation section prior to finalizing he draft for public review.

The meeting was adjourned.

3.5.1 ENVIRONMENTAL SETTING

Nevada County is located within the historical territory of the Nisenan, also known as the southern Maidu (Kroeber 1925; Wilson and Towne 1978) and Miwok. Nisenan lands included the southern extent of the Sacramento Valley, east of the Sacramento River between the North Fork Yuba River and Cosumnes Rivers on the north and south, respectively, and extended east into the foothills of the Sierra Nevada range. Their language is closely related to that of the Konkow and Maidu to the north, forming the Maiduan language family (Mithun 2001, p. 455), which is regarded as a subgroup of the Penutian language stock (Wilson and Towne 1978, p. 387). The Northern Hill Nisenan is the dialect of the Nisenan language that was spoken in the area.

Nisenan villages were located along streams or rivers (Wilson and Towne 1978, pp. 388–389). The villages of Tipotoya and Loyowisa were located near Grass Valley; Takema was located on the Bear River near Colfax; Hangwite was situated on the American River near Auburn (Kroeber 1925, Plate 37). There were also a number of ethnographically known settlements near Combie Crossing, and along Wooley Creek, now beneath Lake Combie (Selverston 2008).

Most villages had bedrock mortars, dance houses, sweathouses, and acorn granaries; many had cemeteries. Deceased Nisenan were cremated and the remains buried in the village cemetery (Wilson and Towne 1978, p. 392). Typical Nisenan communities included a central village with several outlying smaller villages. Groups erected temporary brush shelters while hunting or gathering seasonal plant resources, frequently at higher elevations.

Subsistence fishing and hunting, and collecting plant foods in an area where abundant natural resources varied seasonally, comprised the fundamental economy of the Nisenan (Wilson and Towne 1978, pp. 389–390). Like most native Californian groups, the Nisenan relied on the acorn as a staple food and used a wide variety of tools, implements, and enclosures to collect and process food resources. These included bows and arrows, traps, harpoons, hooks, nets, portable stone mortars, bedrock mortars and pestles, various woven tools, and canoes made of tule balsa or logs. The Nisenan also traded with neighboring groups for shell ornaments, money beads, steatite, and obsidian.

Spanish explorers entered Nisenan territory as early as 1808, but there is no record of the forced movement of Nisenan to the missions (Wilson and Towne 1978, p. 396). In the late 1820s during the Mexican Period, trappers camping in Nisenan territory introduced foreign diseases. The

epidemic that swept the Sacramento Valley in 1833 resulted in the demise of approximately 75 percent of the Valley Nisenan population, wiped out entire villages, and forced the survivors to retreat into the hills (Cook 1955, p. 322).

Coloma, located approximately 20 miles southeast of Nevada County, was in the heart of Nisenan territory. Although Euro-American settlers and trappers had also crossed through their territory, the Hill Nisenan were not affected until after the start of the Gold Rush. The discovery of gold in 1848 near Coloma at Sutter's Mill had a devastating impact on their lives. With the tens of thousands of gold seekers came the mass introduction and concentration of diseases, the loss of land and territory (including traditional hunting and gathering locales), violence, malnutrition and starvation (Grunsky 1989). Traditional lands of the Hill Nisenan were overrun by the early 1850s, and Nisenan survivors were then forced to live at the margins of foothill towns and to work for agricultural, logging, and ranching industries (Wilson and Towne 1978, p. 396).

3.5.2 REGULATORY SETTING

FEDERAL

Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

STATE

Native American Heritage Commission, Public Resources Code Sections 5097.9–5097.991

Section 5097.91 of the PRC established the NAHC, whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Under Section 5097.9 of the PRC, a State policy of noninterference with the free expression or exercise of Native American religion was articulated along with a prohibition of severe or irreparable damage to Native American sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines located on public property. Section 5097.98 of the PRC specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner. Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

California Native American Graves Protection and Repatriation Act of 2001

Codified in the California Health and Safety Code Sections 8010–8030, the California Native American Graves Protection and Repatriation Act (Cal NAGPRA) is consistent with the federal NAGPRA. Intended to "provide a seamless and consistent state policy to ensure that all California Indian human remains and cultural items be treated with dignity and respect," Cal NAGPRA also encourages and provides a mechanism for the return of remains and cultural items to lineal descendants. Section 8025 established a Repatriation Oversight Commission to oversee this process. The Act also provides a process for non– federally recognized tribes to file claims with agencies and museums for repatriation of human remains and cultural items.

Assembly Bill 52

On September 25, Governor Brown signed Assembly Bill No. 52 (AB 52), which creates a new category of environmental resources that must be considered under CEQA: "tribal cultural resources." AB 52 is applicable to project for which a Notice of Preparation is filed on or after July 2015.

AB 52 adds tribal cultural resources to the categories of cultural resources in CEQA, which had formerly been limited to historic, archaeological, and paleontological resources. "Tribal cultural resources" are defined as either (1) "sites, features, places cultural landscapes, sacred places and objects with cultural value to a California Native American tribe" that are included in the state register of historical resources or a local register of historical resources, or that are determined to be eligible for inclusion in the state register; or (2) resources determined by the lead agency, in its discretion, to be significant based on the criteria for listing in the state register.

Recognizing that tribes may have expertise with regard to their tribal history and practices, AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe. Consultation may include discussing the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe.

The parties must consult in good faith, and consultation is deemed concluded when either the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource (if such a significant effect exists) or when a party concludes that mutual agreement cannot be reached.

LOCAL

General Plans

The Conservation Elements of the local general plans including Nevada County, and the Town of Truckee, and the cities of Grass Valley and Nevada City include policies regarding cultural resources. The County and local jurisdictions aim to protect resources through continued identification and protection efforts.

3.5.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with AB 52, the proposed project is considered to have a significant impact on the environment if it will:

- Cause a substantial adverse change in the significance of a Tribal cultural resource, pursuant to Assembly Bill 52 including:

- a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074; or

- impact a resource determined by the lead agency, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

IMPACTS AND MITIGATION MEASURES

Impact 3.5-1: Cause a substantial adverse change in the significance of a Tribal cultural resource, pursuant to Assembly Bill 52 (Less Than Significant with Mitigation)

NCTC met with representatives from the United Auburn Indian Community (UAIC) on May 23, 2017 in accordance with AB 52. The UAIC is a Native American tribal organization with historic or cultural interests regarding lands in Nevada County. This consultation was based on an NOP comment letter that was received by NCTC.

The RTP is a program level planning document that sets forth the regional transportation policy direction, identifies the short-term (10-year) and long-term (20-year) multi-modal transportation needs, and identifies projects that based on revenue projections are anticipated to be able to be funded to meet those needs. It also identifies unconstrained list of projects that could be implemented if additional funding becomes available. Because the RTP is a program level document, specific project design details and project limits have not been determined at this point in time and those details will be determined in the future by the implanting lead agency (i.e. Caltrans, City of Gras Valley, City of Nevada City, Nevada County, or the Town of Truckee). Once a lead agency moves forward with implementation of a project, that agency will be responsible for

the project specific environmental review to determine site specific potential impacts. NCTC does not have land use authority and the RTP addresses transportation projects at a plan level.

NCTC and the UAIC discussed that fact that the RTP is a long-range planning document and individual projects are not currently available for review at the design level. It was also discussed that RTP projects that affect roads and interchanges present the potential to impact tribal resources. NCTC and UAIC agreed that the scope of the evaluation at the project level shall include consultation with Native American representatives identified by the NAHC, including the UAIC. The consultation should be undertaken, consistent with most recent guidance provided by the Office of Planning and Research. The purpose of the consultation is to identify Tribal cultural resources and ensure that such resources are taken into consideration in the planning process. Such resources include culturally significant plant species.

The following mitigation measure would ensure that all future RTP projects involve tribal consultation in accordance with AB 52 are designed to identify and protect tribal resources to the greatest extent feasible. Adherence to the requirements of this mitigation measure during all future RTP projects would reduce this impact to a **less than significant** level.

MITIGATION MEASURES

Mitigation Measure 3.5.1: *Prior to approval of individual RTP projects, the implementing agency shall consult with local tribes who have requested consultation per AB 52 to ensure that the project will not substantially impact tribal resources. Tribal consultation shall specifically include, but not be limited to, consultation with the United Auburn Indian Community (UAIC). The tribal consultation should include a more detailed project-level analysis of proposed improvements to identify specific impacts. Additionally, projects literature and data including cultural reports, records searches, and maps prepared for the project should be provided to local tribes as requested to help facilitate the identification and potential mitigation for resources present.*

If cultural resources are discovered during project-related construction activities, all ground disturbances within a minimum of 50 feet of the find shall be halted until a qualified professional archaeologist can evaluate the discovery. The archaeologist shall examine the resources, assess their significance, and recommend appropriate procedures to the lead agency to either further investigate or mitigate adverse impacts. If the find is determined by the lead agency in consultation with the Native American tribe traditionally and culturally affiliated with the geographic area of the project site to be a tribal cultural resource and the discovered archaeological resource cannot be avoided, then applicable mitigation measures for the resource shall be discussed with the geographically affiliated tribe. Applicable mitigation measures that also consider the cultural values and meaning of the discovered tribal cultural resource, including confidentiality if requested by the tribe, shall be completed (e.g., preservation in place, data recovery program pursuant to PRC §21083.2[i]). During evaluation or mitigative treatment, ground disturbance and construction work could continue on other parts of the project site.

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CEQA requires an EIR to evaluate a project's effects in relationship to broader changes occurring, or that are foreseeable to occur, in the surrounding environment. Accordingly, this chapter presents discussion of CEQA-mandated analysis for cumulative impacts, irreversible impacts, and growth inducement associated with the 2016 RTP.

4.1 CUMULATIVE SETTING AND IMPACT ANALYSIS

CUMULATIVE SETTING

Under CEQA, the discussion of cumulative impacts should focus on the severity of the impacts and the likelihood of their occurrence. The cumulative scenario for the 2016 RTP includes growth planned for Nevada County and incorporated communities. The analysis of cumulative effects considered the cumulative projected general plan buildout throughout Nevada County. Some sections within chapter three include individual cumulative analyses.

Population Characteristics

POPULATION TRENDS

In the period between 1975 and 1990, the average annual population growth rate in Nevada County exceeded five percent. This growth rate was one of the highest in the state and did not allow local governments to keep pace with infrastructure, maintenance, and improvements. Fortunately, the growth rate slowed significantly between 1990 and 2000 and continues to be the trend. Table 4.1-1 presents the recent population changes in Nevada County by location.

TABLE 4.1-1: RECENT POPULATION CHANGE BY LOCATION

LOCATION	POPULATION						
	APR 2000	% CHANGE 2000-2005*	JAN 2005	% CHANGE 2005-2010*	APR 2010	% CHANGE 2010-2015*	JAN 2015
Grass Valley	10,922	17.8%	12,864	-0.03%	12,860	0.5%	12,925
Nevada City	2,996	0.8%	3,019	1.6%	3,068	4.1%	3,194
Truckee	13,864	10.8%	15,364	5.3%	16,180	0.2%	16,211
Unincorporated Area	64,251	3.0%	66,207	0.7%	66,656	-1.2%	65,863
Total County	**92,033**	**5.9%**	**97,454**	**1.3%**	**98,764**	**-0.6%**	**98,193**

SOURCE: STATE OF CALIFORNIA, DEPARTMENT OF FINANCE, REPORT E-4 POPULATION ESTIMATES FOR CITIES, COUNTIES, AND THE STATE, SACRAMENTO, CALIFORNIA, MAY 2015. STATE OF CALIFORNIA, DEPARTMENT OF FINANCE, E-4 HISTORICAL POPULATION ESTIMATES FOR CITY, COUNTY AND THE STATE, 1991-2000, WITH 1990 AND 2000 CENSUS COUNTS. SACRAMENTO, CALIFORNIA, SEPTEMBER 2015 NOTE % CHANGE DOES NOT REPRESENT FULL 5 YEAR INCREMENTS.

As might be expected, population growth in western Nevada County has occurred predominantly around the Grass Valley/Nevada City area. In addition, much of Nevada County's growth has occurred on large lots in the rural areas of the county, which does not assist in the cost-effective operation of public transportation services.

In eastern Nevada County, the Town of Truckee, which incorporated in 1993, experienced rapid growth between 1990 and 2000. According to an analysis of Truckee's population growth since

1990 conducted by the Town's Planning Department in 2004, the average annual growth rate between 1990 and 2000 was 4.5 percent. Since 2000, the average annual growth rate slowed, between 2000 and 2004, to an average annual growth rate of 2.0 percent. Between 2005 and 2009 the average annual growth rate declined to 1.0 percent. Between 2010 and 2016, the average annual growth rate fell to -2.65%.

POPULATION PROJECTIONS

According to the California Department of Finance, Nevada County's population increased from 98,037 in 2015 to 98,095 in 2016. DOF also projects that the County's population will increase 6.41% over the next ten years (2015-2025) with an annual average growth rate of approximately 0.64%. By year 2035, the County's population is projected to be 110,224. As Nevada County's population increases, additional demand will be placed on the existing transportation infrastructure.

POPULATION AGES

The 2015 Census data indicates that the median age in Nevada County was 49.3 years of age compared to 36.5 for the entire state of California. Nevada County's largest population by age in 2010 was the 25-64 age group at 54.5% of the County population. The second largest population by age was the 5-17 age group at 14.8% of the County population compared to a statewide percentage of 18.0%. The 18-24 age group for Nevada County as a percentage stood at 6.7% compared to the statewide 10.5%.

Projections indicate that the county's population of young retirees (age 65 to 74) will increase from 10,732 in 2010 to approximately 14,899 by 2030 (27% increase). The number of mature retirees (age 75-84) are projected to increase from 5,833 in 2010 to approximately 13,560 in 2030 (57 % increase). As people age 65 and older are a major transit market, this suggests additional demand will be placed on fixed route transit and paratransit services in western and eastern Nevada County over the plan period and highlights the need for the state to address the long-term expansion of transit operating revenues.

Transportation Characteristics

NUMBER OF VEHICLES PER HOUSEHOLD

As shown in Table 4.1-2, the 2010 Census counted 1,763 occupied housing units with zero vehicles available in Nevada County (4.3%) compared to 4.7% zero vehicle households identified in the 2010 Census. Planning efforts for the region need to recognize the demographics of Nevada County that make it unique. Nevada County's population mix is older than the statewide average. As the existing population ages, it will create mobility needs that the region's resources will be challenged to meet.

