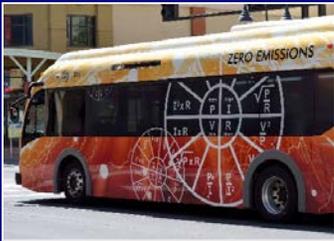


Trans-Sierra Transportation Plan



March 2015

prepared for



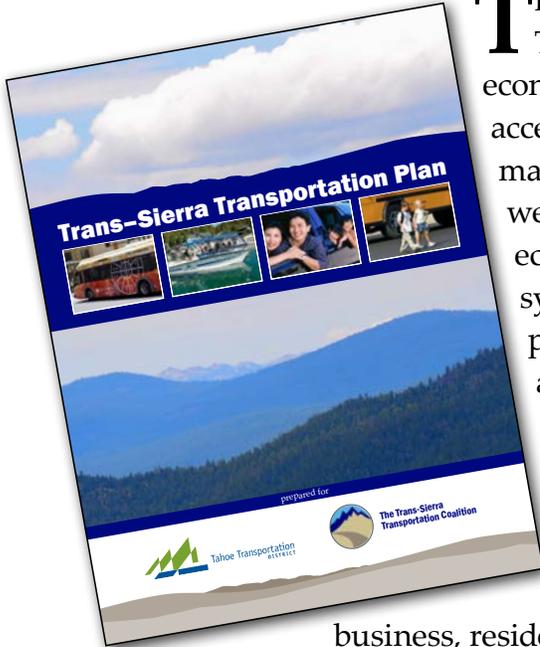
Tahoe Transportation
DISTRICT



**The Trans-Sierra
Transportation Coalition**



Transportation: It's That Important!



Transportation is essential to our quality of life in the Trans-Sierra Region. It is the foundation of a vibrant economy and job creation. Safe commutes to work and access to the numerous attractions of our Region, while maintaining blue skies and clean water, depend on a well thought out, efficient transportation system. The economic activities that depend on our transportation system generate the revenue that funds our schools, police, fire protection, parks, and the many other amenities that make our communities great places to live and work.

Good transportation systems don't just happen; building, operating, maintaining, and renewing our transportation systems takes long-term commitment and dedication. As the transportation needs of

business, residents, and visitors evolve, so too must the transportation system. This requires thoughtful, on-going dialog, planning, and execution.





That's what's behind the Trans-Sierra Transportation Coalition, a group of 11 California and Nevada counties, federal and state agencies, stakeholders, and citizens from Northern California and Northern Nevada committed to ensuring that the Region's

transportation continues to support our economic vitality and preserve our quality of life. This Coalition is dedicated to developing collaborative, innovative strategies to meet the unique transportation challenges and needs of the Trans-Sierra Region while sustaining and enhancing the quality of life for current and future generations.

As part of this ongoing, collaborative effort, the Coalition has created this Trans-Sierra Transportation Plan. This Plan honors and draws upon the individual comprehensive

plans developed by the participating state and local transportation planning agencies for their respective communities. All of the projects and services included within these individual plans, including those that are not currently funded, are incorporated into this Trans-Sierra Transportation Plan by reference.

This Plan is meant to inform, stimulate, and excite the readers about how planned investments in a strong, coordinated transportation system can make the communities of the Trans-Sierra Region even better places to live, do business, and visit.

“Good transportation systems don't just happen; building, operating, maintaining, and renewing our transportation systems takes long-term commitment and dedication.”

Transportation: It's That Important!





The Trans-Sierra Transportation Coalition's Vision

“The Trans-Sierra Region will be served by an integrated multimodal transportation system that is built, operated, and maintained efficiently and sustainably. The Trans-Sierra transportation system will promote a strong economy by supporting approved land use plans and meeting the mobility needs of residents, visitors, and goods movement. This system will be safe and support environmental protection of our region’s outstanding natural assets by reducing congestion, vehicle emissions, and roadway surface pollution.”





