



# 2016 Nevada County Regional Transportation Plan



**PUBLIC DRAFT**

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# Nevada County Transportation Commission

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## 1.0 EXECUTIVE SUMMARY



The 2016 Nevada County Regional Transportation Plan (RTP) has been developed by the Nevada County Transportation Commission (NCTC) to document the transportation policy, actions, and funding recommendations that will meet the short- and long-term access and mobility needs of Nevada County residents over the next twenty years. This document is designed to guide the systematic development of a comprehensive multi-modal transportation system for Nevada County. The 2016 update of the Nevada County RTP reflects the latest project funding and planning assumptions, updates regional issues and policies, and revises performance measures for tracking plan progress.

Population growth over the period of the plan is expected to be moderate. Combined with an aging population and expected employment and demographic trends as well as emerging transportation technologies, new demand on the roadway system is expected to be modest. However, the automobile and the roadway system will continue to be the dominant mode of transportation. Opportunities exist to improve roadway performance in several deficient locations, and stresses on the roadway system induced by climate change may add demands for investment in the roadway network in coming years.

The aging population of the county, as well as increasing desire in the general population for non-automotive transportation options, is likely to increase the demand for transit. However, the share of the population, especially the aging population, outside of the incorporated jurisdictions currently best served by transit will add to the challenges of meeting this demand. The desire for non-automotive transportation options also points to needs for investing in bicycle facilities and sidewalks.

Due to challenges at the state and federal levels, funding for investments in both automotive and non-automotive modes are likely to remain an issue for the short term as well as the long term of the plan.

The RTP contains the following chapters:

1. **Executive Summary:** Provides an overview of the plan and its components.
2. **Introduction:** Describes why and how the plan was developed, the regional setting and key characteristics of Nevada County and its population, and other trends likely to impact the future of transportation in Nevada County. Key characteristics identified include a population that is growing slowly but that is also aging.
3. **Policy Element:** Describes the key issues relevant to planning in Nevada County, other plans that affect the development of the RTP, and public participation in the development of the plan. The policy element also describes issues affecting transportation planning in the county. These issues include ongoing funding challenges, safety, potential future congestion on main roadway corridors, maintaining roadway networks, ongoing challenges of ozone pollution and greenhouse gases, and public desires for increased alternatives to driving. The policy element also presents the goals, objectives, and performance measures for the plan. The following goals are identified:

- *Goal 1.0:* Provide for the safe and efficient movement of all people, goods, and services, on the roadway network.
- *Goal 2.0:* Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.
- *Goal 3.0:* Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life.
- *Goal 4.0:* Develop an economically sustainable transportation system.



Policies are then presented to achieve these goals.

4. **Action Element:** Identifies short- and long- term actions to address the needs of the transportation system and to meet the goals and objectives of the RTP. The Action Element addresses each of the following modes and topics:
  - *Roadway Network:* Identifies projects to improve roadway conditions and level of service across the county. Notable projects include:
    - Safety improvements on SR 174 from Maple Way to You Bet Road
    - Project development for SR 49 widening south of Grass Valley to Wolf and Combie Roads
    - Pioneer Trail and Bridge Street extension
    - Widening and adding bike lanes to Donner Pass Road from I-80 to Truckee Town limits

- *Transit Network:* Identifies improvements to the transit systems to improve service while meeting farebox recovery objectives. Actions include fleet improvements, facility and stop improvements, and security upgrades for both Gold Country Transit and Truckee Transit.
  - *Bicycle and Pedestrian Facilities:* Presents projects identified in the Nevada County Bicycle Master Plan and Pedestrian Master Plan, which incorporate findings from the Truckee Trails and Bikeways Master Plan.
  - *Aviation:* Presents capital improvement program projects for Nevada County and Truckee Airports, including terminal, runway, taxiway, and ramp improvements.
  - *Railroad Facilities:* Continues support of freight rail improvements and encourages expansion of passenger rail service.
  - *Goods Movement:* Includes actions enhancing freight transportation to maintain regional economic vitality.
  - *Intelligent Transportation Systems:* Includes actions supporting Caltrans and other Tahoe Gateways Counties intelligent transportation systems improvements.
  - *Transportation Systems Management:* Includes actions to best utilize existing transportation resources and reduce single-occupancy vehicular demand, including support of improved broadband access and transit, bicycling, and walking efforts.
  - *Air Quality and Greenhouse Gases:* Nevada County is a non-attainment area for ozone, though most pollutants originate outside Nevada County. Continued improvements in vehicle technology are likely to have the biggest impact on reducing this problem. The plan includes actions focused on reducing ozone, other pollutants, and greenhouse gases.
  - *Transportation Safety and Security:* Includes coordination of safety efforts with local partners and work with the SR 49 Stakeholder Committee to continue to reduce fatal collisions in the SR 49 corridor south of Grass Valley.
5. **Financial Element:** Outlines the financial assumptions and forecasts of transportation costs and revenues necessary to implement the Action Element. The Financial Element presents a constrained funding scenario that includes revenue that is reasonably expected to be available from existing funding mechanisms over the horizon of the RTP, including projections of the future STIP and federal transportation funds. The Financial Element also summarizes funding programs available to the NCTC.



## 2.0 INTRODUCTION

### 2.1 PURPOSE

As the Regional Transportation Planning Agency (RTPA) for Nevada County, California State law requires the Nevada County Transportation Commission (NCTC) to prepare, adopt, and submit an updated Regional Transportation Plan to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) at least every five years. The purpose of this plan is to document Nevada County's short-term (2016-2026) and long-term (2026-2036) regional transportation needs 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.

### 2.2 PROCESS

NCTC is responsible for the preparation of the Nevada County RTP and must ensure that all requirements of the RTP process are met. To do so, NCTC completed the following steps:

1. NCTC prepared a draft report that includes all of the required elements.
2. NCTC solicited public comment from the Technical Advisory Committee (TAC), jurisdictions, neighboring Regional Transportation Planning Agencies, general public, and other groups. There are no federally recognized tribes in Nevada County, but NCTC solicited comments from Native American Tribal Organizations in the region.
3. NCTC responded to comments and, as appropriate, included responses to comments in the final document.
4. NCTC prepared environmental documentation in conformance with CEQA.
5. NCTC adopted the environmental documentation and RTP in accordance with State and Federal requirements.

## 2.3 PUBLIC PARTICIPATION IN TRANSPORTATION PLANNING

The planning of the county transportation system is accomplished through the coordination of various governmental agencies, advisory committees, and public input.

### 2.3.1 GOVERNMENT PARTICIPATION

The following government agencies and groups contributed to development of the RTP:

- The Nevada County Transportation Commission, serving as the Regional Transportation Planning Agency, has seven Commissioners and four staff. The Commission includes the following representatives:
  - The Nevada County Board of Supervisors appoints two representatives from the Board of Supervisors.
  - The Nevada County Board of Supervisors also appoints two county-at-large representatives.
  - The incorporated cities of Grass Valley, Nevada City, and the Town of Truckee each have one representative.
- The Technical Advisory Committee provides technical input on transportation issues and ensures that there is coordination and cooperation in the transportation planning process. The committee includes representatives of:
  - Local public works and planning departments
  - Caltrans
  - Public airport operators
  - The air pollution control district
  - Public transit operators
- The Transit Services Commission (TSC) 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 includes the following representatives:
  - The Nevada County Board of Supervisors appoints two representatives from the Board of Supervisors.
  - The Nevada County Board of Supervisors also appoints two county-at-large representatives
  - The City Councils of Grass Valley and Nevada City each have one representative

- The City Councils of Grass Valley and Nevada City also jointly appoint one city-at-large representative.
- The Western Nevada County Conformity Working Group provides interagency consultation and coordination on transportation conformity. The group includes representatives from the following agencies:
  - The Nevada County Transportation Commission
  - Northern Sierra Air Quality Management District,
  - Caltrans
  - California Air Resources Board
  - U.S. Environmental Protection Agency
  - Federal Highway Administration
  - Federal Transit Administration
- Notice was also provided to local representatives of the US Forest Service and Bureau of Land Management

### 2.3.2 CITIZEN PARTICIPATION

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

- Three public outreach events for the RTP were held in August 2015, one each in Grass Valley, Nevada City and Truckee. During each event, NCTC and consultant staff talked to members of the public, solicited input through voting on priority posters and comment cards, and directed the public to the RTP project website to complete an online survey and stay connected to the RTP update. This process is further described in Section 3.3, Public Outreach. Appendix B provides further details of inputs received via the outreach events and online survey.





- The NCTC produces and maintains a website, [www.nctc.ca.gov](http://www.nctc.ca.gov), to keep the public informed of transportation planning efforts in Nevada County. Planning documents, including the draft and final RTP, are posted to this site.
- Copies of the Draft RTP were made available for review at the main public libraries in western and eastern Nevada County and on the NCTC website.
- Press releases were sent to the media establishments in western and eastern Nevada County announcing availability of the Draft RTP for review and comment and noting key findings.
- Public hearings were held and noticed in the main newspapers in western and eastern Nevada County prior to adoption of the RTP and Regional Transportation Improvement Program.
- Notice of the Draft RTP was sent to local environmental, business, and freight organizations.
- 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 and advises 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.
  - One representative of transit users in western Nevada County.
  - One representative of the Hispanic community in the Truckee area.
- Each year, public notifications are sent out to encourage participation in transportation planning processes, such as the annual unmet transit needs public hearing held by the TSC and numerous public workshops relating to the transportation projects and planning activities of the NCTC.

- Citizens are encouraged to attend and speak at the NCTC meetings on any matter included for discussion on the agenda at that meeting.

## 2.4 REGIONAL SETTING

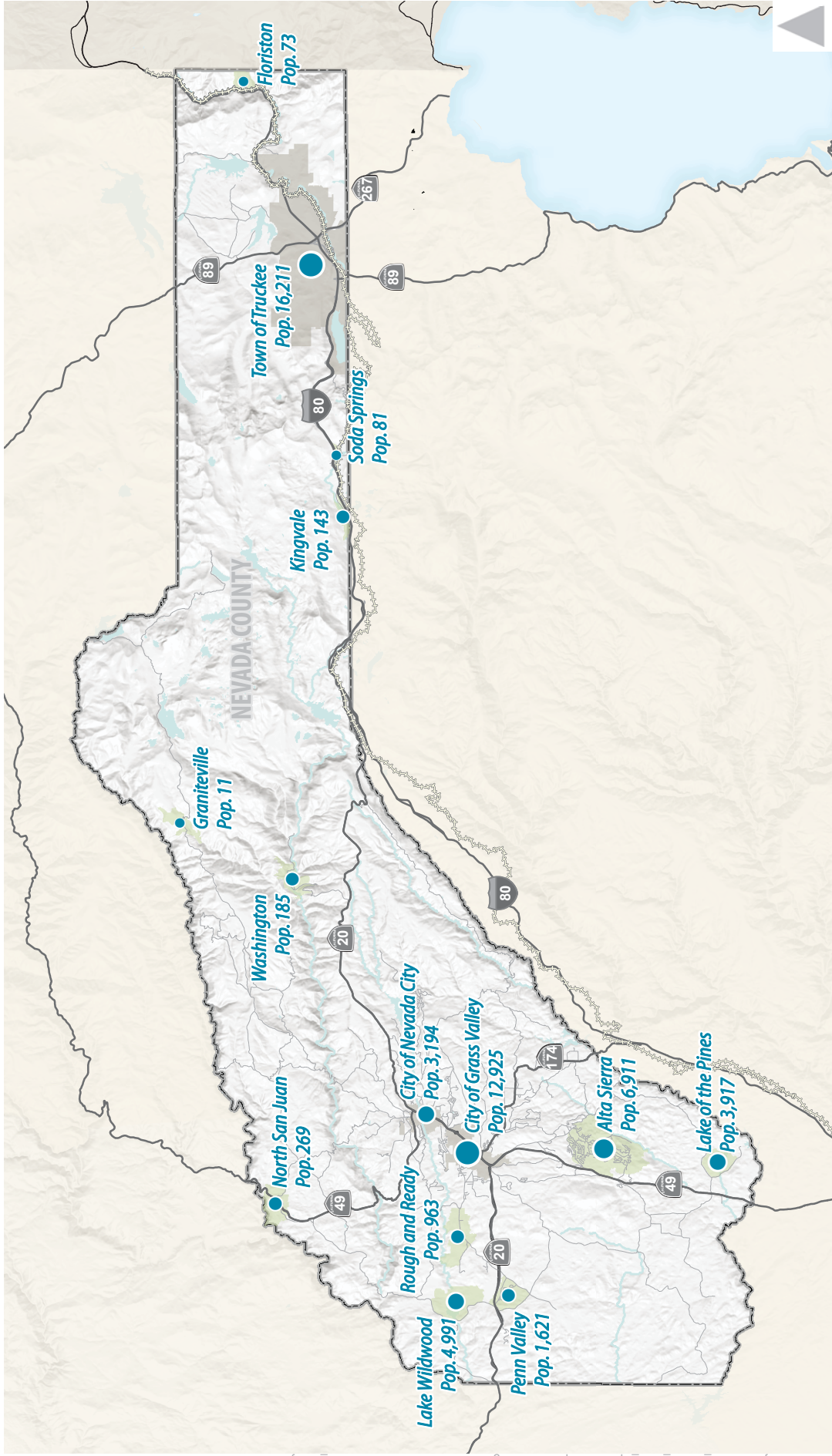
Nevada County was established in 1851, when it was split from Yuba County. Nevada County lies within the northern portion of California, stretching from the eastern end of the Sacramento Valley across the Sierra Nevada to the State of Nevada. Nevada County is located approximately 40 miles northeast of Sacramento and 15 miles west of Reno, Nevada. Interstate 80 (I-80), both directly and via connections from State Route 49 (SR 49), provides interregional access to Sacramento, San Francisco and the Pacific coast, Reno, and the mountain west (Figure 1).

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 development due to the rural character of the area, its historic Gold-Rush era towns, 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 Sierra 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. SR 20, SR 49, and SR 174 connect to I-80, a major transcontinental route.

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 activities, such as skiing, boating, camping, and hiking. These 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 passenger service, Truckee is at the crossroads of I-80 and State Routes 89 and 267, which are the northern entrances to the Tahoe Basin.



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Figure 1  
Nevada County Population Centers and  
Major Transportation Corridors



## 2.5 DEMOGRAPHICS

Transportation planning in Nevada County is multifaceted and strives to balance the needs of multiple users including the local population, people with potentially special needs (e.g., elderly, disabled, and low income), recreational interests, and local industry workers.

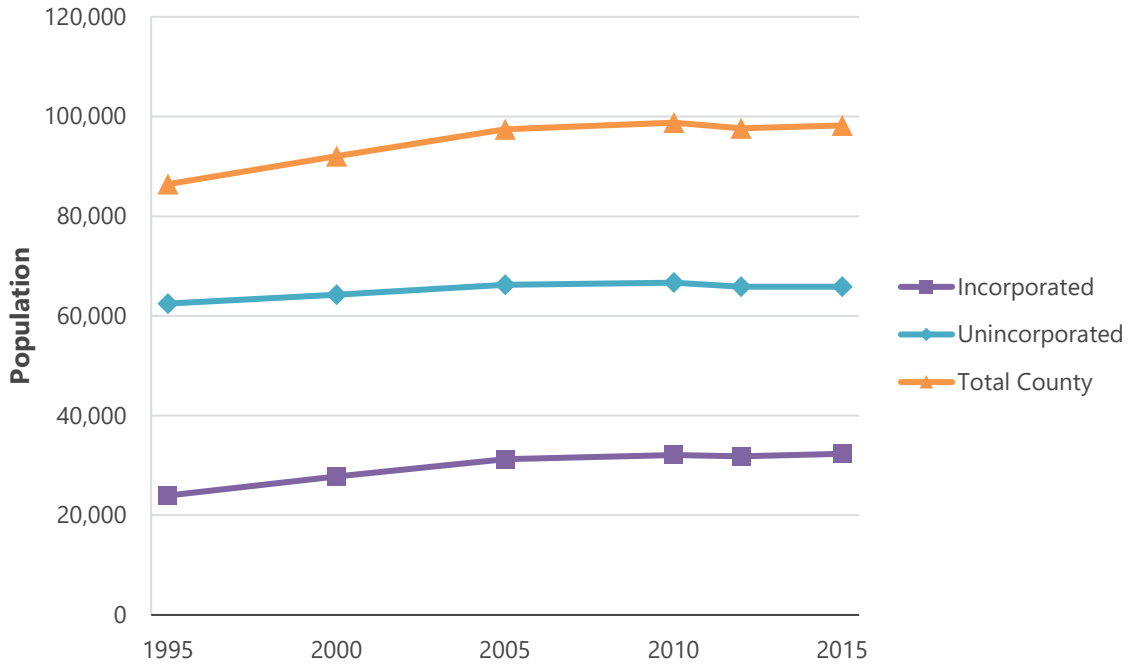
### 2.5.1 POPULATION

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. The historic and current distribution of population for the county is shown in Table 1, Figure 2 and Figure 3.

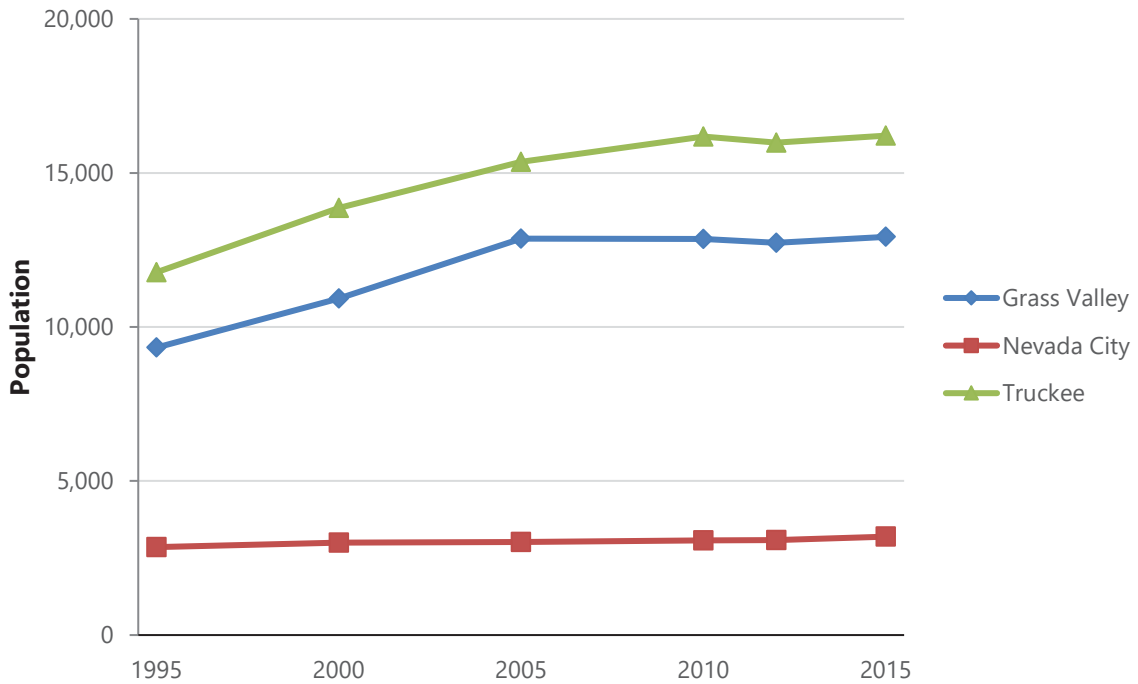
Area of Residence	Population					
	Jan 1995	Apr 2000	Jan 2005	Apr 2010	Jan 2012	Jan 2015
Grass Valley	9,332	10,922	12,864	12,860	12,731	12,925
Nevada City	2,855	2,996	3,019	3,068	3,085	3,194
Truckee	11,775	13,864	15,364	16,180	15,981	16,211
Unincorporated Area	62,464	64,251	66,207	66,656	65,840	65,863
<b>Total County</b>	<b>86,426</b>	<b>92,033</b>	<b>97,454</b>	<b>98,764</b>	<b>97,637</b>	<b>98,193</b>
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 <i>Historical Population Estimates for City, County and the State, 1991-2000, with 1990 and 2000 Census Counts</i> . Sacramento, California, September 2015.						

The cells shaded in Table 1 show peak population between 1995 and 2015. As shown in this table, the populations of the incorporated areas of the county are at their highest levels, while the population of the unincorporated area is still slightly below its 2010 peak.

**FIGURE 2: NEVADA COUNTY POPULATION HISTORY**



**FIGURE 3: CITY POPULATION HISTORY**



Source: State of California, Department of Finance, Report E-4, Historical Population Estimates for Cities, Counties, and the State, Sacramento, California, September 2015.

## 2.5.2 OTHER COMMUNITIES

There are eleven census-designated places (CDP) in Nevada County (Figure 1). A CDP is a concentration of population identified by the U.S. Census Bureau for statistical purposes. CDPs are delineated for each decennial census as the statistical counterparts of incorporated places such as cities, towns, and villages. CDPs are populated areas that lack separate municipal government, but which otherwise physically resemble incorporated places. Table 2 shows the 2010 population for each CDP as reported in the 2010 Census<sup>1</sup>. Three CDPs (Alta Sierra, Lake Wildwood, and Lake of the Pines) have greater population than the incorporated city of Nevada City.

<b>TABLE 2: CENSUS-DESIGNATED PLACES IN NEVADA COUNTY</b>	
<b>CDP</b>	<b>2010 Population</b>
Alta Sierra	6,911
Floriston	73
Graniteville	11
Kingvale	143
Lake of the Pines	3,917
Lake Wildwood	4,991
North San Juan	269
Penn Valley	1,621
Rough and Ready	963
Soda Springs	81
Washington	185
Source: 2010 U.S. Census.	

## 2.5.3 AGE OF POPULATION

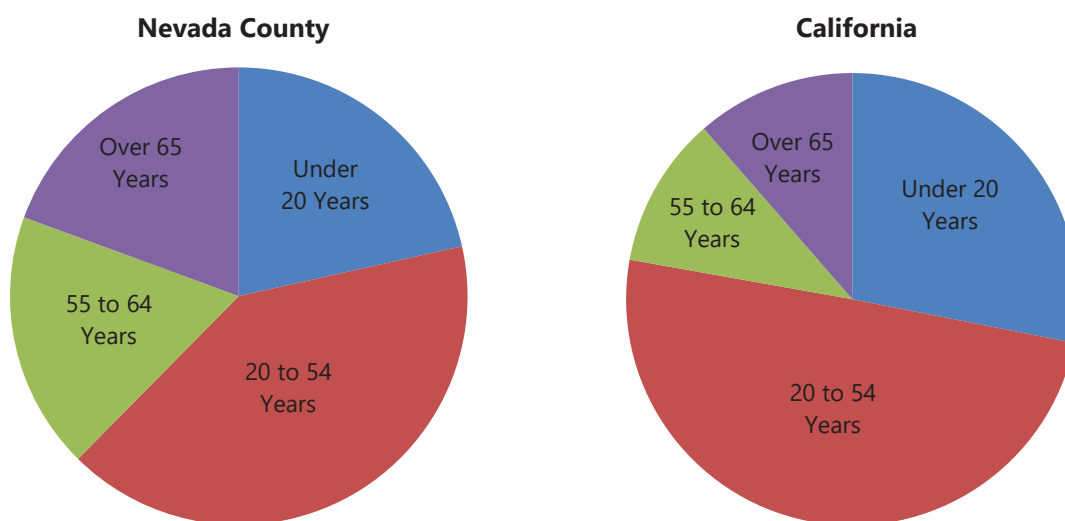
Based on 2010 Census data, approximately 21.5% of the county's population is under the age of 20. As shown in Table 3 and Figure 4, persons between 20 and 54 years of age account for 40.9% of the population, compared to 49.7% for the state as a whole. Persons between 55 and 64 years of age account for 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.

<sup>1</sup> Data from the 2009-2013 ACS was also reviewed, but because margins of error were very large (sometimes over 100%), the data are not included in this report.

TABLE 3: 2010 POPULATION ESTIMATES BY AGE									
Area	Under 20 Years		20 to 54 Years		55 to 64 Years		Over 65 Years		Total
	Persons	%	Persons	%	Persons	%	Persons	%	
Nevada County	21,204	21.5%	40,404	40.9%	17,982	18.2%	19,174	19.4%	98,764
California	10,452,042	28.1%	18,518,907	49.7%	4,036,493	10.8%	4,246,514	11.4%	37,253,956

Source: US Census Bureau, Age Groups and Sex: 2010.

FIGURE 4: POPULATION BY AGE



Source: US Census Bureau, Age Groups and Sex: 2010.

The median age increased from 43.1 in 2000 to 47.6 years in 2010. This age is higher than the median age for the state as a whole, 35.2 years, as shown in Table 4. This table also shows that the increase in median age was greater in Nevada County than in the state as a whole. As the population continues to age, the demand for alternative transportation modes begins to increase in most locations as people either elect to stop or can no longer drive automobiles.

TABLE 4: MEDIAN AGE		
Area	2000	2010
Nevada County	43.1	47.6
California	33.3	35.2

Source: US Census Bureau, Age Groups and Sex: 2010, California

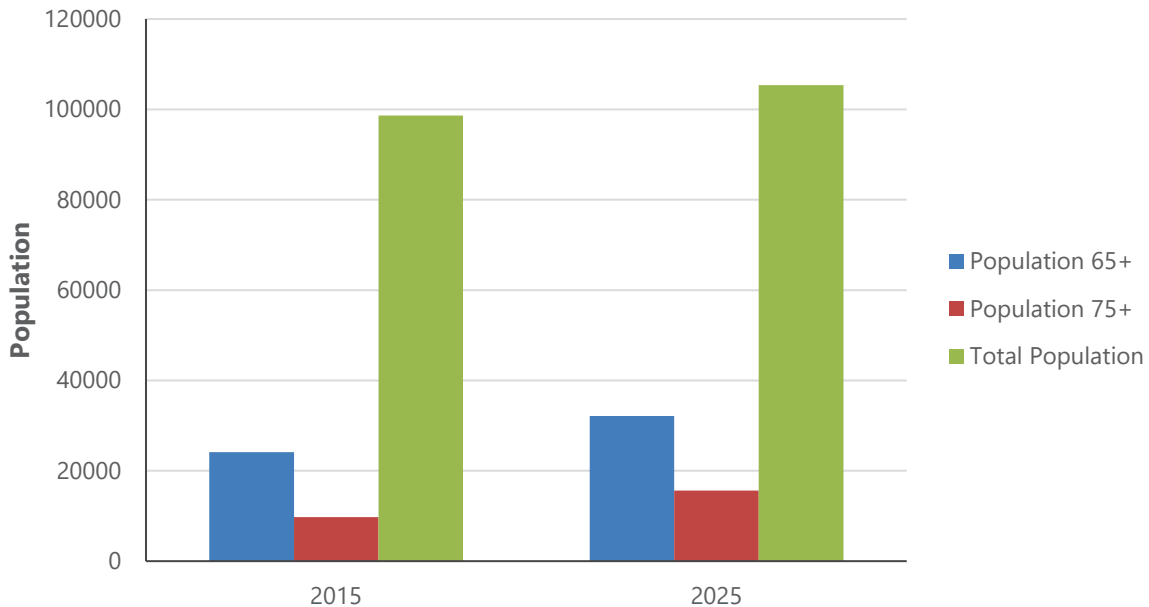
## 2.5.4 POPULATION FORECASTS

As shown in Table 5 and Figure 5, 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. Therefore, the analysis contained in this RTP reviews the need for improvements to existing facilities, as well as the need for new facilities.

Year	65 Years and Older	75 Years and Older	Total
2015	24,155	9,751	98,633
2025	32,125	15,648	105,389
2035	32,937	20,083	110,224

Source: DOF Demographic Research Unit, 2015.

**FIGURE 5: NEVADA COUNTY PROJECTED POPULATION**



Source: California Department of Finance Demographic Research Unit, 2015.

As the residents of Nevada County age, their need for services is likely to increase. As shown in Table 6, the county's population over 65 years of age is expected to increase from 24,155 in 2015 to 32,125 in 2025 and 32,937 in 2035. This is an increase of 36% from 2015 to 2035, with most of the growth occurring prior to 2025. The number of elderly age 75 and above is projected to increase from 9,751 in 2015 to approximately 20,083 in 2035. This represents an increase of 106%. As persons age 65 and older are a major transit market,



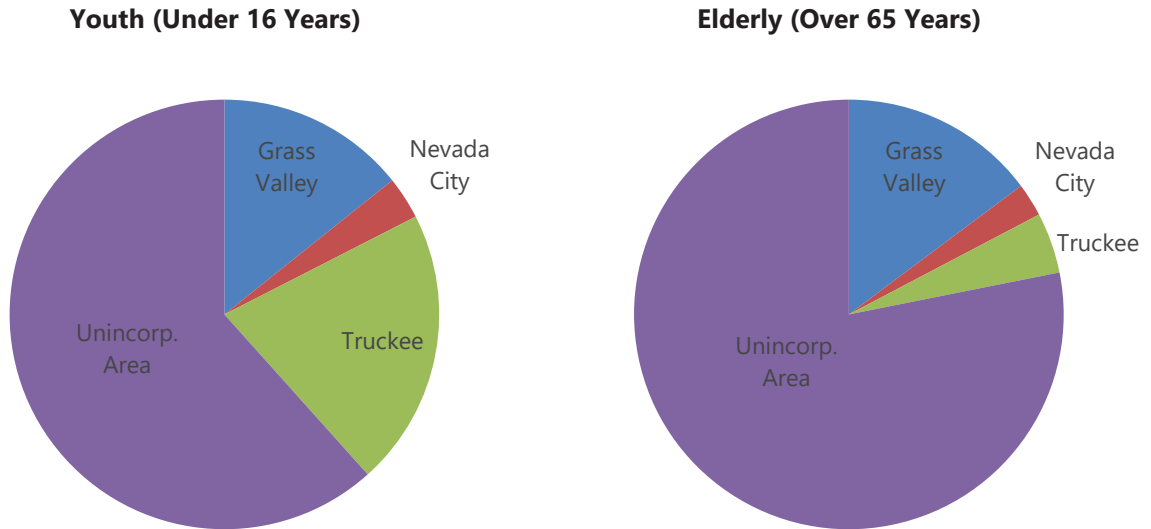
this suggests additional demand will be placed on fixed route transit and paratransit services in western and eastern Nevada County over the plan period and highlights the need to address the long-term expansion of transit operating revenues.

Additionally, most youth and elderly do not reside within the incorporated areas (as shown in Table 6 and Figure 6), which are better served by transit than unincorporated areas. This fact represents another challenge for transit services.

<b>TABLE 6: 2010 POPULATION BY AGE AND AREA OF RESIDENCE</b>					
<b>Area of Residence</b>	<b>Under 16 Years of Age</b>		<b>Over 65 Years of Age</b>		<b>Total</b>
	<b>Persons</b>	<b>%</b>	<b>Persons</b>	<b>%</b>	
Grass Valley	2,320	18.1%	2,871	22.4%	12,818
Nevada City	521	17.0%	487	15.9%	3,066
Truckee	3,397	21.1%	886	5.5%	16,100
Unincorporated Area	10,018	15.1%	15,164	22.8%	66,537
<b>Total County</b>	<b>16,256</b>	<b>16.5%</b>	<b>19,409</b>	<b>19.7%</b>	<b>98,521</b>
<i>State of California</i>	<i>8,174,908</i>	<i>31.0%</i>	<i>4,246,514</i>	<i>11.4%</i>	<i>37,253,956</i>

Source: U.S. Census Bureau, 2010 Census.

**FIGURE 6: RESIDENCY OF ELDERLY AND YOUTH POPULATIONS**



Source: U.S. Census Bureau, 2010 Census.

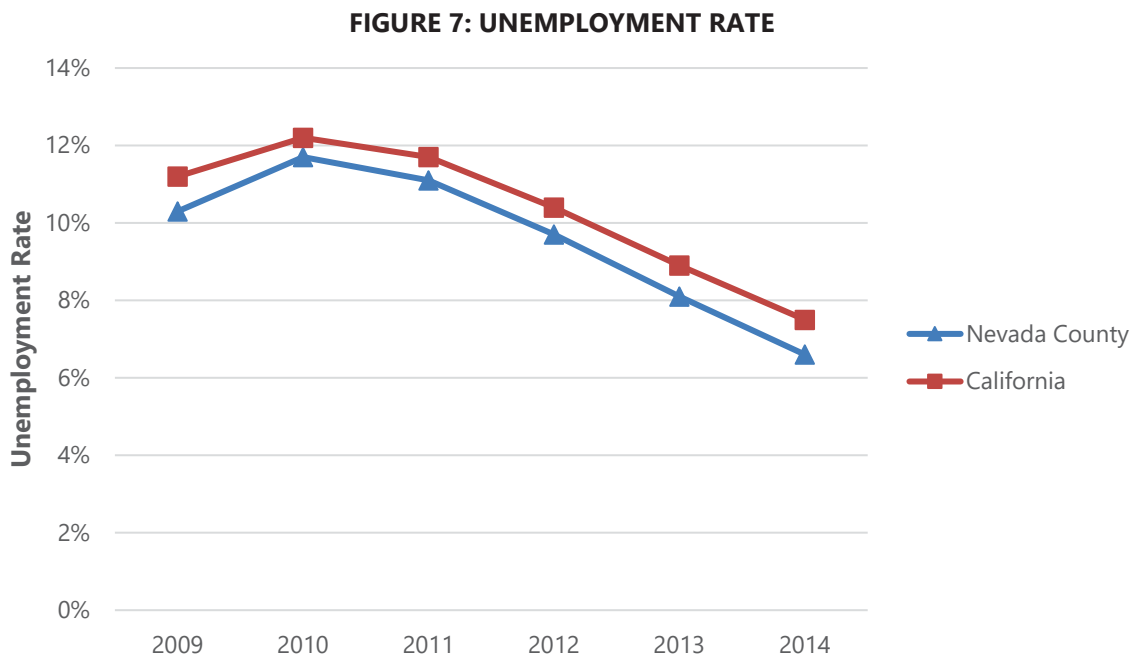
## 2.6 EMPLOYMENT

In 2014, 47,910 county residents 16 years of age and older were members of the labor force (Table 7). This represents approximately 57% of all residents 16 years and older. This share is a decrease from 2009 when the labor force was 50,380. In California, the labor force was represented by 62% of residents 16 years and older during 2014.

Year	Nevada County			California		
	Labor Force	Employment	Unemployment Rate	Labor Force	Employment	Unemployment Rate
2009	50,380	45,200	10.3%	18,215,100	16,182,600	11.2%
2010	48,920	43,180	11.7%	18,663,600	16,091,900	12.2%
2011	48,980	43,560	11.1%	18,419,500	16,260,100	11.7%
2012	48,420	43,710	9.7%	18,554,800	16,630,100	10.4%
2013	48,030	44,160	8.1%	18,671,600	17,002,900	8.9%
2014	47,910	44,750	6.6%	18,811,400	17,397,100	7.5%

Source: State of California March 2014 Labor Market Benchmark.

Nevada County’s annual average unemployment in 2014 was reported at 6.6%. This shows an improvement over 2009 when the county unemployment rate was 10.3%. These trends are depicted in Table 7 and Figure 7.



Source: State of California March 2014 Labor Market Benchmark.

The May 2015 unemployment rate for Nevada County was 5.3%. Table 8 shows the May 2015 Benchmark Monthly Labor Force Data for cities and large CDPs in Nevada County.

<b>Area</b>	<b>Labor Force</b>	<b>Employment</b>	<b>Unemployment Rate</b>
Total Nevada County	48,560	45,970	5.3%
Alta Sierra CDP	3,370	3,250	3.6%
City of Grass Valley	5,440	5,090	6.4%
Lake of the Pines CDP	1,730	1,660	3.7%
Lake Wildwood CDP	2,040	1,980	2.8%
Nevada City	1,580	1,510	4.3%
Penn Valley CDP	610	510	15.5%
Town of Truckee	10,120	9,600	5.2%

Source: State of California May 2015 Labor Market Benchmark. Data not seasonally adjusted.

### 2.6.1 JOB GROWTH

The job growth by industry between 2009 and 2014 is shown in Table 9. The county has experienced a 5.9% increase in wage and salary jobs, reflecting recovery from the recent recession. All industries showed growth except for manufacturing, which declined 22.3% over the five-year period, and farm, which remained flat.

<b>Industry</b>	<b>2009</b>	<b>2014</b>	<b>Change from 2009</b>
Private Service Providing	18,360	19,590	6.7%
Government	5,630	6,090	8.2%
Mining, Logging, and Construction	2,270	2,660	17.2%
Manufacturing	1,840	1,430	-22.3%
Farm	70	70	0.0%
<b>Total, All Industries</b>	<b>28,170</b>	<b>29,830</b>	<b>5.9%</b>

Source: State of California March 2014 Labor Market Benchmark.

The 25 largest employers in Nevada County, listed alphabetically, are:<sup>2</sup>

- American Rivers, Inc.
- Boreal Mountain Resort
- Briarpatch Community Market
- Clear Capital
- County of Nevada
- Golden Empire Convalescent Hospital
- Grass Valley
- Interfaith Food Ministry
- Jehovah’s Witnesses
- Lodge at Tahoe Donner
- Milhous School Inc.
- Nevada County Charter Co-Op
- Nevada Irrigation District
- Nevada Union High School
- Pacific Gas & Electric Company
- Raley’s
- Robinson Enterprises, Inc.
- Safeway (Grass Valley)
- Safeway (Truckee)
- Sierra Nevada Memorial Hospital
- Sierra Nevada Memorial-Miners Hospital
- Sugar Bowl Ski Area Group
- Tahoe Forest Hospital
- Thurston Manufacturing
- Village Lodge-Sugar Bowl

## 2.6.2 EMPLOYMENT PROJECTIONS

Total employment projections described in the 2012-2022 Industry Employment Projections from the EDD Labor Market Information Division, April 2015 for the Northern Mountains Region (Lassen, Modoc, Nevada, Plumas, Sierra, Siskiyou, and Trinity Counties) is estimated to increase 14.2% between 2012 and 2022 (Table 10). The fastest growing industry during this period is projected to be mining, logging, and construction (37.4%), followed by private service providing (15.5%), farm (14.4%), and manufacturing (12.8%). The government sector is also projected to increase by 8.3%.

<b>TABLE 10: 2012-2022 NORTHERN MOUNTAINS REGION EMPLOYMENT PROJECTIONS</b>	
<b>Industry</b>	<b>Growth</b>
Mining, Logging, and Construction	37.4%
Private Service Providing	15.5%
Farm	14.4%
Manufacturing	12.8%
Government	8.3%
<b>Total, All Industries</b>	<b>14.2%</b>
Source: EDD Labor Market Information Division, April 2015.	

<sup>2</sup> America’s Labor Market Information System (ALMIS) Employer Database, 2015.  
<http://www.labormarketinfo.edd.ca.gov/majorer/countymajorer.asp?CountyCode=000057>.

## 2.6.3 INCOME

In 2013, the per capita income in Nevada County was \$32,346. The 2015 median household income was \$56,521, compared to the state median of \$61,818. Income by jurisdiction is shown in Table 11.

Area	Median Income	Mean Income	Households Receiving Social Security	
			Count	%
Truckee	\$77,320	\$101,216	987	15.5%
Grass Valley	\$33,700	\$49,422	2,805	46.6%
Nevada City	\$47,981	\$73,664	535	36.4%
<b>Nevada County Total</b>	<b>\$56,521</b>	<b>\$76,041</b>	<b>16,7958</b>	<b>41.0%</b>
<i>California</i>	<i>\$61,818</i>	<i>\$87,877</i>	<i>3,342,213</i>	<i>26.3%</i>

Source: US Census Bureau, Selected Economic Characteristics 2011-2015 American Community Survey 5-Year Estimates.

A summary of households with income below the poverty line (varies by household size) and households receiving food stamps is provided in Table 12. Note that the highest number of impoverished households is in the unincorporated county, while the highest share is in Grass Valley, as highlighted in the table.

Area	People Below Poverty Line		Households						Total
			Receiving Food Stamps		Receiving SSI		Receiving Cash Public Asst.		
	Count	%	Count	%	Count	%	Count	%	
Truckee	1,549	9.6%	331	5.3%	187	3.0%	177	2.8%	6,301
Grass Valley	3,160	24.6%	704	11.7%	539	8.9%	413	6.8%	6,032
Nevada City	202	6.6%	84	6.9%	33	2.7%	7	0.6%	1,211
Unincorp.	6,910	10.4%	1,096	4.0%	1,274	4.6%	346	1.3%	27,447
<b>Nevada County Total</b>	<b>11,821</b>	<b>12.0%</b>	<b>2,215</b>	<b>5.4%</b>	<b>2,033</b>	<b>5.0%</b>	<b>943</b>	<b>2.3%</b>	<b>40,991</b>
<i>California</i>	<i>5,987,810</i>	<i>15.9%</i>	<i>1,012,610</i>	<i>8.1%</i>	<i>729,243</i>	<i>5.8%</i>	<i>497,402</i>	<i>4.0%</i>	<i>12,542,460</i>

Source: US Census Bureau, Selected Economic Characteristics 2009-2013 American Community Survey 5-Year Estimates.

Several communities within Nevada County qualify as disadvantaged communities according to the California Transportation Commission 2017 Active Transportation Plan Guidelines. Communities with population below 15,000 that have a median income below 80% of the statewide median, or \$49,454, qualify

for this designation. Thus, Grass Valley, Nevada City, North San Juan (\$26,696), Penn Valley (\$41,487), and Rough and Ready (\$43,958) all qualify.<sup>3</sup> Other areas of the county also qualify at a census-tract level.

Additionally, areas with at least 75% of public school students eligible for free or reduced price meals also qualify as disadvantaged. Washington Elementary School (75.0%) and Grizzly Hill Elementary School (82.1%) meet this criterion.<sup>4</sup>

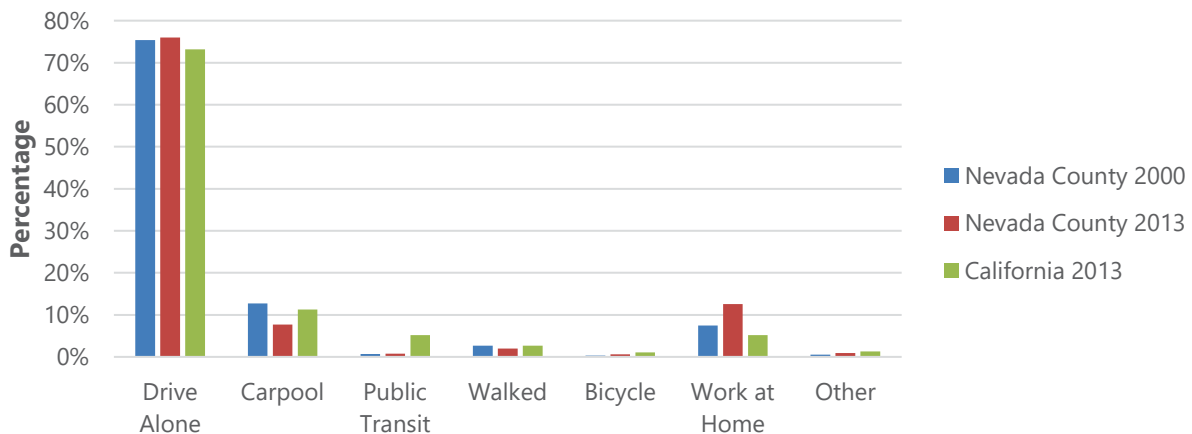
## 2.7 COMMUTING

Table 13 and Figure 8 compare the commuting mode split for Nevada County to the State of California, based on the 2009-2013 American Community Survey and show historical data from the 2000 U.S. Census.