TABLE 4.1-2: NUMBER OF VEHICLES PER HOUSEHOLD (HH)

NUMBER OF VEHICLES PER HH	HH'S	PERCENTAGE
None	1,763	4.3%
1	11,191	27.3%
2	16,274	39.7%
3 or more	11,765	28.7%
Total	40,993	100.0%

SOURCE: U.S. CENSUS BUREAU 2010 CENSUS.

JOURNEY-TO-WORK MODE SPLIT

Travel characteristics within Nevada County vary widely according to the region in which it occurs. The western portion of the County contains a large number of trip producing (residential) land uses in relation to trip-attracting (office and commercial) land uses. The 2015 Census (ACS) Journey-to-Work data for Nevada County indicates that prominent mode of choice is the automobile as indicated by 75.1% of workers who drove alone and 8.2% who carpooled.

Approximately 80 percent of the developed land contained residential uses. This causes many trips to originate in this area with a destination outside of the area. Travel within the eastern portion of the County, however, is driven by a greater quantity of trip attracting land uses than trip-producing uses. This area is characterized by many recreational and tourist attractions, which causes large amounts of traffic to originate outside the area with destinations either inside or through the area.

The 2015 Census indicates that, of the 40,392 employed residents in the County, around 9,613 worked outside the County or approximately 23.8%, and 9.5%, or around 4,244 people, in the local work force commute into Nevada County to work. Table 4.1-3 presents the Journey-to-Work Mode Split for Nevada County according to the 2010 Census.

TABLE 4.1-3: 2015 CENSUS JOURNEY-TO-WORK MODE SPLIT

MODE (HOME-BASED WORK TRIPS)	NEVADA COUNTY
Drive Alone	75.1%
Carpool	8.2%
Public Transportation	1.2%
Bicycle	1%
Walk	2.1%
Worked at Home	11.1%
Other	1.2%

SOURCE: U.S. CENSUS BUREAU 2015 ACS.

TRAVEL TIME TO WORK

The mean travel time to work for Nevada County residents is 25 minutes. Approximately 55.1% of Nevada County workers that commute travel less than 20 minutes to their place of employment. The Census data indicates that 53.2% of workers commute between 20 – 59 minutes and 9.4% commuted from 60 – 90+ minutes to work. Since the 2015 Census data indicated that 9,613 Nevada County residents worked outside of the County, one could conclude based on the number of workers associated with the commute times above, that workers with a travel time slightly above 20 minutes most likely are traveling to an employment destination outside of the County. Table 4.1-4 presents the Travel Time to Work according to the 2015 Census.

TABLE 4.1-4: 2015 CENSUS TRAVEL TIME TO WORK

NEVADA COUNTY WORKERS WHO DID NOT WORK AT HOME	NUMBER	PERCENT
Less than 10 minutes	7,473	18.5%
10 to 14 minutes	7,674	19.0%
15 to 19 minutes	7,109	17.6%
20 to 24 minutes	4,564	11.3%
25 to 29 minutes	2,060	5.1%
30 to 34 minutes	3,635	9.0%
35 to 44 minutes	1,818	4.5%
45 to 59 minutes	2,302	5.7%
60 or more minutes	3,796	9.4%
Less than 10 minutes	7,473	18.5%

SOURCE: U.S. CENSUS BUREAU 2015 ACS.

CUMULATIVE EFFECTS OF THE PROJECT

Method of Analysis

Although the environmental effects of an individual project may not be significant when that project is considered separately, the combined effects of several projects may be significant when considered collectively. State CEQA Guidelines 15130 requires a reasonable analysis of a project's cumulative impacts, which are defined as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is: the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines 15355[b]). Cumulative impact analysis may be less detailed than the analysis of the Project's individual effects (State CEQA Guidelines 15130[b]).

There are two approaches to identifying cumulative projects and the associated impacts. The list approach identifies individual projects known to be occurring or proposed in the surrounding area in order to identify potential cumulative impacts. The projection approach uses a summary of projections in adopted General Plans or related planning documents to identify potential cumulative impacts. Because of the programmatic and county-wide nature of the 2016 RTP, this EIR uses the projection approach for the cumulative analysis and considers the development plans of Nevada County as well as its incorporated communities.

Cumulative Impacts

Some cumulative impacts for issue areas are not quantifiable and are therefore discussed in general terms as they pertain to development patterns in the surrounding region. Exceptions to this are traffic, noise and air quality (the latter two of which are associated with traffic volumes), which may be quantified by estimating future traffic patterns, pollutant emitters, etc. and determining the combined effects that may result. In consideration of the cumulative scenario described above, the proposed project may result in the following cumulative impacts.

AIR QUALITY

Impact 4.1: Cumulative Impact on the Region's Air Quality (Less than Cumulatively Considerable)

The cumulative setting for air quality impacts is the Mountain Counties Air Basin (see Figure 3.1-1). As discussed under Section 3.1, the emission outputs reflect a decreasing trend of criteria pollutant emissions from 2012 through 2035. The results of the emission model reflect the fact that the state and federal EPA's vehicle and fuel regulations that are being phased into place over the study horizon will bring about significantly lower emission levels, which is particularly important for the reduction of emissions in nonattainment areas.

Construction activities associated with construction and implementation of the various roadway and other transportation improvement projects identified in the RTP would result in temporary short-term emissions associated with vehicle trips from construction workers, operation of construction equipment, and the dust generated during construction activities. These temporary and short-term emissions would generate additional ozone precursors (ROG and NOx) as well as PM_{10}; however, because of the temporary nature of these emissions, they are not considered cumulatively considerable.

Implementation of the 2016 RTP will not conflict with the region's Air Quality Plan, cause a violation of Air Quality Standards, contribute substantially to an existing air quality violation, or result in a cumulatively considerable net increase of a criteria pollutant in a nonattainment area. Implementation of the 2016 RTP would result in a **less than cumulatively considerable** impact.

GREENHOUSE GASES AND CLIMATE CHANGE

Impact 4.2: Increased Greenhouse Gas Emissions May Contribute to Climate Change (Less than Cumulatively Considerable)

As discussed under Section 3.2, NCTC's ability to control GHG emissions and mitigate for climate change impacts is largely limited to transportation funding decisions that may result in decreases in VMT throughout the County.

The emission outputs included in Section 3.2 reflect a decreasing trend of GHG emissions from 2012 through 2035. The results of the emission model reflect the fact that the state and federal EPA's vehicle and fuel regulations that are being phased into place over the study horizon will bring about significantly lower emission levels.

Although a substantial decrease in Nevada County-generated mobile GHG emissions is expected, implementation of the mitigation measures described in Section 3.2 will assist in the reduction of per capita VMT levels generated by Nevada County, which will assist in meeting the stated goals of AB 32, SB 375, and the guidance provided by the applicable State Executive Orders. As described throughout this EIR, NCTC has included numerous projects and programs to promote the use and expansion of alternative transportation systems throughout the county and they continue to coordinate with local land use agencies to assist in the development of plans and policies aimed at reducing VMT. After implementation of all the policies, action plans, and mitigation measures

included in the RTP and this EIR, the proposed project would not contribute to an overall significant increase in GHG emission generated by Nevada County. The emission outputs (outputs are summarized in Section 3.2 GHG, and included in Appendix B) reflect a decreasing trend of GHG emissions through 2035. Therefore, this impact is considered a ***less than significant*** and ***less than cumulatively considerable.***

LAND USE

Impact 4.3: Cumulative Impact on Communities and Local Land Uses (Less than Significant and Less than Cumulatively Considerable)

Cumulative land use impacts, such as the potential for conflicts with adjacent land uses and consistency with adopted plans and regulations, are typically site- and project-specific.

The majority of RTP projects would involve transportation system improvements to existing facilities, which would mostly occur within or in close proximity to existing rights-of-way. Some RTP projects will involve new facilities that will occur within or adjacent to existing communities. New facilities may include roadway widening, roadway extensions, bicycle lanes, bicycle/pedestrian paths, bridges, and interchanges. Additionally, the 2016 RTP includes measures that are intended to provide the existing land uses with a complete transportation system that has a broader level of safe transportation choices for the citizens. A complete transportation system with more safe choices provides an enhancement to the quality of life within the community.

Each of the jurisdictions in Nevada County has an adopted General Plan to guide land use and development decisions, including circulation patterns and improvements. The RTP projects responds to growth anticipated in adopted general plans, as well as address safety and rehabilitation issues necessary to maintain the existing transportation system. The RTP projects will also enhance mobility within established communities, and provide connectivity between established communities and throughout the county. The 2016 RTP includes several objectives, policies, and implementation measures intended to coordinate regional transportation planning with local planning efforts.

The 2016 RTP is intended to accommodate growth envisioned by the General Plans of Nevada County and its incorporated communities by providing multimodal circulation infrastructure necessary to meet community needs. The 2016 RTP includes policies that ensure consistency with local plans and regulations and a conformance review of individual RTP projects will ensure consistency with adopted policies and regulations. The 2016 RTP would not result in significant conflicts with plans, policies, and regulations. Therefore, this impact is considered ***less than significant*** and ***less than cumulatively considerable.***

POPULATION AND HOUSING

Impact 4.4: Cumulative Impacts on Population and Housing (Less than Significant and Less than Cumulatively Considerable)

The 2016 RTP has been planned to accommodate anticipated levels of growth, including growth associated with adopted general plans. The RTP does not involve approvals associated with any

development projects, or designate lands for development, change land uses within the county, and does not provide additional water sewer or other infrastructure that could facilitate additional development in the region. The RTP would not induce growth beyond the growth that is planned or being planned by local jurisdictions both locally and regionally, and the RTP does not add or remove housing within the Planning Area. Therefore, implementation of the 2016 RTP will have a ***less than significant*** and ***less than cumulatively considerable*** impact relative to population and housing.

TRANSPORTATION AND CIRCULATION

Impact 4.5: Cumulative Impact on the Transportation Network (Beneficial Contribution)

The cumulative setting for transportation and circulation impacts includes Nevada County as well as regional roadways and highways connecting Nevada County to other population centers. Under cumulative conditions, the increase in development is anticipated to result in increased traffic congestion on local and regional roadways, as well as result in increased demand for transit, bicycle/pedestrian, rail, and aviation facilities and infrastructure.

Without the 2016 RTP improvements, the use of alternative modes of transportation including transit, bicycle, and pedestrian, would be limited. Lack of funding for transit system improvements, bicycle/pedestrian routes and facilities, and other improvements could hamper the use of these transit modes by an increasing population. This is anticipated to result in more trips and more automobiles and trucks on the road. The conditions without the 2016 RTP improvements would also represent greater safety risks, particularly under cumulative conditions, there will be an increase of vehicles on roadways throughout the county regardless of the 2016 RTP, but safety and maintenance improvements identified in the 2016 RTP would not be implemented. Bicycle routes would not be expanded. The potential for adverse interactions between vehicles, pedestrians, and/or bicyclists would increase.

The 2016 RTP included programming for projects that would improve traffic and circulation conditions compared with the 2035 conditions without the project. Without the 2016 RTP improvements, there would be an overall worsening of LOS on County and City roadways and increased safety risks. Without the proposed project the county would also experience an overall increase in vehicle hours of delay.

Implementation of the 2016 RTP would have a beneficial effect on cumulative transportation conditions in the region. Therefore, the 2016 RTP would have a ***beneficial contribution*** to cumulative transportation and circulation impacts.

TRIBAL RESOURCES

Impact 4.6: Cumulative Impact on Tribal Resources
(Less than Significant and Less than Cumulatively Considerable)

The cumulative setting for tribal resource impacts includes all of Nevada County. Under cumulative conditions, the increase in any new traffic infrastructure or service is anticipated to result in increased potential do impact tribal resource, both known and unknown.

Because the proposed project is a planning document individual projects are not currently available for review at the design level, however, it is assumed that RTP projects that require earth movement present the potential to impact tribal resources. Pursuant to AB 52, the scope of the evaluation at the project level shall include consultation with Native American representatives. The consultation should be undertaken, consistent with most recent guidance provided by the Office of Planning and Research. The purpose of the consultation is to identify Tribal cultural resources and ensure that such resources are taken into consideration in the planning process.

Section 3.5 includes mitigation measures to ensure that all future RTP projects are designed to identify and protect tribal resources to the greatest extent feasible. Adherence to the requirements of this mitigation measure during all future RTP projects would reduce this impact to a ***less than significant*** and ***Less than Cumulatively Considerable***.

MITIGATION MEASURES

Implement Mitigation Measure 3.5.1

4.2 GROWTH-INDUCING EFFECTS

INTRODUCTION

Section 15126.2(d) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

> *The way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth…It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.*

Based on the CEQA Guidelines, growth inducement is any growth that exceeds planned growth of an area and results in new development that would not have taken place without implementation of the project. A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new

employment demand *(Napa Citizens for Honest Government v. Napa County Board of Supervisors)*. Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. A project providing an increased water supply in an area where water service historically limited growth could be considered growth-inducing.

The State CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

Components of Growth

The timing, magnitude, and location of land development and population growth in a region are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Since the general plan of a community defines the location, type, and intensity of growth, it is the primary means of regulating development and growth in California.

GROWTH EFFECTS OF THE PROJECT

The proposed 2016 RTP is intended provide efficient and effective regional road, transit, rail, bicycle, pedestrian, and aviation systems that accommodates the demand for safe movement of people and goods, while reducing usage of nonrenewable energy resources for transportation purposes and achieving federal and state air quality standards.

Population Growth

The population in the RTP area is expected to grow from 98,095 in 2016 to 110,135 by 2035. The 2016 RTP has been planned to accommodate anticipated levels of growth, including growth associated with adopted general plans. NCTC does not have the authority to make local land use decisions.

Ultimately, the county and incorporated communities are the agencies responsible for approving land development projects; the 2016 RTP plans infrastructure to implement regional

transportation infrastructure but does not provide approval of development projects. The 2016 RTP does not increase the amount of growth that could occur under the adopted and draft General Plans of the County and incorporated communities, nor does it provide infrastructure that would accommodate growth in excess of planned levels.

It is anticipated that Nevada County and the incorporated communities in the county would grow at rates governed by market influences (the demand for housing as influenced by interest rates, employment rates, etc) as regulated by adopted general plans and local regulations regardless of approval of the 2016 RTP.

Growth Effects Associated with Infrastructure Improvements

The 2016 RTP provides a strategy to reduce the adverse traffic and circulation effects, including demands on energy and air quality effects, of planned growth and would not directly induce growth. The 2016 RTP includes proposed roadway and transportation improvements that have been designed to support the general plans of Nevada County, and the incorporated Cities. The 2016 RTP does not include any provisions requiring the oversizing of infrastructure facilities to serve growth not currently planned. The 2016 RTP also includes provisions for alternative modes of transportation, (transit, bicycle, and pedestrian), which would be increased at a rate that maintains pace with population growth.

