

# CHAPTER 1—INTRODUCTION

## Overview

The Regional Transportation Plan of Washoe County for federal air quality and financial conformity purposes goes through the year 2030. The Plan also contains for illustrative purposes additional unfunded improvements and needs analysis through the year 2040 in accordance with 23 CFR 450.322(f)(10)(vii).

The Regional Transportation Commission (RTC) was formed in July 1979 as a result of legislation approved by the Nevada State Legislature, which consolidated the Regional Street and Highway Commission, the Regional Transit Commission and the Washoe County Area Transportation Study Policy Committee. As the designated Metropolitan Planning Organization (MPO) for Washoe County, the RTC is responsible under the Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU) for five core functions:

**Establish a setting.** Establish and manage a fair and impartial setting for effective regional decision-making in the metropolitan area.

**Identify and evaluate alternative transportation improvement options.** Use data and planning methods to generate and evaluate alternatives. Planning studies and evaluations are included in the Unified Planning Work Program or UPWP.

**Prepare and maintain a transportation plan.** Develop and update a long-range transportation plan for the metropolitan area covering a planning horizon of at least 20 years that fosters (1) mobility and access for people and goods, (2) efficient system performance and preservation and (3) good quality of life. In metropolitan areas, the transportation plan is the statement of the ways the region plans to invest in the transportation system. Per federal regulations, the plan shall "include both long-range and short-range program strategies/actions that lead to the development of an integrated intermodal transportation system that facilitates the efficient movement of people and goods."

For example, the plan should address:

- Goal, objectives and policies
- Strategies, improvements and activities to achieve the goals and objectives consistent with the policies
- A systems level approach by considering roadways, transit, non-motorized transportation and intermodal connections
- Projected demand for transportation services over 20 years
- Regional land-use, development, housing and employment goals and plans

- Cost estimates and reasonably available financial sources for operation, maintenance and capital investments
- Ways to preserve existing roads and facilities and make efficient use of the existing system

**Develop a Transportation Improvement Program (TIP).** Develop a short-range (four-year) program of transportation improvements based on the long-range transportation plan; the TIP should be designed to achieve the area's goals, using spending, regulating, operating, management and financial tools.

**Involve the public.** Involve the general public and other affected constituencies in the four essential functions listed above.

### **The Regional Transportation Plan (RTP)**

SAFETEA-LU regulations state:

*The MPO...in cooperation with the States and mass transportation operators, shall develop transportation plans and programs for urbanized areas of the State.*

Included in this requirement for the urban transportation planning process is the development of a Regional Transportation Plan (RTP) that describes policies, strategies, facilities, changes to existing facilities and proposed facilities. Any street and highway or transit project proposed to be built with federal funds must be consistent with this plan.

The Regional Transportation Plan is the community's vision for the transportation system it would like to have in the future. This vision is articulated in goals, quantified with specific, measurable objectives and guided by policies. While this vision is integrated and multimodal, the plan devotes chapters to specific modal areas to create a document that is accessible to the public. To meet these goals and objectives, the RTP proposes highway improvements that focus on the maintenance of the existing street and highway system and provide additional capacity for existing and future residents and businesses. The RTP also proposes complementary bicycle, pedestrian and public transportation improvements. The RTP identifies transportation system management (TSM) technologies and practices, transportation demand management (TMD) policies and the transportation control measures (TCM) necessary to implement them. It also examines issues concerning aviation and goods movement planning in Washoe County. Finally, the Plan discusses the financial resources, including existing and reasonably expected new revenue sources, that will be necessary to implement the needed transportation facilities and services.

## Transportation Planning Process

Transportation planning is a cooperative process designed to foster involvement by all users of the system such as the business community, community groups, developers, environmental organizations, freight operators and the general public. The Regional Transportation Commission (RTC) conducts a proactive public participation process in development of the RTP. As generically illustrated in **Figure 1-1**, the transportation planning process is a continuous cycle that constantly adjusts to community desires and the realities of funding and accomplishment.