The Trans-Sierra Region: A Place Like No Other

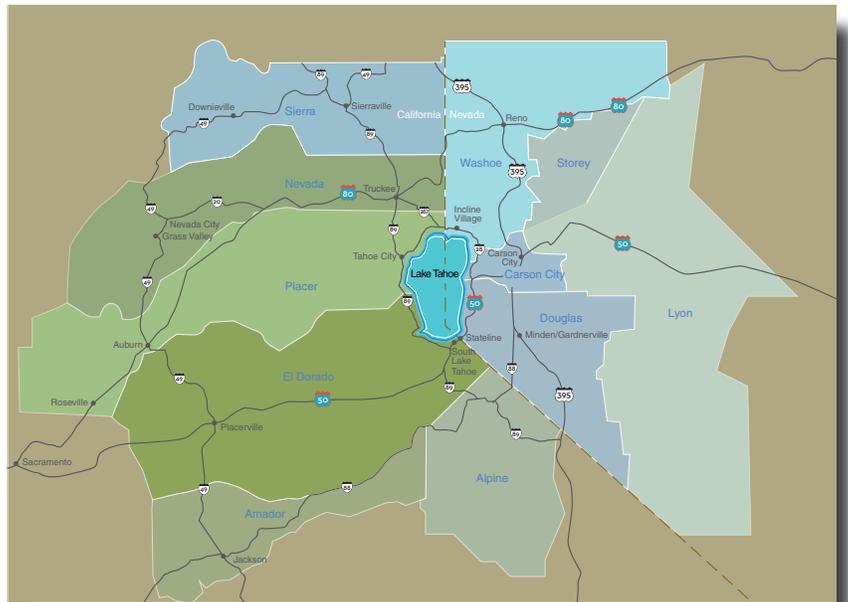
The Trans-Sierra Region of Northern California and Northern Nevada is unique in many ways. It is an enormous but lightly inhabited area of great natural beauty and vast cultural and geographic diversity. It is an area of exceptional environmental sensitivity that must be respected in all of man’s endeavors. While the Trans-Sierra economy is diverse, the lure of our natural and man-made attractions has made tourism and recreation arguably our largest economic sector. The Region straddles the rapidly growing Northern California megapolitan that reaches from San Francisco through Sacramento to Reno and is home to more than 15 million people. These characteristics combine to create unique transportation needs that demand unique transportation solutions.



The Trans-Sierra Region provides wide open spaces with room for recreation and the opportunity for solitude and tranquility that can recharge the human spirit.

Geography and Population

Covering 17,087 square miles, and encompassing six California counties (Alpine, Amador, El Dorado, Nevada, Placer, and Sierra) and five Nevada counties (Carson City, Douglas, Lyon, Storey, and Washoe), the Trans-Sierra Region is home to a sparse 1.2 million people. The relatively small population, dispersed across a large geographic area makes the Trans-Sierra Region a place of wide open spaces that provides room for recreation and opportunities for solitude and tranquility to recharge the human spirit.





Natural Beauty and Man-Made Attractions Provide the Setting for a Lifetime of Experiences



Rising from the foothills to the west, through the rugged Sierra Nevada, and then transitioning to the ranges and basins of Nevada's high desert, the natural beauty of the Trans-Sierra Region is stunning in its diversity. Transected by flowing rivers, the wooded slopes of the foothills are interspersed with flowered meadows, vineyards, and fields.

The Sierra Nevada Range offers dramatic vistas, towering peaks, and alpine lakes, including world renowned Lake Tahoe.

Further to the east, Nevada's mountain ranges and high desert basins allow visitors to see the very bones of the Earth and the big skies of the American West.



The Region teems with wildlife including deer, elk, antelope, big horn sheep, bears, mountain lions, foxes, and coyotes. The skies offer the soothing melodies of song birds and the dramatic flair of falcons, hawks, owls, and eagles including our national bird, the bald eagle. Lakes and streams support robust populations of game fish such as trout and mackinaw.

The Region is also host to a wealth of man-made attractions and recreational activities including ski resorts, gaming venues, theatres, arts, music, museums, historic and archaeological sites, and viticulture to name a few.