Mode	Nevada County 2000	Nevada County 2013	California 2013
Drive Alone	75.4%	76.0% ± 1.8%	73.2% ± 0.1%
Carpool	12.7%	7.7% ± 1.2%	11.3% ± 0.1%
Public Transportation	0.7%	0.8% ± 0.4%	5.2% ± 0.1%
Walked	2.7%	2.0% ± 0.6%	2.7% ± 0.1%
Bicycle	0.3%	0.6% ± 0.4%	1.1% ± 0.1%
Work at Home	7.5%	12.6% ± 1.3%	5.2% ± 0.1%
Other	0.5%	0.9% ± 0.4%	1.3% ± 0.1%

Source: U.S. Census Bureau, 2009-2013 American Community Survey and 2000 U.S. Census.

**FIGURE 8: COMMUTE TO WORK MODE SPLIT**



Source: U.S. Census Bureau, 2009-2013 American Community Survey and 2000 U.S. Census.

<sup>3</sup> US Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

<sup>4</sup> California Department of Education 2015-2016 Free or Reduced Price Meal Data

As shown, most workers (83.7%) in Nevada County commute to work by car (alone or in a carpool), which is similar to the state as a whole. Since 2000, carpooling and walking to work have declined within the county, while working at home has increased.

Table 14 compares 2013 commute times within the county to 2000 data reported in the last RTP update. The mean travel time to work for Nevada County was reported as 24.6 ± 1.1 minutes, less than the state as a whole, 27.2 ± 0.1 minutes and comparable to the 2000 reported time, 26 minutes. The distribution of travel times is also similar to the last RTP update.

<b>TABLE 14: NEVADA COUNTY TRAVEL TIME TO WORK</b>			
<b>Travel Time</b>	<b>Nevada County 2000</b>	<b>Nevada County 2013</b>	<b>California 2013</b>
Less than 10 minutes	17.4%	19.0% ± 1.7%	10.7% ± 0.1%
10 to 14 minutes	18.8%	17.4% ± 1.9%	13.6% ± 0.1%
15 to 19 minutes	16.0%	17.1% ± 1.7%	15.5% ± 0.1%
20 to 24 minutes	14.2%	12.6% ± 1.5%	14.8% ± 0.1%
25 to 29 minutes	4.5%	5.6% ± 1.1%	5.7% ± 0.1%
30 to 34 minutes	8.4%	9.0% ± 1.4%	14.9% ± 0.1%
35 to 44 minutes	4.2%	4.9% ± 1.0%	6.5% ± 0.1%
45 to 59 minutes	5.7%	5.7% ± 0.9%	8.0% ± 0.1%
60 or more minutes	10.9%	8.6% ± 1.2%	10.1% ± 0.1%
Source: U.S. Census Bureau, 2009-2013 American Community Survey and 2000 U.S. Census.			

The place of work data from the 2009-2013 American Community Survey are shown in Table 15 for Nevada County and for California. Approximately 27% of Nevada County residents work outside the county, comparable to the 26% share determined from the 2000 U.S. Census and reported in the last RTP update.

<b>TABLE 15: PLACE OF WORK</b>		
<b>Place of Work</b>	<b>Nevada County (all workers)</b>	<b>California (all workers)</b>
County of residence	72.8% ± 1.9%	82.7% ± 0.1%
Another California county	24.1% ± 1.9%	16.8% ± 0.1%
Outside state of residence	3.1% ± 0.7%	0.5% ± 0.1%
Source: U.S. Census Bureau, 2009-2013 American Community Survey.		

U.S. Census Bureau Longitudinal Employer-Household Dynamics Data reported that of 31,773 workers (not including uniformed military, self-employed, or informally employed workers) living within the county in 2012, 46.6% worked within the county, 48.2% worked in another California county, 4.3% work in the state of Nevada, and 0.9% work elsewhere. Additionally, this data reported that of 24,682 workers (not including uniformed military, self-employed, or informally employed workers) commuting to jobs in Nevada County, 60.0% live in the county, 34.1% live in another California county, 5.4% live in Nevada, and 0.5% live elsewhere.

Vehicles per household data from the 2009-2013 American Community Survey are shown in Table 16. 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.

<b>Place of Work</b>	<b>2000</b>	<b>2013</b>
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.

## 2.8 HOUSING

Housing in Nevada County has increased 1.1% over the last five years as shown in Table 17.

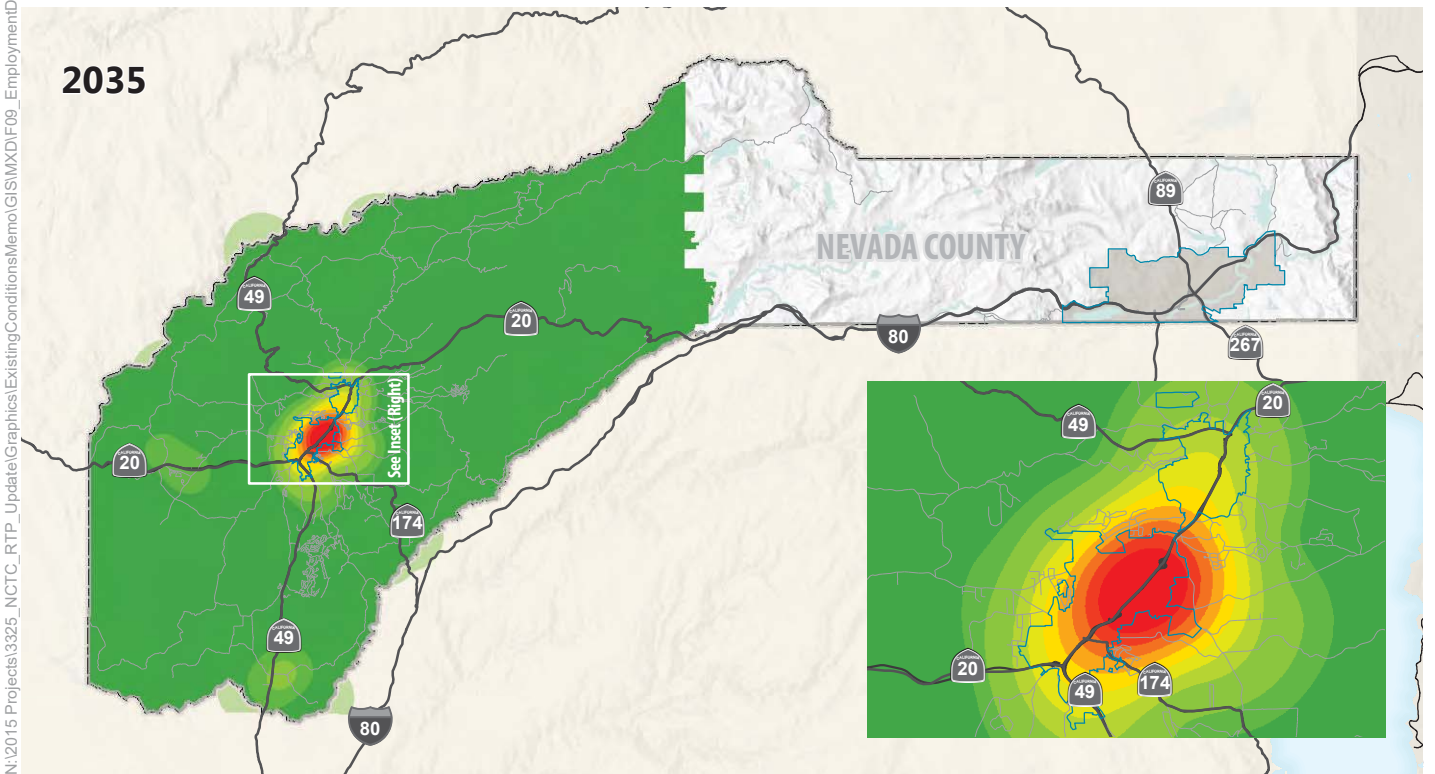
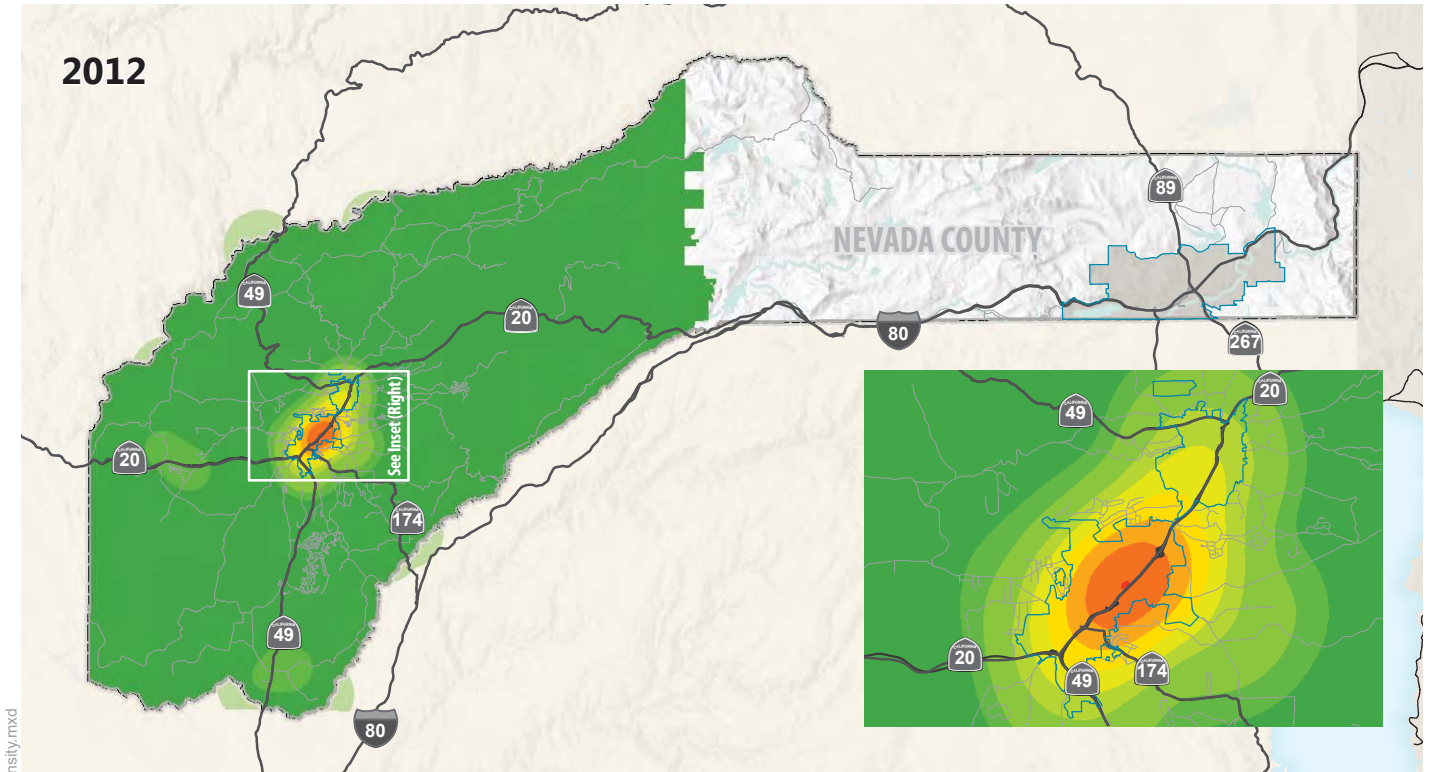
<b>Year</b>	<b>Single Family</b>	<b>Multi-Family</b>	<b>Mobile Homes</b>	<b>Total Housing Units</b>
2010	44,383	5,093	3,114	52,590
2015	44,877	5,151	3,154	53,182
Change	494 (1.1%)	58 (1.1%)	40 (1.3%)	592 (1.1%)

Source: State of California, Department of Finance, Report E-5, Table 2: Population and Housing Estimates, Sacramento, California, May 2015; California Department of Finance Demographic Research Unit.

## 2.9 LAND USE

Using the Nevada County travel model, which covers the western portion of the county, the distribution of employment and population was mapped for 2012 and 2035 (Figure 9 and Figure 10).



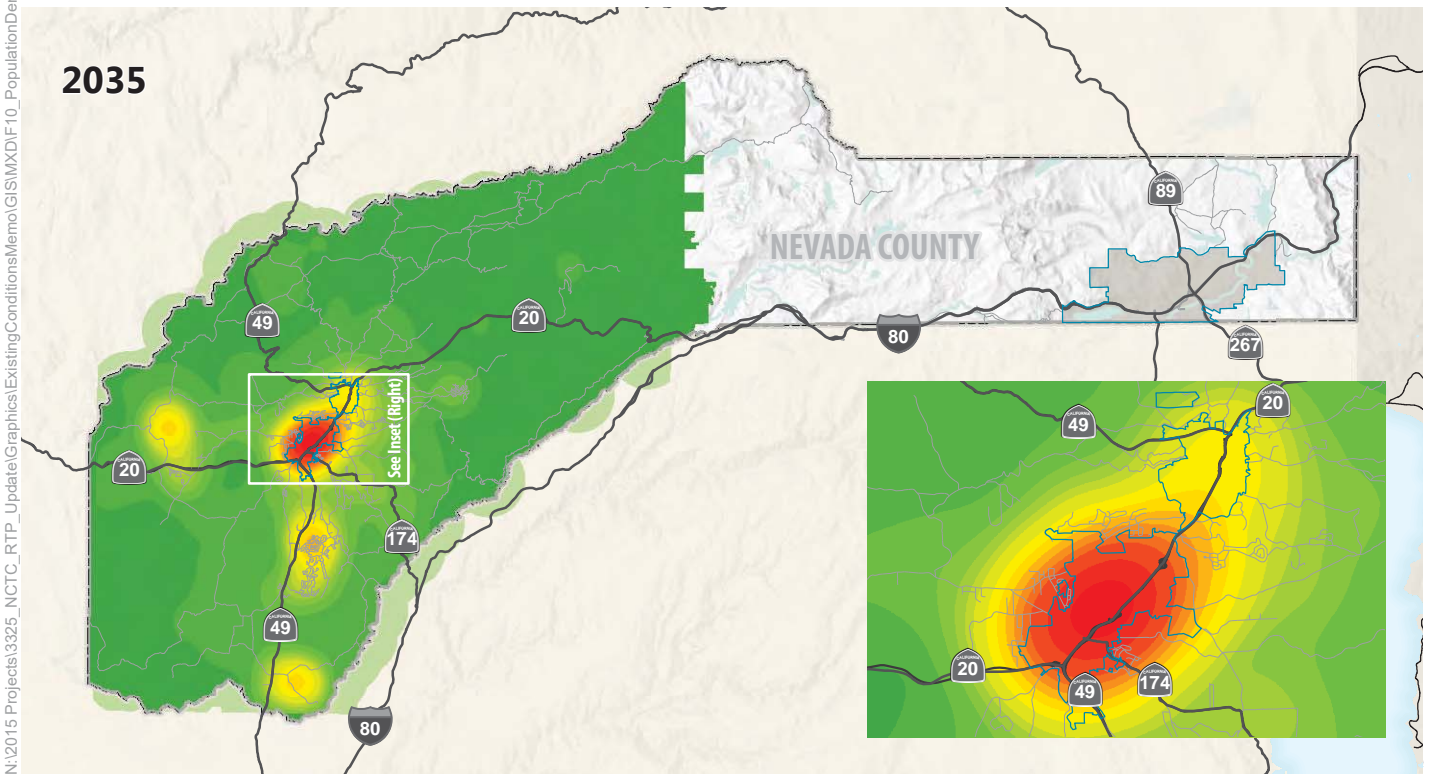
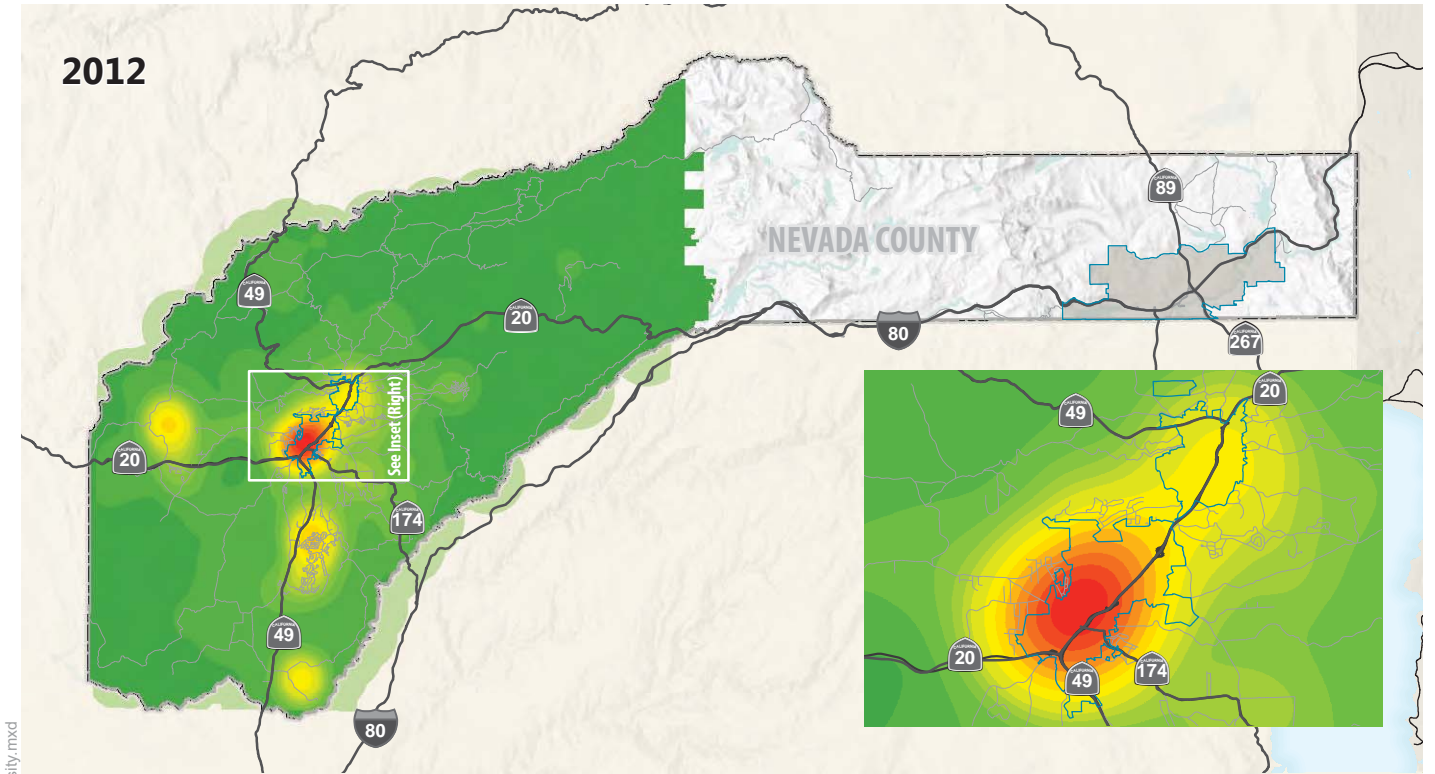


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Figure 9

Employment Density





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Figure 10

Population Density



## 2.10 OTHER TRENDS POTENTIALLY IMPACTING TRANSPORTATION DEMAND

Other trends and factors may impact future transportation demand in Nevada County:

- Labor force participation: a combination of an aging population and lingering effects of the recent recession may keep labor force participation below historic levels.
- Driving age population: a greater share of aging baby boomers is continuing to drive later in life than previous generations. The share of population of non-driving youth (age less than 16 years) within the county has also been decreasing and is expected to remain below the current level for the period of the RTP.<sup>5</sup> Thus, the overall driving age population share may increase.
- Non-auto mode options: in recent years the public has expressed increasing demand for biking, walking, and transit. This demand was also reflected during public input sessions for the RTP (discussed further in Section 3.3, Public Outreach).
- GDP and real income growth: economic growth has been limited in Nevada County since the recent recession. Many employers have reduced staffing, as shown in the labor force reductions over recent years. Though these decreases may slow, large increases are not expected.
- Suburban migration: though many Millennials have expressed strong demand for urban living, this demand may decrease as they start families. Additionally, Nevada County is likely to continue to draw retirees who are interested in more rural living, as indicated in the population projections discussed above. The county's small towns may also present a combination of moderately denser living (than typical suburbs) away from larger cities that could appeal to both Millennials and retirees.
- Telecommuting: census data has shown increasing share of working at home. Ongoing improvements in broadband access are likely to continue to support this trend.
- Internet shopping: internet shopping is already popular and may continue to increase with availability of services such as Amazon's next-day delivery on many items.
- Autonomous cars: availability of autonomous cars may increase the ease of driving, especially for senior drivers, and thus increase VMT.

These factors are only a few points in a range of possible outcomes. Changes in the factors listed above as well as other factors will likely influence VMT in the future; gas prices, economic outlook, and other historical factors have varied greatly in the past, and technologies such as autonomous cars have no direct historical

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<sup>5</sup> California Department of Finance, State and County Total Population Projection by Race/Ethnicity and Detailed Age, 2010 through 2060, December 15, 2014.

precedent. The likely outcome of any particular factor, and especially the combination of all factors, cannot be forecasted definitively.

## 3.0 POLICY ELEMENT

The purpose of the Policy Element is to set a policy framework by which the County's mobility needs are identified and met. The Regional Transportation Plan Policy Element identifies the transportation goals, objectives, performance measures, and policies to meet the needs of the region and reflects consideration of the region's environmental, social, and economic goals.

These goals, objectives, and policies are the foundation for long-term planning and the basis of the projects and actions in the Action Element of the RTP. Additionally, land use decisions and regional transportation policy are linked to each other and to the region's air quality.

The goals, objectives, and policies developed for this plan are the result of a public outreach process described below and collaboration with the decision-making entities in the county. These entities include, but are not limited to, the NCTC, the Nevada County Board of Supervisors and Planning Commission, and key representatives of Grass Valley, Nevada City, and Truckee.

### 3.1 PLANS REVIEWED

The Policy Element and the RTP as a whole have been developed to be consistent with other local, regional, and state plans and other policy documents. These plans and documents are summarized below.

#### 3.1.1 GENERAL PLANS

Nevada County and the cities of Grass Valley, Nevada City, and Truckee each have general plans with circulation elements containing goals and policies related to the regional transportation plan. The circulation elements of these plans were reviewed in detail for development of the RTP. The current general plans for each jurisdiction were adopted as follows:

- Nevada County: 1996, with Circulation Element updated in 2010; Housing, Noise, and Safety Elements updated in 2014; and Land Use Element updated in 2016
- Grass Valley: 1999, with Housing Element updated in 2014
- Nevada City: 1986, with Land use Element updated in 2009 and Housing Element updated in 2014
- Truckee: 2006, with Housing Element updated in 2015

### 3.1.2 CALIFORNIA TRANSPORTATION PLAN 2040

The California Transportation Plan 2040 was released in June 2016. The plan includes goals, policies, strategies, and performance measures that are applicable to the creation of the RTP. The plan's vision considers the three E's of sustainability: a prosperous economy, human and environmental health, and social equity. These principles are interconnected and support a sustainable transportation system that encourages economic vitality, protects natural resources, promotes the health and well-being of all Californians, and meets people's needs equitably. The plan's goals (G) and policies (P) are:

G1: Improve multimodal mobility and accessibility for all people

- G1-P1 Manage and operate an efficient integrated system.
- G1-P2 Invest strategically to optimize system performance.
- G1-P3 Provide viable and equitable multimodal choices, including active transportation.

G2: Preserve the multimodal transportation system

- G2-P1 Apply sustainable preventative maintenance and rehabilitation strategies.
- G2-P2 Evaluate multimodal life-cycle costs in project decision making.
- G2-P3 Adapt the multimodal transportation system to reduce impacts from climate change.

G3: Support a vibrant economy

- G3-P1 Support transportation choices that enhance economic activity.
- G3-P2 Enhance freight mobility, reliability, and global competitiveness.
- G3-P3 Seek sustainable and flexible funding to maintain and improve the system.

G4: Improve public safety and security

- G4-P1 Reduce fatalities, serious injuries, and collisions.
- G4-P2 Provide for system security, emergency preparedness, response, and recovery.

G5: Foster livable and healthy communities and promote social equity

- G5-P1 Expand collaboration and community engagement in multimodal transportation planning and decision making.
- G5-P2 Integrate multimodal transportation and land use development.

- G5-P3 Integrate health and social equity in transportation planning and decision-making.

G6: Practice environmental stewardship

- G6-P1 Integrate environmental considerations in all stages of planning and implementation.
- G6-P2 Conserve and enhance natural, agricultural, and cultural resources.
- G6-P3 Reduce greenhouse gas emissions and other air pollutants.
- G6-P4 Transform to a clean and energy efficient transportation system.

The RTP goals and policies support each of these goals.

### 3.1.3 CALIFORNIA STRATEGIC HIGHWAY SAFETY PLAN, VERSION 2

The California Strategic Highway Safety Plan was released in 2006. The plan's actions are tracked annually. The plan set a goal for the state of less than one roadway fatality per 100 million vehicle miles traveled. The plan also listed 16 challenge areas to reduce the number of fatalities. Key challenge areas from the plan that are relevant to Nevada County highways include the following:

- 2: Reduce the occurrence and consequence of leaving the roadway and head-on collisions
- 7: Improve intersection and interchange safety for roadway users
- 8: Make walking and street crossing safer
- 13: Improve bicycling safety

In 2013 the statewide highway fatality rate was 0.94 per 100 million vehicle miles traveled. Table 28 in the Action Element lists the rates for each state highway in Nevada County and compares them to comparable sections of highway statewide. The RTP goals and policies support improvements in these areas.

### 3.1.4 CALTRANS INTERREGIONAL TRANSPORTATION STRATEGIC PLAN

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," which are 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 like Nevada County, which serve significant tourism traffic, are at a disadvantage compared to other areas, because they have low population and roadway lane miles.

### 3.1.5 CALTRANS DISTRICT 3 SYSTEM MANAGEMENT AND DEVELOPMENT PLAN

The Caltrans District 3 System Management and Development Plan was released in 2013. Its policies include:

- An emphasis on safety across all modes
- Use of performance measures and threshold standards
- Linkage of land use and transportation

The plan also considers relinquishment of state highway system routes that primarily serve local and regional transportation needs, if the local jurisdiction is interested. The segment of SR 174 from the Placer County line to Auburn Street was identified as a candidate segment.

### 3.1.6 TRANS-SIERRA TRANSPORTATION PLAN

The Trans-Sierra Transportation Plan was released in 2015. It was created by a group of 11 California and Nevada counties (including Nevada County), federal and state agencies, stakeholders, and citizens from Northern California and Northern Nevada. It seeks to create a multimodal transportation system that will support a strong economy and meet the needs of its users while being respectful of the region's environment. The envisioned system includes:

- Major corridors binding the region together and connecting it to the rest of the nation, such as I-80, US-50, US-395, and I-580.
- Local streets and roads linking neighborhoods and providing access to businesses, employment, education, services, and amenities.
- Bicycle and pedestrian facilities providing healthy alternative mobility options consistent with a closer connection to beautiful surroundings.
- Integrated transit services offering residents and visitors real options for mobility both within and between communities and attractions.
- Projects and initiatives mitigating the impacts of the transportation system on fragile ecosystems and environment, thus ensuring that the quality of life for residents and the quality of experience for visitors remains intact for generations to come.



### 3.1.7 BAY TO TAHOE BASIN RECREATION AND TOURISM TRAVEL IMPACT STUDY

The Bay to Tahoe Basin Recreation and Tourism Travel Impact Study was released in 2014. The purpose of the study was to: evaluate the impacts of regional tourism travel on the highway system in four California Counties (Amador, El Dorado, Nevada, and Placer), evaluate the existing and future tourism market, associated impacts, and needs based upon existing conditions, and to provide an evaluation of existing transportation funding sources and programs and likely future funding opportunities. The study noted that tourism has significant impacts, such as congestion, on rural roads, yet funding is largely based on lane miles and resident populations. Thus, rural areas like Nevada County, which serve significant tourism traffic, are at a disadvantage compared to other areas, because they have low population and roadway lane miles. Study recommendations included the following:

- Changes to improve the visitor experience along the I-80 corridor, including better signage, transit access, and parking access.
- Pursuit of modifications to transportation funding formulas to include total number of users.
- Improvement information for travelers, including intelligent transportation systems and improved high-speed internet access.

### 3.1.8 PEDESTRIAN AND BICYCLE PLANS

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 goal and policy sections of these plans were reviewed in detail for development of the RTP.

### 3.1.9 PUBLIC TRANSPORTATION PLANS

NCTC is the regional planning agency responsible for allocating Transportation Development Act (TDA) funds, conducting the annual unmet transit needs process, and preparation of Transit Development Plans.

Consolidated Transportation Services Agencies (CTSAs) coordinate social services and carry out intents of the Social Services Transportation Improvement Act of 1979. The County of Nevada is the designated CTSA for Nevada County.

#### 3.1.9.1 Transit Development Plans

Five-year Transit Development Plans (TDPs) are an important planning tool used to analyze the current transit services and recommend improvements necessary to meet future demand. Transit Development Plans are generally regarded as the primary short-term planning guides for smaller transit systems and set a policy framework by which the County's mobility needs are identified and met.

The Western Nevada County TDP was updated in April 2016 and recommended several changes, including:

- Elimination of the outlying paratransit service area to focus resources on the ADA corridor.
- Continued support of mobility management under 211 Nevada County to provide the public with information on transportation resources and options.
- Exploration of a taxi voucher program.
- Improved driver recruitment to satisfy the large demand and short supply of drivers.
- Revising the riders guide to include bus stops.
- Fleet improvements for fixed route and paratransit vehicles
- Stop improvements.
- Bus security camera system, electronic farebox system, automatic voice annunciation, and other technology improvements.

The Eastern Nevada County TDP was updated in 2013 and recommended several changes, including:

- Consistent year-round fixed route service covering common commute times of 8 AM and 5 PM.
- Modifications to fixed routes and stops to improve efficiency.
- Modifications to paratransit service areas and hours to improve efficiency while maintaining level of service.

- Purchase of replacement vehicles to update an aging fleet and purchase of additional vehicles to support improved service levels.
- Installation of automatic vehicle location technology.
- Improved marketing strategies.

### **3.1.9.2 North Tahoe Truckee Transportation Vision Service Plan**

Transit agencies in the North Tahoe and Truckee region have collaborated to create a plan for integrated services. This plan was first released in 2013 and updated in February 2016. The plan includes increased service frequency, extended hours of service, common branding, and coordinated operations. Truckee Transit and Tahoe Area Regional Transit began operating under common branding in late 2015, and some service improvements have already been implemented.

### **3.1.9.3 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 (Table 18). As shown, 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.

**TABLE 18: RELATIVE TRANSIT NEEDS BY CENSUS TRACT**

Census Tract	Description	Index
7.01	Eastern Chicago Park / Banner Mtn.	100
6	Eastern Grass Valley	97
4.01	Lake Wildwood	93
5.01	Northern Grass Valley	91
4.02	Penn Valley / Rough & Ready	84
8.01	Northern Nevada City / SR 20	83
1.03	Lake of the Pines	82
8.02	Nevada City	80
1.02	Alta Sierra	77
5.02	Western Grass Valley	68
7.02	Western Chicago Park	57
9	Washington / North San Juan	51
1.04	La Barr Meadows	50
1.05	SR 49 Corridor	40
2	Southwest County	35
12.06	Central Truckee	35
3	Southern Grass Valley	25
12.03	Northern Truckee	25
12.05	Eastern Truckee	25
12.04	Western Truckee	18

Note: 100 is highest need, 0 is no need  
Source: Nevada County Coordinated Public Transit-Human Services Plan Update, 2014

The plan included the following recommended strategies:

- Expand transit options for eastern Nevada County residents.
- Expand transportation options for residents outside of western Nevada County’s fixed route service area and ADA corridor.
- Increase multimodal options in Nevada County.
- Increase marketing and education to encourage ridership on fixed route transit services.

### 3.1.10 CALIFORNIA STATE RAIL PLAN

The 2013 California State Rail Plan includes discussion of extension of the Capitol Corridor passenger rail service to Truckee/Tahoe and Reno/Sparks with up to two daily round trips. This 151-mile extension would augment the existing Amtrak California Zephyr service, which runs daily, and the Amtrak Thruway bus service, which connects Sacramento and Sparks with stops in Colfax, Truckee, and Reno.

### 3.1.11 OTHER PASSENGER RAIL STUDIES

In 1995, Caltrans completed a study of the potential for intercity rail operations between Sacramento and Reno. Key conclusions included:

- The extension is technically feasible.
- There is a potentially significant rail market for skiers.
- Lack of public funding for railroads will be a constraint to implementing service in this corridor.
- The development of passenger rail transportation as an alternative mode of travel to the Tahoe Basin and the Reno/Sparks area will provide improved access to world-renowned recreational attractions, help prevent environmental degradation, and will provide for the continued economic vitality of the region.

A study was initiated in 2002 by the Capitol Corridor Joint Powers Authority and the Placer County Transportation Planning Agency to explore the project further. However, the study was suspended in March 2005 as a result of Union Pacific Railroad's (UPRR's) decision to terminate additional network modeling or consider operation of new passenger train service to Reno. In this corridor, the tracks extending east through Donner Pass in the Sierra Nevada mountain range are owned by the UPRR and are heavily used for freight activity. Increased passenger rail service would require UPRR's cooperation, which has not been provided in previous study efforts. UPRR, the owner/operator of the rail right-of-way, declined to consider additional passenger rail operations (beyond the daily California Zephyr) in this heavily-utilized freight corridor.

UPRR has expressed concerns that adding more rail travel in this corridor may require infrastructure improvements due to the challenging alignment, steep grades, and constrained right-of-way in the Sierra Nevada. While adding one daily train does not appear to warrant major infrastructure projects, UPRR is reluctant to open the door to passenger rail service.

### 3.1.12 CALIFORNIA FREIGHT MOBILITY PLAN

The 2014 California Freight Mobility Plan (CFMP) seeks to enhance "economic competitiveness by collaboratively developing and operating an integrated, multimodal freight transportation system that provides safe, sustainable freight mobility. This system facilitates the reliable and efficient movement of freight and people while ensuring a prosperous economy, social equity, and human and environmental health." Its goals include economic competitiveness, safety and security, infrastructure preservation, and environmental stewardship.

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. The Union Pacific Railroad through Nevada County and I-80 are classified as Tier 1, while SR 20 and SR 49 between SR 20 and I-80 are classified as Tier 3.

### 3.1.13 AIRPORT PLANS

#### 3.1.13.1 Nevada County Airport Master Plan

On January 28, 1992, the Nevada County Airport Master Plan was adopted by the Nevada County Board of Supervisors. The significant project proposed in the Master Plan was extending the runway from 3,920 to 4,350 feet, which was completed in 1996. The airport is currently updating its layout plan to facilitate an additional extension of its runway.

#### 3.1.13.2 Truckee Tahoe Airport Master Plan

The Truckee Tahoe Airport Master Plan, updated in 2015, identified a number of short term and long term improvements, including:

- Addition of a multi-use hangar and expansion of the executive hangar
- Addition of a seasonal air traffic control tower
- Property acquisition
- Runway and taxiway extensions and improvements
- Addition of a transit center

#### 3.1.13.3 Airport Land Use Compatibility Plans

Both airports have airport land use compatibility plans. The Nevada County plan was updated in 2011, and the Truckee Tahoe plan was updated in 2016. The purpose of these plans is to promote compatibility between the airport and surrounding land uses. The plans have policies supporting this purpose.

The 2010 Nevada County Airport Land Use Compatibility Plan forecasts an increase in annual operations from 30,000 in 2010 to 60,000 in 2040. The 2016 Truckee Airport Land Use Compatibility Plan forecasts an increase in annual operations from 26,470 in 2013 to 31,139 in 2036.

### 3.1.14 TAHOE NATIONAL FOREST

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.)

The USFS Travel Management Rule from 2005 established three subparts as part of the Travel Management Process for National Forests:

- Subpart A – Administration of the Forest Transportation System. Tahoe NF released a Travel Analysis Report in June 2015. This report is a comprehensive review of all national Forest System roads within the forest. It does not include unauthorized roads. The report notes that funds for maintenance have been decreasing in recent years.
- Subpart B – Designation of Roads, Trails, and Areas for Motor Vehicle Use. A Record of Decision was released in September 2010 for Tahoe NF.
- Subpart C – Use by Over-Snow Vehicles. Tahoe National Forest is preparing an environmental impact statement for designation of over-snow vehicle use roads, trails and areas. A draft Over-Snow Vehicle Use Designation report was released in February 2015.

### 3.1.15 CALIFORNIA STATE WILDLIFE ACTION PLAN

The 2015 California State Wildlife Action Plan (SWAP) examines the health of wildlife and prescribes actions to conserve wildlife and vital habitat before they become scarce and more costly to protect. The plan also promotes wildlife conservation while furthering responsible development and addressing the needs of a growing human population. This plan was reviewed during preparation of the RTP. More specific reviews will be done in conjunction as part of the planning process for specific projects in the RTP.

## 3.2 CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

In 2006, the California State Legislature adopted Assembly Bill 32 (AB 32) known as the California Global Warming Solutions Act (Section 38560.5 of the Health and Safety Code). AB 32 establishes a cap on statewide GHG emissions and sets forth the regulatory framework to achieve the corresponding reduction in statewide emissions levels.

The transportation planning literature recognizes three interrelated components that contribute to transportation emissions reductions. Those components include changes in vehicle technology (cleaner

burning engines), alternative fuel sources, and vehicle use. The first two components are typically the responsibility of industry and national governmental interests. RTPAs and local governments have the ability to affect vehicle use by promoting transportation alternatives to the automobile, and by managing the demand for transportation. These efforts typically involve goals and policies and/or projects and programs focused on getting people out of their cars and into alternative modes of travel (mode shifting).

A 2008 report by the Victoria Transport Policy Institute titled "Smart Transportation Emission Reductions - Identifying Truly Optimal Energy Conservation and Emission Reduction Strategies," by Todd Lipman, states that most current transportation emission reduction programs focus on changing vehicle and fuel type rather than the amount people drive. Mileage reduction strategies tend to be ignored because many people assume that they are difficult to implement and may harm the economic well-being of consumers. However, the report also states that many high-mileage motorists would prefer to drive less and rely more on alternative modes, provided those alternatives are convenient, comfortable, and affordable. As with most rural counties, alternative modes are limited in Nevada County due to the challenges describe above and are not seen as a significant replacement to the automobile for economic, mobility, and geographic reasons. These factors and funding challenges similarly limit the availability of transit within Nevada County. Additionally, walking and bicycling are more difficult in many areas of the county due to hilly topography.

The California Air Resources Board (ARB) estimates VMT for each county. As reported in The California Almanac of Emissions and Air Quality, 2013 Edition, ARB estimates that total average daily VMT will increase from 3.121 million in 2015 to 3.858 million in 2035. Per capita VMT is expected to increase from 31.7 to 32.2 over the same period.

In January 2007, the Legislature asked the CTC to review the RTP Guidelines in order to incorporate climate change emission reduction measures. The request emphasized that RTPs should utilize models that accurately measure the benefits of land use strategies aimed at reducing vehicle trips. CTC staff established an RTP Guidelines work group to assist in the development of best practices for inclusion in the RTP Guidelines. The Addendum to the 2007 RTP Guidelines (May 29, 2008) provides several recommendations for consideration by rural RTPAs to address GHG. These recommendations are also consistent with the 2010 RTP Guidelines. The following strategies from the guidelines are applicable to Nevada County:

- Emphasize transportation investments in areas where desired land uses as indicated in a City or County General Plan may result in VMT reduction or other lower impact use.
- Consider shifting transportation investments towards improving and expanding urban and suburban core transit, programs for walkability, bicycling and other alternative modes, and transit access.



- Recognize the rural contribution towards GHG reduction for counties that have policies supporting development within their cities and protecting agricultural and resource lands.
- Consider transportation projects that increase connectivity or provide other means to reduce VMT.
- Include a VMT measurement as part of the environmental reporting requirements, accounting for area growth projections.

### 3.2.1 CLIMATE CHANGE AND ADAPTATION

Climate change is likely to have a number of impacts on Nevada County.<sup>6</sup> Precipitation is expected to decrease in total, but arrive during more intense storm events. These storm events increase the likelihood of flash floods, landslides, and infrastructure damage in susceptible areas. The storms observed in early 2017 are examples of such events. A storm system resulting from an atmospheric river brought over 25 inches in rain and caused over \$1.2 million in damage including a section of Maybert Road washing out in the town of Washington and damage to roads and culverts.<sup>7</sup>

Climate warming, drying, and the effect of increased lightning activity are also likely to increase the number and intensity of wildfires in the county. The fire season in California has begun earlier and ended later in recent years. Intensity of fires has also been increasing. In addition to direct damage to transportation infrastructure, fire may create indirect damage when burned slopes become susceptible to landslides during storm events following fires. Evacuation routes may need to be considered in future road planning, and demands on transportation related firefighting infrastructure, in particular the Nevada County Airport, which serves as a base for several firefighting aircraft, are likely to increase.

Increased temperatures as well as fires are also likely to reduce air quality in Nevada County. Fires directly reduce air quality primarily through the creation of particulate matter. Increased temperatures and sunlight also fosters the creation of ground-level ozone, a criteria pollutant, which already decreases air quality on many days during the summer.

Governmental action in preparation for or response to climate change may also directly influence transportation planning. Metropolitan Planning Organizations are already required to develop Sustainable Community Strategies in conjunction with their Regional Transportation Plans. Though RTPAs such as NCTC

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<sup>6</sup> References reviewed for this section include:

Caltrans, Addressing Climate Change Adaptation in Regional Transportation Plans, February 2013.

Transportation Research Board, Climate Change and Transportation, July 2012.

California Natural Resources Agency, 2009 Climate Adaptation Strategy, First Year Progress Report, 2010.

<sup>7</sup> Sean Powers and Trisha Tillotson, "Long-term transportation funding reform needed for California infrastructure," *The Union*, February 3, 2017.

are not currently required to develop such strategies, other requirements may be placed on regional transportation plans in the future.