**Figure 1-1**  
**Transportation Planning Process**



Transportation planning in our community includes a number of steps:

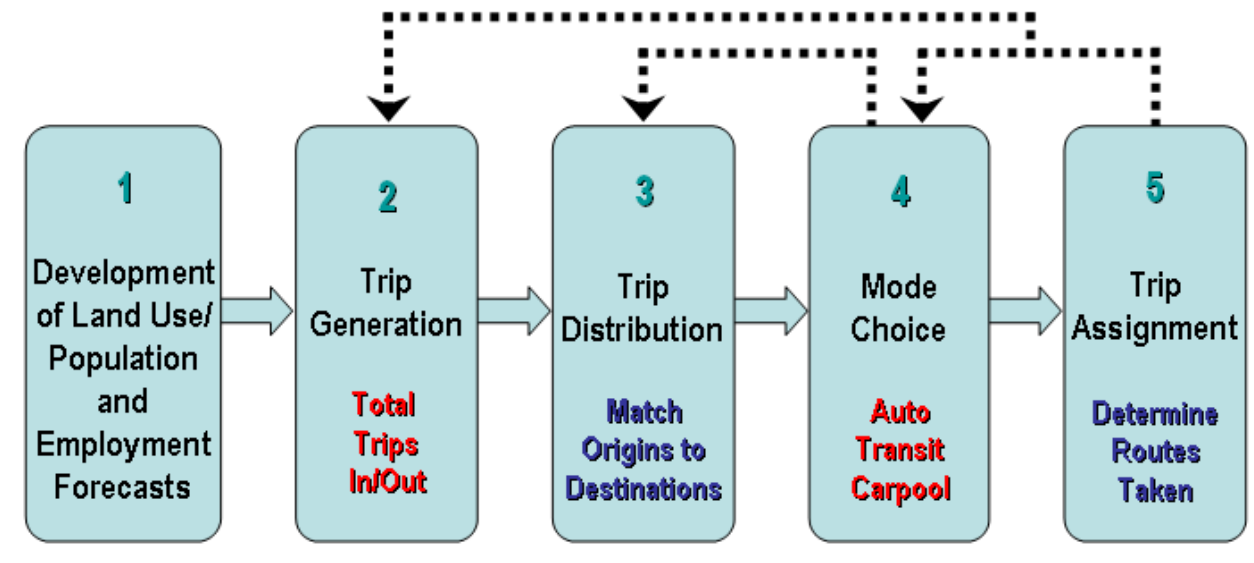
- Monitoring existing system performance, physical condition and financial resources
- Analyzing future population and employment growth provided by the local jurisdictions, including assessing projected land uses in the region and identifying major growth corridors
- Identifying current and future areas of congestion and access needs
- Establishing goals, objectives and policies that describe the type of transportation system the community desires to have

- Analyzing, through detailed planning studies, various transportation improvement strategies that will accomplish the transportation goals of the community in ways that are consistent with community objectives and policies
- Estimating the impact of recommended future improvements to the transportation system on environmental features, air quality and the movement of people and goods
- Developing a financial plan for securing sufficient revenues to cover the costs of implementing the Plan
- Implementation and operation of improvements, services and activities

### Travel Demand Modeling Process

Transportation planning relies on travel demand forecasting, which involves predicting the impacts that various policies and programs will have on travel in the region. Travel demand modeling tools help with developing forecasts using land-use data provided by local agencies. The RTC uses the EMME3 model for developing travel forecasts in the region. A travel forecast might include the number of cars on a future freeway or the number of passengers on a new bus route. Figure 1-2 illustrates the travel demand forecasting process.