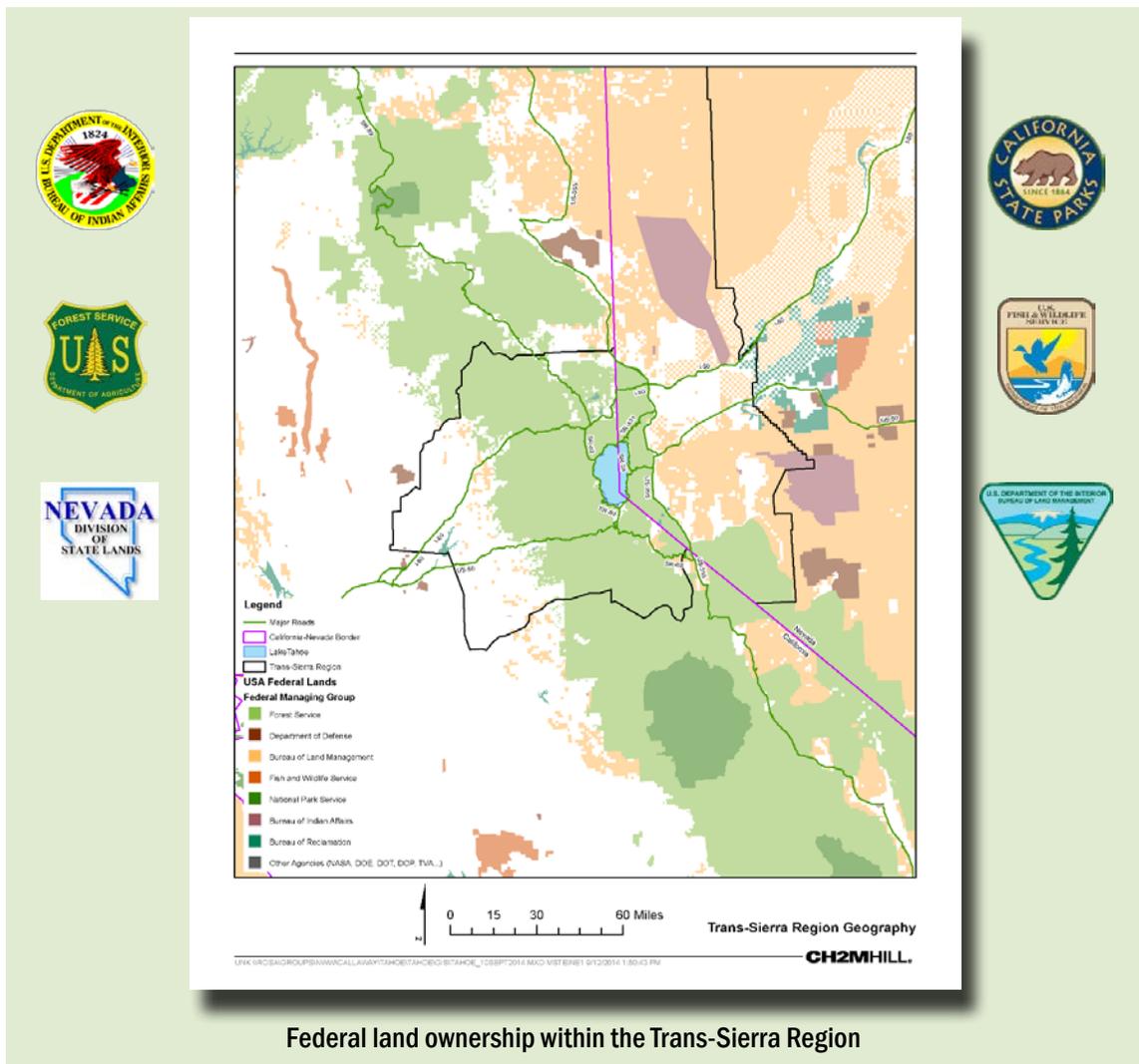


The Gold Country, in the California foothills of the Trans-Sierra Region has developed an extensive winery industry, as well as farms and gardens in the Apple Hill region that are very popular and host numerous arts and cultural festivals. The Trans-Sierra Region also has a number of communities with hotel/casinos that provide gaming and other entertainment and special events that draw many visitors.



Environmental Sensitivity and Sustainability

The natural features and ecosystems of the Trans-Sierra, while bountiful, are also fragile. Extensive and extraordinary measures must be taken to safeguard the wonders of the landscape and the environment in the face of recreational and commercial activities. For the residents of the Trans-Sierra Region, this is a matter of deep personal interest that is further reinforced by the extensive public lands ownership within the Region. The U.S. Forest Service, U.S. Bureau of Land Management, U.S. Bureau of Indian Affairs, U.S. Fish and Wildlife Service, California State Parks, Nevada State Parks, and other agencies administer the majority of the land (approximate 62%) within the Trans-Sierra Region. These and other federal, state, and local agencies must balance the needs of multiple user groups to ensure that the natural treasures of the Region are protected and sustained.