Environmental Effects of Growth

As described above, the 2016 RTP is not considered to be growth-inducing. The following environmental effects could be experienced due to growth throughout the county, although this is not a direct result of the 2016 RTP:

> Air Quality – Increases in air pollutant emissions potentially conflicting with air quality attainment efforts under state and federal Clean Air Acts, greenhouse gas emissions, and increased potential for the exposure to toxic air contaminants.
>
> Greenhouse Gas Emissions and Climate Change – Increases in greenhouse gas emissions, and potentially conflicting with climate actions plans and/or greenhouse gas reductions efforts under state and federal regulations.
>
> Traffic and Circulation – Increased traffic volumes on the region's highways and regional roadways resulting in deficient levels of service of operation.

It is noted that these effects of growth are anticipated to occur regardless of adoption of the proposed 2016 RTP as development and other growth projects could continue to be approved and implemented by the County and incorporated communities.

4.3 SIGNIFICANT IRREVERSIBLE EFFECTS

CEQA requires that EIRs prepared for the adoption of a plan, policy, or ordinance of a public agency must include a discussion of significant irreversible environmental changes of project implementation. CEQA Guidelines Section 15126.2(c) describes irreversible environmental changes as:

> *Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.*

Development of transportation infrastructure and facilities would irretrievably commit building materials and energy to the construction and maintenance of buildings and infrastructure. Renewable, nonrenewable, and limited resources that would likely be consumed as part of transportation infrastructure and facilities would include, but are not limited to, oil, gasoline, lumber, sand and gravel, asphalt, water, steel, and similar materials.

4.4 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. The following significant and unavoidable impacts of the 2016 RTP are discussed in Chapters 3 (program-level) and previously in this chapter (cumulative-level). Refer to those discussions for further details and analysis of the significant and unavoidable impact identified below:

- Impact 3.4-1: Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system

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5.1 CEQA REQUIREMENTS

CEQA requires that an EIR analyze a reasonable range of feasible alternatives that meet most or all project objectives while reducing or avoiding one or more significant environmental effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice (CEQA Guidelines Section 15126.6[f]). Where a potential alternative was examined but not chosen as one of the range of alternatives, the CEQA Guidelines require that the EIR briefly discuss the reasons the alternative was dismissed.

PROJECT GOALS AND OBJECTIVES

The alternatives to the proposed project selected for analysis in the EIR were developed to minimize significant environmental impacts while fulfilling the basic goals and objectives of the project. The following objectives have been identified for the proposed project. The objectives and presented below are consistent with the objectives, policies, and programs contained in the General Plans of Nevada County, Grass Valley, Nevada City, and the Town of Truckee.

- Provide for the safe and efficient movement of all people, goods, and services, on the roadway network.
- Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life.
- Develop an economically sustainable transportation system.
- Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.

5.2 ALTERNATIVES CONSIDERED IN THIS EIR

Three alternatives to the proposed project were developed based on the technical analysis performed to identify the environmental effects of the proposed project. Due to the nature of the proposed project, there are elements common to each of the alternatives, with each alternative having the same approach and investment associated with goods movement, aviation, energy, land use strategies, and outreach and coordination objectives. The alternatives analyzed in this EIR include the following three regional alternatives in addition to the proposed 2016 RTP project.

- No Project Alternative
- Financially Constrained Alternative (Proposed Project)
- Financially Unconstrained Alternative
- Transit Enhanced Alternative

NO PROJECT ALTERNATIVE

The CEQA Guidelines (Section 15126.6[e]) require consideration of a no project alternative that represents the existing conditions, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved. When a project involves the revision of an existing plan, the no-project alternative should reflect continuation of the existing plan. For purposes of this analysis, the No Project Alternative is the continuation of NCTC's adopted 2010 RTP into the future. It should be noted however that some of the dollars that are programmed for projects under the 2010 RTP will not be available until such time that there is an adopted RTP. Therefore, under this alternative the NCTC would not be able to carry out all of the transportation projects in the 2010 RTP.

FINANCIALLY CONSTRAINED ALTERNATIVE (PROPOSED PROJECT)

The proposed project represents a financially-constrained approach to the 2016 RTP, focusing on a balanced transportation system that will provide regional and local mobility through programming most funding for regional roadway improvements. The proposed project only includes improvements for which funding has been identified as is intended to balance funds between the various modes of transportation. The Financially Constrained Alternative leverages Caltrans funding for the road network while also emphasizing transit and multi-modal systems and networks. The Financially Constrained Alternative would continue to support bicycle and pedestrian projects. The Financially Constrained Alternative focuses on decreasing traffic congestion, improving safety, and reducing air pollutant emissions through a combination of capacity and operational improvements directed at single occupancy vehicles, investments in regional transit, and bike and pedestrian facilities. A detailed description of this alternative and individual projects is provided in Section 2.0 Project Description.

FINANCIALLY UNCONSTRAINED ALTERNATIVE

The Financially Unconstrained Alternative includes all of the individual projects identified under the Financially Constrained Alternative (discussed above and in Section 2.0 Project Description) plus numerous additional projects that are needed but not yet funded over the planning horizon. Under this alternative, total spending would need to increase by approximately $219,602,273 in western Nevada County and approximately $52,500,000 in eastern Nevada County. Total county-wide spending would need to increase by $272,102,273. This alternative includes all projects without regard to whether or not they can be funded. Table 5.2-1 and 5.2-2 provides a complete list of the additional projects under this alternative.

TABLE 5.2-1: WESTERN NEVADA COUNTY: FINANCIALLY UNCONSTRAINED (UNFUNDED) RTP PROJECTS 2015-2035

LOCATION	*PROPOSED IMPROVEMENT*	*OBJECTIVES SUPPORTED*	*TOTAL COST*	*FUNDING SOURCE(S)*		*ESTIMATED CONSTRUCTION DATE* [2]
SR 49 Widening – North of La Barr Meadows Road to McKnight Way Interchange	Construction: SR 49 widening and frontage road system (St. Hwy)	1.A 1.B	$35,000,000	$17,500,000 $17,500,000	RIP[3] IIP[4] R	TBD
SR 49 from South side of Alta Sierra Dr. to South of Kenwood Dr. (south of LaBarr Meadows Rd.)	Second SB through lane with median and shoulder widening; leave Pingree Rd. as T-intersection, connect Ponderosa Rd. to Pingree Rd.; connect Lady Jane Rd. to Little Valley Rd. intersection (St. Hwy)	1.A 1.B	$33,417,273	$3,871,078 $27,628,922	RTMF[5] TBD[6]	TBD
SR 49 from North of Lime Kiln Rd. to South of Alta Sierra Dr.	Widen to 5 lanes; connect Auburn Rd. further south as T-intersection, leave Pekolee as T-intersection; combine Round Valley Rd. and Quail Creek Rd. intersections. Construct Frontage Roads. (St. Hwy)	1.A 1.B	$42,000,000	TBD		TBD

LOCATION	*PROPOSED IMPROVEMENT*	*OBJECTIVES SUPPORTED*	*TOTAL COST*	*FUNDING SOURCE(S)*	*ESTIMATED CONSTRUCTION DATE* [2]
SR 49 from South of Lime Kiln Rd. to North of Cherry Creek Rd.	Lengthen two SB lanes; eliminate southerly connection and improve northerly connection with Cherry Creek Rd. (St. Hwy)	1.A	$13,500,000	TBD	TBD
SR 49 at Cerrito Road	Construct NB right turn lane with sight-distance wedge, and restripe median a 2-lane left turn lane to the south of the intersection	1.A	$280,000	TBD	TBD
SR 49 from Cameo Dr. to Holcomb Rd./Cherry Creek Rd.	Complete widening to 5 lanes, eliminate Cameo Dr. intersection (St. Hwy)	1.A	$76,000,000	TBD	TBD
SR 20 from Uren Street to the SR 20/I-80 Junction	Construct passing and truck climbing lanes near Washington Ridge Rd., near Bowman Lake Rd., and widen shoulders to 8-foot standard where feasible (St. Hwy)	1.A 1.B	$4,700,000	State Highway Operations Protection Program (SHOPP)	TBD

LOCATION	*PROPOSED IMPROVEMENT*	*OBJECTIVES SUPPORTED*	*TOTAL COST*	*FUNDING SOURCE(S)*	*ESTIMATED CONSTRUCTION DATE [2]*
SR 20 from SR 49 to Pleasant Valley Rd.	Improve to 4 lanes (St. Hwy)	1.A 1.B	$11,400,000	RIP IIP	TBD
Ridge Rd./Alta St.	Install signal (R)[7]	1.A 1.B	$200,000	TBD	TBD
Ridge Rd./Rough and Ready Hwy.	Install signal or roundabout (R)	1.A 1.B	$600,000	TBD	TBD
Between Centennial Dr. and Bennett St.	Construct connector road to E. Bennett St. (R)	1.A 1.B	$1,000,000	TBD	TBD
Nevada City Hwy./ Banner-Lava Cap Rd.	Intersection improvements (R)	1.A	$505,000	TBD	TBD
SR 174/Race St.	Improve curve and channelize at Race St. (R)	1.A	$1,000,000	TBD	TBD
Total			**$219,602,273**		

Notes:
[2]Specific funding and implementation years for unconstrained projects will be determined by the responsible jurisdiction/agency and dependent on available revenues and adopted priorities.
[3]RIP = Regional Improvement Program
[4]IIP = Interregional Improvement Program
[5]RTMF = Regional Transportation Mitigation Fee
[6]TBD = To be determined
[7](R) indicates regionally significant project
Source: NCTC, 2016.

TABLE 5.2-2: EASTERN NEVADA COUNTY: FINANCIALLY UNCONSTRAINED (UNFUNDED) RTP PROJECTS 2015-2035

LOCATION	*PROPOSED IMPROVEMENT*	*OBJECTIVES SUPPORTED*	*TOTAL COST*	*FUNDING SOURCE(S)*	*EST. DATE OF CONST.*
SR 89/UPPR Undercrossing (Mousehole)	Provide two additional travel lanes, sidewalks, and bicycle lanes (State Highway)	1.A 1.B 2.A 2.B	$50,000,000	TBD	TBD
Donner Pass Rd./SR 89/Frates Ln.	Intersection Improvements (R)	1.A 1.B	$2,500,000	TBD	TBD
		Total	**$52,500,000**		

Source: NCTC, 2016.

TRANSIT ENHANCED ALTERNATIVE

The Transit Enhanced Alternative focuses investment into transit modes, while also funding the locally-funded transportation improvements included in the Financially Constrained Alternative. This alternative would require shifting funds from the Financially Unconstrained Alternative to fund transit capital, operational, and maintenance. It should be noted that funding under the Financially Unconstrained Alternative is not programmed at this time and it is not known if any funds identified under the Financially Unconstrained Alternative will become available. It should also be noted that the increase in transit service under this alternative would not result in a proportionate increase in ridership, particularly in the smaller communities and more rural areas. Under this alternative, the following would occur:

- Funding for long-term unconstrained regional roadway improvements would be shifted to transit projects.
- Transit service would be increased both locally (incorporated cities), regionally (rural unincorporated communities), and interregionally (between Nevada County and adjacent counties).
- Funding would be provided for increases in the transit fleet to accommodate the increase in transit service.
- Funding would be provided for transit maintenance/refueling/management facilities in order to accommodate increases in the transit fleet.
- Funding would be provided for the construction of park and ride lots to accommodate demand from the increased regional and commuter transit service.

5.3 ENVIRONMENTAL ANALYSIS

The alternatives analysis provides a summary of the relative impact level of significance associated with each alternative for each of the environmental issue areas analyzed in this EIR: air quality, greenhouse gas, land use, population and housing, transportation, and tribal resources. Following the analysis of each alternative, Table 5.3-1 summarizes the comparative effects of each alternative.

NO PROJECT ALTERNATIVE

Air Quality/Greenhouse Gas

The No Project Alternative would implement fewer transportation improvement projects compared to the other alternatives, which would result in a reduction in construction-related emissions. However, fewer transportation improvement projects would result in increased congestion on area roadways since operational improvements needed to improve traffic flows and decrease idling times would not occur under this alternative. Both vehicle hours of travel and hours of delay may be greater in comparison to the other alternatives, which would result in higher emissions. However, capacity improvements can lead to additional VMT, and induced

trips, which may offset emissions reductions from congestion relief. Therefore, the short term impacts would be less than all other alternatives, but long-term operational impacts would be greater than the Transit Enhanced Alternative, and roughly equal to the Financially Constrained and Unconstrained alternatives.

Land Use and Population

The No Project Alternative would not reflect changes in land uses that have been approved since the 2010 RTP was adopted and it would also not be consistent with planning efforts that are currently underway or completed, including general plan updates/amendments. The region would not have a planned roadway network that is coordinated with land uses in a way that enable the achievement of GHG reductions pursuant to AB 32. The No Project Alternative would result in an infrastructure system not consistent with current growth and population projections for the county and its communities. Therefore, this alternative would have a worse effect on land use and population than the other alternatives and is considered inferior to the other alternatives.

Transportation

The No Project Alternative would result in an increase in vehicle hours of travel and hours of delay compared to the other alternatives, which is an in indicator of more congestion. This alternative would have fewer improvement projects that address safety deficiencies; thus, it would be anticipated to result in more accidents and potentially an increase in injuries and fatalities. The improvement projects that would be carried out under the Financially Constrained and Unconstrained alternatives would either maintain or improve roadway congestion conditions when compared with the No Project Alternative. Overall, the No Project Alternative is inferior to the other alternatives.

Tribal Cultural Resources

The No Project Alternative would result in fewer transportation improvements when compared to the proposed Project throughout the county. Fewer projects that result from the No Project Alternative may reduce the risks associated disturbance of a tribal cultural resource within the county, however the No Project Alternative would include the continuation of the 2010 RTP and would not include new mitigation measures as proposed by the 2016 RTP SEIR to further address protections of tribal resources. Therefore, this alternative would be superior when compared to the Financially Constrained Alternative, slightly worse than the proposed Project and inferior to the transit enhanced alternative.