**Figure 1-2  
Travel Demand Forecasting Process**

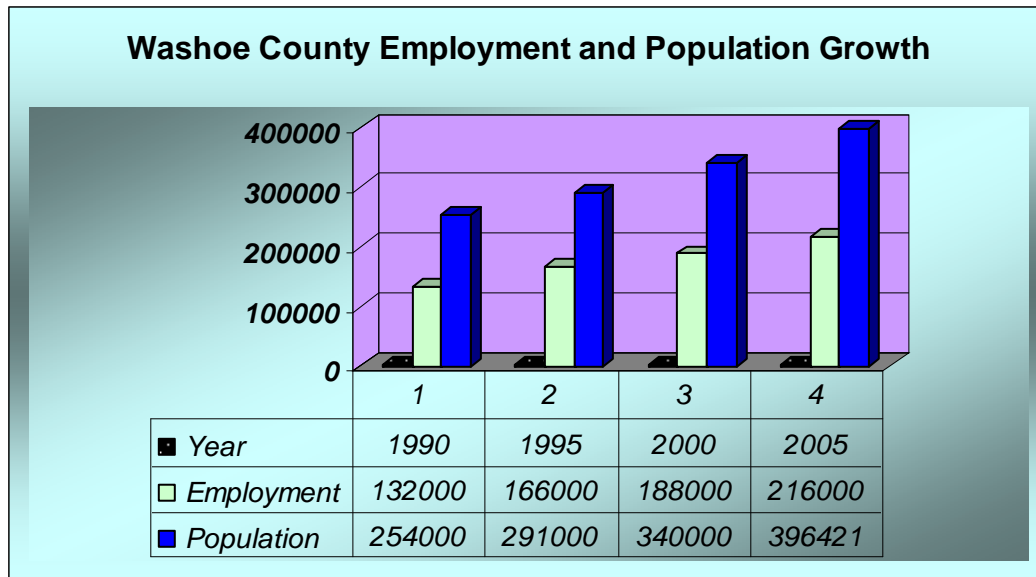


### Population and Employment Trends in Washoe County

Population, employment and land-use data are an essential foundation for creation of the Regional Transportation Plan (RTP) since the amount and location of development determines the location and volume of traffic on each street. Washoe County has seen

consistent and, at times, rapid growth over the last 30 years (see **Figure 1-3**). Between 1990 and 2005, the US Census showed the county population increased from 121,000 to 396,421. During this same time, employment increased from 54,000 to 216,000.

**Figure 1-3**



Federal regulations require the RTP to be based on the best available land-use data, which, for population and employment, the RTC has historically obtained from the Cities of Reno and Sparks and from Washoe County. For this RTP, the RTC began this process in late 2006 through a series of meetings with the planning personnel from the local governments and participation by staff of the Truckee Meadows Regional Planning Agency (TMRPA). The RTP was developed using the data obtained from the local governments in early 2007. In June 2008, a new consensus forecast was published and approved. Although the new population numbers are somewhat lower than the original numbers received from the local governments, the difference in numbers does not undermine the basic validity of the planning process as it was guided by goals, objectives and policies that are independent of specific population forecasts. While growth may occur somewhat more slowly, the projects, services and programs necessary to make the community's transportation vision a reality simply would be implemented at an appropriately slower pace. This plan acknowledges the updated population forecasts and provides context by identifying a range of years for a particular population that are consistent with original information received in early 2007 and the recently approved consensus forecast. These ranges are shown in **Table 1-1**. With regard to travel forecasting and air quality analysis, it was assumed that the population milestones would be reached at the earliest time of the ranges to insure that the worst case for emissions is considered. The specific data sets used for worst case air quality and traffic analysis for the RTP planning area, which includes the City of Reno, the City

of Sparks, the urbanized portion of Washoe County and a portion of Storey County that will be accessed directly from the regional road network, are discussed in **Appendix A**.

**Table 1-1**

<b>Washoe County Population</b>	<b>Time Frame</b>
<b>440,000</b>	<b>2009-2010</b>
<b>485,000</b>	<b>2012-2015</b>
<b>550,000</b>	<b>2016-2022</b>
<b>620,000</b>	<b>2022-2030</b>
<b>730,000</b>	<b>2031-2039*</b>
<b>800,000</b>	<b>2040-2044*</b>

\* The Regional Transportation Plan of Washoe County for federal air quality and financial conformity purposes goes through the year 2030. The Plan also contains for illustrative purposes additional unfunded improvements and needs analysis through the year 2040.