Federal land ownership within the Trans-Sierra Region

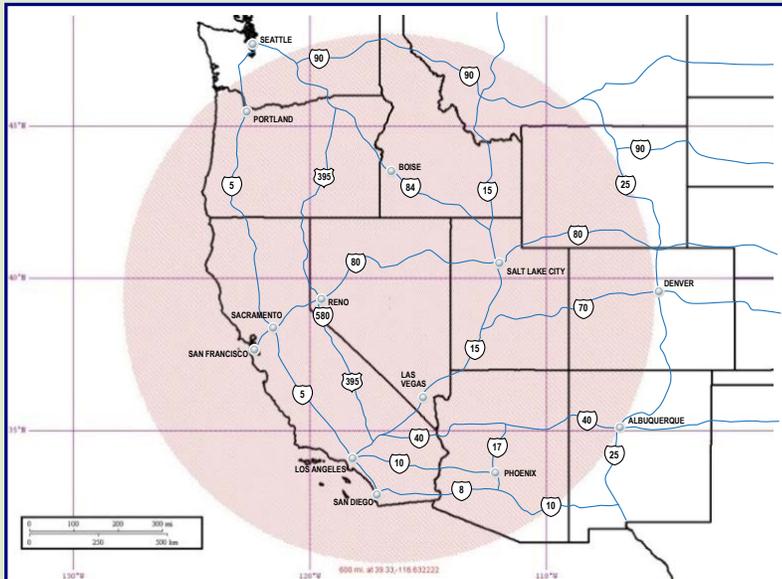


Economy and Tourism

The Trans-Sierra Region is home to major facilities of some of the best known brands in America including: Tesla, Microsoft, Google, Barnes and Noble, Amazon, Walmart, FedEx, Intuit, United Parcel Service, and Hewlett Packard. The Region boasts the world's largest business park, the 107,000-acre Tahoe-Reno Industrial Center, as well as major medical, educational, and research facilities. With

excellent highway and rail connections putting 18% percent of the U.S. population within a day's travel of the Region, it has become a major logistics hub for the Western U.S.

In addition to these commercial and industrial activities, our economy is also strongly driven by year-round tourism and recreation. While most of the visitors



Approximately 60 million people live within 600 miles of the Trans-Sierra Region.

to the Trans-Sierra Region come from California and the Western U.S., the spectacular landscapes and wide array of recreational and entertainment offerings of the Region draw visitors from all over the world.

Tourism is a major industry in the Trans-Sierra Region. Numerous hotel-casinos, wineries, state and national parks, and special events attract more than 13.5 million to the region annually and contribute over \$4 billion to the local economy each year. Many of these visitors come from California (approximately 70% of total visits), the majority coming from the San Francisco Bay area (55%).





The Trans-Sierra Region: Backyard Playground for the Northern California Megapolitan

The wide open spaces and attractions of the Trans-Sierra Region straddle what has been dubbed the Northern California megapolitan, the fast growing urban area stretching from San Francisco, through Sacramento, to Reno. The Northern California

megapolitan is home to some 15 million people today, and this number is expected to increase by an estimated 25-30% by the year 2035. The natural beauty, year-round recreational opportunities, and solitude of the Trans-Sierra Region are a relatively short drive from these urban areas. This proximity makes the Region a key contributor to the overall quality of life for the millions that live and work in the Northern California megapolitan.



The Northern California megapolitan at night



The majority of visitors to North Lake Tahoe make a three-hour (or less) drive on I-80, from the Sacramento and San Francisco Bay areas. These account for 71% of winter visitors and 68% of summertime visitors.



Tourism expenditures in El Dorado and Douglas Counties were estimated at \$1.2 billion in 2006, and an estimated \$634.4 million in income was created by indirect effects. The direct impact of tourism on employment in the Lake Tahoe region was 16,897 jobs with an additional 6,514 jobs generated by indirect effects.



Placer County's estimated direct travel spending was \$787 million in 2008. Local and state sales tax receipts from tourism and recreation amounted to \$43.9 million.



Trans-Sierra Transportation: Unique Needs and Challenges

The unique nature of the Trans-Sierra Region creates unique transportation needs and challenges. First, the Region's transportation system must meet the typical local demands of



residents and businesses. Residents need safe, convenient, and reliable access to work, school, shopping, services, and amenities. Businesses need a system to bring supplies, materials, products, employees, and customers to and from their establishments.

In addition to the typical local demands, the Trans-Sierra Region's transportation system has substantial impacts from tourists, visitors, and recreationists. Roads, highways, parking lots, transit vehicles, bike trails, and pedestrian

ways that function well much of the time are overloaded during weekends, peak seasons, and special events.

Meeting the transportation needs of the Trans-Sierra Region presents significant challenges. The rugged topography and extreme environmental sensitivity of much of the Region severely limits the potential for expanding existing roadways or creating new ones.

Where opportunities for expansion are feasible, the costs are often extraordinarily high due to environmental considerations and the need to keep existing facilities operating during construction due to the lack of alternate routes.