Additionally, efforts to reduce greenhouse gas and criteria pollutant emissions through reductions in VMT are likely to be difficult due to the rural nature of much of the county and interregional travel. As noted in the 2010 RTP guidelines, rural areas have different challenges than urban areas to reduce regional transportation related greenhouse gas emissions. Lower land use densities, limited transit options, and higher VMT per household contribute to the challenges to reduce these emissions.

The guidelines encourage rural RTPAs to incorporate strategies to reduce GHG emissions as part of their planning process. More efficient vehicles and low-carbon fuel efforts being pursued at the state level will likely afford the greatest reduction in rural GHG emissions. Similarly, electric vehicles are an increasing part of the vehicle fleet; Nevada County already has a number of charging stations in Grass Valley, Truckee, Penn Valley, and along the I-80 corridor in eastern Nevada County. The low-density nature of most Nevada County development creates challenges for meeting access and mobility needs via non-automotive modes. As with most rural counties, alternative modes are limited in Nevada County due to the challenges describe above and are not seen as a significant replacement to the automobile for economic, mobility, and geographic reasons. These factors and funding challenges similarly limit the availability of transit within Nevada County. Additionally, walking and bicycling are more difficult in many areas of the county due to hilly topography. Overall, reductions in Nevada County VMT are likely to be modest.

## 3.3 PUBLIC OUTREACH

Public involvement is a major component of the transportation planning process. Every person in Nevada County is affected by transportation and, as such, is an important component of the transportation planning process. Public input was solicited via pop-up workshops at three street fairs and an online survey.

### 3.3.1 POP-UP WORKSHOPS

Three pop-up workshops (i.e., booths at public street fairs) where the public could learn about and provide input to the RTP process, were conducted as follows:

- Grass Valley Thursday Night Market (August 6, 2015)
- Truckee Thursdays (August 13, 2015)
- Nevada City Farmers Market (August 15, 2015)

During each event, NCTC and consultant staff talked to members of the public, solicited input through voting on priority posters comment cards, and directed the public to the project website, <http://nctcrtp.fehrandpeers.net/>, to complete an online survey and stay connected to the RTP update. Inputs were received as summarized in Table 19.

<b>Input</b>	<b>Grass Valley</b>	<b>Truckee</b>	<b>Nevada City</b>
Priority votes	213	83	279
Comment cards	15	7	9

The top concerns identified during the events were:

- Many respondents reported they would like to take transit to destinations outside the area. This issue was the top concern overall. Similarly, many respondents reported that the bus generally does not go where they would like it to go. These responses were consistent in all three cities.
- Air pollution, including ground level ozone and greenhouse gas emissions, was the second biggest concern overall, especially in Nevada City and Grass Valley.
- The third biggest concern overall was feeling unsafe biking, most strongly in Grass Valley and Nevada City. Where the question was asked (only in Nevada City), strong support was also expressed for more bike lanes and facilities.
- The fourth concern overall, and the second biggest concern in Truckee, was missing sidewalks, which force pedestrians to walk on the road. Walking conditions, including poor condition sidewalks, were a common issue in all three cities.

Several other key points were identified:

- Respect among different user groups (pedestrians, bicyclists, and drivers) was also a common concern.
- Respondents were generally satisfied with the condition of the roads.
- Respondents in all three cities were willing to pay extra for better transportation facilities by large margins (8 to 1 overall).

When asked what they like about transportation in Nevada County, respondents in all three cities reported feeling safe driving as well as walking. Truckee respondents also reported feeling safe biking. Grass Valley and Nevada City respondents also reported that they rarely encountered congestion and can easily drive to where they need to go.

Comment card responses were consistent with voting results. Comment cards frequently had suggestions for improvements at specific locations.

Public outreach results are provided in more detail in Appendix B.

### 3.3.2 ONLINE SURVEY

An online survey was established on the project website. The website was publicized in *The Union* and on YubaNet in addition to the workshops.

The survey solicited input about transportation needs and preferences as well as demographic input about the survey respondents. Thirty-two responses were received as of October 6, 2015.

Demographically, most respondents were in the 35 to 44 and 55 to 64 age ranges, and nearly 70% were female. Nearly one-third of respondents live in the 95945 zip code (Grass Valley and areas to the east), and nearly another third live in the 95959 zip code (Nevada City and areas to the north and west).

Concerns identified in the survey were generally similar to those expressed during the public workshops. However, the following additional issues were also raised in the online survey:

- Respondents expressed mixed concerns about driving in the region. When asked what they like about transportation in the county, the lack of congestion and feeling safe driving were top responses. However, the top concern among drivers was safety on state highways.
- Bicyclists expressed a desire for more bike parking.

## 3.4 ISSUES

### 3.4.1 STATEWIDE ISSUES

In its 2014 annual report, the CTC identified two core issues for 2015 and beyond that have significance for transportation planning in California:

- Reform: reforms to management of the transportation system are necessary to ensure that decisions made today promote efficient and effective actions and solutions. Reforms should provide for efficiencies in utilization of declining resources, encompassing asset management and preservation and project selection. Processes should be coordinated among programs, be transparent, and articulate their benefit to the public. These processes should be designed to provide for a multimodal perspective of corridor investments and to ensure that funds are directed to those transportation projects offering the greatest potential for achieving desired outcomes.
- Revenue: transportation revenues, primarily from taxes on fuel sales, have not kept pace with inflation, and these revenues will continue to be impacted as vehicles continue to become more

fuel efficient or use alternative fuels. Declining revenue only increases the importance of accountability and efficiency in transportation processes and investment decision making.

- Transportation funding has continued to be challenging at most levels of government. While local jurisdictions in the County have had success with sales tax measures to fund transportation, state funding continues to be short of needs.
- At the state level, Caltrans has estimated that approximately \$8 billion is required annually over the next ten years to address highway system needs; however, only \$2.3 billion per year is expected to be available.<sup>8</sup> As of late November 2015, the 2016 State Transportation Improvement Program (STIP) Fund Estimate indicated that only \$46 million was available statewide to fund new projects.<sup>9</sup> In January 2016, the California Transportation Commission approved an estimate of projected funding reduced by \$754 million over the next five years, noting that this estimate was “the most optimistic scenario,” and that “even more Draconian cuts” may be made next year if the Legislature fails to reach agreement on a number of reforms and new funding increases currently under consideration. The state gas tax has dropped by six cent per gallon over the last few years and is expected to drop another two cents per gallon this year, with each penny in reduction amounting to a reduction of about \$140 million per year in total revenue. The commission expects to rescind funding previously committed to projects.<sup>10</sup>
- At the national level, the Fixing America’s Surface Transportation (FAST) Act was passed in 2015. The bill covers fiscal years 2016 to 2020 and is the first long-term transportation bill in a decade. However, though funding was provided through 2020, no increase to the gas tax was included, and funding shortfalls are likely to continue thereafter.<sup>11</sup>

### 3.4.2 REGIONAL AND LOCAL ISSUES

In addition to collecting input from the public as described in the public outreach section above, planning or community development directors from the four jurisdictions were contacted to understand the primary concerns relevant to the RTP in their areas.

All inputs were evaluated and compiled as discussed below. The primary local and regional issues continue to be safety, maintaining an acceptable level of service on the existing road system, and system preservation (maintenance and rehabilitation). There has been limited population growth in the county and subsequently operational capacity increasing projects have not been the priority in the County. Having adequate

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<sup>8</sup> Caltrans, Caltrans Releases Plans Detailing Critical Infrastructure Funding Shortfalls Facing California’s Highway System, May 8, 2010, <http://www.dot.ca.gov/hq/paffairs/news/pressrel/2015/15pr042.htm>.

<sup>9</sup> Daniel B. Landon, Public Hearing: 2015/16 Regional Transportation Improvement Program, Nevada County Transportation Commission, November 6, 2015.

<sup>10</sup> California Department of Transportation, CTC News Release: State Body Slashes Transportation Funding, January 22, 2016, <http://www.dot.ca.gov/hq/paffairs/news/pressrel/2016/16pr004.htm>.

<sup>11</sup> U. S. Department of Transportation, The Fixing America’s Surface Transportation Act or “FAST Act,” Updated January 12, 2016, <https://www.transportation.gov/fastact>.

transportation revenues to address future needs is a key concern, especially for completing operations and safety improvements in the SR 49 corridor.

Table 20 provides a non-prioritized summary of some of Nevada County’s most important transportation issues.

<b>TABLE 20: REGIONAL AND LOCAL TRANSPORTATION ISSUES</b>		
<b>Facility/Element</b>	<b>Issues/Needs</b>	<b>Comments</b>
<b>ROADS AND HIGHWAYS</b>		
State Highway System	<ul style="list-style-type: none"> <li>• LOS E is expected to persist on SR 49 on the two and three lane highway sections between Combie Road and Grass Valley and on portions of SR 20 west of Grass Valley.</li> <li>• Operation improvement to address forecasted increases in interregional travel and goods movement</li> <li>• Implementation of projects identified in the SR 49 Corridor System Management Plan (CSMP) to enhance safety and operations, including reduction of collisions and fatalities</li> <li>• I-80 and SR 89 ongoing maintenance related to high elevation snow and snow removal</li> </ul>	<ul style="list-style-type: none"> <li>• Though non-automotive transportation modes are sought by many in the community, the rural and low density nature of the county will make the automobile the primary transportation mode for the foreseeable future</li> </ul>
County Roads	<ul style="list-style-type: none"> <li>• Ongoing investment is needed to maintain the condition of county roads and to achieve best management practice standards to preserve existing transportation investments</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance on county roads is important because they provide the connections within the region and to the state highway and freeway system</li> <li>• Although county roads are currently overall in good condition with a PCI of 71, this is still below the best management practice of at least 80 to minimize deterioration and reduce the cost of preserving roadway investments</li> </ul>
City Streets/Local Roads	<ul style="list-style-type: none"> <li>• Many city streets are in poor condition</li> <li>• New development is limited, and consequently funding from development fee programs is limited</li> </ul>	<ul style="list-style-type: none"> <li>• Cities are working to make up for years of deferred maintenance using local revenues to leverage other funding sources; this is an ongoing process that will take many years to complete</li> <li>• Sales tax measures are being used to add to funding</li> </ul>

**TABLE 20: REGIONAL AND LOCAL TRANSPORTATION ISSUES**

<b>Facility/Element</b>	<b>Issues/Needs</b>	<b>Comments</b>
Historic and Environmental Preservation	<ul style="list-style-type: none"> <li>The historic environment of the entire county contains many resources that must be preserved, not only for their inherent value but for their economic benefit</li> <li>Similarly, the natural beauty and environmental wealth of the county is a great benefit and attraction valued by both residents and visitors</li> </ul>	<ul style="list-style-type: none"> <li>All maintenance, changes, and improvements to the transportation system must consider these priorities</li> </ul>
<b>PUBLIC TRANSPORTATION</b>		
Service	<ul style="list-style-type: none"> <li>Residents desire greater availability and local service</li> <li>Residents would like transit access to destinations across the county and outside the county</li> <li>Several areas have high levels of unmet needs for elderly and low-income households</li> <li>Rail service to the Bay Area, Sacramento, and Reno would serve both resident and tourists</li> <li>Due to delays along the route, Amtrak service often operates substantially behind schedule, particularly in the westbound direction</li> </ul>	<ul style="list-style-type: none"> <li>The rural nature of the county is a challenge for meeting desired service</li> <li>Limited resources will continue to need to be directed where they can be used most efficiently</li> <li>Improved and increased rail service could help meet needs for connectivity to destinations outside the county, but is unlikely to be available within the time period of the plan</li> </ul>
Equipment and Funding Needs	<ul style="list-style-type: none"> <li>Inadequate funds to purchase equipment</li> <li>Fares cover low share of costs</li> <li>Operational efficiency needed to maximize use of limited resources to serve most population</li> </ul>	<ul style="list-style-type: none"> <li>Investment is needed to replace aging equipment and support desired service expansion</li> <li>Expensive to serve needs in remote low-density areas</li> </ul>
<b>BICYCLISTS AND PEDESTRIANS</b>		
Bikeways	<ul style="list-style-type: none"> <li>Many residents feel unsafe bicycling on local roads</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of the bicycle plan is ongoing</li> <li>Greater funding could increase the rate of implementation</li> </ul>
Sidewalks and Paths	<ul style="list-style-type: none"> <li>Many residents are concerned about missing sidewalk</li> <li>Many existing sidewalks are in poor condition</li> </ul>	<ul style="list-style-type: none"> <li>The sidewalks in the older area of the cities are in poor condition</li> <li>Many areas outside of the downtown districts were developed without sidewalks</li> <li>Implementation of the pedestrian plan is ongoing</li> </ul>
User Behaviors	<ul style="list-style-type: none"> <li>Many residents are concerned about the respect shown among different user groups: drivers, bicyclists, and pedestrians</li> </ul>	<ul style="list-style-type: none"> <li>Concerns about politeness and following the law exist in all directions among these groups</li> </ul>

**TABLE 20: REGIONAL AND LOCAL TRANSPORTATION ISSUES**

Facility/Element	Issues/Needs	Comments
<b>AIR QUALITY AND GREENHOUSE GAS EMISSIONS</b>		
Ozone and CO <sub>2</sub>	<ul style="list-style-type: none"> <li>Air quality, especially ground-level ozone, is a problem in the region</li> <li>Many residents are concerned about pollution and greenhouse gas emissions</li> <li>Telecommute alternatives are limited in many rural areas of the county due to the lack or expense of broadband service</li> </ul>	<ul style="list-style-type: none"> <li>The air quality in and around the County largely results from Sacramento and San Francisco region emissions</li> <li>Though local ability to influence air quality is small, it is still incumbent for the region to do its part to reduce emissions</li> <li>Wider broadband availability, in addition to providing commute alternatives, may be of wider economic benefit to the county</li> </ul>

### 3.5 GOALS, OBJECTIVES, AND POLICIES

The goals, objectives, and policies in the 2016 RTP are intended to guide the development of the transportation system and improve the quality of life for the citizens of Nevada County. Comprehensive goals, objectives, and policies that meet the needs of the region and are consistent with the County’s regional vision and priorities for action have been developed for this RTP.

- Goals are a vision of circulation conditions toward which the County will direct planning and implementation. A goal is the end toward which effort is directed; it is general and timeless.
- Objectives are specific conditions that represent intermediate steps in attaining goals; several objectives can relate to a single goal. An objective is a point to be attained, and the best objectives are measureable. They are capable of being quantified and realistically attained considering probable funding and political constraints. Objectives represent levels of achievement in movement toward a goal. Objectives may be tied to specific performance measures.
- Policies are specific statements that guide decision-making and suggest actions to be carried out to meet objectives and attain goals. Policies reflect all relevant effects, including the natural environment, social, and economic factors. Together, policies serve as a planning guideline for local and state officials when making decisions.

Nevada County is typical of many rural counties in California in that the County’s existing transportation system and widely scattered population, topography, and lack of funding limit alternative solutions to transportation-related problems. The automobile is the primary mode of moving people in the county, and trucking is the primary mode of moving goods and commodities. The use of other modes of transportation has been limited because of lack of facilities, distance between communities, and lack of an economic base to provide support.



A transportation system provides mobility to sustain social, economic, and recreational activities. An improperly developed transportation system can result in ineffective mobility and cause adverse and undesirable conditions, such as safety hazards, long delays, air pollution, and unnecessary energy consumption. The goals, objectives, policies, and implementation measures of this RTP are intended to guide the development of a transportation system that will maintain and improve the quality of life in Nevada County over the next 20 years. To this end, consistency with the California Interregional Transportation Strategic Plan, the California Transportation Plan, and the California Strategic Highway Safety Plan strategies are important parts of the overall goals and policies of this RTP. In addition, the 2010 RTP Guidelines for addressing GHG emissions and VMT reduction is considered as part of the overall transportation investment strategies for the plan.

The goals, objectives, and policies for each component of the Nevada County Transportation System are provided below. They cover both short-range and long-range desired outcomes. They are consistent with the policy direction of the General Plans for Nevada County and the cities of Grass Valley, Nevada City, and Truckee, the updated transit policies for western and eastern Nevada County, the bicycle and pedestrian plans for Nevada County and Truckee, and the federal funding bill Fixing America's Surface Transportation (FAST) Act. They also reflect input provided from the public. Given the limited transportation dollars available, the goals, objectives, and policies reflect a balanced approach and focus on the most feasible desired outcomes.

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

- Objective
  - 1.A Improve safety
  - 1.B Maintain levels of service adopted by local jurisdictions.
- Policies
  - 1.1 Coordinate with Caltrans and the SR 49 Stakeholders Committee to ensure development, implementation, and funding of projects within the SR 49 Corridor System Management Plan (CSMP) that improve safety and operations.
  - 1.2 Work with both the public and private sectors to enhance transit, ridesharing, telecommuting, and other means of increasing vehicle occupancy and reducing congestion on the regional roadway network.
  - 1.3 Program improvements that support the planned development of the region in a coordinated manner within the framework of the local general plans.

- 1.4 Pursue new sources of funds for maintenance, expansion, and improvement of transportation facilities and services
- 1.5 Educate the public about the limitations of state and federal transportation funding and the need to seek new revenue sources for transportation projects.
- 1.6 Provide jurisdictions technical support for local roadway improvement efforts through transportation studies and analyses to meet plan goals, as requested.
- 1.7 Improve the provision of, and accessibility to, traveler information systems.

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

- Objectives
  - 2.A Reduce dependence on the automobile by emphasizing transit, ridesharing, working from home, and pedestrian and bicycle travel
  - 2.B Create bicycle, pedestrian, and transit networks that provide access and connections between key destinations including schools and commercial centers.
  - 2.C Support safe aviation access at our airports.
- Policies
  - 2.1 Maintain existing and proposed facilities for pedestrians, bicyclists, and motorists, and regularly clear these facilities of debris.
  - 2.2 Support roadway and street designs that avoid bicycle-auto, pedestrian-auto, and bicycle-pedestrian conflicts.
  - 2.3 Maintain and improve general public transportation services within Grass Valley and between Grass Valley and Nevada City.
  - 2.4 Maintain and improve specialized transportation services directed for the elderly and handicapped in Nevada County.
  - 2.5 Support the funding of operational improvements, maintenance, and modernization of public transit services and facilities.
  - 2.6 Encourage transit services along the SR 49 corridor as recommended in the State Route 49 Corridor System Management Plan.
  - 2.7 Develop connections between the eastern and western County and usable commuter service to neighboring regions by expanding and connecting transit and rail networks.

- 2.8 Annually conduct the Unmet Transit Needs process in accordance with Section 99401.5 of the Public Utilities Code and address unmet needs.
- 2.9 Encourage jurisdictions to review and assess the impact of new development proposals on transit system.
- 2.10 Encourage jurisdictions to consider the proximity to transit and multi-modal facilities when siting educational, social service, and major employment and commercial facilities.
- 2.11 Encourage the completion of existing non-motorized transportation systems and facilities (including bikeways and sidewalks), with an emphasis on connectivity and safety.
- 2.12 Encourage improved pedestrian facilities in high density areas.
- 2.13 Existing general aviation facilities should be maintained and improved. Participate with the state in development of the California Aviation System Plan as a means of planning for future development of aviation facilities.
- 2.14 Review development proposals for consistency with adopted Airport Land Use Compatibility Plan to identify potential safety issues and conflicts.
- 2.15 Encourage increased passenger service on existing rail lines by participation in regional rail studies and seeking improvements to existing rail transportation facilities within the County.
- 2.16 Coordinate with local transportation management associations and other appropriate agencies to improve existing Transportation System Management and Transportation Demand Management Programs.

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

- Objective
  - 3.A All projects in the RTP are consistent with management and conservation strategies of regional resources contained in the General Plans.
  - 3.B Reduce regional emissions of criteria pollutants and greenhouse gases.
- Policies
  - 3.1 Establish and protect "scenic highways" in accordance with local general plans.
  - 3.2 Assist the Northern Sierra Air Quality Management District with the development of transportation control measures that will be needed to meet the required emission reductions of the California Clean Air Act.
  - 3.3 Assist in the implementation of transportation control measures as requested by the cities of Grass Valley and Nevada City, the Town of Truckee, and Nevada County.

- 3.4 Ensure transportation facilities are compatible with adjacent land uses, management, and conservation strategies of the jurisdictions' general plans.
- 3.6 Support transportation projects that minimize vehicle emissions while providing cost effective movement of people and goods.
- 3.7 Support efforts to reduce pollution within the County as well as in the upwind emitting regions of the Sacramento and San Francisco Bay areas.

**Goal 4.0 Develop an economically sustainable transportation system.**

- Objectives
  - 4.A Minimize the capital and operating costs of all travel modes.
  - 4.B Balance farebox recovery with transit service.
- Policies
  - 4.1 Support innovative alternative transportation improvements that provide equivalent solutions or benefits at a reduced cost compared to accepted standard improvements.
  - 4.2 Require new development and private sector activities to fully mitigate their impacts to the transportation system through the provision of streets and roads, transit, pedestrian, and bicycle facilities as planned by local agencies.
  - 4.3 Support federal legislation increasing funds available for all transportation modes by formal resolution and petitioning local representatives in Congress.
  - 4.4 Encourage responsible agencies to consider formation of assessment districts for assisting in the financing of projects and programs included in the Regional Transportation Plan, when feasible.
  - 4.5 Develop viable alternative fund sources such as a local transportation sales tax, local option motor vehicle fuel tax, public/private partnerships, peak hour congestion pricing, and bond measures.
  - 4.6 Facilitate the equitable distribution of Surface Transportation Program funds among the County of Nevada, Town of Truckee, and cities of Grass Valley and Nevada City.
  - 4.7 The fares on all public transportation systems should be set to minimize the subsidy per ride, provided the amount of the fare does not cause major reductions in ridership.
  - 4.8 Support continued return of fair share of motor vehicle fuel taxes to local agencies in Nevada County.
  - 4.9 Withhold Transportation Development Act allocations to a local entity, if the entity's proposed expenditures are not in conformity with the Regional Transportation Plan.

- 4.10 Maximize use of federal and state transportation funding sources and advocate for full funding of transportation programs, including the State Transportation Improvement Program (STIP).
- 4.11 Work with the California Transportation Commission, Caltrans, jurisdictions, and other regional agencies to maximize allocations of statewide funds, such as, State Highway Operation Protection Program (SHOPP) and Interregional Transportation Improvement Program (ITIP), for Nevada County.
- 4.125 Work with local, state, and federal officials to stop attempts to divert or reduce transportation funding.
- 4.13 Construction of additional streets and roads with public funds should be secondary to improving, maintaining, and realigning existing streets and roads, unless determined to be necessary for safety, operational improvements, or facilitate implementation of adopted General Plans.
- 4.14 Fund maintenance at an appropriate level to minimize future repair and replacement costs.

### 3.5.1 PERFORMANCE MEASURES

Performance measures connect to key goals and objectives for the RTP and provide quantifiable evidence of the consequences of decisions or actions. In the context of the RTP, they predict, evaluate, and monitor the extent that transportation systems accomplish public objectives. Performance measures can be quantitative (e.g. number of accidents) or qualitative (e.g. historic character). Performance measures can also be measured (e.g. traffic volume) or modeled (e.g. vehicle miles traveled).

Performance targets provide specific metrics by which progress of the RTP towards its goals can be measured. NCTC developed targets for each performance measure and also identified the current status of each in Nevada County.

NCTC led the recently completed Rural County Taskforce Performance Indicator Study. This study evaluated the performance measures documented in the San Diego Association of Governments (SANDAG) performance measure study in light of the particular needs of rural and small urban areas. The recommendations of this study were used in creating the performance measure recommendations for the NCTC RTP update.

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law and started a process that could fundamentally change transportation impact analysis as part of CEQA compliance. These changes will include elimination of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts in many parts of California (if not statewide) and is elevating traffic safety as an analysis topic under CEQA. The "Preliminary Discussion Draft of Updates

to the CEQA Guidelines Implementing Senate Bill 743," released in August 2014, recommend the use of VMT in place of auto delay and LOS, so VMT is included as a performance measure, as well as auto delay and LOS, which are still necessary to support General Plan consistency findings under CEQA. In early 2016, the Governor's Office of Planning and Research (OPR) released the second of guidelines for public review. Based on input received, OPR will likely make one more set of revisions and submit the final Guidelines to the Natural Resource Agency.

Table 21 presents the goals, objectives, performance measures, and performance targets for the RTP.

**TABLE 21: GOALS, OBJECTIVES, PERFORMANCE MEASURES, AND PERFORMANCE TARGETS**

Number	Objective	Performance Measures	Intended Direction	Target	Current Measure and Trend
<b>1.0</b>	<b>PROVIDE FOR THE SAFE AND EFFICIENT MOVEMENT OF ALL PEOPLE, GOODS, AND SERVICES ON THE ROADWAY NETWORK.</b>				
1.A	Improve safety	Number of collisions by mode	↓	0 pedestrian, bicycle, and fatal collisions 2%/year decrease in injury and total collisions	922 Total 13 Pedestrian 11 Bike 15 Fatalities 478 Injuries (2013) All decreasing vs. 2012 <sup>1</sup>
1.B	Maintain levels of service adopted by local jurisdictions	Peak hour level of service	↑ if below target ↔ if at target	Varies by road and jurisdiction, but generally D	Western Co 2012 model generally meets D with a few exceptions (E Main St, SR 49 GV to Combie, SR 20 GV to Rough and Ready Hwy) Forecasted to worsen in some areas by 2035 (See Figure 12 and Figure 13)
<b>2.0</b>	<b>CREATE AND MAINTAIN A COMPREHENSIVE, MULTI-MODAL TRANSPORTATION SYSTEM TO SERVE THE NEEDS OF THE COUNTY.</b>				
2.A	Reduce dependence on the automobile by emphasizing transit, ridesharing, working from home, and pedestrian and bicycle travel	Journey to work mode share	↓ Drive alone ↑ Other modes	71% Drive alone 29% Other modes	76% drive alone 24% other modes Trend is flat vs. 2000 (See Table 13)
2.B	Create bicycle, pedestrian, and transit networks that provide access and connections between key destinations including schools and commercial centers	Percent of planned sidewalk network completed Percent of planned bicycle network (shared use paths, bike lanes, and bike routes) completed Number of transit boardings	↑ ↑ ↑	2% increase/year 2% increase/year 2% increase/year	69% as of 2011 <sup>2</sup> Shared use paths 42% Bike lanes 44% Bike routes 12% as of 2015 <sup>3</sup> 252,567 FY 2014/2015 (See Table 38)
2.C	Support safe aviation access at our airports	Landings as a share of capacity	↓ if near or at capacity	<100% on days other than holidays or fire operations	Nevada County Airport: 10% annual (est. 2015) but near capacity during some fire ops <sup>4</sup> Truckee Airport: 12% annual (2012), but near capacity holiday periods <sup>5</sup>

**TABLE 21: GOALS, OBJECTIVES, PERFORMANCE MEASURES, AND PERFORMANCE TARGETS**

Number	Objective	Performance Measures	Intended Direction	Target	Current Measure and Trend
		Accidents and incidents	↓	0 accidents or incidents	Nevada County Airport: 2 (2014) Truckee Airport: 3 (2014) Increase from 2013 (0/2) <sup>6</sup>
<b>3.0</b>	<b>REDUCE ADVERSE IMPACTS ON THE NATURAL, SOCIAL, CULTURAL, AND HISTORICAL ENVIRONMENT AND THE QUALITY OF LIFE.</b>				
3.A	All projects in the RTP are consistent with management and conservation strategies of regional resources contained in the General Plans	Check each project against applicable general plan policies	↑	100%	100% <sup>7</sup>
3.B	Reduce regional emissions of criteria pollutants and greenhouse gases	Greenhouse gas emissions	↓	2.5% reduction/yr	Estimates: 2010: 3,850 tons CO <sub>2</sub> /day, 320 tons CH <sub>4</sub> /day 2030: 5,250 tons CO <sub>2</sub> /day, 120 tons CH <sub>4</sub> /day <sup>8</sup>
		Ozone precursors	↓	2.5% reduction/yr	Reactive organic gases: 2.789 tons/day (2015), 1.736 tons/day (2035) 2.43% reduction/yr estimated through 2035 <sup>9</sup>
<b>4.0</b>	<b>DEVELOP AN ECONOMICALLY SUSTAINABLE TRANSPORTATION SYSTEM.</b>				
4.A	Minimize the capital and operating costs of all travel modes	Pavement Condition Index (PCI)	↑	71	71 in 2014 Slight decrease from 2012 (72) <sup>10</sup> [see discussion]
		Sidewalk condition (good to poor, qualitative) by %	↑	[see discussion]	
4.B	Balance farebox recovery with transit service	Number of transit boardings	↑	2% increase per year	252,567 FY 2014/2015



**TABLE 21: GOALS, OBJECTIVES, PERFORMANCE MEASURES, AND PERFORMANCE TARGETS**

Number	Objective	Performance Measures	Intended Direction	Target	Current Measure and Trend
Sources:					
1	California Highway Patrol Statewide Integrated Traffic Records System, 2016				
2	Nevada County Pedestrian Master Plan, 2011				
3	Nevada County Bicycle Master Plan with updates, 2016				
4	Personal communication with Lee Ocker, November 20, 2015				
5	Personal communication with Hardy Bullock, November 24, 2015, Truckee Tahoe Airport Master Plan, July 2015				
6	NTSB Aviation Accident and Incident Data System, November 19, 2015				
7	Personal communication with Mike Woodman, November 2015				
8	2010 NCTC RTP Draft Supplemental Environmental Impact Report				
9	California Air Resources Board 2013 Almanac Standard Emissions Tool				
10	2015 Rural Counties Pavement Needs Assessment, February 2015				
11	Truckee Transit data, FY 2013/14 and 2014/2015; Personal communication with Kelly Beede, November 19, 2015; Nevada County Transit data, FY 2013/14 and 2014/2015				

Discussion of these performance measures and targets is provided below:

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

These metrics provide a comprehensive view of the safety of all road users, including drivers, bicyclists, and pedestrians. Additionally, peak hour level of service is a common operational metric used by the general plans for Nevada County, Grass Valley, and Truckee. Nevada City does not have an LOS policy, but instead seeks to maintain "reasonable traffic levels."

*Performance Measure 1A: Number of collisions by mode*

The target of zero pedestrian, bicycle, and fatal collisions is aggressive, but ultimately achievable given low absolute numbers. From 2011 to 2013, decrease in total collisions was 9% annually, but this is not sustainable. 2% is a reasonable goal.

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

The metrics for Goal 2.0 seek to measure the share of pedestrians, bicyclists, and transit users as well as the infrastructure available for each of these modes. Additionally, aviation in the County is addressed by tracking the amount of airport capacity being used and the number of accidents and incidents at each airport.

*Performance Measure 2B: Landings as a share of capacity*

Truckee Tahoe Airport is near or at capacity during holiday periods. However, due to concerns of the community about noise and other impacts on quality of life, the goal is to remain operationally neutral and not increase capacity for these peaks. Nevada County Airport is generally below capacity except during fire operations.

*Performance Measure 2C: Percent of planned sidewalk network completed*

2% is approximately 1.4 miles at a typical cost of \$500,000.

*Performance Measure 2C: Percent of planned bicycle network (shared use paths, bike lanes, and bike routes) completed*

Shared use paths: 2% is approximately 1 mile at a typical cost of \$1.5 million

Bike lanes: 2% is approximately 1.25 mile at a typical cost of \$850,000 (costs may be less if sufficient pavement width is available)

Bike routes: 2% is approximately 5.4 mile at a typical cost of \$27,000

*Performance Measure 2C: Number of transit boardings*

2% objective exceeds annual population growth rate (0.6% to 0.7%).

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

The general plans for the counties and each of the cities emphasize the importance of preserving the natural environment and quality of life of the region, and each of these plans contains policies supporting that goal. Thus, the RTP seeks to ensure each project meets those policies.

Additionally, the public expressed strong concerns about pollutants and greenhouse gas emissions during the public outreach portion of the RTP update. Therefore, NCTC has included measurement of greenhouse gas emissions directly. Because VMT is strongly correlated with all these emissions, measurement of it is also included.

*Performance Measure 3A: Check each project against applicable general plan policies*

Goal is 100%. This metric should be measured and tracked as part of CEQA review process.

*Performance Measure 3B: Vehicle Miles Traveled*

Target is to keep VMT flat in support of statewide greenhouse gas targets. 2012 is year of most recent modeled VMT estimation.

*Performance Measure 3B: Greenhouse gas emissions*

Metric is consistent with Governor's Executive Order B-30-15.

*Performance Measure 3B: Ozone precursors*

Target is a slight decline, in parallel with VMT data but including modest technology improvements.

**Goal 4.0: Develop an economically sustainable transportation system.**

Proper and timely pavement maintenance directly affects the overall expense of maintaining a roadway. If a roadway is allowed to deteriorate, later repairs will be more extensive and expensive, and roadway costs overall can be greater. Thus, pavement condition is included as a metric. Similar issues affect sidewalks, and the public expressed concerns about the poor condition of many sidewalks during public outreach. Thus, sidewalk condition has also been included as a metric.

*Performance Measure 4A: Sidewalk condition (good to poor, qualitative) by %*

Sidewalk condition is a key element of safe pedestrian travel, and timely sidewalk maintenance may save money by making repairs early and avoiding later, larger costs. However, data is not available documenting these conditions within Nevada County. A separate project will need to be created to collect this data to update it on a regular basis.

## 4.0 ACTION ELEMENT

The Action Element of the RTP consists of short-term (2015-2025) and long-term (2025-2035) activities that address regional transportation issues and needs. All transportation modes (highways, local streets and roads, transit, rail, bicycle, pedestrian, and aviation facilities and services) are addressed. In addition, the Action Element identifies investment strategies, alternatives, and project priorities beyond what is already programmed.

The Policy Element discussed issues relevant to the RTP identified performance measures and targets for each objective. Proposed projects to achieve these performance measures are presented for each mode. The goals and objectives (and thus the performance measure and targets) associated with each project are also provided.

Costs for planned projects have been calculated in "year of expenditure" dollars to account for estimated inflation to the extent possible. All State Highway projects programmed in the State Transportation Improvement Program are shown at "year of expenditure" dollars. The inflation rates were developed by Caltrans to reflect recent trends in the construction industry.

Some regional projects derived from local and regional development fee programs were not able to be calculated to "year of expenditure" dollars at the time of the development of the RTP, and therefore current dollars are used for these projects. In some cases, the development fee programs do not identify a specific year of construction for the projects due to the fact that the timing of construction is dependent on revenue collection and that priorities are dictated by the governing bodies of the local jurisdictions. These development fee programs are updated annually and updated cost information is amended into each subsequent update of the RTP.

Local conditions, land use, transportation technologies, and transportation funding are constantly evolving. These projects are based on the best data available at this time; however, projects may be added, deleted, or revised. Additional projects of regional significance will be amended into the RTP if required for funding.

### 4.1 ROADWAY NETWORK

Most travel in Nevada County is by automobile, and it will continue to be so over the life of this plan, and beyond. The roadway network within the unincorporated parts of the county is rural in character, mainly serving small communities, tourism, recreation, and agriculture uses. I-80 and State Routes 20, 49, 89, 174, and 267 are the primary transportation corridors extending through the county and serve all of the county's

major population centers, including Grass Valley, Nevada City, and Truckee. Other county arterials and a network of federal, state, local public, and private roads constitute the remainder of the roadway system. Public roads include approximately 166 miles of U.S. Forest Service roads, 44 miles of California State Parks roads, and 1 mile of US Bureau of Reclamation road (Caltrans Highway Performance Monitoring System, 2012). The state highway network serves primarily intercity and inter-county regional travel and interregional tourism, while the county's roadways serve local trips.

Figure 1 shows the major routes in the regional roadway system according to federal operational classifications. These classifications indicate the operational hierarchy of the roadway system as described below.

#### 4.1.1 STATE HIGHWAYS

State highways in Nevada County are listed below and include freeways and conventional highways, both of which are operated and maintained by Caltrans. Interstate routes are also part of the state highway system that is maintained by Caltrans. Nevada County has one Interstate route, I-80.

- 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 SR 88), I-80 serves commercial traffic, tourists, skiers, commuters, and others. Interstate 80 eastbound 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, I-80 westbound 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 to Nevada City is signed as 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 (Placer County) to the south. SR 20 and SR 49 also serve as an emergency detour route for I-80. SR 49 is the lifeline for much of Nevada County's freight and lumber traffic and also provides access to recreational and tourist 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 to SR 49 for access to I-80 for residents in the Grass Valley and Nevada City area. SR 174 also serves as an emergency detour route when I-80 is closed.

- 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 approximately 13 miles in length that connects I-80 near Truckee to SR 28 near Kings Beach in Placer County, as well as access to the Northstar ski resort. The route is of local and regional significance providing access to residential, commercial, industrial, and recreational land uses and serves interregional, local commuter, and recreational traffic traveling between the Tahoe Basin, Martis Valley, Truckee, and I-80. Access to the Truckee-Tahoe Airport is also provided via SR 267.

Caltrans prepares a Transportation Concept Report (TCR) or Corridor System Management Plans (CSMP) for each of its facilities. A TCR is a long-term planning document that each Caltrans district prepares for every state highway or portion thereof in its jurisdiction. The TCR usually represents the first step in Caltrans' long-range corridor planning process. The purpose of a TCR is to determine how a highway will be developed and managed so that it delivers the targeted LOS and quality of operations that are feasible to attain over a 20-year period. These are indicated in the route concept. In addition to the 20-year route concept level, the TCR includes an ultimate concept, which is the ultimate goal for the route beyond its 20-year planning horizon. The concept LOS and facilities for state highways in Nevada County are shown in Table 22.

Caltrans has prepared a CSMP for SR 49 from Placer County to the SR 20 junction. CSMPs are also long-term planning documents similar to TCRs, but they consider the mobility of the corridor comprehensively, reviewing other travel modes (transit, bicycles, and trucks in addition to cars) and parallel routes. Where they are available, CSMPs replace TCRs.

**TABLE 22: STATE HIGHWAY TRANSPORTATION CONCEPTS**

Highway	TCR Segment	Post-Mile		Average Annual Daily Traffic	Concept LOS	Facility <sup>1</sup>		
		From	To			Existing	Concept	Ultimate
I-80	12	53.36 <sup>2</sup>	69.77 <sup>2</sup>	27,000	F	4F	4F	6F
	13	0.00	13.60	30,500	E	4F	4F	6F
	14	13.60	18.27	34,500	F	4F	4F	6F
	15	18.27	31.78	26,000	D	4F	4F	4F
SR 20	14	0.00	6.60	13,000	E	2C	2C with passing lanes	4E
	15	6.60	12.30	43,000	D	2E/4E	2E/4E	4E
	16	12.30	17.40	47,500	E	4F	4F	4F
	17	17.40	45.66	5,300	E	2C	2C	2C with passing lanes
SR 49	CSMP	0.00	2.19	29,000	E	5C	5C	5C
	CSMP	2.19	13.28	23,300	D	4C/2E/3C/2C	5C	5C
	CSMP	13.28	14.48	31,000	C	4F	4F	4F
	8	15.06	32.64	11,100	F	2C	2C	2C
SR 174	3	0.00	9.28	13,200	D	2C	2C	2C
	4	9.28	10.22	13,300	D	2C	2C	2C
SR 89	6	0.00	0.49	18,900	E	2C/4C	2C/4C	4C
	7	0.49	8.70	18,900	D	2C	2C	2C
SR 267	1	0.00	1.80	14,100	D	2E	2E	4E

Notes:  
<sup>1</sup>Number of lanes followed by facility type code: C = conventional highway; E = expressway; F = freeway.  
<sup>2</sup>I-80 segment 12 post-miles are for Placer County. This segment passes in and out of Nevada County.

Source:  
 Caltrans, Transportation Corridor Concept Reports, 2000-2013.  
 Caltrans, State Route 49 Corridor System Management Plan, May 2009.  
 Caltrans 2014 Volumes Book, Maximum AAD.T  
 Fehr & Peers, 2015.

#### 4.1.2 INTERREGIONAL ROAD SYSTEM

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 interregional highways that serve interregional 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.

#### 4.1.3 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. Figure 11 shows both designated and eligible scenic highways.

#### 4.1.4 COUNTY ROADS

The County maintains approximately 569 miles of roadways.<sup>12</sup> 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.

#### 4.1.5 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.

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<sup>12</sup> Caltrans High Performance Monitoring System, 2012.



