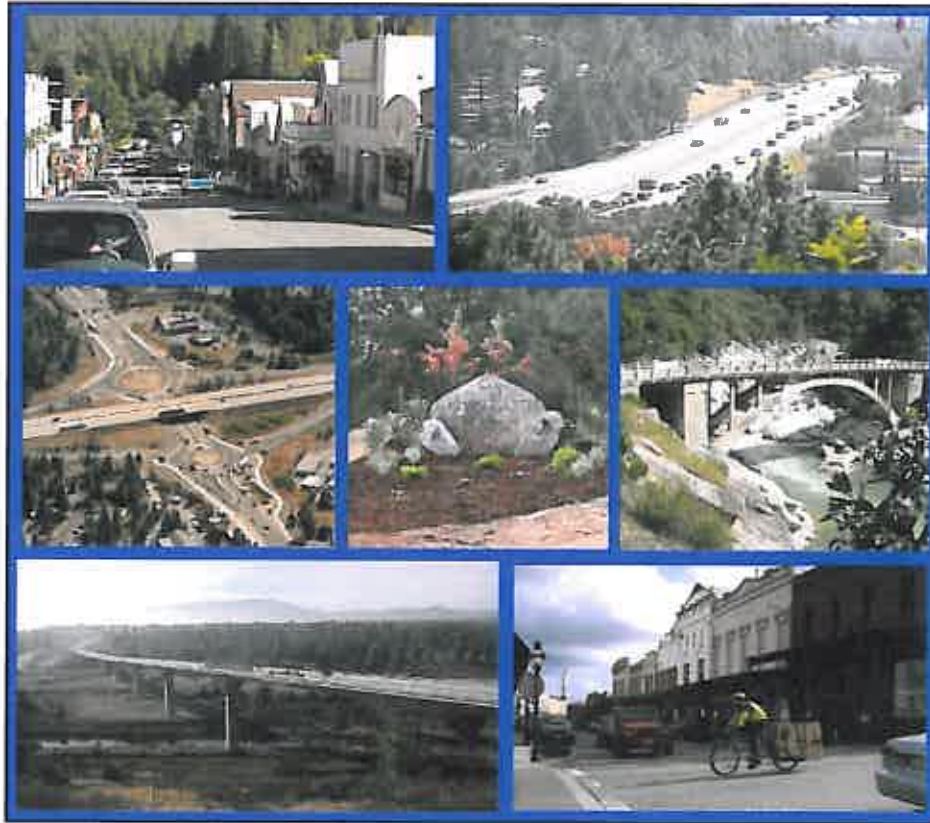


FINAL



2010

NEVADA COUNTY

REGIONAL

TRANSPORTATION PLAN

July 20, 2011

NEVADA COUNTY TRANSPORTATION COMMISSION

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I. EXECUTIVE SUMMARY

Automobile travel is clearly the dominant mode of transportation in Nevada County, however, fuel costs, changes in technology and other factors may alter transportation in the future. To insure development of a coordinated and balanced transportation system, the Regional Transportation Plan (RTP) includes actions, funding recommendations, and policy direction necessary to meet the needs of each transportation system component in Nevada County. The RTP identifies existing and future transportation problems, proposes solutions, considers all modes of travel, and identifies anticipated funding for projects and programs considering both the short-term (10 year) and long-term (20 year) time horizons. Because the RTP has a “multi-modal” approach to transportation, it addresses social and environmental factors affecting Nevada County’s transportation system, such as air quality, and transportation needs of specific segments of the population (e.g. elderly and transit dependent persons).

PURPOSE OF THE PLAN

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 RTP to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) every five years. The 2010 update of the Nevada County RTP is intended as a minor update to reflect the latest project funding and planning assumptions, as well as, to preliminarily address the new requirements of Assembly Bill 32 regulating greenhouse gas emissions associated with construction of improvements identified in the plan.

The purpose of this plan is to document the short-term (2010-2020) and long-term (2020-2030) regional transportation needs covering the RTP horizon and set forth an effective, cost-feasible action plan to meet these needs. The RTP documents the policy direction, actions, and funding strategies designed to maintain and improve the regional transportation system. The RTP promotes a continuous, comprehensive, and cooperative transportation planning process that facilitates the efficient development and implementation of projects while maintaining a strong commitment to public health and environmental quality.

It is incumbent upon the Nevada County Transportation Commission to seek to involve and educate the citizens of the region as to the issues connected with transportation. Further, the Commission must be creative in assisting the region in developing the revenues to construct improvement projects.

POLICY ELEMENT

Regional Issues, Needs, and Goals

The main transportation issues in western Nevada County are related to providing infrastructure and services to meet the demands of a growing and aging population, while maintaining and enhancing the rural character and environmental qualities of the area. In eastern Nevada County, the issues also stem from the challenges to meet to the demands of a growing and aging population, as well as, the high volumes of traffic generated by travelers taking advantage of the world-class recreational opportunities available in the Truckee-North Tahoe area. To address these issues requires a multi-modal approach to transportation planning in the region.

Acquiring adequate and timely funding for transportation improvements is the central need within all of the Nevada County issues. As the population grows implementation of highway and regional

roadway improvements will be key to reducing congestion while improving safety and air quality. The 2000 Census reported that approximately 17.5% of the county population was over 65 years of age and it is projected that by 2030 this proportion is expected to increase to over 30%. As the population of residents over the age of 65 increases, it will result in increased demand for public transit services in Nevada County. Additional state and federal transit operating and capital revenues will be necessary in order to meet the additional demand placed on the public transit systems.

Transportation issues facing Nevada County, which have been identified as regionally significant include the following:

- ◆ Insufficient state, federal, and local transportation revenues
- ◆ Air quality/greenhouse gas emission reductions
- ◆ Coordination of land use, air quality, and transportation planning
- ◆ Providing and maintaining a transportation system that enhances safety, the efficient movement of all people, goods, services, and information, and environmental quality
- ◆ Support of new technologies

Recognition of these issues leads to the overall goal of the Regional Transportation Plan which is to provide and maintain a transportation system that enhances safety, the efficient movement of all people, goods, and services, and environmental quality. In the Policy Element this overarching goal is divided into the following four goals:

- 1) Provide for the safe and efficient movement of all people, goods, services, and information;
- 2) Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life;
- 3) Develop an economically feasible transportation system;
- 4) Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.

The Regional Transportation Plan Policy Element identifies policies, objectives, and performance measures that are consistent with the goals included in local general plan documents, and that reflect consideration of environmental, social, and economic goals (see pages 16 - 25).

Performance measures are a relatively new tool in regional transportation plans. Given the continuing instability of transportation funding programs, it is important to select and construct the most cost effective projects. The performance measures in this update of the Regional Transportation Plan provide a foundation for project selection. Future Regional Transportation Plans will build upon that foundation as data collection methods improve and the regional database becomes more complete. The operational performance measures included in this Regional Transportation Plan are aimed at identifying how proposed projects will:

- ◆ Improve safety and operations
- ◆ Improve travel time
- ◆ Reduce congestion

Additional performance measures are included to:

- ◆ Insure consistency with general plan documents
- ◆ Identify cost effectiveness of projects and services
- ◆ Identify implementation of alternative transportation projects and strategies
- ◆ Enhance public awareness of transportation alternatives

ACTION AND FINANCIAL ELEMENTS

The purpose of the Action Element is to identify the short-term (2010-2020) and long-term (2020-2030) actions that will address the needs of the regional transportation system in Nevada County and the Goals and Objectives of the RTP.

The Action Element identifies the projects needed to improve transportation system operations. Based on the funding forecasts in the Financial Element, it is widely recognized that the region will not be able to “build its way out” of the identified problems. In order to accomplish the goal of providing for the safe and efficient movement of all residents, visitors, and goods, the Nevada County Transportation Commission must seek to program projects that will provide the best investment of public funds and assist local jurisdictions in bringing those projects to completion. In selection of projects, the communities must recognize the importance of protecting environmental quality, while maintaining a vital economy. Projects identified in the RTP support local land use and population projections and address economic development and social equity issues identified in the General Plans of Nevada County, Grass Valley, Nevada City, and the Town of Truckee.

The Action Plan calls for an extensive list of improvements over the next twenty-year period of the Plan. As is true throughout the state, there are not enough existing federal, state, or local resources to fully fund all of the improvements identified in the RTP.

The Financial Element of the Regional Transportation Plan (RTP) outlines the financial assumptions and forecasts of transportation costs and revenues necessary to implement the Action Element of the 2010 Nevada County RTP. Appendix A-2 on page 110 provides a summary of funding programs available to the NCTC.

The Financial Element presents a constrained funding scenario made up of the revenue that is reasonably expected to be available from existing funding mechanisms currently in place over the horizon of the RTP, including projections of the future STIP, and federal transportation funds.

In the Action Element, each of the following topics is discussed briefly:

- ◆ Regional Road Network
- ◆ Goods Movement
- ◆ Transit Services
- ◆ Non-Auto Facilities
- ◆ Intelligent Transportation Systems
- ◆ Transportation Systems Management
- ◆ Air Transportation
- ◆ Rail Transportation
- ◆ Air Quality
- ◆ Transportation Safety and Security

Regional Road Network

The network of roadways that facilitate the movement of people and goods within and through Nevada County is one of the most important components of the overall transportation system. This section of the RTP identifies the regionally significant roadways and the improvements that will be required over the horizon of the plan. Roadways are determined to be of regional significance if they meet one or more of the following criteria:

- ◆ Roadways of statewide significance
- ◆ State or interstate highways
- ◆ Principal arterials connecting Nevada County with other regions or counties
- ◆ Rural arterials connecting two or more urbanized areas
- ◆ Roadways that provide access to significant commercial, industrial, recreational, or institutional activity centers

The network of local roadways provides access to all areas of Nevada County, and each one is an important part of Nevada County's transportation system. However, the RTP seeks to identify deficiencies and propose solutions for local roadways that are of regional significance, connecting population centers with commercial, industrial, recreational, or institutional activity centers.

Every two years the NCTC submits regional transportation projects to the state for funding. The project listing is called the Regional Transportation Improvement Program (RTIP). The 2009 RTIP included two projects:

- ◆ Dorsey Drive Interchange
- ◆ State Route 49/La Barr Meadows Rd. Signalization and Widening

The Action Element identifies the short-term (2010-2020) and long-term (2020-2030) state highway and regional roadway improvements in eastern and western Nevada County that can reasonably be expected to be funded over the plan period. Table 20, in the Financial Element indicates that based on the revenue forecasts for "reasonably available" funding, sufficient funds will be available over the plan period to complete the projects included in the financially constrained (funded) project tables in the Action Element. However, most of these regional roadway projects are tied to regional and local mitigation fees and therefore are subject to a timeframe predicated on implementation of development projects. In order to construct regional projects in a timeframe that is consistent with expressed community needs, NCTC will work with its member agencies to identify and pursue additional revenue sources.

The Action Element also identifies the short-term and long-term state highway and regional roadway improvements that are currently unfunded, but may be constructed over the plan period if additional revenues are realized or funded by future development. The identified unfunded State Highway System needs in Nevada County totals \$312,999,200. The identified unfunded regional roadway needs in Nevada County totals 21,275,459. Unless NCTC is able to implement new funding sources, prioritization and scheduling of the unconstrained (unfunded) State Highway and Regional Projects listed in the Action Element will be an exercise in futility.

During the last two decades, gasoline tax revenues have not kept pace with either inflation or need. Existing revenue sources are not sufficient to offset these losses. Significant additional revenues over and above the existing revenues are needed. The NCTC's overall funding strategy to address the identified funding deficit is as follows:

- ◆ Aggressively pursue state and federal funding
- ◆ Assist jurisdictions interested in pursuing a local sales tax for transportation improvements
- ◆ Use CEQA mitigation to construct needed improvements
- ◆ Pursue low-cost innovations and new technological solutions

Goods Movement

Projects that enhance goods movement help to maintain regional economic vitality. Further, the state highways and rail routes that traverse Nevada County are an important gateway linking California to the rest of the Nation and distributing goods to and from the Pacific Rim. As the State of California develops funding programs aimed at improving goods movement, Nevada County may be in a position to receive some of those funds for the regional transportation system (see Goods Movement Action Plan, page 43).

Transit Services

Currently public transit is a relatively small component of Nevada County's transportation system. However, for those citizens who are dependent on these services, public transit is a life sustaining necessity. Also, future enhancements to public transit may prove to be a means of reducing congestion and providing access to jobs. Financial Element Table 24 indicates that there will be sufficient revenue to maintain the existing western Nevada County transit programs and establish an operating reserve to address the volatility of transit funding. Financial Element Table 25 identifies a short-term (2010-2020) funding deficit for eastern Nevada County transit and paratransit services. However, implementation of the Eastern Nevada County Transit Development Plan recommendations to increase passenger fares, implement modifications to the Truckee Transit non-winter route, and Dial-A-Ride modifications are projected to address the deficit (see Transit Services Action Plan, page 52 and Transit Funding Forecasts, page 101).

Non-Auto Facilities

Pedestrian and bicycle facilities are transportation amenities that enhance mobility and add vitality to communities. While funds for these facilities are limited, it is important to have comprehensive plans in place and projects "on the shelf" to take advantage of grant funding and other opportunities when they are available and to ensure projects are incorporated into future developments (see Non-Auto Facilities Action Plan, page 61).

Intelligent Transportation Systems Action Plan

The presence of a significant number of "high tech" businesses and the desirability of Nevada County as a place to live and recreate, provides an opportunity to take advantage of Intelligent Transportation Systems projects and programs. NCTC's participation in the development and maintenance of the Tahoe Gateway Counties Intelligent Transportation Systems Strategic Deployment Plan insures that the region will have a competitive edge in vying for any State or Federal Intelligent Transportation Systems funds (see Intelligent Transportation Systems Action Plan, page 63).

Transportation Systems Management

Transportation Systems Management strategies can be effectively employed to reduce congestion and improve operation of the transportation system with relatively small capital expenditures. Emerging technological advances in telecommunications and internet commerce have potential to add capacity to the transportation system and improve air quality (see Transportation Systems Management Action Plan, page 68).

Aviation

Although aviation facilities within Nevada County do not handle a large number of passenger trips, maintenance and enhancement of regional airports is important for the provision of emergency services and to enhance business and recreational activities. Inclusion of aviation facilities in the Regional Transportation Plan insures that local airports remain eligible for State and Federal grant funds (see Aviation Action Plan, page 73).

Rail

Currently the rail corridor that parallels Interstate 80 along the southern border of Nevada County is a major artery for goods movement that brings shipments to and from the Ports of Oakland and Stockton. To the west of Nevada County the Capitol Corridor is a rapidly growing intercity passenger service. Expansion of the Capitol Corridor passenger service has significant potential for bringing visitors to the Truckee – North Tahoe resort area. It is important for the Nevada County Transportation Commission to monitor state and federal legislation and changes in Union Pacific rail operations in order to enhance the opportunity to improve rail service to the region (see Rail Action Plan, page 79).

Air Quality

Western Nevada County has been thrust into the Air Quality arena by virtue of its designation in 2004 as a non-attainment area under the Federal 8-hour ozone standards. While the majority of pollutants that cause the violations of Federal standard are transported to western Nevada County from Sacramento and the San Francisco Bay area, NCTC must identify and implement transportation projects that will demonstrate that the region is taking reasonable steps to address the emissions generated within the County.

Additionally, as part of the California Global Warming Solutions Act of 2006, Assembly Bill 32 (AB 32) was signed into law and requires that by 2020 the state's Greenhouse Gas (GHG) emissions be reduced to 1990 levels. Rural transportation planning agencies have a unique set of challenges compared to urbanized areas to reduce regional transportation related GHG emissions. Lower land use densities, limited transit options, higher vehicle miles traveled per household, and higher volumes of interregional traffic contribute to the challenges to reduce these emissions. The development of vehicles that are more efficient and improvements in low-carbon fuels present the highest payoff for rural counties to reduce transportation related carbon dioxide emissions (see Air Quality Action Plan, page 84).

Transportation Safety and Security

Congress emphasized the need for a more collaborative approach to safety and security when it passed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in August of 2005. SAFETEA-LU included two new planning factors related to transportation safety and security.

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

- ◆ Planning and programming transportation infrastructure improvements;
- ◆ Coordinating implementation of the SR 49 Corridor System Management Plan;
- ◆ Serve as a resource of information on transportation system capacities and resulting level of services that might be experienced in relation to certain planned emergency responses;

- ◆ Identify opportunities to leverage resources for planning and construction of transportation infrastructure projects that can enhance transportation and security efforts; and
- ◆ Coordinate with Caltrans and local jurisdictions to identify safety and security concerns on key facilities and work to identify funding and implement solutions (see Transportation Safety and Security Action Plan, page 89).

II. INTRODUCTION

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) every five years.

The purpose of this plan is to document the short-term (2010-2020) and long-term (2020-2030) regional transportation needs covering the RTP horizon and set forth an effective, cost-feasible action plan to meet these needs. The RTP documents the policy direction, actions, and funding strategies designed to maintain and improve the regional transportation system. The RTP promotes a continuous, comprehensive, and cooperative transportation planning process that facilitates the efficient development and implementation of projects while maintaining Nevada County's commitment to public health and environmental quality.

A list of common acronyms are defined in Appendix A-1 for quick reference.

Environmental Considerations

An addendum to the Program Environmental Impact Report (EIR), State Clearinghouse #99072038, was prepared and certified in compliance with Section 15164 of the California Environmental Quality Act (CEQA) for the previously adopted 2005 Nevada County RTP. For the 2010 Nevada County RTP, NCTC is currently preparing a Supplemental EIR (SEIR), based on the certified 2005 Nevada County RTP Program EIR. Appendix A-6 includes a summary of the mitigations included in the SEIR.

An EIR is an informational document, the purpose of which is to inform public agency decision makers and the general public of the significant environmental impacts of a proposed project, to identify possible means to minimize significant effects, and to describe reasonable alternatives to the project. As defined in CEQA, "significant effect on the environment", means "a substantial, or potentially substantial adverse change in the environment." Although the EIR does not dictate the lead agency's ultimate decision in adopting the RTP, it must be considered, along with any other information, to assist the lead agency's decision-making process. As provided in the CEQA Guidelines, public agencies are charged with the duty to avoid or minimize environmental damage where feasible. In complying with this obligation, the public agency has to balance a variety of public objectives, including economic, environmental, and social.

Because the RTP is a program level planning document containing general policies, guidelines, and lists of proposed projects for which specific design details have not yet been completed for all projects, the object of the environmental analysis in this Program Level EIR is to provide a general overview of the potential impacts of the recommended RTP improvements. The degree of specificity of this Program Level EIR corresponds with the degree of specificity in the proposed RTP. The RTP provides limited information on site-specific transportation improvements; therefore, the EIR is limited in its ability to precisely determine potential significant site-specific impacts associated with future transportation improvement projects. Analysis of site-specific environmental impacts of transportation improvement projects will be the responsibility of the lead agency for the specific project and identified in the project specific environmental documentation.

RTP PROCESS

The NCTC is responsible for the preparation of the Nevada County RTP every five years. NCTC must ensure that all requirements of the RTP process are met. The NCTC prepares a draft report that includes all of the required elements, and solicits public comment from the Technical Advisory Committee (TAC), jurisdictions, neighboring Regional Transportation Planning Agencies, and a wide variety of groups, including the general public. Caltrans encourages the consideration of transportation related concerns of Native American Tribal Governments within the RTP boundaries. There are no federally recognized tribes in Nevada County, but NCTC solicits comments from Native American Tribal Organizations in the region. The comments solicited are responded to and/or included in the final document as appropriate. Environmental documentation, in conformance with CEQA is also prepared. NCTC then adopts the environmental documentation and RTP in accordance with State and Federal requirements.

NCTC will be responsive to changing conditions throughout the county on an ongoing basis. As new or redefined projects are needed, the action and financial sections will be amended.

Government Participation

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

- ◆ **The Nevada County Transportation Commission**, serving as the Regional Transportation Planning Agency, has seven Commissioners and four staff. The Commission is made up of the following representatives: the Nevada County Board of Supervisors appoints two representatives from the Board of Supervisors, as well as, two county-at-large representatives; the incorporated cities of Grass Valley, Nevada City, and the Town of Truckee each have one representative.
- ◆ **The Technical Advisory Committee** is made up of representatives of local public works and planning departments, Caltrans, public airport operators, the air pollution control district, and public transit operators. The Committee provides technical input on transportation issues and ensures that there is coordination and cooperation in the transportation planning process.
- ◆ **The Transit Services Commission** provides policy direction and advises the transit operator in western Nevada County on matters relating to the daily operations of the transit and paratransit services. The Transit Services Commission is made up of the following representatives: the Nevada County Board of Supervisors appoints two representatives from the Board of Supervisors, as well as, two county-at-large representatives; the City Councils of Grass Valley and Nevada City each have one representative, and jointly appoint one city-at-large representative.
- ◆ **The Western Nevada County Conformity Working Group** is made up of representatives from the Nevada County Transportation Commission, Northern Sierra Air Quality Management District, Caltrans, California Air Resources Board, U.S. Environmental Protection Agency, Federal Highway Administration, and Federal Transit Administration. The purpose of this technical working group is to provide interagency consultation and coordination on transportation conformity.

Citizen Participation

Public involvement is a major component of the transportation planning process. The NCTC makes a concerted effort to solicit public input from all Nevada County residents including under-represented groups in many aspects of transportation planning within Nevada County. Specific examples are listed below:

- ◆ The NCTC produces and distributes a bi-monthly newsletter and maintains a website (www.nctc.ca.gov) in an effort to keep the public informed of transportation planning efforts underway in Nevada County. Newsletters are posted on the bulletins boards of local jurisdictions and public libraries and mailed to mobile home parks, residential home owners associations, senior centers, environmental advocates, associations representing the private sector, and individuals that have asked to be included on the distribution list.
- ◆ Articles on the preparation of the RTP, as well as the public comment periods, were included in the June 2010, December 2010, and June 2011 NCTC Newsletters.
- ◆ Copies of the Draft RTP are made available for review at the main public libraries in western and eastern Nevada County, as well as, on the NCTC website.
- ◆ Press releases are sent to the media establishments in western and eastern Nevada County notifying them the Draft RTP was available for review and comment and noting some key findings.
- ◆ Public hearings are held and noticed in the main newspapers in western and eastern Nevada County prior to adoption of the RTP and Regional Transportation Improvement Program.
- ◆ 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.
- ◆ The Social Services Transportation Advisory Council (SSTAC) consists of appointed citizens representing a wide range of transit dependent groups. The SSTAC recommends action to the NCTC relative to the unmet transit needs finding and 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.

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

REGIONAL SETTING

Nevada County lies within the northern portion of California, stretching from the eastern end of the Sacramento Valley across the Sierra Nevada to the State of Nevada. Figure 1 (see page 15) displays the regional area and key statistics relative to the area.

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

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

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

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

STUDY AREA

As displayed in Figure 1, the study area includes the entire County of Nevada. Travel characteristics within the study area vary between the eastern and western county primarily due to their distinctive land use patterns.

The eastern portion of the study area contains several land uses, which attract more trips than they produce, such as the ski resorts and the Truckee shopping area. This land use pattern causes many trips to end within the area, but originate outside the area. Another prominent travel characteristic of the eastern County is the trips on the I-80 Corridor that pass through the area.

Land use patterns in the western portion of the study area typically consist of more residential uses than commercial and industrial uses. Large residential areas such as Lake of the Pines, Lake Wildwood, and Alta Sierra create many trips that originate within the study area, but end outside the area, particularly for trips from home to work.

DEMOGRAPHIC TRENDS

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

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

- ◆ Lake Wildwood Approximately 2,836 residences. Located adjacent to Highway 20 west of Grass Valley/Nevada City near the Yuba County line.
- ◆ Lake of the Pines Approximately 1,800 residences. Located adjacent to Highway 49 south of Grass Valley/Nevada City near the Placer County line.
- ◆ Alta Sierra Approximately 2,600 residences. Located adjacent to Highway 49 south of Grass Valley/Nevada City.

In eastern Nevada County the Town of Truckee, which incorporated in 1993, experienced rapid growth between 1990 and 2000. According to an analysis of Truckee's population growth since 1990, conducted by the Town's Planning Department in 2004, the average annual growth rate between 1990 and 2000 was 4.5 percent. Between 2000 and 2004, the average annual growth rate slowed to an average annual growth rate of 2.0 percent. Between 2005 and 2009 the average annual growth rate declined to 1.0 percent. Much of the population growth has occurred in the large Tahoe-Donner, Glenshire, and Prosser residential subdivisions.

**TABLE 1
RECENT POPULATION CHANGE BY LOCATION**

NEVADA COUNTY	2005 Pop.	% Change 2005-06	2006 Pop.	% Change 2006-07	2007 Pop.	% Change 2007-08	2008 Pop.	% Change 2008-09	2009 Pop.
Grass Valley	12,944	-0.12%	12,929	0.14%	12,947	-0.43%	12,891	-0.58%	12,817
Nevada City	3,037	0.85%	3,063	0.07%	3,065	0.00%	3,065	-0.72%	3,043
Truckee	15,578	1.31%	15,784	0.97%	15,939	1.08%	16,113	0.19%	16,241
Unincorporated	66,905	0.86%	67,484	-0.25%	67,314	-0.76%	66,805	-0.28%	66,617
County Total	98,464	0.80%	99,260	0.01%	99,265	-0.40%	98,874	-0.16%	98,718

Source: State of California, Department of Finance, *E-4 Population Estimates for Cities, Counties, and State, 2001-2009, with 2000 Benchmark*. Sacramento California, May 2009.

According to the *State of California, Department of Finance, E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2009 and 2010*. Sacramento, California, May 2010, Nevada County's population increased from 98,649 in 2009 to 98,680 in 2010 with an annual percent change of an increase of 0.0 %. As the economy recovers, all communities in Nevada County are projected to experience at least moderate growth over the next 20 years, which implies that there will be additional demand placed on the area's roadway system.

The California Department of Finance's *Population Projections by Race/Ethnicity, Gender and Age for California and Its Counties 2000-2050*, released in July of 2007, estimate that Nevada County's population will increase 16% over the next ten years (2010-2020) with an annual average growth rate of approximately 1.6%. These population projections also estimate that Nevada County's population in the year 2030 will be 123,940. According to this projection, the population growth will slow between 2020 and 2030 and is projected to increase only 8.0% during this period. 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.

The 2000 Census data indicates that the median age in Nevada County was 43 years of age compared to 33 for the entire state of California. Nevada County's largest population by age in 2000 was the 35-54 age group at 33.5% of the County population. The second largest population by age was the 65-84 age group at 15.7% of the County population compared to a statewide percentage of only 9.4%. The 20-34 age group for Nevada County as a percentage was approximately only half of the statewide percentage by comparison.

As the residents of Nevada County grow older it has the potential to further increase the need for services. The *Population Projections by Race/Ethnicity, Gender and Age for California and Its Counties 2000-2050*, indicate that the county's population of elderly persons (age 65 to 74) will increase from 11,445 in 2010 to approximately 19,804 by 2030. This forecast projects an increase in the elderly population of 73% between 2010 and 2030. The number of frail elderly (age 75 and above) are projected to increase from 8,309 in 2010 to approximately 17,944 in 2030. This represents an increase of 114% in the frail elderly population. 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 for the state to address the long-term expansion of transit operating revenues.

**TABLE 2
2000 CENSUS JOURNEY-TO-WORK MODE SPLIT**

Mode (Home-based work trips)	Nevada County
Drive Alone	75.4%
Carpool	12.7%
Public Transportation	0.7%
Bicycle	0.3%
Walk	2.7%
Worked at Home	7.5%
Other	0.5%

U.S. Census Bureau 2000 Census

The 2000 Census Journey-to-Work data for Nevada County indicates that the prominent mode of choice is the automobile as indicated by 75.4% of workers who drove alone and 12.7% who carpooled. The mean travel time to work is 26 minutes.

Travel characteristics within Nevada County vary widely according to the region in which it occurs. The western portion of the County contains a large number of trip producing (residential) land uses in relation to trip-attracting (office and commercial) land uses. Approximately 80 percent of the developed land contained residential uses. This causes many trips to originate in this area with a destination outside of the area. Travel within the eastern portion of the County, however, is driven by a greater quantity of trip attracting land uses than trip-producing uses. This area is characterized by many recreational and tourist attractions, which causes large amounts of traffic to originate outside the area with destinations either inside or through the area. Additionally, the 2000 Census and Bureau of Economic Analysis data for 2000 indicate that, of the 41,533 employed residents in the County, 11,006 worked outside the County or approximately 26%. The Bureau of Economic Analysis data also indicates that 4,244 people in the local work force commute into Nevada County to work.

**TABLE 3
2000 CENSUS TRAVEL TIME TO WORK**

Nevada County workers who did not work at home	Number	Percent
Less than 10 minutes	6,552	17.4%
10 to 14 minutes	7,064	18.8%
15 to 19 minutes	6,018	16.0%
20 to 24 minutes	5,320	14.2%
25 to 29 minutes	1,677	4.5%
30 to 34 minutes	3,154	8.4%
35 to 44 minutes	1,582	4.2%
45 to 59 minutes	2,159	5.7%
60 to 89 minutes	2,392	6.4%
90 or more minutes	1,679	4.5%
	37,597	100.0%

Journey-to-Work: 2000, Census 2000 Summary File 4

Approximately 52.2% of Nevada County workers that commute travel less than 20 minutes to their place of employment. The Census data indicates that 37% of workers commute between 20 – 59 minutes and 10.8% commuted from 60 – 90+ minutes to work. Since the 2000 Census data indicated that 11,006 Nevada County residents worked outside of the County, one could conclude based on the number of workers associated with the commute times above, that workers with a travel time slightly above 20 minutes most likely are traveling to an employment destination outside of the County.