FINANCIALLY UNCONSTRAINED ALTERNATIVE

Air Quality/Greenhouse Gas

The Financially Unconstrained Alternative would implement the most transportation improvement projects compared to the other alternatives, which would comparatively result in the highest amount of construction-related emissions. However, more transportation improvement projects would result in decreased congestion on area roadways since operational improvements needed to improve traffic flows and decrease idling times would occur under this

alternative. Both vehicle hours of travel and hours of delay would be lower in comparison to the other alternatives, except for the Transit Enhanced Alternative which is expected to have a slight reduction in both. The short term impacts would be greater than all other alternatives. Additionally, capacity improvements can lead to additional VMT, and induced trips, which may offset emissions reductions provided from congestion relief. Therefore, the short term impacts would be greater than all other alternatives, but long-term operational impacts would be greater than the Transit Enhanced Alternative, and roughly equal to the Financially Constrained and No Project alternatives.

Land Use and Population

The Financially Unconstrained Alternative would more fully reflect changes in land uses that have been approved since the 2010 RTP was adopted. This alternative would also be more consistent with planning efforts that are currently underway or completed, including general plan updates/amendments. In essence, the transportation funding needed to accommodate the transportation needs of the communities would be provided more completely without regards to funding availability. The region would have a planned roadway network that is coordinated with land uses. This alternative would result in a transportation infrastructure system consistent with current growth and population projections for the county and its communities. However, a common theme stated in local general plans from the county and incorporated cities is to reduce VMT, increase alternative modes of transportation, and increase transit ridership in an effort to reduce GHGs. Therefore, this alternative would be inferior to the Transit Enhanced Alternative, but would be superior to the Financially Constrained Alternative, and the No Project Alternative. As previously noted, the funding constraints of the RTP make this alternative not feasible even though it is identified as superior to the other alternatives. This is because a significant number of desired improvements across all modes of transportation will remain un-fundable within the RTP's 20-year horizon until additional sources of funding are created.

Transportation

The Financially Unconstrained Alternative would result in a reduction in vehicle hours of travel and hours of delay compared to the other alternatives. This is an indicator of less congestion. This alternative would have more improvement projects that address safety deficiencies; thus, it would be anticipated to result in less accidents and potentially a decrease in injuries and fatalities. The improvement projects that would be carried out under this alternative would either maintain or improve roadway congestion conditions when compared with the other alternatives. Overall, the Financially Unconstrained Alternative is superior to the other alternatives.

Tribal Cultural Resources

The Financially Unconstrained Alternative would implement the most transportation improvement projects compared to the other alternatives, which would comparatively result in the greatest potential for the disturbance of a tribal resource. Therefore, this alternative would be inferior when compared to all other alternatives.

TRANSIT ENHANCED ALTERNATIVE

Air Quality/Greenhouse Gas

The Transit Enhanced Alternative would implement transportation improvement projects, which would result in an increase in construction-related emissions. The amount of construction-related emissions would be greater than the No Project, equal to the Financially Constrained, and less than the Financially Unconstrained alternatives. The combination of transportation improvement projects and increased transit would result in decreases in vehicle hours of travel and hours of delay, which would improve emissions. This alternative would increase the use of public transit, which is intended to help reduce congestion by reducing volume, and reduce emissions. Overall, the Transit Enhanced Alternative is superior to the other alternatives.

Land Use and Population

The Transit Enhanced Alternative would reflect funding needed to accommodate the multi-modal transportation needs of the County and its communities, and would provide alternative transportation options to a greater extent than any other alternative. This alternative would result in a transportation infrastructure system consistent with current growth and population projections for the county and its communities, and would provide adequate funding toward the non-auto, and public transit needs of the community. As stated previously, common theme stated in local general plans from the county and incorporated cities is to reduce VMT, increase alternative modes of transportation, and increase transit ridership in an effort to reduce GHGs. Additionally, local general plans also aim to reduce congestion and provide safe streets. The unconstrained Alternative provides for the greatest congestion relief, while the Transit Enhanced Alternative also provides congestion relief (to a lesser extent), it also provides for reduced VMT and a greater share of alternative transportation and transit ridership. Therefore, this alternative is considered to be superior to all other alternatives.

Transportation

The Transit Enhanced Alternative would result in a greater reduction in congestion when compared to the No Project and Financially Constrained Alternative, but not as great as the Financially Unconstrained Alternative. This alternative would not have the number of improvement projects that address safety deficiencies when compared to the Financially Unconstrained Alternative; thus, it would be anticipated to result in more accidents and fatalities then the Financially Unconstrained Alternative. Overall, this alternative would increase the use of public transit, which is intended to help reduce congestion by reducing volume, but not as efficiently as increasing capacity. This alternative would be superior to the No Project and Financially Constrained Alternative, and inferior to the Financially Unconstrained Alternative.

Tribal Cultural Resources

The Transit Enhanced Alternative would result in additional transit projects which would increase the consolidation of improvements. Improvements would be expected to occur in more developed areas, impacts associated with improvements would be less likely to impact

undiscovered resources within the Planning Area. Therefore, this alternative would be superior when compared to all other alternatives.

5.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed project.

Table 5.4-1 provides a comparison of the alternatives using a qualitative matrix that quantifies the impacts of each alternative relative to the other alternatives. As shown in Table 5.4-1 below, the Transit Enhanced Alternatives has the lowest overall impact (score of 5). The Financially Unconstrained Alternative ranks second with a score of 10, while the Financially Constrained Alternative ranks third with a score of 11, and the No Project Alternative ranks last with a score of 14.

The Financially Unconstrained Alternative has greater transportation benefits related to congestion relief, vehicle delay and safety, while the Transit Enhanced Alternative has the greater emission (Air Quality/Greenhouse Gas) benefits. The Transit Enhanced Alternative is deemed the environmentally superior alternative because it provides the greatest reduction of potential impacts in comparison to the other alternatives. The feasibility of the environmentally superior alternative(s) is/are based on the funding availability over the planning horizon. At this time funding is programmed for a portion of these alternatives (constrained project list), while funding is not programmed for the unconstrained project list, or enhancement of transit. The NCTC will need to consider the costs and benefits of additional regional roadway projects from the unconstrained list of projects vs. the enhancement of transit service for the region as additional funds become available in the future.

TABLE 5.4-1: COMPARISON SUMMARY OF ALTERNATIVES

ENVIRONMENTAL ISSUE	*NO PROJECT*	*FINANCIALLY CONSTRAINED*	*FINANCIALLY UNCONSTRAINED*	*TRANSIT ENHANCED*
Air Quality/ Greenhouse Gases	3 (Medium)	3 (Medium)	3 (Medium)	1 (Best)
	The Transit Enhanced Alternative would result in the lowest potential for adverse impacts on air quality and greenhouse gas emission. As regional roadway projects and transit service would increase under this alternative, the vehicle related air quality and greenhouse gas emissions per capita would decrease.			
Land Use/Population	4 (Worst)	3 (Medium)	2 (Better)	1 (Best)
	The Transit Enhanced Alternative would result in a transportation system that reduces congestion and VMT to meet objectives stated in local general plans.			
Transportation	4 (Worst)	3 (Medium)	1 (Best)	2 (Better)
	The Financially Unconstrained Alternative would result in the greatest potential to reduce impacts associated with regional roadway operational and safety conditions in comparison to the other alternatives. As additional regional roadway projects would increase under this alternative, the traffic volume and hours of delay per capita would decrease improving the overall congestion levels.			
Tribal Resources	3 (Medium)	2 (Better)	4 (Worst)	1 (Best)
	The Transit Enhanced Alternative would result in the greatest potential to reduce impacts associated with Tribal Resources in comparison to the other alternatives. As additional transit projects would increase consolidation of improvements under this alternative, and would be expected to occur in more developed areas, impacts associated with improvements would be less likely to impacts undiscovered resources within the Planning Area.			

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APPENDIX A - NOTICE OF PREPARATION

NOTICE OF PREPARATION

TO:	FROM:	EIR Consultant:
State Clearinghouse	Nevada County Transportation Commission	Steve McMurtry, Principal Planner
State Responsible Agencies	Mike Woodman, Transportation Planner	De Novo Planning Group
State Trustee Agencies	101 Providence Mine Road, Suite 102	1020 Suncast Lane, Suite 106
Other Public Agencies	Nevada City, CA 95959	El Dorado Hills, Ca 95762
Interested Organizations	(530) 265-3202	

SUBJECT: Notice of Preparation –2015 Nevada County Regional Transportation Plan Update

Nevada County Transportation Commission (NCTC) prepared a Program EIR in 1999 to address the environmental impacts associated with the Nevada County RTP. Amendments to the Program EIR were prepared in 2001, 2005 and 2010 to address changes that NCTC made to the Nevada County RTP. At the time of the amendments in 2001, 2005 and 2010, NCTC prepared Supplemental EIR's to address new information of substantial importance that was not known, or could not have been known at the time the previous EIR was certified. NCTC is in the process of updating the RTP and has determined that the update is subject to the California Environmental Quality Act (CEQA). The CEQA Guidelines require that a *Supplemental* EIR must be prepared for a "plan update", where the original plan is covered by an existing EIR, if there is a "new significant environmental effect" or "new information of substantial importance" that was not known or could not have been known at the time the previous EIR was certified. CEQA Guidelines also require that a Supplemental EIR be prepared if a plan update contains even "minor revisions" to existing policies, programs, or projects since the previous EIR was certified.

NCTC does not anticipate any new significant physical environmental effects resulting from implementation of proposed revisions to the 2010 RTP. However, state and federal planning requirements adopted since 2010, as well as the effect of continuing funding constraints require the RTP Update to consider new information of substantial importance that was not known or could not have been known previously. Furthermore, minor revisions to existing policies, programs, or projects adopted under the 2010 SEIR are also proposed. As such, NCTC anticipates that the RTP Update will warrant supplemental environmental analysis to be presented in a Supplemental EIR under the requirements of the CEQA Guidelines. A Supplemental EIR will be performed for the RTP Update, in order to reflect new information and minor revisions.

An Initial Study has been prepared for the project and is attached to this Notice of Preparation (NOP). The Initial Study lists those issues that will require detailed supplemental analysis that will need to be prepared as part of the Supplemental EIR. Those environmental issues that have been determined to be less than significant will have a discussion that is limited to a brief explanation of why those effects are not considered potentially significant or that there was no significant change since the 2010 RTP. In addition, the Supplemental EIR may also consider those environmental issues which are raised by responsible agencies, trustee agencies, and members of the public or related agencies during the NOP process.

We need to know the views of your agency or organization as to the scope and content of the environmental information germane to your agency's statutory responsibilities or of interest to your organization in connection with the proposed project. Specifically, we are requesting the following:

1. If you are a public agency, state if your agency will be a responsible or trustee agency for the project and list the permits or approvals from your agency that will be required for the project and its future actions;
2. Identify significant environmental effects and mitigation measures that you believe need to be explored in the Supplemental EIR with supporting discussion of why you believe these effects may be significant;
3. Describe special studies and other information that you believe are necessary for the NCTC to analyze the significant environmental effects, alternatives, and mitigation measures you have identified;
4. For public agencies that provide infrastructure and public services, identify any facilities that must be provided (both on- and off-site) to provide services to the proposed project;
5. Indicate whether a member(s) from your agency would like to attend a scoping workshop/meeting for public agencies to discuss the scope and content of the Supplemental EIR's environmental information;
6. Provide the name, title, and telephone number of the contact person from your agency or organization that we can contact regarding your comments;

Due to the time limits mandated by State law, your response must be sent and received by the NCTC by the following deadlines:

- For responsible agencies, not later than 30 days after you receive this notice,
- For all other agencies and organizations, not later than 30 days following the publication of this Notice of Preparation. The 30-day review period ends on March 27th 2017.

If we do not receive a response from your agency or organization, we will presume that your agency or organization has no response to make. A responsible agency, trustee agency, or other public agency may request a meeting with the NCTC or its representatives in accordance with Section 15082(c) of the CEQA Guidelines. One public scoping meeting will be held during the public review period at the NCTC Conference Room located at 101 Providence Mine Road, Suite 102 Nevada City, CA on March 24th 2017 at 1:00pm.

Please send your response to Mike Woodman Nevada County Transportation Commission, 101 Providence Mine Road, Suite 102 Nevada City, CA 95959, or email responses to mwoodman@nccn.net. If you have any questions, please contact Mike Woodman at NCTC (530) 265-3202.

Signature Date

1210.5

RECEIVED FEB 27 2017

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

Notice of Preparation

February 23, 2017

To: Reviewing Agencies

Re: 2015 Nevada County Regional Transportation Plan Update
SCH# 1999072038

Attached for your review and comment is the Notice of Preparation (NOP) for the 2015 Nevada County Regional Transportation Plan Update draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

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

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH# 1999072038
Project Title 2015 Nevada County Regional Transportation Plan Update
Lead Agency Nevada County Transportation Commission

Type NOP Notice of Preparation

Description The proposed project is the adoption and implementation of the 2015 Nevada County Regional Transportation Plan (RTP). The RTP has been prepared to fulfill the state requirements of AB 402 using specific guidance from the CA Transportation Commission Regional Transportation Plan Guidelines. More specifically, the RTP is a twenty year, comprehensive transportation plan for all modes of transportation. NCTC is required to adopt and submit an updated RTP to the CTC and Caltrans every five years. In addition, the RTP is used to documents NCTC's priorities for transportation funding in the region.

Lead Agency Contact

Name Mike Woodman
Agency Nevada County Transportation Commission
Phone (530) 265-3202 **Fax**
email
Address 101 Providence Mine Road, Suite 102
City Nevada City **State** CA **Zip** 95959

Project Location

County Nevada
City Nevada City
Region
Cross Streets Countywide
Lat / Long
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways I-80, SR 20, 49, 174
Airports Nevada County Truckee Tahoe
Railways UPRR, Amtrak
Waterways Yuba, Truckee, Bear River
Schools Countywide
Land Use County side plan includes all uses within Nevada county, Town of Truckee, cities of Grass valley and Nevada City

Project Issues Growth Inducing; Other Issues; Traffic/Circulation; Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Vegetation; Water Quality; Water Supply; Wetland/Riparian

Reviewing Agencies Resources Agency; Department of Parks and Recreation; Department of Water Resources; Caltrans, District 3 N; California Highway Patrol; Caltrans, Division of Transportation Planning; Native American Heritage Commission; State Lands Commission; Public Utilities Commission; Air Resources Board, Transportation Projects; Regional Water Quality Control Bd., Region 5 (Sacramento); Department of Fish and Wildlife, Region 2

Date Received 02/22/2017 **Start of Review** 02/23/2017 **End of Review** 03/24/2017

Note: Blanks in data fields result from insufficient information provided by lead agency.