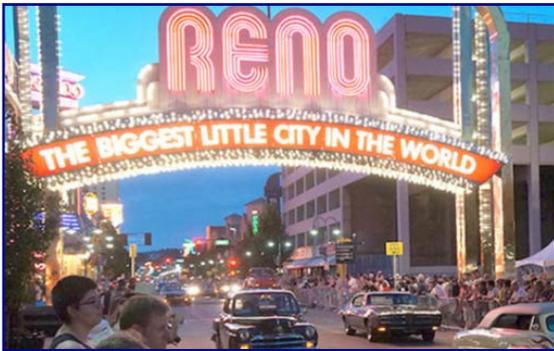
“Residents need safe, convenient, and reliable access to work, school, shopping, services, and amenities. Businesses need a system to bring supplies, materials, products, employees, and customers to and from their establishments.”



“Parking lots, bike trails, and pedestrian ways are often impacted by many of the same factors that afflict the road system and likewise, they do not provide enough capacity when huge numbers of visitors arrive.”

Expanding transit services to provide alternatives to the automobile in large parts of the Trans-Sierra Region is also difficult. In many cases, transit service for residents is hindered by the cost of effectively serving the relatively small resident populations in many of the Region’s communities. To be attractive to most riders, transit service must be convenient, affordable, dependable, and within reasonable

walking distance to the origin and destination of trips and must have well planned schedules and routes to effectively serve demand. Effective transit for visitors is even more problematic. With luggage, equipment, and small children in tow, our transit systems must achieve extraordinary levels of integration and service to deliver a convenient door-to-door journey to those we host.



Parking lots, bike trails, and pedestrian ways are often impacted by many of the same factors that afflict the road system and likewise, they do not provide enough capacity when huge numbers of visitors arrive.



All of these challenges to providing an effective and efficient transportation system that serves the needs of businesses, residents, and visitors in the Trans-Sierra Region will be exacerbated by a growing and changing population of our residents and our visitors.



With an estimated 25 to 30 percent increase in population in the Northern California megapolitan by 2035, our Region can expect to see a similar increase in visits from that megapolitan, in addition to increased visits from the rest of the Nation and the world.



The Trans-Sierra Region population is projected to grow 25 percent from 1.2 million to 1.5 million by 2035. Sustaining the quality of life for those who reside in the Region will depend on a good transportation system.



Nationwide, and in the Trans-Sierra Region, the population is aging. By 2030, the population of residents aged 65 and older in many parts of the Region is expected to nearly double (or more) by 2030. Our transportation system will have to evolve to meet the changing needs of our residents and visitors.



Meeting the Needs of the Trans-Sierra: Transportation for Today and Tomorrow

The individual transportation plans of the entities in the Trans-Sierra Region speak to the goals and objectives of each community and to the transportation projects and services necessary to achieving these goals. Collectively, these plans create a path for realizing the Coalition's transportation vision. If these plans are fully resourced and implemented, they would create a regional transportation network that can be sustainably operated, maintained, renewed, and expanded to meet the needs of our businesses, residents, and visitors. This would be the fully integrated, multimodal transportation system desired by each community and articulated in the transportation vision for the Region. This system would include:



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

The following pages provide a glimpse of some of the benefits of fully implementing the Coalition's transportation vision and the individual transportation plans that support that vision.



Major Interregional Corridors: Bringing Us Together

Our interregional corridors link the communities within the Trans-Sierra Region and connect us to the Nation and the world. Making sure that these corridors can continue to move people and goods safely and efficiently will require multiple strategies including:



- **Intelligent transportation systems that provide travelers with advanced information on road conditions, incidents, and construction so that they may plan their route of travel, times of departure, and layovers**
- **Improved winter operations that ensure snow and ice are anticipated and removed rapidly**
- **Integrated management of the major corridor system with new lanes at critical chokepoints and interchanges, new or improved reliever routes, and alternative modes such as transit and rail for moving people and goods**





On average more than 6,000 trucks per day cross the Trans-Sierra Region on I-80, an essential artery to the Nation's economy.



I-580/US-395, the primary north-south route through the Trans-Sierra Region for people and goods, could take on even greater regional and national importance if it becomes the proposed I-11, the most significant major addition to the interstate system in 30 years.



US-50 provides visitors with access to more than 100 wineries and farms, as well as year-round outdoor and leisure activities.



During peak months, an average of 180,000 vehicles per day travel through the Trans-Sierra Region on I-80 to destinations in the Region and beyond.