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Figure 11

Scenic Highways and Eligible Scenic Highways



## 4.1.6 ROADWAY OPERATIONS

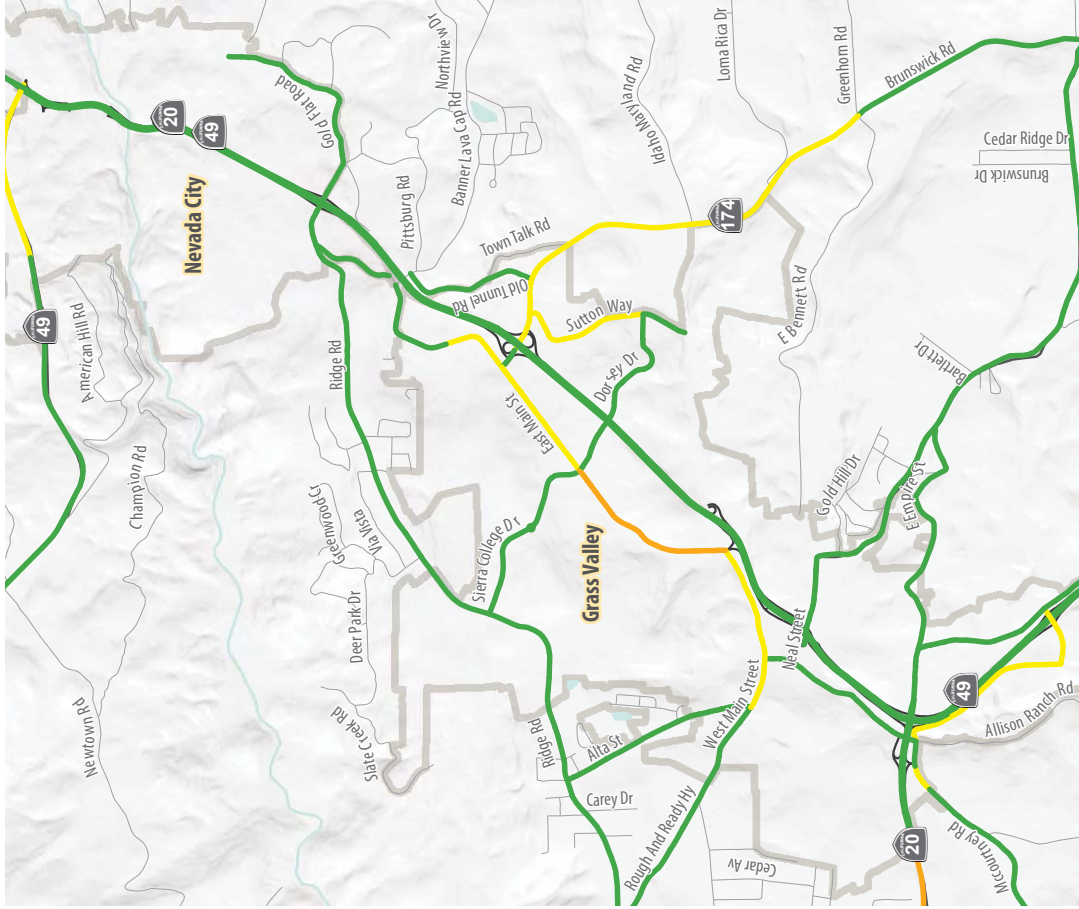
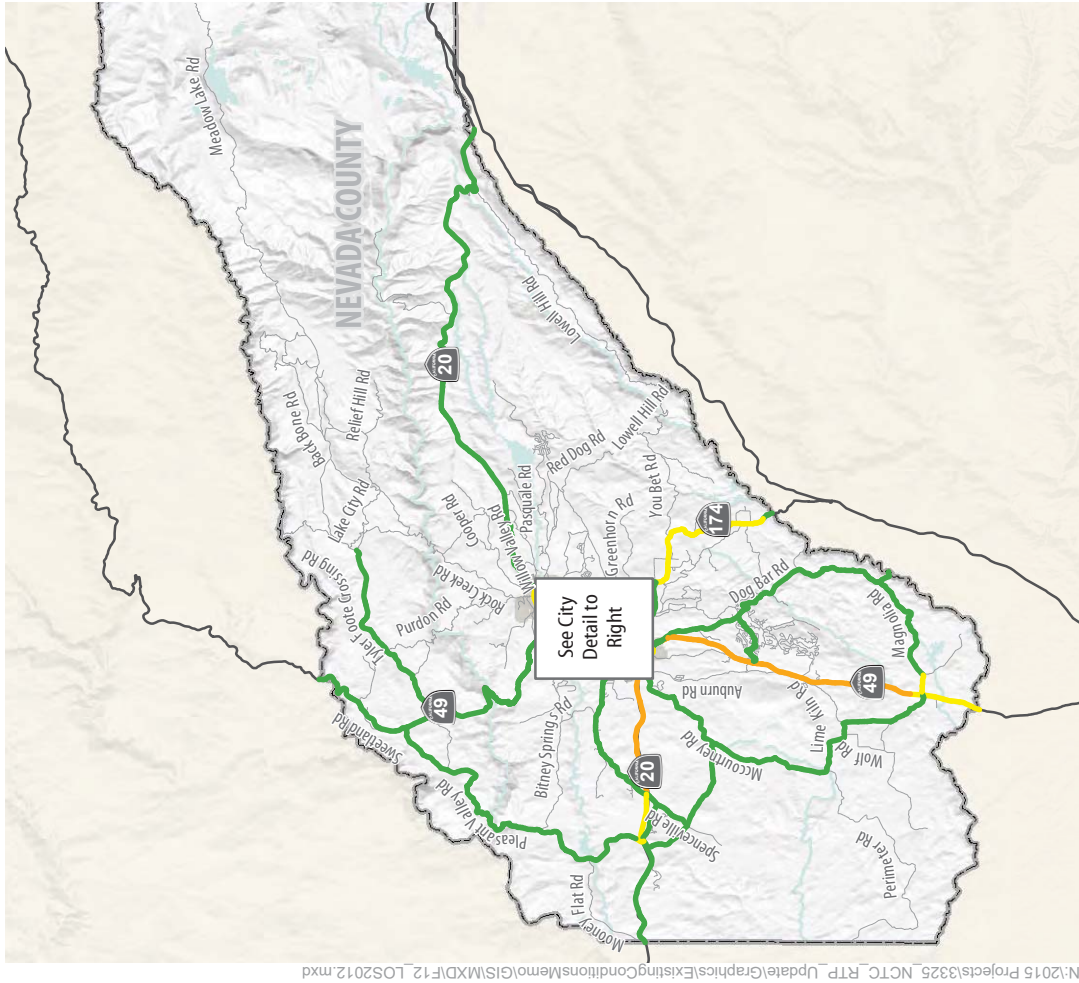
The operations of roadway facilities are described in terms of Level of Service (LOS). LOS is a qualitative description of traffic flow based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels are defined, from LOS A and B, which represent uncongested operating conditions, 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.

### 4.1.6.1 Western Nevada County

NCTC updated its travel demand model for western Nevada County in 2014. Figure 12, Figure 13, and Appendix A provide the current and estimated future traffic conditions for significant county roads and highways based on this model.

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 23 summarizes daily roadway segment capacity thresholds by operational class.

<b>TABLE 23: WESTERN NEVADA COUNTY PEAK HOUR LEVEL OF SERVICE THRESHOLDS</b>				
<b>Operational Class</b>	<b>LOS B</b>	<b>LOS C</b>	<b>LOS D</b>	<b>LOS E</b>
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				



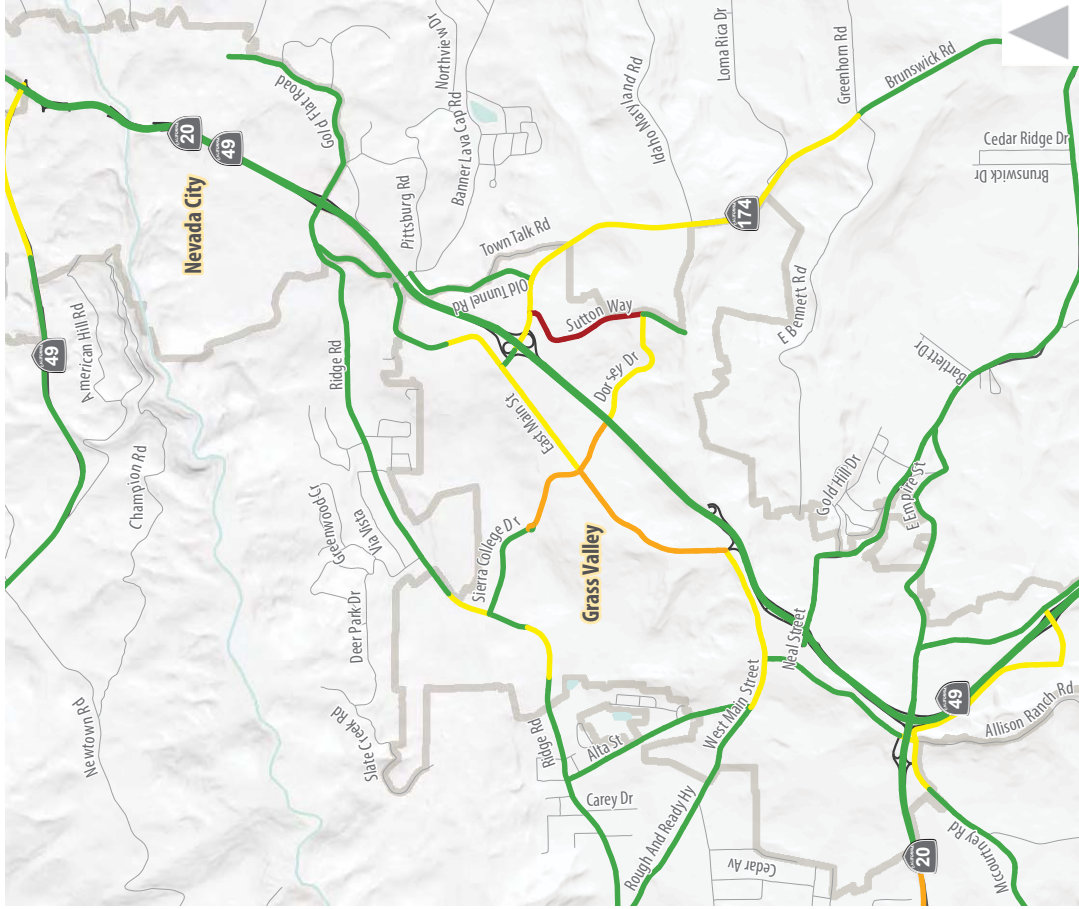
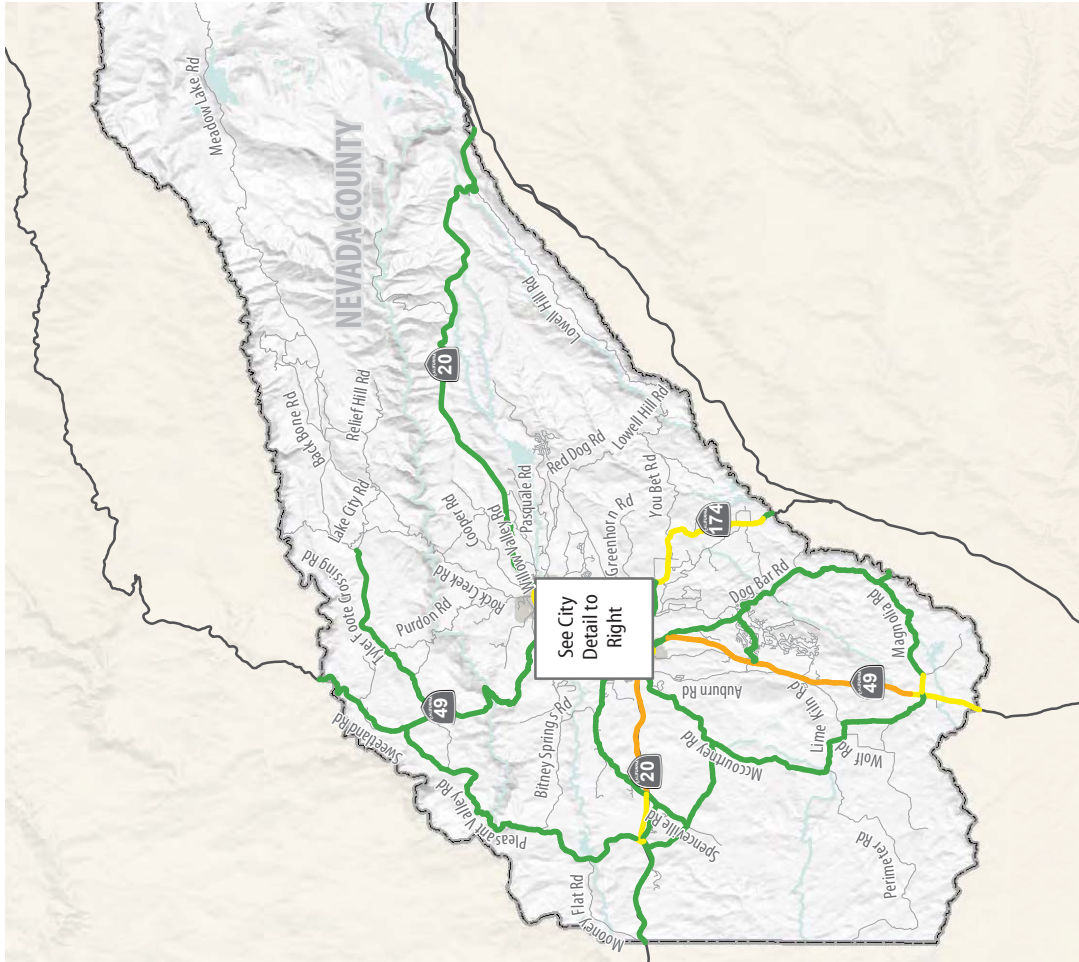
- Level of Service
- A - C
- D
- E
- Incorporated City Limits
- Nevada County Boundary



Figure 12

2012 Roadway Level of Service (LOS)

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- Level of Service
- E — Incorporated City Limits
- F — Nevada County Boundary
- A - C —
- D —



Figure 13

2035 Roadway Level of Service (LOS)

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#### 4.1.6.2 Eastern Nevada County

A travel demand model for Truckee estimated traffic at key local intersections based on a 2012 base year and 2032 general plan buildout. Table 24 and Table 25 show the results of this model. Thresholds in this model were based on *Highway Capacity Manual* (2010) methodology and SimTraffic analysis.

<b>TABLE 24: TRUCKEE EXISTING 2012 TRAFFIC CONDITIONS</b>						
<b>Roadway Segment</b>	<b>Classification</b>	<b>LOS Threshold</b>	<b>Peak-Hour Volume per Lane at Threshold</b>	<b>Peak-Hour Two-Way Volume</b>	<b>Peak-Hour Peak-Direction Volume</b>	<b>LOS Threshold Exceeded?</b>
Bridge Street, across railroad tracks	Minor Arterial	E	1,600	1,077	580	No
Donner Pass Road, South of SR 89 North	Minor Arterial	D	1,420	907	523	No
Donner Pass Road, South of I-80 Eastern Interchange	Minor Arterial	E	1,600	916	475	No
Donner Pass Road, East of Bridge Street (Commercial Row)	Minor Arterial	E	1,200	990	639	No
Donner Pass Road, West of Bridge Street (Commercial Row)	Minor Arterial	E	1,200	1,068	717	No
SR 89, North of I-80	Highway	D	N/A <sup>1</sup>	771	413	No
SR 267, between I-80 and Brockway Road	Highway	D	N/A <sup>1</sup>	1,291	766	No
SR 267, between Brockway Road and Town Limit	Highway	D	N/A <sup>1</sup>	1,493	846	No
Brockway Road, between SR 267 and project access	Minor Arterial	D	1,420	945	505	No
Brockway Road, between project access and Martis Valley Road	Minor Arterial	D	1,420	935	496	No
Brockway Road, between Martis Valley Road and Palisades Drive	Minor Arterial	D	1,420	1,249	733	No
Brockway Road, between Palisades Drive and West River Street	Minor Arterial	E	1,600	1,609	997	No
Note: <sup>1</sup> Threshold Volume is not applicable to these roadway segments, as traffic conditions on these segments were evaluated using a SimTraffic microsimulation						
Source: Town of Truckee, PC-3 Joerger Ranch Specific Plan Traffic Impact Analysis, September 4, 2013.						

**TABLE 25: TRUCKEE ESTIMATED FUTURE 2032 TRAFFIC CONDITIONS**

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 <sup>1</sup>	1,791	955	No
SR 267, between I-80 and Brockway Road	Highway	D	N/A <sup>1</sup>	2,376	1,330	No
SR 267, between Brockway Road and Town Limit	Highway	D	N/A <sup>1</sup>	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	2,331	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: <sup>1</sup> Threshold Volume is not applicable to these roadway segments, as traffic conditions on these segments were evaluated using a SimTraffic microsimulation						
Source: Town of Truckee, PC-3 Joerger Ranch Specific Plan Traffic Impact Analysis, September 4, 2013.						

#### 4.1.7 SAFETY

In order to assess roadways safety needs in the County, a three-year summary of collision data was compiled (Table 26). The table summarizes total collisions by year, including number of persons killed and number of persons injured.

**TABLE 26: 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
<b>Total</b>	<b>3,212</b>	<b>39</b>	<b>1,534</b>

Source: Caltrans Traffic Information System (TIMS 2011); Statewide Integrated Traffic Records System (CHP 2015).

Table 27 summarizes the total and percentage of collisions by type between 2011 and 2013. Figure 14 also shows the location and density of collisions.

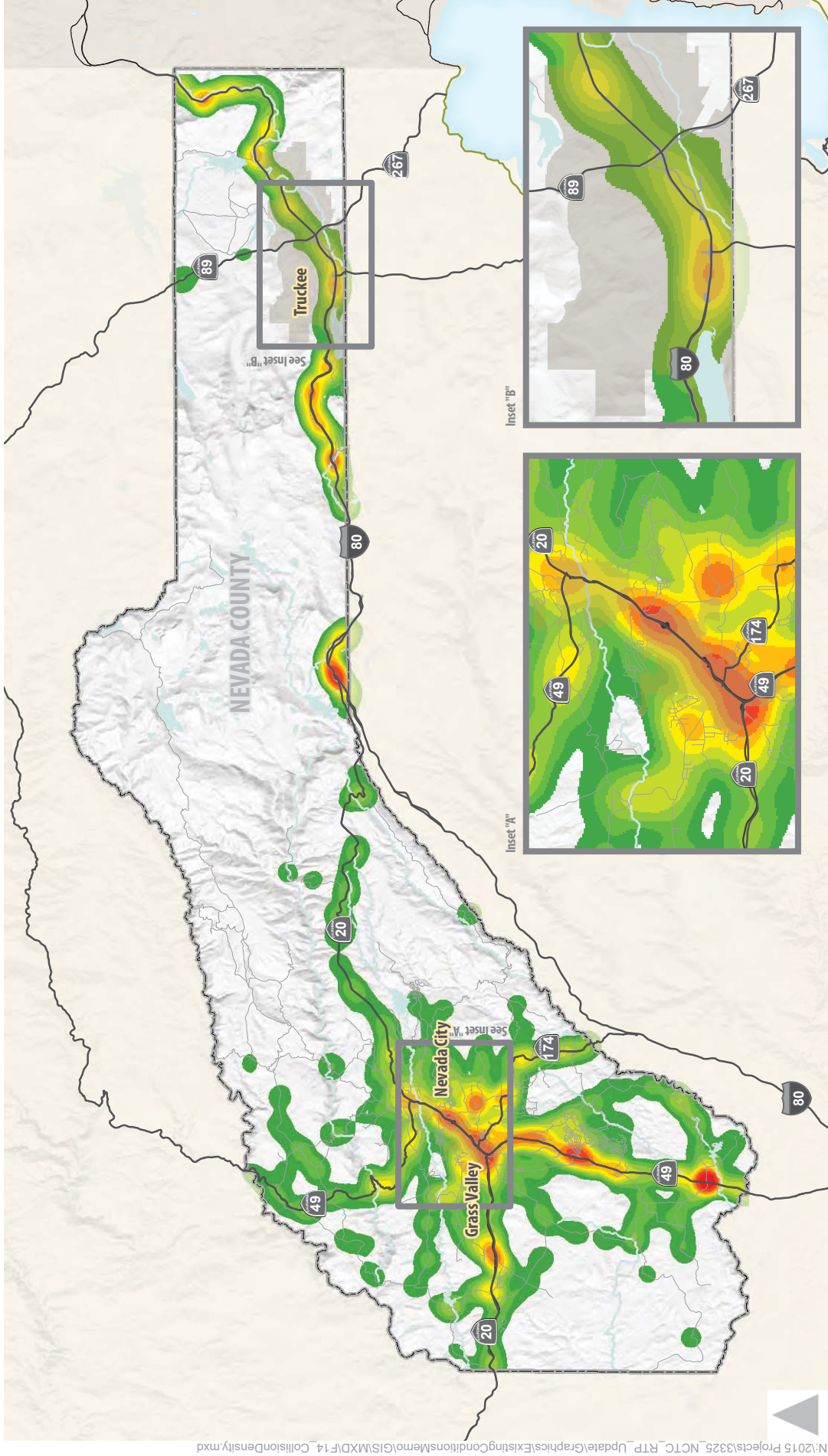
As shown in Table 27, hit object collisions account for the highest number and percentage of collisions between 2011 and 2013. Rear-end collisions show the second highest occurrence over the same three-year period. Of the 3,212 collisions, 286 or 9% involved trucks, 49 or about 2% involved pedestrians, and 41 or about 1% involved bicycles. 13% of the collisions also involved driving under the influence of alcohol and/or drugs.

**TABLE 27: THREE-YEAR COLLISION SUMMARY (2011 – 2013) BY COLLISION TYPE**

Type	Total Collisions	Percent of Total
Hit Object	1,227	38%
Rear-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%
<b>Total</b>	<b>3,212</b>	<b>100%</b>
<b>Involved trucks</b>	<b>422</b>	<b>9%</b>
<b>Involved alcohol</b>	<b>286</b>	<b>13%</b>

Source: Caltrans Traffic Information System (TIMS 2011); Statewide Integrated Traffic Records System (CHP 2015).





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Collision Density  
 High  
 Low

Incorporated City Limits  
 Nevada County Boundary

Figure 14

Three Year Collision Density (2011-2013)



The Caltrans Transportation System Network (formerly the Traffic Accident Surveillance and Analysis System) was queried to determine accident rates on state highways for a three year period ending in September 2013. Results are shown in Table 28. Sections with rates higher than average rates on comparable state highways are shaded.

Route	Postmile		Distance	Fatalities		Total	
	From	To		Rate	Comparable Average Rate	Rate	Comparable Average Rate
I-80 EB	0	2.2	21.0	0.003	0.009	0.45	0.46
	13.0	31.8					
	2.2	12.5	10.2	0.014	0.005	0.76	0.35
	58.7	58.8	2.4	0	0.010	0.83	0.39
	60.3	62.5					
58.8	60.0	1.2	0	0.009	2.24	0.45	
I-80 WB	0	2.2	21.0	0.006	0.009	0.58	0.46
	13.0	31.8					
	2.2	12.6	10.4	0	0.004	0.58	0.37
	58.8	60.0	1.2	0	0.009	1.68	0.45
	60.3	62.5	2.3	0	0.009	0.90	0.40
SR 20	0	41.3	39.6	0.009	0.02	0.72	0.9
	43.9	46.1	2.3	6.410	1.87	0.78	0.47
SR 49	0	32.6	31.2	0.02	0.025	0.84	1.2
SR 89	0	8.7	8.7	0.03	0.014	1.21	0.64
SR 174	0	10.1	10.1	0.042	0.02	1.19	1.52
SR 267	0	1.8	1.8	22.37	1.21	0.27	0.28

Source: Caltrans Transportation System Network, 2015.

SR 49 between Grass Valley and Auburn has been a focus of safety efforts in recent years. Since 2006, a number of changes have been made to reduce collisions in the corridor. In 2006, local residents Bruce and Deborah Jones founded the group Citizens for Highway 49 Safety, and shortly thereafter the SR 49 Stakeholder Committee, which includes representatives from local and state agencies, was formed. In June 2006, as a result of input from the SR 49 Stakeholder Committee, the Caltrans Office of Traffic Operations designated SR 49 from Dry Creek Road to near McKnight Way in Grass Valley as a Safety Corridor and a daylight headlight section. A Safety Corridor is a segment of highway with a history of high fatal collisions (McKnight Way to Combie Road) or a segment of highway with potential for fatal and severe collisions (Combie Road to Dry Creek Road) that is identified and focused on by state and local officials with increased enforcement, public awareness measures, and short- and long-term improvements to reduce and prevent fatal and severe collisions. The Safety Corridor status can also assist the California Highway Patrol (CHP) in obtaining additional money for enforcement through California State Office of Traffic Safety (OTS).

With the existing road width too narrow for center dividers, Caltrans has implemented centerline and shoulder rumble strips, reflectors, and striping to improve motorist awareness and discourage illegal

passing as short-term improvements. OTS estimates that 40% to 60% of head-on collisions between Wolf/Combie Road and McKnight Way may have been prevented by these rumble strips. Caltrans has also constructed additional improvements such as increased all-red time at traffic signals, construction of a traffic signal and other improvements at La Barr Meadows Road. CHP additionally conducts round-the-clock patrols in the corridors. As result of the coordinated efforts mentioned, the number of fatalities in the section of SR 49 between Dry Creek Road and McKnight Way has declined. However, recent fatalities have returned public attention to safety on SR 49. Over a two-month period from mid-December 2016 to mid-February 2017, five fatalities occurred in the corridor.

#### 4.1.8 ROADWAY SYSTEM MAINTENANCE

##### 4.1.8.1 State Highways

Caltrans is responsible for the maintenance and rehabilitation of approximately 49,720 lane miles of state highways. The number of distressed lane miles (those with poor structural condition or with poor ride quality) is an important indicator of the State Highway System's pavement condition. This indicator is used by Caltrans to prioritize road maintenance and repairs. For the state, there are approximately 7,820 distressed lane miles (16% of total lane miles) based on an updated 2013 Pavement Condition Survey.<sup>13</sup> This same survey showed that Caltrans District 3, where Nevada County is located, has approximately 753 distressed lane miles of its 4,339 total lanes miles (17%).

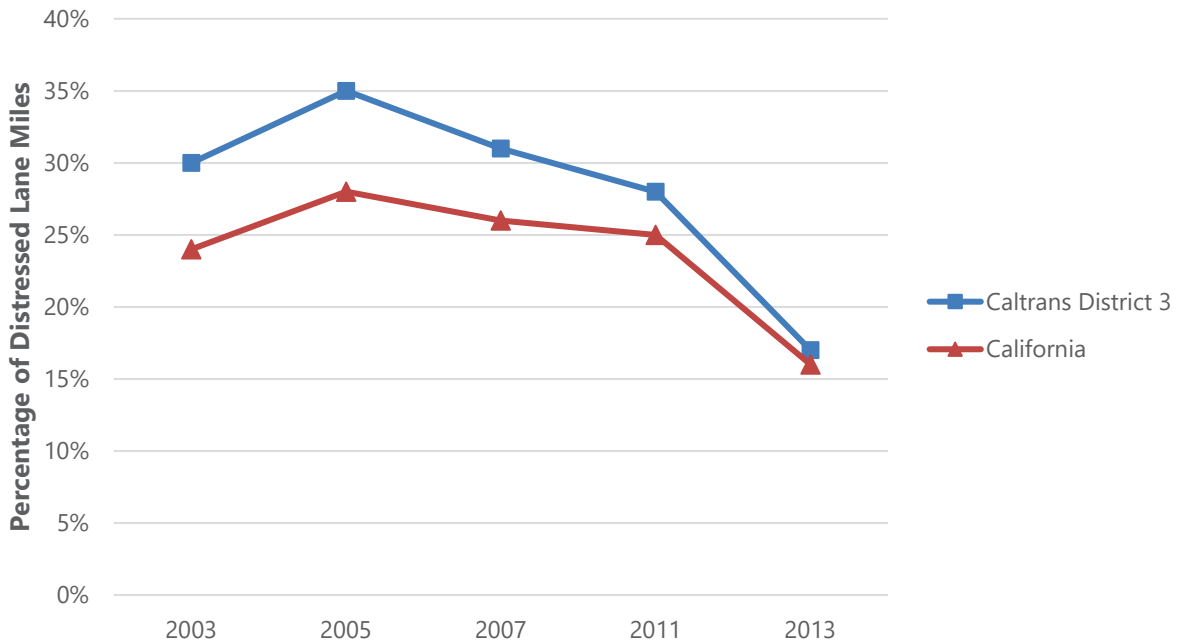
Table 29 and Figure 15 provide historical data for the percentage of distressed lane miles for the state and Caltrans District 3. As the table shows, District 3 has historically had a higher percentage of distressed miles than the State of California as a whole. This is not surprising given the amount of truck traffic within District 3 including I-5, I-80, US 50, and SR 99.

<b>Region</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2011</b>	<b>2013</b>
Caltrans District 3	30%	35%	31%	28%	17%
California	24%	28%	26%	25%	16%

Source: Caltrans, 2011 State of the Pavement and 2013 State of the Pavement.

<sup>13</sup> State of the Pavement Report Based on the 2013 Pavement Condition Survey, Caltrans, 2013.

**FIGURE 15: DISTRESSED LANE MILES BY SURVEY YEAR**



Source: Caltrans, 2011 State of the Pavement and 2013 State of the Pavement.

The 2015 Rural Counties Pavement Needs Assessment (discussed further below) also reported ten-year pavement needs of \$5.3 million for Nevada County.

#### 4.1.8.2 Local Road Maintenance

In February 2015, the California Rural Counties Task Force published the 2015 Rural Counties Pavement Needs Assessment. The report indicated that the average Pavement Condition Index (PCI) for Nevada County is 71, good, and the 20-year maintenance needs are estimated at \$240 million (2014 \$). Table 30 compares the PCI and maintenance needs of Nevada County to adjacent rural counties, along with center line miles, lane miles, and square yards of pavement. PCI for Nevada County is better than that of neighboring counties, and third best in the state as a whole.

**TABLE 30: LOCAL PAVEMENT NEEDS BY COUNTY**

County	Center Line Miles	Lane Miles	Area (square yards)	2014 PCI	20-Year Needs (2014 \$M)
<b>Nevada</b>	<b>802</b>	<b>1,617</b>	<b>10,370,868</b>	<b>71</b>	<b>\$240.0M</b>
Placer	1,986	4,194	34,182,680	69	\$766.4M
Sierra	398	799	3,669,765	45	\$124.3M

Source: 2015 Rural Counties Pavement Needs Assessment, February 2015, California Rural Counties Task Force.

#### 4.1.8.3 Estimated Local Agency Bridge Needs

The League of Cities Needs Study summarized bridge needs by county. Table 31 compares Nevada County to adjacent counties. Nevada County's average sufficiency rating is comparable to adjacent counties, but worse than Placer County's.

<b>County</b>	<b>Number of Bridges</b>	<b>Average Sufficiency Rating (SR)</b>	<b>Structures with SR &lt; 80</b>	<b>Structures with SR &lt; 50</b>	<b>Total Bridge Need (2012 \$M)</b>
Placer	168	77	51	25	\$29M
<b>Nevada</b>	<b>56</b>	<b>72</b>	<b>14</b>	<b>13</b>	<b>\$26M</b>
Sierra	32	72	11	7	\$13M
Yuba	74	70	24	17	\$30M

Source: 2014 California Local Streets and Roads Needs Assessment, October 2014, League of California Cities.

#### 4.1.9 ACTION PLAN

Improvements to the roadway network are an important strategy necessary to achieve the RTP performance targets, in particular those under Goal 1, "Provide for the safe and efficient movement of all people, goods, and services on the roadway network." The projects identified in the RTP below are also consistent with the projects included in the Federal Transportation Improvement Program (FTIP), Regional Transportation Improvement Program (RTIP), and Caltrans Interregional Transportation Improvement Program (ITIP).

Significant items in the action plan include the following:

*Safety improvement on SR 174 from Maple Way to You Bet Road:* This corridor experiences higher than average fatal collision rates. This project will realign curves, widen shoulders, add a left turn lane at Greenhorn Access Rd., and improve the clear recovery zone.

*SR 49 widening south of Grass Valley to Wolf and Combie Roads:* SR 49 has been designated by Caltrans as a priority interregional highway and is the major connection from Grass Valley and Nevada City to Auburn and the I-80 corridor. Roadway operations are forecasted to worsen along this corridor. Upgrading the existing roadway to four lanes with a continuous left-turn lane will provide adequate capacity for future traffic demand, reduce congestion, and improve safety. The planned consolidation of access points into a series of frontage road systems should reduce the number of accidents and improve operational problems. The intersection of La Barr Meadows Road and SR 49 was recently relocated to the south and signalized. Project development is continuing for improvements along the remainder of the section, but implementation is currently unfunded.

*Pioneer Trail and Bridge Street Extension:* This project will improve congested traffic conditions by providing two travel lanes from Pioneer Commerce Center to Northwoods Boulevard and from Jiboom Street to Pioneer Trails.

*Donner Pass Rd. widening and addition of bike lanes from I-80 to Truckee Town limits:* This project will reduce congestion and improve multimodal safety and connectivity.

#### **4.1.9.1 Western Nevada County**

Table 32, Table 33, and Table 34 list the planned projects for Western Nevada County and the objectives supported by each project. These project are shown in Figure 16.

- Table 32 lists short-term financially constrained projects. These projects can reasonably be expected to be funded and begin construction prior to 2025.
- Table 33 lists long-term financially constrained projects that can reasonably be expected to be funded and constructed between 2025 and 2035.
- Table 34 lists unconstrained (unfunded) projects that may be constructed prior to the year 2035 if additional revenues are realized or funded by future development.

**TABLE 32: WESTERN NEVADA COUNTY SHORT-TERM FINANCIALLY CONSTRAINED ROADWAY PROJECTS 2015-2025**

Map ID <sup>1</sup>	Location	Proposed Improvement	Objectives Supported	Total Cost	Funding Source(s)		Estimated Construction Date
WS1	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
WS2	Combie Rd. from SR 49 to Magnolia Rd.	Widen to 5 Lanes from SR 49 to Magnolia Rd. (R) <sup>2</sup>	1.A 1.B	\$4,600,000	\$3,697,171 \$902,829	Co. Dev. Fee Local Funds	2017/18
WS3	Combie Rd. at Higgins Rd.	Intersection improvements	1.A 1.B	\$250,000	\$111,761 \$138,239	Co. LTMF Local Funds	2017/18
WS4	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 <sup>3</sup>
<b>Total</b>				<b>\$39,306,000</b>			
Notes:							
<sup>1</sup> Map ID refers to Figure <sup>2</sup> (R) indicates regionally significant project <sup>3</sup> TBD = To be determined Source: NCTC, 2016.							

**TABLE 33: WESTERN NEVADA COUNTY LONG-TERM FINANCIALLY CONSTRAINED ROADWAY PROJECTS 2025-2035**

Map ID <sup>1</sup>	Location	Proposed Improvement	Objectives Supported	Total Cost	Funding Source(s)		Estimated Construction Date <sup>2</sup>
WL1	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 <sup>3</sup> Local Funds	TBD
WL2	SR 20/49 at Uren St.	Intersection improvements	1.A 1.B	\$1,088,655	\$225,911 \$862,745	RTMF Local Funds	TBD

**TABLE 33: WESTERN NEVADA COUNTY LONG-TERM FINANCIALLY CONSTRAINED ROADWAY PROJECTS 2025-2035**

Map ID <sup>1</sup>	Location	Proposed Improvement	Objectives Supported	Total Cost	Funding Source(s)		Estimated Construction Date <sup>2</sup>
WL3	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
WL4	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
WL5	SR 49 at Coyote St.	Intersection improvements	1.A	\$350,000	\$115,283 \$234,717	RTMF Local Funds	TBD
WL6	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
WL7	SR 20/49 NB Ramps/Idaho Maryland Rd.	Install coordinated signals at ramps and Railroad Ave. (R) <sup>4</sup>	1.A 1.B	\$1,380,043	1,333,700 \$46,342	RTMF Local Funds	TBD
WL8	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
WL9	Rough and Ready Hwy. at Ridge Road	Install signal or roundabout	1.A 1.B	\$975,000	Co. LTMF <sup>5</sup>		TBD
WL10	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
WL11	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 <sup>6</sup> Local Funds	TBD
WL12	Dorsey Dr. at Sutton Way	Install a single lane roundabout at intersection (R)	1.A 1.B	\$1,121,115	GVTIF		TBD
WL13	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



**TABLE 33: WESTERN NEVADA COUNTY LONG-TERM FINANCIALLY CONSTRAINED ROADWAY PROJECTS 2025-2035**

Map ID <sup>1</sup>	Location	Proposed Improvement	Objectives Supported	Total Cost	Funding Source(s)		Estimated Construction Date <sup>2</sup>
WL14	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
WL15	Ophir St. at Bennett St.	Install traffic signal (R)	1.A 1.B	\$828,953	GVTIF		TBD
WL16	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
WL17	Idaho Maryland from East Main St. to SR 20/49 Ramps	Intersection improvements	1.A 1.B	\$213,879	GVTIF		TBD
WL18	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
WL19	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
WL20	Railroad Ave. Extension to Bennett Rd.	Extend two lane road from Railroad Avenue to Bennett Road	1.B	\$2,011,362	GVTIF		TBD
WL21	Bank St. Bridge	Bridge replacement	1.A 1.B	\$549,773	\$142,941 \$406,832	GVTIF Local Funds	TBD
<b>Total</b>				<b>\$35,661,394</b>			

## Notes:

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

Source: NCTC, 2016.

**TABLE 34: WESTERN NEVADA COUNTY FINANCIALLY UNCONSTRAINED ROADWAY PROJECTS  
2015-2035**

Map ID <sup>1</sup>	Location	Proposed Improvement	Objectives Supported	Total Cost	Funding Source(s)		Estimated Construction Date <sup>2</sup>
WU1	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	\$33,417,272	\$14,773,097 \$14,773,097 \$3,871,078	RIP <sup>3</sup> IIP <sup>4</sup> RTMF <sup>5</sup>	TBD
WU2	SR 49 from South side of Alta Sierra Dr. to South of Kenwood Dr.	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	\$31,500,000	TBD <sup>6</sup>		TBD
WU3	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

**TABLE 34: WESTERN NEVADA COUNTY FINANCIALLY UNCONSTRAINED ROADWAY PROJECTS  
2015-2035**

Map ID <sup>1</sup>	Location	Proposed Improvement	Objectives Supported	Total Cost	Funding Source(s)	Estimated Construction Date <sup>2</sup>
WU4	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
WU5	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
WU6	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
WU7	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
WU8	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
WU9	Ridge Rd./Alta St.	Install signal (R) <sup>7</sup>	1.A 1.B	\$200,000	TBD	TBD
WU10	Ridge Rd./Rough and Ready Hwy.	Install signal or roundabout (R)	1.A 1.B	\$600,000	TBD	TBD

**TABLE 34: WESTERN NEVADA COUNTY FINANCIALLY UNCONSTRAINED ROADWAY PROJECTS  
2015-2035**

Map ID <sup>1</sup>	Location	Proposed Improvement	Objectives Supported	Total Cost	Funding Source(s)	Estimated Construction Date <sup>2</sup>
WU11	Between Centennial Dr. and Bennett St.	Construct connector road to E. Bennett St. (R)	1.A 1.B	\$1,000,000	TBD	TBD
WU12	Nevada City Hwy./Banner-Lava Cap Rd.	Intersection improvements (R)	1.A	\$505,000	TBD	TBD
WU13	SR 174/Race St.	Improve curve and channelize at Race St. (R)	1.A	\$1,000,000	TBD	TBD
<b>Total</b>				<b>\$216,102,272</b>		

Notes:

<sup>1</sup>Map ID refers to Figure

<sup>2</sup>Specific funding and implantation years for unconstrained projects will be determined by the responsible jurisdiction/agency and dependent on available revenues and adopted priorities.

<sup>3</sup>RIP = Regional Improvement Program

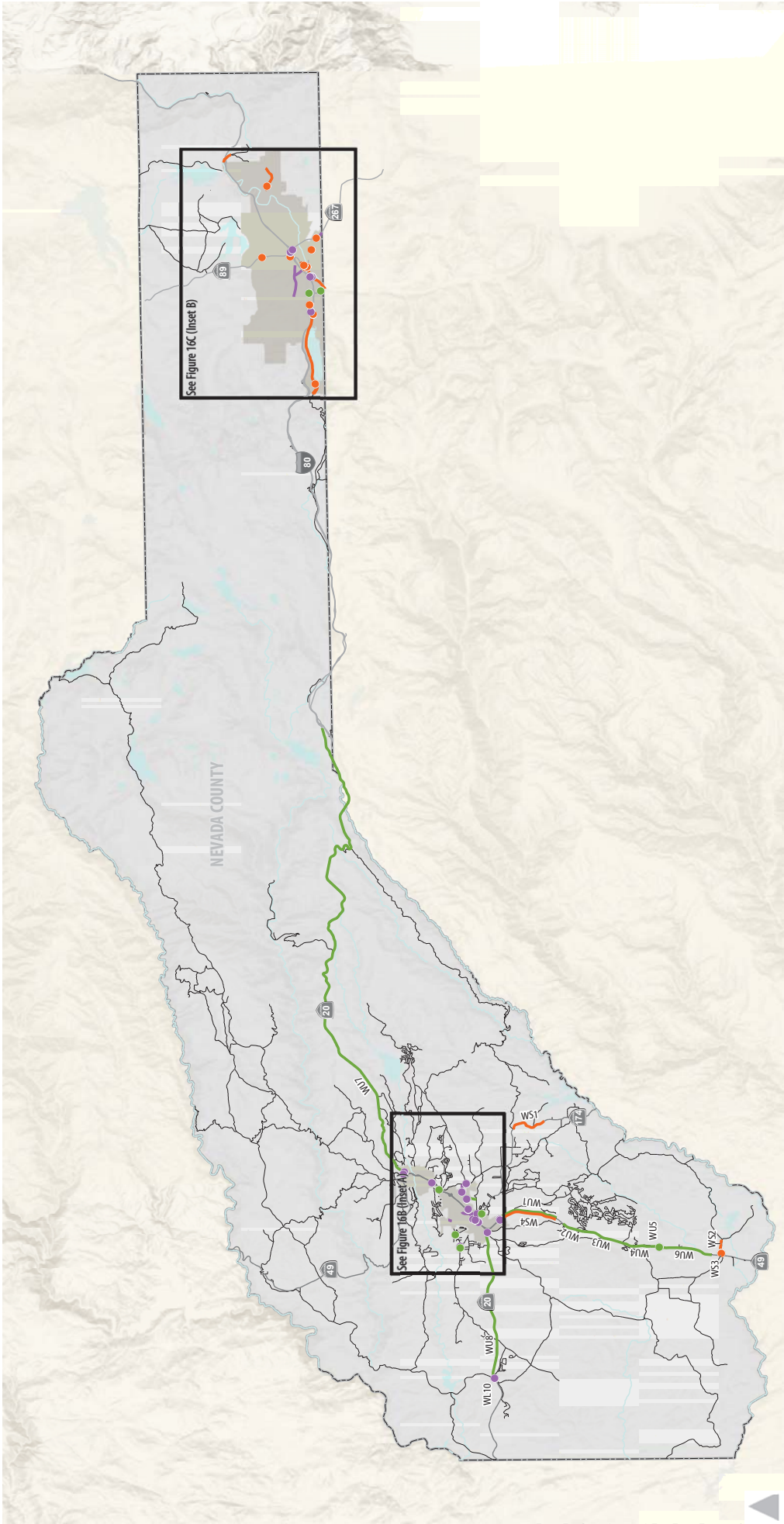
<sup>4</sup>IIP = Interregional Improvement Program

<sup>5</sup>RTMF = Regional Transportation Mitigation Fee

<sup>6</sup>TBD = To be determined

<sup>7</sup>(R) indicates regionally significant project

Source: NCTC, 2016.