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 1999072038

Project Title: 2015 Nevada County Regional Transportation Plan Update

Lead Agency: Nevada County Transportation Commission | Contact Person: Mike Woodman

Mailing Address: 101 Providence Mine Road, Suite 102 | Phone: (530) 265-3202

City: Nevada City | Zip: 95959 | County: Nevada

Project Location: County: Nevada (County-Wide) | City/Nearest Community: Truckee. Nevada City, Grass Valley

Cross Streets: | Zip Code:

Longitude/Latitude (degrees, minutes and seconds): ____° ____ ′ ____ ″ N / ____° ____ ′ ____ ″ W Total Acres:

Assessor's Parcel No.: | Section: | Twp.: | Range: | Base:

Within 2 Miles: State Hwy #: I-80, SR 20, 49, 174 | Waterways: Yuba, Truckee, and Bear River

Airports: NevadaCounty TruckeeTaho | Railways: UPRR, Amtrak | Schools: County-wide

Document Type:

CEQA: ☒ NOP ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) 1999072038 ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec Other:

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other:

Governor's Office of Planning & Research
FEB 22 2017
AFTER 12pm
STATE CLEARINGHOUSE

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other: RTP

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☐ Educational:
☐ Recreational:
☐ Water Facilities: Type ____ MGD ____
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type ____ MW ____
☐ Waste Treatment: Type ____ MGD ____
☐ Hazardous Waste: Type
☒ Other: Regional Transportation Improvements Program

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☒ Agricultural Land ☒ Air Quality ☒ Archeological/Historical ☒ Biological Resources ☐ Coastal Zone ☒ Drainage/Absorption ☐ Economic/Jobs
☐ Fiscal ☒ Flood Plain/Flooding ☒ Forest Land/Fire Hazard ☒ Geologic/Seismic ☒ Minerals ☒ Noise ☒ Population/Housing Balance ☒ Public Services/Facilities
☒ Recreation/Parks ☒ Schools/Universities ☒ Septic Systems ☒ Sewer Capacity ☒ Soil Erosion/Compaction/Grading ☒ Solid Waste ☒ Toxic/Hazardous ☒ Traffic/Circulation
☒ Vegetation ☒ Water Quality ☒ Water Supply/Groundwater ☒ Wetland/Riparian ☒ Growth Inducement ☒ Land Use ☒ Cumulative Effects ☒ Other: GHG

Present Land Use/Zoning/General Plan Designation:

County-wide Plan includes all uses within Nevada County, Town of Truckee, and cities of Grass Valley and Nevada City

Project Description: *(please use a separate page if necessary)*

The proposed project is the adoption and implementation of the 2015 Nevada County Regional Transportation Plan (RTP). The RTP has been prepared to fulfill the state requirements of AB 402 (Government Code Title 7, Chapter 2.5, Sections 65080-65082) using specific guidance from the California Transportation Commission Regional Transportation Plan Guidelines. More specifically, the RTP is a twenty year, comprehensive transportation plan for all modes of transportation. NCTC is required to adopt and submit an updated RTP to the California Transportation Commission (CTC) and the Department of Transportation (Caltrans) every five years. In addition, the RTP is used to documents NCTC's priorities for transportation funding in the region.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

NOP Distribution List

County: Nevada

SCH# 1999072038

Resources Agency

- [■] **Resources Agency**
  Nadell Gayou
- [ ] **Dept. of Boating & Waterways**
  Denise Peterson
- [ ] **California Coastal Commission**
  Elizabeth A. Fuchs
- [ ] **Colorado River Board**
  Lisa Johansen
- [ ] **Dept. of Conservation**
  Crina Chan
- [ ] **California Energy Commission**
  Eric Knight
- [ ] **Cal Fire**
  Dan Foster
- [ ] **Central Valley Flood Protection Board**
  James Herota
- [ ] **Office of Historic Preservation**
  Ron Parsons
- [■] **Dept of Parks & Recreation**
  Environmental Stewardship Section
- [ ] **California Department of Resources, Recycling & Recovery**
  Sue O'Leary
- [ ] **S.F. Bay Conservation & Dev't. Comm.**
  Steve Goldbeck
- [■] **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou

Fish and Game

- [ ] **Depart. of Fish & Wildlife**
  Scott Flint
  Environmental Services Division
- [ ] **Fish & Wildlife Region 1**
  Curt Babcock
- [ ] **Fish & Wildlife Region 1E**
  Laurie Harnsberger
- [■] **Fish & Wildlife Region 2**
  Jeff Drongesen
- [ ] **Fish & Wildlife Region 3**
  Craig Weightman
- [ ] **Fish & Wildlife Region 4**
  Julie Vance
- [ ] **Fish & Wildlife Region 5**
  Leslie Newton-Reed
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6**
  Tiffany Ellis
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6 I/M**
  Heidi Calvert
  Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Wildlife M**
  William Paznokas
  Marine Region

Other Departments

- [ ] **Food & Agriculture**
  Sandra Schubert
  Dept. of Food and Agriculture
- [ ] **Dept. of General Services**
  Cathy Buck
  Environmental Services Section
- [ ] **Delta Stewardship Council**
  Kevan Samsam
- [ ] **Housing & Comm. Dev.**
  CEQA Coordinator
  Housing Policy Division

Independent Commissions,Boards

- [ ] **Delta Protection Commission**
  Erik Vink
- [ ] **OES (Office of Emergency Services)**
  Monique Wilber
- [■] **Native American Heritage Comm.**
  Debbie Treadway
- [■] **Public Utilities Commission**
  Supervisor
- [ ] **Santa Monica Bay Restoration**
  Guangyu Wang
- [■] **State Lands Commission**
  Jennifer Deleong
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Cal State Transportation Agency CalSTA

- [ ] **Caltrans - Division of Aeronautics**
  Philip Crimmins
- [■] **Caltrans – Planning**
  HQ LD-IGR
  Christian Bushong
- [■] **California Highway Patrol**
  Suzann Ikeuchi
  Office of Special Projects

Dept. of Transportation

- [ ] **Caltrans, District 1**
  Rex Jackman
- [ ] **Caltrans, District 2**
  Marcelino Gonzalez
- [■] **Caltrans, District 3**
  Eric Federicks – South
  Susan Zanchi - North
- [ ] **Caltrans, District 4**
  Patricia Maurice
- [ ] **Caltrans, District 5**
  Larry Newland
- [ ] **Caltrans, District 6**
  Michael Navarro
- [ ] **Caltrans, District 7**
  Dianna Watson
- [ ] **Caltrans, District 8**
  Mark Roberts
- [ ] **Caltrans, District 9**
  Gayle Rosander
- [ ] **Caltrans, District 10**
  Tom Dumas
- [ ] **Caltrans, District 11**
  Jacob Armstrong
- [ ] **Caltrans, District 12**
  Maureen El Harake

Cal EPA

Air Resources Board

- [ ] Airport & Freight
  Jack Wursten
- [■] Transportation Projects
  Nesamani Kalandiyur
- [ ] Industrial/Energy Projects
  Mike Tollstrup
- [ ] **State Water Resources Control Board**
  Regional Programs Unit
  Division of Financial Assistance
- [ ] **State Water Resources Control Board**
  Cindy Forbes – Asst Deputy
  Division of Drinking Water
- [ ] **State Water Resources Control Board**
  Div. Drinking Water #_____
- [ ] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resouces Control Board**
  Phil Crader
  Division of Water Rights
- [ ] **Dept. of Toxic Substances Control**
  CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- [ ] **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] **RWQCB 3**
  Central Coast Region (3)
- [ ] **RWQCB 4**
  Teresa Rodgers
  Los Angeles Region (4)
- [■] **RWQCB 5S**
  Central Valley Region (5)
- [ ] **RWQCB 5F**
  Central Valley Region (5)
  Fresno Branch Office
- [ ] **RWQCB 5R**
  Central Valley Region (5)
  Redding Branch Office
- [ ] **RWQCB 6**
  Lahontan Region (6)
- [ ] **RWQCB 6V**
  Lahontan Region (6)
  Victorville Branch Office
- [ ] **RWQCB 7**
  Colorado River Basin Region (7)
- [ ] **RWQCB 8**
  Santa Ana Region (8)
- [ ] **RWQCB 9**
  San Diego Region (9)

- [ ] **Other** _____

_____

_____

- [ ] _____
  Conservancy

Last Updated 2/3/17

1210.5

MIWOK MAIDU United Auburn Indian Community of the Auburn Rancheria

Gene Whitehouse, Chairman
John L. Williams, Vice Chairman
Calvin Moman, Secretary
Jason Camp, Treasurer
Gabe Cayton, Council Member

RECEIVED MAR 2 9 2017

March 14, 2017

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

Subject: Notification of the Nevada County Regional Transportation Plan Update

Dear Mike Woodman,

Thank you for requesting information regarding the above referenced project. The United Auburn Indian Community (UAIC) of the Auburn Rancheria is comprised of Miwok and Southern Maidu (Nisenan) people whose tribal lands are within Placer County and whose service area includes El Dorado, Nevada, Placer, Sacramento, Sutter, and Yuba counties. The UAIC is concerned about development within its aboriginal territory that has potential to impact the lifeways, cultural sites, and landscapes that may be of sacred or ceremonial significance. We appreciate the opportunity to comment on this and other projects. The UAIC would like to consult on this project.

In order to ascertain whether the project could affect cultural resources that may be of importance to the UAIC, we would like to receive copies of any archaeological reports that are completed for the project. We also request copies of environmental documents for the proposed project so that we have the opportunity to comment on appropriate identification, assessment and mitigation related to cultural resources. We recommend UAIC tribal representatives observe and participate in all cultural resource surveys. If you are interested, the UAIC's preservation department offers a mapping, records and literature search services program that has been shown to assist project proponents in complying with the necessary resource laws and choosing the appropriate mitigation measures or form of environmental documentation during the planning process.

The UAIC's preservation committee would like to set up a meeting or site visit, and begin consulting on the proposed project. Based on the preservation committee's identification of cultural resources in and around your project area, UAIC recommends that a tribal monitor be present during any ground disturbing activities. Thank you again for taking these matters into consideration, and for involving the UAIC early in the planning process. We look forward to reviewing the documents requested above and consulting on your project. Please contact Marcos Guerrero, Cultural Resources Manager, at (530) 883-2364 or by email at mguerrero@auburnrancheria.com if you have any questions.

Sincerely,

Gene Whitehouse,
Chairman

CC: Marcos Guerrero, CRM

RECEIVED MAR 2 4 2017

1210.5

STATE OF CALIFORNIA
NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone (916) 373-3710
Fax (916) 373-5471
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

Edmund G. Brown Jr., Governor

March 21, 2017

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

Re: SCH# 1999072038 2015 Nevada County Regional Transportation Plan Update, Nevada County, California

Dear Mr. Woodman:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Preparation (NOP) prepared for the project referenced above.

The California Environmental Quality Act (CEQA)[1], specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.[2] If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared.[3] In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended in 2014 by Assembly Bill 52. (AB 52).[4] **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** AB 52 created a separate category for "tribal cultural resources"[5], that now includes "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.[6] Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.[7] Your project may also be subject to **Senate Bill 18 (SB 18)** (Burton, Chapter 905, Statutes of 2004), Government Code 65352.3, if it also involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space. **Both SB 18 and AB 52 have tribal consultation requirements.** Additionally, if your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966[8] may also apply.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

Agencies should be aware that AB 52 does not preclude agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52. For that reason, we urge you to continue to request Native American Tribal Consultation Lists and Sacred Lands File searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/. Additional information regarding AB 52 can be found online at http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf, entitled "Tribal Consultation Under AB 52: Requirements and Best Practices".

The NAHC recommends lead agencies consult with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

A brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments is also attached.

Please contact me at Email address, katy.sanchez@nahc.ca.gov or call phone number, (916) 373-3712 if you have any questions.

Sincerely,

Katy Sanchez

Katy Sanchez
Associate Environmental Planner

Attachment

[1] Pub. Resources Code § 21000 et seq.
[2] Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b); CEQA Guidelines Section 15064.5 (b)
[3] Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1); CEQA Guidelines § 15064 (a)(1)
[4] Government Code 65352.3
[5] Pub. Resources Code § 21074
[6] Pub. Resources Code § 21084.2
[7] Pub. Resources Code § 21084.3 (a)
[8] 154 U.S.C. 300101, 36 C.F.R. § 800 et seq.

Pertinent Statutory Information:

Under AB 52:
AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:
Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice.
A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.[9] and **prior to the release of a negative declaration, mitigated negative declaration or environmental impact report**. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18).[10]
The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

a. Alternatives to the project.
b. Recommended mitigation measures.
c. Significant effects.[11]

1. The following topics are discretionary topics of consultation:
   a. Type of environmental review necessary.
   b. Significance of the tribal cultural resources.
   c. Significance of the project's impacts on tribal cultural resources.

If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency.[12]
With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process **shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10.** Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.[13]
If a project may have a significant impact on a tribal cultural resource, **the lead agency's environmental document shall discuss** both of the following:

a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.[14]

Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.[15]

Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 **shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program**, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable.[16]
If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, **the lead agency shall consider feasible mitigation** pursuant to Public Resources Code section 21084.3 (b).[17]
An environmental impact report **may not be certified**, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days.[18]

This process should be documented in the Tribal Cultural Resources section of your environmental document.

Under SB 18:
Government Code § 65352.3 (a) (1) requires consultation with Native Americans on general plan proposals for the purposes of "preserving or mitigating impacts to places, features, and objects described § 5097.9 and § 5091.993 of the Public Resources Code that are located within the city or county's jurisdiction. Government Code § 65560 (a), (b), and (c) provides for consultation with Native American tribes on the open-space element of a county or city general plan for the purposes of protecting places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code.

[9] Pub. Resources Code § 21080.3.1, subds. (d) and (e)
[10] Pub. Resources Code § 21080.3.1 (b)
[11] Pub. Resources Code § 21080.3.2 (a)
[12] Pub. Resources Code § 21080.3.2 (a)
[13] Pub. Resources Code § 21082.3 (c)(1)
[14] Pub. Resources Code § 21082.3 (b)
[15] Pub. Resources Code § 21080.3.2 (b)
[16] Pub. Resources Code § 21082.3 (a)
[17] Pub. Resources Code § 21082.3 (e)
[18] Pub. Resources Code § 21082.3 (d)

- SB 18 applies to **local governments** and requires them to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf
- Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.**[19]
- There is no Statutory Time Limit on Tribal Consultation under the law.
- Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research,[20] the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction.[21]
- Conclusion Tribal Consultation: Consultation should be concluded at the point in which:
    - The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    - Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation.[22]

NAHC Recommendations for Cultural Resources Assessments:

- Contact the NAHC for:
    - A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    - A Native American Tribal Contact List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
        - The request form can be found at http://nahc.ca.gov/resources/forms/.
- Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    - If part or the entire APE has been previously surveyed for cultural resources.
    - If any known cultural resources have been already been recorded on or adjacent to the APE.
    - If the probability is low, moderate, or high that cultural resources are located in the APE.
    - If a survey is required to determine whether previously unrecorded cultural resources are present.
- If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    - The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

Examples of Mitigation Measures That May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

- Avoidance and preservation of the resources in place, including, but not limited to:
    - Planning and construction to avoid the resources and protect the cultural and natural context.
    - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - Protecting the cultural character and integrity of the resource.
    - Protecting the traditional use of the resource.
    - Protecting the confidentiality of the resource.
- Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed.[23]
- Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated.[24]

The lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

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[19] (Gov. Code § 65352.3 (a)(2)).
[20] pursuant to Gov. Code section 65040.2,
[21] (Gov. Code § 65352.3 (b)).
[22] (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).
[23] (Civ. Code § 815.3 (c)).
[24] (Pub. Resources Code § 5097.991).

- Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources.[25] In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

[25] per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)).

APPENDIX B - AIR QUALITY AND GHG MODEL

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: Sub-Area
Region: Nevada (MC)
Calendar Year: 2012
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Trips	ROG_TOTAL	CO_TOTEX	NOx_TOTEX	CO2_TOTEX	PM10_TOTAL	PM2_5_TOTAL	SOx_TOTEX	Fuel_Consumption	Gasoline Fuel_Consumption	Diesel Fuel_Consumption
Nevada (M	2012	All Other B	Aggregate	Aggregate	DSL	35.98404	1997.867459	0	0.001455712	0.003549623	0.019625807	2.716225899	0.00099106	0.000777902	2.59141E-05	0.244460331		0.244460331
Nevada (M	2012	LDA	Aggregate	Aggregate	GAS	31776.45	975257.7629	196441.5617	0.486423062	3.976372251	0.37605863	362.9374312	0.05220155	0.022868017	0.003692938	39.39055481	39.39055481	
Nevada (M	2012	LDA	Aggregate	Aggregate	DSL	459.8316	14219.76709	2678.176534	0.001418642	0.010830648	0.013140053	4.999988061	0.001685159	0.00121939	4.7733E-05	0.449998926		0.449998926
Nevada (M	2012	LDA	Aggregate	Aggregate	ELEC	45.18684	1676.598108	288.973531	2.49967E-06	0	0	0	8.2704E-05	3.28044E-05	0	0		
Nevada (M	2012	LDT1	Aggregate	Aggregate	GAS	5512.239	171902.7562	32606.24512	0.187994466	1.422001929	0.11865596	74.41171377	0.009737361	0.004535932	0.000767984	8.191670416	8.191670416	
Nevada (M	2012	LDT1	Aggregate	Aggregate	DSL	27.62709	568.7047529	143.5892141	0.000116813	0.000731475	0.000819738	0.238623477	0.000120593	9.96639E-05	2.27805E-06	0.021476113		0.021476113
Nevada (M	2012	LDT1	Aggregate	Aggregate	ELEC	1.218998	53.43675939	7.836790048	6.76549E-08	0	0	0	2.63595E-06	1.04555E-06	0	0		
Nevada (M	2012	LDT2	Aggregate	Aggregate	GAS	22431.37	757764.4881	138492.3199	0.488266151	4.034449172	0.573434488	384.2389055	0.040609657	0.017804372	0.003905911	41.6622178	41.6622178	
Nevada (M	2012	LDT2	Aggregate	Aggregate	DSL	13.47632	472.0879881	79.59842475	4.5613E-05	0.000383188	0.000557256	0.226914478	5.33148E-05	3.79654E-05	2.16627E-06	0.020422303		0.020422303
Nevada (M	2012	LHD1	Aggregate	Aggregate	GAS	2548.078	78072.6104	37962.57012	0.139041281	0.84623288	0.168227127	76.28224336	0.007849499	0.003528004	0.000776809	8.285801747	8.285801747	
Nevada (M	2012	LHD1	Aggregate	Aggregate	DSL	3855.586	132013.6083	48498.41694	0.036300733	0.167775909	0.906048143	86.95049076	0.020776448	0.012768411	0.000830083	7.825544169		7.825544169
Nevada (M	2012	LHD2	Aggregate	Aggregate	GAS	205.0542	7061.974144	3055.00209	0.008268764	0.052315404	0.011621088	7.730469993	0.000792234	0.000346081	7.81179E-05	0.833241454	0.833241454	
Nevada (M	2012	LHD2	Aggregate	Aggregate	DSL	746.058	28636.71743	9384.471476	0.006693912	0.030881793	0.156865009	21.19099233	0.004539135	0.002588209	0.000202302	1.907189309		1.907189309
Nevada (M	2012	MCY	Aggregate	Aggregate	GAS	4086.994	25219.80367	8173.169884	0.169354603	0.935542532	0.039349301	4.757401997	0.00057717	0.000300186	6.57994E-05	0.701846046	0.701846046	
Nevada (M	2012	MDV	Aggregate	Aggregate	GAS	15057.56	484290.7805	93619.72709	0.310138688	3.240778237	0.450612037	310.7093655	0.025909845	0.011342993	0.003158328	33.68816213	33.68816213	
Nevada (M	2012	MDV	Aggregate	Aggregate	DSL	99.86936	4185.875689	606.6023779	0.000202372	0.001768061	0.001516606	2.476310024	0.000348339	0.000217621	2.36404E-05	0.222867902		0.222867902
Nevada (M	2012	MH	Aggregate	Aggregate	GAS	1009.424	7816.177864	100.9827954	0.005152866	0.128495463	0.012961655	11.32195999	0.001272175	0.000549773	0.000115197	1.228744882	1.228744882	
Nevada (M	2012	MH	Aggregate	Aggregate	DSL	278.295	2490.765989	27.8294989	0.000451568	0.001753122	0.020452972	2.948551754	0.000952524	0.00069126	2.81487E-05	0.265369658		0.265369658
Nevada (M	2012	Motor Coa	Aggregate	Aggregate	DSL	5.528862	708.8516792	0	0.000727581	0.002220749	0.010566307	1.481855515	0.00037813	0.000301354	1.41376E-05	0.133366996		0.133366996
Nevada (M	2012	OBUS	Aggregate	Aggregate	GAS	45.80328	2256.815231	916.432069	0.002278903	0.030214544	0.005034873	3.378340711	0.000361016	0.000152892	3.42573E-05	0.365403498	0.365403498	
Nevada (M	2012	PTO	Aggregate	Aggregate	DSL	0	1326.448027	0	0.003403763	0.01353744	0.028454892	3.35687161	0.001716944	0.00164267	3.20261E-05	0.302118445		0.302118445
Nevada (M	2012	SBUS	Aggregate	Aggregate	GAS	8.770343	369.0340495	35.08137202	0.00223437	0.039351515	0.001728917	0.30803418	0.000316489	0.000140339	3.75886E-06	0.040093669	0.040093669	
Nevada (M	2012	SBUS	Aggregate	Aggregate	DSL	39.67976	1391.006402	0	0.001358554	0.003788343	0.019803236	2.165271239	0.001808292	0.001113883	2.06577E-05	0.194874411		0.194874411
Nevada (M	2012	T6 Ag	Aggregate	Aggregate	DSL	50.56749	925.9236433	0	0.001472885	0.003557587	0.013653169	1.282182423	0.000875495	0.000758702	1.22326E-05	0.115396418		0.115396418
Nevada (M	2012	T6 CAIRP h	Aggregate	Aggregate	DSL	3.239799	174.3843623	0	0.000120469	0.000300137	0.001591571	0.235287249	8.75287E-05	6.88788E-05	2.24475E-06	0.021175852		0.021175852
Nevada (M	2012	T6 CAIRP sı	Aggregate	Aggregate	DSL	8.657874	535.3169529	0	0.000310414	0.000794744	0.00437921	0.724076772	0.000251771	0.000195253	6.90803E-06	0.06516691		0.06516691
Nevada (M	2012	T6 instate (	Aggregate	Aggregate	DSL	3.963088	195.1825144	0	0.000181913	0.000444224	0.002153433	0.263778002	0.00011648	9.48049E-05	2.51657E-06	0.02374002		0.02374002
Nevada (M	2012	T6 instate (	Aggregate	Aggregate	DSL	5.400395	319.2984656	0	0.000198622	0.000501301	0.002725247	0.433148738	0.000150466	0.000116742	4.13244E-06	0.038983386		0.038983386
Nevada (M	2012	T6 instate l	Aggregate	Aggregate	DSL	153.0517	6485.508418	0	0.007444793	0.017807177	0.077056796	8.813921224	0.004601316	0.003849484	8.40889E-05	0.79325291		0.79325291
Nevada (M	2012	T6 instate s	Aggregate	Aggregate	DSL	275.5711	14608.49292	0	0.01212395	0.029827019	0.147738367	19.79359778	0.00826261	0.006660042	0.00018884	1.781423801		1.781423801
Nevada (M	2012	T6 OOS he	Aggregate	Aggregate	DSL	1.856283	99.91568594	0	6.34503E-05	0.000158365	0.000869313	0.135130151	4.75143E-05	3.69427E-05	1.2892E-06	0.012161714		0.012161714
Nevada (M	2012	T6 OOS sm	Aggregate	Aggregate	DSL	4.960636	306.7164959	0	0.000177856	0.000455358	0.002509123	0.414868779	0.000144255	0.000111872	3.95804E-06	0.03733819		0.03733819
Nevada (M	2012	T6 Public	Aggregate	Aggregate	DSL	119.267	1802.986875	0	0.00141534	0.003576477	0.020631082	2.546480136	0.001091674	0.000890774	2.42946E-05	0.229183212		0.229183212
Nevada (M	2012	T6 utility	Aggregate	Aggregate	DSL	6.848431	130.3159144	0	2.81632E-05	8.07262E-05	0.000830649	0.18273022	3.67728E-05	2.40748E-05	1.74333E-06	0.01644572		0.01644572
Nevada (M	2012	T6TS	Aggregate	Aggregate	GAS	121.7553	3513.367833	2436.079346	0.019622126	0.192523528	0.018525671	5.674322408	0.000615398	0.000288358	6.00952E-05	0.641002797	0.641002797	
Nevada (M	2012	T7 Ag	Aggregate	Aggregate	DSL	68.02074	1130.913964	0	0.002589945	0.009817346	0.026027784	2.365216618	0.001469338	0.001333407	2.25653E-05	0.212869496		0.212869496
Nevada (M	2012	T7 CAIRP	Aggregate	Aggregate	DSL	223.3716	43806.05775	0	0.045717794	0.147025916	0.604716226	88.44379762	0.024074575	0.020229919	0.000843795	7.959941785		7.959941785
Nevada (M	2012	T7 CAIRP c	Aggregate	Aggregate	DSL	0.651717	138.4609885	0	0.000149124	0.000490924	0.001828335	0.278768691	8.66322E-05	7.40243E-05	2.65958E-06	0.025089182		0.025089182
Nevada (M	2012	T7 NNOOS	Aggregate	Aggregate	DSL	245.2382	54319.56611	0	0.041350806	0.13440875	0.570092511	110.0688277	0.024089026	0.019570973	0.001050108	9.906194493		9.906194493
Nevada (M	2012	T7 NOOS	Aggregate	Aggregate	DSL	88.23173	17303.37989	0	0.017920228	0.057066252	0.239060463	35.43664361	0.009351074	0.007839287	0.000338082	3.189297925		3.189297925
Nevada (M	2012	T7 POAK	Aggregate	Aggregate	DSL	21.2938	2441.439362	0	0.00117607	0.004107095	0.050263838	4.920816742	0.000835986	0.000643591	4.69469E-05	0.442873507		0.442873507
Nevada (M	2012	T7 Public	Aggregate	Aggregate	DSL	120.2363	2752.239239	0	0.004445641	0.016469358	0.061546915	6.508092177	0.002409363	0.002129016	6.20902E-05	0.585728296		0.585728296
Nevada (M	2012	T7 Single	Aggregate	Aggregate	DSL	115.0193	6680.2574	0	0.00966427	0.037530799	0.126716595	13.43131692	0.006492436	0.005784099	0.000128141	1.208818523		1.208818523
Nevada (M	2012	T7 single c	Aggregate	Aggregate	DSL	5.156897	358.1803594	0	0.000297916	0.001042994	0.005417374	0.70444101	0.000184102	0.000153217	6.7207E-06	0.063399691		0.063399691
Nevada (M	2012	T7 SWCV	Aggregate	Aggregate	DSL	25.49007	1171.748752	0	8.29182E-05	0.001955643	0.022404161	6.311212881	0.00015016	6.86825E-05	5.61889E-05	0.568009159		0.568009159
Nevada (M	2012	T7 tractor	Aggregate	Aggregate	DSL	121.071	14763.13116	0	0.020261021	0.072936636	0.251736389	29.04029957	0.01086019	0.009445673	0.000277058	2.613626961		2.613626961
Nevada (M	2012	T7 tractor (	Aggregate	Aggregate	DSL	3.783148	267.049931	0	0.000345638	0.001209724	0.004303598	0.525174978	0.000189896	0.000164592	5.01041E-06	0.047265748		0.047265748
Nevada (M	2012	T7 utility	Aggregate	Aggregate	DSL	5.070733	109.9319059	0	6.66023E-05	0.000270871	0.00171774	0.260430163	3.57459E-05	2.71649E-05	2.48463E-06	0.023438715		0.023438715
Nevada (M	2012	T7IS	Aggregate	Aggregate	GAS	10.55618	568.227008	211.2080449	0.003746454	0.085588374	0.00647773	1.243966816	5.85515E-05	2.66499E-05	1.38698E-05	0.147941684	0.147941684	
Nevada (M	2012	UBUS	Aggregate	Aggregate	GAS	8.742051	1089.692303	34.96820215	0.001212229	0.018969771	0.004882255	2.104235203	0.000176303	7.56048E-05	2.13477E-05	0.227703993	0.227703993	
Nevada (M	2012	UBUS	Aggregate	Aggregate	DSL	7.574973	960.9247317	30.29989068	0.000890581	0.007630361	0.017764691	2.464639474	0.001239025	0.00070548	2.04467E-05	0.221817553		0.221817553
							Sum	**Sum (trips/day)**	**Sum**	**Sum**	**Sum**	**Sum**	**Sum**	**Sum**	**Sum**	**Sum**	**Sum**	**Sum**
							2,876,713	**575,831**	**2.044**	**15.790**	**5.223**	**1,709.435**	**0.271**	**0.164**	**0.017**	**177.1947127**	**135.4043849**	**41.79032773**
Note: See VMT estimates for Actual VMT (F&P & LSC).							**Actual**	**Actual (trips/day)**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**
Emissions pro-rated based on VMT.							**2,368,928**	**474,188**	**1.68353833**	**13.00242534**	**4.30118628**	**1,407.693411**	**0.22321860**	**0.13540396**	**0.01409645**	**145.9170873**	**111.503403**	**34.41368429**