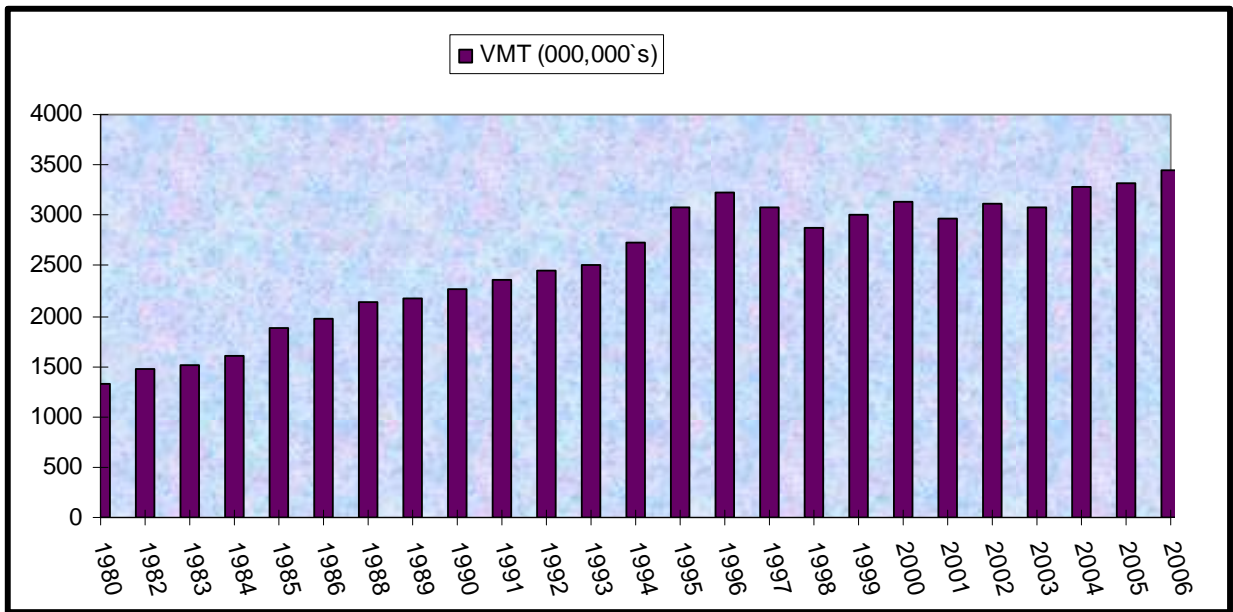
Population and employment are expected to grow steadily over the 20-year period of the RTP. Several new large planned developments have been approved or are in the approval process since the last RTP was developed in 2004. These include the East Truckee Canyon Area Plan, the Heinz Ranch and Evans Ranch developments in the Cold Springs Valley, the Winnemucca Ranch Corridor and the Pyramid Highway Corridor.

### **Vehicle Miles Traveled, Travel Time and Population Trends**

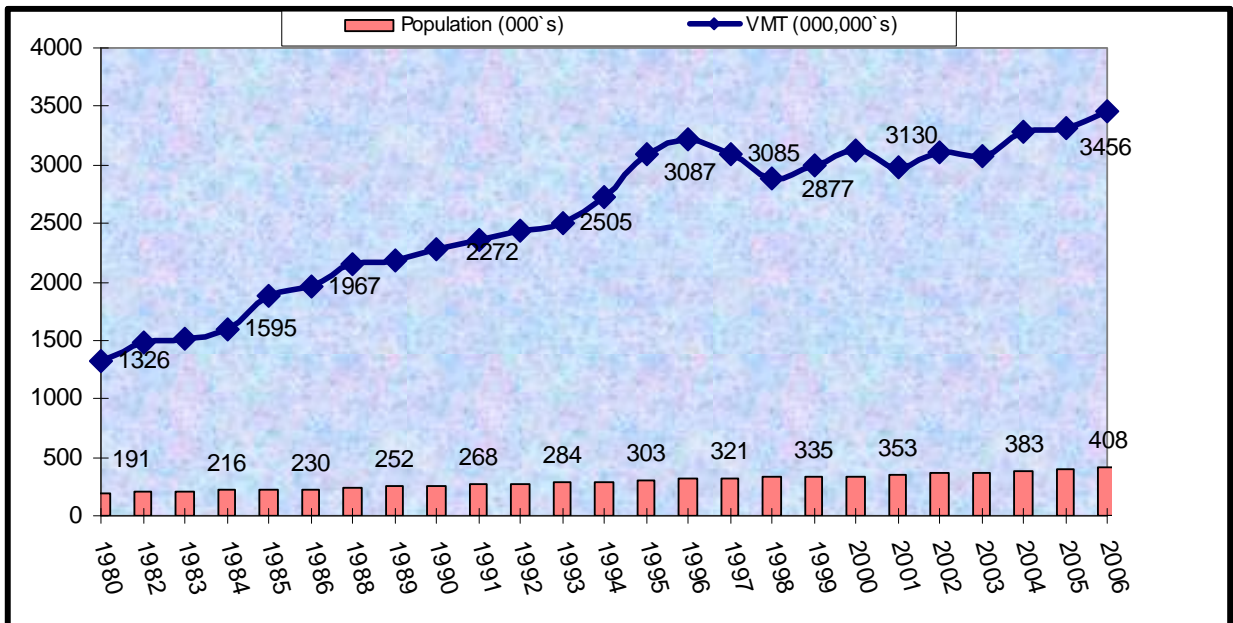
The growth in population and employment is a major factor in the increase of annual vehicle miles traveled (VMT) in Washoe County. Additionally, much of the recent residential development has occurred in the outlying areas. As a result, trip lengths for all trip purposes have increased. **Figure 1-4** shows the estimated annual VMT in Washoe County from 1990 to 2006. In 2006, there was more than 3.5 billion VMT as compared with 2.2 billion in 1990, which equates to 53% increase. **Figure 1-5** shows the increase in population and VMT in Washoe County.