**Roadway Network Projects**

- Long-term Projects
- Short-term Projects
- Unconstrained



Figure 16A  
NCTC Roadway Network Projects

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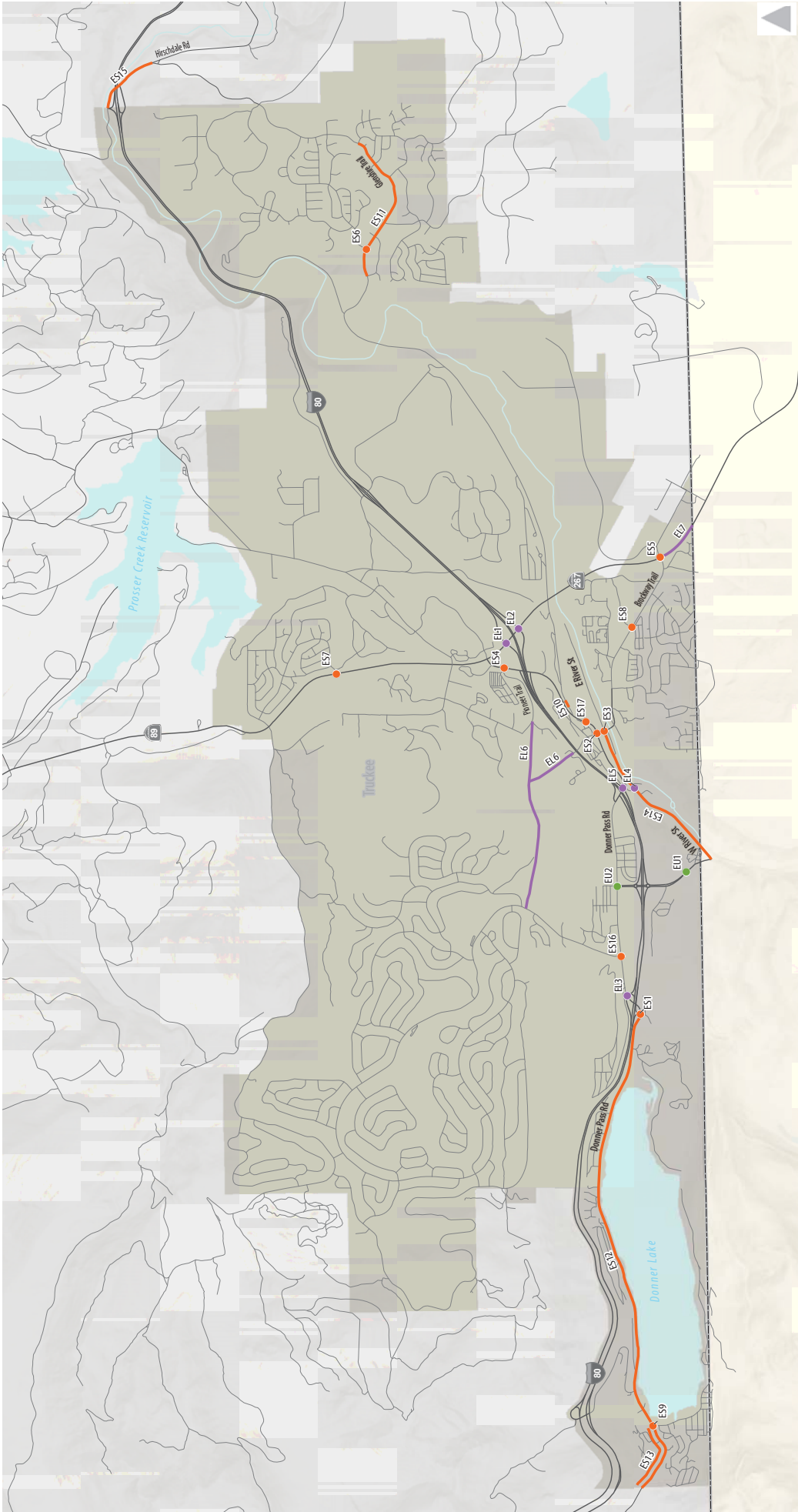


**Roadway Network Projects**

- Long-term Projects
- Short-term Projects
- Unconstrained



Figure 16B  
 NCTC Roadway Network Projects  
 Inset A



**Roadway Network Projects**

- Long-term Projects
- Short-term Projects
- Unconstrained

Figure 16C  
NCTC Roadway Network Projects  
Inset B



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#### 4.1.9.2 Eastern Nevada County

Table 35, Table 36, and Table 37 list the planned projects for Eastern Nevada County and the objectives supported by each project. These projects are located as shown in Figure 16.

- Table 35 lists short-term financially constrained projects. These projects can reasonably be expected to be funded and begin construction prior to 2025.
- Table 36 lists long-term financially constrained projects that can reasonably be expected to be funded and constructed between 2025 and 2035.
- Table 37 lists unconstrained (unfunded) projects that may be constructed prior to the year 2035 if additional revenues are realized or funded by future development.

Map ID <sup>1</sup>	Location	Proposed Improvement	Objectives Supported	Total Cost	Funding Source(s)		Estimated Construction Date
ES1	Donner Pass Rd./Cold Stream Rd./I-80 EB Ramps	Construct 1-lane roundabout (R) <sup>2</sup>	1.A 1.B	\$3,500,000	\$3,500,000	Truckee TIF <sup>3</sup>	2015-2025
ES2	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
ES3	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
ES4	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
ES5	SR 267/Brockway Rd.	Construct 3-lane roundabout (R)	1.A 1.B	\$4,000,000	\$3,640,000 \$360,000	Truckee TIF Local Funding	2015-2025
ES6	Glenshire Dr./Dorchester Rd. (West)	Eastbound left turn lane (R)	1.A 1.B	\$500,000	\$260,000 \$240,000	Truckee TIF Local Funding	2015-2025

**TABLE 35: EASTERN NEVADA COUNTY SHORT-TERM FINANCIALLY CONSTRAINED ROADWAY PROJECTS 2015-2025**

Map ID <sup>1</sup>	Location	Proposed Improvement	Objectives Supported	Total Cost	Funding Source(s)		Estimated Construction Date
ES7	SR 89 North/Rainbow Rd.	Southbound left turn lane (R)	1.A 1.B	\$500,000	\$455,000 \$45,000	Truckee TIF Local Funding	2015-2025
ES8	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
ES9	Donner Pass Rd./South Shore Dr.	Westbound left turn lane (R)	1.A 1.B	\$500,000	\$500,000	Truckee TIF	2015-2025
ES10	Church St. Extension	Extend Donner Pass Rd. to Glenshire Dr. (R)	1.B	\$5,500,000	5,500,000	Truckee TIF	2015-2025
ES11	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
ES12	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 <sup>4</sup>	2019-2020
ES13	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
ES14	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
ES15	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
ES16	Northwoods Blvd./Donner Pass Rd.	Construct 1-lane roundabout (R)	1.A 1.B	\$2,490,000	\$2,490,000	Local Funding	2017-2019
ES17	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
<b>Total</b>				<b>\$45,740,000</b>			

**TABLE 35: EASTERN NEVADA COUNTY SHORT-TERM FINANCIALLY CONSTRAINED ROADWAY PROJECTS 2015-2025**

<b>Map ID<sup>1</sup></b>	<b>Location</b>	<b>Proposed Improvement</b>	<b>Objectives Supported</b>	<b>Total Cost</b>	<b>Funding Source(s)</b>	<b>Estimated Construction Date</b>
<p>Notes:</p> <ul style="list-style-type: none"> <li><sup>1</sup>Map ID refers to Figure</li> <li><sup>2</sup>(R) indicates regionally significant project</li> <li><sup>3</sup>TIF = Transportation Impact Fee</li> <li><sup>4</sup>FLAP = Federal Lands Access Program</li> </ul> <p>Source: NCTC, 2016.</p>						

**TABLE 36: EASTERN NEVADA COUNTY LONG-TERM FINANCIALLY CONSTRAINED ROADWAY PROJECTS 2025-2035**

Map ID <sup>1</sup>	Location	Proposed Improvement	Objectives Supported	Total Cost	Funding Source(s)		Estimated Construction Date
EL1	SR 267/I-80 WB Ramps	Construct 2-lane roundabout (R) <sup>2</sup>	1.A 1.B	\$4,000,000	\$4,000,000	Truckee TIF	2025-2035
EL2	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
EL3	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
EL4	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
EL5	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
EL6	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
EL7	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
<b>Total</b>				<b>\$41,600,000</b>			

Notes:

<sup>1</sup>Map ID refers to Figure

<sup>2</sup>(R) indicates regionally significant project

<sup>1</sup>TIF = Transportation Impact Fee

Source: NCTC, 2016.

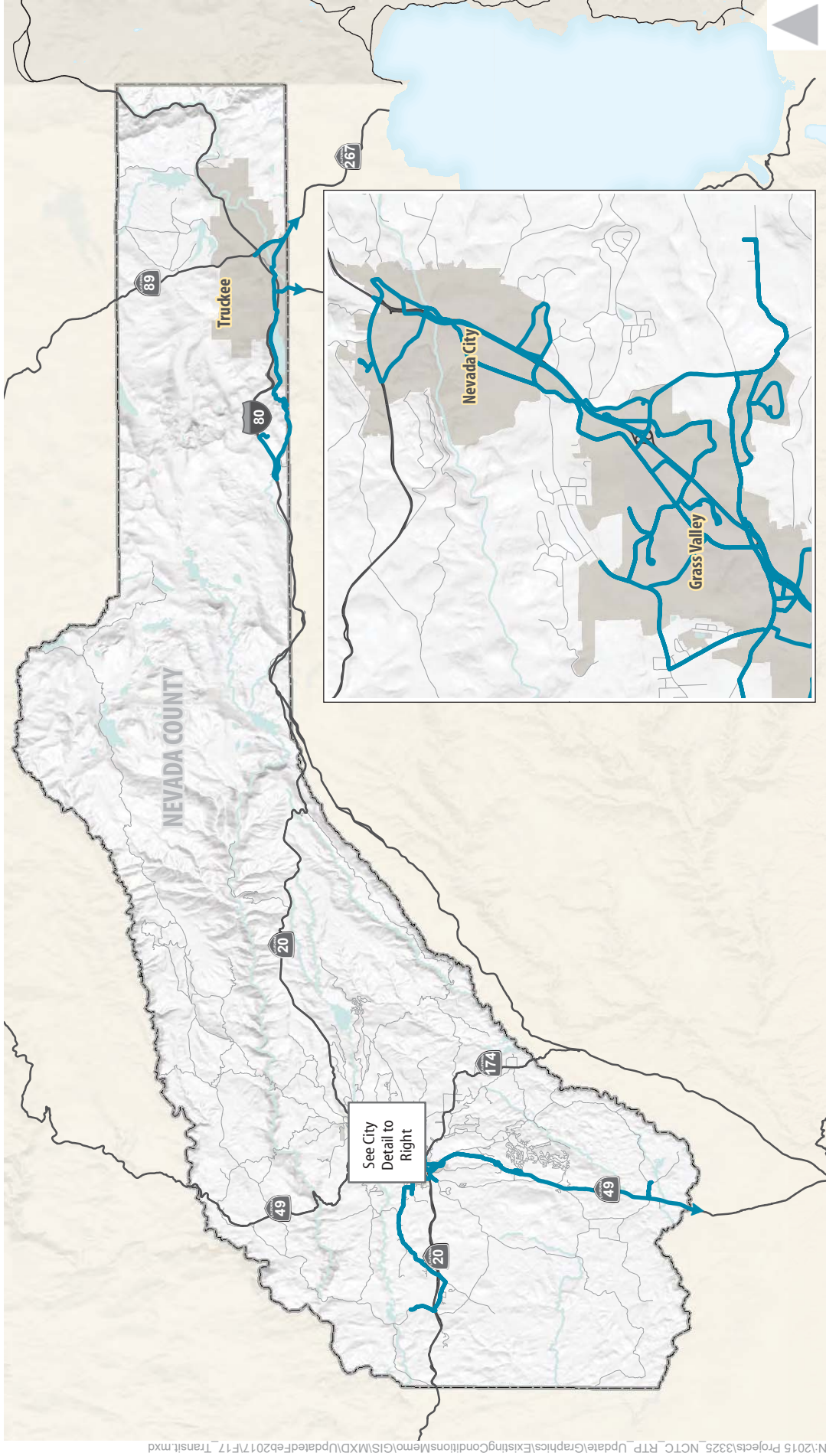
<b>TABLE 37: EASTERN NEVADA COUNTY FINANCIALLY UNCONSTRAINED ROADWAY PROJECTS 2015-2035</b>						
<b>Map ID<sup>1</sup></b>	<b>Location</b>	<b>Proposed Improvement</b>	<b>Objectives Supported</b>	<b>Total Cost</b>	<b>Funding Source(s)</b>	<b>Estimated Construction Date</b>
EU1	SR 89/UPPR Undercrossing (Mousehole)	Provide two additional travel lanes, sidewalks, and bicycle lanes (State Highway)	1.A 1.B 2.A 2.B	\$50,000,000	TBD <sup>1</sup>	TBD
EU2	Donner Pass Rd./SR 89/Frates Ln.	Intersection Improvements (R)	1.A 1.B	\$2,500,000	TBD	TBD
<b>Total</b>				<b>\$52,500,000</b>		
Notes: <sup>1</sup> Map ID refers to Figure <sup>2</sup> TBD = To be determined Source: NCTC, 2016.						

## 4.2 PUBLIC TRANSIT

The NCTC is the regional planning agency responsible for allocating Transportation Development Act (TDA) funds, conducting the annual unmet transit needs process, and preparing Transit Development Plans. Transit Development Plans are generally regarded as the primary short-term planning guides for smaller transit systems, and set a policy framework by which the County's mobility needs are identified and met.

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 Gold Country Telecare, one of the demand response service providers, are the designated CTSAs for Nevada County.

Transit operations are managed separately for western Nevada County and Truckee. Figure 17 depicts the fixed route transit service within the county. Table 38 shows system-wide performance measures for Western Nevada County and Truckee based on the most recent triennial performance audits. Passengers per service hour and service mile increased over the period.



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Figure 17

Existing Fixed Route Transit Service



<b>TABLE 38: TRANSIT SERVICES SYSTEM-WIDE PERFORMANCE MEASURES</b>					
<b>Western Nevada County</b>					
<b>Fiscal Year</b>	<b>One-way Passenger Trips</b>	<b>Vehicle Service Hours</b>	<b>Vehicle Service Miles</b>	<b>Passengers Per Service Hour</b>	<b>Passengers Per Service Mile</b>
10/11	188,775	28,750	470,582	6.57	0.40
11/12	186,313	27,962	416,491	6.66	0.45
12/13	184,507	29,872	470,916	6.18	0.39
13/14	214,642	32,333	469,683	6.64	0.46
14/15	227,516	32,291	496,942	7.05	0.46
<b>Truckee</b>					
<b>Fiscal Year</b>	<b>One-way Passenger Trips</b>	<b>Vehicle Service Hours</b>	<b>Vehicle Service Miles</b>	<b>Passengers Per Service Hour</b>	<b>Passengers Per Service Mile</b>
10/11	26,817	7,262	101,196	3.69	0.27
11/12	28,189	6,915	110,350	4.08	0.26
12/13	24,436	6,502	102,069	3.76	0.24
13/14	21,869	7,237	116,730	3.02	0.19
14/15	25,051	7,148	116,094	3.50	0.22
Source: Western Nevada County Transit Operators Triennial Performance Audit for Fiscal Years 09/10, 10/11, and 11/12. 2013. Truckee Transit Triennial Performance Audit for Fiscal Years 09/10, 10/11, and 11/12. 2013. Annual operations summaries received via personal communication from Susan Healy-Harman and Kelly Beede, October 2015.					

#### 4.2.1 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.

#### **4.2.1.1 Gold Country Stage Fixed Route Transit Service**

The Gold Country Stage (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.

#### **4.2.1.2 Gold Country LIFT Demand Response Paratransit Service**

The Nevada County Transit Services Department 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.

#### **4.2.1.3 Sierra Services for the Blind and Visually Impaired**

The non-profit organization Sierra Services 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.

#### **4.2.1.4 Hospice of the Foothills**

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.

#### **4.2.1.5 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.

### **4.2.2 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 three public transit systems operating in eastern Nevada County. The two fixed-route transit systems are now co-branded as Tahoe Truckee Area Regional Transit (TART) to provide a more continuous and convenient customer experience.

- 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 Gold Country Telecare.

- 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 Gold Country Telecare.
- 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.

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.

#### **4.2.2.1 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.

#### **4.2.2.2 Truckee TART**

The Truckee TART fixed route service is operated by the Town of Truckee, which contracts with Gold Country LIFT, 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-March) 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-March 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 5:05 PM every day except Sunday. All buses are equipped with bike racks.

#### **4.2.2.3 Placer County TART**

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 6:30 AM and 6:30 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.

#### **4.2.2.4 Truckee Dial-A-Ride Service**

The Town also contracts Gold Country for operations of the Truckee Dial-A-Ride program. 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.

#### **4.2.2.5 Placer County Complementary Paratransit Service**

Complementary Paratransit Service (CPS) for Placer County 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 Placer County TART routes (including those areas within the Town of Truckee). Eligible riders are required to request service 24 hours in advance.

### **4.2.3 OTHER TRANSPORTATION SERVICES**

#### **4.2.3.1 Veteran's Service Office**

The Veteran's Service Office (VSO) in Nevada County provides free transportation to the Reno Veterans Administration (VA) Medical Center through a volunteer driver program. The VSO uses a 6-passenger van to travel from Grass Valley to the medical center in Reno, making stops in Truckee if there is a passenger need. In the past, service to Truckee residents is only rarely requested. To ensure a seat on the vehicle, a person must have an appointment at the Reno VA Medical Center and must call the VSO at least a week in advance. In most cases, the van does not provide service to residences, but rather will meet the passenger at a location close to the highway (such as the McDonald's on Deerfield Drive). Unfortunately, the van is not wheelchair accessible and cannot accommodate persons using walkers. This program is funded through the Disabled American Veteran's program.

#### **4.2.3.2 Retired Senior and Volunteer Program**

The Area 4 Agency on Aging (A4AA) is responsible for the Retired Senior and Volunteer Program (RSVP), which coordinates volunteers aged 55 and older to provide services to elderly members of the community, including rides to medical appointments, errands and meal delivery service.

#### **4.2.3.3 LogistiCare**

LogistiCare is available to persons needing transportation to medical-related appointments or errands, including Medicare and Medicaid clients, seniors, and disabled and special needs persons. This service is offered in Nevada County through California Health and Wellness, the state designated service provider for Medicaid beneficiaries. Members of the Medi-Cal Managed Care Rural Expansion program are currently served under the existing program with California Health and Wellness, including the Temporary Assistance for Needy Families and Children's Health Insurance Program, and are eligible to use LogistiCare services. Reservations must be made at least 5 days in advance for mass transit and 3 days in advance for all other modes. ADA accessible vehicles are available. Service is provided at no charge to the client, and is available to appointments and facilities that are covered under California Health and Wellness. There is no limit to the number of trips a person can make; however, all trips must be related to a covered benefit. Additionally, one-way trips cannot exceed 200 miles without prior authorization from California Health and Wellness.

### **4.2.4 TRANSIT NETWORK ACTION PLAN**

Improvements to the transit network are also important to achieve the RTP performance targets, in particular those under Goal 2, "Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County," Goal 3, "Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life," and Goal 4, "Develop an economically sustainable transportation system."

#### **4.2.4.1 Western Nevada County**

The Western Nevada County TDP was updated in April 2016 and included a service plan, institutional and marketing plan, and capital plan. The service plan for Western Nevada County includes both a financially constrained plan, and a financially unconstrained plan. The financially constrained plan makes recommendations with no costs or very low costs in order to stay within the parameters of expected revenues. The financially unconstrained plan makes prioritized recommendations for desired improvements should revenues exceed projections. These plans are presented in Table 39 through Table 42 along with the objectives supported by each project.

<b>TABLE 39: WESTERN NEVADA COUNTY FINANCIALLY CONSTRAINED TRANSIT SERVICE PLAN</b>		
<b>Proposed Improvement</b>	<b>Objectives Supported</b>	<b>Total Annual Cost</b>
Consider redefining the paratransit service area boundaries to focus resources to meet the demand in the ADA corridor	4.B	\$0
Continue support of mobility management under 211 Nevada County to provide the public with information on transportation resources and options	2.A	\$0
Explore a taxi voucher program to improve mobility in western Nevada County	2.B	\$0
	<b>Total</b>	<b>\$0</b>

Source: NCTC, 2016.

<b>TABLE 40: WESTERN NEVADA COUNTY FINANCIALLY UNCONSTRAINED TRANSIT SERVICE PLAN</b>		
<b>Proposed Improvement</b>	<b>Objectives Supported</b>	<b>Total Annual Cost</b>
Increase frequency on Route 1, the main route in the system, to 30-minute headways	2.A	\$190,610
	2.B	
	3.B	
Provide limited fixed-route service to North San Juan	2.A	\$18,700
	2.B	
	3.B	
Implement Sunday service	2.A	\$143,100
	2.B	
	3.B	
	<b>Total</b>	<b>\$352,410</b>

Source: NCTC, 2016.

<b>TABLE 41: WESTERN NEVADA COUNTY TRANSIT INSTITUTIONAL AND MARKETING PLAN</b>		
<b>Proposed Improvement</b>	<b>Objectives Supported</b>	<b>Total Annual Cost</b>
Update performance standards to achieve more efficient and effective service	4.B	\$0
Improve driver recruitment to overcome large demand and short supply	4.B	\$0
Revise riders' guide to identify bus stop and transfer locations during next update	2.A	\$0
	2.B	
	<b>Total</b>	<b>\$0</b>

Source: NCTC, 2016.

<b>TABLE 42: WESTERN NEVADA COUNTY FINANCIALLY CONSTRAINED TRANSIT CAPITAL PLAN</b>			
<b>Proposed Improvement</b>	<b>Objectives Supported</b>	<b>Total Cost</b>	<b>Years</b>
Gold Country Stage Fleet improvements	4.A	\$2,651,100	2015-2023
Transit facility upgrades	2.A 2.B	\$400,000	2016-2017
Bus stops/shelters, safety/security improvements and maintenance	2.A 2.B 4.A	\$300,000	2015-2023
Onboard bus security camera system	2.A	\$400,000	2015-2023
Transit technology and automated vehicle annunciation system upgrades	2.A 2.B	\$96,000	2015-2023
<b>Total</b>		<b>\$3,847,100</b>	

Source: NCTC, 2016.

<b>TABLE 43: WESTERN NEVADA COUNTY FINANCIALLY UNCONSTRAINED TRANSIT CAPITAL PLAN</b>		
<b>Proposed Improvement</b>	<b>Objectives Supported</b>	<b>Total Cost</b>
Electronic fareboxes	2.A 4.A	\$2,651,100
Paratransit vehicles in lieu of leasing	4.A	\$400,000
<b>Total</b>		<b>\$3,847,100</b>

Source: NCTC, 2016.

#### 4.2.4.2 Eastern Nevada County

The Eastern Nevada County Transit Development Plan was updated in October 2013. Since that time, Truckee Transit has instituted a number of improvements proposed in this plan including route changes and a cooperative operational agreement with Tahoe Area Regional transit. The capital plan provided in that report included several bus replacements occurring over the five-year plan horizon.

The 2016/2017 Town of Truckee Public Transit budget includes the items listed in Table 44. Objectives supported by each project are also presented in this table.

<b>TABLE 44: TOWN OF TRUCKEE 2016/2017 PUBLIC TRANSIT BUDGET – CAPITAL OUTLAY</b>		
<b>Proposed Improvement</b>	<b>Objectives Supported</b>	<b>Total Cost</b>
Computer equipment	4.A	\$1,330
Depreciation expense	4.A	\$100,000
California Office of Emergency Services (Cal OES) – Grant awards of \$25,88 for FY 15/16 and \$12,944 for FY16/17 that will fund transit safety and security capital projects such as lighting, video security equipment, communications equipment, fencing and gates, and other safety and security equipment, devices and supplies.	2.A	\$12,944
Proposition 1B Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA) – Grant award of \$466,383 provides funding for transit capital projects. Procurement of two replacement fixed route 30 passenger buses totaling \$228,987, and local match funding of \$68,172 for two FTA 5310 funded buses. Delivery of the buses is anticipated by mid-2016. Procurement to implement the new brand including logo application on the existing and five new buses (two funded by FTA 5310, one funded by FTA 5339, and two funded by Prop 1B), and bus stop signage reflecting the new TART brand (\$27,000). Procurement of the NextBus program that provides real-time information on when a bus is expected to arrive at a stop (\$45,000). The remaining \$97,224 grant balance may be used to build new bus shelters, purchase benches, and install safety features on the buses such as cameras. Grant funds must be expended by June 2020.	2.A 2.B 4.A	\$232,883
<b>Total</b>		<b>\$347,157</b>
Source: NCTC, 2016.		

The North Lake Tahoe Resort Triangle Transit Vision was developed in 2013 to improve transit services in the North Tahoe/Truckee area. The vision included several key tenets:

- Increased service frequency
- Increased night hours of service
- Year-round service on SR 267
- Free service (no charge to the rider)
- A unified brand for all transit services

Since that time, the unified brand has been implemented and progress has been made on other service improvements including year-round SR 267 service and the operation of the Skier Shuttle and Nightrider service by Placer County. Additionally, Truckee has funded additional neighborhood service from its general fund for summer Truckee Thursdays events. In 2016, the North Tahoe Transit Vision Service/Cost Committee updated the operating plan, capital requirements, and cost implications of the vision. The plan added advanced service technologies to improve the convenience and efficiency of transit service, including automatic vehicle location, real-time traveler information displays, and enhanced communication systems. A key aspect of this update was expanding morning service beyond the winter season. The updated report estimated Truckee Transit's share of the total additional annual capital and operating funding needed to

achieve the vision to be \$781,700. This expansion of service is unconstrained. NCTC will encourage Truckee Transit to continue implementing this vision to support objectives 2.A, 2.B, and 4.B.

## 4.3 BICYCLE AND PEDESTRIAN FACILITIES

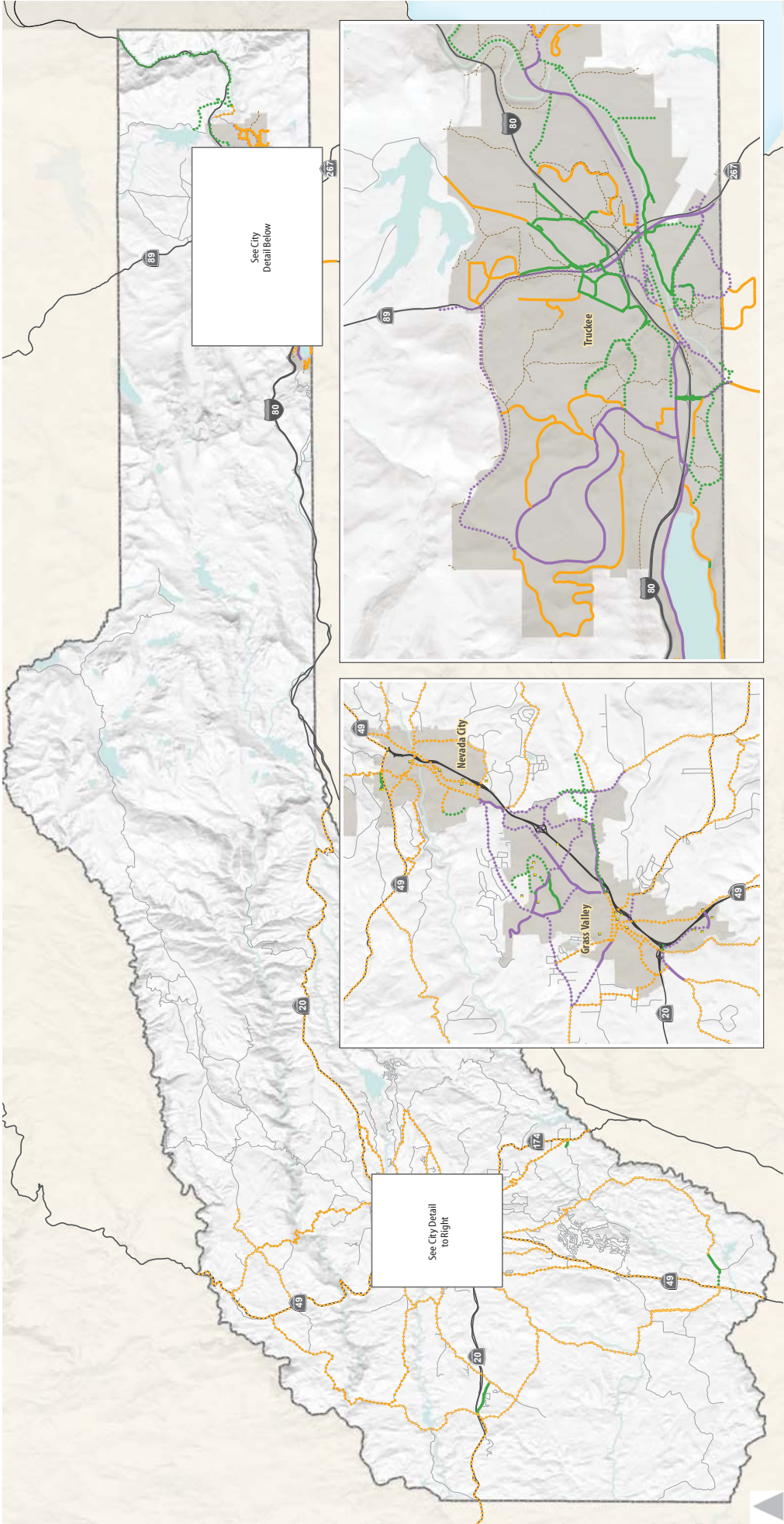
Walking and bicycling are the most prevalent forms of non-motorized transportation in Nevada County. In addition to helping reduce traffic congestion and automobile emissions, providing safe facilities that encourage walking and bicycling can enhance the quality of life for Nevada County residents. In 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.

As shown in Table 13, 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. Figure 18 and Figure 19 depict the bicycle and pedestrian networks for the county as developed by these plans.





- Existing Bike Facilities
  - Class I Bike Path
  - Class II Bike Lane
  - Class III Bike Route
- Planned Bike Facilities
  - Class I Bike Path
  - Class II Bike Lane
  - Class III Bike Route
  - Class III with Multi-use Shoulder
  - Earthen Trail
- Incorporated City Limits
- Nevada County Boundary



Figure 18

Bicycle Facilities

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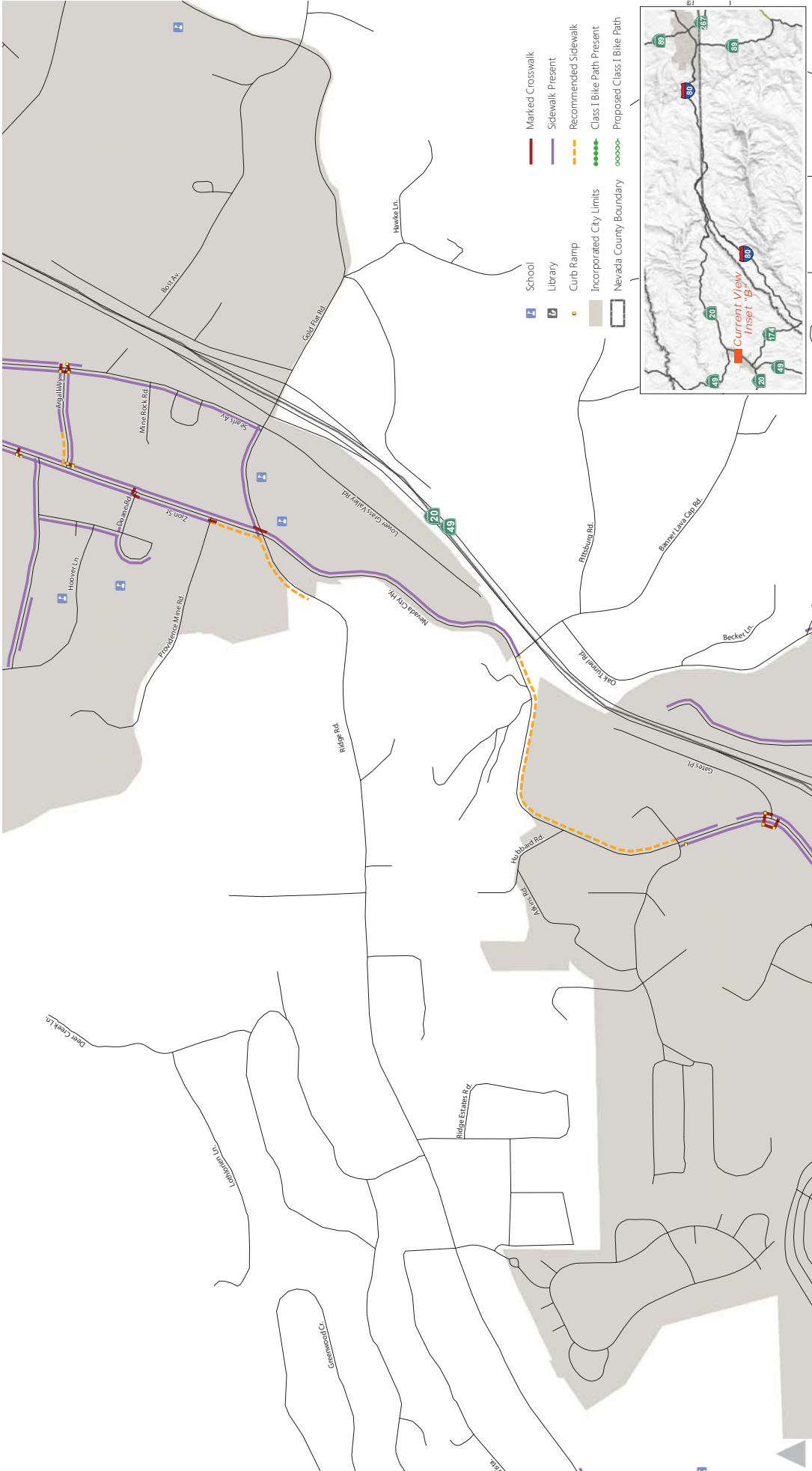