**TABLE 4
NUMBER OF VEHICLES PER HOUSEHOLD (HH)**

Number of Vehicles Per HH	HH's	Percentage
None	1,742	4.7%
1	10,234	27.7%
2	15,532	42.1%
3 or more	9,386	25.4%
	36,894	100.0%

Profile of Selected Housing Characteristics: 2000, Census 2000 Summary File

As shown in Table 5, the 2000 Census counted 1,742 occupied housing units with zero vehicles available in Nevada County (4.7%) compared to 3.5% zero vehicle households identified in the 1990 Census. Planning efforts for the region need to recognize the demographics of Nevada County that make it unique. Nevada County's population mix is older than the statewide average. As the existing population ages it will create mobility needs that the region's resources will be challenged to meet.

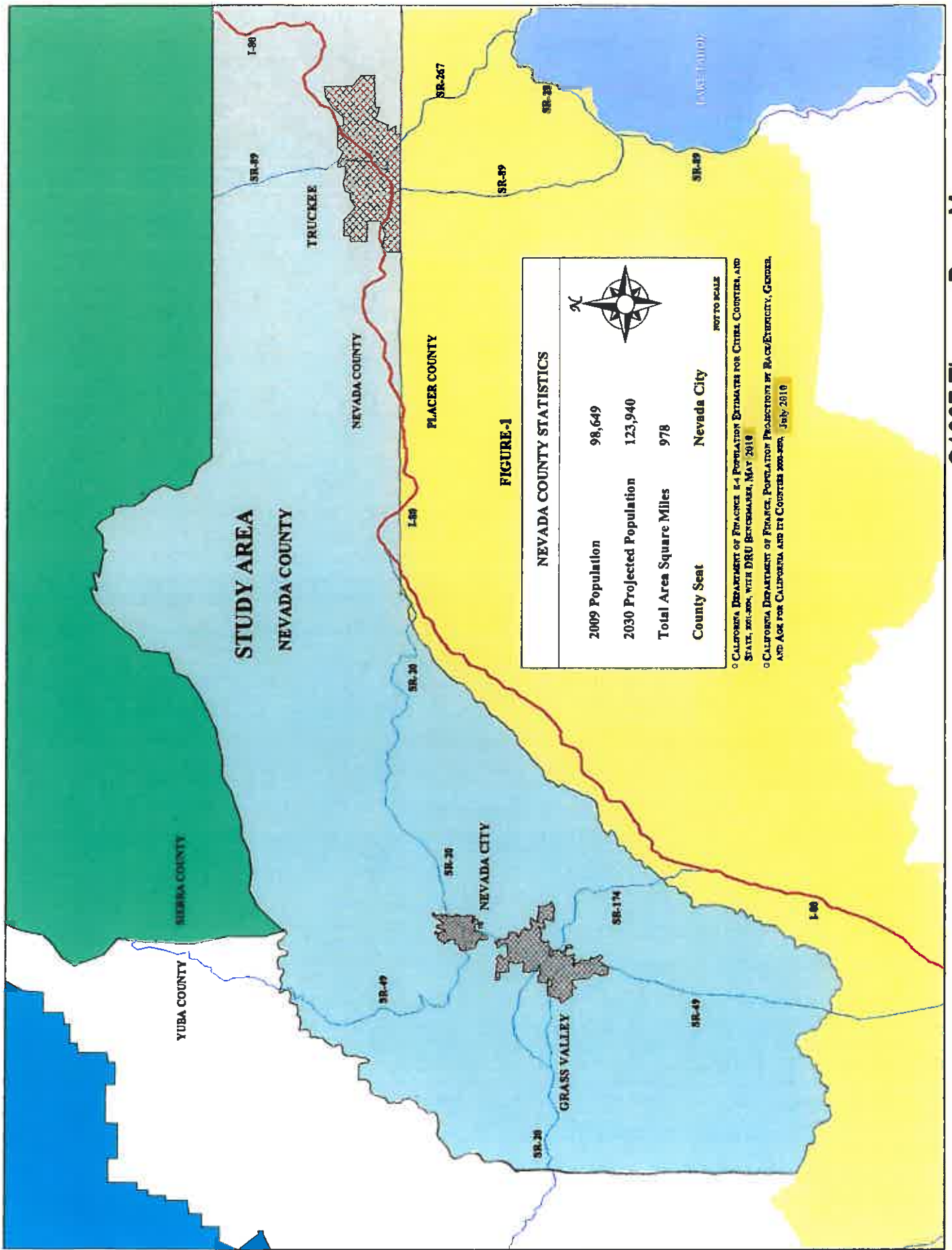


FIGURE-1

NEVADA COUNTY STATISTICS	
2009 Population	98,649
2030 Projected Population	123,940
Total Area Square Miles	978
County Seat	Nevada City



NOT TO SCALE

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 © CALIFORNIA DEPARTMENT OF FINANCE, POPULATION PROJECTIONS BY RACE/ETHNICITY, GENDER, AND AGE FOR CALIFORNIA AND ITS COUNTIES 200-200, July 2010

III. POLICY ELEMENT

PURPOSE

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 environmental, social, and economic goals.

The goals, objectives, and policies have been developed to form the basis of the Action Element of the Regional Transportation Plan, as well as, being the foundation for long term planning. The projects and actions contained in the Action Element are constrained by the revenue forecasts identified in the RTP Financial Element and are consistent with regional goals, objectives, and policies. In addition land use decisions and regional transportation policy are linked to the region's air quality.

The purpose of the Policy Element is to set a policy framework by which the County's mobility needs are identified and met. The goals, objectives, and policies listed below are the result of an extensive public participation program associated with the Nevada County General Plan Update process, as well as, direction received from the various decision-making entities in the county. These entities include, but are not limited to, the NCTC, the Nevada County Planning Commission and Board of Supervisors, and key representatives of Grass Valley, Nevada City, and the Town of Truckee.

REGIONAL ISSUES

The major transportation issues facing western Nevada County include the increased demand for transportation resulting from community growth, and the need for additional funding to construct facilities and provide services to meet the existing and future demand. The construction of the Dorsey Drive Interchange is a priority project included in the Regional Transportation Improvement Program (RTIP). This interchange project will provide access to the Sierra Nevada Memorial Hospital and the Sierra College – Nevada County Campus and help to reduce congestion at adjacent interchanges. State Route 49 is western Nevada County's main link to the Interstate 80 corridor and the Sacramento area. State Route 49 experiences peak hour congestion and the SR 49/La Barr Meadows Road improvement project is also a priority project included in the NCTC's RTIP. Area businesses and residents hope to improve safety on SR 49 and reduce congestion and the associated traffic delays through the realignment and signalization of the current intersection and completion of a frontage road system.

There is a strong desire to maintain the area's rural ambiance and enhance its natural qualities, while improving the safety and operation of transportation facilities. To accomplish these desires, it will be important to promote and enhance regional transit service, implement appropriate demand management and systems management strategies, and continue implementation of comprehensive corridor plans that utilize design features for highway improvements that are in concert with community standards.

The major transportation issues in eastern Nevada County are related to the tremendous amount of regional traffic and its resulting environmental impacts. Major arterial routes in eastern Nevada County have peak period demands that exceed system capacities. Because of environmental and funding constraints, large-scale highway construction to meet the demand is rarely realistic and often undesirable. The widening of the SR 89 Union Pacific Rail Road grade separation or locally known as the "Mousehole" is another important RTIP project in eastern Nevada County that would help to

alleviate peak season congestion and improve safety for pedestrians. The Town of Truckee is currently working on completing the project approval and environmental documentation for the construction of a pedestrian tunnel at the SR 89 Grade Separation. While some highway construction will aid the situation, there is an urgent need to implement demand management strategies on a regional basis, and to enhance alternatives to the automobile.

With the population in Nevada County projected to increase over the period of the plan, the provision and promotion of transportation alternatives such as transit and Transportation Demand Management (TDM) measures will be important. One TDM measure that currently is available in the incorporated cities and some of the unincorporated areas of Nevada County is access to broadband internet services. Expanding broadband services into rural areas would provide more opportunities for telecommuting, conducting government business online, shopping online, and online educational opportunities, thereby, assisting to reduce the number of automobile trips made during peak time periods.

Goals, objectives and policies also provide regional input for consideration in the State evaluation of significant transportation issues. The central need within all of the regionally significant transportation issues is acquiring timely and adequate funding.

Transportation Funding

Ongoing state budget challenges combined with a downturn in the economy since the adoption of the 2005 Nevada County RTP have resulted in unstable and unreliable transportation funding in California. The California Legislature worked to address a general fund deficit of nearly \$20 billion in the current fiscal year, on top of deficits of more than \$ 40 billion over the past two years. Early in the decade, the state raided transportation funds to balance the budget, resulting in project programming delays for State Transportation Improvement Program (STIP) projects. The passage of Proposition 1A and 1B in 2006 provided a significant infusion of revenue to transportation, but by 2009 transportation funding was once again in jeopardy due to continuing state budget challenges.

Revisions to the 2008/09 Budget Act and the amended 2009/10 Budget Act resulted in diversions of transportation funding and loans to the General Fund. Transit funding was reduced by diverting \$363 million in FY 2009/10. Additionally, due to the struggling economy in California and low credit rating, the state has had difficulty selling general obligation bonds for transportation projects in relation to Proposition 1B.

At the local level many transportation projects substantially depend on development fees. Cities and counties also rely on local funds for transportation projects, which may include dedicated sales taxes, redevelopment funds, general funds, special grants, and other sources. There are many more transportation projects than there are funds to implement and construct them. Future funding sources for state and local projects will continue to be dependent on the condition of the state budget and state legislature's development of statewide transportation funding programs.

Even without the economic and budget challenges facing California and the United States, the existing state and federal transportation revenue sources are inadequate and additional reliable and flexible transportation revenue sources are needed to address the infrastructure needs in order to accommodate the planned growth in Nevada County and across the state.

The Financial Element of the RTP is intended to discuss the financial assumptions and forecasts of transportation costs and revenues necessary to implement the Action Element of the Nevada County RTP Update. The Action Plan calls for an extensive list of improvements over the horizon of the

RTP. As is true in other areas of California, there are not enough existing federal, state, or local resources to fund all of the improvements necessary.

The RTP Financial Element presents a constrained funding scenario made up of the revenue that is reasonably expected to be available from existing funding mechanisms currently in place over the horizon of the RTP, including projections of the future STIP, and federal transportation funds. The RTP also discusses potential local revenue sources

Estimated improvement costs for the actions recommended to meet the identified needs exceed the projected funding available for transportation projects in Nevada County. Revenue projections indicate shortfalls in funding for improvements to the following transportation system components:

- ◆ State Highways
- ◆ Regional Roadways
- ◆ Roadway Rehabilitation and Maintenance
- ◆ Transit Services
- ◆ Rail Transportation

Air Quality/Greenhouse Gas Emission Reductions

On June 15th 2004, the Environmental Protection Agency (EPA) designated western Nevada County as a "non-attainment" area under the Federal 8-hour ozone national air quality standard. The standard is designed to protect the public from exposure to ground-level ozone. Ozone is unhealthy to breathe, especially for people with respiratory diseases, and for children and adults who are active outdoors. The 8-hour ozone standard is based on averaging air quality measurements over 8-hour blocks of time. The 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.

Isolated rural non-attainment areas are required to complete a Transportation Conformity Analysis/Determination when a federal approval is required on a regionally significant transportation project. The "Conformity" finding must show that the project, along with all of the regionally significant Federal and non-Federal transportation projects, does not create new violations of the National Ambient Air Quality Standards (NAAQS), does not increase the severity of NAAQS violations, or delay timely attainment.

To ensure the coordination of transportation planning and air quality efforts 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 (NSAQMD), Caltrans, California Air Resources Board (ARB), EPA, Federal Highway Administration, and Federal Transit Administration. The purpose of this technical working group is to provide interagency consultation and coordination on transportation conformity.

The NSAQMD is working in conjunction with the NCTC and California ARB to prepare an air quality attainment plan for western Nevada County. The RTP seeks to reduce air quality issues associated with future planned growth by increasing the efficiency of the transportation system and increasing alternative transportation options.

The California legislature passed the Global Warming Solutions Act in 2006 through Assembly Bill 32. As a result of AB 32, California Statute specifies that by the year 2020, greenhouse gas (GHG) emissions within the state must be at 1990 levels. The California Air Resource Board (ARB) is the

primary state agency responsible for implementing the necessary regulatory and market mechanisms to achieve reduction in GHG emissions to comply with the requirements of AB 32. ARB research indicates that 37% of CO2 emissions in California are generated from the transportation sector.

Rural transportation planning agencies have a unique set of challenges compared to urbanized areas to reduce regional transportation related greenhouse gas emissions. Lower land use densities, limited transit options, higher vehicle miles traveled per household, and higher volumes of interregional traffic contribute to the challenges to reduce these emissions. The development of vehicles that are more efficient and improvements in low-carbon fuels present the highest payoff for rural counties to reduce transportation related carbon dioxide emissions.

◆ **Coordination of Land Use, Air Quality, and Transportation Planning**

Land use planning is a major element of providing effective transportation, particularly in light of the projected increase in population, housing and employment needs, which can be expected in the future. Transportation corridors and right-of-way must be protected through the General Plan and zoning processes. In addition, land use decisions and policies on local and regional transportation alternatives can affect the region's air quality. In order to ensure coordination of land use, air quality, and transportation planning a Technical Advisory Committee (TAC) made up of representatives from the local city and county public works, planning departments, Caltrans, and NCTC meet monthly to review and discuss transportation and land use issues. Representatives from public transportation providers and local airport managers participate on the TAC on relevant issues. The TAC also coordinates the land use data sets and forecasts developed for the update of the NCTC traffic model. Continued coordination between land use and transportation planning will result in more efficient use of the existing transportation system, and will help to mitigate both traffic and air quality impacts.

◆ **Providing and Maintaining a Transportation System that Enhances Safety, the Efficient Movement of all People, Goods, Services, and Information, and Environmental Quality.**

Needs contained in this update are a result of past trends and future trend forecasts. Past trends indicate that Nevada County has experienced a high population growth rate. According to the California State Department of Finance population forecasts, a moderate growth rate is expected over the plan period. In order to adequately accommodate future travel demand associated with the planned growth for Nevada County, improvements to the transportation system are needed.

One of the big challenges that Nevada County will face over the coming years will be the increasing need to continue to provide transportation services for elderly persons, especially those who are in the potentially frail elderly population.

◆ **Support New Technologies**

As new technologies come on line, it is important to establish a base level of research and development in the region to determine how new technology can be appropriately applied to the transportation issues that exist in Nevada County. For example, the expansion of broadband services into rural areas of Nevada County could make telecommuting a feasible alternative to the automobile for those that otherwise have to travel a long distance to work. It also has the potential to reduce additional trips by providing the residents with ability to use E-Government, shop online, or even take educational classes online.

In 2002, NCTC participated in the development of the *Tahoe Gateway Counties Intelligent Transportation Systems Deployment Plan* for the counties of Nevada, El Dorado, Placer, and Sierra. Intelligent Transportation Systems (ITS) involves the integration of communication and information technologies into the transportation system. The installation of dynamic message signs, highway advisory radio, 511 traveler information, and internet updates can provide travelers with real-time information regarding roadway conditions allowing them to make informed decisions regarding when to travel. A long-term strategy for monitoring the location of fixed route transit vehicles en-route between stops and relaying the information to waiting passengers with dynamic message signs could be accomplished through the implementation of automatic vehicle location and identification systems. These are only a couple of examples of ITS applications that could be implemented in Nevada County.

Regions that do not recognize the importance of utilizing technological innovation will have fewer funding and improvement options than those that keep pace with advanced transportation opportunities.

GOALS, OBJECTIVES, PERFORMANCE MEASURES, AND POLICIES

An important element of the regional transportation planning process is the development of valid and appropriate goals, objectives, performance measures, and policies. The RTP Guidelines define these as follows:

- ◆ A **goal** is general in nature and characterized by a sense of timelessness. It is something desirable to work toward; the end result toward which effort is directed.
- ◆ An **objective** is a measurable point to be attained. 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 are linked to the short-range (10 year) and long-range (20 year) transportation implementation goals listed below.
- ◆ The scale by which the attainment of an objective is measured is defined as a **performance measure**. Performance measurement involves examining the performance of the existing system, as well as, forecasting the performance of the future planned system. By examining the performance of the existing system over time, the NCTC can monitor trends and identify regional transportation needs that may be considered when updating the RTP. The purpose of performance measurements is to clarify the link between transportation decisions and eventual outcomes, thereby improving the discussion of planning options and communication with the general public. In addition, they can assist in determining which improvements provide the best means for maximizing the system's performance within the given budget and other constraints.
- ◆ A **policy** is a direction statement that guides decisions with specific actions.

Goal	1.0	Provide for the safe and efficient movement of all people, goods, services, and information.
Objective	1.A	Program improvements to the transportation system which: (Short-range)
		◆ Improve safety and operations. <i>Performance Measure: State and local accident statistics for Nevada County.</i>

- ◆ Reduce travel time required for the movement of persons, goods, and information. *Performance Measure: NCTC Traffic Model travel time outputs.*
- ◆ Maintain levels of service adopted by local jurisdictions. *Performance Measure: Freeway segment directional capacities compared with peak hour directional volumes. Level-of-Service on local roadways will be determined in specific traffic studies.*
- ◆ Support the policies of the local general plans. *Performance Measure: Proposed transportation improvements will be reviewed to ensure consistency with the goals, objectives, and policies of adopted General Plans.*
- ◆ Improve the provision of, and accessibility to, traveler information systems. *Performance Measure: Expansion of broadband services, implementation of related ITS elements, and enhanced 511 coverage for Nevada County.*

Policies	<ul style="list-style-type: none"> 1.1 Coordinate with Caltrans and the SR 49 Stakeholders Committee to ensure development of Project Initiation Documents for projects within the SR 49 Corridor System Management Plan (CSMP) that improve safety and operations. 1.2 Coordinate with Caltrans to implement and fund safety and operational improvements within the SR 49 CSMP boundary. 1.3 Continue efforts to obtain state and federal funding for the construction of the Dorsey Drive Interchange project. 1.4 Support efforts by the Town of Truckee to fund and construct improvements to the SR 89 Union Pacific Railroad Undercrossing (“Mousehole” project). 1.5 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. 1.6 Program improvements that support the planned development of the region in a coordinated manner within the framework of the local general plans. 1.7 Support projects that address the timely movement of goods and services throughout the region. 1.8 Support roadway and street designs that avoid bicycle-auto, pedestrian-auto, and bicycle-pedestrian conflicts. 1.9 Facilitate the coordination and implementation of local and regional transportation programs to improve mobility and air quality. 1.10 Secure maximum available funding; pursue new sources of funds for maintenance, expansion, and improvement of transportation facilities and services; and educate the public about the need for funding for transportation projects. 1.11 Provide jurisdictions technical support for local roadway improvement efforts through transportation studies and analyses, as requested. 1.12 Review development proposals for consistency with adopted Airport Land Use Compatibility Plan to identify potential safety issues and conflicts.
Goal	<p>2.0 Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life.</p>
Objective	<p>2.A Development of the transportation system should be consistent with management and conservation strategies of regional resources contained in the</p>

General Plans. (Long-Range) *Performance Measure: Proposed transportation improvements will be reviewed to ensure consistency with the goals, objectives, and policies of adopted General Plans.*

- Policies**
- 2.1 Establish and protect "scenic highways" in accordance with local general plans.
 - 2.2 The adverse environmental impacts of each transportation improvement should be fully analyzed prior to implementation, and either totally avoided or mitigated to a level of insignificance as defined under CEQA or a statement of overriding considerations approved.
 - 2.3 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.
 - 2.4 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.
 - 2.5 Transportation facilities should be compatible with adjacent land uses.
 - 2.6 Private development/activities should be required to mitigate their impact on public transportation facilities.
 - 2.7 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.
 - 2.8 Support transportation projects that minimize vehicle emissions while providing cost effective movement of people and goods.
 - 2.9 Air Quality Conformity Analyses will be conducted for non-exempt regionally significant transportation projects.
- Goal**
- 3.0 **Develop an economically feasible transportation system.**
- Objectives**
- 3.A Minimize the capital costs of transportation improvements and operating costs of transit services. (Short-range) *Performance Measure: When planning transportation improvements, analyze cost effectiveness of alternatives. Monitor transit statistics and recommend implementation measures to reduce operating costs.*
 - 3.B User charges should recover as much of the cost as possible and still provide the service. (Short-range) *Performance Measure: Monitor and update the Regional Transportation Mitigation Fee Capital Improvement Program as needed. Monitor transit system farebox recovery ratios.*
- Policies**
- 3.1 Support innovative alternative transportation improvements that provide equivalent solutions or benefits at a reduced cost compared to accepted standard improvements.
 - 3.2 Seek and develop alternative funding sources for transportation improvements.
 - 3.3 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.

- 3.4 Transit and paratransit operations should strive to achieve a goal of 16% farebox return (percent of total operating expense offset by fares collected), and should seek to achieve a higher percentage whenever possible.
- 3.5 Support federal legislation increasing funds available for transit system operating expenses by formal resolution and petitioning local representatives in Congress.
- 3.6 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.
- 3.7 Consider 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 in the event funding shortfalls occur for needed projects.
- 3.8 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.
- 3.9 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.
- 3.10 Support state budget appropriations consistent with the adopted Nevada County Regional Transportation Improvement Program.
- 3.11 Support continued return of fair share of motor vehicle fuel taxes to local agencies in Nevada County.
- 3.12 It is the policy of the Nevada County Transportation Commission to withhold Transportation Development Act allocations to a local entity, if the entity's proposed expenditures are not in conformity with the Regional Transportation Plan.
- 3.13 Maximize use of federal and state transportation funding sources and advocate for full funding of transportation programs, including the State Transportation Improvement Program (STIP).
- 3.14 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.
- 3.15 Work with local, state, and federal officials to stop attempts to divert or reduce transportation funding.

- Goal** 4.0 **Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.**
- Objectives** 4.A Reduce dependence on the automobile. (Short-range) *Performance Measure: The number of pedestrian and bikeway projects implemented, transit ridership statistics, Census Journey-to-Work Mode Split Data, and the number of broadband related transactions that reduce trips.*
- 4.B Emphasize mass transit, ridesharing, telecommuting, and pedestrian and bicycle travel as alternatives to the automobile. (Short-range) *Performance*

Measure: Develop and conduct a program to inform the public about alternative forms of transportation utilizing the NCTC website.

- 4.C Program those improvements to the streets and road system that are appropriate with the local general plans. (Long-term) *Performance Measure: Transportation improvements will be reviewed to ensure consistency with the goals, objectives, and policies of adopted General Plans.*
- Policies**
- 4.1 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.
 - 4.2 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.
 - 4.3 Encourage improved pedestrian facilities in high density areas.
 - 4.4 Continue public participation processes to determine the need for new and enhanced transportation facilities.
 - 4.5 Encourage transit services along the Highway 49 Corridor as recommended in the *Nevada County Corridor Management and Rail Feasibility* studies.
 - 4.6 General public transportation services should be maintained and improved within Grass Valley, and between Grass Valley and Nevada City.
 - 4.7 Specialized transportation services directed for the elderly and handicapped should be maintained and improved in Nevada County.
 - 4.8 Coordinate with local transportation management associations and other appropriate agencies to improve existing Transportation System Management and Transportation Demand Management Programs.
 - 4.9 Annually conduct the "Unmet Transit Needs" process in accordance with Section 99401.5 of the Public Utilities Code.
 - 4.10 Encourage jurisdictions to review and assess the impact of new development proposals on transit system demand.
 - 4.11 Support the funding of operational improvements, maintenance, and modernization of public transit services and facilities.
 - 4.12 Encourage the completion of existing non-motorized transportation systems and facilities (including bikeways and sidewalks), with an emphasis on connectivity.
 - 4.13 Encourage jurisdictions to consider the proximity to transit and multi-modal facilities when siting educational, social service, and major employment and commercial facilities.

The objectives and policies contained under the main goals of the Regional Transportation Plan correspond with the following goals, objectives, policies, and programs contained in the General Plans of Nevada County, Grass Valley, Nevada City, and the Town of Truckee:

RTP Goal 1.0 Provide for the safe and efficient movement of all people, goods, services, and information.

Nevada County General Plan, Updated 2010: Goal LU-4.1, Goal LU-4.6, Goal MV-4.2, Goal MV-4.3, Goal MV-4.4, Policy MV-4.2.6, Policy MV-4.2.7, Policy MV-4.2.8, Policy MV 4.2.9, Policy RD-4.3.8, Policy RD-4.3.9, Program MV-4.2.1, Program MV-4.2.2, Program MV-4.2.3, Program RD-4.3.1, Program RD-4.3.2

City of Grass Valley 2020 General Plan: 2-CG, 3-CG, 4-CG, 13-CO

Nevada City General Plan 1980-2000: Circulation Objective 3, Circulation Policy 4

Town of Truckee 2025 General Plan: Goal CIR-1, P1.2, P1.7, Goal CIR 2, P2.1, P2.2, P2.4, P2.5, P2.6

RTP Goal 2.0 Reduce adverse impacts on the natural, social, cultural, and historical environment, and the quality of life.

Nevada County General Plan, Updated 2010: Goal EP-4.4.1, Goal EP-4.4.2, EP-4.4.3, Goal RD-4.3, Goal RD-4.4, Policy EP-4.4.1, Policy EP-4.4.2, Policy EP-4.4.2, Policy EP-4.4.3, Policy RD 4.3.3, Program 4.4.1

City of Grass Valley 2020 General Plan: 3-CG, 10-CO, 15-CP, 21-CP, 26-CP

Nevada City General Plan 1980-2000: Circulation Goal 1

Town of Truckee 2025 General Plan: Goal CIR-3, P3.1, P3.2, P3.4, Goal CIR-6, P6.1, P6.2, P6.3, P6.4, P6.5, P6.6, P6.7, P6.8

RTP Goal 3.0 Develop an economically feasible transportation system.

Nevada County General Plan, Updated 2010: Goal LU-4.5 Policy LU-4.1.4, Policy LU-4.1.6, Policy LU-4.1.9, Policy RD-4.3.4, Policy RD-4.3.5, Program LU-4.1.9, Program LU-4.1.2, Program LU-4.1.3, Program LU-4.1.4

City of Grass Valley 2020 General Plan: 2-CO

Nevada City General Plan 1980-2000: Circulation Policy 5

Town of Truckee 2025 General Plan: CIR-5, P5.1, P5.2, P5.3

RTP Goal 4.0 Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.

Nevada County General Plan Updated, 2010: Goal RD-4.1, Goal RD-4.2, Goal RD-4.3, Goal RD-4.4, Policy RD-4.3.2, Policy RD-4.3.6, Policy RD-4.3.8, Policy RD-4.3.9, Program RD-4.3.1, Program RD-4.3.2

City of Grass Valley 2020 General Plan: 1-CG, 1-CO, 3-CO, 1-CP, 2-CP, 6-CP, 7-CP, 8-CP

Nevada City General Plan 1980-2000: Circulation Policy 1

Town of Truckee 2025 General Plan: Goal CIR-9, P9.1, P9.2, P9.3, Goal CIR-10, P10.1, P10.2, P10.3, P10.4, P10.6, P10.6, P10.7, P10.8, P10.9, P10.10, P10.11, P10.12, Goal CIR-11, P11.1, P11.2, P11.5, P11.6, P11.7

IV. ACTION ELEMENT

PURPOSE

The purpose of the Action Element is to identify the short-term (2010-2020) and long-term (2020-2030) needs of the regional transportation system in Nevada County. In compliance with federal and state law, the planned transportation system improvements are developed to benefit all residents of Nevada County and do not have a disproportionate adverse impact on low income or other under-represented groups.

Each of the following components of the regional transportation system and issues are addressed individually, including:

- ◆ Regional Road Network
- ◆ Goods Movement
- ◆ Transit Services
- ◆ Non-Auto Facilities
- ◆ Intelligent Transportation Systems
- ◆ Transportation Systems Management
- ◆ Air Transportation
- ◆ Rail Transportation
- ◆ Air Quality

REGIONAL ROAD NETWORK

The network of roadways that facilitate the movement of people and goods within and through Nevada County is one of the most important components of the overall transportation system. This section of the RTP identifies the regionally significant roadways and the improvements that will be required over the horizon of the Plan. Figure 2 displays the regionally significant roads in Nevada County (see page 28). Roadways are determined to be of regional significance if they meet one or more of the following criteria:

- ◆ Roadways of statewide significance
- ◆ State or interstate highways
- ◆ Principal arterials connecting Nevada County with other regions or counties
- ◆ Rural arterials connecting two or more urbanized areas
- ◆ Roadways that provide access to significant commercial, industrial, recreational, or institutional activity centers

The network of local roadways provides access to all areas of Nevada County, and each one is an important part of Nevada County's transportation system. However, the RTP seeks to identify deficiencies and propose solutions for local roadways that are of regional significance, connecting population centers with commercial, industrial, recreational, or institutional activity centers. The roadways in Nevada County are categorized into the following classifications based on the type of use and volume of traffic:

- ◆ **Interstates and Freeways** Limited access highways.
- ◆ **Principal Arterials** Major roadways providing access from rural to urban areas and access to freeways.