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: Sub-Area
Region: Nevada (MC)
Calendar Year: 2035
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Trips	ROG_TOTAL	CO_TOTEX	NOx_TOTEX	CO2_TOTEX	PM2_5_TOTAL	SOx_TOTEX	Fuel_Consumption	Gasoline Fuel_Consumption	Diesel Fuel_Consumption
Nevada (M	2035	All Other B	Aggregatec	Aggregatec	DSL	67.26557	3747.545698	0	0.000194306	0.001025356	0.007226496	4.877527009	0.000256182	4.65339E-05	0.438977431		0.438977431
Nevada (M	2035	LDA	Aggregatec	Aggregatec	GAS	43578.88	1520699.057	273260.958	0.095467376	0.791419546	0.059813158	333.474344	0.031702224	0.003341702	35.64410713	35.64410713	
Nevada (M	2035	LDA	Aggregatec	Aggregatec	DSL	593.4262	20954.92148	3737.57947	0.00012062	0.003429297	0.000379474	4.322984537	0.000438645	4.12699E-05	0.389068608		0.389068608
Nevada (M	2035	LDA	Aggregatec	Aggregatec	ELEC	6564.343	251482.04	41977.6947	0.00036312	0	0	0	0.004920504	0	0		
Nevada (M	2035	LDT1	Aggregatec	Aggregatec	GAS	3256.512	114815.328	19726.182	0.015396344	0.079195506	0.006488977	28.46491945	0.002397625	0.000285453	3.044773712	3.044773712	
Nevada (M	2035	LDT1	Aggregatec	Aggregatec	DSL	2.479661	74.54977072	14.4359933	1.58331E-06	1.77347E-05	1.29827E-05	0.018925111	2.06237E-06	1.80671E-07	0.00170326		0.00170326
Nevada (M	2035	LDT1	Aggregatec	Aggregatec	ELEC	1.394054	51.03896372	8.59789418	7.54093E-08	0	0	0	9.9863E-07	0	0		
Nevada (M	2035	LDT2	Aggregatec	Aggregatec	GAS	25544.23	871640.8173	155297.449	0.125039649	0.730057385	0.066587446	254.1173848	0.01827124	0.002548727	27.18588212	27.18588212	
Nevada (M	2035	LDT2	Aggregatec	Aggregatec	DSL	50.41536	1841.730811	314.490891	2.95573E-05	0.000313615	8.64596E-05	0.488001309	4.47351E-05	4.65876E-06	0.043920118		0.043920118
Nevada (M	2035	LHD1	Aggregatec	Aggregatec	GAS	913.1111	21830.5509	13603.9951	0.030265836	0.078598752	0.034829716	20.6903199	0.000903831	0.00020801	2.218729147	2.218729147	
Nevada (M	2035	LHD1	Aggregatec	Aggregatec	DSL	998.1728	25979.35539	12555.7587	0.005607178	0.027606877	0.075348081	15.87730485	0.001828587	0.000151575	1.428957437		1.428957437
Nevada (M	2035	LHD2	Aggregatec	Aggregatec	GAS	89.00345	3339.273075	1326.01878	0.000725903	0.004965773	0.001303144	3.356787237	0.000156804	3.35924E-05	0.358311425	0.358311425	
Nevada (M	2035	LHD2	Aggregatec	Aggregatec	DSL	243.5695	8747.162732	3063.79819	0.00128719	0.006098968	0.004671581	5.704685113	0.000526293	5.44605E-05	0.51342166		0.51342166
Nevada (M	2035	MCY	Aggregatec	Aggregatec	GAS	3663.483	15893.65752	7326.23231	0.08994321	0.439058279	0.023734388	3.29025583	0.000160315	4.18138E-05	0.446004919	0.446004919	
Nevada (M	2035	MDV	Aggregatec	Aggregatec	GAS	15903.62	443708.3237	91158.252	0.142722521	0.716835018	0.090637786	184.5653293	0.009419555	0.001854616	19.78217149	19.78217149	
Nevada (M	2035	MDV	Aggregatec	Aggregatec	DSL	357.4097	11422.20468	2196.93866	9.3434E-05	0.00242036	0.000295568	4.147552247	0.000249913	3.95951E-05	0.373279702		0.373279702
Nevada (M	2035	MH	Aggregatec	Aggregatec	GAS	186.6941	1481.741138	18.6768792	0.000100269	0.001282157	0.000511744	2.036805762	9.82703E-05	2.03535E-05	0.217099797	0.217099797	
Nevada (M	2035	MH	Aggregatec	Aggregatec	DSL	65.90288	499.1523743	6.59028792	6.97333E-05	0.000246597	0.002393778	0.570452862	8.73416E-05	5.4459E-06	0.051340758		0.051340758
Nevada (M	2035	Motor Coa	Aggregatec	Aggregatec	DSL	9.235417	1232.591307	0	0.000115409	0.000662183	0.002947283	2.290627975	8.61643E-05	2.18537E-05	0.206156518		0.206156518
Nevada (M	2035	OBUS	Aggregatec	Aggregatec	GAS	43.22379	2008.377539	864.821555	0.000658343	0.005739369	0.001052045	2.779743613	0.000134087	2.78494E-05	0.297053802	0.297053802	
Nevada (M	2035	PTO	Aggregatec	Aggregatec	DSL	0	3522.266513	0	0.00085126	0.004893657	0.018723017	7.271383329	3.12909E-05	6.93724E-05	0.6544245		0.6544245
Nevada (M	2035	SBUS	Aggregatec	Aggregatec	GAS	12.30232	520.8650793	49.209294	0.000184961	0.001883462	0.000114953	0.401554279	0.000185356	4.04416E-06	0.043136828	0.043136828	
Nevada (M	2035	SBUS	Aggregatec	Aggregatec	DSL	43.25759	1594.955093	0	0.000129971	0.000606263	0.004893499	2.364626892	0.000577065	2.25596E-05	0.21281642		0.21281642
Nevada (M	2035	T6 Ag	Aggregatec	Aggregatec	DSL	76.95468	925.9743165	0	5.6146E-05	0.0002985	0.003975083	1.272249056	6.38881E-05	1.21379E-05	0.114502415		0.114502415
Nevada (M	2035	T6 CAIRP h	Aggregatec	Aggregatec	DSL	6.225369	303.2293713	0	1.41601E-05	7.4622E-05	0.00057532	0.381847696	2.06081E-05	3.64301E-06	0.034366293		0.034366293
Nevada (M	2035	T6 CAIRP sı	Aggregatec	Aggregatec	DSL	16.10894	930.8393307	0	4.10675E-05	0.000216628	0.001568161	1.197806283	6.30131E-05	1.14276E-05	0.107802566		0.107802566
Nevada (M	2035	T6 instate (	Aggregatec	Aggregatec	DSL	51.83458	4085.913439	0	0.000216638	0.001141638	0.007438276	5.296186777	0.0002798	5.05281E-05	0.47665681		0.47665681
Nevada (M	2035	T6 instate (	Aggregatec	Aggregatec	DSL	139.21	6684.133032	0	0.000324951	0.001714796	0.012604583	8.657109526	0.000455116	8.25929E-05	0.779139857		0.779139857
Nevada (M	2035	T6 instate I	Aggregatec	Aggregatec	DSL	291.0365	10097.8978	0	0.000614239	0.003207787	0.026971754	13.07149027	0.000700678	0.000124708	1.176434125		1.176434125
Nevada (M	2035	T6 instate s	Aggregatec	Aggregatec	DSL	603.9525	23743.47796	0	0.001349606	0.006913798	0.056690908	31.2050074	0.001653774	0.00029771	2.808450666		2.808450666
Nevada (M	2035	T6 OOS hea	Aggregatec	Aggregatec	DSL	3.572738	173.7390339	0	8.118E-06	4.27812E-05	0.000330055	0.218795448	1.18081E-05	2.08741E-06	0.01969159		0.01969159
Nevada (M	2035	T6 OOS sm	Aggregatec	Aggregatec	DSL	9.22982	533.3359541	0	2.35301E-05	0.00012412	0.000898497	0.686297985	3.61042E-05	6.5476E-06	0.061766819		0.061766819
Nevada (M	2035	T6 Public	Aggregatec	Aggregatec	DSL	53.88739	855.963017	0	4.6602E-05	0.000201451	0.003072002	1.146420976	6.21565E-05	1.09374E-05	0.103177888		0.103177888
Nevada (M	2035	T6 utility	Aggregatec	Aggregatec	DSL	8.655601	163.0817699	0	6.05432E-06	3.22015E-05	0.000397494	0.214020699	1.09273E-05	2.04186E-06	0.019261863		0.019261863
Nevada (M	2035	T6TS	Aggregatec	Aggregatec	GAS	143.76	5780.20571	2876.34916	0.003061971	0.025540893	0.00393722	8.197147407	0.00038701	8.2278E-05	0.87761471	0.87761471	
Nevada (M	2035	T7 Ag	Aggregatec	Aggregatec	DSL	118.2331	1131.1	0	0.000167826	0.000874826	0.010165415	2.605538724	5.23446E-05	2.48581E-05	0.234498485		0.234498485
Nevada (M	2035	T7 CAIRP	Aggregatec	Aggregatec	DSL	296.6903	76172.44561	0	0.007237138	0.040942662	0.155822801	127.6556767	0.003435194	0.001217895	11.48901091		11.48901091
Nevada (M	2035	T7 CAIRP c	Aggregatec	Aggregatec	DSL	13.3986	2898.51586	0	0.000285158	0.001610237	0.006238522	5.035026894	0.000130688	4.80365E-05	0.45315242		0.45315242
Nevada (M	2035	T7 NNOOS	Aggregatec	Aggregatec	DSL	382.8243	94453.92733	0	0.008190481	0.045771774	0.173285751	160.7414596	0.004152177	0.001533549	14.46673137		14.46673137
Nevada (M	2035	T7 NOOS	Aggregatec	Aggregatec	DSL	117.4806	30088.09355	0	0.002931132	0.016442175	0.063786465	51.20519692	0.001357271	0.000488522	4.608467723		4.608467723
Nevada (M	2035	T7 POAK	Aggregatec	Aggregatec	DSL	45.14939	6878.755688	0	0.000669074	0.00388886	0.015150037	11.37372686	0.000313704	0.000108511	1.023635417		1.023635417
Nevada (M	2035	T7 Public	Aggregatec	Aggregatec	DSL	249.3524	5714.238197	0	0.000579312	0.002784274	0.030239388	11.37495554	0.000270346	0.000108522	1.023745998		1.023745998
Nevada (M	2035	T7 Single	Aggregatec	Aggregatec	DSL	176.0842	17738.8382	0	0.001506572	0.008469857	0.041567334	30.39479683	0.000807895	0.000289981	2.735531715		2.735531715
Nevada (M	2035	T7 single cc	Aggregatec	Aggregatec	DSL	79.29934	7498.079161	0	0.00057595	0.003317375	0.014502397	12.66493614	0.000328327	0.000120829	1.139844252		1.139844252
Nevada (M	2035	T7 SWCV	Aggregatec	Aggregatec	DSL	46.52604	2143.473624	0	0.00010325	0.007134996	0.006583007	9.479839241	0.000100242	7.59101E-05	0.853185532		0.853185532
Nevada (M	2035	T7 tractor	Aggregatec	Aggregatec	DSL	165.3236	12757.36849	0	0.001400491	0.007933052	0.039924109	21.56076872	0.000600591	0.0002057	1.940469185		1.940469185
Nevada (M	2035	T7 tractor (	Aggregatec	Aggregatec	DSL	64.61479	5590.372197	0	0.00053557	0.003097434	0.013506857	9.413582165	0.000253703	8.981E-05	0.847222395		0.847222395
Nevada (M	2035	T7 utility	Aggregatec	Aggregatec	DSL	6.026513	137.572528	0	1.16201E-05	5.96637E-05	0.000531367	0.268051535	5.81931E-06	2.55734E-06	0.024124638		0.024124638
Nevada (M	2035	T7IS	Aggregatec	Aggregatec	GAS	8.209548	755.3185703	164.256628	0.000502659	0.034557745	0.003460773	1.3681714	2.72873E-05	1.42156E-05	0.151630141	0.151630141	
Nevada (M	2035	UBUS	Aggregatec	Aggregatec	GAS	11.5815	1453.955045	46.3260022	0.000387941	0.005212491	0.001655425	2.621037939	9.82314E-05	2.6257E-05	0.280068699	0.280068699	
Nevada (M	2035	UBUS	Aggregatec	Aggregatec	DSL	11.06624	1390.903468	44.26495	0.000108706	0.00353961	0.004150357	3.296673142	0.000597731	3.11624E-05	0.296700583		0.296700583
							Total	**Total**	**Total**	**Total**	**Total**	**Total**	**Total**	**Total**	**Total**	**Total**	**Total**
							3,648,168	**629,639**	**0.540**	**3.122**	**1.101**	**1,413.715**	**0.089**	**0.014**	**141.6982218**	**90.54658392**	**51.15163791**
Note: See VMT estimates for Actual VMT (F&P & LSC).							**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**
Emissions pro-rated based on VMT.							**3,166,336**	**546,479**	**0.46896048**	**2.70922960**	**0.95565554**	**1,226.998713**	**0.07703313**	**0.01206122**	**122.9834124**	**78.58763312**	**44.39577928**

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APPENDIX C - NCTC VMT TRAFFIC MODEL WESTERN COUNTY

NCTC DAILY VMT SUMMARY BY SPEED BIN					
VMT Speed Bins (MPH)	**2012**	**2015**	**2025**	**2030**	**2035**
0 - 5	472	478	497	507	517
5 - 10	12,682	13,337	15,522	16,614	17,706
10 - 15	16,540	17,044	18,725	19,565	20,405
15 - 20	8,558	9,294	11,745	12,971	14,197
20 - 25	229,715	233,388	245,633	251,756	257,878
25 - 30	177,864	182,269	196,954	204,296	211,638
30 - 35	186,938	188,600	194,138	196,908	199,677
35 - 40	247,906	252,296	266,930	274,246	281,563
40 - 45	236,460	239,838	251,097	256,726	262,356
45 - 50	202,978	199,645	188,536	182,982	177,427
50 - 55	271,346	274,803	286,325	292,086	297,847
55 - 60	58,291	57,869	56,461	55,758	55,054
60 - 65	50,148	49,792	48,606	48,013	47,420
65 - 70	0	0	0	0	0
70 - 75	0	0	0	0	0
>75	0	0	0	0	0
Total	1,699,898	1,718,653	1,781,169	1,812,428	1,843,685

Note:

Source: Fehr & Peers, 2014 – NCTC Travel Forecasting Model

APPENDIX D – NCTC EASTERN COUNTY-TRUCKEE TRAFFIC MODEL VMT

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MEMORANDUM

To: Michael Woodman, Nevada County Transportation Commission

From: Gordon Shaw, PE, AICP, LSC Transportation Consultants, Inc.