Figure 19B

Nevada County Pedestrian Facilities



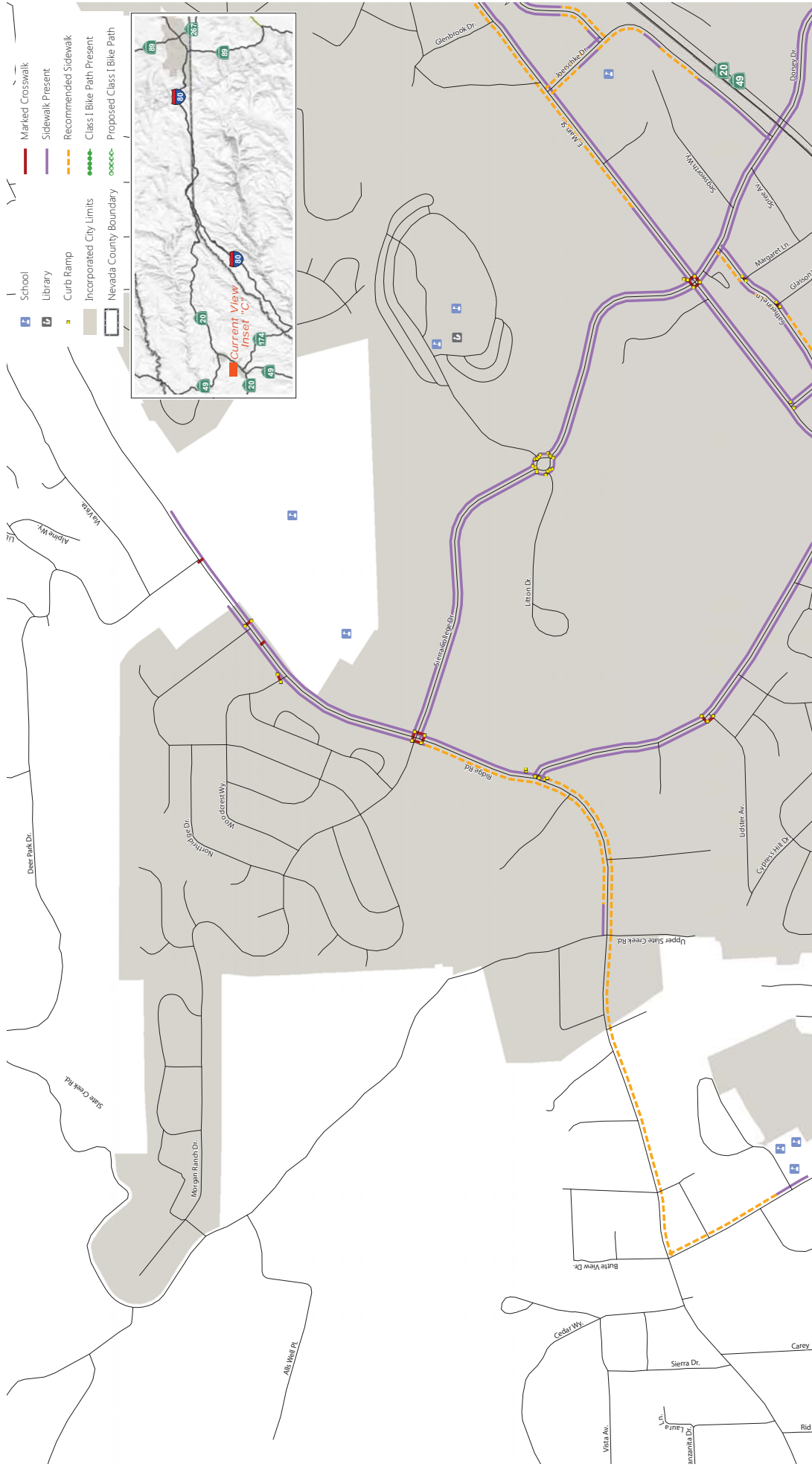


Figure 19C

Nevada County Pedestrian Facilities



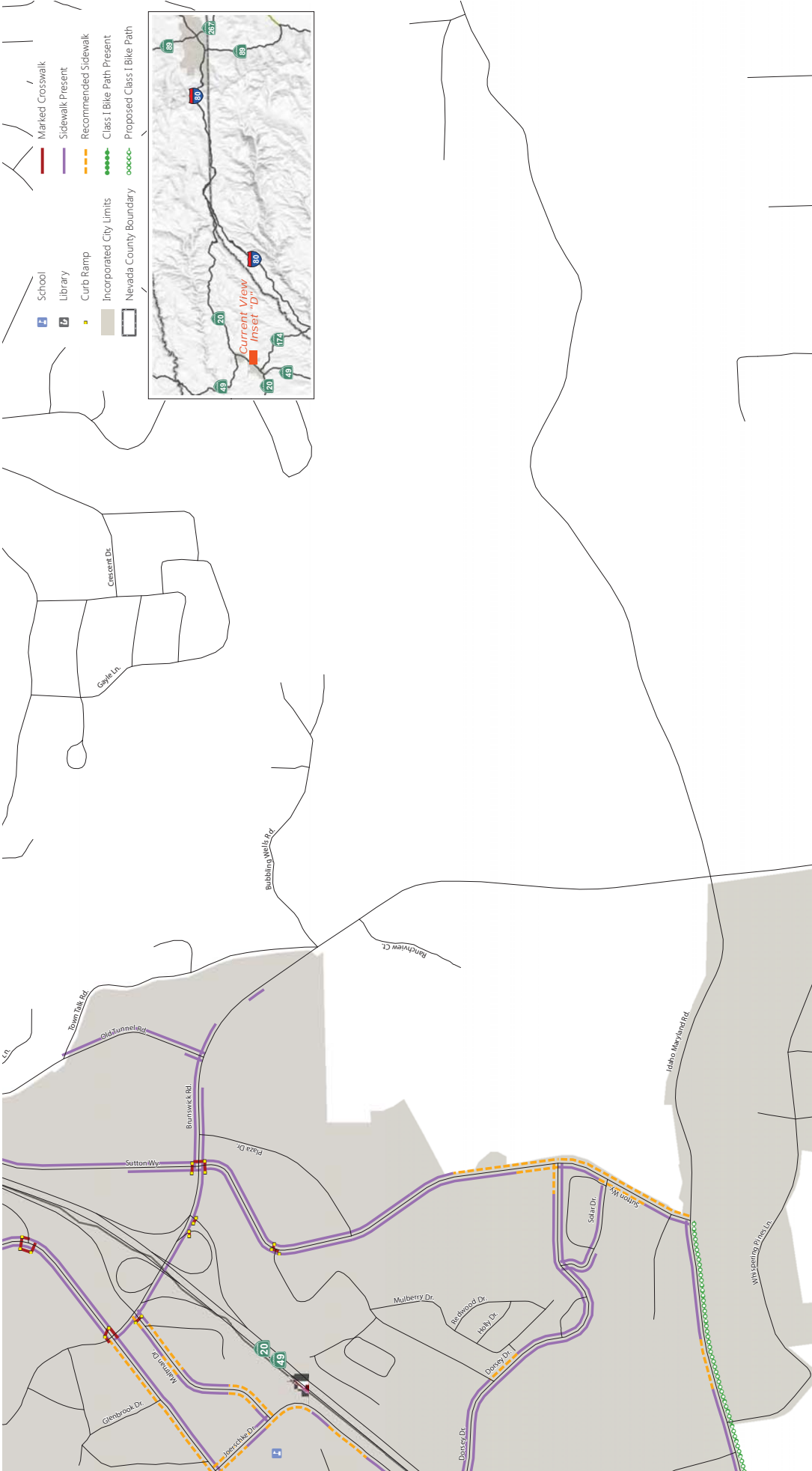


Figure 19D

Nevada County Pedestrian Facilities



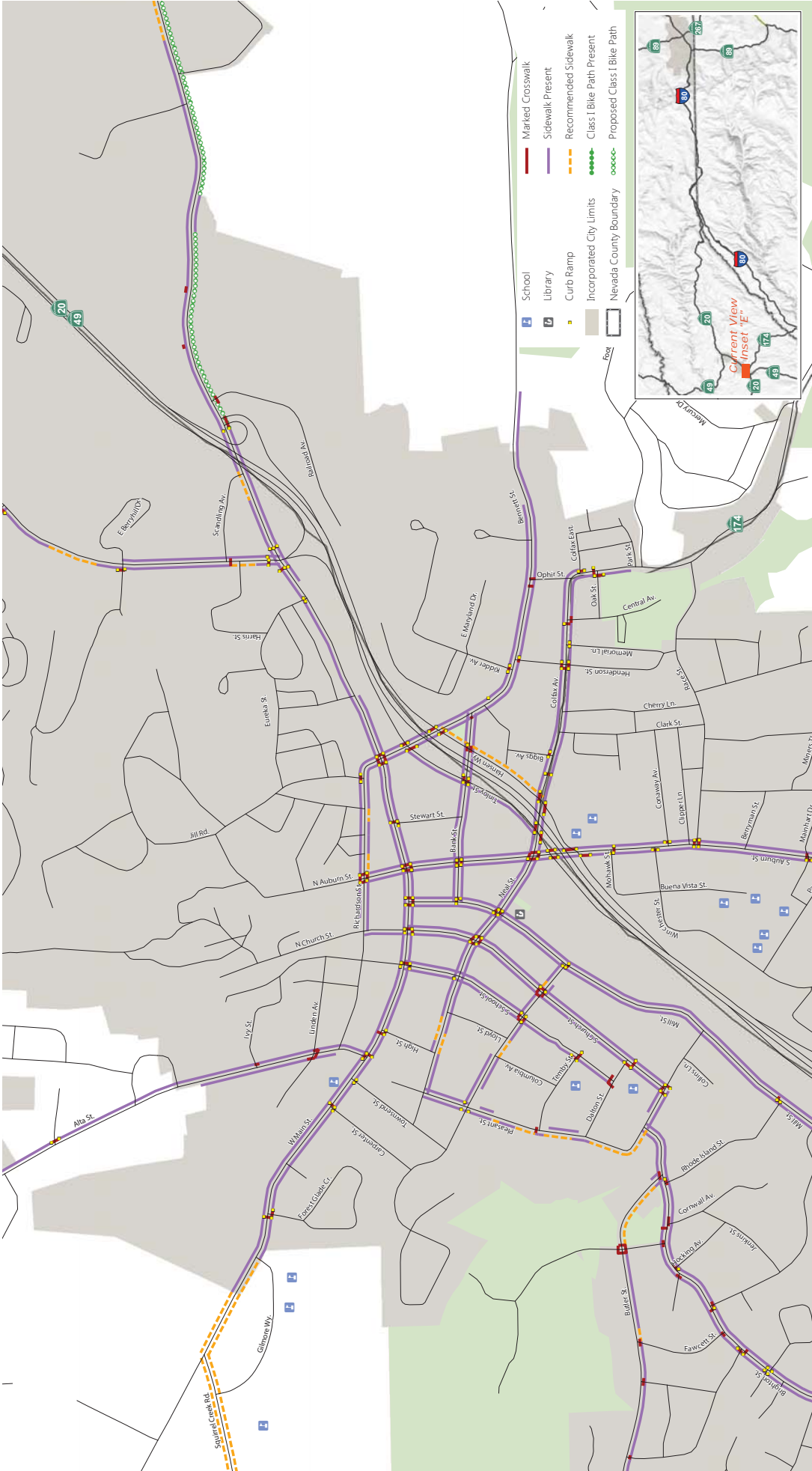


Figure 19E

Nevada County Pedestrian Facilities









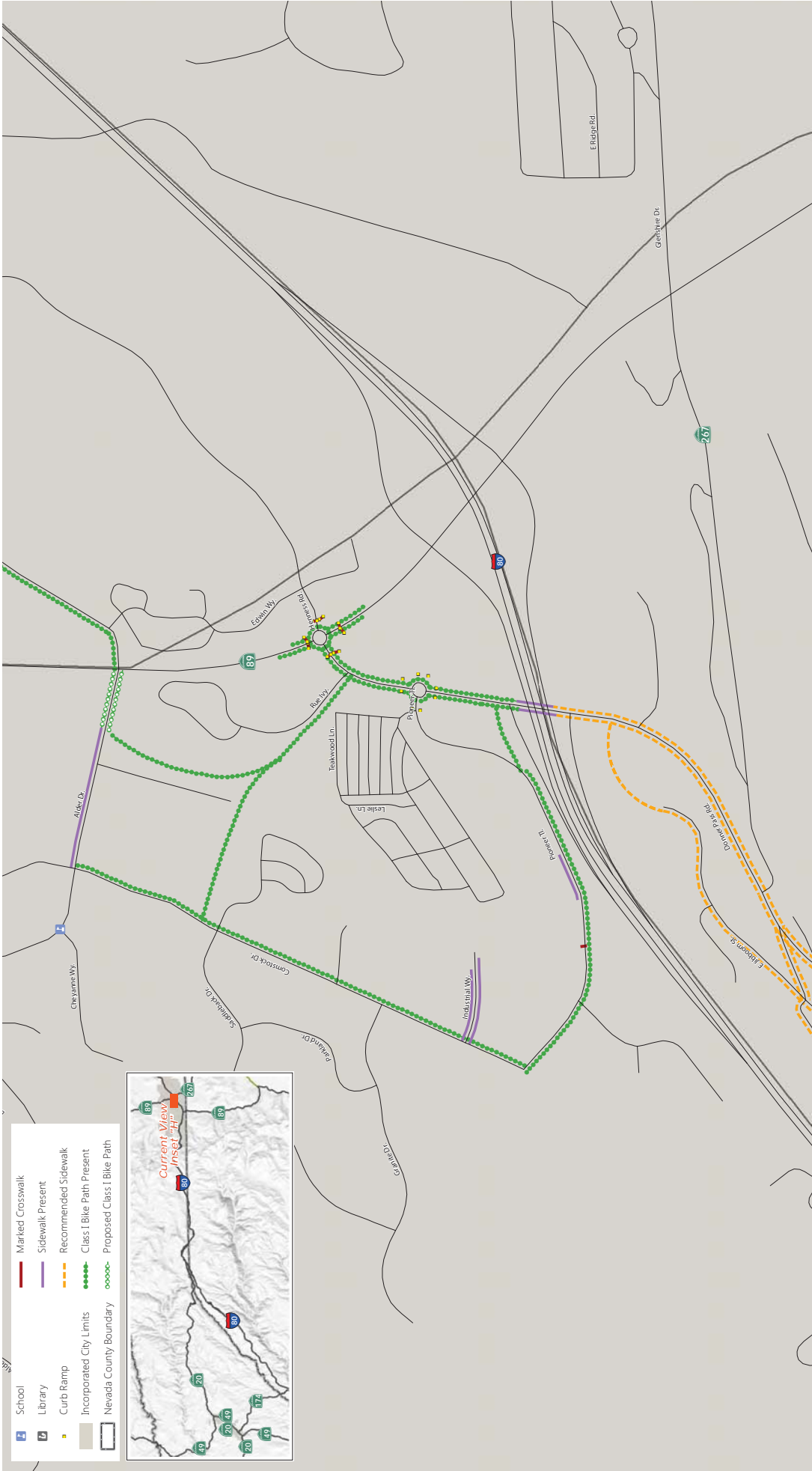


Figure 19H

Nevada County Pedestrian Facilities



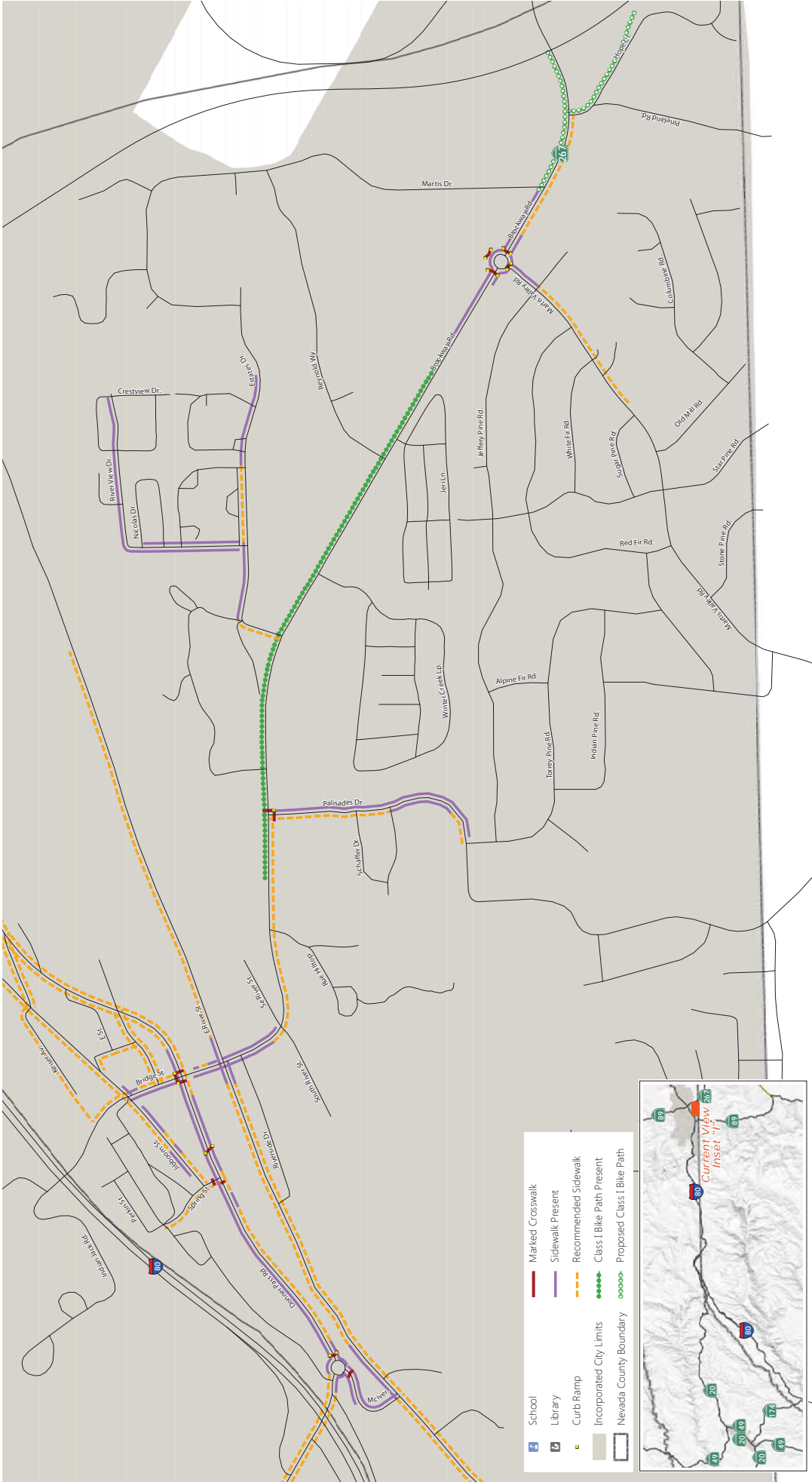


Figure 191

Nevada County Pedestrian Facilities



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.

### 4.3.1 BICYCLE AND PEDESTRIAN ACTION PLAN

Improvements to the bicycle and pedestrian networks support achievement of the RTP performance targets under Goal 2, "Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County."

The actions below all support objectives 2.A, 2.B, and 3.B.

#### 4.3.1.1 Short-Term Actions

1. Encourage the jurisdictions to consider projects identified in the Nevada County Bicycle Master Plan, Nevada County Pedestrian Improvement Plan, and Truckee Trails and Bikeways Master Plan that can be incorporated into the planning, construction, and maintenance activities of Nevada County, Grass Valley, Nevada City, and Truckee. (NCTC, jurisdictions)
2. Encourage the jurisdictions to annually submit applications for Active Transportation Program and other state and federal grant funding to construct projects identified in the Nevada County Bicycle Master Plan, Nevada County Pedestrian Improvement Plan, and Truckee Trails and Bikeways Master Plan (NCTC, jurisdictions).

#### 4.3.1.2 Long-Term Actions

1. Encourage the jurisdiction to require future development to dedicate the right-of-way for off-street bikeways, with connections to future planned facilities outside of the development in mind. (NCTC, jurisdictions)
2. Work with the jurisdictions to develop connections to adjacent counties and agencies, especially (NCTC, jurisdictions):
  - o Along SR 267 between Truckee Tahoe Airport and Martis Creek Lake
  - o Along SR 89 between Truckee and Tahoe City
  - o Along SR 49 south of Grass Valley as roadway capacity is expanded

## 4.4 AVIATION

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.

### 4.4.1 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.

#### 4.4.2 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.

### 4.4.3 AVIATION ACTION PLAN

Improvements to the aviation network support achievement of the RTP performance targets under Goal 2, "Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County," Objective 2.B, "Support safe aviation access at our airports."

#### 4.4.3.1 Short-Term Actions

Short-term actions for aviation in Nevada County are defined in each airport's capital improvement program. The 2017-2021 Nevada County Airport Capital Improvement Program contains the projects listed in Table 45. The 2016-2019 Truckee Airport Capital Improvement Program contains the projects listed in Table 46.

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	\$1,050,000
Runway 25 PAPI Installation (Design & Construction).	\$157,500	\$7,875	\$9,625	\$175,000
Taxiway A, Ramps 1, 2, and 5 and Service Road Reconstruction (Design) - Phase I	\$135,000	\$6,750	\$8,250	\$150,000
Taxiway A, Ramps 1, 2, and 5 and Service Road Reconstruction (Constr.) - Phase II	\$1,170,000	\$58,500	\$71,500	\$1,300,000
Ramps 3 & 4 repair (Design) - Phase I	\$63,000	\$3,150	\$3,850	\$70,000
Ramps 3 & 4 repair (Construction) - Phase II	\$360,000	\$18,000	\$22,000	\$400,000
Runway Pavement Preservation - Crack Seal, Seal Coat & Re-stripe (Design)	\$76,500	\$3,825	\$4,675	\$85,000
<b>Total</b>	<b>\$2,907,000</b>			

Source: NCTC, 2016.

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
<b>Total</b>	<b>\$4,729,000</b>			
Source: NCTC, 2016.				

#### 4.4.3.2 Long-Term Actions

If demand warrants, consider implementation of improvements identified in both the Nevada County Airport Layout Plan (as referenced in the Nevada County Airport Land Use Compatibility Plan) and the Truckee Tahoe Airport Master Plan final phases. Some of these needs are predicated on increased demand brought on by future development and population growth. If growth and development do not occur, these improvements may not be required. Both plans recommend long-term improvements to the airfield and the building areas.

## 4.5 RAILROAD FACILITIES

Union Pacific Railroad (UPRR) owns and operates tracks that roughly follow I-80 along the southern and eastern borders of Nevada County (Figure 1). 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 47. All crossings are gated.

<b>TABLE 47: AT-GRADE RAILROAD CROSSINGS AND COLLISIONS</b>			
<b>Roadway</b>	<b>Cross Street</b>	<b>Collisions, 2005-2014</b>	<b>Year of Last Collision</b>
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			

### 4.5.1 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.

### 4.5.2 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.



### 4.5.3 RAIL ACTION PLAN

Section 3.1.11 of the Policy Element describes plans which evaluated increasing railroad service to Nevada County. The Union Pacific Railroad (UPRR), the owner/operator of the rail right-of-way along I-80, declined to consider additional passenger rail operations (beyond the daily California Zephyr) in this heavily-utilized freight corridor. Without support of the UPRR, changes to rail service are unlikely in the short term.

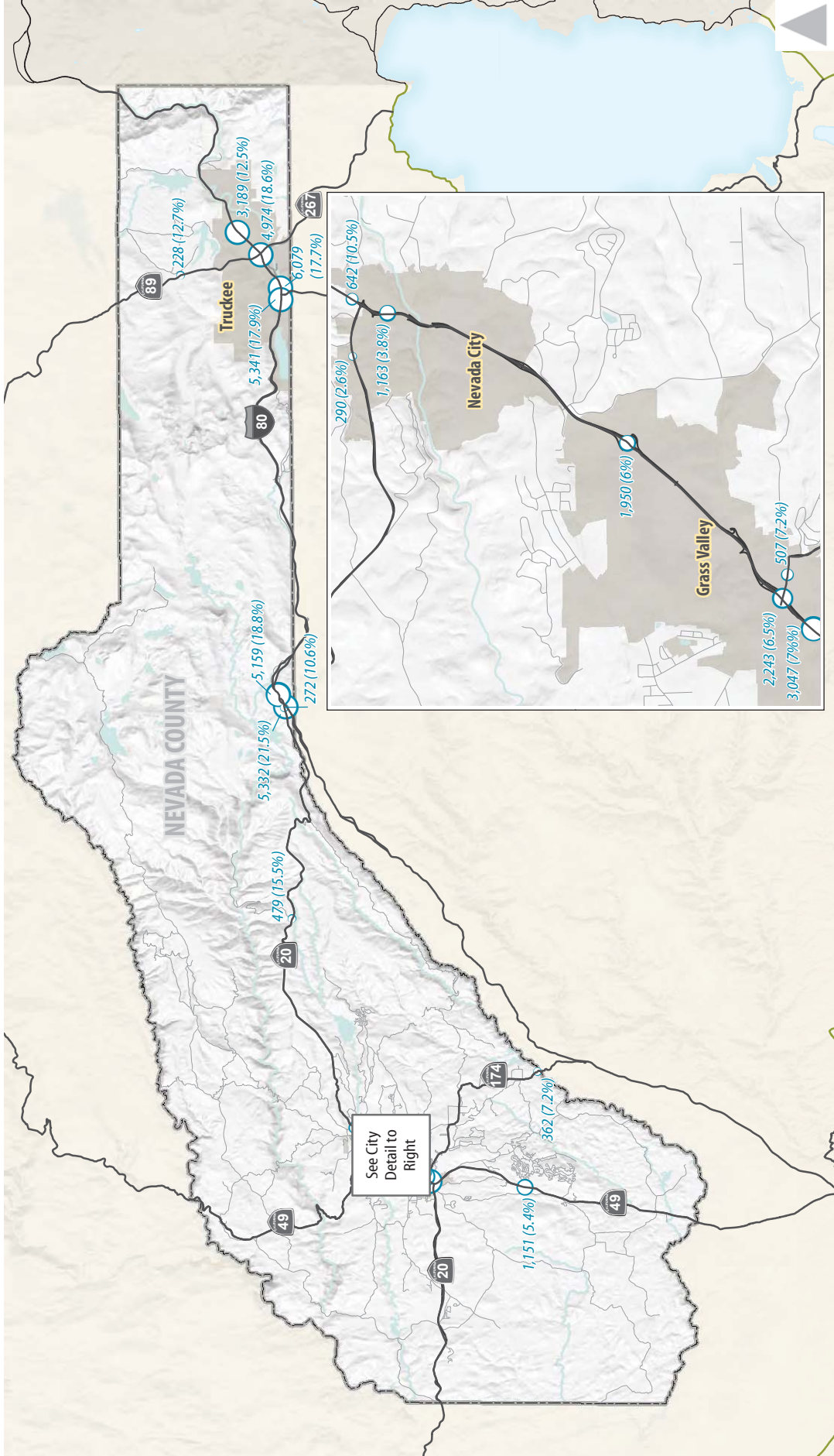
#### 4.5.3.1 Short and Long-Term Action Plan

The actions below support Goal 1.0, "Provide for the safe and efficient movement of all people, goods, and services on the roadway network;" Goal 2.0, "Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County;" and Goal 3.0, "Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life;" and objectives 1.B, 2.A, and 3.B.

1. Encourage expansion of the Amtrak passenger service to Colfax, Soda Springs, Truckee, and Reno/Sparks. (NCTC, PCTPA, CCJPA, Caltrans, Washoe County Regional Transportation Commission, jurisdictions, TNT/TMA)
2. Support federal legislation to provide funding for rail corridors, including the Amtrak Capitol Corridor. (NCTC, PCTPA, CCJPA, Washoe County Regional Transportation Commission, jurisdictions, TNT/TMA, Federal representatives)
3. Support expansion of additional Capitol Corridor passenger trains to Auburn. (NCTC, PCTPA, TSC, Nevada County DPW)

## 4.6 GOODS MOVEMENT

As discussed in the Introduction to the RTP, the primary mode of goods movement in Nevada County is by truck. Figure 20 and Table 48 summarize 2013 truck volumes on state facilities in Nevada County. 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. Freight movement by truck suffers from congestion on the roadway system as discussed in Section 4.1, the Roadway Action Element. Traffic congestion on the Interstate and State Highways in Nevada County particularly affects goods movement through the region. Therefore, securing State transportation funding for the planned improvements to these facilities in Nevada County will continue to be a priority.



- Truck Volumes
- 1,001 - 2,000
- < 500
- 501 - 1,000
- Incorporated City Limits
- Nevada County Boundary
- 2,001 - 3,000
- > 3,000
- 2,243 (6.5%)
- Truck Volume (Percentage Trucks)

Figure 20

Truck Volumes



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**TABLE 48: 2013 TRUCK VOLUMES ON STATE HIGHWAYS**

Facility	Location	Vehicle AADT	Truck AADT	Truck Volume (%)
SR 20	Grass Valley, SR 49	43,500	3,047	7.0
	SR 174	34,500	2,243	6.5
	Brunswick Road	32,500	,1950	6.0
	Nevada City, East SR 49 (ahead)	6,100	642	10.5
	Washington Road	3,100	479	15.5
	I-80	2,550	272	10.6
SR 49	Alta Sierra Drive	21,500	1,151	5.4
	Nevada City, SR 20 (back)	31,000	1,163	3.8
	Nevada City, SR 20 (ahead)	11,100	290	2.6
I-80	SR 20 West	24,800	5,332	21.5
	SR 20 West	27,400	5,159	18.8
	Truckee, SR 89 South (back)	29,800	5,341	17.9
	Truckee, SR 89 South (ahead)	34,400	6,079	17.7
	SR 89 North, SR 267 South	26,800	4,974	18.6
	Union Hills BR OH	25,500	3,189	12.5
SR 89	Hobart Mills Road	1,800	228	12.7
SR 174	Placer County Line	5,000	362	7.2
	Grass Valley, SR 20	7,000	507	7.2

Source: Annual Average Daily Truck Traffic on California State Highways – Caltrans 2013.

#### 4.6.1 HIGHWAY FREIGHT NETWORK TIERS

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.

#### 4.6.2 GOODS MOVEMENT ACTION PLAN

The projects discussed in the Roadway Network Action Plan will directly support improving goods movement in Nevada County. Additional specific goods movement actions are provided below. These projects and actions will support Performance Measure 1.0, "Provide for the safe and efficient movement of all people, goods, and services on the roadway network," and objectives 1.A and 1.B.

#### **4.6.2.1 Short-Term Action Plan**

1. Review transportation projects to ensure that they minimize conflicts between trucks and other vehicles. (NCTC, Caltrans, jurisdictions)

#### **4.6.2.2 Long-Term Action Plan**

1. Support the improvement or increase in goods movement modes available to the county. (NCTC, Caltrans, jurisdictions)
2. Support projects that facilitate interregional, multi-modal goods movement to commercial and industrial areas in Nevada County. (NCTC, Caltrans, jurisdictions)

## **4.7 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.

#### 4.7.1 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 agencies 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)

#### 4.7.2 INTELLIGENT TRANSPORTATION SYSTEMS ACTION PLAN

The actions below will support Goal 1.0, "Provide for the safe and efficient movement of all people, goods, and services on the roadway network," and objectives 1.A and 1.B.

#### 4.7.2.1 Short-Term Actions

1. Work with Caltrans to implement the projects contained in the Caltrans District 3 Intelligent Transportation System (ITS)/ Operational Improvement Plan. (NCTC, Caltrans)
2. Support Truckee Transit implementation of AVL system included in NextBus project (Truckee Transit).

#### 4.7.2.2 Long-Term Actions

1. Continue coordination and implementation (deployment, operations, and maintenance) of ITS projects contained in the Tahoe Gateway Counties ITS Strategic Deployment Plan, in partnership with Tahoe Gateway Partner Agencies and Caltrans. (NCTC, El Dorado County, Placer County, Sierra County. jurisdictions, Caltrans, SACOG, FHWA)
2. Ensure the long-term viability of ITS in the Tahoe Gateway Region by reviewing and updating the Tahoe Gateway Counties ITS Strategic Deployment Plan as necessary, in coordination with Tahoe Gateway partner agencies. (NCTC, El Dorado County, Placer County, Sierra County. jurisdictions, Caltrans, SACOG, FHWA)
3. Maintain an ITS program that is compatible and supported by national ITS efforts through periodic maintenance of the Tahoe Gateway ITS Architecture, in coordination with Tahoe Gateway partner agencies. (NCTC, El Dorado County, Placer County, Sierra County. jurisdictions, Caltrans, SACOG, FHWA)
4. Ensure that a Regional ITS Architecture Maintenance Plan is maintained and implemented, in coordination with Tahoe Gateway partner agencies. (NCTC, El Dorado County, Placer County, Sierra County. jurisdictions, Caltrans, SACOG, FHWA)

## 4.8 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.

### 4.8.1 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. The recent increase in workers working at home (as shown in Table 13 and Figure 8) suggests that telecommuting is increasing in Nevada County.

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.

#### 4.8.2 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.

#### 4.8.3 MULTIMODAL 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

#### 4.8.4 TRANSPORTATION SYSTEMS MANAGEMENT ACTION PLAN

The actions below support Goal 1.0, “Provide for the safe and efficient movement of all people, goods, and services on the roadway network;” Goal 2.0, “Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County;” and Goal 3.0, “Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life;” and objectives 1.B, 2.A, and 3.B.

##### 4.8.4.1 Short- and Long-Term Actions

1. Work cooperatively with Caltrans and neighboring jurisdictions to implement ITS improvements that would support TSM efforts in the region. (NCTC, Caltrans, neighboring jurisdictions)
2. Encourage increased marketing efforts in Nevada County to increase public awareness of transit opportunities and the benefits on air quality. (NCTC, NSAQMD, Nevada County, Town of Truckee, TNT/TMA)
3. Coordinate with local jurisdictions to identify and implement traffic flow improvements on regionally significant roadways. (NCTC, jurisdictions, Caltrans)
4. Improve and expand public transportation systems as feasible through the annual unmet transit needs process. (NCTC, transit operators, SSTAC)
5. Develop and expand facilities to support the use of alternatives to single-occupancy vehicle driving such as pedestrian and bicycle facilities, park-and-ride lots, and transit transfer stations. (NCTC, jurisdictions, Caltrans)
6. Promote development of park-and-ride lots co-located with transit stops in Eastern Nevada County to support both tourist and resident use of carpooling and transit (NCTC, Town of Truckee, TNT/TMA, Caltrans)
7. Encourage employers to offer staggered shifts, flexible hours, compressed work weeks, and high occupancy vehicle preferential scheduling. (NCTC, jurisdictions, TNT/TMA, NSAQMD)
8. Encourage employer based carpool programs to increase employee vehicle occupancy through incentives or requirements. (NCTC, jurisdictions, TNT/TMA, NSAQMD)
9. Support organizations promoting broadband expansion. (NCTC, jurisdictions, NSAQMD)
10. Encourage the development and expansion of municipal Wi-Fi/WiMAX networks. (NCTC, jurisdictions, NSAQMD)

## 4.9 AIR QUALITY AND GREENHOUSE GASES

### 4.9.1 ENVIRONMENTAL SETTING

Nevada County is located within the Mountain Counties Air Basin (MCAB). The MCAB includes Nevada, Sierra, Plumas, Amador, Calaveras, Tuolumne, and Mariposa counties and a portion of El Dorado and Placer counties. 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.

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 frequently occur, where warm air overlays cooler air, and traps pollutants close to the ground.

In the summer, the strong upwind valley air flowing into the basin from the Central Valley to 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 (13 CCR sec. 70500).

### 4.9.2 EXISTING AIR QUALITY CONDITIONS

The Environmental Protection Agency (EPA) has designated western Nevada County (west of a line near Soda Springs) as "nonattainment" for the 2008 ozone National Ambient Air Quality Standards (NAAQS). Nonattainment is due primarily to transport of pollutants generated outside of Nevada County into Nevada County. The primary source of these pollutants is the broader Sacramento area and, to a lesser degree, the San Francisco Bay area. For the 1997 standard (80 ppb), the area received a Finding of Attainment that suspends planning requirements for this standard (which is different from a redesignation, which requires a Maintenance Plan). For the 2008 standard (75 ppb), the area is classified as Moderate Nonattainment, but the Northern Sierra Air Quality Management District (NSAQMD) anticipates being reclassified as Serious Nonattainment in 2017 due to monitor data not showing a trend toward attainment. Western Nevada County has been recommended by CARB as Nonattainment for the 2015 ozone NAAQS, with a Design Value of 0.081 ppm. Final EPA designations and classifications are expected in late 2017.

The standards are 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.

All of Nevada County is either classified as attainment or unclassifiable for all other NAAQS.

### 4.9.3 REGIONAL AIR QUALITY PLANNING

NSAQMD has submitted a control strategy State Implementation Plan (SIP) for the 1997 standard, which incorporates all required Reasonably Available Control technology (RACT), and which has been approved by EPA. The SIP is an air quality plan that demonstrates how the area will attain and maintain Federal Clean Air Act Standards.

There are no additional RACT controls required for the 2008 standard, although a Reasonably Available Control Measure analysis must be performed. In 2016, the NSAQMD adopted two key rules for meeting federal Nonattainment requirements under the 2008 NAAQS: New Source Review and Emissions Statements. EPA is delaying action on Transportation Conformity rules around the State while some technical issues are worked out. The NSAQMD and the California Air Resources Board (CARB) are currently developing an overall SIP revision to submit to EPA for the 2008 ozone NAAQS. It appears that the area is on track for its 2008 ozone NAAQS Reasonable Further Progress milestone demonstration of 15% volatile organic compounds (VOCs, precursors of ozone) reduction within the first 6 years of Nonattainment. This progress is mostly due to vehicles becoming cleaner.

SIPs for the 2015 ozone NAAQS will theoretically be due in 2020, although the 2015 ozone NAAQS Implementation Rule will not be finalized by EPA until at least late 2017.

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 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.

NSAQMD works in conjunction with the NCTC and California Air Resources Board to prepare an 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.

NCTC coordinates with the NSAQMD and CARB to insure integration of the Regional Transportation Plan and the SIP to facilitate implementation of emission reducing measures when appropriate. Nevada County is required to adopt all reasonably available transportation control measures (TCMs).

The California Clean Air Act (CCAA) does not define what measures are reasonably available or how decisions on "reasonableness" are to be made. According to the California Clean Air Act Transportation Requirements Guidance, February 1990, prepared by the CARB, the air quality management districts, in coordination with local and state transportation agencies, have the primary responsibility to determine the measures that are reasonable, and to ensure that those so deemed are included in the district's air quality plan. In this case, the NCTC is coordinating with NSAQMD and appropriate agencies in the development and adoption of transportation control measures for Nevada County. Additional strategies and programs may be identified in the attainment plan that is to be prepared by the NSAQMD.

#### 4.9.4 FUTURE AIR QUALITY CONDITIONS

The CARB 2012 Almanac Emission Projection Data, published in 2013, was used to estimate future on-road vehicle emissions. Table 49 displays estimated emissions based on motor vehicle fleet emission data and travel data for Nevada County. Between 2015 and 2025, emissions of reactive organic gases, nitrogen oxides, and carbon monoxide are forecasted to decrease approximately 50%. Over the same period, PM 2.5 is expected to decrease almost 40% and particulate matter (PM) 10 is expected to decrease 20%. Sulfur oxides emissions are expected to remain flat. Over this period, VMT is expected to decrease as shown in This substantial decrease in emissions is related to assumptions in the modeling regarding improving emission rates for vehicles due to state emission control programs.

Additionally, the RTP seeks to reduce air quality issues associated with future growth by increasing the efficiency of the transportation system and increasing alternative transportation options.

<b>TABLE 49: CARB 2013 ALMANAC EMISSION PROJECTION DATA ESTIMATED COUNTY-WIDE EMISSIONS FROM ON-ROAD MOTOR VEHICLES</b>						
<b>Daily Emissions (Tons/Day)</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>
Reactive Organic Gases	3.072	1.989	1.319	0.933	0.788	0.694
Carbon Monoxide	28.492	17.635	12.866	8.411	6.367	5.311
Nitrogen Oxides	8.022	5.527	4.298	2.856	1.953	1.699
Sulfur Oxides	0.054	0.018	0.019	0.019	0.019	0.020
Particulate Matter 2.5 Microns	0.241	0.178	0.124	0.113	0.114	0.119
Particulate Matter 10 Microns	0.347	0.292	0.239	0.235	0.243	0.254
<b>VMT (Million)</b>	2,923	3,121	3,332	3,503	3,679	3,858
Source: CARB, 2016						

#### 4.9.5 GREENHOUSE GASES

As discussed in Section 3.2 of the Policy Element, more efficient vehicles and low-carbon fuel efforts being pursued at the state level will likely afford the greatest reduction in rural GHG emissions. NCTC will continue to support these efforts, including the expansion of electric vehicle charging stations within Nevada County. For example, ChargePoint, a charging station network provider, has been awarded grants from the California Energy Commission to install five DC fast charging stations in the I-80 corridor between Auburn and Truckee and two stations in the SR 49 corridor between Auburn and Grass Valley.

The low-density nature of most Nevada County development creates challenges for meeting access and mobility needs via non-automotive modes. As with most rural counties, alternative modes are limited in Nevada County and are not seen as a significant replacement to the automobile for economic, mobility, and geographic reasons. This factors and funding challenges similarly limit the availability of transit within Nevada County. Additionally, walking and bicycling are more difficult in many areas of the county due to hilly topography. NCTC will continue to support transit, pedestrian, and bicycle transportation as discussed in Section 4.2, Public Transit, and Section 4.3, Bicycle and Pedestrian Facilities, of the Action Element.

#### 4.9.6 SHORT-TERM AND LONG-TERM ACTIONS

The actions below support achievement of the RTP performance targets under Goal 3, "Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life," Objective 3.A, "Reduce regional emissions of criteria pollutants and greenhouse gases."

1. Support continued expansion of electric vehicle charging station networks. (NCTC)
2. Encourage the use of alternative fuels and electric vehicles to reduce impacts on air quality as feasible. (NCTC, NSAQMD)

3. Conduct interagency consultation as needed to review transportation related air quality issues. (NCTC, NSAQMD, CARB, Caltrans, EPA, FHWA, FTA)
4. 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)
5. Coordinate with NSAQMD during the development of the State Implementation Plan for Nevada County. (NCTC, NSAQMD)
6. 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)
7. Coordinate with member jurisdictions to ensure transportation and land use planning efforts take into consideration strategies to reduce GHG emissions. (NCTC, Nevada County, Grass Valley, Nevada City, Town of Truckee)
8. Consider and implement transportation planning and investment strategies that may result in GHG emission reductions as appropriate. (NCTC)

## 4.10 TRANSPORTATION SAFETY AND SECURITY ACTION PLAN

The transportation system must be safe as well as efficient for all users. Safety includes collision reduction, homeland security, and personal safety and security.

Roadway safety statistics were discussed in Section 4.1.7 of the Roadway Network Action Element. As discussed in this section, SR 49 south of Grass Valley continues to be a public safety concern. Limited road width prevents installation of a center concrete barrier without widening the road, which would require significant cost and purchase of adjoining property in some areas. NCTC will continue to work with the SR 49 Stakeholder Committee to pursue safety improvements in this corridor.

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 ongoing preparedness, emergency drills, and simulations with other agencies, including those that provide transportation services.

Within California's emergency management organizational structure, each county serves as an Operational Area. In this role, Nevada County OES serves as an agent between State OES and the cities, special districts

and unincorporated areas of Nevada County. During a disaster, this includes gathering information on the county's emergency response needs, assessing county and state resources, and facilitating the acquisition, use, and coordination of those resources.

The Nevada County Transportation Commission's role in transportation safety and security consists of the following:

- Planning and programming transportation infrastructure improvements
- Coordinating implementation of the SR 49 Corridor System Management Plan
- Serving 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
- Identifying opportunities to leverage resources for planning and construction of transportation infrastructure projects that can enhance transportation and security efforts
- Coordinating with Caltrans and local jurisdictions to identify safety and security concerns on key facilities and work to identify funding and implement solutions

#### 4.10.1 TRANSPORTATION SAFETY AND SECURITY ACTION PLAN

The actions below support Goal 1, "Provide for the safe and efficient movement of all people, goods, and services on the roadway network," Objective 1.A, "Improve safety," and Goal 2.0, "Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County," Objective 2.C, "Support safe aviation access at our airports."

##### 4.10.1.1 Short- and Long-Term Actions

1. Complete safety improvement project in the SR 174 corridor (Caltrans)
2. Encourage jurisdictions and transportation agencies to continue to coordinate with the Nevada County OES on emergency preparedness activities. (Local jurisdictions, transit operators, CHP, Caltrans, Nevada County OES, NCTC)
3. Continue coordination of education, enforcement efforts, short-term and long-term improvements through participation in the SR 49 Stakeholder Committee. (Nevada County, Caltrans, CHP, NCTC)
4. Coordinate implementation of projects included in the SR 49 Corridor System Management Plan. (Nevada County, Caltrans, CHP, NCTC)
5. Encourage a regional approach to maximize the public outreach and education and related enforcement initiatives that target high risk behavior issues that improve safety. (CHP, Caltrans, local jurisdictions, NCTC)

## 5.0 FINANCIAL ELEMENT

The Financial Element identifies the current and anticipated revenue sources and financing techniques available to fund the planned transportation investments described in the Action Element. Additionally, the Financial Element defines realistic financing constraints and opportunities.

The Action Element calls for an extensive list of improvements over the period of the Plan. As is true in many other areas of the state, there are not enough existing federal, state, or regional resources to fully fund all of the improvements identified. Therefore, this financial analysis presents a constrained funding scenario made up of the revenue that is reasonably expected to be available from existing funding mechanisms over the horizon of the RTP, including projections of the future STIP and federal transportation funds. It also identifies the unconstrained (unfunded) state highway and regional roadway needs.

### 5.1 ESTIMATE OF REVENUES

A key task in the preparation of a long-range transportation funding strategy is an assessment of revenue potentially available from existing federal and state programs and local sources. Preparing forecasts of anticipated transportation revenues is a challenging task due to decreasing funding trends at the state and federal levels (discussed in Section 5.2, Funding Programs) as well as an evolving local economic and funding situation. Table 50 summarizes the revenues available to support operations, maintenance, and projects to improve the Nevada County transportation system in both the short and long terms. Annual averages in this table were only calculated for reasonably foreseeable funding sources. Annual averages were not calculated for grant funds, short-term funding mechanisms, and other highly variable funding sources. Estimates below are consistent with the four-year STIP fund estimate.

<b>Funding</b>	<b>Eligible Expenditures</b>	<b>Short-Term 2015-2025</b>	<b>Long-Term 2026-2035</b>	<b>Total</b>	<b>Annual Average</b>
<b>Federal Revenue</b>					
Congestion Mitigation Air Quality (CMAQ)	Congestion Reduction, Transit, Non-Motorized, Alternative Fuels	\$8,169	\$8,188	\$16,357	\$819
Federal Airport Improvement Program (FAIP)	Airport Capital Improvements	\$7,163	\$7,000	\$14,163	N/A
Federal Lands Access Program (FLAP)	Roadways, Maintenance	\$9,835	\$0	\$9,835	N/A
FTA 5310	Transit Operations, Transit Capital	\$1,500	\$1,500	\$3,000	N/A



**TABLE 50: ESTIMATE OF REVENUES TO IMPLEMENT CONSTRAINED PROJECTS**

<b>Funding</b>	<b>Eligible Expenditures</b>	<b>Short-Term 2015-2025</b>	<b>Long-Term 2026-2035</b>	<b>Total</b>	<b>Annual Average</b>
FTA 5311 b Rural Assistance Program	Transit Operations	\$6,223	\$7,042	\$13,265	\$663
FTA 5339	Transit Capital	\$139	\$0	\$139	N/A
<b>State Revenue</b>					
Area 4 Agency on Aging (A4AA)	Transit Operations	\$318	\$388	\$706	\$35
California Aid to Airports (CAAP)	Airport Capital Improvements	\$7,636	\$7,000	\$14,636	N/A
Highway Safety Improvement Program (HSIP)	Highways, Roadway Improvements	\$5,614	\$5,614	\$11,228	\$561
Interregional Improvement Program (IIP)	Highways	\$0	\$10,000	\$10,000	N/A
Low Carbon Transit Operations Program (LCTOP)	Transit Operations	\$978	\$1,098	\$2,076	\$104
Public Transportation, Modernization, Improvement, and Service Account (PTMISEA)	Transit Capital	\$966	\$0	\$966	N/A
Regional Improvement Program (RIP)	Highways	\$10,136	\$10,000	\$20,136	\$1,007
Regional Surface Transportation Program (RSTP) Exchange	Highways, Roads, Transit, Non-Motorized, Travel Demand Management	\$13,345	\$13,345	\$26,690	\$1,335
State Highway Operations & Protection Program (SHOPP)	Highway Safety, Rehabilitation, Maintenance	\$38,233	\$38,000	\$76,233	\$3,812
State Highway Maintenance	Highway Maintenance	\$50,860	\$50,860	\$101,720	\$5,086
State Transit Assistance (STA)	Transit Capital, Transit Operations	\$5,444	\$6,115	\$11,559	\$578
<b>Local Revenue</b>					
Gas Tax Revenues	Roadway Maintenance	\$49,547	\$61,970	\$111,517	5,576
Local Transportation Funds (LTF) - Transit	Transit, Non-Motorized, Roadway Maintenance	\$29,872	\$37,168	\$67,040	\$3,352
LTF - Community Transit Services (CTS)	Transit Operations	\$1,469	\$1,791	\$3,260	\$163
LTF - Ped & Bike	Non-Motorized	\$599	\$731	\$1,330	\$67
Nevada County Motor Vehicle License Fee - Measure F	Roadway Maintenance and Repair, Safety, and Access	\$17,057	\$17,057	\$34,114	\$1,706
Regional Transportation Mitigation Fee (RTMF)	Roadway Improvements	\$10,340	\$10,340	\$20,680	N/A

**TABLE 50: ESTIMATE OF REVENUES TO IMPLEMENT CONSTRAINED PROJECTS**

Funding	Eligible Expenditures	Short-Term 2015-2025	Long-Term 2026-2035	Total	Annual Average
Transit Fares - Western Nevada County	Transit Operations	\$3,453	\$4,170	\$7,623	\$381
Transit Fares - Town of Truckee	Transit Operations	\$312	\$345	\$657	\$33
Grass Valley Transportation Impact Fee (GVTIF)	Roadway Improvements	\$8,144	\$8,144	\$16,288	N/A
Nevada County Local Traffic Mitigation Fee (LTMF)	Roadway Improvements	\$1,915	\$1,915	\$3,830	N/A
Truckee Traffic Impact Fee (TTIF)	Roadway Improvements	\$31,268	\$31,268	\$62,536	N/A
Grass Valley Sales Tax – Measure N	Roadway Maintenance	\$5,000	\$0	\$5,000	N/A
Nevada City Sales Tax – Measure S	Roadway Maintenance	\$3,360	\$0	\$3,360	N/A
Town of Truckee Sales Tax - Measure T	Roadway Maintenance	\$23,000	\$6,900	\$29,900	N/A
<b>Total</b>					
		\$351,895	\$347,949	\$699,844	\$25,276

Source: NCTC, 2016.

## 5.2 FUNDING PROGRAMS

Transportation funding has continued to be challenging at most levels of government. While local jurisdictions in the County have had success with sales tax measures to fund transportation, state funding continues to be short of needs.

At the state level, Caltrans has estimated that approximately \$8 billion is required annually over the next ten years to address highway system needs; however, only \$2.3 billion per year is expected to be available.<sup>14</sup> As of late November 2015, the 2016 State Transportation Improvement Program (STIP) Fund Estimate indicated that only \$46 million was available statewide to fund new projects.<sup>15</sup> In January 2016, the California Transportation Commission approved an estimate of projected funding reduced by \$754 million over the next five years, noting that this estimate was “the most optimistic scenario,” and that “even more Draconian cuts” may be made next year if the Legislature fails to reach agreement on a number of reforms and new

<sup>14</sup> Caltrans, Caltrans Releases Plans Detailing Critical Infrastructure Funding Shortfalls Facing California’s Highway System, May 8, 2010, <http://www.dot.ca.gov/hq/paffairs/news/pressrel/2015/15pr042.htm>.