Local Streets and Roads: Serving Our Communities

The Trans-Sierra Region is dedicated to having communities that are great places to live and great places to visit. Powerful tools, proven successful in many other regions, are being put to good use here as well. Many communities have adopted the “complete streets” concept, to create safe, pleasant transportation facilities that accommodate all modes of travel: pedestrian, bicycle, transit, and automobile. Development that is well integrated and takes advantage of transit routes and hubs, sometimes called “transit oriented development” or “TOD,” will play a role in the transportation future of the Region. Transit oriented development has been successful in spurring greater private sector investment, increasing

“Transit oriented development has been successful in spurring greater private sector investment, increasing property values, and creating vibrant, attractive centers in the Region’s more urban areas.”

property values, and creating vibrant, attractive centers in the Region’s more urban areas. In addition, the reconstruction and, in some cases, realignment of busy arterials will allow a rebirth of

some of the Region’s downtown areas by creating incredible “places” appealing to residents and visitors alike for shopping, leisure, special events, and community activities.

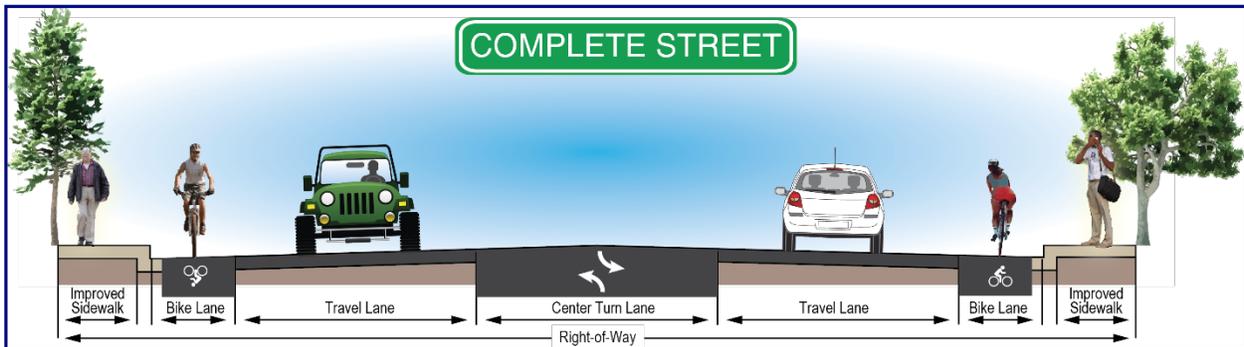
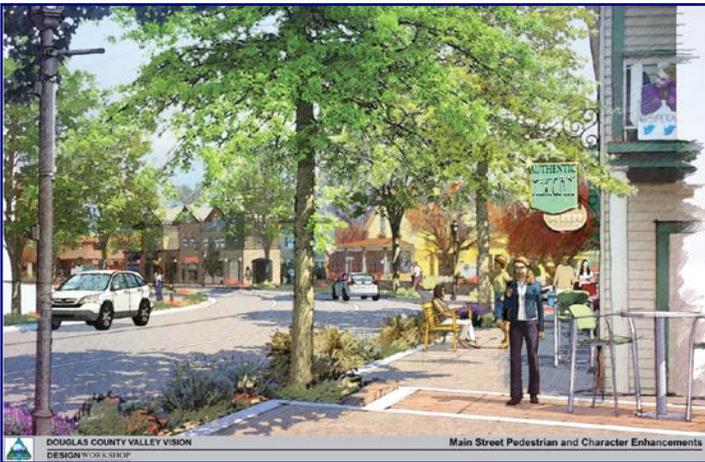




Figure 13 — Option 1 Traditional Landscape Example

In Reno/Sparks, the Oddie Boulevard/Wells Avenue Corridor Study has identified multimodal transportation improvements (bike, pedestrian, transit, and auto) to facilitate a more livable, safer, and vibrant corridor for residents and visitors alike.

Existing condition



The I-80/SR 65 interchange improvements in Placer County will enhance safety, reduce traffic congestion, and improve local traffic and regional commutes by increasing capacity and relieving the existing traffic choke point at the interchange.