- ◆ **Minor Arterials** Streets providing through service to industrial and commercial areas and between cities and/or providing access to highways and freeways.
- ◆ **Major & Minor Collectors** Streets that collect traffic from local streets within residential areas.
- ◆ **Locals** Streets whose primary purpose is to provide access to individual properties.

Analysis of Regionally Significant Roadways

The NCTC maintains a TransCAD travel demand forecasting model covering western Nevada County that includes freeways, highways, major and minor arterials, and major and minor collector roadways. The modeling area includes Nevada City, the City of Grass Valley, and the surrounding unincorporated areas of western Nevada County. The modeling area is divided into numerous traffic analysis zones (TAZs), which provide the geographical area within which travel behavior and traffic generation are estimated. Most TAZs cover the “internal” modeling area, while several of them are cordons covering the area “external” to the modeling area. The cordon locations account for trips traveling to and from areas outside of western Nevada County.

The regionally significant roadways are analyzed with the traffic model based on current and on future travel demand, and provide a basis to identify potential impacts of growth. Land use data assumptions are based on the Nevada County General Plan and the General Plans of Grass Valley and Nevada City. Growth projections are based on General Plan zoning, County Assessor parcel data, and historical and projected population statistics from the California Department of Finance.

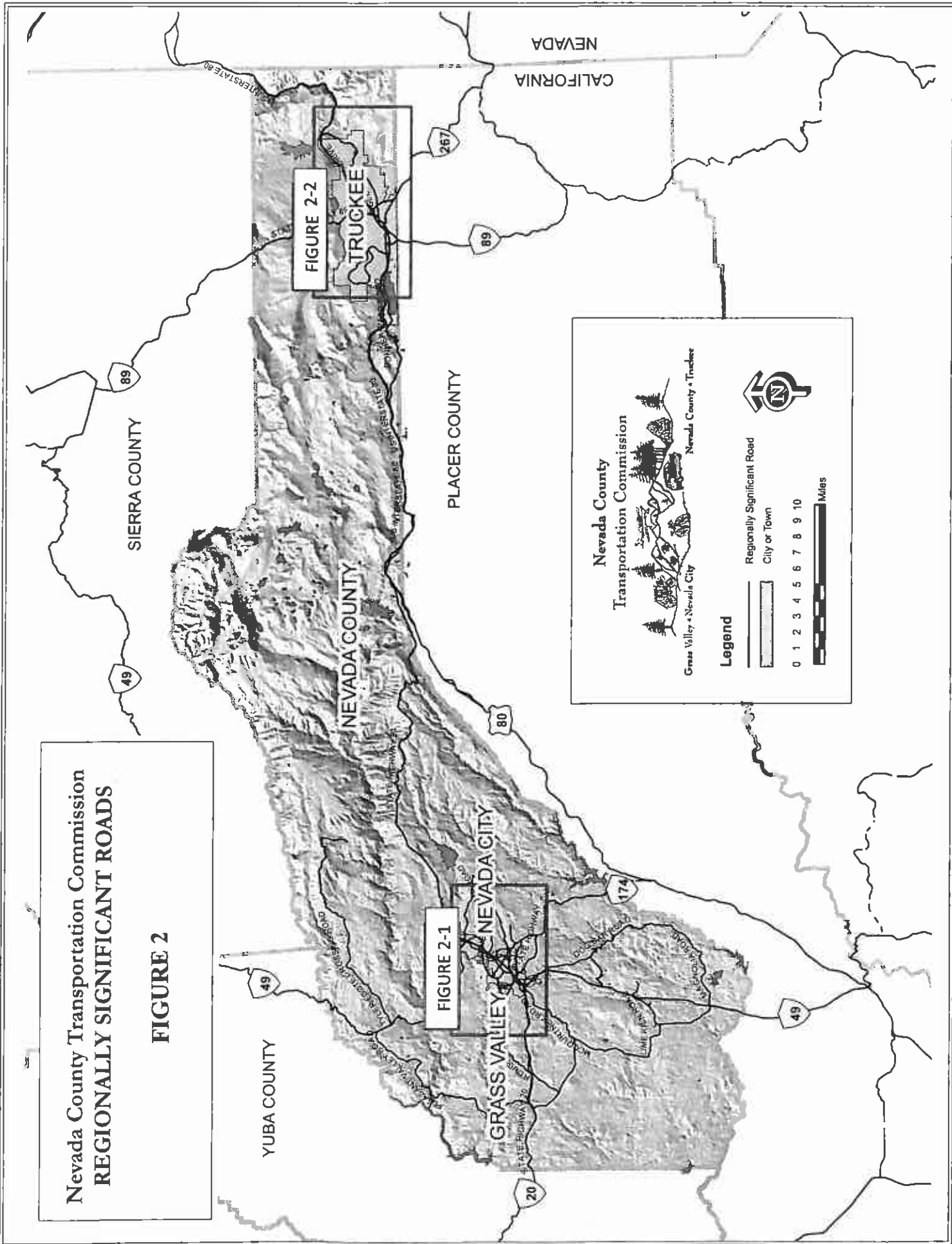
The western Nevada County Regional Transportation Mitigation Fee (RTMF) program was established in 2001 through a partnership between the Nevada County Transportation Commission (NCTC), Nevada County, the City of Grass Valley, and Nevada City. The purpose of establishing the RTMF program was to ensure that development impact fees are collected to help fund the construction of the transportation improvements on the regional system of roadways and highways that are necessary to accommodate planned growth. The RTMF program was reviewed and updated in 2008 utilizing information from the NCTC TransCAD travel demand model.

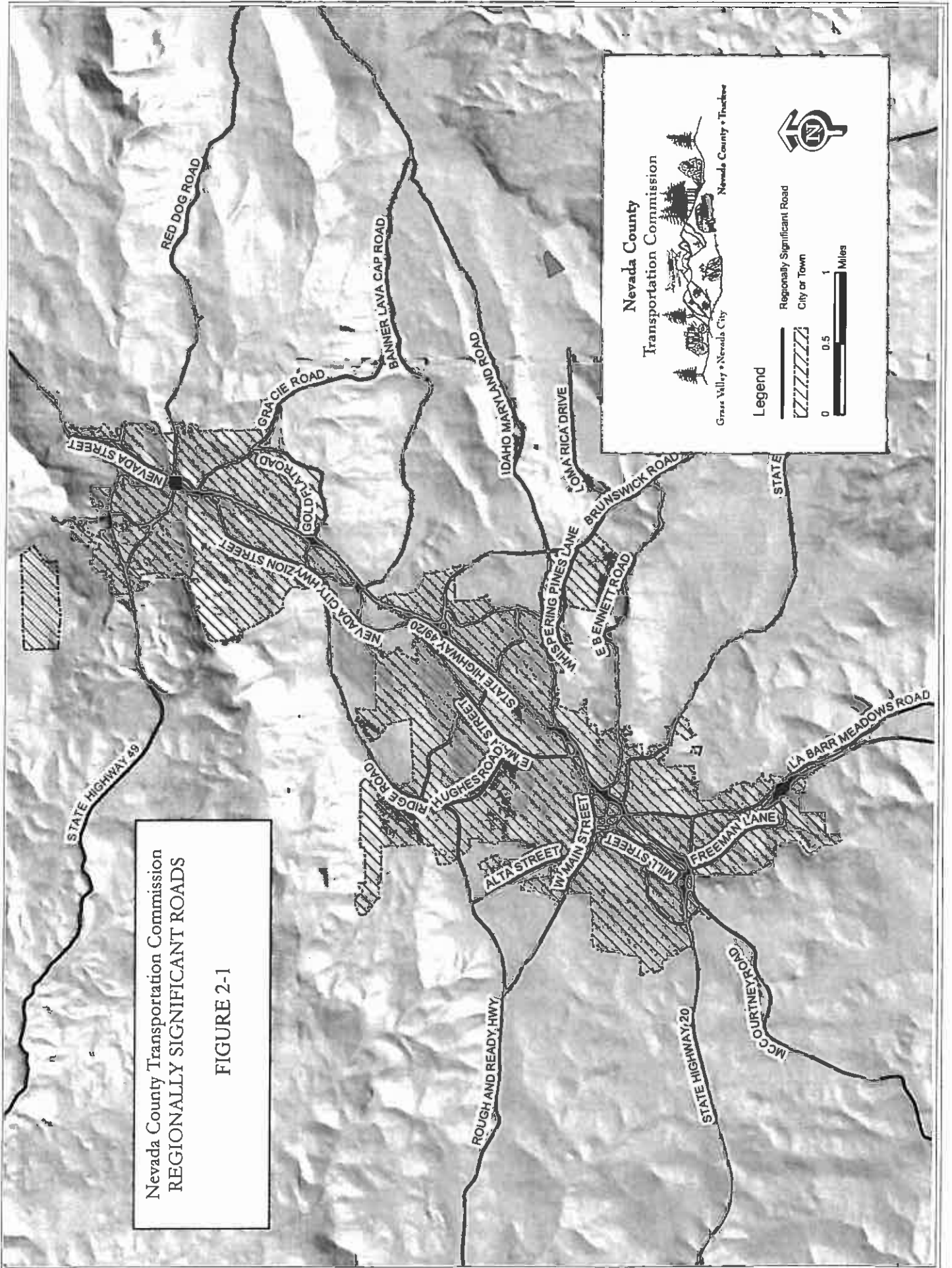
In 2006, the City of Grass Valley developed a citywide TransCAD travel demand forecasting model compatible with the NCTC traffic model and is utilized by the city to identify the impacts of proposed development projects. The transportation improvement projects on the local roadways are then included in the Grass Valley Transportation Impact Fee Program.

The Town of Truckee also maintains a travel demand forecasting model that is utilized to identify the transportation improvement projects needed to accommodate growth in the Town of Truckee. The transportation improvement projects that are needed to accommodate future development are included in the Town of Truckee Traffic Impact Fee Program.

Nevada County Transportation Commission
REGIONALLY SIGNIFICANT ROADS

FIGURE 2





Nevada County Transportation Commission
 REGIONALLY SIGNIFICANT ROADS
 FIGURE 2-1

Nevada County
 Transportation Commission
 Nevada County Truckee

Grass Valley • Nevada City

Legend

Regionally Significant Road

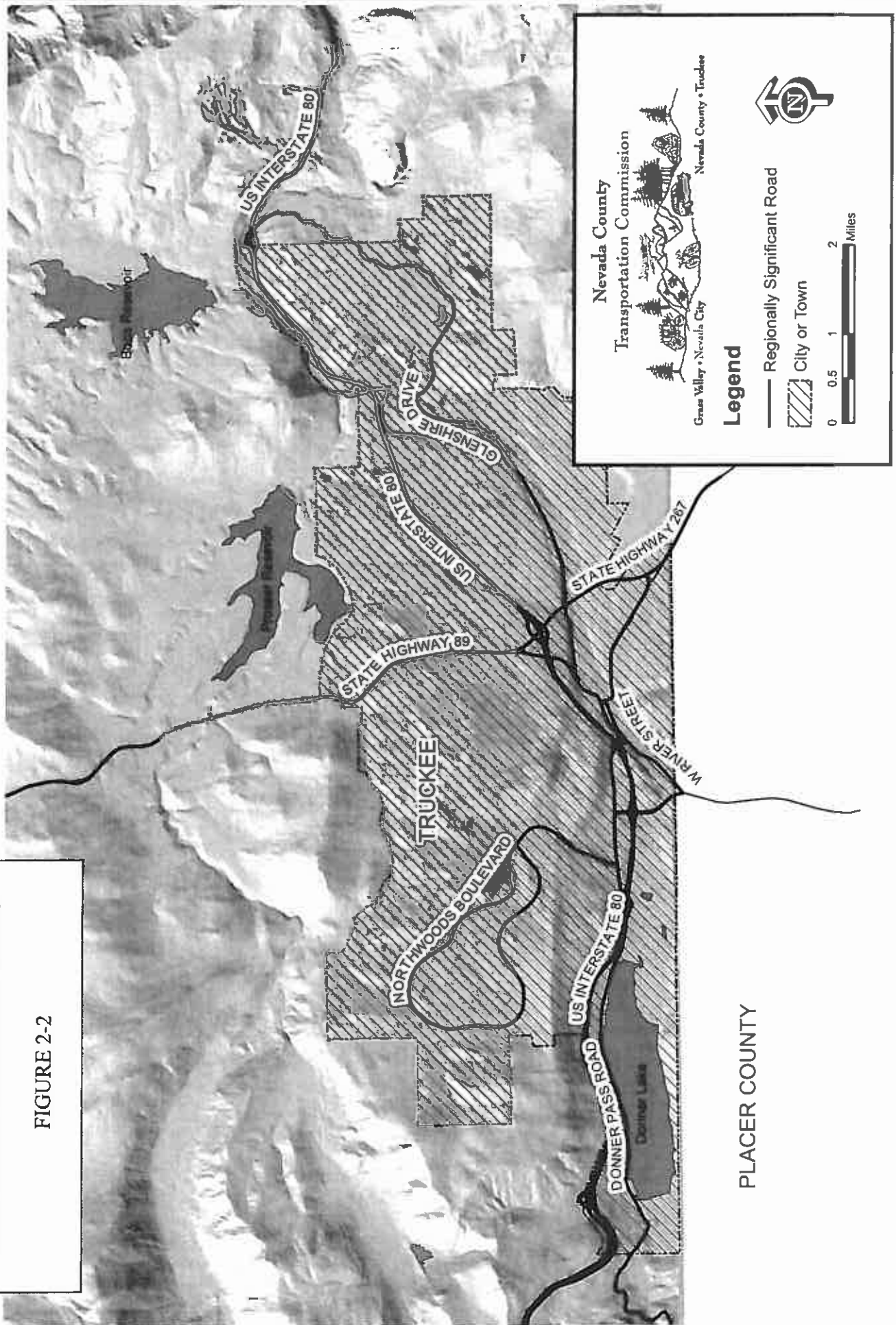
City or Town

0 0.5 1 Miles

North Arrow

Nevada County Transportation Commission
REGIONALLY SIGNIFICANT ROADS

FIGURE 2-2



PLACER COUNTY

State Highways

State highways in Nevada County are the backbone of the region's roadway system, connecting the major population centers within the county, and connecting the county with other regions throughout the State. All of the state highways in Nevada County are regionally significant and include:

Interstate 80 (I-80) is a major route on the Federal Interstate System that runs in California from its western limits in the San Francisco Bay area to the eastern California/Nevada Border. It continues eastward outside of California toward the northeastern United States and terminates in New Jersey. As one of three major all-weather trans-Sierra routes in the winter (others include U.S. 50 and California 88), Interstate 80 is always busy with commercial traffic, tourists, skiers, commuters, and others. Interstate 80 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, Interstate 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 a shared SR 49/20, and is a principal arterial. This shared route is named the "Golden Center Freeway" between Route 49 south of Grass Valley and SR 20 north of Nevada City.

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

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

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

State Route 267 (SR 267) is a north/south undivided two-lane conventional highway 12.69 miles in length that connects I-80 near Truckee to SR 28 near Kings Beach in Placer County, 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 inter-regional, 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.

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

There are currently eighty-seven Interregional Road System (IRRS) routes in state statute. They are a subset of the existing two hundred forty-nine state highway routes that serve the interregional movement of people and goods. Due to the large number of routes and capacity improvements needed on the IRRS, the 1990 IRRS Plan identified thirteen of eighty-seven routes as being most critical IRRS routes, and identified them by the term "High Emphasis Routes". The term "High

Emphasis,” and the priority for improvements to routes in that category, continue as a basis for common and understood usage between Caltrans and regional agencies. Interstate 80 is classified as a “High Emphasis” route and has been designated by Caltrans in the Interregional Transportation Strategic Plan as a gateway.

The IRRS and High Emphasis Routes are incorporated into both Caltrans system planning for long-range highway improvements, and in most regional transportation plans and planning processes. Focus Routes are a subset of the thirty-four High Emphasis Routes. The routes represent ten IRRS corridors that should be of the highest priority for completion to minimum facility standards in the twenty-year period. Completion of the Focus Routes to minimum facility standards will assure a statewide trunk system is complete for higher volume interregional trip movements. Focus Routes will serve as a system of high volume primary arteries to which lower volume and facility standard state highway routes can connect for purposes of longer interregional trips and access into statewide gateways. Focus Routes assure rural connectivity for the north state, and otherwise connect the fastest growing urbanized areas and urban centers to a trunk system. State Routes 20 and 49 are both designated as High Emphasis and Focus Routes in the interregional road system.

REGIONAL ROADWAY ACTION PLAN

REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP) PRIORITIES

The projects identified in the RTP below demonstrate consistency with the projects included in the regions RTIP and Caltrans Interregional Transportation Improvement Program (ITIP).

WESTERN NEVADA COUNTY

◆ Dorsey Drive Interchange

Need and Purpose

This project when completed will provide a direct access to high use sites, specifically the Nevada County Sierra College Campus, Sierra Nevada Memorial Hospital, and the Litton Hill development. Currently, the above mentioned sites gain access from SR 20 using the existing adjacent interchanges at Brunswick Road and Idaho-Maryland/East Main Street compounding congestion experienced from the retail/commercial developments at these locations. This project will benefit the overall regional circulation by helping to alleviate congestion in the Brunswick Basin and East Main Street corridors and reduce the delay time at these existing adjacent interchanges.

Current and Future Regional Improvement Program (RIP)/Local Funding

The NCTC views this project as one of its top priorities and wishes to see this project constructed as soon as possible. NCTC currently has \$10.5 million of RIP funds programmed for construction in Fiscal Year 2012/13. The Regional Transportation Mitigation Fee Program will provide approximately \$451,000 of local funding for this project. The City of Grass Valley has also committed \$5.3 million of Redevelopment funds for the Dorsey Drive Interchange and \$250,000 of Regional Surface Transportation Program funding. In addition \$550,000 of Congestion Mitigation and Air Quality Improvement Program fund is also programmed for the Dorsey Drive Interchange. The current estimated cost of construction is \$14.0 million and construction support is estimated at \$3 million for a combined estimated total cost of \$17.0 million. NCTC, Caltrans, Grass Valley, Nevada County, and Nevada City are exploring options to advance the project as soon as possible to take advantage of the currently favorable bid environment. Completion of this project continues to be a high priority until it is constructed.

◆ **State Route 49 Widening - Placer County to Grass Valley**

Need and Purpose

SR 49 is classified as a Federal Aid Primary (FAP) route, and it is part of the Interregional Road System (IRRS) established by Senate Bill 300 (Kopp 1989) and is designated as a High Emphasis and Focus Route in the interregional road system.

SR 49 is the major roadway connecting Grass Valley and Nevada City with I-80 in Auburn to the south. It is the lifeline for much of Nevada County and is utilized by freight and lumber traffic, commuters, and recreational traffic. Growth forecasts for the corridor indicate that traffic congestion and delays will only increase if SR 49 in Nevada County is not improved. Existing Level of Service (LOS) on this highway operates near failing at several segments during peak periods. 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.

In the 2000 STIP, the California Transportation Commission made a commitment to Nevada County by approving the partnering of RTIP and ITIP funding to complete the first phase of the SR 49 widening from just south of the Bear River to Wolf-Combie Roads in south county. This section was completed in 2004, ahead of schedule and under-budget, and has substantially reduced congestion and improved the safety along this section.

The NCTC, in partnership with Caltrans, has currently programmed the second phase of this project from just north of Alta Sierra Drive to just south of Wellswood Way near Grass Valley. Due to growth in the area and several residential communities in the immediate vicinity, this segment experiences operational problems during the peak period and a number of serious accidents have occurred as motorists attempt to enter onto the highway.

As a part of this project, the intersection of La Barr Meadows Road and SR 49 will be relocated to the south and signalized. Highway widening from two to four through lanes to the north and south of the new intersection and turn pockets at the intersection are needed to provide adequate storage and left turn movements. The numerous driveways and private road accesses to the highway will be consolidated by a system of frontage roads that will greatly improve access to the highway at the new signalized intersection and improve safety. This project will also improve access to SR 49 for emergency vehicles from the fire station south of La Barr Meadows Road that are often delayed for significant periods of time attempting to enter the highway. A pre-emptive signal device will be installed at the signalized intersection as part of the project.

Current and Future RIP/Interregional Improvement Program (IIP) Funding

The NCTC in partnership with Caltrans has \$1.9 million of RIP funding combined with \$1.9 million of IIP match from Caltrans programmed for construction of the La Barr Meadows signalization and widening project. However, based on award of the bid for construction of this project, it is estimated that the RIP and IIP match required will only be \$1.1 million each. Any potential RIP savings will be credited to NCTC in the next STIP cycle. NCTC also has \$5.4 million of Proposition 1B Corridor Mobility Investment Account (CMIA) funds and Caltrans has \$2.0 million of American Recovery and Reinvestment Act (ARRA) funds programmed for construction of this project. Construction is scheduled to begin in the spring of 2011.

Subsequent phased improvements within the SR 49 corridor will continue to be one of the top priorities for consideration in future STIP cycles. NCTC intends to continue to partner funding with Caltrans to plan and implement future improvements within this corridor.

EASTERN NEVADA COUNTY

◆ **State Route 89 South - Widening at the Union Pacific Railroad Grade Separation**

Need and Purpose

The current Union Pacific Railroad (UPRR) underpass structure on SR 89 South has long been the subject of discussion regarding its inadequacies. Known locally as the “Mousehole,” this undercrossing predates much of the development of the region, including Squaw Valley and Alpine Meadows ski areas. These resorts gain their major access through the structure. The current two-lane roadway cross-section, approximately 25 feet in width, creates a “bottleneck” for regional traffic, which is most evident at peak periods.

Presently oversized loads cannot pass through the “Mousehole”. Overhead clearance is restricted to 14 foot 6 inches northbound and 15 foot southbound. Oversized loads traveling on SR 89 between Tahoe City and I-80 must use West River Street and the at-grade railroad crossing at Bridge Street in downtown Truckee. This re-routing mixes these large trucks with passenger vehicles in an already-congested area, further exacerbating traffic delays downtown and at the grade crossing. Traffic analysis has indicated that the widening of the “Mousehole” is necessary to ensure that SR 89 can accommodate future traffic volumes.

In addition, the SR 89 corridor is also a travel route for bicyclists and pedestrians. The development of an important shopping district to the north (Crossroads Center), coupled by the development of residential land uses to the south, has generated a demand for non-motorized travel through the structure. Pedestrians and cyclists must now walk along the very edge of the narrow travel lane to navigate through the undercrossing. Pedestrians are often observed to run through the underpass to avoid conflicts with cars. They have even been observed climbing up and over the 25-foot high railroad embankment and crossing the tracks at-grade rather than risk walking through the underpass. Additionally, traffic is observed to slow down and even stop in some instances when pedestrians and cyclists are passing through the underpass, causing both a reduction in roadway capacity and an unsafe condition.

The Town of Truckee is the lead agency for this project and is currently working on completing the Project Approval and Environmental Documentation (PA/ED) for a project to construct a separate pedestrian tunnel at the SR 89 undercrossing.

Current and Future RIP/IIP Funding

NCTC programmed \$498,000 of RTIP funds in the 2004 STIP for the completion of the PA/ED. The Town of Truckee also received a Federal Earmark in the amount of \$2.8 million as part of the Federal Surface Transportation Reauthorization bill, SAFETEA-LU, in 2005 for improvements to the SR 89 UPRR undercrossing.

The PA/ED for this project was completed April 15, 2011 and the Town of Truckee is now exploring funding opportunities to complete the right-of-way and design phase of this project. The right-of-way purchase costs and right-of-way support component are estimated at \$200,000 and the design phase is estimated at \$1 million. The total estimated cost of the pedestrian tunnel is approximately \$9.1 million.

REGIONAL ROAD NETWORK CAPITAL IMPROVEMENTS

Tables 5 and 6 list the “Financially Constrained” short-term (2010-2020) and long-term (2020-2030) State Highway System (St. Hwy) and regional roadway (Reg.) capital improvements that are reasonably expected to be constructed in western Nevada County based on revenue assumptions. Table 7 lists the “Financially Unconstrained” capital improvements for western Nevada County that do not have all of the funding source(s) currently identified or funding is not reasonably expected to be available in order to construct the improvement. Some of the improvements included in this list are anticipated to be funded by future development.

Tables 8 and 9 list the “Financially Constrained” short-term (2010-2020) and long-term (2020-2030) State Highway System and regional roadway capital improvements that are reasonably expected to be constructed in eastern Nevada County based on revenue assumptions. Table 10 lists the “Financially Unconstrained” capital improvements for eastern Nevada County that do not have all of the funding sources identified or cannot reasonably be expected to have funding available in order to construct the improvement.

Transportation projects identified in the Action Element of the RTP have been calculated in “year of expenditure” dollars to account for 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 in relation to 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. 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 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.

Projects may be added, deleted, or revised based on changes in land use, implementation of Transportation Demand Management or Transportation Systems Management strategies, or changes in transportation technology. Additional projects of regional significance identified in the future will be amended into the Plan if required for funding and/or included in future updates of the Regional Transportation Plan, as well as, in local improvement programs and General Plans of the City of Grass Valley, Nevada City, Town of Truckee, and Nevada County as appropriate.

TABLE 5
WESTERN NEVADA COUNTY
FINANCIALLY CONSTRAINED (FUNDED) REGIONAL TRANSPORTATION PROJECTS LIST
SHORT TERM IMPROVEMENTS 2010-2020

Short-term financially constrained improvements are those that can reasonably be expected to be funded and begin construction prior to 2020.

Location	Proposed Improvement	Total Cost	Funding Source(s)	Estimated Date of Construction
SR 49 (PM 9.7 to PM 11.2)	Construct frontage roads, realign signal at La Barr Meadows & Channelization (St. Hwy)	\$9,607,000	\$1,121,000 RIP \$1,121,000 IIP \$5,365,000 CMIA \$2,000,000 ARRA	2011/12
SR 20 Penn Valley Dr./Rough and Ready Hwy.	Provide two through lanes in both the WB and EB directions at the intersection (St. Hwy)	\$1,000,000	Caltrans SHOPP	2011/12

SR 20/49 at Dorsey Dr. Overcrossing	Construct Interchange (St. Hwy)	\$17,000,000	\$10,555,341 \$451,000 \$550,000 \$5,443,659	RIP RTMF CMAQ Local Funds	2012/13
SR 49 at Brewer Rd.	Add right turn lane and four foot shoulder at Brewer Rd. (St. Hwy)	\$230,000	Caltrans SHOPP		2013/14
SR 49 at Smith Rd.	Add right turn taper at Smith Rd. (St. Hwy)	\$230,000	Caltrans SHOPP		2013/14
SR 49 at Carriage Rd.	Add right turn lane and sight distance wedge and 4foot shoulder (St. Hwy)	\$280,000	Caltrans SHOPP		2013/14
SR 49 at Cherry Ln.	Add right turn lane and sight distance wedge, and 8 foot shoulder to the north (St. Hwy)	\$350,000	Caltrans SHOPP		2013/14
SR 49 at Ladybird Dr.	Add 12 foot wide paved shoulder NB SR 49 approaching the intersection and add a 12 foot wide paved shoulder taper leaving the intersection (St. Hwy)	\$150,000	Caltrans SHOPP		2013/14
Combie Rd.	Widen to 5 Lanes from SR 49 to Magnolia Rd. (R)	\$1,500,000	Co. Dev. Fee		2014/15
SR 49 Widening - McKnight Way to Combie Road	Project development for future phases (St. Hwy)	\$3,000,000	RTMF		To Be Determined (TBD)
Total Cost - Western Nevada County Financially Constrained Short-Term Regional Roadway Improvements		\$33,347,000			

TABLE 6

**WESTERN NEVADA COUNTY
FINANCIALLY CONSTRAINED (FUNDED) REGIONAL TRANSPORTATION PROJECTS LIST**

LONG TERM IMPROVEMENTS 2020-2030

The "Financially Constrained" long-term project list identifies projects that can reasonably be expected to be funded and constructed between 2020-2030

Location	Proposed Improvement	Total Cost	Funding Source(s)		Estimated Date of Construction
Sutton Wy./Dorsey Dr.	Install a single lane roundabout at intersection (R)	\$929,306	GVTIF		To Be Determined (TBD)
Ridge Rd./Gold Flat Rd/SR 20/49 NB Ramps, Ridge Rd./Gold Flat Rd./SR 20/49 SB Ramps, Zion St./Ridge Rd.	Install intersection improvements: roundabout or signals. Close spacing of intersections necessitates improvements at all three intersections (R)	\$4,000,000	\$3,132,421 \$867,579	RTMF Local funds	TBD
Combie Rd./SR 49	Extend Right Turn Lane (R)	\$500,000	Co. Dev. Fee		TBD
Wolf Rd./SR 49	Extend Right turn lane (R)	\$300,000	Co. Dev. Fee		TBD
Pleasant Valley Rd./Lake Wildwood Dr.	Install signal (R)	\$500,000	Co. Dev. Fee		TBD
Pleasant Valley Rd./Wildflower Dr.	Install two-way left turn lane (R)	\$450,000	Co. Dev. Fee		TBD
Mill St./SR 20 WB Ramps	Install a traffic signal (R)	\$626,560	GVTIF		TBD

SR 20/49 NB Ramps/Idaho Maryland Rd.	Install coordinated signals at ramps and Railroad Ave. (R)	\$1,143,935	\$996,935 \$147,000	RTMF Caltrans	TBD
SR 20/49 SB Ramps/Brunswick Rd.	Improve operation of Brunswick Rd./Nevada City Hwy. intersection and eastbound Brunswick Rd. access to SB on ramp (R)	\$892,279	RTMF		TBD
SR 20 EB Ramp at McCourtney Rd.	Install signal or single lane roundabout (R)	\$1,290,215	\$1,078,967 \$211,248	RTMF Local Funds	TBD
SR 49/Combie Rd.	Provide second southbound left-turn lane with receiving lane (R)	\$2,345,800	RTMF		TBD
SR 20/Pleasant Valley Rd.	Restripe southbound approach to include a left turn lane with receiving lane (R)	\$575,900	RTMF		TBD
Bennett St./SR 20/49 NB Ramps	Install traffic signal and ADA compliant ramps (R)	\$635,623	GVTIF		TBD
Bennett St./SR 20/49 SB Ramps	Install traffic signal and ADA compliant ramps (R)	\$696,537	\$459,418 \$237,119	GVTIF Local	TBD
Brunswick Rd./Whispering Pines Ln.	Construct concrete islands for turning and merging traffic (R)	\$181,488	GVTIF		TBD
East Main St.-Bennett St. to Idaho-Maryland Rd.	Widen roadway to provide 12' travel lanes and sidewalks on south side (R)	\$1,532,984	GVTIF		TBD
East Main St./Brunswick Rd.	Widen the north-eastbound approach to provide lengthened turn and through pockets. Curb, gutter, sidewalk, and ADA compliant ramps on south side of street (R)	\$205,668	GVTIF		TBD
East Main St.-Idaho-Maryland Rd. to Hughes Rd.	Widen to provide three travel lanes and bike lanes. Install curb, gutter, and sidewalk on the west side of the street. (R)	\$1,106,721	\$345,850 \$760,871	GVTIF Local Funds	TBD
Freeman Ln./Taylorville Rd.	Install traffic signal (R)	\$743,475	GVTIF		TBD
Idaho Maryland Rd./Sutton Wy.	Install traffic signal, sidewalk on south side Idaho Maryland Rd. (R)	\$915,001	GVTIF		TBD
McCourtney Rd./Brighton St.	Install traffic signal, sidewalk (R)	\$811,760	GVTIF		TBD
Mill St./McCourtney Rd.	Install traffic signal and sidewalk on McCourtney Rd. (R)	\$932,528	GVTIF		TBD
Ophir St./Bennett St.	Install traffic signal (R)	\$687,130	\$616,491 \$70,639	GVTIF Local Funds	TBD
Ophir St./Collfax Ave.	Install traffic signal, modify intersection alignment (R)	\$946,763	GVTIF		TBD
South Auburn St./Empire St.	Install traffic signal, modify intersection alignment (R)	\$239,925	GVTIF		TBD
South Auburn St./SR 20/49 NB Ramps	Install traffic signal (R)	\$856,965	\$565,597 \$291,368	GVTIF Local Funds	TBD
West Main St./Alta St.	Install traffic signal and widen W. Main St. EB (R)	\$825,191	GVTIF		TBD
Idaho Maryland Dr./Centennial Dr.	Realign Centennial Dr. to intersect Idaho Maryland Rd. at the Spring Hill intersection and install traffic signal (R)	\$2,555,309	\$1,916,482 \$638,827	GVTIF Local Funds	TBD
Total Cost - Western Nevada Financially Constrained Long-Term Regional Roadway Improvements		\$27,427,063			

Note: 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.