<sup>15</sup> Daniel B. Landon, Public Hearing: 2015/16 Regional Transportation Improvement Program, Nevada County Transportation Commission, November 6, 2015.

funding increases currently under consideration. The state gas tax has dropped by 11.7 cents per gallon over the last few years,<sup>16</sup> with each penny amounting to a reduction of about \$140 million per year in total revenue. The commission expects to rescind funding previously committed to projects.<sup>17</sup>

At the national level, the federal gas tax has been unchanged at 18.4 cents per gallon since 1997, and thus has experienced a significant decline in real purchasing power. The Fixing America's Surface Transportation (FAST) Act was passed in 2015. The bill covers fiscal years 2016 to 2020 and is the first long-term transportation bill in a decade. However, though funding was provided through 2020, no increase to the gas tax was included, and funding shortfalls are likely to continue thereafter.<sup>18</sup>

## 5.2.1 FEDERAL FUNDING PROGRAMS

### *The Fixing America's Surface Transportation (FAST) Act*

On December 4, 2015, President Obama signed into law the Fixing America's Surface Transportation (FAST) Act. Overall, the FAST Act largely maintains current program structures and funding shares between highways and transit. The law also makes changes and reforms to many Federal transportation programs, including streamlining the approval processes for new transportation projects, providing new safety tools, and establishing new programs to advance freight projects. A summary of important federal programs is provided below.

### *Surface Transportation Block Grant Program (STBGP)*

The Surface Transportation Block Grant Program (STBGP) provides flexible funding that may be used by states and localities for projects on any federal-aid highway. In the past this funding was authorized by the Surface Transportation Program (STP) in the Moving Ahead for Progress in the 21st Century Act (MAP-21). Funding for STBGP is now authorized through the FAST Act, with the same goals as STP funding. This funding may be used by States and localities for projects to preserve or improve conditions and performance on any Federal-aid highway, bridge projects on any public road, facilities for active transportation, transit capital projects, and public bus terminals and facilities.

The Transportation Alternatives Program (TAP), authorized through MAP-21, provided funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and

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<sup>16</sup> California State Board of Equalization, State Tax Rates for Fuels, February 8, 2017, <http://www.boe.ca.gov/sutax/strf.htm>.

<sup>17</sup> California Department of Transportation, CTC News Release: State Body Slashes Transportation Funding, January 22, 2016, <http://www.dot.ca.gov/hq/paffairs/news/pressrel/2016/16pr004.htm>.

<sup>18</sup> U. S. Department of Transportation, The Fixing America's Surface Transportation Act or "FAST Act," Updated January 12, 2016, <https://www.transportation.gov/fastact>.

bicycle facilities, transit access, mobility, and recreation trails. This program is now part of the STBGP in FAST instead of a stand-alone program as it was under MAP-21.

#### *Congestion Mitigation and Air Quality Program (CMAQ)*

This funding program, established by the 1991 Federal Intermodal Surface Transportation Efficiency Act (ISTEA) and continued MAP-21, continues under the FAST Act. Funds are directed to transportation projects and programs that contribute to the attainment of maintenance of National Ambient Air Quality Standards in non-attainment or air quality maintenance areas for ozone, carbon monoxide, or particulate matter under the provisions of the Clean Air Act. In 2004, western Nevada County was designated as an isolated rural "basic non-attainment" area under the federal 8-hour ozone national air quality standard and is now eligible for CMAQ funds.

Eligible CMAQ projects include public transit improvements, high occupancy vehicle (HOV) lanes; intelligent transportation infrastructure, traffic management and traveler information systems, employer-based transportation management plans and incentives, traffic flow improvement programs (signal coordination), fringe parking facilities serving multiple occupancy vehicles, shared ride services, bicycle and pedestrian facilities, flexible work-hour programs, outreach activities establishing Transportation Management Associations (TMAs), and fare/fee subsidy programs.

#### *Airport Improvement Program (AIP)*

The Federal AIP provides grants to public agencies and private owners and entities for the planning and development of public-use airports that are in the National Plan of Integrated Airport System (NPIAS). Eligible projects include improvements related to enhancing airport safety, capacity, security, and environmental concerns. In general, sponsors can use AIP funds on most airfield capital improvements or repairs, except terminals, hangars, and non-aviation development.

#### *Federal Lands Access Program (FLAP)*

The Federal Lands Access Program (Access Program) was established in 23 U.S.C. 204 to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands. The Access Program supplements State and local resources for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators.

#### *Federal Transit Administration (FTA)*

The FAST Act continues funding for transit. The following programs will be utilized in Nevada County:

Section 5310 - Capital funds for elderly and disabled transit programs. This competitive grant program has been administered by Caltrans. Under the FAST Act, localities that provide transit service can be direct recipients. Private non-profit corporations and public agencies are also eligible.

Section 5311b - Rural Assistance Program funds can be used for non-urbanized public transportation, both capital and operating costs. Although these funds are subject to federal approval, they are programmed locally by the NCTC.

Section 5339 - The Grants for Buses and Bus Facilities program makes federal resources available to states and direct recipients to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities. Funding is provided through formula allocations and competitive grants. A sub-program, the Low- or No-Emission Vehicle Program, provides competitive grants for bus and bus facility projects that support low and zero-emission vehicles.

## 5.2.2 STATE FUNDING PROGRAMS

### *Area 4 Agency on Aging (A4AA)*

The Area 4 Agency on Aging provides funds supporting transit for older adults and their families.

### *California Aid to Airports Program (CAAP)*

CAAP encompasses three different programs administered by Caltrans Division of Aeronautics. These include discretionary grants for capital improvements, annual grants of \$10,000 each to general aviation airports, and matching funds for Federal Aviation Administration (FAA) grants.

### *Highway Safety Improvement Program (HSIP)*

Caltrans administers the Highway Safety Improvement Program (HSIP) specified as part of the FAST Act. This program uses cost-benefit ratios as a primary factor in the awarding of applications. Because the program focuses on roadway safety, projects with documented collision history – through frequency of collision but particularly collision severity – are typically ranked higher.

### *State Transportation Improvement Program (STIP), Interregional Improvement Program (IIP), and Regional Improvement Program (RIP)*

The STIP is a five-year multimodal program that is funded through the State Highway Account and other sources. All STIP projects must be capital projects (including project development costs) needed to improve

transportation. These projects generally include, but are not limited to, improving state highways, local roads, public transit, intercity rail, pedestrian and bicycle facilities, grade separations, transportation system management, transportation demand management, sound walls, intermodal facilities, safety, and environmental enhancement and mitigation.

The STIP consists of two broad programs. 75% of the funds available to the STIP are committed to the Regional Improvement Program (RIP). Projects to be funded from the RIP are selected by regional transportation planning agencies and are included in their Regional Transportation Improvement Programs (RTIPs). The RTIP may propose to program or reserve up to 5% of the county share for project planning, programming, and monitoring by the transportation planning agency. The remaining 25% of STIP funds will be available to Caltrans for state highways, intercity rail, grade separation, and mass transit guideway improvements. This funding program is called the Interregional Improvement Program (IIP) and Caltrans list of projects will be known as the Interregional Transportation Improvement Program (ITIP).

#### *Low Carbon Transit Operations Program (LCTOP)*

The Low Carbon Transit Operations Program (LCTOP) is one of several programs that are part of the Transit, Affordable Housing, and Sustainable Communities Program established by the California Legislature in 2014 by Senate Bill 862. The LCTOP was created to provide operating and capital assistance for transit agencies to reduce greenhouse gas emission and improve mobility, with a priority on serving disadvantaged communities. Approved projects in LCTOP will support new or expanded bus or rail services, expand intermodal transit facilities, and may include equipment acquisition, fueling, maintenance, and other costs to operate those services or facilities, with each project reducing greenhouse gas emissions.

#### *Public Transportation, Modernization, Improvement, and Service Account (PTMISEA)*

Approved as Proposition 1B on the November 2006 ballot, the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act includes \$4 billion for the Public Transportation, Modernization, Improvement, and Service Account (PTMISEA). Of this amount, \$3.6 billion is designated for public transportation projects that protect the environment and public health, conserve energy, reduce congestion, and increase mobility and access. Funds are distributed by formula based on population or revenue to transit operators for capital projects.

#### *State Highway Operations and Protection Program (SHOPP)*

The SHOPP is a ten-year program developed by Caltrans for the expenditure of transportation funds for major capital improvements that are necessary to preserve and protect the state highway system. Projects

included in the SHOPP are limited to capital improvements relative to maintenance, safety, and rehabilitation of State highways and bridges, which do not add capacity to the system.

#### *State Highway Maintenance*

State Highway Maintenance provides funding to support maintenance efforts on the state highways and roadways.

#### *State Transit Assistance Funding (STA)*

State Transit Assistance funds can be used for the operation of public transportation and transit capital purchases, but are subject to performance criteria for utilization for operating purposes. These funds are allocated to regional transportation planning agencies pursuant to Sections 99313 and 99314 of the Public Utilities Code. The 99313 funds are allocated based on population, and the 99314 funds are allocated based on transit revenues collected.

### 5.2.3 LOCAL REVENUE

#### *Gas Tax Revenue and Gas Tax Swap (Gasoline Excise Tax Subvention)*

Gas tax revenues are generated through an excise tax on motor fuel imposed by the State of California. Gas tax funds are distributed to cities and counties formulaically to be used for street and road maintenance. Subventions are expected to continue for local jurisdictions based on existing formulas. After transportation bond debt payments, 44% of the gasoline excise tax is directed to local jurisdictions to support street and road maintenance. The state annually adjusts the excise tax to account for the decreased gasoline sales tax and maintain revenue neutrality. Thus, funds may vary year to year as consumption varies (due to economic conditions, fuel efficiency or other factors) and price varies (due to volatility of gas production and supply).

#### *Local Transportation Fund (LTF)*

Local Transportation Fund is a revenue source generated by 1/4 cent of the 8 1/4 cent retail sales tax collected statewide. Funds are apportioned to each county based on the amount of tax collected in that county. In Nevada County, the NCTC has the authority to allocate LTF funds for transit services, community transit services, pedestrian and bike projects, and roadways. In regions with less than 500,000 in population, funds may be used for streets and roads purposes if it is determined that there are no transit needs that are reasonable to meet.

### *Nevada County Motor Vehicle License Fee – Measure F*

In March 1996, Nevada County voters approved Measure F, an ordinance which required that all funds received from the State of California from motor vehicle license fee funds, as defined in the State Constitution and in statute, must be segregated into a separate accounting fund. The County must spend at least half of those funds in each fiscal year only for public roads and highways for maintenance, repair, circulation enhancement, general road safety, and fire access.

### *Regional Transportation Mitigation Fee Program (RTMF)*

The RTMF defines the regional transportation investments needed to accommodate the forecasted growth in western Nevada County, and identifies the financial resources needed to pay for these investments. The County of Nevada and the cities of Grass Valley and Nevada City participate in these studies at both the policy and technical levels. The RTMF Fee Program was updated in 2016.

The purpose of the RTMF Program is to ensure that future growth would fully mitigate both its direct and cumulative impacts. The county and the two participating cities are responsible for imposing and collecting the fee in their respective areas of jurisdiction.

To determine which projects should be included in an RTMF Capital Improvement Program, "Regional projects" are generally identified as follows:

- Projects on all ramp connections to freeways or expressways.
- Projects on roads functionally classified as "arterials" and above.
- Projects identified as providing regional circulation in city or county general plans and their EIRs.

### *Transit Fares*

Funds generated by passenger fares on transit services are used to help fund system operating costs. Under the requirements of the Transportation Development Act (TDA), fares must generate at least 10% of the operating revenue for transit systems in Nevada County.

### *Local Traffic Impact Fees*

Under state law local jurisdictions may impose fees on development that mitigate their impacts on traffic generated by the new development on the road system.



### Local Transportation Sales Tax

Counties or cities may impose a sales tax dedicated to transportation purposes with the approval of 2/3 of the county's or city's voters. Grass Valley, Nevada City and the Town of Truckee currently have voter-approved sales tax measures for transportation purposes.

## 5.3 COMPARISON OF PROJECTED EXPENDITURES AND REVENUES

Projected expenditures associated with the 2015-2035 Regional Transportation Plan must be constrained within the anticipated revenues. This section compares the short-term and long-term action plans for each mode with the anticipated revenues for the 2015-2035 timeframe.

The Action Element described unconstrained projects, in particular for the roadway and transit networks. However, looking beyond the constrained project lists, the future of funding transportation projects is more clouded. Transportation funding has continued to be challenging at most levels of government. At the national level, although the FAST Act was passed in 2015, funding was only provided through 2020, no increase to the gas tax was included, and funding shortfalls are likely to continue thereafter. At the state level, the California Transportation Commission has reduced projected funding and reported that more cuts are likely.

### 5.3.1 ROADWAY NETWORK

Revenues for roadway network capital projects and maintenance costs are compared in Table 51 below.

	<b>Short-Term FY 2015/16 - 2024/25</b>	<b>Long-Term FY 2025/26 - 2034/35</b>	<b>Total</b>
<b>Revenues</b>	\$284,141	\$269,940	\$554,081
<b>Capital Costs</b>	\$85,046	\$78,761	\$162,307
<b>Maintenance Costs</b>	\$136,000	\$136,000	\$272,000
<b>Balance</b>	\$63,095	\$56,679	\$119,774
Source: NCTC, 2016			

This table shows a nominal surplus in both the short-term and long-term planning horizons. However, this surplus is primarily due to the limited number and scope of planned projects, not robust revenue. It is

assumed that reasonably available forecasted revenue is sufficient over the entire planning period to fund programmed and planned improvements.

### 5.3.2 PUBLIC TRANSIT

Table 52 and Table 53 compare the projected transit and paratransit operating costs and revenues for Western and Eastern Nevada County, respectively.

<b>TABLE 52: COMPARISON OF PROJECTED WESTERN NEVADA COUNTY TRANSIT/PARATRANSIT OPERATING REVENUES AND COSTS, SURPLUS/DEFICIT (IN THOUSANDS)</b>			
	<b>Short-Term FY 2015/16 - 2024/25</b>	<b>Long-Term FY 2025/26 - 2034/35</b>	<b>Total</b>
<b>Revenues</b>	\$41,316	\$49,070	\$90,386
<b>Costs</b>	\$41,267	\$50,759	\$92,026
<b>Balance</b>	\$49	-\$1,689	-\$1,640
Source: NCTC, 2016			

Western Nevada County transit operating costs will begin to exceed the forecasted transit/paratransit operating revenues beginning in FY 2018/19 and will necessitate drawing from the LTF and STA reserve fund. It will be important to annually review the financial conditions and revenue trends in order to determine if any service reductions and/or fare increases need to be considered to ensure the transit system remains financially sustainable over the long-term.

<b>TABLE 53: COMPARISON OF PROJECTED EASTERN NEVADA COUNTY TRANSIT/PARATRANSIT OPERATING REVENUES AND COSTS, SURPLUS/DEFICIT (IN THOUSANDS)</b>			
	<b>Short-Term FY 2015/16 - 2024/25</b>	<b>Long-Term FY 2025/26 - 2034/35</b>	<b>Total</b>
<b>Revenues</b>	\$11,402	\$13,854	\$25,256
<b>Costs</b>	\$11,110	\$13,532	\$24,642
<b>Balance</b>	\$292	\$322	\$614
Source: NCTC, 2016			

Eastern Nevada County transit operating costs are expected to be less than revenues over the life of the RTP. Long-term local and regional enhancements will require additional funding.

### 5.3.3 BICYCLE AND PEDESTRIAN NETWORKS

Funding sources administered by NCTC that are eligible for non-motorized transportation projects include Local Transportation Fund (LTF) pedestrian and bicycle funds, Regional Surface Transportation Program (RSTP) funds, and Congestion Mitigation Air Quality (CMAQ) funds. Forecasts of LTF pedestrian and bicycle funds, assuming an annual increase of 2.0% beyond FY 2015/16, indicate approximately \$1,330,087 will be

available over the plan period. RSTP funding forecasts, indicate approximately \$26,689,460 will be available over the plan period. However, it should be noted this funding source can be used on a wide range of other types of transportation projects. Forecasts of CMAQ funding revenue for western Nevada County, indicate approximately \$16,356,633 will be available over the plan period. However, pedestrian and bicycle projects will have to compete with other types of transportation projects eligible for CMAQ funding.

#### 5.3.4 AVIATION

It is assumed that the Nevada County Airport will utilize operating revenues as a local match to leverage California Aid to Airports Program (CAAP) or Federal Airport Improvement Program (AIP) grant funds for completion of the Capital Improvement Plan (CIP) projects. The Tahoe Truckee Airport generates revenues from operating expenses and special district property tax revenues collected within the Truckee Tahoe Airport District. It is assumed that the Tahoe Truckee Airport will utilize operating and property revenues to construct projects included in their CIP and as a local match for the Federal AIP or State CAAP grant funding.

### 5.4 POTENTIAL REGIONAL REVENUE OPTIONS TO ADDRESS FUNDING SHORTFALLS

Providing adequate funding for the actions recommended in this RTP will require a combination of funding mechanisms. Due to the challenges at the federal and state levels, local jurisdictions will have to rely more heavily on their own resources. Described below are potential local funding programs that have been successful in other jurisdictions and are applicable for use in Nevada County.

- *Local Option Sales Taxes:* These taxes have been instituted in several counties to fund transportation improvements. Future increases in traffic congestion and the limited amount of state funding available to implement needed transportation improvements may make this a viable option to Nevada County residents in the future. Local option sales tax funding for transportation improvements has been approved by voters in many of the metropolitan counties. It appears that voters are generally receptive to such a tax, when the specific projects to be funded by the tax meet the needs identified by the voters.
- *Local Option Motor Vehicle Fuel Taxes:* These taxes can be implemented by a two-thirds endorsement of Nevada County voters and an agreement between applicable agencies on the amount of tax and allocation of revenues.
- *Conditions of Development:* Conditions may be placed on proposed development, which contributes to a transportation system impact. A development may be conditioned to assist in the implementation of any improvement directly related to their development.

- *General Obligation Bond Measures:* Cities and counties may issue general obligation bonds payable through increased property taxes by a two-thirds majority vote of the general electorate. These bonds may be used to fund government services, including transportation improvements.
- *Benefit Assessment Districts:* This allows local governments to recover the costs of public improvements directly from property owners benefiting from the project(s). The assessment is based on the premise that the transportation improvement project(s) enhances the value of the affected property. Assessments are enacted according to a zone of benefit, with each affected parcel being assessed a specified dollar amount. The amount of revenue generated from an assessment district is dependent on the cost of its proposed public improvements.
- *Mello-Roos Community Facilities Districts:* This source of revenue provides for the issuance of tax-free municipal bonds by creating a special tax assessment district to repay the debt. Local jurisdictions may form the district and levy a special tax after two-thirds approval of the voters (or if uninhabited, two-thirds of the landowners) within the proposed district. Total revenues are dependent on the costs of proposed projects.
- *Active Transportation Program:* The Active Transportation Program was created in 2013 and consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single program with a focus to make California a national leader in active transportation. NCTC has completed bicycle and pedestrian master plans that could be updated and combined into an active transportation plan that meets the requirements of this program. The cities of Grass Valley and Nevada City, in addition to other areas of the County, qualify as disadvantaged communities under this program as discussed in Section 2.6.3, and therefore are more likely to be eligible for project funding.

## APPENDIX A: REGIONAL TRANSPORTATION PLAN CHECKLIST





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## Regional Transportation Plan Checklist

(Revised February 2010)

*(To be completed electronically in Microsoft Word format by the MPO/RTPA and submitted along with the draft RTP to Caltrans)*

**Name of MPO/RTPA:** \_\_\_\_\_ Nevada County Transportation Commission

**Date Draft RTP Completed:** \_\_\_\_\_ April 14, 2017

**RTP Adoption Date:** \_\_\_\_\_ **TBD**

**What is the Certification Date of the Environmental Document (ED)?** \_\_\_\_\_ **TBD**

**Is the ED located in the RTP or is it a separate document?** \_\_\_\_\_ Separate document

*By completing this checklist, the MPO/RTPA verifies the RTP addresses all of the following required information within the RTP.*

### Regional Transportation Plan Contents

#### General

1. Does the RTP address no less than a 20-year planning horizon? (23 CFR 450.322(a))
2. Does the RTP include both long-range and short-range strategies/actions? (23 CFR part 450.322(b))
3. Does the RTP address issues specified in the policy, action and financial elements identified in California Government Code Section 65080?
4. Does the RTP address the 10 issues specified in the Sustainable Communities Strategy (SCS) component as identified in Government Code Sections 65080(b)(2)(B) and 65584.04(i)(1)? **(MPOs only)**
  - a. Identify the general location of uses, residential densities, and building intensities within the region? **(MPOs only)**
  - b. Identify areas within the region sufficient to house all the population of the region, including all economic segments of the population over the course of the planning period of the regional transportation plan taking into account net migration into the region, population growth, household formation, and employment growth? **(MPOs only)**
  - c. Identify areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to Government Code Section 65584? **(MPOs only)**
  - d. Identify a transportation network to service the transportation needs of the region? **(MPOs only)**

Yes/No	Page #
Yes	4
Yes	4
Yes	27, 59, 134
NA	
NA	
NA	
NA	
NA	



- e. Gather and consider the best practically available scientific information regarding resource areas and farmland in the region as defined in subdivisions (a) and (b) of Government Code Section 65080.01? **(MPOs only)**
  - f. Consider the state housing goals specified in Sections 65580 and 65581? **(MPOs only)**
  - g. Utilize the most recent planning assumptions, considering local general plans and other factors? **(MPOs only)**
  - h. Set forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the ARB? **(MPOs only)**
  - i. Provide consistency between the development pattern and allocation of housing units within the region (Government Code 65584.04(i)(1))? **(MPOs only)**
  - j. Allow the regional transportation plan to comply with Section 176 of the federal Clean Air Act (42 U.S.C. Section 7506)? **(MPOs only)**
4. Does the RTP include Project Intent i.e. Plan Level Purpose and Need Statements?
  5. Does the RTP specify how travel demand modeling methodology, results and key assumptions were developed as part of the RTP process? (Government Code 14522.2) **(MPOs only)**

Consultation/Cooperation

1. Does the RTP contain a public involvement program that meets the requirements of Title 23, CFR part 450.316(a)?
2. Did the MPO/RTPA consult with the appropriate State and local representatives including representatives from environmental and economic communities; airport; transit; freight during the preparation of the RTP? (23CFR450.316(3)(b))
3. Did the MPO/RTPA who has federal lands within its jurisdictional boundary involve the federal land management agencies during the preparation of the RTP?
4. Where does the RTP specify that the appropriate State and local agencies responsible for land use, natural resources, environmental protection, conservation and historic preservation consulted? (23 CFR part 450.322(g))
5. Did the RTP include a comparison with the California State Wildlife Action Plan and (if available) inventories of natural and historic resources? (23 CFR part 450.322(g))

Yes/No	Page #
NA	
NA	
NA	
NA	
NA	
NA	
Yes	4, 43
NA	
Yes/No	Page #
Yes	6
Yes	5
Yes	5
Yes	5
Yes	37



	Yes/No	Page #
6. Did the MPO/RTPA who has a federally recognized Native American Tribal Government(s) and/or historical and sacred sites or subsistence resources of these Tribal Governments within its jurisdictional boundary address tribal concerns in the RTP and develop the RTP in consultation with the Tribal Government(s)? (Title 23 CFR part 450.316(c))	Yes	4
7. Does the RTP address how the public and various specified groups were given a reasonable opportunity to comment on the plan using the participation plan developed under 23 CFR part 450.316(a)? (23 CFR 450.316(i))	Yes	5, 40
8. Does the RTP contain a discussion describing the private sector involvement efforts that were used during the development of the plan? (23 CFR part 450.316 (a))	Yes	6
9. Does the RTP contain a discussion describing the coordination efforts with regional air quality planning authorities? (23 CFR 450.316(a)(2)) <b>(MPO nonattainment and maintenance areas only)</b>	NA	
10. Is the RTP coordinated and consistent with the Public Transit-Human Services Transportation Plan?	Yes	33
11. Were the draft and adopted RTP posted on the Internet? (23 CFR part 450.322(j))	Yes	6
12. Did the RTP explain how consultation occurred with locally elected officials? (Government Code 65080(D)) <b>(MPOs only)</b>	NA	
13. Did the RTP outline the public participation process for the sustainable communities strategy? (Government Code 65080(E)) <b>(MPOs only)</b>	NA	
<b><u>Modal Discussion</u></b>	<b>Yes/No</b>	<b>Page #</b>
1. Does the RTP discuss intermodal and connectivity issues?	Yes	126
2. Does the RTP include a discussion of highways?	Yes	60
3. Does the RTP include a discussion of mass transportation?	Yes	91
4. Does the RTP include a discussion of the regional airport system?	Yes	114
5. Does the RTP include a discussion of regional pedestrian needs?	Yes	102
6. Does the RTP include a discussion of regional bicycle needs?	Yes	102
7. Does the RTP address the California Coastal Trail? (Government Code 65080.1) <b>(For MPOs and RTPAs located along the coast only)</b>	NA	
8. Does the RTP include a discussion of rail transportation?	Yes	118
9. Does the RTP include a discussion of maritime transportation (if appropriate)?	NA	
10. Does the RTP include a discussion of goods movement?	Yes	119



Programming/Operations

1. Is a congestion management process discussed in the RTP? (23 CFR part 450.450.320(b)) **(MPOs designated as TMAs only)**
2. Is the RTP consistent (to the maximum extent practicable) with the development of the regional ITS architecture?
3. Does the RTP identify the objective criteria used for measuring the performance of the transportation system?
4. Does the RTP contain a list of un-constrained projects?

Yes/No	Page #
NA	
Yes	122
Yes	51
Yes	80, 100, 91

Financial

1. Does the RTP include a financial plan that meets the requirements identified in 23 CFR part 450.322(f)(10)?
2. Does the RTP contain a consistency statement between the first 4 years of the fund estimate and the 4-year STIP fund estimate? (2006 STIP Guidelines, Section 19)
3. Do the projected revenues in the RTP reflect Fiscal Constraint? (23 CFR part 450.322(f)(10)(ii))
4. Does the RTP contain a list of financially constrained projects? Any regionally significant projects should be identified. (Government Code 65080(4)(A))
5. Do the cost estimates for implementing the projects identified in the RTP reflect "year of expenditure dollars" to reflect inflation rates? (23 CFR part 450.322(f)(10)(iv))
6. After 12/11/07, does the RTP contain estimates of costs and revenue sources that are reasonably expected to be available to operate and maintain the freeways, highway and transit within the region? (23 CFR 450.322(f)(10)(i))
7. Does the RTP contain a statement regarding consistency between the projects in the RTP and the ITIP? (2006 STIP Guidelines section 33)
8. Does the RTP contain a statement regarding consistency between the projects in the RTP and the FTIP? (2006 STIP Guidelines section 19)
9. Does the RTP address the specific financial strategies required to ensure the identified TCMs from the SIP can be implemented? (23 CFR part 450.322(f)(10)(vi)) **(nonattainment and maintenance MPOs only)**

Yes/No	Page #
Yes	134
Yes	134
Yes	134
Yes	77, 77, 87, 90
Yes	59
Yes	134
Yes	75
Yes	75
NA	

Environmental

1. Did the MPO/RTPA prepare an EIR or a program EIR for the RTP in accordance with CEQA guidelines?
2. Does the RTP contain a list of projects specifically identified as TCMs, if applicable?
3. Does the RTP contain a discussion of SIP conformity, if applicable? **(MPOs only)**
4. Does the RTP specify mitigation activities? (23 CFR part 450.322(f)(7))

Yes/No	Page #
Yes	4
NA	
NA	
TBD	

- 5. Where does the EIR address mitigation activities?
- 6. Did the MPO/RTPA prepare a Negative Declaration or a Mitigated Negative Declaration for the RTP in accordance with CEQA guidelines?
- 7. Does the RTP specify the TCMs to be implemented in the region? **(federal nonattainment and maintenance areas only)**

Yes/No	Page #
TBD	
Yes	4
NA	

**I have reviewed the above information and certify that it is correct and complete.**

\_\_\_\_\_  
 (Must be signed by MPO/RTPA  
 Executive Director or designated representative)

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Daniel B. Landon  
 Print Name

\_\_\_\_\_  
 Executive Director  
 Title

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## APPENDIX B: PUBLIC OUTREACH SUMMARY





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## MEMORANDUM

Date: August 26, 2015  
To: Dan Landon, Nevada County Transportation Commission  
From: Rod Brown and Dave Robinson, Fehr & Peers  
Subject: **Regional Transportation Plan Initial Public Outreach Summary**

RS15-3325

Fehr & Peers conducted three outreach events to gather public input for the update to the Nevada County Regional Transportation Plan. The three events were:

- Grass Valley Thursday Night Market (August 6, 2015) – attended by Dan Landon, Dave Robinson, and Kwasi Donkor
- Truckee Thursdays (August 13, 2015) – attended by Mike Woodman, Dave Robinson, and Rod Brown
- Nevada City Farmers Market (August 15, 2015) – attended by Dan Landon, Rod Brown, and Neil Smolen

During each event, NCTC and Fehr & Peers staff talked to members of the public, solicited input through voting on priorities posters and completing comment cards, and directed the public to the project website, <http://nctcrtp.fehrandpeers.net/>, to complete an online survey and stay connected to the RTP update. Inputs were received as summarized in the table below.

<b>PUBLIC OUTREACH RESPONSES</b>			
	<b>Grass Valley</b>	<b>Truckee</b>	<b>Nevada City</b>
<b>Priority votes</b>	<b>213</b>	<b>83</b>	<b>279</b>
<b>Comment cards</b>	<b>15</b>	<b>7</b>	<b>9</b>

25 online survey responses were also received as of August 25<sup>th</sup>.



### Summary of public input

The top concerns identified during the events were:

1. Many respondents reported they would like to take transit to destinations outside the area. This issue was the top concern overall. Similarly, many respondents reported that the bus generally does not go where they would like it to go. These responses were consistent in all three cities.
2. Air pollution, including ground level ozone and greenhouse gas emissions, was the second biggest concern overall, especially in Nevada City and Grass Valley.
3. The third biggest concern overall was feeling unsafe biking, most strongly in Grass Valley and Nevada City. Where the question was asked (only in Nevada City), strong support was also expressed for more bike lanes and facilities.
4. The fourth concern overall, and the second biggest concern in Truckee, was missing sidewalks which forced pedestrians to walk on the road. Walking conditions, including poor condition sidewalks, were a common issue in all three cities.

Several other key points were identified:

- Respect among different user groups (pedestrians, bicyclists, and drivers) was also a common concern.
- Road conditions were not a strong concern in any of the cities.
- Respondents in all three cities were willing to pay extra for better transportation facilities by large margins (8 to 1 overall).
- When asked what they like about transportation in Nevada County, respondents in all three cities reported feeling safe driving as well as walking. Truckee respondents also reported feeling safe biking. Grass Valley and Nevada City respondents also reported that they rarely encountered congestion and can easily drive to where they need to go.





Comment card responses were consistent with voting results. Comment cards frequently had suggestions for improvements at specific locations.

Appendix A contains all inputs received via voting posters at each of the outreach events. Appendix B depicts all informational posters and handouts used at the events. A copy of all comment cards as well as a summary of all contact information received on comment cards will be provided separately.

### **Next steps**

The website is online and accepting survey responses. As noted above, 25 surveys were completed as of August 25<sup>th</sup>. The website has been publicized in *The Union* and on YubaNet in addition to the outreach events. Continued publicity of the website on venues such as Facebook, the Sierra Foothills Report blog, local email groups, and via the local chambers of commerce, Sierra College, and local schools will create increased exposure and generate more responses.

### **Appendices**

Appendix A: Poster responses

Appendix B: Informational posters and handouts



## APPENDIX A

### POSTER RESPONSES

#### **Explanation of scoring**

Scores range from 0 to 100%. Scores were created by scaling the number of votes by the highest line item vote count separately for each city. To create overall scores, the scores for each item from all three cities were averaged, then that result was scaled again by the highest overall item score.

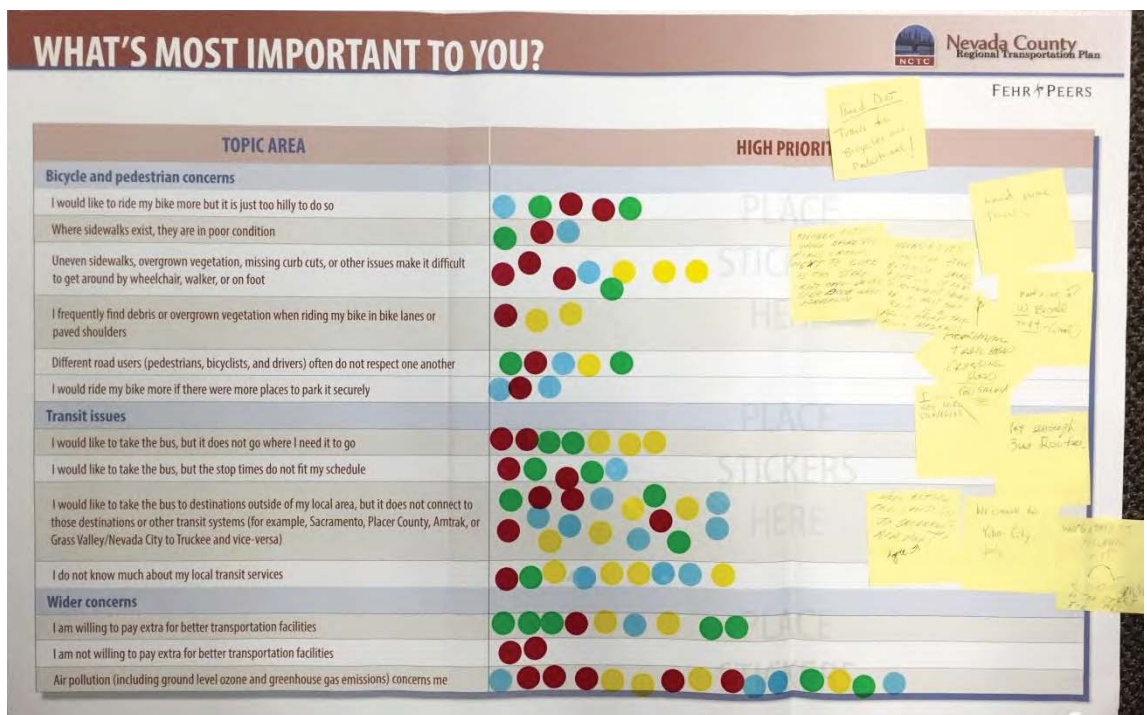
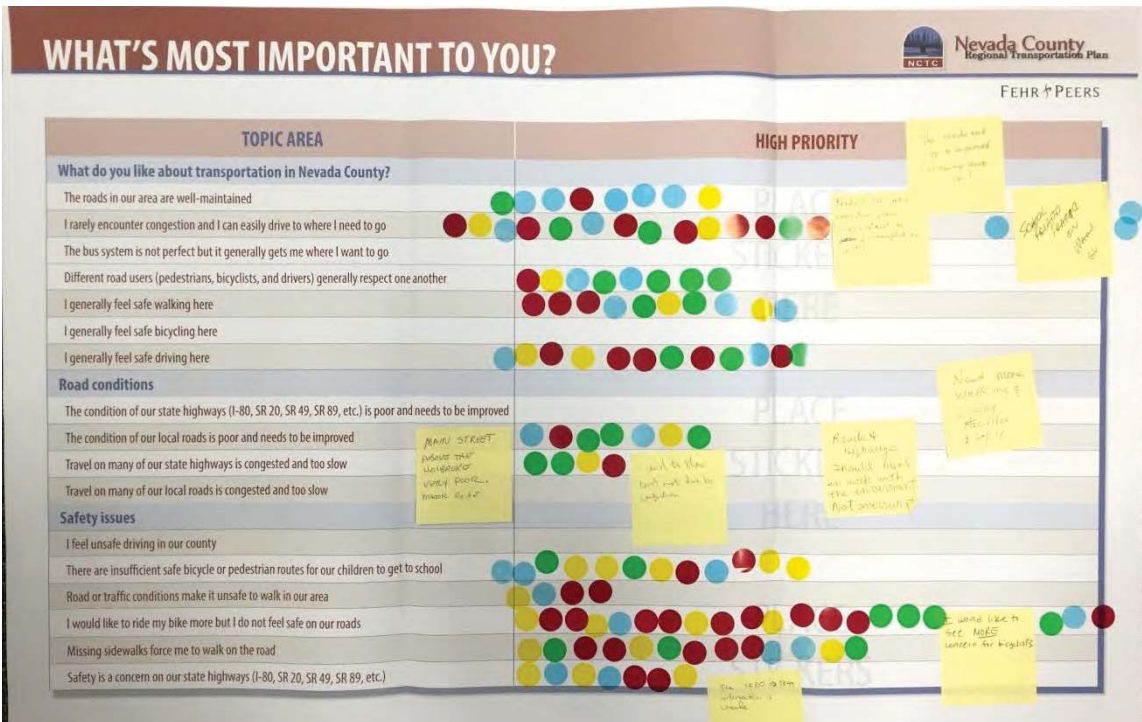


**Voting summary**

Red = highest ranked, Green = lowest ranked												
	Grass Valley			Truckee			Nevada City			Overall		
Total votes:	213	37%		83	14%		279	49%		575	100%	
Topic Area	Votes	Score	Rank	Votes	Score	Rank	Votes	Score	Rank	Votes	Score	Rank
<b>What do you like about transportation in Nevada County?</b>												
The roads in our area are well-maintained	8	40%	11	0	0%	23	1	4%	27	15%	19%	25
I rarely encounter congestion and I can easily drive to where I need to go	17	85%	2	2	22%	15	11	44%	13	50%	66%	8
The bus system is not perfect but it generally gets me where I want to go	0	0%	26	1	11%	19	0	0%	29	4%	5%	31
Different road users (pedestrians, bicyclists, and drivers) generally respect one another	8	40%	11	1	11%	19	5	20%	19	24%	31%	20
I generally feel safe walking here	10	50%	8	4	44%	8	18	72%	4	55%	72%	6
I generally feel safe bicycling here	0	0%	26	5	56%	6	2	8%	23	21%	28%	22
I generally feel safe driving here	12	60%	6	7	78%	3	16	64%	6	67%	88%	5
<b>Road conditions</b>												
The condition of our state highways (I-80, SR 20, SR 89, etc.) is poor and needs to be improved	0	0%	26	2	22%	15	2	8%	23	10%	13%	27
The condition of our local roads is poor and needs to be improved	7	35%	14	3	33%	11	2	8%	23	25%	33%	18
Travel on many of our state highways is congested and too slow	4	20%	20	0	0%	23	2	8%	23	9%	12%	28
Travel on many of our local roads is congested and too slow	0	0%	26	2	22%	15	0	0%	29	7%	10%	30
<b>Safety issues</b>												
I feel unsafe driving in our county	0	0%	26	0	0%	23	9	36%	14	12%	16%	26
There are insufficient safe bicycle or pedestrian routes for our children to get to school	12	60%	6	0	0%	23	7	28%	17	29%	38%	15
Road or traffic conditions make it unsafe to walk in our area	4	20%	20	0	0%	23	22	88%	2	36%	47%	11
I would like to ride my bike more but I do not feel safe on our roads	20	100%	1	3	33%	11	20	80%	3	71%	93%	3
Missing sidewalks force me to walk on the road	13	65%	5	7	78%	3	4	16%	21	53%	69%	7
Safety is a concern on our state highways (I-80, SR 20, SR 49, SR 89, etc.)	7	35%	14	2	22%	15	0	0%	29	19%	25%	23
<b>Bicycle and pedestrian concerns</b>												
I would like to ride my bike more but it is just too hilly to do so	5	25%	17	0	0%	23	13	52%	10	26%	33%	17
Where sidewalks exist, they are in poor condition	3	15%	22	1	11%	19	15	60%	7	29%	37%	16
Uneven sidewalks, overgrown vegetation, missing curb cuts, or other issues make it difficult to get around by wheelchair, walker, or on foot	8	40%	11	0	0%	23	13	52%	10	31%	40%	13
I frequently find debris or overgrown vegetation when riding my bike in bike lanes or paved shoulders	3	15%	22	0	0%	23	9	36%	14	17%	22%	24
Different road users (pedestrians, bicyclists, and drivers) often do not respect one another	5	25%	17	4	44%	8	13	52%	10	40%	53%	10
I would ride my bike more if there were more places to park it securely	3	15%	22	3	33%	11	6	24%	18	24%	31%	19
<b>Transit issues</b>												
I would like to take the bus, but it does not go where I need it to go	7	35%	14	6	67%	5	9	36%	14	46%	60%	9
I would like to take the bus, but the stop times do not fit my schedule	5	25%	17	5	56%	6	5	20%	19	34%	44%	12
I would like to take the bus to destinations outside of my local area, but it does not connect to those destinations or other transit systems (for example, Placer County, Amtrak, or Grass Valley to Truckee and vice-versa)	17	85%	2	8	89%	2	14	56%	9	77%	100%	1
I do not know much about my local transit services	9	45%	9	3	33%	11	3	12%	22	30%	39%	14
<b>Wider concerns</b>												
I am willing to pay extra for better transportation facilities	9	45%	9	9	100%	1	15	60%	7	68%	89%	4
I am not willing to pay extra for better transportation facilities	2	10%	25	1	11%	19	1	4%	27	8%	11%	29
Air pollution (including ground level ozone and greenhouse gas emissions) concerns me	15	75%	4	4	44%	8	25	100%	1	73%	95%	2
<b>(Nevada City only)</b>												
Need more bike lanes / places to ride							17	68%	5	23%	30%	21