Post-project condition





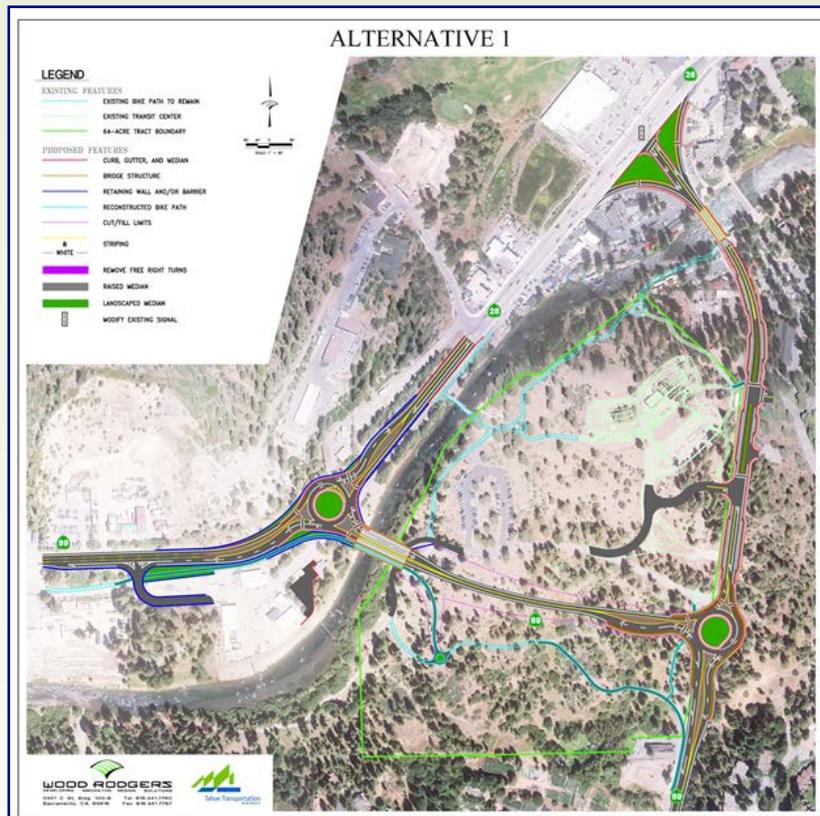
The Kings Beach Commercial Core Improvement Project will convert the existing four-lane highway to a corridor friendly to all users and will include roundabouts for improved traffic flow. The project also includes improved water quality facilities to preserve Lake Tahoe's clarity.



The US-50/Stateline Community Revitalization Project would realign US-50 around the Stateline casino corridor area, creating not only a safe route for motorists passing through Stateline but also an unparalleled opportunity to reinvent the downtown core by making it more friendly to local traffic, pedestrians, bicyclists, and transit. Economic studies indicate that this project is likely to spur as much as \$1 billion in private sector investments in restaurants, retail shops, lodging, and other attractions to create a destination that will attract residents and visitors for year-round activities.

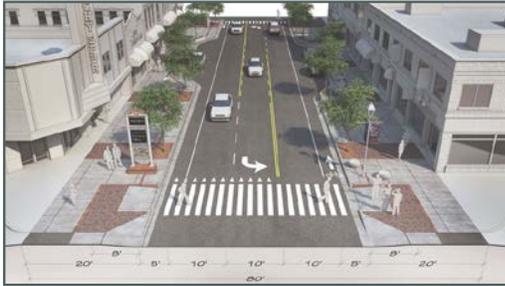


The Fanny Bridge replacement at the intersection of SR 89 and SR 28 in Tahoe City addresses congestion and improves seismic resistance while offering a unique opportunity to remake the downtown. The community has selected a multimodal alternative that will relieve congestion, improve safety, and allow the transformation of downtown Tahoe City into an exciting “place” for residents and visitors.





Bicycle and Pedestrian Facilities: Every Trip Begins or Ends with a Walk



Carson Street Preferred Concept

While automobiles are an indispensable part of our overall mobility, there are many trips where good old fashioned people-power serves just as well. Research indicates that in urban areas, two-thirds of trips are five miles or less, making them good candidates for cycling. Nationwide, it is estimated that one-quarter of all trips are one mile or less, making them potentially suitable for walking. Traveling by foot or bicycle is an enjoyable, healthy alternative for many trips if we have a safe, connected system of bike lanes, paths, and sidewalks on which to travel. Communities across the Trans-Sierra Region have made significant investments in bicycle and pedestrian facilities, and the plans for the future take this to a whole new level!