TABLE 7

**WESTERN NEVADA COUNTY
UNCONSTRAINED (UNFUNDED) REGIONAL TRANSPORTATION PROJECTS LIST**

IMPROVEMENTS 2010-2030

The unconstrained (unfunded) long-term improvements are the projects that may be constructed prior to the year 2030 if additional revenues are realized or funded by future development.

Location	Proposed Improvement	Total Cost	Potential Funding Source(s)		Estimated Date of Construction
Brunswick Rd./Loma Rica Dr. Brunswick Rd./E. Bennett St./Greenhorn Rd.	Improvement project to resolve future LOS deficiency at the Loma Rica/Brunswick Rd intersection. & signal and channel Brunswick Rd./E. Bennett St./Greenhorn Rd. (R)	\$2,941,400	\$928,000 \$2,013,000	RTMF Local	To Be Determined (TBD)
Brunswick Rd./Idaho Maryland Rd.	Re-align roadway and intersection, construct roundabout, construct two bridges (R)	\$5,000,000	TBD		TBD
Dorsey Drive Extension	Extend two lane road from Sutton Way to Brunswick Road (R)	\$4,529,602	\$1,793,683 \$2,735,937	RTMF Local Funds	TBD
SR 174/Brunswick Rd.	Realign SR 174 to create 4-way intersection and install signal (St. Hwy)	\$4,269,200	\$1,408,836 \$2,860,364	RTMF Caltrans	TBD
SR 49 from South of Cornette Wy. to Christian Life Way	Widen to 5 lanes; connect Wellwood to proposed intersection on north near church (St. Hwy)	\$39,000,000	TBD		TBD
SR 49 from Christian Life Wy. to McKnight Wy.	Widen to 5 lanes at intersection near Crestview, limit turns to right only on east side to avoid traffic signal installation (St. Hwy)	\$38,000,000	TBD		TBD
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)	\$31,500,000	TBD		TBD
SR 49 from North of Lime Kiln Rd. to South of Alta Sierra Dr.	Widen to 5 lanes; connect Auburn Rd. further south as T-intersection, leave Pekolee as T-intersection; combine Round Valley Rd. and Quail Creek Rd. intersections (St. Hwy)	\$42,000,000	TBD		TBD
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)	\$13,500,000	TBD		TBD
SR 49 from Cameo Dr. to Holcomb Rd./Cherry Creek Rd.	Complete widening to 5 lanes, eliminate Cameo Dr. intersection (St. Hwy)	\$76,000,000	TBD		TBD
SR 20 from SR 49 to Pleasant Valley Rd.	Improve to 4 lanes (St. Hwy)	\$11,400,000	TBD		TBD
Ridge Rd./Alta St.	Install Signal (R)	\$200,000	TBD		TBD
Ridge Rd./Rough and Ready Hwy.	Install signal or roundabout (R)	\$600,000	TBD		TBD
Between Centennial Dr. and Bennett St.	Construct connector road to E. Bennett St. (R)	\$1,000,000	TBD		TBD
Nevada City Hwy./Banner-Lava Cap Rd.	Intersection improvements (R)	\$505,000	TBD		TBD

SR 49 NB Ramps/E. McKnight Way, SR 49 SB Ramps/W. McKnight Way/La Barr Meadows Rd. & McKnight Way/Taylorville Rd.	Closely spaced intersections necessitate improvements at all four intersections (R)	\$5,499,457	\$2,438,438 \$3,061,019	RTMF Local Funds	TBD
SR 174/Race St.	Improve curve and channelize at Race St. (R)	\$1,000,000	TBD		TBD
SR 20/49 Uren St	Two lane overcrossing with roundabouts at the ramp intersections (St. Hwy)	\$15,000,000	TBD		TBD
Total Cost - Financially Unconstrained "Unfunded" Western Nevada Long-term Regional Roadway Improvements		\$291,944,659			

TABLE 8

**EASTERN NEVADA COUNTY
FINANCIALLY CONSTRAINED (FUNDED) REGIONAL TRANSPORTATION PROJECTS LIST**

SHORT TERM IMPROVEMENTS 2010-2020

Short-term financially constrained improvements are those that can reasonably be expected to be funded and begin construction prior to 2020.

Location	Proposed Improvement	Total Cost	Funding Source(s)		Estimated Date of Construction
Donner Pass Rd./SR 89 South	Construct 2-lane roundabout (R)	\$4,249,070	\$4,206,579 \$42,491	Truckee TIF Local Funding	2013-2020
Donner Pass Rd./Cold Stream Rd./I-80 EB Ramps	Construct 2-lane roundabout (R)	\$2,832,713	Truckee TIF		2013-2020
Donner Pass Rd./I-80 WB Ramps (Western Interchange)	Construct roundabout or equivalent improvement (R)	\$2,832,713	Truckee TIF		2013-2020
West River St./Melver Crossing	Construct 1-lane roundabout (R)	\$2,832,713	\$2,719,405 \$113,308	Truckee TIF Local Funding	2013-2020
Donner Pass Rd./Bridge St.	Construct 1-lane roundabout or equivalent improvement (R)	\$2,832,713	\$2,745,640 \$87,073	Truckee TIF Local Funding	2013-2020
Bridge St./West River St.	Construct 2-lane roundabout or equivalent improvement (R)	\$2,832,713	\$2,715,915 \$116,798	Truckee TIF Local Funding	2013-2020
Donner Pass Rd./I-80 EB Off Ramp (Eastern Interchange)	Construct 1-lane roundabout (R)	\$2,832,713	\$2,703,670 \$129,043	Truckee TIF Local Funding	2013-2020
SR 267/Brockway Rd.	Construct roundabout or equivalent improvement (R)	\$4,249,070	\$3,400,839 \$848,231	Truckee TIF Local Funding	2013-2020
Donner Pass Rd.(DPR)/Glenshire Dr.	Extend DPR from Bridge St. to Glenshire Dr. East of DPR (R)	\$4,249,070	\$4,183,890 \$65,180	Truckee TIF Local Funding	2013-2020
Glenshire Dr./Dorchester Rd. (West)	Intersection improvements (R)	\$424,907	\$194,955 \$229,952	Truckee TIF Local Funding	2013-2020
Glenshire Rd./Olympic Blvd.	Intersection improvements (R)	\$424,907	\$242,197 \$182,710	Truckee TIF Local Funding	2013-2020
SR 89 North/Rainbow Rd.	Intersection improvements (R)	\$424,907	\$271,940 \$152,967	Truckee TIF Local Funding	2013-2020
SR 89 North/Alder Creek Rd.	Intersection improvements (R)	\$708,178	\$120,390 \$587,788	Truckee TIF Local Funding	2013-2020
Brockway Rd./Reynolds Wy.	Intersection improvements (R)	\$424,907	\$322,929 \$101,978	Truckee TIF Local Funding	2013-2020
Pioneer Trail & Bridge Street Extension	Provide 2 travel lanes from Pioneer Commerce Center to Northwoods Blvd. and from Jiboom St. to Pioneer Trails (R)	\$21,245,349	\$21,214,470 \$30,879	Truckee TIF Local Funding	2013-2020
Downtown Rail Crossing Improvements	Provide improvements to Bridge St. crossing or Eastern underpass between Rail Yard and East River St. (R)	\$6,537,031	\$3,000,000 \$3,537,031	Truckee TIF Local Funding	2013-2020
Total Cost – Eastern Nevada County Financially Constrained Short-Term Regional Roadway Improvements		\$59,933,674			

TABLE 9

**EASTERN NEVADA COUNTY
FINANCIALLY CONSTRAINED (FUNDED) REGIONAL TRANSPORTATION PROJECTS LIST**

LONG TERM IMPROVEMENTS 2020-2030

The “Financially Constrained” long-term project list identifies projects that can reasonably be expected to be funded and constructed between 2020-2030

Location	Proposed Improvement	Total Cost	Funding Source(s)		Estimated Date of Construction
SR 267/I-80 WB Ramps	Construct 2-lane roundabout or loop on-ramp (R)	\$3,540,892	\$2,838,489 \$702,403	Truckee TIF Local Funding	2020-2030
SR 267/I-80 EB Ramps	Construct 2-lane roundabout (R) or loop on-ramp	\$3,115,985	\$2,239,078 \$876,907	Truckee TIF Local Funding	2020-2030
SR 267 - Brockway Rd. to Placer Co. Line	Widen to 4 lanes (R)	\$3,540,892	\$2,478,624 \$1,062,268	Truckee TIF Local Funding	2020-2030
Total Cost – Eastern Nevada County Financially Constrained Long-Term Regional Roadway Improvements		\$10,197,769			

TABLE 10

**EASTERN NEVADA COUNTY
UNCONSTRAINED (UNFUNDED) REGIONAL TRANSPORTATION PROJECTS LIST**

IMPROVEMENTS 2010-2030

The unconstrained improvements are the projects that may be constructed prior to the year 2030 if additional revenues are realized or funded by future development.

Location	Proposed Improvement	Total Cost	Potential Funding Source(s)		Estimated Date of Construction
SR 89/UPPR Undercrossing (Mousehole)	Pedestrian/Bicycle Undercrossing – Right-of-Way, Design, and Construction (St. Hwy)	\$9,100,000	\$1,120,000 \$7,980,000	Truckee Impact Fee Other Funding	2013-2020
SR 89/UPPR Undercrossing (Mousehole)	Provide two additional travel lanes, sidewalks, and bicycle lanes (St. Hwy)	\$35,000,000	TBD		TBD
Total Cost - Financially Unconstrained “Unfunded” Eastern Nevada Regional Roadway Improvements		\$44,100,000			

Tables 7 and 10 identify a total unfunded deficit for state highway projects of \$312,240,364. The total deficit for the state highway projects over the planning period for western Nevada County totals \$269,260,200. The state highway deficit for eastern Nevada County over the plan period totals \$42,980,000. Table 7 identifies a total deficit for regional roadway projects in western Nevada County of \$14,706,502.

The state highway and regional roadway project deficits above account for reductions in relation to assumed development fee program revenue depicted in Tables 7 & 10. The unconstrained project costs and actual deficits are summarized in Table 21 in the Financial Element.

During the last two decades, transportation revenue sources have not kept pace with either inflation or need. Existing revenue sources are not sufficient to offset these losses. Significant additional revenues over and above the existing revenues are needed.

The NCTC's overall funding strategy to try and address the identified funding deficit is as follows:

- ◆ Aggressively Pursue State and Federal Funding – The NCTC and its member agencies should continue to pursue increased state funding for Nevada County transportation projects and road maintenance. Continue participation in state level organizations to ensure that transportation revenue transfers to the State Highway Account are not suspended and used in the State General Fund. The NCTC should also continue to pursue the possibility of federal “earmarks” for Nevada County transportation projects.
- ◆ Assist Jurisdictions Interested in Pursuing Local Sales Tax Measures for Transportation Improvements – The NCTC as the Regional Transportation Planning Agency for Nevada County is not allowed to campaign for approval of a sales tax measure, but can assist in providing the public information regarding funding shortfalls at the state level, estimated revenues, and information on the projects proposed to be funded.
- ◆ Use CEQA Mitigation to Construct Needed Improvements – Tables 7 and 10 contain a list of needed transportation projects that are currently not funded. If new development projects are required to construct specific improvements in relation to their project, the overall regional road funding deficit can be reduced.
- ◆ Pursue Low-Cost Innovations and New Technological Solutions – The NCTC will work with Caltrans and local agencies to investigate opportunities to use new technologies and apply innovative approaches that can solve traffic congestion and safety problems with lower cost solutions. Examples include coordinated traffic signal timing, changeable message signs, and the expansion of broadband services.

Local Streets and Roads Maintenance

Local streets and roads are critical to provide an interconnected, multi-modal transportation system where every trip begins and ends. Investment in local streets and roads is an investment in public safety, economic growth, goods movement and farm to market needs. According to the 2008 California Public Road Data compiled by Caltrans Division of Transportation System, counties and cities maintain 81 percent of the maintained miles within the State of California and carry 45 percent of the total annual miles of vehicle travel.

The condition of local streets and roads continue to deteriorate due to funding shortfalls and counties and cities will be further challenged as repair costs escalate in future years. As roadway pavement conditions deteriorate the cost to repair them increases exponentially. The *California Statewide Streets and Roads Needs Assessment* completed in October 2009, indicates that to bring the state's local system back into a cost-effective maintenance condition, at least \$7 billion annually in additional funding is needed to stop the further decline of local streets and roads. The costs developed in this study are based on what the industry calls best management practices (BMP). The BMP goal is to reach a pavement condition index (PCI) in the low 80s (on a scale of 1 to 100) and the elimination of the backlog of maintenance projects. The BMP represents improving the roadway condition to a level where roads only need less expensive preventative maintenance treatments instead of costly rehabilitation and reconstruction. The average PCI rating statewide for streets and roads is 68, which is considered to be in the “at risk” category. The average PCI for major and local roads in Nevada County, including the incorporated cities/town, is rated at 72.

Countywide data collected as part of the *California Statewide Streets and Roads Needs Assessment* indicate that the 10-year pavement needs for the County of Nevada and incorporated cities/town total approximately \$204 million. It is critical that cities and counties statewide receive an adequate and dedicated revenue stream for the cost effective maintenance of the local streets and roadway system to avoid rapid deterioration over the next 20 years.

GOODS MOVEMENT

Goods movement is critical to the continued economic health of Nevada County and the State of California. Improving freight transportation infrastructure and maintaining an efficient transportation system that provides for effective goods movement allows local business to transport goods within Nevada County, as well as, to markets outside of the area and allows them to bring in materials and finished products into the area. Goods movement covers all transportation methods by which freight and commodities are transported into and out of Nevada County.

Trucking

Trucking accounts for the majority of goods movement in Nevada County and provides end delivery service for every other long-haul mode. The common practice of “just in time delivery” has made trucking the freight mode of choice. Fast delivery reduces on-site warehousing and allows retail outlets and other businesses to cut back on their inventory. Trucking has outperformed rail for this part of the market, because trucks can make faster deliveries directly to businesses. In Nevada County Interstate 80 and State Routes 20, 49, 89, 174, and 267 are all vital goods movement facilities. Improvements to these facilities will be critical to ensure effective goods movement within Nevada County and across the State of California.

According to the Caltrans Division of Traffic Operations, *2008 Annual Average Daily Truck Traffic (ADTT) on the California State Highway System* report, trucks account for approximately 18-20% of the total portion of vehicle traffic on Interstate 80 within Nevada County. State Route 89 just north of Hobart Mills Road the truck ADTT is approximately 13% of the total vehicle traffic. The next highest percentage of ADTT to total vehicle traffic is on State Route 20 east of Nevada City at approximately 11-15%, followed by State Route 174 at 7% and State Route 49 with 5%. All of the truck corridors in Nevada County are projected to experience growing levels of congestion. Trucks contribute to the congestion in these corridors because they use more capacity per vehicles than automobiles. It will be important to identify and support projects that reduce congestion, improve safety, reduce delays, and increase throughput on the system. These projects may include auxiliary lanes, truck-climbing lanes, turn pockets, and pull-outs.

Package Delivery

Over the years package delivery and courier services have become established in Nevada County. These services are responding to a need to move small parcels around the urban area and to outlying areas of the county. As the trend toward e-commerce, smaller more frequent package deliveries, and overnight mail increases, additional demand will be placed on the transportation system.

Air Freight

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

Freight Movement by Railroad

Union Pacific Railroad owns and operates tracks that follow Interstate 80 along the southern border of Nevada County. Although the Union Pacific Railroad lines run through a portion of eastern Nevada County there are currently no rail freight loading and unloading facilities in Nevada County. As congestion increases on Interstate 80 in the future, the provision of rail freight loading and unloading facilities in eastern Nevada County may need to be considered.

GOODS MOVEMENT NEEDS ASSESSMENT

Traffic Congestion

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, which delays deliveries and therefore may cause some economic loss to shippers. Truck traffic mixing with automobile traffic contributes to congestion, and can pose safety and operational problems on the freeways. Traffic congestion on the Interstate and State Highways in Nevada County affects the timely flow of goods, and increases in truck traffic during commute hours exacerbates peak period traffic congestion. Therefore, securing State transportation funding for the planned improvements to these facilities in Nevada County will continue to be a priority.

GOODS MOVEMENT ACTION PLAN

Short-Term

1. Maximize the use of the existing goods movement infrastructure of the region, through the implementation of Transportation Systems Management strategies. *(Caltrans, jurisdictions)*
2. Protect the transportation infrastructure from deterioration through on-going maintenance and rehabilitation. *(Caltrans, jurisdictions)*
3. Review transportation projects to ensure that they minimize conflicts between trucks and other vehicles. *(NCTC, Caltrans, jurisdictions)*
4. Implement transportation improvements that will reduce congestion and improve safety. *(NCTC, Caltrans, jurisdictions)*

Long-Term

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)*

TRANSIT SERVICES

The 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. 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.

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:

- ◆ To establish fares.
- ◆ Approve level of service.
- ◆ Monitor public response.
- ◆ Provide recommendation on proposed purchase of additional vehicles.
- ◆ Oversee on a regular basis 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 make recommendations to TSD staff regarding the annual budgets for transit and paratransit operations.
- ◆ To 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 as follows:

- ◆ **Gold Country Stage** is the 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 Telecare, Inc.** is a nonprofit organization contracted with by the County to provide demand response paratransit service for disabled residents in western Nevada County. Telecare also provides both local trips and out-of-county non-emergency medical trips through a volunteer driver program.

Consolidated Transportation Services Agency

Gold Country Telecare, Inc. was designated a Consolidated Transportation Service Agency (CTSA) by the NCTC in August of 2000. The County of Nevada is also designated as a CTSA for western Nevada County. CTSA funds are typically budgeted by the County Transit Services division for paratransit services in order to provide additional service hours to serve individuals beyond the ADA corridor. Gold Country Telecare, Inc. also utilizes CTSA funds to match grant funding to procure vehicle replacements needed to continue providing ongoing paratransit services and programs.

FIGURE 3

Gold Country Stage Fixed Route Map, May 2010

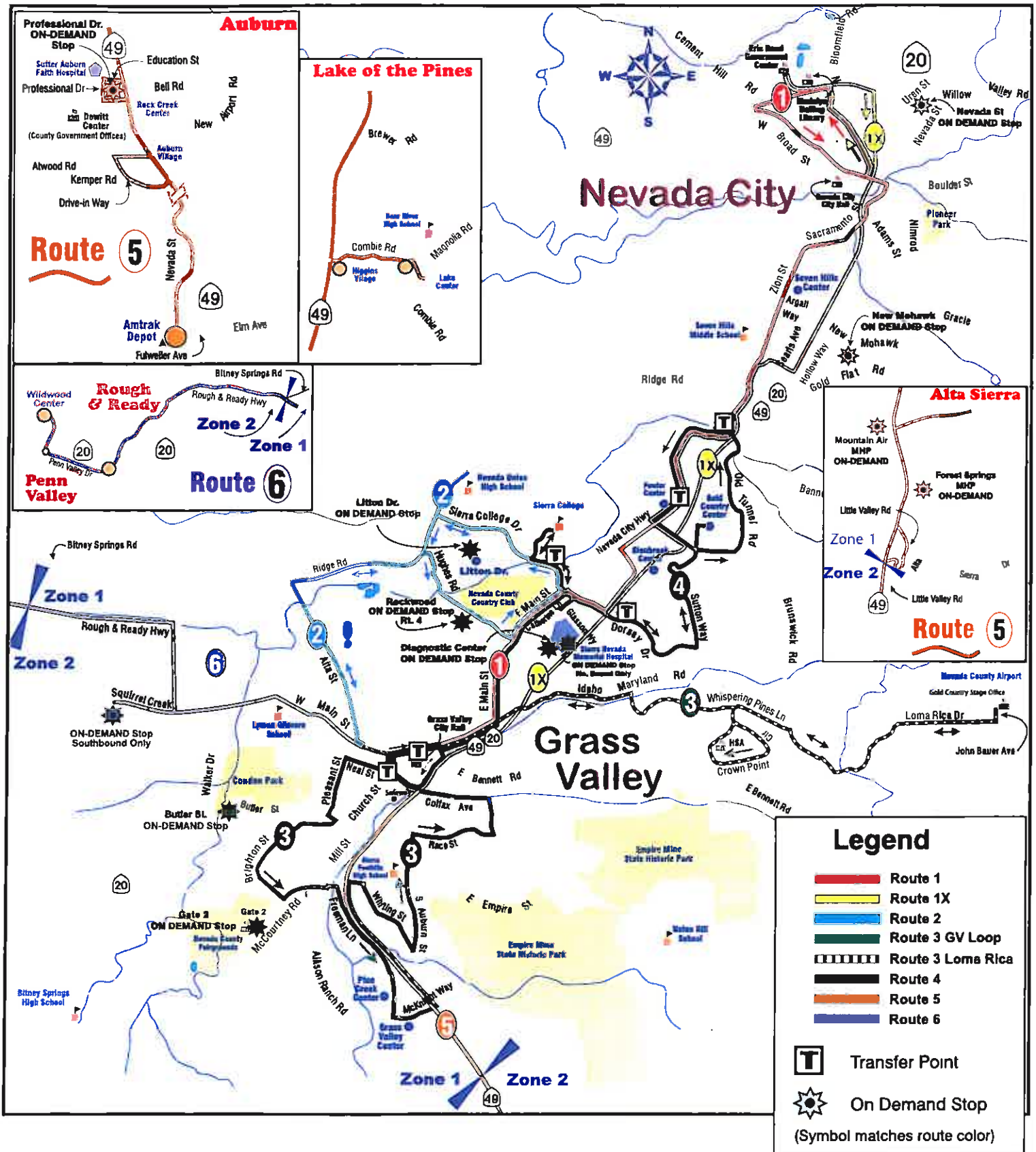
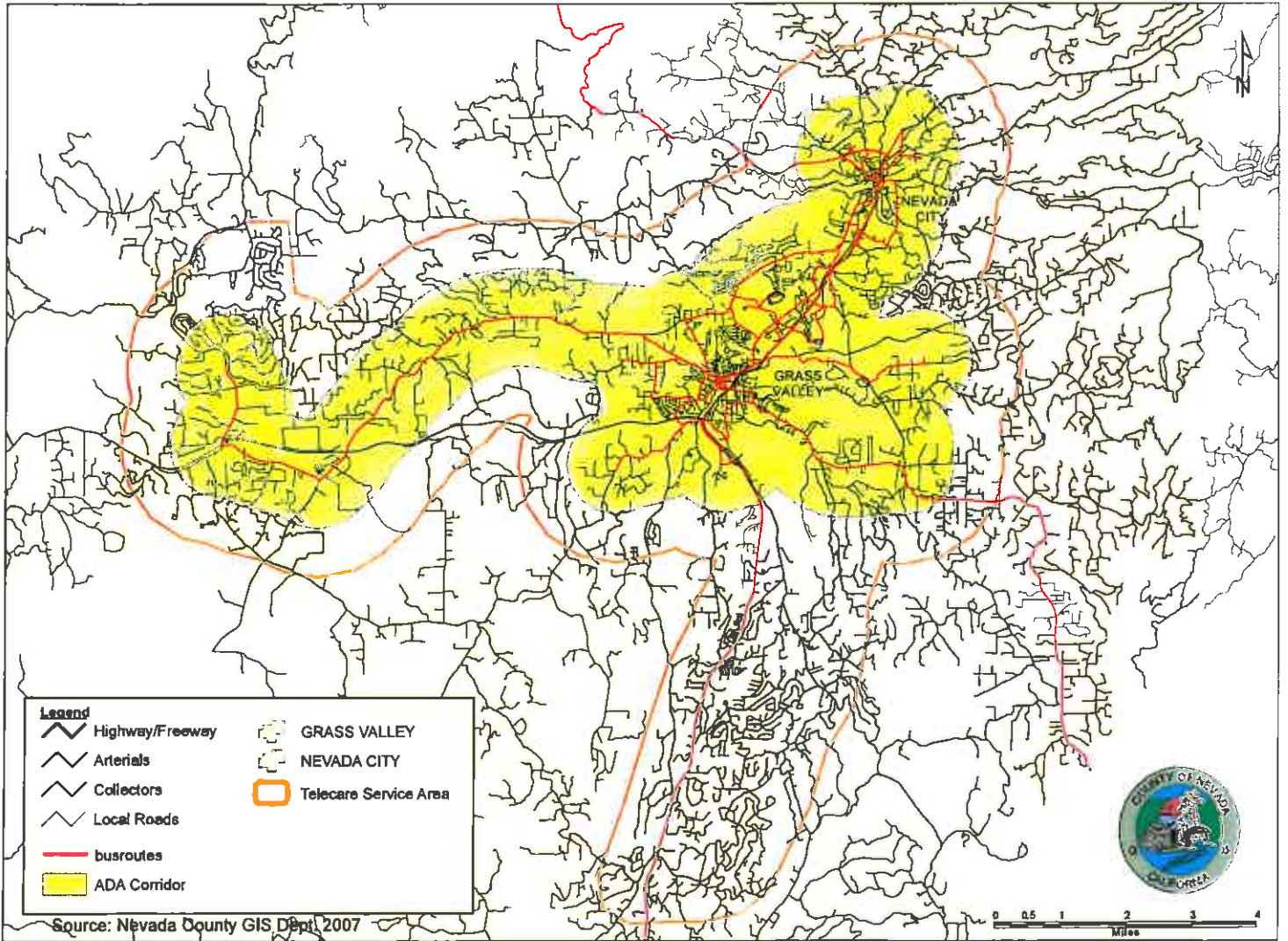


FIGURE 4
TELECARE SERVICE AREA



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 a total of seven routes that serve the Nevada City/Grass Valley area, 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. This interregional transit service is made possible through a funding partnership between Nevada County and Placer County.

The Nevada County Transit Services Division maintains a fleet of 12 buses and six support vehicles. Gold Country Stage's entire fleet of buses are equipped with wheelchair lifts and bike racks. The fixed route system is designed on a combination of coverage and productivity goals that seek to provide the level of service that can be reasonably financially supported to each part of the service area. More frequent and direct service is provided to areas that generate higher ridership, while retaining other routes to provide coverage where needed.