**Figure 1-6** shows the increases in the projected VMT and travel time in the RTP planning area under a status quo scenario that assumes no new roadway improvements are built through 2040. Under this scenario, the daily VMT will increase by approximately 170% over the 2000 VMT levels. At the same time, system delay time will increase by approximately 5,500% compared with the delay levels in 2000. The figure illustrates that a small increase in the daily VMT will result in large increase in the total daily delay.

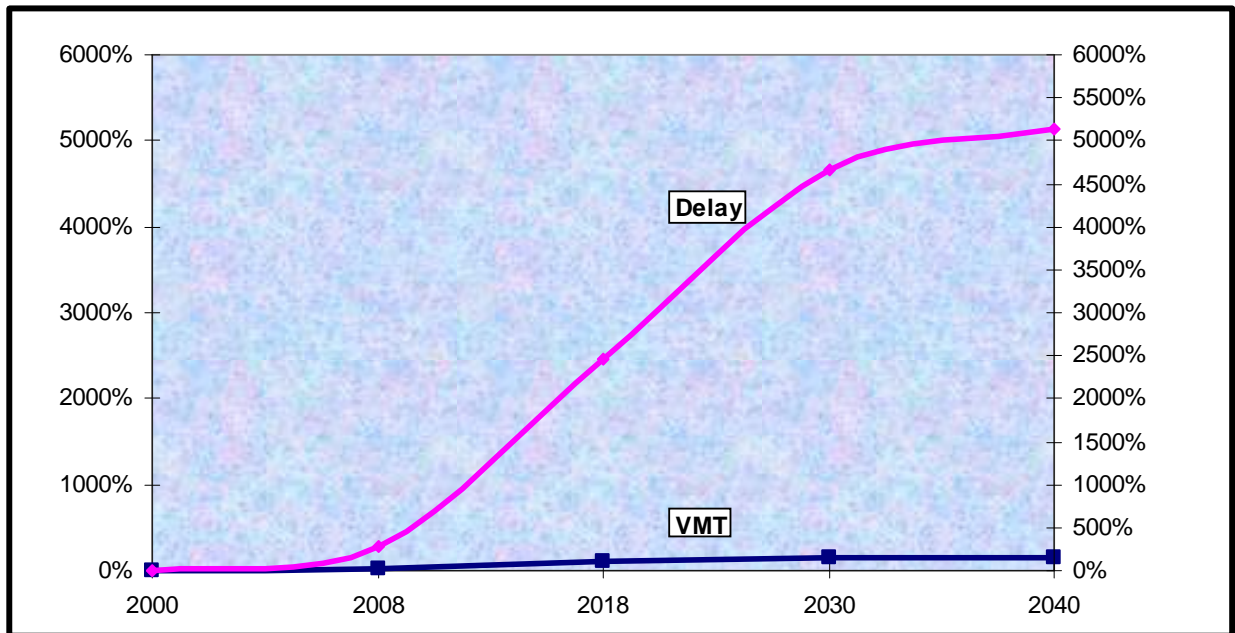
**Figure 1-4**  
**Washoe County Annual Vehicle Miles Traveled**