**Grass Valley**





**Truckee**

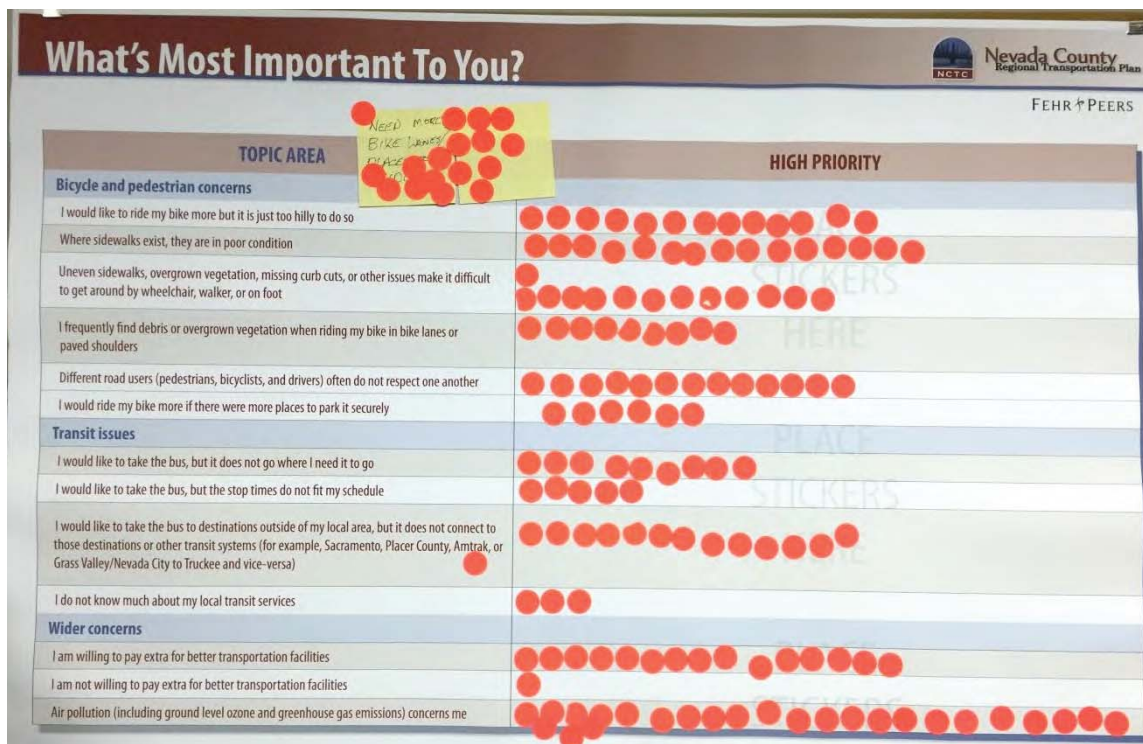
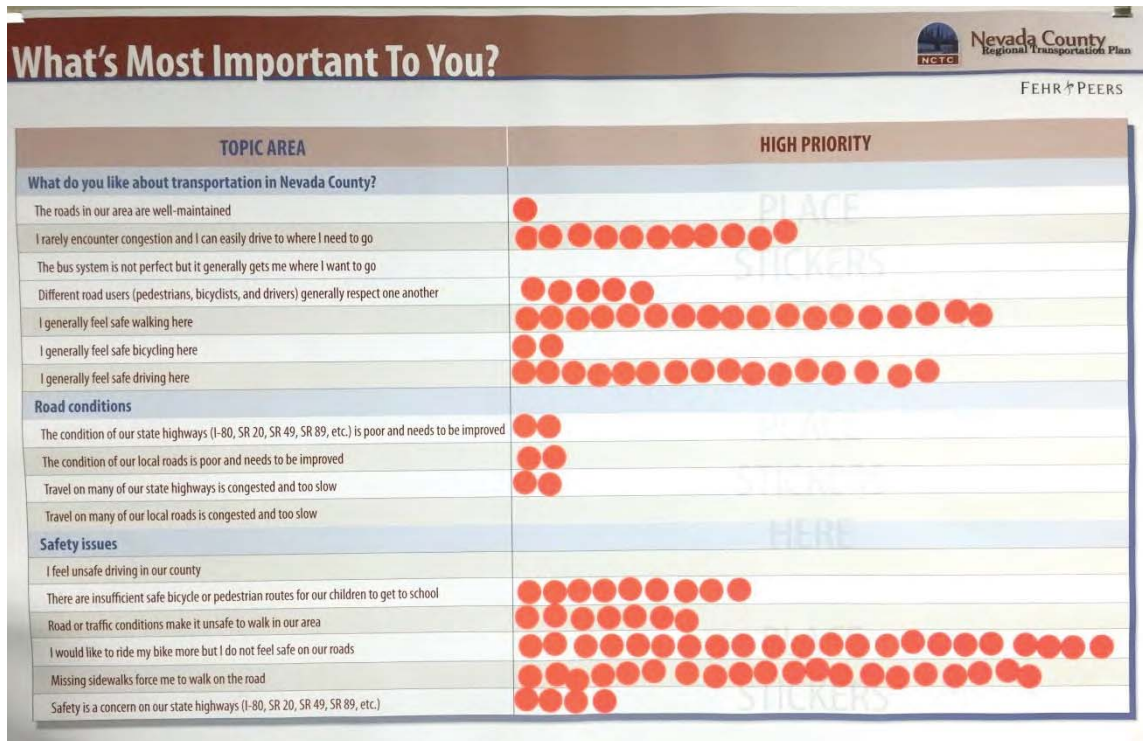
What's Most Important To You?	
TOPIC AREA	HIGH PRIORITY
<b>What do you like about transportation in Nevada County?</b>	
The roads in our area are well-maintained	
I rarely encounter congestion and I can easily drive to where I need to go	●●
The bus system is not perfect but it generally gets me where I want to go	●
Different road users (pedestrians, bicyclists, and drivers) generally respect one another	●
I generally feel safe walking here	●●●●
I generally feel safe bicycling here	●●●●●●
I generally feel safe driving here	●●●●●●●●
<b>Road conditions</b>	
The condition of our state highways (I-80, SR 20, SR 49, SR 89, etc.) is poor and needs to be improved	●●
The condition of our local roads is poor and needs to be improved	●●●●
Travel on many of our state highways is congested and too slow	
Travel on many of our local roads is congested and too slow	●●
<b>Safety issues</b>	
I feel unsafe driving in our county	
There are insufficient safe bicycle or pedestrian routes for our children to get to school	
Road or traffic conditions make it unsafe to walk in our area	
I would like to ride my bike more but I do not feel safe on our roads	●●●●
Missing sidewalks force me to walk on the road	●●●●●●●●
Safety is a concern on our state highways (I-80, SR 20, SR 49, SR 89, etc.)	●●

What's Most Important To You?	
TOPIC AREA	HIGH PRIORITY
<b>Bicycle and pedestrian concerns</b>	
I would like to ride my bike more but it is just too hilly to do so	
Where sidewalks exist, they are in poor condition	●
Uneven sidewalks, overgrown vegetation, missing curb cuts, or other issues make it difficult to get around by wheelchair, walker, or on foot	
I frequently find debris or overgrown vegetation when riding my bike in bike lanes or paved shoulders	
Different road users (pedestrians, bicyclists, and drivers) often do not respect one another	●●●●
I would ride my bike more if there were more places to park it securely	●●●●
<b>Transit issues</b>	
I would like to take the bus, but it does not go where I need it to go	●●●●●●
I would like to take the bus, but the stop times do not fit my schedule	●●●●●●
I would like to take the bus to destinations outside of my local area, but it does not connect to those destinations or other transit systems (for example, Sacramento, Placer County, Amtrak, or Grass Valley/Nevada City to Truckee and vice-versa)	●●●●●●
I do not know much about my local transit services	●●●●
<b>Wider concerns</b>	
I am willing to pay extra for better transportation facilities	●●●●●●●●
I am not willing to pay extra for better transportation facilities	●
Air pollution (including ground level ozone and greenhouse gas emissions) concerns me	●●●●

Make  
Transit  
Routes  
Diverse  
Bus  
Stops



Nevada City





## Transportation Problem Locations

Place stickers at locations where you experience problems with getting around Nevada County

**NCTC** Nevada County Regional Transportation Plan  
FEHR & PEERS

The map displays the Nevada County region with various transportation routes highlighted in blue. A prominent yellow sticker is placed on a road near Nevada City, with the handwritten text "I always get stuck in traffic". The map includes labels for major roads such as Highway 49, Highway 20, and Highway 203, and cities including Nevada City, Grass Valley, and Truckee. A legend in the top right corner identifies the blue lines as Transit Routes, the black outline as the Nevada County Boundary, and the grey shaded areas as Incorporated City Limits. An inset map in the top right shows the county's location within a larger regional context.



## APPENDIX B

### INFORMATIONAL POSTERS AND HANDOUTS





## NEVADA COUNTY TRANSPORTATION COMMISSION OVERVIEW

**Nevada County**  
 Regional Transportation Plan  
 FEHR ↑ PEERS

### What is the Nevada County Transportation Commission (NCTC)?

The Nevada County Transportation Commission (NCTC) is the Regional Transportation Planning Agency (RTPA) for Nevada County. The State of California created RTPAs to coordinate transportation planning efforts for local jurisdictions; for NCTC, these jurisdictions are Grass Valley, Nevada City, Truckee, and Nevada County.

*NCTC's mission:*

- **Create a Balanced Transportation System** – create a balanced transportation system through planning, communication, and coordination, with the citizens and decision makers of Nevada County, Grass Valley, Nevada City, Truckee, and Caltrans.
- **Administer Funding** – Administer regional, state, and federal funding for transportation projects.
- **Project Delivery** – Initiate transportation planning and environmental studies and construct transportation improvements.


### Recent Projects




Tinloy Transit Center



SR 49 Widening



Truckee Mousehole Pedestrian Tunnel



Dorsey Interchange Construction

### Who serves on the Commission?

The Commission has seven members. Their role is to represent the transportation needs of their appointed jurisdiction and to advise and direct NCTC staff on county-wide projects and priorities.

### Commissioners

- Terri Andersen, Nevada City Council Member
- Nate Beason, Nevada County Supervisor
- Carolyn Wallace Dee, Truckee Council Member
- Jason Fouyer, Grass Valley Council Member (Vice Chairman)
- Anne Guerra, County At-Large Representative
- Larry Jostes, County At-Large Representative (Chairman)
- Ed Scofield, Nevada County Supervisor

### NCTC Staff

- Daniel Landon, Executive Director
- Michael Woodman, Transportation Planner
- Nancy Holman, Administrative Services Officer
- Toni Perry, Administrative Assistant



key staff

## REGIONAL TRANSPORTATION PLAN OVERVIEW

**Nevada County**  
 Regional Transportation Plan  
 FEHR ↑ PEERS

### What is a Regional Transportation Plan?

The purpose of the Regional Transportation Plan (RTP) is to document the short-term (10-year) and long-term (20-year) regional transportation needs 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 in Nevada County.

### Why is the RTP being updated?

By law, the RTP must be updated and submitted to the California Transportation Commission every five years. Keeping the RTP up-to-date also ensures that the projects planned for the county reflect the current needs of its citizens and are compatible with reasonably foreseeable funding levels.

### What is being addressed in the update, and what are the goals of the update?

A key focus of the update is to transform the RTP to a performance-based planning approach that will use information on transportation system performance to develop investment priorities and guide outcomes for the transportation plan. This focus will better align performance monitoring and transportation planning between state agencies, NCTC, and its regional partners.

### What is the schedule for the update?

SCHEDULE	
DATE	TASK
August 2015	Initial public outreach
September 2015 – January 2016	Data collection and analysis
February 2016 – August 2016	Prepare, present, and review draft RTP
August 2016 – October 2016	Incorporate inputs and prepare and present final RTP

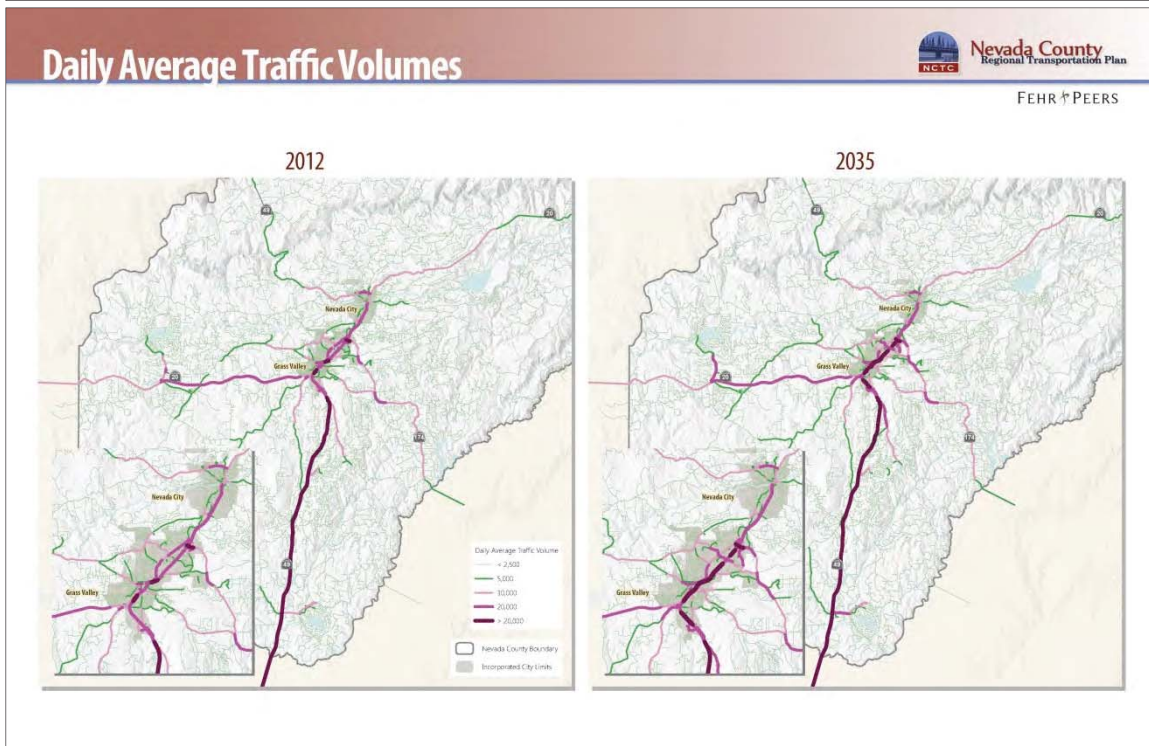
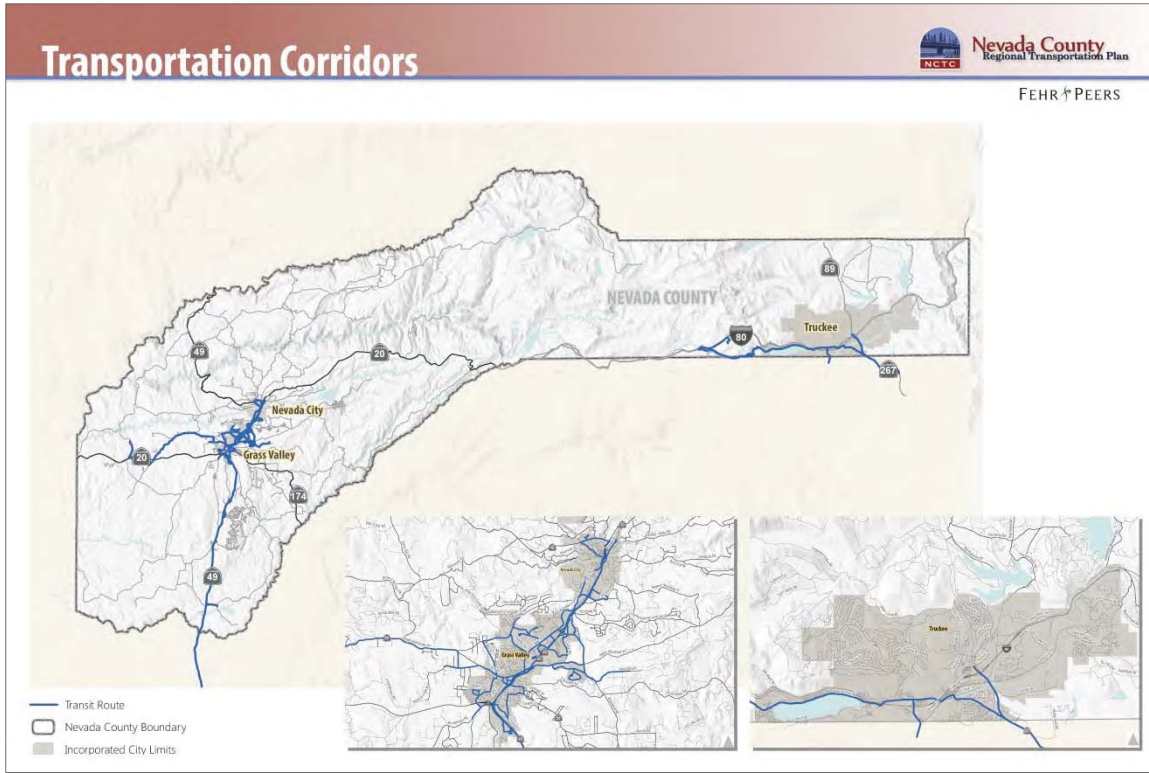
### How does the update affect me?

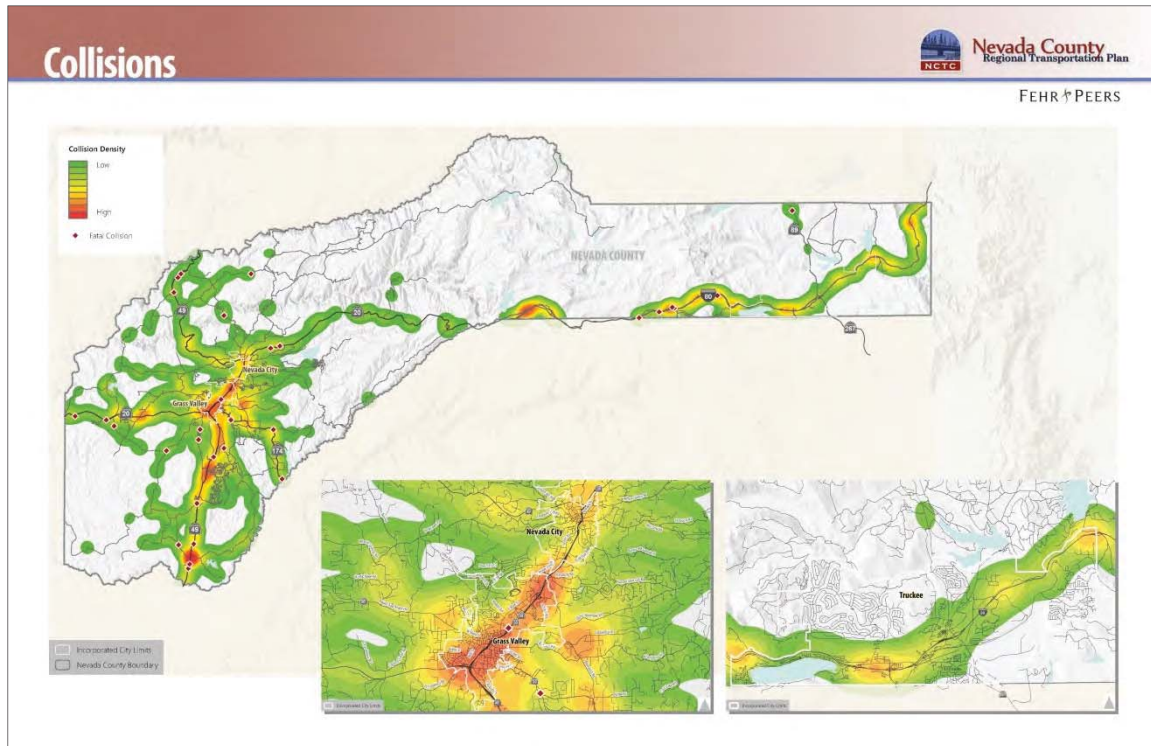
The RTP will establish the short- and long-term goals and actions for improving transportation in Nevada County. The transportation projects identified, funded, and built will determine how Nevada County's residents, workers, and visitors travel, affecting the quality of life of everyone.

### How can I get involved in the update?

- Share your input today
- Visit and comment on the project website, [www.nctrtp.fehrandpeers.net](http://www.nctrtp.fehrandpeers.net)
- Participate in NCTC meetings









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**APPENDIX C: CURRENT AND ESTIMATED FUTURE TRAFFIC  
CONDITIONS FOR SIGNIFICANT WESTERN NEVADA COUNTY ROADS  
AND HIGHWAYS**





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Roadway Segment	Classification	2035 Estimated, Peak Hour	
		Two-Way Volume	LOS
ALTA SIERRA DR E. OF HWY 49	Two-Lane Arterial	460	C
ALTA SIERRA DR E. OF NORLENE WY	Two-Lane Arterial	110	C
ALTA SIERRA DR W. OF DOG BAR RD	Two-Lane Arterial	220	C
ALTA ST GRASS VALLEY CORP LIMIT	Two-Lane Arterial	330	C
ALTA ST SE OF RIDGE RD	Two-Lane Arterial	340	C
ALTA STREET S. ALTA HILL MINE ROAD	Two-Lane Arterial	310	C
BRUNSWICK RD N. OF IDAHO MARYLAND RD	Two-Lane Arterial	1,040	D
BRUNSWICK RD N. OF HWY 174	Two-Lane Arterial	730	C
BRUNSWICK RD NW OF E. BENNETT RD	Two-Lane Arterial	960	D
BRUNSWICK RD NW OF LOMA RICA DR	Two-Lane Arterial	1,200	D
BRUNSWICK RD OVERCROSSING TOTAL	Four-Lane Arterial, Undivided	2,570	D
BRUNSWICK RD S. OF IDAHO MARYLAND RD	Two-Lane Arterial	1,410	D
BRUNSWICK RD SE OF E. BENNETT RD	Two-Lane Arterial	740	C
BRUNSWICK RD. NEVADA CITY HWY TO MALTMAN DR.	Four-Lane Arterial, Undivided	1,590	C
BRUNSWICK S. OLD TUNNEL	Two-Lane Arterial	1,340	D
BRUNSWICK S. TOWN TALK	Two-Lane Arterial	1,040	D
COMBIE RD E. OF HWY 49	Two-Lane Arterial	1,410	D
COMBIE RD W. OF W. HACIENDA & MAGNOLIA	Two-Lane Arterial	1,400	D
DOG BAR RD N. OF MAGNOLIA RD	Two-Lane Arterial	130	C
DOG BAR RD NW OF ALTA SIERRA DR	Two-Lane Arterial	550	C
DOG BAR RD NW OF MOUNT OLIVE RD	Two-Lane Arterial	110	C
DOG BAR RD S. OF ALTA SIERRA DR	Two-Lane Arterial	380	C
DOG BAR RD S. OF LABARR MEADOWS RD	Two-Lane Arterial	680	C
DOG BAR RD S. OF MOUNT OLIVE RD	Two-Lane Arterial	100	C
DOG BAR RD SE OF MAGNOLIA RD	Two-Lane Arterial	110	C
DORSEY DRIVE, EAST OF SR-49	Two-Lane Arterial	1,220	D
DORSEY DRIVE, WEST OF SPREE	Two-Lane Arterial	1,580	E
DUGGANS RD N. OF WOLF RD	Two-Lane Arterial	200	C
DUGGANS RD SE OF LIME KILN RD	Two-Lane Arterial	180	C
E. EMPIRE ST E. OF GRASS VALLEY CORP LIMIT	Two-Lane Arterial	370	C
E. EMPIRE ST W. OF HWY 174	Two-Lane Arterial	350	C
E. MAIN STREET IDAHO MARYLAND TO HUGHES	Two-Lane Arterial	1,620	E
EAST MAIN STREET BENNETT TO IDAHO MARYLAND	Two-Lane Arterial	1,160	D
EMPIRE STREET, EAST OF PINE	Two-Lane Arterial	420	C
GOLD FLAT RD HAWKE LN TO HOLLOW WY	Two-Lane Arterial	240	C
GOLD FLAT RD. S. OF GRACIE RD	Two-Lane Arterial	240	C
INDIAN SPRINGS RD NW OF SPENCEVILLE RD	Two-Lane Arterial	70	C



Roadway Segment	Classification	2035 Estimated, Peak Hour	
		Two-Way Volume	LOS
INDIAN SPRINGS RD SE OF PENN VALLEY RD	Two-Lane Arterial	80	C
INDIAN SPRINGS RD SE OF SPENCEVILLE RD	Two-Lane Arterial	170	C
INDIAN SPRINGS RD W. OF MCCOURTNEY RD	Two-Lane Arterial	180	C
LABARR MEADOWS N. OLD WHITE TOLL ROAD	Two-Lane Arterial	820	C
LABARR MEADOWS RD N. OF DOG BAR RD	Two-Lane Arterial	730	C
LIME KILN RD SE OF MCCOURTNEY RD	Two-Lane Arterial	200	C
MAGNOLIA RD E. OF COMBIE RD (EB)	Two-Lane Arterial	580	C
MAGNOLIA RD E. OF KNOLLS DR	Two-Lane Arterial	180	C
MAGNOLIA RD E. OF LAKESHORE NORTH	Two-Lane Arterial	610	C
MAGNOLIA RD E. OF LK OF PINES	Two-Lane Arterial	460	C
MAGNOLIA RD SW OF DOG BAR RD	Two-Lane Arterial	110	C
MCCOURTNEY RD NE OF INDIAN SPRINGS RD	Two-Lane Arterial	230	C
MCCOURTNEY RD NE OF WOLF MOUNTAIN RD	Two-Lane Arterial	380	C
MCCOURTNEY RD S. OF INDIAN SPRINGS RD	Two-Lane Arterial	310	C
MCCOURTNEY RD SW OF BRIGHTON ST	Two-Lane Arterial	710	C
MCCOURTNEY RD W. OF AUBURN RD	Two-Lane Arterial	510	C
MCCOURTNEY ROAD BRIGHTON STREET TO SR 20 RAMPS	Two-Lane Arterial	1,040	D
MCCOURTNEY ROAD SR 20 RAMPS TO MILL STREET	Two-Lane Arterial	870	D
MCCOURTNEY ROAD, POLA TO BONNIE VIEW WAY	Two-Lane Arterial	560	C
MILL STREET MCCOURTNEY ROAD TO SR 20 RAMPS	Two-Lane Arterial	960	D
MILL STREET SR 20 RAMPS TO FRENCH AVENUE	Two-Lane Arterial	560	C
MILL STREET, BETWEEN FRENCH AND CHAPEL	Two-Lane Arterial	550	C
NEV CTY HWY SW. OF BRUNSWICK RD	Two-Lane Arterial	1,000	D
NEV. CTY HWY NE. OF BRUNSWICK RD	Two-Lane Arterial	1,370	D
NEVADA CITY HWY S. OF RIDGE RD (NC CORP LIMIT)	Two-Lane Arterial	510	C
NEVADA CITY HWY SW OF BANNER LAVA CAP RD	Two-Lane Arterial	470	C
OLD TUNNEL RD S. OF BANNER LAVA CAP RD	Two-Lane Arterial	340	C
OLD TUNNEL RD. N. OF BRUNSWICK RD	Two-Lane Arterial	430	C
PENN VALLEY DR NE OF SPENCEVILLE RD	Two-Lane Arterial	580	C
PENN VALLEY DR-- SE EASY ST	Two-Lane Arterial	390	C
PENN VALLEY DR SE OF EASY ST	Two-Lane Arterial	330	C
PENN VALLEY DR SE OF PHEASANT ST	Two-Lane Arterial	390	C
PENN VALLEY DR SW OF HWY 20 (E END)	Two-Lane Arterial	630	C
PENN VALLEY DR W. OF SPENCEVILLE RD	Two-Lane Arterial	400	C
PLEASANT VALLEY RD @ FRENCH CORRAL	Two-Lane Arterial	20	C
PLEASANT VALLEY RD N. OF BITNEY SPRINGS RD	Two-Lane Arterial	40	C
PLEASANT VALLEY RD N. OF HWY 20	Two-Lane Arterial	970	D
PLEASANT VALLEY RD N. OF LAKE WILDWOOD DR	Two-Lane Arterial	560	C



Roadway Segment	Classification	2035 Estimated, Peak Hour	
		Two-Way Volume	LOS
PLEASANT VALLEY RD N. OF WILDFLOWER DR	Two-Lane Arterial	260	C
PLEASANT VALLEY RD S. OF BITNEY SPRINGS RD	Two-Lane Arterial	80	C
PLEASANT VALLEY RD S. OF LAKE WILDWOOD DR	Two-Lane Arterial	800	C
PLEASANT VALLEY RD W. OF HWY 49	Two-Lane Arterial	40	C
RIDGE RD E. OF ROUGH AND READY HWY	Two-Lane Arterial	600	C
RIDGE RD E. OF VIA VISTA (W)	Two-Lane Arterial	550	C
RIDGE RD SW. OF HUGHES RD.	Two-Lane Arterial	870	D
RIDGE RD W. OF NEVADA CITY HWY (NC CORP)	Two-Lane Arterial	590	C
RIDGE RD W. OF UPPER SLATE CRK (GV CORP)	Two-Lane Arterial	840	C
RIDGE ROAD N. SIERRA COLLEGE BLVD	Two-Lane Arterial	850	D
RIDGE ROAD S. SIERRA COLLEGE BLVD	Two-Lane Arterial	750	C
ROUGH & READY HIGHWAY W. OF WEST	Two-Lane Arterial	530	C
ROUGH AND READY HWY N. OF HWY 20	Two-Lane Arterial	300	C
ROUGH AND READY HWY W. OF BITNEY SPRINGS RD	Two-Lane Arterial	400	C
ROUGH AND READY HWY W. OF RIDGE RD	Two-Lane Arterial	530	C
ROUGH AND READY HWY W. OF SQUIRREL CREEK RD	Two-Lane Arterial	450	C
SIERRA COLLEGE DRIVE, EAST OF RIDGE ROAD	Two-Lane Arterial	660	C
SOUTH AUBURN STREET, BETWEEN BADGER AND ADAMS	Two-Lane Arterial	500	C
SOUTH AUBURN STREET, NORTH OF VILLAGE WAY	Two-Lane Arterial	760	C
SPENCEVILLE RD NE OF INDIAN SPRINGS RD	Two-Lane Arterial	180	C
SPENCEVILLE RD SW OF PENN VALLEY RD	Two-Lane Arterial	450	C
SUTTON WAY, SOUTH OF BRUNSWICK ROAD	Two-Lane Arterial	1,740	F
SUTTON WY SOLAR DR TO GOLDEN GATE TERRACE	Two-Lane Arterial	810	C
TYLER FOOTE CROSSING RD NE OF HWY 49	Two-Lane Arterial	250	C
TYLER FOOTE CROSSING RD NE OF OAK TREE RD	Two-Lane Arterial	180	C
TYLER FOOTE CROSSING RD SW OF OAK TREE RD	Two-Lane Arterial	190	C
W EMPIRE ST LE DUC ST TO S AUBURN ST	Two-Lane Arterial	550	C
WEST MAIN STREET SOUTH AUBURN TO ALTA	Two-Lane Arterial	1,150	D
WEST MAIN, BETWEEN WEST HILL AND GREENWOOD	Two-Lane Arterial	440	C
WEST MCKNIGHT WAY FREEMAN TO TAYLORVILLE	Two-Lane Arterial	1,020	D
WEST MCKNIGHT WAY NB SR 49 RAMPS TO LA BARR MEADOWS	Two-Lane Arterial	1,310	D
WOLF RD W. OF HWY 49	Two-Lane Arterial	580	C
SR 49 WOODRIDGE DR TO COMBIE RD	Four-Lane Arterial, Undivided	2,410	D
SR 49 COMBIE RD TO CAMEO DR	Four-Lane Arterial, Undivided	1,910	D
SR 49 MEADOWBROOK COURT TO ALTA SIERRA DRIVE	Major Two-Lane Highway	1,980	E



Roadway Segment	Classification	2035 Estimated, Peak Hour	
		Two-Way Volume	LOS
SR 49 PINGREE ROAD TO LITTLE VALLEY ROAD	Major Two-Lane Highway	1,960	E
SR-49 SOUTH OF LA BARR MEADOWS ROAD	Major Two-Lane Highway	2,400	E
SR 49 CRESTVIEW DRIVE TO W. MCKNIGHT WAY	Major Two-Lane Highway	2,420	E
SR 49 W. MCKNIGHT WAY TO W. EMPIRE STREET (NORTHBOUND)	Two Freeway Lanes	1,490	B
SR 49 W. MCKNIGHT WAY TO W. EMPIRE STREET (SOUTHBOUND)	Two Freeway Lanes	1,870	B
SR 49 SR 20 TO COYOTE STREET	Two-Lane Arterial	1,160	D
SR 49 W. BROAD ST/CEMENT HILL RD TO ELKS LODGE ENTRANCE	Two-Lane Arterial	640	C
SR 49 EAST OF NEWTOWN	Two-Lane Arterial	610	C
SR 49 NEWTON RD TO JOHN BARLEYCORN RD	Two-Lane Arterial	440	C
SR 49 NORTH OF TYLER FOOTE	Two-Lane Arterial	310	C
SR 174 CENTRAL AVE TO OPHIR ST	Two-Lane Arterial	470	C
SR 174 GOLD HILL DR TO RACE ST	Two-Lane Arterial	580	C
SR 174 PARTRIDGE RD TO EMPIRE MINE CROSS RD	Two-Lane Arterial	440	C
SR 174 E. EMPIRE STREET OT CHURCH ENTRANCE	Two-Lane Arterial	740	C
SR 174 BRUNSWICK RD TO LOS CENDROS LN	Two-Lane Arterial	900	D
SR 20/49 W. EMPIRE ST TO S. AUBURN ST (NORTHBOUND)	Two Freeway Lanes and Auxiliary Lane	1,710	B
SR 20/49 W. EMPIRE ST TO S. AUBURN ST (SOUTHBOUND)	Two Freeway Lanes and Auxiliary Lane	1,880	B
SR 20/49 SOUTH AUBURN ST. TO E. BENNETT ST. (NORTHBOUND)	Two Freeway Lanes	1,560	B
SR 20/49 SOUTH AUBURN ST. TO E. BENNETT ST. (SOUTHBOUND)	Two Freeway Lanes	1,730	B
SR-20, SOUTH OF IDAHO-MARYLAND (NORTHBOUND)	Two Freeway Lanes and Auxiliary Lane	2,140	B
SR-20, SOUTH OF IDAHO-MARYLAND (SOUTHBOUND)	Two Freeway Lanes and Auxiliary Lane	2,480	B
SR 20/49 IDAHO MARYLAND RD TO BRUNSWICK RD (NORTHBOUND)	Two Freeway Lanes and Auxiliary Lane	1,600	B
SR 20/49 IDAHO MARYLAND RD TO BRUNSWICK RD (SOUTHBOUND)	Two Freeway Lanes and Auxiliary Lane	1,950	B
SR 20/49 BRUNSWICK RD TO GOLD FLAT RD (NORTHBOUND)	Two Freeway Lanes	1,530	B
SR 20/49 BRUNSWICK RD TO GOLD FLAT RD (SOUTHBOUND)	Two Freeway Lanes	1,440	B
SR 20/49 GOLD FLAT RD TO SACRAMENTO ST (NORTHBOUND)	Two Freeway Lanes	1,320	B
SR 20/49 GOLD FLAT RD TO SACRAMENTO ST (SOUTHBOUND)	Two Freeway Lanes	1,110	B

Roadway Segment	Classification	2035 Estimated, Peak Hour	
		Two-Way Volume	LOS
SR 20 WEST OF PENN VALLEY	Major Two-Lane Highway	620	C
SR-20 PLEASANT VALLEY RD. TO PENN VALLEY DR.	Major Two-Lane Highway	660	C
SR-20 PLEASANT VALLEY ROAD TO ROUGH & READY HWY	Major Two-Lane Highway	1,240	D
SR 20 BRIGHTON STREET TO PENN VALLEY DRIVE	Major Two-Lane Highway	1,410	E
SR-20, MILL STREET TO SR-49 (EASTBOUND)	Two Freeway Lanes and Auxiliary Lane	550	B
SR-20, MILL STREET TO SR-49 (WESTBOUND)	Two Freeway Lanes and Auxiliary Lane	890	B
SR 20 SR 49 TO NEVADA STREET/MANZANITA DIGGINS DR	Major Two-Lane Highway	390	C
SR 20 WEST OF MOONEY FLAT RD (GATEWAY)	Major Two-Lane Highway	630	C
SR 49 NORTH OF HERON RD (GATEWAY)	Two-Lane Arterial	190	C
SR 20 EAST OF HARMONY RIDGE RD (GATEWAY)	Major Two-Lane Highway	310	B
SR 174 SE OF REDBERRY RD (GATEWAY)	Two-Lane Arterial	460	C
DOG BAR RD SOUTH OF SPRINGFIELD DR (GATEWAY)	Two-Lane Arterial	120	C
SR 49 OVERHILL DR TO LINNET LN (GATEWAY)	Four-Lane Arterial, Undivided	2,190	D
Source: Fehr & Peers, 2016			

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## APPENDIX D: GLOSSARY OF COMMON ACRONYMS





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- AQMD** *Air Quality Management District*, a regional agency formed by two or more counties that adopts regulations to meet state and federal air quality standards.
- ATP** *Active Transportation Program*, created in 2013, consolidates existing federal and state bicycle and pedestrian funding programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single program with a focus to make California a national leader in active transportation.
- CARB** *California Air Resources Board*, the State agency responsible for implementation of the federal and State Clean Air Acts. Provides technical assistance to air districts preparing attainment plans, reviews local attainment plans, and combines portions of them with State measures for submittal of the State Implementation Plan (SIP) to U.S. EPA.
- CASP** *California Aviation System Plan*, prepared by Caltrans every five years as required by PUC 21701. The CASP integrates regional system planning on a statewide basis.
- CEQA** *California Environmental Quality Act*, state law which requires the environmental effects associated with proposed plans, programs, and projects be fully disclosed.
- CTC** *California Transportation Commission*, a decision-making entity established by AB 402 (Alquist/Ingalls) of 1977 to advise and assist the Secretary of Transportation and the legislature in formulating and evaluating state policies and plans for transportation programs.
- DSL** *Digital Subscriber Line*, high-speed internet connection that uses the same wires as a regular telephone line.
- FAST** *Fixing America's Surface Transportation Act*, signed in 2015. The FAST Act largely maintains current program structures and funding shares between highways and transit. The law also makes changes and reforms to many Federal transportation programs, including streamlining the approval processes for new transportation projects, providing new safety tools, and establishing new programs to advance freight projects. This federal transportation bill covers fiscal years 2016 to 2020 and is the first long-term transportation bill in a decade. FAST replaces MAP-21.
- FHWA** *Federal Highway Administration*, a component of the U.S. Department of Transportation, established to ensure development of an effective national road and highway transportation system. FHW A and FTA, in consultation with the U.S. Environmental

Protection Agency (EPA), make Federal Clean Air Act Conformity findings for Regional Transportation Plans, Transportation Improvement Programs, and Federally-funded projects.

**FTA** *Federal Transit Administration*, a component of the U.S. Department of Transportation, responsible for administering the federal transit program under the Federal Transit Act, as amended, and the Intermodal Surface Transportation Enhancement Act (ISTEA) of 1991.

**IIP** *Interregional Improvement Program*, under the State Transportation Improvement Program (STIP) reforms of Senate Bill 45, the STIP now consists of two broad programs, the Interregional Improvement Program and the Regional Improvement Program (RIP). The IIP is funded with 25% of the State Highway Account revenues programmed through the State Transportation Improvement Program.

**IRRS** *Interregional Roadway System*, a series of interregional state highway routes outside of urbanized Areas that provides access to and between the state's economic centers, major recreational areas, and urban and rural regions.

**ISTEA** *Intermodal Surface Transportation Efficiency Act of 1991*, now superseded, mandated planning requirements and created funding programs for transportation projects.

**ITIP** *Interregional Transportation Improvement Program*, funds capital improvements on a statewide basis, including capacity increasing projects primarily outside of an urbanized area. Projects are nominated by Caltrans and submitted to the California Transportation Commission for inclusion in the STIP. The ITIP has a five-year planning horizon and is updated every two years by the CTC.

**ITS** *Intelligent Transportation Systems*, the application of advanced sensor, computer, electronics, and communication technologies, and management strategies to increase the safety and efficiency of the surface transportation system.

**LOS** *Level of Service*, a qualitative measure of traffic operating conditions whereby a letter grade, A through F, corresponding to progressively worsening traffic conditions, is assigned to an intersection or section of roadway.

**MAP-21** *Moving Ahead for Progress in the 21st Century*, a funding and authorization bill to govern United States federal surface transportation spending signed in 2012. Now superseded.



- NEPA** *National Environmental Protection Act*, Federal legislation which created an environmental review process similar to CEQA, but pertaining only to projects having federal involvement through financing, permitting, or Federal Land ownership.
- RIP** *Regional Improvement Program*, under the State Transportation Improvement Program (STIP) reforms of Senate Bill 45, the STIP now consists of two broad programs, the RIP and UP. The RIP is funded from 75% of the new STIP funds, divided by formula among fixed county shares. Each county selects projects to be funded from its county share in its Regional Transportation Improvement Program (RTIP).
- RTIP** *Regional Transportation Improvement Program*, a list of proposed transportation projects submitted to the California Transportation Commission by regional transportation planning agencies for state funding. The RTIP has a five-year planning horizon (previously seven years) and is updated every two years by the CTC.
- RTP** *Regional Transportation Plan*, state mandated document prepared at least every five years by all regional transportation planning agencies. The Plan describes existing and projected transportation needs, conditions, and financing affecting all modes within a 20-year horizon.
- RTPA** *Regional Transportation Planning Agency*, a state designated agency (multicounty or county level-agency) responsible for regional transportation planning to meet state planning mandates. RTPAs can be Local Transportation Commissions, Councils of Government, Metropolitan Planning Organizations, or statutorily created agencies.
- SAFETEA-LU** *Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users*, now superseded, signed into law in 2005 made changes to metropolitan planning processes and authorized the Federal surface transportation programs for highways, highway safety and transit for 2005-2009.
- SHA** *State Highway Account*, the state's primary source for funding transportation improvements. Revenues from state fuel tax (gasoline and diesel fuel excise tax), truck weight fees, and the federal highway funds are deposited into SHA. SHA provides funding for 1) non-capital outlays (maintenance, operations, capital outlay support, etc.), 2) State Transportation Improvement Program (STIP), 3) State Highway Operation and Protection Program (SHOPP), 4) local assistance, etc.

- SHOPP** *State Highway Operations and Protection Program*, a program created by state legislature, which includes projects needed to maintain the integrity of the state highway system, primarily associated with safety and rehabilitation without increasing roadway capacity. SHOPP is a four-year program of projects, approved by the CTC separately from the STIP cycle.
- SIP** *State Implementation Plan*, required by the Federal Clean Air Act Amendment of 1990. The SIP is an air quality plan developed by the California Air Resources Board in cooperation with local air districts for attaining and maintaining Federal Clean Air Act Standards.
- STA** *State Transit Assistance*, revenues from the excise tax on gasoline and diesel fuel are appropriated to the State Controller's Office by the Legislature for allocation to transit operators by RTPAs.
- STIP** *State Transportation Improvement Program*, a list of transportation projects proposed in RTIPs and ITIPs, which are approved for funding by the CTC.
- TDM** *Transportation Demand Management*, refers to policies, programs, and actions that are directed towards decreasing the use of single occupancy vehicles. TDM also can include activities to encourage shifting or spreading peak travel periods.
- TSM** *Transportation System Management*, refers to the use of low capital intensive transportation improvements to increase the efficiency of transportation facilities and services. These can include carpool and vanpool programs, parking management, traffic flow improvements, high occupancy vehicle lanes, and park-and-ride lots.
- EPA** *U.S. Environmental Protection Agency*, reviews and approves the State Implementation Plan, including emissions budgets used in RTP conformity assessments.
- WiFi** *Wireless Fidelity*, is term that is meant to be used generically when referring to any type of 802.11 wireless network, whether 802.11 (a), 802.11 (b), dual band, etc. WiFi allows a person to connect to the internet from virtually anywhere within range of a base station.
- WiMax** *Worldwide Interoperability for Microwave Access*, a certification mark for products that pass conformity and interoperability tests for the 802.16 wireless standards. Products that pass the conformity tests for WiMAX are capable of forming wireless connections between them to permit the carrying of internet package data. It is similar to WiFi in concept, but has certain improvements that are aimed at improving performance and should permit usage over much greater distances.