Gold Country Stage Transit Transfer Facility Relocation

The current on-street transit transfer facility utilized by Gold Country Stage is located in downtown Grass Valley at the corner of Church Street and Neal Street. The facility consists of one passenger shelter, and only has capacity for three buses at a given time. Accessibility for persons with disabilities is limited by the narrow sidewalk and steep driveway at this location. In addition, the facility provides no restroom facilities for the use of bus drivers, and presents operational difficulties due to traffic congestion and difficult turning movements.

NCTC was awarded a State Transit Technical Planning Assistance Grant for the 2006/07 FY funding cycle and conducted a study to evaluate possible sites to relocate the current transit transfer facility and recommend a conceptual design and potential amenities for a new facility. This study identified the most feasible location to be along Tinloy Street, between Bank Street and Bennett Street. Following completion of the study, the County of Nevada received a federal earmark as part of the federal reauthorization in the amount of \$777,747 for construction of a new Gold Country State transit transfer facility in western Nevada County, as well as, American Recovery and Reinvestment Act funding and Proposition 1B Public Transportation Modernization, Improvement, and Service Enhancement Account funding. Construction of the new transit transfer facility is scheduled to begin in the spring of 2011.

Construction of a new transfer facility along Tinloy Street will enable all of the Gold Country Stage routes to meet, facilitating timed-transfers between routes. In addition, it will provide a more convenient and attractive waiting area for passengers, improved accessibility for persons with disabilities, and restroom facilities for bus drivers. The larger goal of the project is to make transit a more attractive and convenient transportation option for local residents and visitors.

Gold Country Telecare, Inc. 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 Telecare, Inc. to provide demand response paratransit services for Americans with Disabilities Act (ADA) eligible individuals in western Nevada County.

Gold Country Telecare, Inc. provides on demand paratransit service Monday through Friday. The paratransit service area 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. Figure 4 shows the Gold Country Telecare, Inc. service area. All of Telecare's buses and modified-vans are wheelchair accessible and are designed to transport at least two wheelchair patrons.

Gold Country Telecare Supplementary Programs

Gold Country Telecare also offers supplementary programs to qualified passengers. These include the Transportation for Health and Enrichment Van Program (T.H.E Van Program), Sunday Senior Rides, and Telecare Volunteer Driver Program.

T.H.E Van Program provides low-cost transportation for seniors and persons with disabilities to specific, pre-scheduled healthcare related services in western Nevada County. T.H.E Van Program is funded by Federal Transit Administration 5316 New Freedom grant funding, United Way, The PASCO Foundation, and private donations.

The **Sunday Senior Rides** service is a subsidy program funded by the Area 4 on Aging to provide seniors (60 and over) in western Nevada County with transportation on Sundays.

Gold Country Telecare has expanded and renamed their Neighbor-to-Neighbor Volunteer Driver Program to the **Telecare Volunteer Driver Program**. This door-to-door service provides transportation to the elderly and individuals with disabilities. Rides are available for ambulatory riders 24 hours a day, 7 days a week, anywhere the rider would like to go, as long as Telecare can match them with a volunteer driver. Rides can be arranged by calling the Telecare Volunteer Coordinator 48 hours in advance of the requested ride time. Passengers are charged 65 cents per mile as a mileage reimbursement for the volunteer driver. Volunteer drivers provide service mainly for out-of-county trips to medical appointments. Out-of-county trips should be arranged at least five days in advance. Volunteer drivers use their own vehicles.

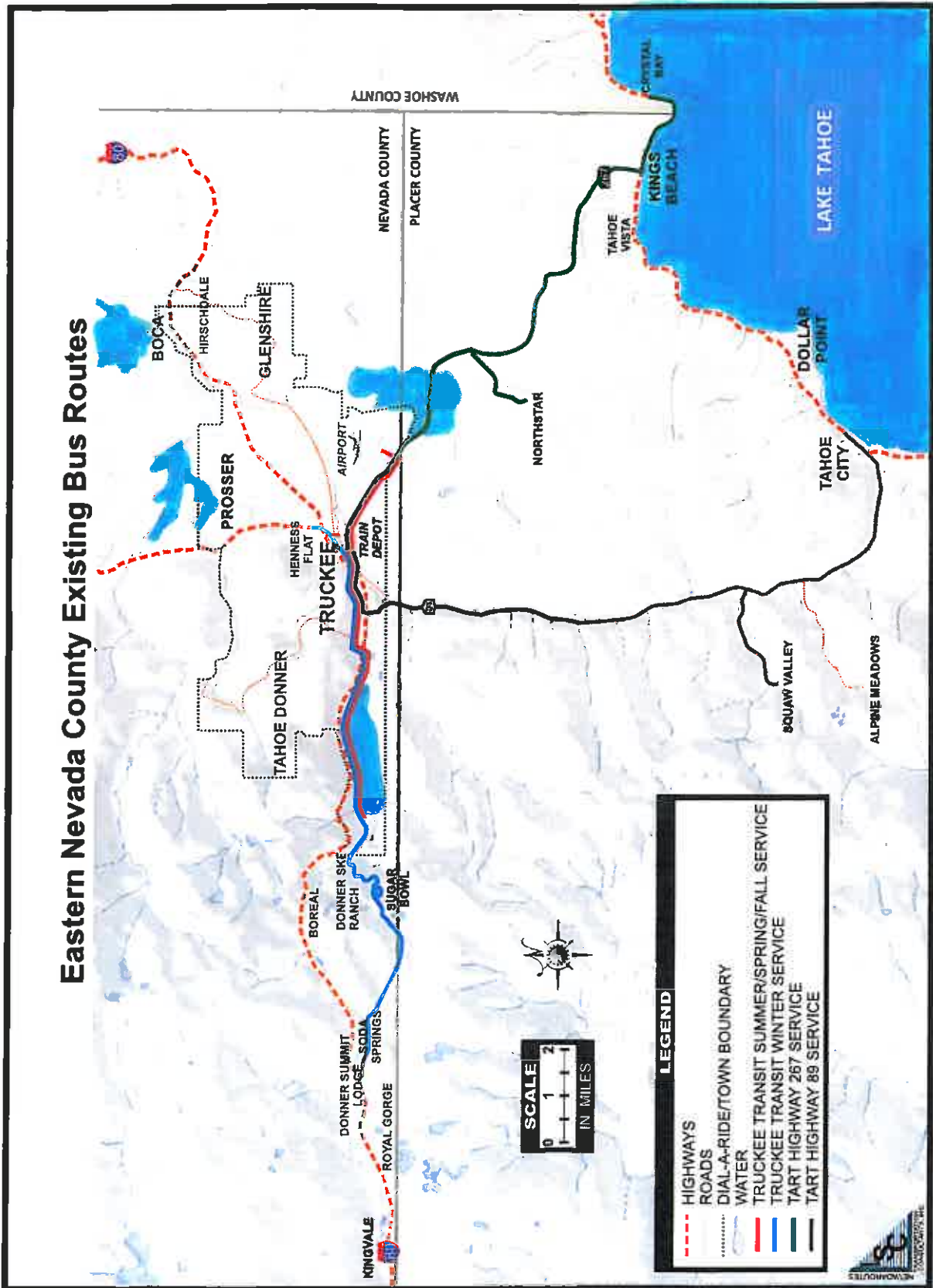
EASTERN NEVADA COUNTY

Eastern Nevada County has provided 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:

- ◆ **Truckee Transit** 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 Aztec Transportation.
- ◆ **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 and is also provided through a contract with Aztec Transportation.
- ◆ Placer County's **Tahoe Area Regional Transit (TART)** operates a route called "The Bus," which provides fixed route service between the Town of Truckee and Tahoe City via SR 89.

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.

FIGURE 5



Truckee North Tahoe – Transportation Management Association

The Truckee North Tahoe - Transportation Management Association (TNT/TMA) is a regional organization important to transportation in eastern Nevada County. This non-profit public-private partnership provides a framework for private sector participation in solving traffic congestion and air quality problems in the greater Truckee-North Tahoe-Incline Village Resort Triangle. Established in 1989, the TNT/TMA has been instrumental in garnering support from employers, property owners, and residents in establishing the Truckee-Tahoe City bus service, as well as, transit marketing efforts.

Truckee Transit Fixed Route Transit Services

The Truckee Transit fixed route service is provided through a public-private partnership between the Town of Truckee and several private organizations. Three routes are operated during the winter months: Route A operates between Sugar Bowl Ski Area and downtown Truckee, Route B operates between Northstar-at-Tahoe Ski Resort and downtown Truckee, and Route C operates between Kings Beach and Northstar-at-Tahoe Ski Resort. These routes operate seven days per week during the winter. In non-winter months, one bus is operated Monday through Saturday between downtown Truckee and the west end of Donner Lake.

Public-private partnerships, such as the Northstar-at-Tahoe Ski Resort paying for employees and guest riders from both Truckee and Kings Beach to its resort, result in the high farebox recovery for the Truckee Transit. To improve the reliability and expand the partnership of the Northstar Route, the North Lake Tahoe Resort Association also participates in the funding of this route. These partnerships have assisted the Town of Truckee in funding and maintaining transit services in the region. With limited funding available for transit operations and ongoing capital replacement needs, it will be important for the Town of Truckee to continue to build upon the public/private partnerships in eastern Nevada County.

The TART Truckee-Tahoe City Service “The Bus”

The Placer County Department of Public Works operates the Tahoe Area Regional Transit (TART) fixed route transit service with a route between the Town of Truckee and Tahoe City, known as "The Bus". The service has been operating between Truckee and Tahoe City since December of 1991. Since the route serves two different counties, the Town of Truckee contributes a portion of the funding, with Placer County funding the remaining operating costs.

Service is provided hourly December through mid-April during the winter peak season and then every two hours during the off-peak season. The route stops at shopping areas along Donner Pass Road, Squaw Valley, and Alpine Meadows. "The Bus" does not go into Squaw Valley or Alpine Meadows, but drops off passengers at the ski area entrances where they can transfer to the ski area shuttles. Riders traveling from the Truckee area can transfer for free to other TART routes in Tahoe City or the North Shore Trolley if they want to continue to other areas along the north and south shores.

Truckee Dial-A-Ride Service

The Town contracts with El Camino Trailways for operations of the Truckee Dial-A-Ride program. The Truckee Dial-A-Ride is a general public demand response service that operates Monday through Friday. Days and time of service are subject to change. Passengers are asked to make reservations by 5:00 P.M. the previous service day, though same-day requests are accommodated when possible.

The Town of Truckee has implemented some innovative practices to integrate the Dial-A-Ride and Truckee Transit. Dial-A-Ride is considered an "extension" of the fixed route service, covering the outlying suburbs that are not served by the Truckee Transit fixed routes. The fare policy encourages fixed route transit use by offering a free transfer to either the Truckee Trolley going to Kings Beach or the TART Bus to Tahoe City. The dispatch policy also supports fixed route transit. When the dispatcher receives a call, he/she first checks to see if the trip can be made on the fixed route transit, either completely or partially. If so, those options are offered before making a door-to-door reservation.

Short Range Transit Plans

Five-Year Transit Development Plans (TDP) are an important planning tool used to analyze the current transit services and provide recommendations on improvements necessary to meet future demand. In 2009 the TDP for eastern Nevada County was completed and the western Nevada County TDP was adopted in January 2011. The major issues facing both western and eastern Nevada County transit and paratransit services are that rising operating costs coupled with the need to replace aging vehicle fleets over the period of the plan are outpacing the projected revenues.

Western Nevada County has had to make service cutbacks in traditional public transportation services due to severe declines in state funding sources. Budgeted revenues for operating public transportation services have declined from \$3.8 million in FY 2008/09 to \$2.4 million for FY 2010/11. In response, the Transit Services Commission had to reduce service levels and routes to match available revenues. Service reductions were focused on protecting core services in the more populated areas of Nevada City and Grass Valley that have generated the most ridership.

The combined total number of vehicle service hours provided by Gold Country Stage and Gold Country Telecare, Inc. have declined from 54,063 vehicle service hours provided in FY 2007/08 to the 28,677 vehicle hours budgeted in FY 2010/11.

The western Nevada County TDP also examined potential cost-effective Mobility Management options to expand transportation choices given declining revenue. Mobility management disaggregates service planning and markets in order to better serve individuals and the community. Traditional transit service planning aggregates demand on centralized, highly traveled routes of a transit system; where mobility management focuses on service diversity and a "family of transportation services" to reach a wide range of customers versus traditional transit systems that are built on the principle of unified regional service coverage. A "family of transportation services" is a wide range of travel options, services, and modes that are matched to community demographics and needs. The Nevada County Transit Services Division is currently managing a stakeholder process called the Mobility Action Partners to examine potential Mobility Management options.

The Eastern Nevada County TDP recommended modifications to service hours, implementation of a redesigned non-winter Truckee Trolley route, elimination of unproductive services, and fare increases in order to insure that transit and paratransit services would be financially sustainable over the five-year plan period.

Nevada County Coordinated Public Transit - Human Services Transportation Plan

In 2008, NCTC adopted the *Nevada County Coordinated Public Transit-Human Services Transportation Plan*. This plan identified the available public, private, and non-profit services, includes an assessment of transportation needs, and strategies to address gaps between current services and needs. In order for transit projects to be eligible for Federal Transit Administration (FTA) grant funding through FTA Section 5310 Elderly and Disabled Specialized Transportation

Program, FTA 5316 Job Access and Reverse Commute (JARC), and FTA 5317 New Freedom Program, they must be derived from the Coordinated Public Transit-Human Services Transportation Plan. Strategies identified in the RTP are consistent with the *Nevada County Coordinated Public Transit-Human Services Transportation Plan*.

Western and Eastern Nevada County Capital Replacement Needs

The Nevada County Transit Services Division anticipates the need to replace seven fixed route transit buses and four utility vehicles between FY 2011/12 and FY 2014/15 with an expected total cost of \$974,000. Gold Country Telecare, the paratransit contractor in western Nevada County, anticipates the need to replace fourteen paratransit buses between FY 2011/12 and FY 2014/15 with an expected cost of \$961,900. Federal Transit Administration 5310 grant funding will help to address some of the associated capital costs for Gold Country Telecare, but revenue from additional funding sources will be necessary to meet the replacement needs.

Over the next five years, the Town of Truckee is planning to replace three transit buses at a cost of \$255,000 utilizing FTA 5311 capital grant funding.

TRANSIT SERVICES ACTION PLAN

Short-Term

1. Construct a new transit transfer facility to improve the provision of transit services in western Nevada County. (*Nevada County Transit Services Division, Nevada County Department of Transportation and Sanitation*)
2. Conduct marketing efforts to promote the use of fixed route services in western Nevada County and make the public aware of the transit options available. (*Transit operators*)
3. Monitor transit services regularly and make adjustments to routes and schedules as needed. (*Transit Operators, Transit Services Commission*)
4. Continue to obtain public input on the fixed route and paratransit services by holding annual unmet transit needs workshops and hearings. Implement expanded services that are determined reasonable to meet as feasible. (*NCTC, transit operators, jurisdictions, Transit Advisory Committee, Social Services Transportation Advisory Council*)
5. Implement and/or modify paratransit services to continually meet the requirements of the Americans with Disabilities Act. (*Transit operators, Transit Services Commission*)
6. Annually budget for vehicle replacement to meet the capital replacement needs of the fixed route transit and paratransit fleet. (*Transit operators*)
7. Establish an ongoing operating reserve to help offset future fluctuations in transit revenues.
8. Continue efforts and incentives that encourage paratransit users who are able to utilize the fixed route transit system to do so. Transitioning paratransit riders who are able to use fixed route service is in the interest of both the rider and the transit system, since fixed route services offer a higher level of mobility at a lower per trip subsidy than paratransit services. Transit ambassador programs or other types of travel training that encourages this transition should be considered for Nevada County. (*Transit operators*)
9. Continue to seek public/private partnerships to assist in providing transit and paratransit services in Nevada County. (*Transit operators, Truckee-North Tahoe Transportation Management Agency*)

10. Consider cost-effective Mobility Management options that fill mobility gaps not served by traditional public transportation. (*Transit operators, Transit Services Commission*)

Long-Term

1. Update the short range transit plans for the transit operators with continued emphasis on meeting the transit needs of the growing and changing population, as well as addressing the capital and infrastructure needs within the constraints of available funding. (*NCTC, transit operators, jurisdictions, Transit Services Commission*)

NON-AUTO FACILITIES

Non-Motorized Transportation

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

Bicycle ridership and pedestrian activity levels are not easily measured or projected for an entire county without extensive data collection efforts. The concept of “demand” for these facilities is difficult to measure. A common term used in describing demand is “mode split”. Mode split refers to the form of transportation a person chooses to take, be it walking, bicycling, using public transit, or driving. Mode split is often used in evaluating commuter alternatives such as bicycling, where the objective is to increase the “split” or percentage of people selecting an alternative means of transportation. The 2000 Census data for Nevada County identifies the journey-to-work mode split information for workers sixteen years old and over.

The 2000 Census data indicates less than one percent of home-based work trips for Nevada County residents are made by bicycle, and approximately three percent are pedestrian trips. However, the census data does not include trips from home-to-school in the data set. This is important because home-to-school trips occur during the same morning peak travel hours as typical commuter trips. Since many children walk or ride bicycles to school, the actual number of bicycle and pedestrian trips during the morning peak hour is slightly higher than shown. Additionally, the data does not account for utilitarian walking or bicycle trips.

Nevertheless, the limited amount of pedestrian and bicycle facilities in Nevada County may be discouraging residents from walking and bicycling. Several factors influence the decision to bicycle or walk, the most prevalent factor is the perception of a lack of safe facilities. In order for non-motorized transportation to be a viable transportation option, 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.

Pedestrian and Bicycle Planning

The Nevada County Transportation Commission (NCTC) contracted with Fehr & Peers Transportation Consultants to develop a comprehensive countywide Pedestrian Improvement Plan. This planning effort was funded through a \$65,000 Caltrans Community-Based Transportation Planning Grant and completed in March of 2011. The objective of this study was to develop a pedestrian plan that will identify pedestrian projects in the City of Grass Valley, Nevada City, the Town of Truckee, and the unincorporated areas of Nevada County that will improve the mobility and safety needs of pedestrians and persons with disabilities. Another purpose of the plan is assist the jurisdictions in implementing efficient transportation infrastructure investments that improve accessibility, reflect community values, foster livable communities, and promote walking as an alternative mode of transportation. Key elements of the *Nevada County Pedestrian Improvement Plan*, include pedestrian policies, pedestrian design guidelines, a prioritized list of capital projects by jurisdiction, and a set of recommended funding strategies.

In July 2007, the update of *Nevada County Bicycle Master Plan* was adopted by NCTC and its member jurisdictions. The Plan focused on developing a complete countywide network of bikeways, as well as, programs, and specific policies and enhancements. Specific recommendations for bicycle

facilities are identified for Nevada County, Grass Valley, and Nevada City. The Plan also includes references to the 2007 update of the *Town of Truckee Trails and Bikeways Plan*.

The Town of Truckee adopted an update of the *Town of Truckee Trails and Bikeways Plan* in the spring of 2007. This long-range planning document focused on both recreational trails and on-street bikeways to create a framework for the creation of a town-wide system. The Plan will be used as a tool to guide the incremental development of specific recreational trail segments and on-street bikeways as resources and opportunities arise.

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 provide 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.

Multi-Modal Connections

Improving non-motorized access to transit services, having transit buses equipped with bicycle racks, and providing bicycle parking facilities at transit transfer facilities and key destinations provides the opportunity for people to utilize the transit services as a “bike-ride” mode of transportation. Linking bicycle trips with public transit can help to overcome barriers such as trip distance and provides an additional mobility option at both ends of the transit trip. All of the Gold Country Stage (GCS) vehicles are bike rack equipped with the ability to transport two bicycles and bicycle parking facilities are planned to be installed at the new GCS Transit Transfer Facility being constructed in the Spring of 2011. All of the Truckee Transit fixed route transit buses are also equipped with bike racks, as well as, the Tahoe Area Regional Transit buses operating between the Town of Truckee and Tahoe City.

Existing and Planned Bicycle Facilities

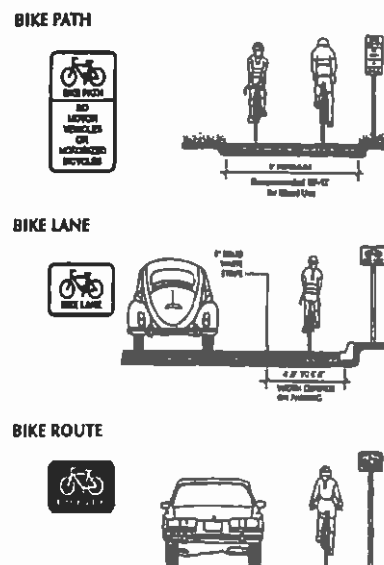
Chapter 1000 of the *Caltrans Highway Design Manual* contains the design standards for bicycle facilities. All state, county, and city agencies responsible for bikeways or roads where bicycle travel is permitted must follow the minimum bicycle planning and design criteria contained in this manual if designating a bikeway. The three classifications of bicycle facilities are described below.

Class I Bike Path: Provides a completely separated facility designed for the exclusive use of bicycles and pedestrians with minimal cross flows by motorists. The minimum width is eight feet for two-way travel and five feet for one-way travel.

Class II Bike Lane: Provides a striped lane for one-way bicycle travel on a street or highway. The minimum width for a bike lane is four feet.

Class III Bike Route: Provides for shared use with pedestrian and motor vehicle traffic. Signage typically identifies the “Bike Route”, and there is no minimum width since the bicyclist shares the roadway with pedestrian and motor vehicle traffic.

The graphics on the following pages show the existing and planned bicycle facilities within Nevada County.

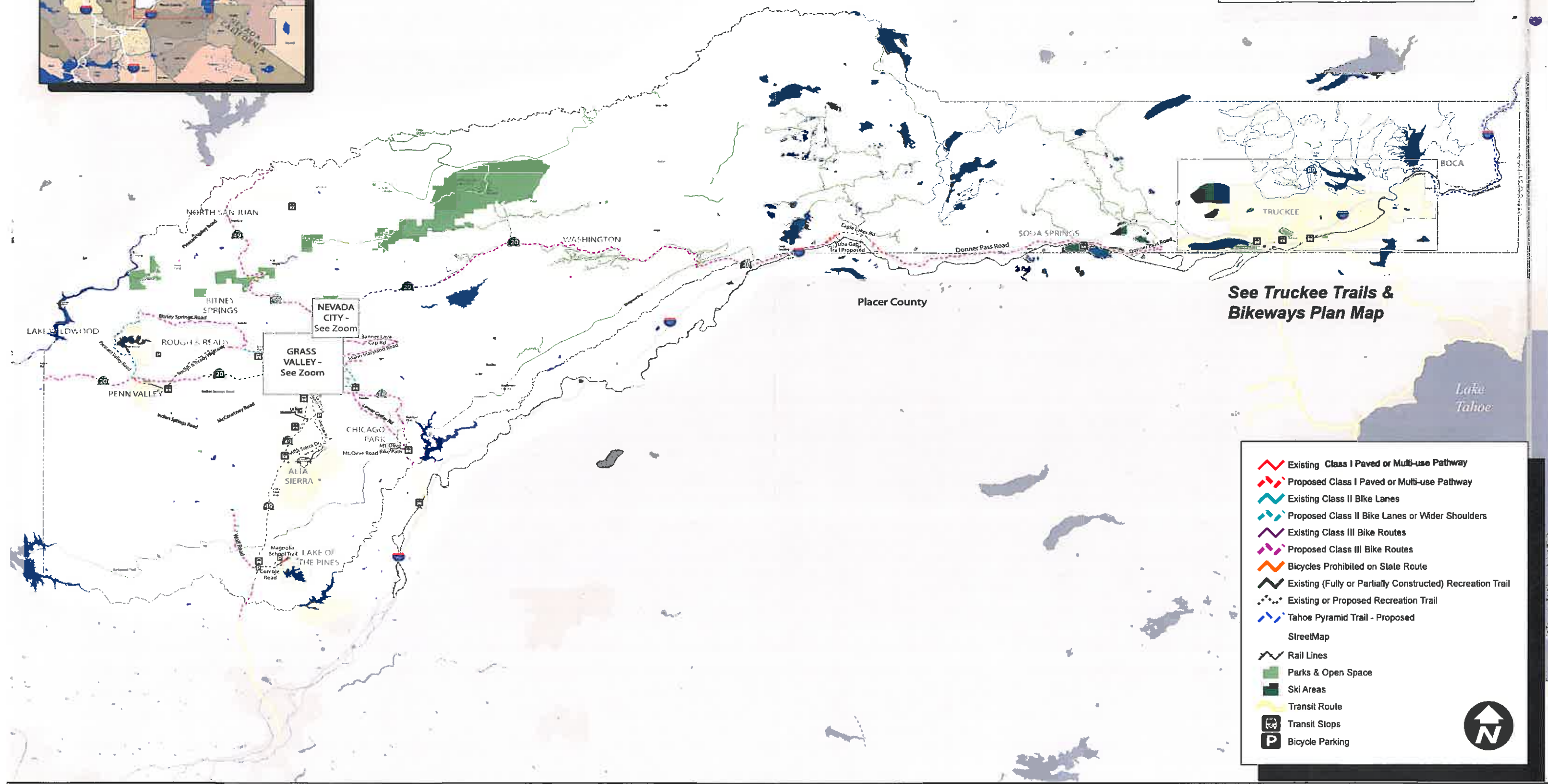


Project Area



NEVADA COUNTY EXISTING AND PROPOSED BIKEWAYS

FIGURE 6



See Truckee Trails & Bikeways Plan Map

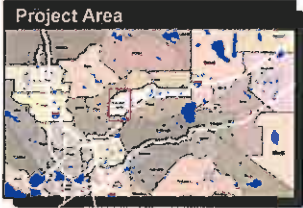
- Existing Class I Paved or Multi-use Pathway
- Proposed Class I Paved or Multi-use Pathway
- Existing Class II Bike Lanes
- Proposed Class II Bike Lanes or Wider Shoulders
- Existing Class III Bike Routes
- Proposed Class III Bike Routes
- Bicycles Prohibited on State Route
- Existing (Fully or Partially Constructed) Recreation Trail
- Existing or Proposed Recreation Trail
- Tahoe Pyramid Trail - Proposed
- StreetMap
- Rail Lines
- Parks & Open Space
- Ski Areas
- Transit Route
- Transit Stops
- Bicycle Parking



Figure 5-3: Nevada County Existing and Proposed Bikeways
Nevada County California Bikeway Plan

Map Prepared by: June 2007 by Alta Planning + Design
Data Provided by: Nevada County, CA; CALTRANS; & ESRI Proj: NAD 83 - CA State Plane II





NEVADA COUNTY EXISTING AND PROPOSED BIKEWAYS
FIGURE 6-1

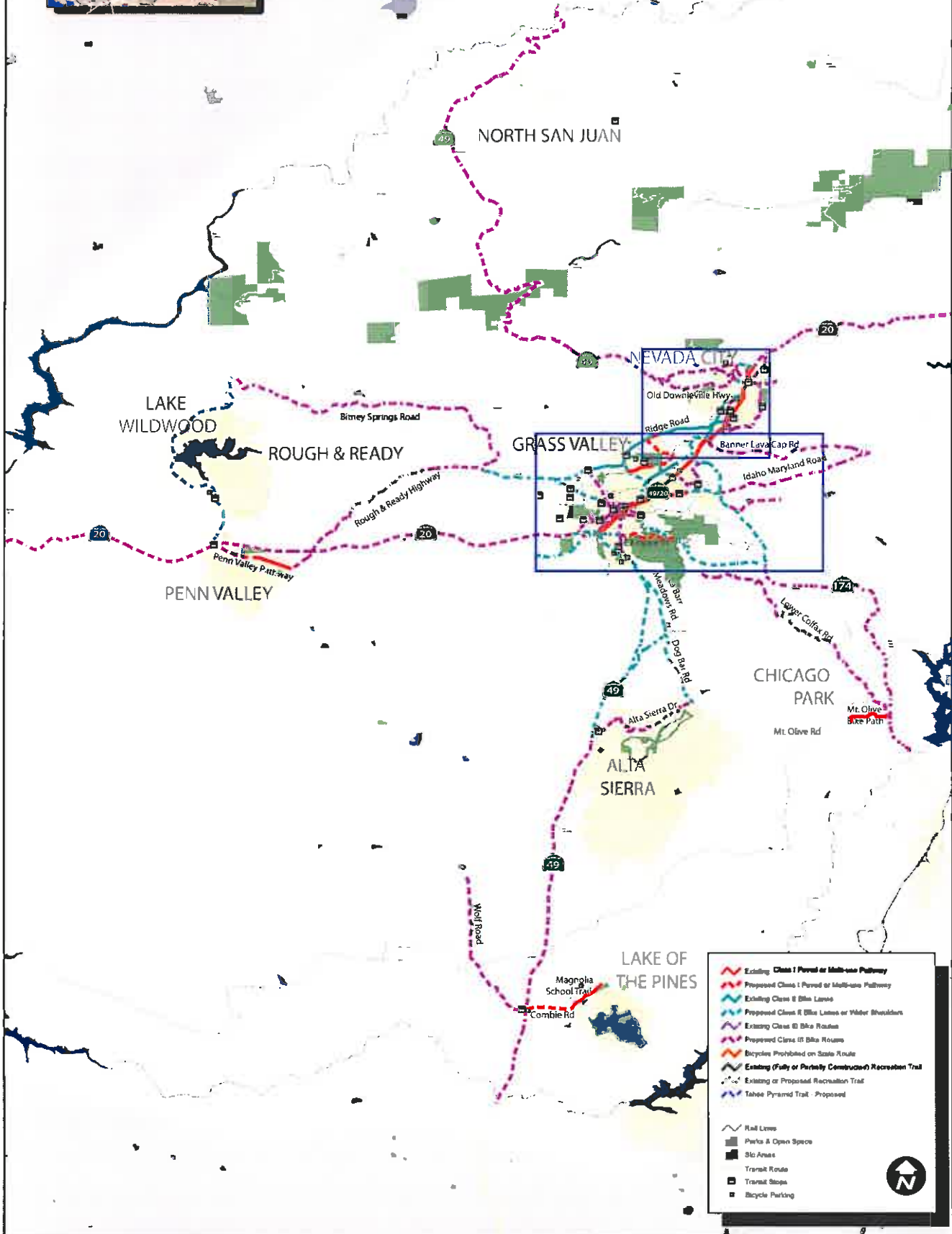


Figure 5-4: Western Nevada County Existing and Proposed Bikeways
Nevada County California Bikeways Plan
Map Prepared June 2007 by Alta Planning + Design Data Provided by Nevada County CA, Caltrans, & ESRI
Proj NAD83 - CA State Plane II