**Figure 1-5**  
**Washoe County VMT and Population Growth**



**Figure 1-6  
RTP Planning Area VMT and Delay—Status Quo (No Build) Scenario**



**Conformity with Federal Regulations**

The Safe, Accountable, Flexible, and Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU) places requirements upon the RTC acting as the Metropolitan Planning Organization (MPO) for Washoe County. The MPO, in cooperation with the state, must prepare an RTP for the urbanized area or areas that will be urbanized within at least the 20-year forecast period. The RTP is the region’s long-range plan for all modes of transportation. The RTP addresses travel by automobiles, public transportation, bicycles and pedestrians as well as management strategies to make the transportation system more efficient. Federal regulations require that the RTP identify the costs of the implementation and funding of the Plan and must be fiscally constrained through the year 2030. It must also ensure that there is no degradation of the region’s air quality.

SAFETEA-LU requires the planning process to consider the following eight important factors. The RTP has integrated all these factors into the long-range planning process and each factor is also given consideration in the annual Unified Planning Work Program (UPWP) and the short-range Regional Transportation Improvement Program (RTIP).

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency.
2. Increase the safety of the transportation system for motorized and non motorized users.



3. Increase the security of the transportation system for motorized and non-motorized users.
4. Increase the accessibility and mobility options available to people and for freight.
5. Protect and enhance the environment, promote energy conservation and improve quality of life.
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.

### **Air Quality Conformity and Pollutants Status**

The RTP must meet all air quality regulatory requirements through the year 2030. No air quality analysis is required for the illustrative facilities plan (2031-2040). Chapter 10 contains the air quality conformity and pollutant status analysis.

### **Regional Transportation Plan Public Participation Process**

To achieve a community-wide consensus in developing the RTP, the RTC encouraged public involvement and technical guidance throughout the process. Several RTC committees also provided direction in the preparation of the RTP.

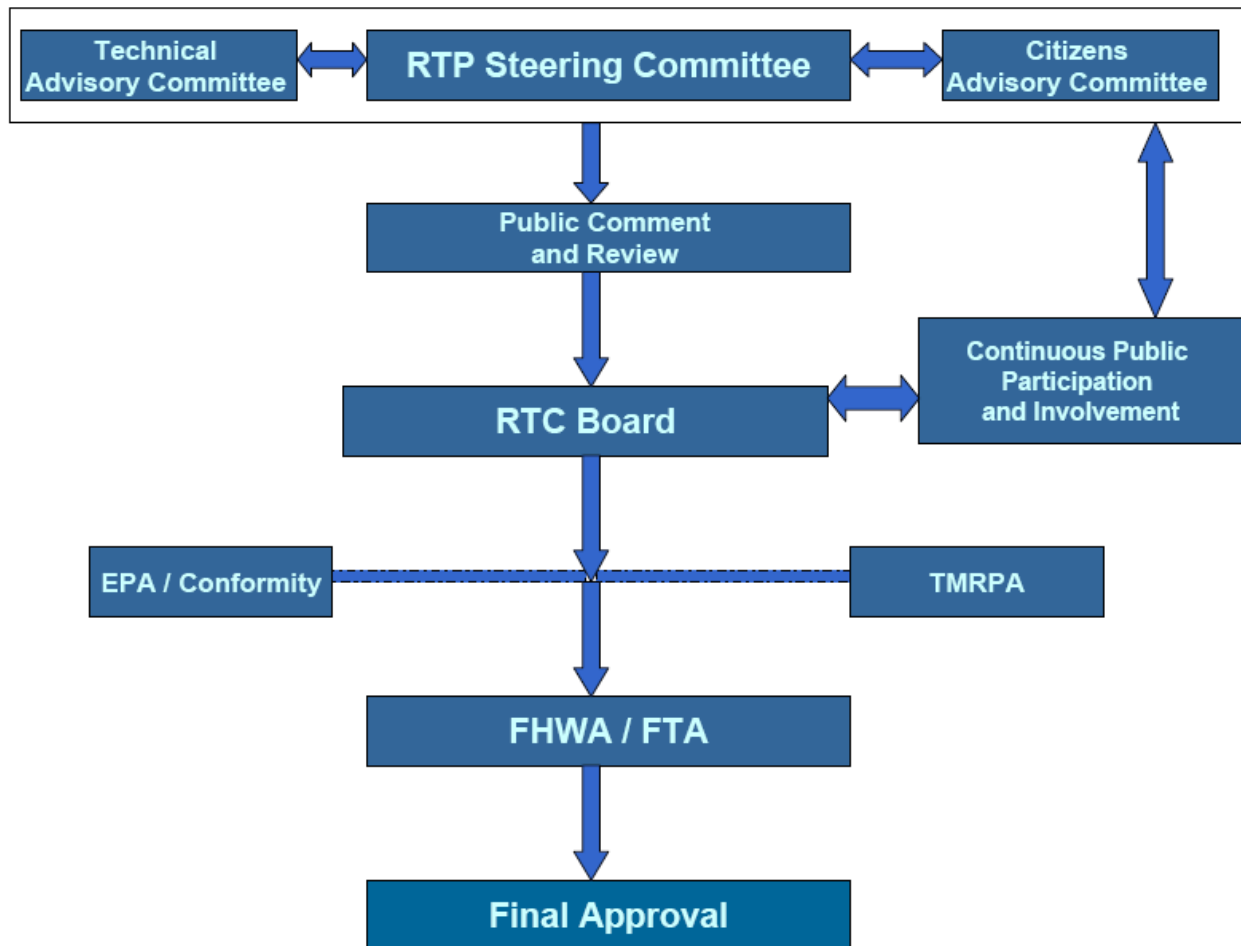
**RTP Steering Committee.** The RTP Steering Committee was established to guide the development of the RTP update. Their task was to make recommendations for solutions to problems and provide input on goals, objectives and policy issues. The committee was made up of neighborhood, transportation, development, business/economic and environmental/ open space representatives as well as a representative from each of the local planning commissions. The meetings were held at least twice per month to provide direction and input into the RTP update process. Two public open houses were also held during this time. A public hearing was held before the RTC Board.