Date: April 6, 2017

RE: Nevada County RTP Truckee VMT Analysis

This memo presents an analysis of the Vehicle-Miles of Travel in the Truckee area, for purposes of the Nevada County Regional Transportation Plan. It is based on the Truckee/Martis Valley TransCAD transportation model maintained by LSC for the Town of Truckee.

This model has the following characteristics, which are addressed in the analysis:

- The model area includes the Town of Truckee, the portion of unincorporated Nevada County encompassing the airport area and Hirschdale area, and the Martis Valley area of unincorporated Placer County. Within Nevada County, the model extends to the west end of Donner Lake on the west, to State Route (SR) 89 north of Martis Creek Road on the north, just east of the Hirschdale interchange on the east, and the Placer County line on the south.

- The model was most recently calibrated against 2014 traffic volumes and land use conditions. The "future conditions" model reflects buildout of the Town of Truckee General Plan and the Martis Valley Area Plan. As there is no available economic forecast to define when full buildout will occur, for purposes of this analysis this future condition is assumed to occur 20 years after the calibration year, or 2034.

- The model is developed to reflect PM peak-hour volumes on a busy summer weekday. This peak-hour is from 4 PM to 5 PM.

- The model does not include through traffic volumes on I-80 passing entirely through the model area. It does include all traffic using on ramps and off ramps in the study area.

Our analysis was conducted in the following steps:

1. The Truckee/Martis Model was summarized to identify the VMT by 5 mile-per-hour speed ranges (or "bins") for both 2014 and 2034, for all roadway links within Nevada County (i.e., excluding links in Placer County).

2. To include through volumes on I-80, current Caltrans I-80 counts were reviewed. Specifically, hourly counts for 10 peak summer weekdays (the last week of July and first week of August) were obtained for I-80 just west of the Donner Lake interchange (the western boundary of the model area). The average 2-way traffic volume during the PM peak hour was found to be 2,874. To adjust to 2014 conditions, Caltrans traffic trend data was reviewed, identifying an average annual growth rate of 4.8 percent between 2012 and 2015 (most recent available for consistent datasets). Adjusting the 2016 peak-hour volume yields a 2014 peak-hour total I-80 volume of 2,597. Subtracting the model (non-through) volumes yields an estimate of the hourly through volumes equal to 380 vehicles per hour per direction. These volumes were added to the non-through volumes in the appropriate speed bins (60-65 mph, except for the directional link that includes the agricultural inspection station, which has speeds in the 40-45 mph speed bin.)

3. Growth factors for future total I-80 volumes in 2034 were identified based upon the current Caltrans I-80 *Transportation Concept Report*. Factoring the "existing" (2007) and "future" (2028) volumes presented in this document and adjusting to reflect a 2014 to 2034 period, the TCR forecast indicates that 2034 peak-hour volumes will be 39 percent higher than 2014 volumes west of Donner Lake interchange. Applying this growth factor to the 2014 Caltrans counts and subtracting the model forecast of non-through volumes yields a 2034 estimate of 649 through vehicles per peak hour in each direction. These volumes were also added to the appropriate speed bin.

4. The resulting PM peak-hour VMT by speed bin figures for 2014 and 2034 are shown in Table A. Note that the figures reflect the fact that there are no roadways with a 60 mph speed limit in the study area. As I-80 has a 65 mph speed limit, and as traffic volumes on the interstate do not cause the volume/speed function to yield speeds on the interstate between 55 and 60 mph, there is a gap in the estimated in this 55-60 mph speed range.

5. As a basis for estimating VMT data for the 2012 and 2015 analysis years, recent Caltrans traffic counts were reviewed. As shown in Table B, overall volumes in the region increased by an average of 3.81 percent between 2012 and 2015.

This rate was used to factor the 2014 downward to 2012 and upward to 2015, as also shown in Table A.

6. 2035 PM peak-hour volumes were estimated by extrapolating the 2015 to 2034 values by an additional year. Additional 2020, 2025 and 2030 values were estimated by interpolating the 2015 and 2035 values.

7. It is next necessary to factor the PM peak-hour volumes generated by the Truckee model to the various time periods used in the western Nevada County analysis. Available hourly traffic counts over the course of summer days were collected and summarized, as shown in Table C. Counts for a total of four locations were included, and the factor representing the ratio of traffic volume in each specific time period to the traffic volume during the 4PM-5PM Truckee PM peak-hour calculated. A weighted average (weighted by total daily traffic volume) was then identified as an overall estimated factor for all traffic in the model area.

8. Applying these time-of-day factors to the 2012 PM peak-hour speed bin data yields the 2012 VMT by speed bin and by time of day shown in Table D. Similarly, Tables E, F and G provide these estimates for 2015, 2020 and 2035, respectively.

9. In addition, Table G provides total daily VMT by speed bin for 2012, 2015, 2020, 2025, 2030 and 2035.

TABLE A: Truckee PM Peak-Hour VMT by Speed

Speed Bins (mph)		Model Volumes + I-80 Through		Total VMT by Design Year					
Begin	End	2014	2034	2012	2015	2020	2025	2030	2035
0	5	20	22	19	21	21	22	22	22
5	10	541	723	500	561	604	647	689	732
10	15	749	1,121	692	778	868	959	1,049	1,139
15	20	623	1,240	575	646	803	959	1,116	1,272
20	25	5,632	9,267	5,203	5,847	6,747	7,647	8,547	9,447
25	30	2,168	3,969	2,003	2,251	2,703	3,155	3,607	4,059
30	35	9,914	14,845	9,158	10,291	11,489	12,688	13,886	15,084
35	40	951	1,819	879	988	1,207	1,426	1,644	1,863
40	45	7,341	12,086	6,782	7,621	8,796	9,971	11,146	12,321
45	50	235	397	217	244	284	325	365	405
50	55	3,732	6,745	3,448	3,874	4,630	5,385	6,141	6,896
55	60	0	0	0	0	0	0	0	0
60	65	52,199	77,373	48,222	54,187	60,289	66,390	72,492	78,593
65	70	0	0	0	0	0	0	0	0
70	+	0	0	0	0	0	0	0	0
TOTAL		84,106	129,607	79,710	89,324	100,461	111,599	122,734	133,868

TABLE B: Truckee Area Traffic Trends

Caltrans Peak-Month Average Daily Traffic Counts

Route	Side	Location	2012	2015
80	WEST OF	TRUCKEE, DONNER PARK	33,000	38,000
80	WEST OF	TRUCKEE, JCT. RTE. 89 SOUTH	37,000	42,000
80	WEST OF	CENTRAL DPR INTERCHANGE	37,500	42,500
80	WEST OF	JCT. RTE. 89 N, JCT. RTE. 267 S	35,500	42,500
80	WEST OF	POLARIS ROAD (CHP SCALES)	29,500	36,000
80	WEST OF	HIRSCHDALE ROAD OH (BOCA)	35,000	35,500
89	SOUTH OF	PLACER/NEVADA COUNTY LINE	25,000	25,500
89	SOUTH OF	WEST JCT. RTE. 80; TRUCKEE, WEST	25,000	25,500
89	SOUTH OF	PROSSER DAM ROAD/ALDER DRIVE	6,700	6,700
89	SOUTH OF	HOBART MILLS ROAD	2,650	2,650
89	SOUTH OF	NEVADA COUNTY	3,150	3,150
267	NORTH OF	BRIDGE ST, RT/SOARNG WY LT	14,200	17,000
267	NORTH OF	PLACER/NEVADA COUNTY LINE	16,600	19,500
TOTAL OF ALL STATIONS			300,800	336,500
Annual Growth Rate -- 2012 to 2015				3.81%

Source: Caltrans website

Table C: Ratio of Period Volume to Truckee Model PM Peak Hour Volume

			Roadway Location				
	From	To	Donner Pass Rd. W. of 89 S.	267 N. of Airport Way	Glenshire Drive E. of DPR	Brockway Road S. of S. River Street	Weighted Average
Avg. Daily Traffic Volume			13,677	16,442	4,425	14,744	
Truckee Model PM Pk Hr	4PM	5PM					
AM Period	6AM	9AM	1.45	1.70	1.70	2.30	1.81
Mid-Day	9AM	4PM	6.49	5.43	5.50	6.79	6.14
PM Period	4PM	7PM	2.55	2.52	2.53	2.40	2.49
Off-Peak	7PM	6AM	1.51	1.36	1.52	2.06	1.62
AM Pk Hr	7AM	8AM	0.48	0.62	0.63	0.80	0.64
PM Pk Hr	5PM	6PM	0.87	0.89	0.91	0.77	0.85
Total Daily			12.00	11.02	11.25	13.55	12.07

TABLE D: Eastern Nevada County 2012 VMT Summary by Speed Bin

Speed Bins (mph)		AM Peak Period	Mid-day Period	PM Peak Period	Off-Peak Period	Daily
0	5	34	117	47	31	229
5	10	907	3,069	1,247	812	6,035
10	15	1,255	4,247	1,726	1,124	8,353
15	20	1,043	3,529	1,434	934	6,941
20	25	9,437	31,933	12,980	8,454	62,803
25	30	3,633	12,293	4,997	3,254	24,177
30	35	16,610	56,206	22,847	14,880	110,542
35	40	1,594	5,395	2,193	1,428	10,610
40	45	12,300	41,624	16,919	11,019	81,862
45	50	394	1,332	541	353	2,619
50	55	6,254	21,162	8,602	5,602	41,619
55	60	0	0	0	0	0
60	65	87,459	295,957	120,300	78,350	582,066
65	70	0	0	0	0	0
70	+	0	0	0	0	0
TOTAL		140,922	476,870	193,835	126,243	937,870

TABLE E: Eastern Nevada County 2015 VMT Summary by Speed Bin

Speed Bins (mph)		AM Peak Period	Mid-day Period	PM Peak Period	Off-Peak Period	Daily
0	5	38	129	52	34	253
5	10	1,017	3,443	1,400	911	6,772
10	15	1,411	4,775	1,941	1,264	9,391
15	20	1,172	3,965	1,612	1,050	7,798
20	25	10,605	35,885	14,587	9,500	70,576
25	30	4,083	13,815	5,616	3,657	27,171
30	35	18,665	63,160	25,673	16,720	124,218
35	40	1,792	6,064	2,465	1,605	11,926
40	45	13,822	46,773	19,012	12,382	91,990
45	50	443	1,498	609	396	2,945
50	55	7,026	23,776	9,664	6,294	46,761
55	60	0	0	0	0	0
60	65	98,278	332,567	135,181	88,041	654,066
65	70	0	0	0	0	0
70	+	0	0	0	0	0
TOTAL		158,354	535,856	217,814	141,856	1,053,879

TABLE F: Eastern Nevada County 2020 VMT Summary by Speed Bin

Speed Bins (mph)		AM Peak Period	Mid-day Period	PM Peak Period	Off-Peak Period	Daily
0	5	38	129	52	34	253
5	10	1,095	3,707	1,507	981	7,291
10	15	1,574	5,327	2,165	1,410	10,477
15	20	1,456	4,928	2,003	1,305	9,693
20	25	12,237	41,409	16,832	10,962	81,440
25	30	4,902	16,589	6,743	4,392	32,627
30	35	20,837	70,512	28,662	18,667	138,678
35	40	2,189	7,408	3,011	1,961	14,569
40	45	15,953	53,984	21,943	14,291	106,172
45	50	515	1,743	708	461	3,428
50	55	8,397	28,416	11,550	7,523	55,887
55	60	0	0	0	0	0
60	65	109,345	370,017	150,403	97,956	727,721
65	70	0	0	0	0	0
70	+	0	0	0	0	0
TOTAL		178,540	604,175	245,581	159,945	1,188,248

TABLE G: Eastern Nevada County 2035 VMT Summary by Speed Bin

Speed Bins (mph)		AM Peak Period	Mid-day Period	PM Peak Period	Off-Peak Period	Daily
0	5	40	135	55	36	266
5	10	1,328	4,493	1,826	1,189	8,836
10	15	2,066	6,990	2,841	1,851	13,748
15	20	2,307	7,807	3,173	2,067	15,354
20	25	17,134	57,980	23,567	15,349	114,030
25	30	7,362	24,912	10,126	6,595	48,994
30	35	27,358	92,576	37,630	24,508	182,072
35	40	3,379	11,434	4,648	3,027	22,487
40	45	22,346	75,619	30,737	20,019	148,721
45	50	735	2,486	1,010	658	4,889
50	55	12,507	42,323	17,203	11,204	83,238
55	60	0	0	0	0	0
60	65	142,542	482,356	196,066	127,695	948,660
65	70	0	0	0	0	0
70	+	0	0	0	0	0
TOTAL		239,106	809,117	328,884	214,200	1,591,307

TABLE H: Eastern Nevada County 2035 VMT Summary by Speed Bin

Speed Bins (mph)		2012	2015	2020	2025	2030	2035
0	5	229	253	253	266	266	266
5	10	6,035	6,772	7,291	7,810	8,317	8,836
10	15	8,353	9,391	10,477	11,576	12,662	13,748
15	20	6,941	7,798	9,693	11,576	13,471	15,354
20	25	62,803	70,576	81,440	92,303	103,167	114,030
25	30	24,177	27,171	32,627	38,083	43,538	48,994
30	35	110,542	124,218	138,678	153,151	167,612	182,072
35	40	10,610	11,926	14,569	17,213	19,844	22,487
40	45	81,862	91,990	106,172	120,355	134,538	148,721
45	50	2,619	2,945	3,428	3,923	4,406	4,889
50	55	41,619	46,761	55,887	65,000	74,125	83,238
55	60	0	0	0	0	0	0
60	65	582,066	654,066	727,721	801,363	875,018	948,660
65	70	0	0	0	0	0	0
70	+	0	0	0	0	0	0
TOTAL		937,858	1,053,873	1,188,248	1,322,618	1,456,965	1,591,297