Figure 5-5: Grass Valley Existing and Proposed Bikeways Map

Nevada County California Bikeways Plan

Map Prepared: June, 2007 by Alta Planning + Design Data Provided by: Nevada County, CA, Caltrans, & ESRI
Proj: NAD03 - CA State Plans II



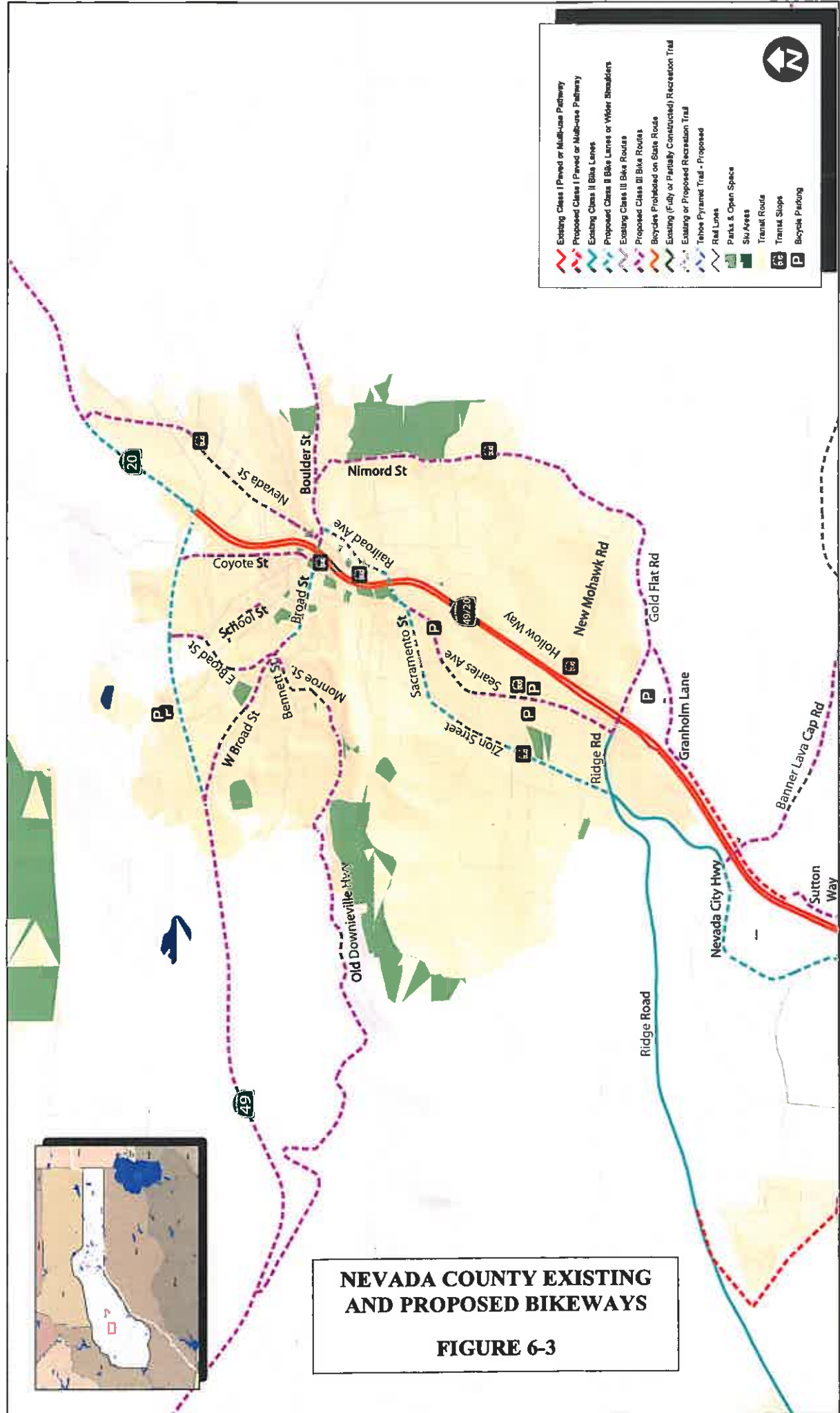
Figure 5-6: Nevada City Existing and Proposed Bikeways Map
Nevada County California Bikeways Plan

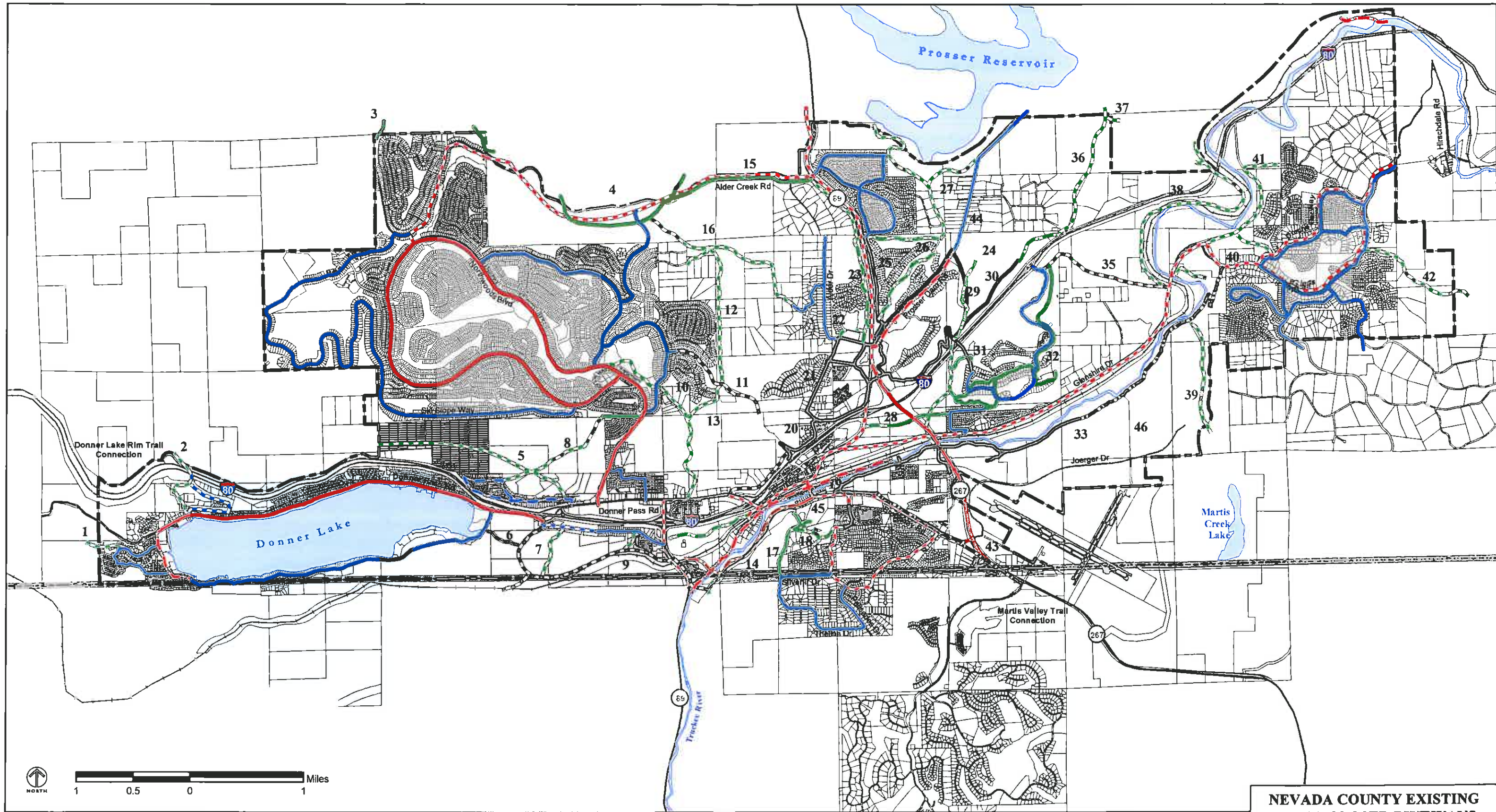
Map Prepared: June, 2007 by Alta Planning + Design Data Provided by: Nevada County, CA; Caltrans, & ESRI
Proj: NAD03 - CA State Plans I



	Existing Class I Paved or Multi-Use Pathway
	Proposed Class I Paved or Multi-Use Pathway
	Existing Class II Bike Lanes
	Proposed Class II Bike Lanes or Wider Shoulders
	Existing Class III Bike Routes
	Proposed Class III Bike Routes
	Existing Fully or Partially Constructed Recreation Trail
	Existing or Proposed Recreation Trail
	Trail - Proposed
	Trail - Existing
	Parks & Open Space
	Six Areas
	Tram/Rail Route
	Tram/Rail Stop
	Bicycle Parking

NEVADA COUNTY EXISTING AND PROPOSED BIKEWAYS
FIGURE 6-3





Existing Trail - Actual Route

- Class I Bike Path
- Class II Bike Lane
- Class III Bike Route
- Recreational Trail - Earthen

Planned Alignment

- Class I Bike Path
- Class I With Unpaved Element
- Class II Bike Lane
- Class III Bike Route
- Recreational Trail - Surface TBD

Proposed Corridor

- Class I Bike Path
- Class I With Unpaved Element
- Class II Bike Lane
- Class III Bike Route
- Recreational Trail - Surface TBD

Truckee Town Limits

NEVADA COUNTY EXISTING AND PROPOSED BIKEWAYS

FIGURE 6-4

EXISTING AND PROPOSED TRAIL AND BIKEWAY NETWORK
As of 10/20/2010



TOWN OF TRUCKEE
2010 Trail Corridors

By John B. Anderson Planning Professional, Inc. Truckee, NV

NON-AUTO FACILITIES ACTION PLAN

Short-Term

1. Encourage jurisdictions to consider projects identified in the Bicycle Improvement 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 Bicycle Transportation Account grant funding to construct projects identified in the Nevada County Bicycle Improvement Plan. *(NCTC, jurisdictions)*
3. Create a bikeway system that is cost-effective to construct, maintain, and minimizes the potential for conflicts with other types of vehicles, and places a priority on facilities that serve areas with the greatest demand. *(NCTC, jurisdictions)*
4. Solicit and consider community input in the design and location of bikeway facilities. *(NCTC, jurisdictions)*

Long-Term

1. Encourage future development to dedicate the right-of-way for off-street bikeways with connections to future planned facilities outside of the development in mind. *(Jurisdictions)*
2. Apply for state and federal grants to implement non-auto facilities in Nevada County. *(Jurisdictions)*
3. Develop a coordinated approach to implementing and maintaining bicycle facilities between Nevada County, Grass Valley, Nevada City, Truckee, Placer County Transportation Planning Agency, and the Tahoe Regional Transportation Planning Agency. *(NCTC, jurisdictions, Placer County Transportation Planning Agency, Tahoe Regional Transportation Planning Agency)*

INTELLIGENT TRANSPORTATION SYSTEMS

Overview

Intelligent Transportation Systems (ITS) involves the integration of communication and information technologies into the transportation system in order to make the most efficient use of existing transportation infrastructure. The successful implementation of ITS programs and technologies is essential to ensure that all modes of travel remain as safe and efficient as possible.

The Transportation Equity Act for the 21st Century (TEA-21) sought to accelerate the integrated deployment of ITS through the use of regional ITS architectures. This has caused the incorporation of ITS into regional transportation planning to take on a much greater emphasis. This greater emphasis requires that a region's ITS projects and a region's ITS architecture be consistent with one another and consistent with the requirements of the National ITS Architecture and Standards.

Intelligent Transportation Systems Needs Assessment

The Placer County Transportation Planning Agency coordinated an ITS planning effort for the four counties which comprise the Tahoe Gateway Planning Area (Nevada, El Dorado, Placer and Sierra). In 2002, the *Tahoe Gateway Counties ITS Strategic Deployment Plan* (SDP) was adopted by the four Regional Transportation Planning Agencies. The implementation of ITS technologies will be aimed at improving safety and enhancing the capacity of the existing transportation facilities through more effective management and operation of the transportation system. 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 for how the region's ITS systems will integrate together to form information gathering, processing, and dissemination procedures, and 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 expands, 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.

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
- Implement automatic vehicle identification and location systems , as well as computer aided dispatch technologies for public transit
- Install ice detection and warning systems on I-80 and SR 89
- Install rock/mudslide and avalanche detection and warning system at SR 20, SR 49, and SR 89 as appropriate
- Install animal/vehicle collision avoidance systems were applicable

INTELLIGENT TRANSPORTATION SYSTEMS ACTION PLAN

Short-Term

1. Maximize the operating efficiency of the existing surface transportation system, through implementation of ITS elements in the Tahoe Gateway region. (*NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans*)
2. Improve the safety of travel into, through, and out of the Tahoe Gateway Region, through implementation of the ITS projects contained in the *Tahoe Gateway Counties ITS Strategic Deployment Plan*. (*NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans*)
3. Ensure that accurate and reliable traveler information regarding traffic and weather conditions is available to those entering the region, as well as those traveling within the region, through implementation of the ITS projects contained in the *Tahoe Gateway Counties ITS Strategic Deployment Plan*. (*NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans*)
4. Provide more effective and convenient transit services, through the implementation of automatic vehicle identification and location devices with compatible computer aided dispatch technology. (*NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, transit operators*).
5. Ensure efficient commercial vehicle operations into, through, and out of the Tahoe Gateway Region, through implementation of the ITS projects contained in the *Tahoe Gateway Counties ITS Strategic Deployment Plan*. (*NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans*)
6. 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. (*NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, FHWA*)
7. Maintain an ITS program that is compatible and supported by national ITS efforts through periodic maintenance of the Tahoe Gateway ITS Architecture. (*NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA*)

Long-Term

1. Continue coordination and implementation (deployment, operations, and maintenance) of ITS elements in the Tahoe Gateway Counties. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)*
2. Continue regional ITS management via each member county, neighboring regions, and other agencies, organizations, and individuals. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)*
3. Mainstream or incorporate ITS technologies into the planning process as stand-alone projects and/or as part of larger transportation projects. *(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. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)*

TRANSPORTATION SYSTEMS MANAGEMENT

Well planned, cost-effective transportation operations and management actions can improve mobility, safety, and productivity of the system for transportation users in Nevada County. Transportation Systems Management (TSM) is often used interchangeably with Transportation Control Measures (TCM) and Transportation Demand Management (TDM) to describe a series of techniques designed to maximize the efficiency of the existing transportation system. The emphasis of these methods are to reduce traffic congestion, delay the need for new and expensive transportation improvements, reduce the dependence on single occupant vehicles, and improve air quality. These methods generally employ techniques that are low-cost measures to reduce travel demand or improve the utilization of the existing transportation infrastructure.

TSM strategies focus on increasing the efficiency, safety, and capacity of existing transportation systems through techniques such as facility design treatments, access management programs, targeted traffic enforcement, and Intelligent Transportation Systems (ITS). TCMs are focused on reducing air pollution through techniques such as alternative fuel vehicles. TDM addresses traffic congestion by reducing travel demand rather than increasing transportation capacity. Specifically, TDM actions attempt to modify travel choices and alter relative transportation prices for different travel decisions. TDM actions and programs are implemented through both the public and private sectors. The Truckee/North Tahoe Transportation Management Association in eastern Nevada County, as a public/private partnership, is uniquely positioned to coordinate implementation of TDM programs.

Transportation Systems Management Strategies

Traffic Flow Improvements

Roadway re-stripping, channelization, auxiliary lanes, elimination of on-street parking, pavement markings and signage to communicate lane utilization, and computerized signalization are techniques currently used to improve the flow of traffic without new road construction. Roadway re-stripping seeks to increase the number of lanes by reducing lane width, thus increasing traffic capacity. Channelization, which is often done in conjunction with re-stripping, adds turn lanes to busy roadways to eliminate traffic backups behind cars trying to make turns. Computerized signalization seeks to coordinate signal timing to smooth traffic flow.

Transit

Public transit service is an alternative mode of transportation that is utilized in Nevada County by residents who commute to work and school. Transit services are also used for shopping, medical, and leisure trip purposes. Marketing efforts to increase public awareness of the public transit options available should be conducted by the transit operators in Nevada County.

Park-and-Ride Lots

The purpose of park-and-ride lots is to provide a central meeting place adjacent or in close proximity to major travel routes where commuters can congregate and form carpools or catch buses for the remainder of the commute trip. There are currently four Caltrans park-and-ride lots located in Nevada County at the following locations:

- ◆ SR 20 at Pleasant Valley Road
- ◆ SR 20 at Penn Valley Drive
- ◆ SR 20/49 at South Auburn St.
- ◆ SR 49 at the Cornerstone Calvary Chapel Church

Ridesharing

The Sacramento Council of Governments (SACOG) manages the Regional Rideshare program covering the counties of El Dorado, Placer, Sacramento, Yolo, Yuba, Sutter, and Nevada. The purpose of the Regional Rideshare program is to encourage the use of alternative transportation options for traveling to work, school, personal trips, and recreation. The Regional Rideshare program has a database of commuters interested in ridesharing (carpools and vanpools) and can be accessed on the internet at <http://www.sacregion511.org/rideshare/index.cfm> or by dialing 511 on your cell phone.

Intelligent Transportation Systems

The Tahoe Gateway ITS Strategic Deployment Plan recommends implementation of several technological improvements that can improve the flow and timeliness of information available to the traveler in order to avoid and/or reduce traffic congestion and delays due to traffic. These regional projects focus on traveler information management, emergency signal system technology, traffic management, and communications.

An example of a regional ITS project is the recently implemented 511 comprehensive traveler information system. The 511 system provides access to information about all modes of travel including: traffic conditions for commuters, bus and light rail information for more than 20 transit agencies, paratransit services for the elderly and disabled, and information about ridesharing and commuting by bike. The telephone service is available in English and Spanish and is accessed by calling 511 on your cell phone. The 511 website contains the same valuable information and can help users plan their daily commutes, access transit providers, and find a carpool partner. Users can check commute options and know road conditions before traveling and reduce congestion. For more information about the 511 service, visit the SACOG website at www.sacog.org.

Transportation Demand Management Strategies

Expansion of Broadband Services

Future expansion of broadband coverage, such as DSL (which provide for a faster and more convenient internet access) could reduce the need for certain types of automobile trips given the growing popularity of e-commerce. Instead of getting in ones car and going to shopping malls and dealing with traffic and the high cost of gasoline, a person may choose to simply stay home and shop online. E-Government and other business websites in Nevada County that allow people to avoid making an automobile trip, by having information accessible online, are also becoming more prevalent. In addition, a new wireless technology called Worldwide Interoperability for Microwave Access (WiMAX) will allow certain products, for example newer cell phones, the ability of forming wireless connections and allow the provision of broadband internet services. Local DSL internet providers, cable companies, and community sponsored wireless fidelity (Wi-Fi) hotspots are currently providing broadband services in the core areas of Nevada County.

The County of Nevada completed an E-Government expansion project in September 2002, made possible by grant funding provided by the Northern Sierra Air Quality Management District. The project expanded the Nevada County website to provide additional information, forms, and services to the public that they would otherwise require an automobile trip to the County Government Center. Over a one year period from 2001 to 2002, an analysis of the trip reductions determined that the project had reduced approximately 136,240 vehicle trips and approximately 3,079,024 vehicle miles traveled, which is equivalent to reducing one entire day worth of vehicle trips over the study period relieving congestion and resulting in air quality benefits. The expansion of broadband services into

the outlying areas currently not served will provide county residents with alternatives to making certain trips by automobile

Telecommuting, Compressed Work Weeks, and Flexible Hours

TDM actions maximize transportation system utilization through modification of travel behavior decisions. Specifically, TDM actions attempt to modify travel choices and alter relative transportation prices for different travel decisions. TDM actions are implemented through both the public and private sectors.

Telecommuting, compressed work weeks, and flexible work hours are employment-based techniques to reduce the number of work trips per week, or to transfer trips to reduce peak hour congestion. Telecommuting, or alternative work locations, allows workers to perform job duties at home or another location, communicating with the main work center by modem, fax, or telephone as necessary. This alternative is especially attractive for workers in rural areas, or those commuting long distances. The addition of new and lower cost technologies, such as DSL, will continue to encourage telecommuting as a TDM strategy.

Teleconferencing

Teleconferencing is generally defined as meetings held by telephone or via video hookup to replace the need for traveling to meet in person. Teleconferencing is a common technique used by employers as a cost-effective way of conducting meetings and avoiding the need to travel.

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. Currently, the 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. Costs to implement TSM/TDM measures vary widely. Each proposed project will be evaluated for its cost/benefit potential.

TSM ACTION PLAN

Short and Long-Term

1. Work cooperatively with neighboring jurisdictions to implement ITS improvements that would support TSM efforts in the region. (*NCTC, PCTPA, EDCTC, TRPA, Sierra County, Caltrans*)
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. Encourage the use of alternative fuels to reduce impacts on air quality as feasible. (*NCTC, NSAQMD*)
6. Develop and expand facilities to support the use of alternative transportation such as pedestrian and bicycle facilities, park-and-ride lots, and transit transfer stations. (*NCTC, jurisdictions, 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*)

AIR TRANSPORTATION

Existing Conditions of Air Transportation Facilities

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 in the Martis Valley, serves eastern Nevada County. Both of these airports are included in the National Plan of Integrated Airport Systems (NPIAS), which includes approximately 3,660 airports that are important to national air transportation. At the regional level these airports improve mobility for recreational and business travelers, generate tax revenues, provide facilities for emergency response, law enforcement activities, fire fighting services, and air cargo delivery. Both airports are classified in the California Aviation System Plan as Regional General Aviation airport facilities. This classification indicates that they provide the same access as community airports, but are located in an area with a larger population base with a higher concentration of business and corporate flying; accommodate most business, multi-engine, and jet aircraft, have published instrument approach, and provide most services for pilots and aircraft including aviation fuel. The general location of each airport is displayed on Figure 7 (page 75).

The Nevada County Airport is a small aircraft airport classified in the Airport Reference Code as B-I, meaning it generally accommodates aircraft less than or equal to 12,500 pounds and less than 49 foot wingspan. The *Nevada County Air Park Master Plan* adopted in 1992 recommended expansion of the airport, which included physical improvements to meet future demand, and to correct a line-of-sight distance requirement for aircraft. In fiscal year 1995/96 a major airport renovation took place. The runway was lengthened to 4,100 feet, a parallel taxiway added and ramp space expanded. Since then, the airport has added a new terminal building, over 40 executive hangers, a Global Positioning System (GPS) approach and Automatic Weather Observation System (AWOS) capability.

The Truckee Tahoe Airport is classified in the Airport Reference Code (ARC) as a B-II Airport, which handles predominantly small aircraft. Although the airport has the capability to handle larger aircraft due to runway size, the Truckee Tahoe Airport District intends to maintain its B-II Airport status for the foreseeable future. This airport is owned and operated by a special airport district, which includes portions of eastern Nevada and Placer Counties.

Regional Overview

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 Northern California. 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 5,900 feet.

The airport is located approximately two miles southeast of the Town of Truckee, along SR 267, in an area that serves as a transportation hub for the region. Located along California's eastern border, the area is accessible by Interstate 80, which is the major east-west Trans-Sierra highway. 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.

Nevada County Airport

Nevada County Airport is located in the western end of Nevada County, within five miles from the County's major cities of Grass Valley and Nevada City. The runway is 4,350 feet long and 75 feet wide and lies at an elevation of 3,150 feet in the foothills of the Sierra Nevada Mountain Range. 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 three CAL FIRE 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.

Air Passenger Forecast and Trends

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.

The lack of local commercial air passenger service in Nevada County forces local area residents to travel to Sacramento, San Francisco, or Reno to access their commercial air travel needs. The desired destination of the air traveler quite often dictates an individual's choice of location to access air passenger service. Economic and time factors are also considerations in selecting commercial air service locations, such as lower fares at the larger airport and scheduling constraints. Consequently, the role of the Nevada County Airport and the Truckee Tahoe Airport in the area of air passenger service remains one of a support effort for the larger facilities.

No scheduled airline service has been offered at Nevada County Airport or the Truckee Tahoe Airport in the past and no such proposals are currently active. Air taxi service on a non-scheduled charter basis has been and continues to be available through both airport's fixed base operations.

Air Cargo Demand Forecasts and Trends

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

General Aviation Demand Forecasts and Trends

The Nevada County Airport and the Tahoe Truckee Airport are classified as "Regional" General Aviation airport facilities as a result of an airport classification study performed by the State of California Department of Transportation. 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 serves single engine, twin-engine, turbo prop, business jets, based fire attack aircraft and helicopters. Similarly, the Truckee Tahoe Airport serves single engine, multi-engine, turbo prop, turbo fan, helicopters, business jets and gliders.

The number of aircraft operations and based aircraft at the Nevada County Airport and the Truckee-Tahoe Airport are projected to increase over the next twenty years as displayed in Tables 11 and 12.

**TABLE 11
NEVADA COUNTY AIRPORT ACTIVITY DATA AND FORECASTS**

Activity Type	2010	2030
Total Based Aircraft	135	270
Total Aircraft Operations	30,000	60,000

Source: Nevada County Airport Land Use Compatibility Plan, July 2011

**TABLE 12
TRUCKEE TAHOE AIRPORT ACTIVITY DATA AND FORECASTS**

Activity Type	2010	2030
Total Based Aircraft	149	265
Total Aircraft Operations	35,000	60,000

Source: Truckee Tahoe Airport Manager, July 2011

Analysis of Aviation Capacity Issues

Nevada County Airport

The Nevada County Airport encompasses approximately 117 acres, with a total of 86 hangars, and 93 aircraft tiedowns. The Nevada County Airport's airfield capacity is calculated at 165,000 to 180,000 annual operations.

The Nevada County Airport's existing runway and taxiway configuration essentially meets the Federal Aviation Administration standards for airports serving aircraft that weigh no more than 12,500 pounds, have maximum wingspans of 49 feet, and have approach speeds of less than 121 knots. For the airport to regularly accommodate other comparatively large aircraft, the major constraints are the runway length, runway width, and runway-to-taxiway separation distance.

Even if the Nevada County Airport airfield could be significantly upgraded to properly accommodate larger aircraft, the space to park them is limited by major building area constraints.

Truckee Tahoe Airport

The Truckee Tahoe Airport encompasses 931 acres, with a total of 191 hangars, and paved tiedowns for over 210 aircraft. The existing runway orientations, lengths, widths, and strengths are sufficient to serve the expected mix of powered-aircraft through the 2030 planning period.

To accommodate forecast demand, the Truckee Tahoe Airport District constructed additional hangars in 2005. The number of tiedowns and available apron area should be sufficient for future growth. The District does not have plans to construct additional hangars at this time, but will continue to evaluate demand.

The Truckee Tahoe Airport has been historically located in an area of predominately open space or forested areas. Most urban development is located west and northwest of the Airport towards the Town of Truckee, as well as southeast of the airport towards Northstar. However, new residential developments are being established much closer to airport boundaries than in the past. The Truckee Tahoe Airport District and the Town of Truckee have entered into a Memorandum of Understanding regarding the future use of property surrounding the Airport.

Future Conditions for Air Transportation Facilities

The *Air Park Master Plan* adopted in 1992 for the Nevada County Airport, analyzed three forms of airport capacity, which included airfield, building area, and environment. The airfield capacity is calculated as being between 165,000 and 180,000 annual aircraft operations. Building area was analyzed by estimating the number of aircraft parking spaces that could be created. With land needed for many of the different airport facilities, parking was calculated to be a maximum of two hundred seventy-five spaces. For environmental capacity, the Master Plan reviewed noise impacts by calculating noise contours and recording noise complaints. The results of the capacity analyses showed that none of the three forms of airport capacity would be exceeded by 2010. Major improvements to the Nevada County Airport were completed in the spring of 1996 enhancing airport operations.

The Truckee-Tahoe Airport Master Plan was last updated in December 2001, and an update to that plan is currently in underway and anticipated to be completed in 2012. Total aircraft operations are expected to increase over the next twenty years. Short-term and long-term improvements will be considered to accommodate potential future demand.