The public had access to the RTC's website that included all information regarding the RTP development. The public was also able to provide comments and ask questions utilizing the website.

**Technical Advisory Committee (TAC).** The RTC Technical Advisory Committee (TAC), made up of representatives from the local planning and public works departments, provided important technical input from all levels of government as well as

a discussion forum regarding local and regional issues. TAC members received monthly updates on the RTP process and assisted in development and review of the new level of service (LOS) standards.

**Citizens Advisory Committee (CAC).** The RTC Citizens Advisory Committee (CAC) was also involved in the development of the RTP, receiving monthly updates on the RTP process. The CAC includes citizens from various jurisdictions of Washoe County appointed by the RTC Board to provide public input to RTC staff in the conduct of transportation planning activities. CAC membership is geographically diverse, thus providing another forum for discussion of regional transportation issues.



### Regional Transportation Plan (RTP) Adoption Process

As the designated MPO of Washoe County, it is the RTC's responsibility to prepare a regional transportation plan that best satisfies the future needs and concerns of Washoe County. The RTP is required to be updated every four years or when conditions change

enough to warrant a revision. This RTP replaces the 2030 RTP adopted in November 2004 and approved by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) in April 2005.

The RTP is adopted by the RTC Board and submitted to the federal government for approval (FHWA, FTA, Environmental Protection Agency (EPA)). The RTP also serves as the transportation element of the Truckee Meadows Regional Plan (TMRP) and under the separate, non-federal requirements of Nevada Revised Statutes (NRS) 278, will be submitted to the Truckee Meadows Regional Planning Agency (TMRPA) for local conformance review.

### **RTP Format**

The RTP document is presented by modal chapters (street and highway, public transportation, etc.). Chapter 2 presents the goals and policies for all transportation modes. Chapters 3 through 8 contain the individual elements by mode and the financial element. Chapter 9 contains the Congestion Management Process, Chapter 10 includes the air quality conformity analysis, Chapter 11 includes the federal regulatory conformity determination, Chapter 12 covers environmental justice and Chapter 13 is the Alternatives Analysis.