Airport Land Use Commission/Airport Land Use Compatibility Plans

The Nevada County Transportation Commission (NCTC) was recently designated as the Airport Land Use Commission (ALUC) for the Nevada County Airport and the Truckee Tahoe Airport. Requirements for the creation of ALUCs were first established under the California State Aeronautics Public Utility Code Sections 21670 et seq. in 1967. The fundamental purpose of the ALUC is to promote land use compatibility in the areas surrounding airports. As expressed in present statutes, the purpose is:

To protect public health, safety, and welfare by ensuring orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.

The Airport Land Use Compatibility Plans for both airports identify the common goals of orderly growth of the airports and the areas surrounding the airports within the identified planning boundary, to protect the general welfare of the inhabitants within the vicinity of the airport, and the public in general. The airport land use plans have guidelines that identify compatible land uses in the various safety zones. The airport land use plans also identify noise compatibility criteria for development projects within the airport land use planning area. The Nevada County General Plan contains policy recommendations consistent with the Nevada County Airport and Truckee Tahoe Airport ALUCs.

To protect the public's investment in the Nevada County Airport or Truckee Tahoe Airport, aviation easements should be obtained over properties contained within the boundaries of the airport's Compatibility Land Use Plan, as opportunities present themselves.

Air Transportation Facility Needs

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

construct projects included in their CIP and as a local match for the Federal Airport Improvement Program (AIP) or State CAAP grant funding.

AVIATION ACTION PLAN

Short-Term

Short-term capital improvements for both the Nevada County Airport and Truckee Tahoe Airport are listed in Tables 13 and 14, which represent the projects submitted in the most recent airport Capital Improvement Plans (CIPs) that are eligible for funding from State and Federal funding programs.

Long-Term

If demand warrants, consider implementation of improvements identified in both the Nevada County Airport and Truckee Tahoe Airport Master Plans 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.

**TABLE 13
NEVADA COUNTY AIRPORT CIP LIST 2010-2015**

Project Description	Total Cost	Program Year
1. Engineering for Runway 07/25 asphalt repair	\$84,210	2010
2. RSA Improvement Construction (P III)	\$1,550,000	2011
3. RWY 07/25 Rehab & Repair	\$1,700,000	2011
4. RWY 07/25 Threshold Move	Incl. in #3	2011
5. Land Acquisition for Airport Expansion	\$1,500,000	2012
6. Upgrade/Repair Perimeter Fencing (Phase I design & engineer)	\$100,000	2013
7. Obstruction Removal in ~ 20 Acres east of Airport	\$100,000	2013
8. Engineering & Construction Cost Estimate for Wash Rack	\$50,000	2013
9. Upgrade/Repair Perimeter Fencing (Phase II construction)	\$450,000	2014
10. Wash Rack Construction	\$200,000	2014
11. Land Acquisition for Ramp 5 Expansion & RPZ protection	\$2,000,000	2015
TOTAL	\$7,734,210	

**TABLE 14
TRUCKEE-TAHOE AIRPORT CIP LIST 2011-2016**

Project Description	Total Cost	Program Year
1. Runway 10/28 and Taxiway A Overlay includes reconstruction of Hangar Rows J & K as additive alternate 1 and the installation of under-drains as additive alternate 2	\$2,105,263	2011
2. Segmented Circle with Lighted Wind Cone and Apron Lighting Replacement	\$360,000	2011
3. Airport Master Plan	\$225,000	2011
4. PCC Helipad	\$200,000	2012
5. Obstruction Abatement	\$97,000	2012
6. Slurry Seal and Restripe Apron	\$630,000	2012
7. Purchase Snow Removal Equipment (Oshkosh Plow Truck)	\$400,000	2013
8. Sealcoat and Stripe Hangar Rows & Taxilanes	\$231,000	2014
9. Purchase Snow Removal Equipment (Caterpillar Loader)	\$440,000	2014
10. Mill & Fill Pavement at Jet Ramp and Airshow Way	\$773,000	2014
11. Fog Seal & Stripe Runways, Sealcoat and Stripe Taxiways, and Glider Facility	\$528,000	2015
12. Reconstruct Taxiway A and Associated Connectors	\$5,080,000	2015
13. Purchase Snow Removal Equipment (Oshkosh Blower)	\$460,000	2015
14. Slurry Seal and Stripe Roads & Parking Lots	\$96,000	2016
15. Reconstruct Runway 1/19, Taxiway G, and Associated Connectors	\$6,380,000	2016
16. Reconstruct Taxilane R	\$986,000	2016
17. Reconstruct Fuel Farm Road	\$97,000	2016
TOTAL	\$16,398,000	

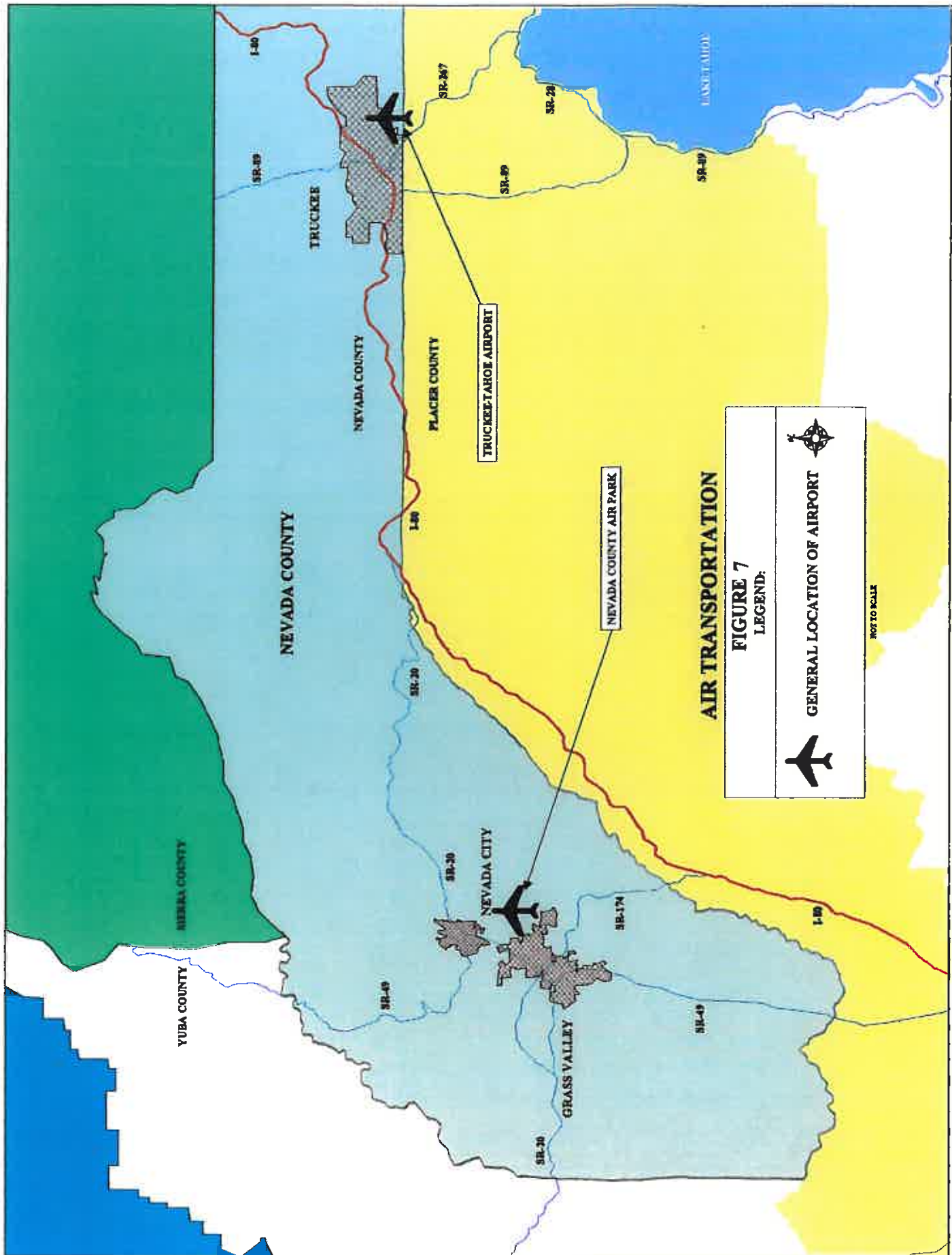




FIGURE 7
LEGEND:
 GENERAL LOCATION OF AIRPORT

 NOT TO SCALE

RAIL TRANSPORTATION

Existing Conditions of Rail Transportation Facilities

Union Pacific Railroad (UPRR) owns and operates tracks that follow Interstate 80 along the southern border of Nevada County (Figure 8 on page 80). The rail line is used heavily for the shipment of goods and also utilized for passenger service. However, there are currently no freight rail loading and unloading facilities in Nevada County. 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 Truckee Intermodal Transportation Center is an important facility located in eastern Nevada County, which serves transit, rail, automobiles, trucks, bikes, and pedestrians.

Historically, highways are publicly owned, while railroads have been under private ownership. Public funds have been available for public roads, but not for railroads. Only in the last twenty-nine years, since Amtrak was created, have public funds been available for passenger rail. While passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) improved upon the Interstate Highway Era by making federal funds flexible, the flexibility is limited to urban and commuter transit projects. The ability to provide passenger rail options would be enhanced by implementing a rail development process similar to the highway development process, and fully integrating passenger rail options into transportation problem solving.

Although California statute allows Caltrans to design and construct intercity passenger rail projects and purchase right-of-way, traditional modal funding mandates restrict Caltrans's ability to facilitate the development of non-highway modes. Recent investments in intercity rail have been largely the result of one-time capital funding provided by bond funds.

INTERSTATE 80 CORRIDOR

The 250 kilometer Union Pacific mainline between Sacramento, California and Sparks, Nevada has the longest continuous railroad grade in the world.

The railroad has proved to be a highly reliable mode of transportation. In the 105-year period between 1889 and 1994, the railroad was shut down because of snow only five times. With the exception of the thirteen day closure in January 1952 that stranded the *City of San Francisco* streamliner for seventy-two hours, and closed Interstate 80's predecessor, US 40, for about three weeks, the other four rail shut downs lasted from between one to three days. On the other hand, during the eighteen years between 1974 and 1993, Interstate 80 was closed a total of 588 times, (an average of about 31 times per season) for a total of 2,375 hours or an average of 5.21 days per season.

In the I-80 Corridor, the rail line is underutilized for passenger rail services. The easiest way to increase capacity along this corridor with minimal cost and degradation to air quality, and without harming the environment, is to increase the passenger rail mode option by extending the Capitol Corridor service to Reno/Sparks, Nevada. The addition of only one or two passenger trains per day will provide an alternative mode of travel to the mountain ski resorts, the Lake Tahoe Basin, the Town of Truckee, and Reno/Sparks without significantly hindering the freight capacity of the line.

The existing Amtrak train, the *California Zephyr*, which runs between Oakland and Chicago, does not adequately serve the needs of local Bay Area to Reno/Sparks corridor travelers. Travel on the

California Zephyr requires a reservation, while Amtrak fare and booking policies discourage or exclude local trips in favor of long haul passengers. The westbound train, which originates in Chicago two days earlier, is not reliable for travelers' day-use needs in the western end of the corridor. However, the extension of one or two passenger trains per day, with fares and schedules that serve the local traveler and with good marketing, could provide transportation for up to one thousand passengers per train.

A survey conducted by the Truckee - North Tahoe Transportation Management Association and the Placer County Transportation Planning Agency (PCTPA) in March 1994, indicated skiers interest in rail transportation in the I-80 Corridor. Survey results showed that 94% of all respondents traveled by automobile to the ski areas. When asked if they wanted a ski train, 61% of all respondents said "Yes" and 14% said "No", 70% said they would take a ski train during bad weather, and 11% said they would not. When asked if they would take a ski train instead of facing holiday delays on I-80, 75% said "Yes", and 10% said "No."

The ski market was not included in calculating ridership estimates in the Caltrans Sacramento-Tahoe-Reno Intercity Rail Study. The survey results indicate there is potentially a substantial ski market. While a significant overall mode split for rail is not assumed, skiers could increase ridership on Amtrak passenger trains, and possibly lessen travel demand on I-80, especially during peak demand periods.

Future Conditions for Rail Transportation Facilities

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

- ◆ There is a potentially significant rail market for skiers, which has not yet been included in the patronage estimates for intercity rail service in the I-80 Corridor.
- ◆ By the year 2020, Caltrans District 3 will be faced with the need to provide transportation capacity for an additional one million people.
- ◆ Air quality, economic, and financial constraints will limit the improvements to the highway system, making multimodal alternatives, especially the mass transportation services, of major importance.
- ◆ 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.

Recommendations from the study are listed below:

- ◆ Caltrans and the Nevada County Department of Public Works should work closely with Amtrak, the local jurisdictions in the I-80 Corridor, the ACR 132 Policy Advisory Committee, and private businesses in the Reno/Sparks and Lake Tahoe areas to develop an implementation plan for expanding passenger service between Sacramento and Reno/Sparks. This implementation plan should include a realistic funding program

which reflects the major constraints with Caltrans, Nevada County Department of Public Works, and Amtrak.

- ◆ Representatives from the Nevada County Transportation Commission, Washoe Regional Transportation Commission, and the State of Nevada should be invited to join the ACR 132 Policy Advisory Committee and participate in the development of the implementation plan for extending passenger service to Reno/Sparks.
- ◆ Caltrans and the Nevada County Department of Public Works should coordinate with local and regional operators to connect feeder bus service between Truckee, Tahoe City, and South Lake Tahoe via California Highway 89 and Nevada Highway 28, with a schedule that meets the proposed extension of the rail passenger service in Truckee.

In 2003, NCTC, PCTPA, Capitol Corridor Joint Powers Authority (CCJPA), the Town of Truckee, and interested businesses in the North Tahoe area decided to jointly fund a planning effort to explore the feasibility of extending daily Capitol Corridor service to Reno. The planning effort was suspended because the UPRR determined that they needed to complete their own evaluation of the extent of the growing demand for freight services and whether there would be sufficient capacity in the corridor for passenger service. Although this planning effort was deferred, interest and support remain for the passenger rail service to Reno, with stops in the resort areas and the Town of Truckee, through either an expansion of an existing passenger service or development of a new route. The California State Rail Plan 2007/08 to 2017/18 considers the expansion of rail passenger service between Sacramento and Reno, with one train projected by 2014/15.

Rail Transportation Facility Needs

Due to the lack of rail facilities in Nevada County, and data describing facility operations, short-term needs could not be determined. Long-term needs have been identified in the *Nevada County Rail Feasibility Study*. The long-term need for rail transit services in Nevada County is based on excessive automobile demand on local and state roadways, as well as obtaining local goals to reduce environmental impacts on the County's transportation system.

The long-term rail transit needs, as identified by the *Nevada County Rail Feasibility Study*, includes implementing the I-80 Bay Area-Truckee/Reno winter train service. Initially, the service should be operated only during winter months, which is the strongest market base on which to build patronage. The study states that this service has the potential to cover all of its operating costs through passenger fares. Initially, the service is not expected to significantly reduce automobile travel in the I-80 Corridor. Nevertheless, as the corridor becomes increasingly congested, this service will become a more attractive alternative to the automobile.

Connections 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. The future provision of additional Capital Corridor trains to Auburn will make the service more convenient for Nevada County residents and increase ridership.

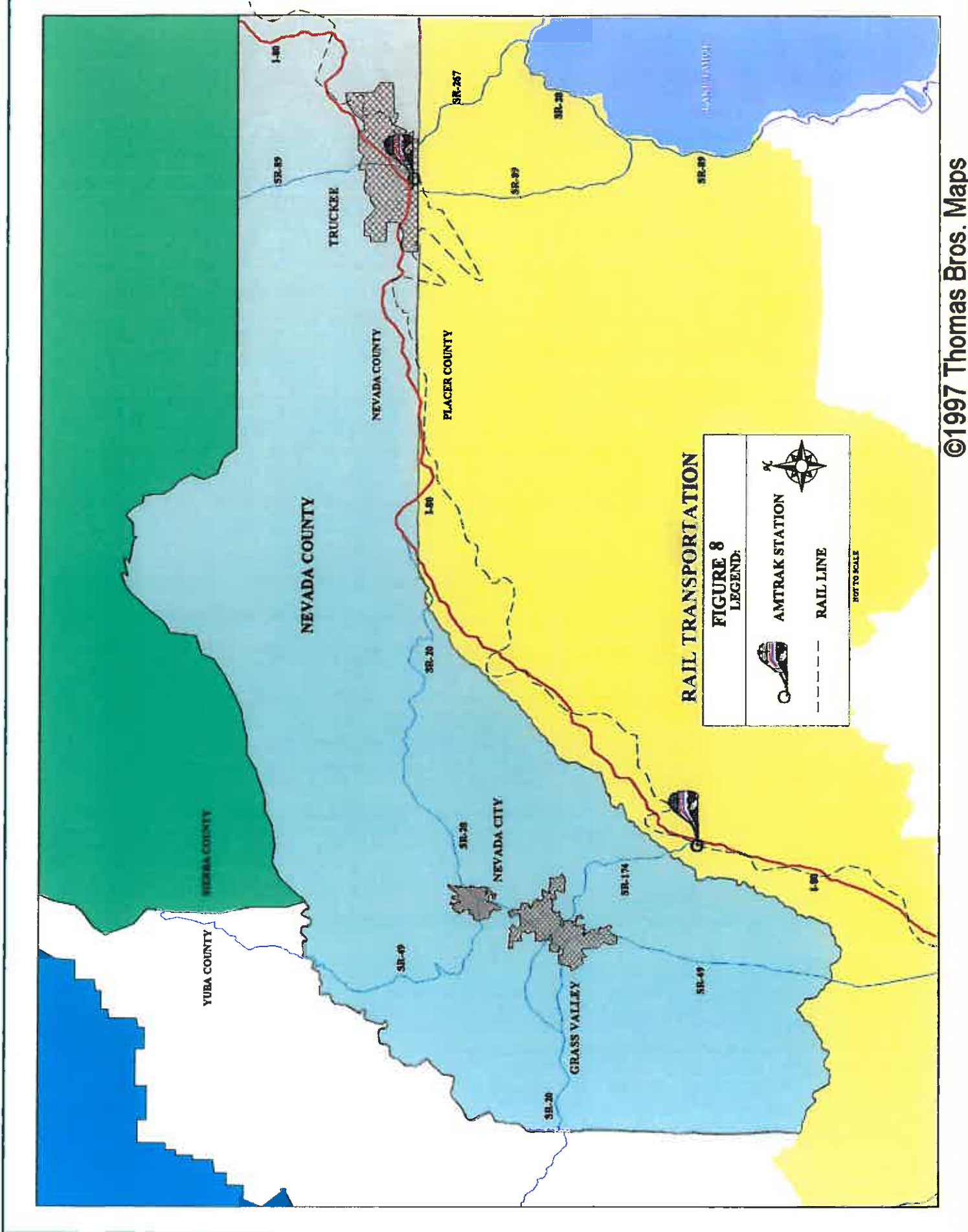
The Action Plan of the *Nevada County Rail Feasibility Study* indicated that successful implementation of rail programs would present various challenges and require aggressive and focused programs, including the following: 1) additional detailed planning and feasibility studies for projects identified in this preliminary study, 2) development of a strong local and/or regional advocacy for projects, 3) establishment of a reliable funding source for both capital needs and

ongoing costs for maintenance and operations, and 4) inter-jurisdictional agreements on basic program strategies and responsibilities.

RAIL ACTION PLAN

Short and Long-Term

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)



AIR QUALITY

Environmental Setting

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

Precipitation levels are higher as the elevations climb into the foothills and increase near the crest of the Sierra Nevada Mountains, but are lower near the western edge of the basin near the valley floor. Winter temperatures in the mountains can be below freezing for weeks at a time, and substantial depths of snow can accumulate, but in the western foothills winter temperatures usually dip below freezing only at night and precipitation is mixed as rain or light snow. In the summer, temperatures in the mountains are mild, with daytime peaks in the 70s to low 80s F, but the western end of the county can routinely exceed 100 degrees F.

Existing Air Quality Conditions

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

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

Western Nevada County was originally classified by EPA as a “basic” non-attainment area. A recent court ruling discarded the “basic” classification, so EPA must reclassify such areas. Western Nevada County's new classification will depend on EPA's process to determine the appropriate new classification for these areas. Western Nevada County's attainment is dependent on emission

reductions from the Sacramento Area and therefore may be classified to match the recent change in attainment classification approved for the Sacramento Region.

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

Regional Air Quality Planning

Isolated rural ozone non-attainment areas are required to complete a Transportation Conformity Analysis/Determination when a federal approval is required on a regionally significant transportation or transit project. The "Conformity" finding must show that the project, along with all of the regionally significant federal and non-federal transportation projects, does not create new violations of the National Ambient Air Quality Standards (NAAQS), increase the severity of NAAQS violations, or delay timely attainment.

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.

Non-attainment areas are also required to prepare and submit a State Implementation Plan. The SIP is an air quality plan developed by the California Air Resources Board, in cooperation with local air districts, to demonstrate how the area will attain and maintain Federal Clean Air Act Standards. The SIP for western Nevada County will identify all sources of emissions of pollutants that exceed federal standards in the non-attainment area and detail the strategies the area will utilize to meet the NAAQS. The SIP for our region will be incorporated into a statewide SIP that will outline the measures that the state will take in order to improve air quality in non-attainment areas.

The Northern Sierra Air Quality Management District (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.

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.

Greenhouse Gas Emission Reduction Planning

The California legislature passed the Global Warming Solutions Act in 2006 through Assembly Bill 32. As a result of AB 32, California Statute specifies that by the year 2020, greenhouse gas (GHG) emissions within the state must be at 1990 levels. The California Air Resource Board (ARB) is the primary state agency responsible for implementing the necessary regulatory and market mechanisms to achieve reduction in GHG emissions to comply with the requirements of AB 32.

AB 32 identifies greenhouse gases as specific air pollutants that are responsible for global warming and climate change. California has focused on six GHGs (Carbon Dioxide (CO₂), Methane, Nitrous Oxide, Hydro Fluorocarbons, Per Fluorocarbons, and Sulfur Hexafluoride). The most prevalent GHG is CO₂ and all the other GHGs are generally referenced in terms of CO₂ equivalent. ARB research indicates that 37% of CO₂ emissions in California are generated from the transportation sector.

Rural transportation planning agencies have a unique set of challenges compared to urbanized areas to reduce regional transportation related greenhouse gas emissions. Lower land use densities, limited transit options, higher vehicle miles traveled per household, and higher volumes of interregional traffic contribute to the challenges to reduce these emissions. The development of vehicles that are more efficient and improvements in low-carbon fuels present the highest payoff for rural counties to reduce transportation related carbon dioxide emissions.

The Nevada County Transportation Commission (NCTC) as the Regional Transportation Planning Agency for Nevada County will continue to coordinate with its member jurisdictions to ensure transportation and land use planning efforts take into consideration strategies to reduce GHG emissions. These land use strategies can include, but are not limited to:

- Mixed use, infill, and higher density development projects.
- Public transit incorporated into project design.
- Pedestrian and bicycle facilities within planned developments.
- Consideration of current and future school sites and needs regarding school-related trips.

NCTC will continue to fund projects that promote alternative modes of transportation and projects that reduce congestion and improve air quality. Additional transportation planning and investment strategies that may result in GHG emission reductions will be considered by NCTC and implemented as appropriate.

Future Air Quality Conditions

To demonstrate the overall on-road regional emissions projections for the county, the CARB 2009 Almanac Emission Projection Data published in 2008 was utilized. Table 15 displays estimates of on-road motor vehicle emissions based on motor vehicle fleet emission data and travel data for Nevada County. The CARB Almanac Emission Projections for Nevada County demonstrates that between 2005 and the year 2020 emissions of reactive organic gases, nitrogen oxides, carbon monoxide, and sulfur oxides are expected to decrease an average of 57 % from 2005 emission levels. The emissions of Particulate Matter (PM) 2.5 and PM 10 are forecasted to decrease an average of 31% between 2005 and 2020. This is the case even though vehicle miles traveled are expected to increase approximately 42% by the year 2020. 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.

Table 15
CARB 2009 Almanac Emission Projection Data
Estimated County-Wide Emissions from Vehicles in Nevada County
2005, 2010, 2015 and 2020

Daily Emissions in Tons/Day for:	2005	2010	2015	2020	Percentage Change
Reactive Organic Gases	3.624	2.867	2.200	1.785	51% Decrease
Carbon Monoxide	33.546	25.784	18.673	14.026	58% Decrease
Nitrogen Oxides	9.520	8.043	5.650	3.958	58% Decrease
Sulfur Oxides	0.066	0.021	0.023	0.027	59% Decrease
Particulate Matter 2.5 (Microns)	0.286	0.253	0.208	0.181	36% Decrease
Particulate Matter 10 (Microns)	0.361	0.331	0.290	0.270	25% Decrease
Daily Vehicle Miles Traveled	3,184,000	3,429,000	3,921,000	4,522,000	42% Increase

AIR QUALITY ACTION PLAN

Short-Term and Long-Term

1. Conduct interagency consultation as needed to review transportation related air quality issues. (NCTC, NSAQMD, CARB, Caltrans, EPA, FHWA, FTA)
2. Complete a Transportation Conformity Analysis on regionally significant transportation projects when federal funding or federal approval is required in coordination with local, state, and federal agencies. (NCTC, NSAQMD, CARB, Caltrans, EPA, FHWA, FTA)
3. Coordinate with NSAQMD during the development of the State Implementation Plan for Nevada County. (NCTC, NSAQMD)
4. Administer the selection of projects eligible for Congestion Mitigation Air Quality funds in western Nevada County for projects that reduce emissions and improve air quality. (NCTC, NSAQMD)

5. Coordinate with member jurisdictions to ensure transportation and land use planning efforts take into consideration strategies to reduce GHG emissions. (NCTC, Nevada County, Grass Valley, Nevada City, Town of Truckee)
6. Consider and implement transportation planning and investment strategies that may result in GHG emission reductions as appropriate. (NCTC)

TRANSPORTATION SAFETY AND SECURITY

Congress emphasized the need for a more collaborative approach to safety and security when it passed the *Safe, Accountable, Flexible, Efficient Transportation Equity Act for the 21st Century* (SAFETEA-LU) in August of 2005. SAFETEA-LU included two new planning factors related to safety and security that must be addressed.

- ◆ Increase the safety of the transportation system for motorized and non-motorized users.
- ◆ Increase the security of the transportation system for motorized and non-motorized users.

The public expects, and demands, that the transportation system be safe and efficient for all users. The focus of this section is on increasing the safety of the transportation system for all modes; and on increasing the ability of the transportation system to support homeland security and to safeguard the personal security for all users.

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

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

Transportation Safety

The Business Transportation and Housing Agency is the lead agency for traffic safety in the State of California. It oversees the activities of the Office of Traffic Safety and Departments of California Highway Patrol, Transportation, and Motor Vehicles.

California Strategic Highway Safety Plan

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

California's SHSP was completed and approved in September 2006. The SHSP establishes statewide goals, objectives, challenge areas, and key actions to address California's most pressing safety problems on public roadways. The SHSP set a goal for California of less than one roadway fatality per 100 million vehicle miles traveled. The fatality rate in 2008 for California was 1.04 per 100 million vehicle miles traveled, compared to the national fatality rate in 2008 of 1.28 per 100 million vehicle miles traveled.

The emphasis areas from the SHSP were reviewed and incorporated into the Nevada County RTP as appropriate. The implementation of projects contained in the RTP will improve the transportation safety and security in Nevada County.

Fatal and Injury Collision Statistics

Annually, the California Highway Patrol prepares a report that compiles the statistics in relation to fatal and injury motor vehicle traffic collisions. The report is compiled from motor vehicle traffic collision reports received from local police and sheriff jurisdictions and from California Highway Patrol field officers. The Statewide Integrated Traffic Records System (SWITRS) processes all reported fatal and injury collisions that occurred on California’s state highways and all other roadways, excluding private property.

During 2008, California had a total of 452,595 traffic collisions: 3,113 fatal; 170,496 injury; and 278,986 property damage only. This was the lowest number of fatal collisions since 1998 (3,075) and also the lowest number of injury collisions since 1975 (167,758). Additionally, during 2008 there were 1.04 persons killed and 74.25 persons injured for every 100 million vehicle miles of travel. This is the lowest mileage death and mileage injury rates on record.

Table 16 below shows a summary of the California Highway Patrol’s *2008 Annual Report of Fatal and Injury Motor Vehicle Traffic Collisions* data in relation to the fatal and injury collisions in Nevada County covering the period between 1999 and 2008. During this period Nevada County had the highest number of fatal collisions in 1999 and the lowest in 2001 and 2007. The highest number of injury collisions occurred in 2001, with the lowest number in 2008.

TABLE 16
Summary of Fatal & Injury Vehicle Collisions for Nevada County 1998-2008

Category	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Fatal Collisions	23	14	12	16	14	14	15	17	12	16
Persons Killed	24	14	14	17	14	17	18	22	13	17
Injury Collisions	588	588	620	586	559	566	541	515	496	435
Persons Injured	903	941	966	894	846	832	806	776	703	587

Note: The Traffic Collision Report form was revised in July 2003 and as a result “truck involved collision” or “motorcycle involved collision” may be under reported.

Identifying Transportation Safety Issues and Coordinating to Develop Solutions

To adequately address safety in the planning process requires active monitoring of the transportation system for safety problems. This involves monitoring the number of crashes, injuries and fatalities associated with the operation of different transportation modes.

In 2005, the stretch of SR 49 between Wolf/Combie Road and McKnight Way in Grass Valley experienced nine collision related fatalities. In 2006, another five lives were lost due to fatal collisions. In January of 2006, local residents Bruce and Deborah Jones founded the group Citizens for Highway 49 Safety and held a community meeting “Save Lives Now” at the Bear River High School on January 18, 2006. Approximately 300 concerned citizens and public officials attended this event. After the meeting, the group was able to foster creation of the SR 49 Stakeholder Committee which includes local and state officials that continue to work together to reduce the number of accidents and fatalities on SR 49.

In June 2006, as a result of input from the SR 49 Stakeholder Committee the Caltrans Office of Traffic Operations designated SR 49 from Dry Creek Road to near McKnight Way in Grass Valley

as a Safety Corridor and a daylight/headlight section. A Safety Corridor is a segment of highway with a history of high fatal collisions (McKnight to Combie) or a segment of highway with potential for fatal and severe collisions (Combie to Dry Creek) that is identified and focused on by state and local officials with increased enforcement, public awareness measures, short-term improvements and long term improvements in order to reduce and prevent fatal and severe collisions. The Safety Corridor status can also assist CHP in obtaining additional money for enforcement through California State Office of Traffic Safety (OTS).

With the road width too narrow for center dividers, Caltrans explored implementation of rumble strips, reflectors, and striping to improve motorist awareness and discourage illegal passing to serve as a short-term improvement. Caltrans Office of Traffic Operations performed a detailed review of the head-on collisions between Wolf/Combie Road and McKnight Way to determine how many collisions may have been prevented by rumble strips. Based on this review, 40% to 60% of these collisions might have been averted with centerline and shoulder rumble strips. In 2007, Caltrans completed a \$500,000 project to install centerline and shoulder rumble strips.

The Grass Valley CHP office in conjunction with the Auburn/Newcastle CHP office began joint speed enforcement efforts in 2006 within the SR 49 Safety Corridor. Between August 2009 and July 2010, the Grass Valley California Highway Patrol conducted a year-long enhanced enforcement effort with funding provided through a \$178,786 grant awarded by the California Office of Traffic Safety. As result of the coordinated efforts mentioned, the number of fatalities in the section of SR 49 between Dry Creek Road and McKnight Way declined between 2005 and 2010.

TABLE 17
Fatalities SR 49 Dry Creek Road to McKnight Way

Year	2005	2006	2007	2008	2009	2010*
Fatalities	9	5	1	1	3	2

*Fatalities reported as of September 15, 2010

SR 49 Stakeholder Committee will continue to coordinate to efforts to improve the safety within the SR 49 Safety Corridor through education, enforcement, and implementation of short-term and long-term improvements.

Transportation Security

Transportation security refers to the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users. Nevada County is susceptible to many types of potentially disastrous incidents. These incidents could include major transportation accidents, natural disasters (earthquake, floods, and wild fires), sabotage, civil unrest, hazardous material spills, criminal activity, or acts of terrorism. The transportation system in Nevada County will most likely play a critical role in responding to such incidents. The transportation system allows access to first responders, can provide detours to navigate around incidents, and serve as evacuation facilities. Other examples of the support functions that the transportation system can provide in response to an incident or emergency include, but are not limited to the following:

- Mobilization of public transit and paratransit to assist in the evacuation of the public;
- Utilizing the shoulders of the roadway to increase vehicle capacity during evacuations;
- Setting up contra-flow lanes to move large numbers of vehicles in one direction;
- Extending the traffic signal timing to allow large numbers of vehicles or pedestrians to proceed in one direction:

- Deploying traffic personnel to problem intersections to manually direct traffic;
- Deploying various intelligent transportation system elements such as portable message signs or utilizing permanent message signs along I-80; and
- Utilizing transportation facilities, such as rail stations or transit centers as potential staging areas for medical and food supplies.

Nevada County Office of Emergency Services

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

TRANSPORTATION SAFETY & SECURITY ACTION PLAN

Short and Long-Term

1. 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*)
2. Continue coordination of education, enforcement efforts, short-term and long-term improvements through participation in the SR 49 Stakeholder Committee. (*Nevada County, Caltrans, CHP, Citizens for Highway 49 Safety, NCTC*)
3. Coordinate implementation of projects included in the SR 49 Corridor System Management Plan. (*Nevada County, Caltrans, CHP, NCTC*)
4. 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*)

V. FINANCIAL ELEMENT

INTRODUCTION

The Financial Element of the RTP is intended to discuss the financial assumptions and forecasts of transportation costs and revenues necessary to implement the Action Element of the 2010 RTP.

The Action Plan 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 necessary.

This financial analysis presents a constrained funding scenario made up of the revenue which is reasonably expected to be available from existing funding mechanisms currently in place 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.

Transportation projects identified in the Action Element of the RTP have been calculated in “year of expenditure” dollars to account for 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 in relation to 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. 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 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.

State Highways Facilities

The NCTC currently has a total of \$12,481,000 of Regional Improvement Program (RIP) funds programmed in the State Transportation Improvement Program (STIP) for the Dorsey Drive Interchange and SR 49/La Barr Meadows Signalization and Widening Project. Caltrans currently has \$1,926,000 of Interregional Improvement Program (IIP) matching funds programmed in the STIP for the SR 49/La Barr Meadows Signalization and Widening Project. NCTC also currently has an unprogrammed RIP balance of \$5,000,000. The projects identified in the RTP are consistent with the Federal Transportation Improvement Program (FTIP) and the Interregional Transportation Improvement Program (ITIP).

Estimates of future revenues for state highway improvements are consistent with the California Transportation Commission’s adopted 2010 STIP Fund Estimate. Based on this estimate of the STIP revenue forecasts, the Financial Element of the RTP assumes no additional STIP shares until 2015. Beginning in 2015, NCTC anticipates receiving approximately \$1,000,000 of RIP funds a year. Therefore, over the period of the RTP, the financial element assumes a total of approximately \$15,000,000 in additional RIP funding.

Regional Roadways

Revenues for regional roadway improvement projects off the state highway system were based on funding forecasts of the Regional Transportation Mitigation Fee Program, local jurisdiction

development fee programs, and local funds. Funding for these regional roadway projects are subject to a timeframe predicated on implementation of development projects and collection of fees. Cities and counties also rely on local funds for transportation projects, which may include dedicated sales taxes, redevelopment funds, general funds, special grants, and other sources.

The condition of local streets and roads continue to deteriorate due to funding shortfalls, and counties and cities will be further challenged as repair costs escalate in future years. As roadway pavement conditions deteriorate the cost to repair them increases exponentially. The *California Statewide Streets and Roads Needs Assessment* completed in October 2009, indicates that to bring the state's local system back into a cost-effective maintenance condition, at least \$7 billion annually in additional funding is needed to stop the further decline of local streets and roads. The costs developed in this study are based on what the industry calls best management practices (BMP). The BMP goal is to reach a pavement condition index (PCI) in the low 80s (on a scale of 1 to 100) and the elimination of the backlog of maintenance projects. The BMP represents improving the roadway condition to a level where roads only need less expensive preventative maintenance treatments instead of costly rehabilitation and reconstruction. The average PCI rating statewide for streets and roads is 68, which is considered to be in the "at risk" category. The average PCI for major and local roads in Nevada County, including the incorporated cities/town, is rated at 72.

Countywide data collected as part of the *California Statewide Streets and Roads Needs Assessment* indicate that the 10-year pavement needs for the County of Nevada and incorporated cities/town total approximately \$204 million. It is critical that cities and counties statewide receive an adequate and dedicated revenue stream for the cost effective maintenance of the local streets and roadway system to avoid rapid deterioration over the next 20 years.

Transit Services

Revenue projections were based on the forecasted amount of state, federal, and local transit revenue assumed to be available over the period of the RTP. Financial Element Table 24 indicates that there will be sufficient revenue to maintain the existing western Nevada County transit programs and establish an operating reserve to address the volatility of transit funding. Financial Element Table 25 identifies a short-term (2010-2020) funding deficit. However, implementation of the Eastern Nevada County Transit Development Plan recommendations to increase passenger fares, implement modifications to the Truckee Transit non-winter route, and Dial-A-Ride modifications are projected to address the projected deficit.

Non-Auto Facilities

It is assumed that the majority of non-motorized facilities in Nevada County will be funded through state grant programs, such as the State Bicycle Transportation Account, which had a funding level of \$7,200,000 statewide in 2010. Other funding sources available for these types of projects include Local Transportation Fund – Pedestrian and Bicycle funds, Congestion Mitigation and Air Quality Improvement Program funds.

Aviation

The most recent Capital Improvement Programs were used to determine the improvement costs for Nevada County's aviation facilities. It is assumed that the Nevada County Airport and Truckee Tahoe Airport will utilize operating revenues as a local match to leverage Federal Airport Improvement Program and California Aid to Airports Program (CAAP) grant funds for completion

of the Capital Improvement Plan (CIP) projects, updates to their Airport Master Plans, and Airport Land Use Compatibility Plans.

IMPROVEMENT FUNDING PROGRAMS

Federal Funding Programs

The Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) was enacted in July 2005. SAFETEA-LU authorized the federal surface transportation programs for highways, highway safety and transit for 2005-2009. SAFETEA-LU expired on September 30, 2009 and has been extended via continuing resolutions. The revenue projections assume reauthorization of federal transportation legislation by 2013 and that the existing funding programs and funding levels remain largely unchanged from SAFETEA-LU. A summary of important federal programs are listed below.

- ◆ ***Congestion Mitigation and Air Quality Program (CMAQ).*** This funding program was established by the 1991 Federal Intermodal Surface Transportation Efficiency Act (ISTEA) and was re-authorized with the passage of SAFETEA-LU in 2005. 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.

- ◆ ***Federal Transit Administration (FTA).*** Title III of the 1991 ISTEA revised the old Urban Mass Transit Administration (UMTA) programs and redesigned the UMTA to be the Federal Transit Administration.
 1. Section 5310 - Capital funds for elderly and disabled transit programs. This competitive grant program is administered by Caltrans. Private non-profit corporations and public agencies are also eligible.
 2. Section 5311 - Rural Transportation Assistance formula funds can be used for non-urbanized public transportation, both capital and operating. Although these funds are subject to federal approval, they are programmed locally by the NCTC.
 3. Section 5316 - Job Access and Reverse Commute Program (JARC) is a competitive grant program for projects targeted at developing new or expanded transportation services that connect welfare recipients and other low-income persons to jobs and other employment related services. This grant program requires a 50% match for projects seeking operating assistance and a 20% match for projects seeking capital funding.

4. Section 5317 - New Freedom Program provides formula funding for “new” public transportation services beyond those required by the Americans with Disabilities Act (ADA) for persons with disabilities. This program requires a 50% match for projects seeking operating assistance and a 20% match for projects seeking capital funding.

- ◆ **Regional Surface Transportation Program Funds (RSTP).** The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 replaced the Federal-Aid System programs with the Surface Transportation Program (STP). The funds are approved by Congress and then passed through the State to the RTPAs.

In California, Caltrans exchanges the federal funds for state funds for rural Regional Transportation Planning Agencies to relieve the federal administrative requirements. The exchanged funds may be used for any purpose allowed by Article XIX of the State Constitution. Those purposes include: research, planning, construction and improvement, maintenance, operation of public streets and highways (and their related public facilities of non-motorized traffic), including the mitigation of their environmental effects, the payment for property taken or damaged for such purposes, and the administrative costs related to such purposes. Article XIX also provides for some purposes related to “Mass Transit Guideways”, but there are no such facilities in Nevada County. NCTC has always exchanged its federal funds for state funds and has programmed them for maintenance and rehabilitation of local streets and highways.

- ◆ **Transportation Enhancement Activities (TEA).** National policy in ISTEA included recognition that transportation programs, while vital for national mobility and international competitiveness, must also include consideration of overall environmental context and community values and setting. This policy is reflected in the TEA program, which has the intent for transportation enhancements to become a common part of the transportation investment policy integrated into many projects. TEA funds are to be used for transportation related capital improvement projects that enhance quality-of-life in or around transportation facilities. Projects must be over and above required mitigation of normal transportation projects and must be directly related to the transportation system.
- ◆ **Airport Improvement Program (AIP).** The Federal AIP provides grants to public agencies, 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.
- ◆ **Safe Routes to School Program (SR2S).** Caltrans has established a “Safe Routes to School” construction program utilizing federal transportation funds for construction of bicycle and pedestrian safety and traffic calming projects. To qualify for SR2S funds, the project must be located on either a state highway or local road. Projects must correct an identified safety hazard or problem on a route that students use for trips to and from school.

State Funding Programs

- ◆ **State Transportation Improvement Program (STIP).** The State Transportation Improvement Program 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). If Caltrans and a regional agency agree, they may recommend a new project be jointly funded from county and interregional shares. In that case, the region will nominate the county share in the RTIP and Caltrans will nominate the interregional share in the ITIP. RTIPs and the ITIP are submitted to the California Transportation Commission (CTC) for approval.

Except for project planning, programming, and monitoring, all RTIP projects will be capital projects (including project development costs) needed to improve transportation in the region. These projects generally may include, but are not limited to, improving state highways, local roads, public transit (including buses), intercity rail, pedestrian and bicycle facilities, grade separations, transportation system management, transportation demand management, soundwalls, intermodal facilities, and safety. Non-capital costs for transportation system management or transportation demand management may be included where the regional agency finds the project to be a cost-effective substitute for capital expenditures. Other non-capital projects (e.g. road and transit maintenance) are not eligible.

The interregional program has two parts:

1. The first, funded from 10% of the STIP funding, is nominated solely by Caltrans and projects may include state highway, intercity rail, mass transit guideway, or grade separation projects.
2. The second part, funded from at least 15% of the STIP funding, is limited to intercity rail projects and improvements outside urbanized areas on the interregional road system.

Under restricted circumstances, a regional agency may also recommend a project for funding from the second part of the interregional program.

A regional agency may recommend improvements outside urbanized areas on the interregional road system, and the CTC may program that regional recommendation, only if the CTC makes a finding that, based on objective analysis, the recommended project is more cost-effective than a project submitted by Caltrans.

The CTC envisions an Interregional Improvement Program that works toward the achievement of the following six objectives:

1. Completing a trunk system of higher standard state highways (usually expressways and freeways).
2. Connecting all urbanized areas, major metropolitan centers, and gateways to the freeway and expressway system to ensure a complete statewide system for the highest volume and most critical trip movements.
3. Ensuring a dependable level of service for movement into and through major gateways of statewide significance and ensuring connectivity to key intermodal transfer facilities, seaports, air cargo terminals, and freight distribution facilities.
4. Connecting urbanizing centers and high growth areas to the trunk system to ensure future connectivity, mobility, and access for the state's expanding population.

5. Linking rural and smaller urban centers to the trunk system.
6. Implementing an intercity passenger rail program, (including interregional commuter rail), that complies with Federal and State laws, improves service reliability, decreases running times, and reduces the per passenger operating subsidy.

The Caltrans ITIP will be based on a Strategic Plan for implementing the interregional program. The Strategic Plan should address development of both the interregional road system and intercity rail in California.

- ◆ ***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 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.

Beginning in 2007, the state legislature drastically cut the STA program to backfill state general fund shortfalls due to the recent economic downturn. Funding for the STA program was eliminated in the fiscal year (FY) 2009/10 state budget fiscal year. However, in March 2010 the Governor enacted Assembly Bill (AB) X8 6 and AB X8 9, which is commonly referred to as the “gas tax swap”. These bills included a one-time appropriation of \$400 million to the STA program to help fund transit operations for the remainder of FY 2009/10 and FY 2010/11 and are projected to generate approximately \$350 million starting in FY 2011/12.

- ◆ ***Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA)*** appropriates Proposition 1B bond funds to eligible public transportation projects for capital purposes over a ten-year period through FY 2017/18. Funding for this program is allocated on a similar basis as the STA funding program.
- ◆ ***Transit System Safety, Security, and Disaster Response Account (TSSSDRA)*** appropriates Proposition 1B bond funds to eligible public transportation projects for capital projects that increase protection against security and safety threats over a ten-year period through FY 2017/18. Funding for this program is allocated on a similar basis as the STA funding program.
- ◆ ***Bicycle Transportation Account (BTA) Program***. The BTA is intended to provide funds for bicycle transportation projects that improve the safety and convenience for bicycle commuters. Funding for projects is awarded through a competitive grant process and administered by Caltrans. To be eligible for BTA funding, cities and counties must have an adopted Bicycle Transportation Plan that has been approved by the appropriate regional transportation planning agency and Caltrans.

Caltrans anticipates an appropriation of \$7.2 million annually for projects that improve safety and convenience for bicycle commuters. Applicants must provide a match of at least

10 % of the total project cost. No applicant shall receive more than 25 percent of the total amount transferred to the BTA in a single fiscal year.

- ◆ **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.

Regional/Local Funding Programs

The funding programs listed on the next page describe the funding programs administered by the Nevada County Transportation Commission (NCTC) and funding programs administered by the local jurisdictions.

- ◆ **Local Transportation Fund (LTF).** Local Transportation Fund is a revenue source generated by ¼ cent of the 8¼ 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. Transit operators in Nevada County utilize 100% of the LTF funds allocated for transit purposes for the operation of transit services and capital replacement.
- ◆ **Regional Transportation Mitigation Fee Program (RTMF).** The NCTC managed a study process that defined the regional transportation investments needed to accommodate the forecasted growth in western Nevada County, and identified the financial resources needed to pay for the investments. The County of Nevada and the cities of Grass Valley and Nevada City participated in these studies at both the policy and technical levels. The study resulted in the development and adoption of the RTMF Program.

The purpose of developing the RTMF Program was 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. The following criteria have been used to determine which projects should be included in an RTMF Capital Improvement Program:

"Regional projects" are generally identified as follows:

- a. Projects on all ramp connections to freeways or expressways.
 - b. Projects on roads functionally classified as "arterials" and above.
 - c. Projects identified as providing regional circulation in city or county general plans and their EIRs.
- ◆ **Gas Tax Swap (Gasoline Excise Tax Subvention).** In March 2010, the Governor enacted Assembly Bill (AB) X8 6 and AB X8 9, which is commonly referred to as the "gas tax swap". The *Gas Tax Swap* is a combination of eliminating the sales tax on gasoline and simultaneously raising the state excise per gallon motor vehicle fuel tax, effective July 1, 2010. Additionally, the *Gas Tax Swap* also includes raising the diesel fuel sales tax rate and simultaneously lowering the state excise diesel fuel tax effective July 1, 2011. The combined actions result in a revenue neutral change of revenue sources utilized to fund transportation projects.

Starting in fiscal year 2010/2011 and thereafter, the sales tax on gasoline was eliminated and an additional \$.173 per gallon excise tax was added to the current \$.18 excise tax for a total excise tax of \$.353 per gallon. Beginning in March 1, 2011 and each March 1st thereafter, the State Board of Equalization will estimate funding generated through the previous per gallon sales tax and adjust the excise tax to account for the difference. The excise tax revenues will be apportioned 44% to the State Transportation Improvement Program (STIP), 12% State Highway Operation and Protection Program (SHOPP), and 44% will be distributed by formula directly to cities and counties support street and road maintenance.

In FY 2011 and thereafter, there will be slight reduction in subventions due to the reduction in the diesel excise tax. The revenue will fluctuate based on the revenue generated by the 1.75 percent increase in diesel sales tax as the state makes adjustments to maintain overall revenue neutrality.

- ◆ **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. Nevada City and the Town of Truckee currently have voter approved sales tax measures for transportation purposes.

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 based on need and community acceptance. Local jurisdictions will also have to rely more heavily on their own resources, as State funds are spread over an expanding number of communities throughout California. 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.
- ◆ **Benefit Assessment District.** 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 District.*** 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.

STATE HIGHWAY AND REGIONAL PROJECT FUNDING FORECAST

The tables below identify the federal, state, and regional revenue sources that are forecasted to be available for state highway and regional roadway improvement projects during the Plan period. Forecasted revenues were then matched to the “Financially Constrained” State highway and regional transportation projects contained in Tables 5, 6, 8, and 9 in the Action Element of the RTP. Tables 18 and 19 below, summarize the state highway and regional transportation short-term and long-term revenue forecasts. A comparison of the “Financially Constrained” project costs and revenue forecasts is provided in Table 20. Table 21 summarizes the amount of the financially unconstrained (unfunded) state highway and regional transportation needs identified in Tables 7 and 10 of the RTP Action Element.

**TABLE 18
State Highway Project Revenue Forecast (In Thousands \$)**

Revenue Source	Short-Term 2010-2020	Long-Term 2020-2030	Total Revenue
RIP Funding Forecast*	\$21,621	\$10,000	31,621
IIP Funding Forecast**	\$1,121	\$0	\$1,121
CMIA (Proposition 1B)***	\$5,365	\$0	\$5,365
ARRA***	\$2,000	\$0	\$2,000
SHOPP Funding Forecast	\$2,240	\$0	\$2,240
Programmed CMAQ Funding	\$550	\$0	\$550
RTMF Program	\$3,451	\$0	\$3,451
Local Funds	\$5,485	\$0	\$5,485
Total	\$41,833	10,000	\$51,833

* The short-term revenue forecast of RIP revenue includes \$5 million of unprogrammed RIP reserve and assumes \$1 million a year in additional STIP shares beginning in FY 2015.** It is anticipated that Caltrans will continue partner funding with NCTC in the future; however, no long-term future IIP or SHOPP funding is currently programmed.***ARRA and CMIA were one time funding programs.

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**TABLE 19
Regional Roadway Project Revenue Forecast (In Thousands \$)**

Revenue Source	Short-Term 2010-2020	Long-Term 2020-2030	Total Revenue
RTMF Program	\$0	\$9,022	\$9,022
Grass Valley Dev. Fee	\$0	\$13,430	\$13,430
Nev. Co. Dev. Fee	\$1,500	\$1,750	\$3,250
Truckee Traffic Fee	\$53,708	\$7,556	\$61,264
Caltrans	\$0	\$147	\$147
Local Funding	\$6,225	\$5,719	\$11,944
Total	\$61,433	\$37,624	\$99,057

TABLE 20
Summary of Costs and Revenues
Financially Constrained State Highway and Regional Projects (In Thousands \$)

Financially Constrained Comparison of Expenditures to Revenue From Table 5, 6, 8, & 9						
Revenue Source	Short-Term Costs 2010-2020	Short-Term Revenue Forecast	Short-Term Costs versus Revenues Surplus / (Deficit)	Long-Term Costs 2020-2030	Long-Term Revenue Forecast	Long-Term Costs versus Revenues Surplus / (Deficit)
State Highway Projects **						
RIP Funds	\$11,676	\$21,621 *	\$9,945	\$0	\$11,000	\$11,000
IIP Funds	\$1,121	\$1,121	\$0	\$0	\$0	\$0
CMIA Funds	\$5,365	\$5,365	\$0	\$0	\$0	\$0
ARRA Funds	\$2,000	\$2,000	\$0	\$0	\$0	\$0
SHOPP Funds	\$2,240	\$2,240	\$0	\$0	\$0	\$0
CMAQ Funds	\$550	\$550	\$0	\$0	\$0	\$0
RTMF Program	\$3,451	\$3,451	\$0	\$0	\$0	\$0
Local Funds	\$5,444	\$5,485	\$41	\$0	\$0	\$0
Total	\$31,847	\$41,833	\$9,986	\$0	\$11,000	\$11,000
Regional Projects						
RTMF	\$0	\$0	\$0	\$9,022	\$9,022	\$0
Grass Valley Dev. Fee	\$0	\$0	\$0	\$13,430	\$13,430	\$0
Nev. Co. Dev. Fee	\$1,500	\$1,500	\$0	\$1,750	\$1,750	\$0
Truckee Traffic Fee	\$53,708	\$53,708	\$0	\$7,556	\$7,556	\$0
Local Funds	\$6,225	\$6,225	\$0	\$5,719	\$5,719	\$0
Caltrans	\$0	\$0	\$0	\$147	\$147	\$0
Total	\$61,433	\$61,433	\$0	\$37,624	\$37,624	\$0

* The short-term revenue forecast of RIP revenue includes \$5 million of unprogrammed RIP reserve and assumes \$1 million a year in additional STIP shares beginning in FY 2015. **Costs for regionally funded projects with a State Highway component are shown above under "Regional Projects". No long-term State Highway Projects are currently programmed in the State Transportation Improvement Program (STIP), but short-term funding identified for Project Initiation Document development is anticipated to lead to programming of long-term STIP funded State Highway projects.

TABLE 21
Summary of Costs and Deficits
Unconstrained (Unfunded) State Highway and Regional Projects (In Thousands \$)

Unconstrained Project Costs From Tables 7 & 10		
	Project Costs 2010-2030	Total Deficit
State Highway Projects		
Western Nev. Co.	\$270,669	(\$269,260)
Eastern Nev. Co.	\$44,100	(\$42,980)
Total	\$314,769	(\$312,240)
Regional Projects		
Western Nev. Co.	\$21,275	(\$16,115)
Eastern Nev. Co.	\$0	\$0
Total	21,275	(\$16,115)

TRANSIT FUNDING FORECASTS

Tables 22 and 23 identify the federal, state, and local revenue sources that are forecast to be available for the operation of public transit during the plan period. Forecasted revenues were then compared to the projected operating costs for public transit services in western and eastern Nevada County and detailed in Tables 24 & 25.

TABLE 22
Summary of Transit Revenues for Western Nevada County (In Thousands)

Transit Revenue	W. Nevada County Short-Term 2010-2020	W. Nevada County Long-Term 2020-2030	Total
LTF Funds	\$18,749	\$25,196	\$43,945
CTS Funds	\$1,182	\$1,966	\$3,148
Fare Revenue	\$3,266	\$3,608	\$6,874
STA Funds*	\$3,980	\$4,068	\$8,048
FTA 5311 Funds	\$3,634	\$4,834	\$8,468
Total	\$30,811	\$39,672	\$70,483

* STA estimates are based on projected statewide revenue resulting from the "Gas Tax Swap" legislation passed March 22, 2010. Actual revenue may vary as population numbers increases or decreases in relation to this formula program.

TABLE 23
Summary of Transit Revenues for Eastern Nevada County (In Thousands \$)

Transit Revenue	E. Nevada County Short-Term 2005-2015	E. Nevada County Long-Term 2016-2027	Total
LTF Funds	\$3,704	\$4,978	\$8,682
Fare Revenue	\$1,614	\$2,122	\$3,736
STA Funds*	\$745	\$809	\$1,554
FTA 5311 Funds	\$708	\$951	\$1,659
Total	\$6,771	\$8,860	\$15,631

* STA estimates are based on projected statewide revenue resulting from the "Gas Tax Swap" legislation passed March 22, 2010. Actual revenue may vary as population numbers increases or decreases in relation to this formula program.

TABLE 24
**Comparison of Projected Western Nevada County Transit/Paratransit
Revenue and Operating Costs Surplus/Deficit (In Thousands \$)**

	W. Nevada County Short-Term 2010-2020	W. Nevada County Long-Term 2020-2030	Total
Projected Transit Revenue	\$30,811	\$39,672	\$70,483
Projected Transit/Paratransit Operating Costs*	\$28,842	\$38,761	\$67,603
Balance	\$1,969	\$911	1,870

* Assumes annual 3% escalation in operating costs over period of the plan.

TABLE 25
**Comparison of Projected Eastern Nevada County Transit/Paratransit
Revenue and Operating Costs (In Thousands \$)**

	E. Nevada County Short-Term 2010-2020	E. Nevada County Long-Term 2020-2030	Total
Projected Transit Revenue	\$6,771	\$8,860	\$15,631
Projected Transit/Paratransit Operating Costs*	\$6,961	\$8,246	\$15,207
Balance	(\$190)**	876	\$424

* Assumes annual 1.9% escalation in operating costs over the period of plan. **Implementation of the Eastern Nevada County Transit Development Plan recommendations to increase passenger fares along with modification to the non-winter route to increase productivity are projected to address the projected deficit.

ADDITIONAL NCTC REVENUE FORECASTS

The tables below provide forecasts of two discretionary funding sources allocated by NCTC.

TABLE 26
Congestion Mitigation and Air Quality (CMAQ) Program Revenue (In Thousands \$)

	W. Nevada County Short-Term 2010-2020	W. Nevada County Long-Term 2020-2030	Total
Projected CMAQ Revenue	\$9,229	\$10,999	\$20,228

TABLE 27
Regional Surface Transportation Program (RSTP) Revenue (In Thousands \$)

	NCTC Short-Term 2010-2020	NCTC Long-Term 2020-2030	Total
Projected RSTP Revenue	\$8,023	\$8,375	\$16,398

NON-MOTORIZED TRANSPORTATION FUNDING

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 3.0% beyond FY 2010/11, indicate approximately \$1,079,803 will be available over the plan period. RSTP funding forecasts, indicate approximately \$16,397,807 will be available over the plan period. However, it should be noted this funding source can be utilized on a wide range of other types of transportation projects. Forecasts of CMAQ funding revenue for western Nevada County, indicate approximately \$20,288,752 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. The majority of non-motorized facilities in Nevada County will be funded through state grant programs, such as the State Bicycle Transportation Account, which had a funding level of \$7,200,000 statewide in 2009.

AVIATION FUNDING

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.