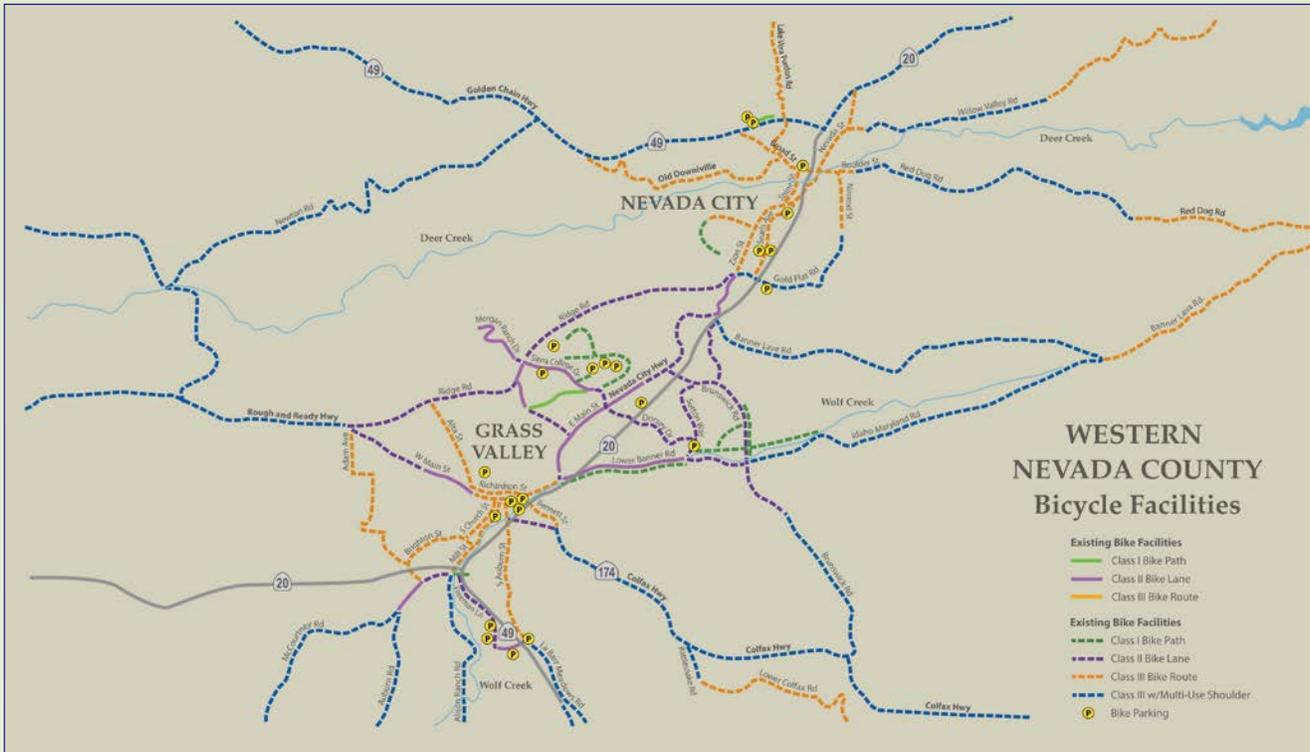
While automobiles are an indispensable part of our overall mobility, there are many trips where good old fashioned people-power serves just as well. Research indicates that in urban areas, two-thirds of trips are five miles or less, making them good candidates for cycling. Nationwide, it is estimated that one-quarter of all trips are one mile or less, making them potentially suitable for walking. Traveling by foot



Partnering with Douglas County and the U.S. Forest Service Lake Tahoe Basin Management Unit, the Tahoe Transportation District managed construction of the one-mile Rabe Meadow Bike Path, the first phase of the 3.2-mile Stateline to Round Hill segment of “America’s Most Beautiful Bikeway.”



While existing bicycle/pedestrian paths are popular in the Tahoe Basin, the use of non-auto transportation has been limited by the lack of a complete path network. The need for broadening transportation choices and providing alternatives to private car use will become more crucial as the number of area residents and visitors continues to increase. “America’s Most Beautiful Bikeway” has been proposed to complete a premier separated bikeway circling Lake Tahoe that connects communities, enhances recreational opportunities, expands transportation choices, and promotes the enjoyment of the Tahoe Basin.



The Nevada County Transportation Commission recently completed a Bicycle Master Plan for Nevada County that would create an extensive network of Class I, Class II, and Class III bicycle facilities. These would provide neighborhood connections, and enable bicycle travel across the county.



The Tahoe Metropolitan Planning Organization's Lake Tahoe Region Bicycle and Pedestrian Plan for the Tahoe Basin envisions a network of interconnected bicycle facilities providing neighborhood connections as well as contiguous access around the Basin.



Sierra County's Bicycle Master Plan includes adding shoulders on SR 89 to accommodate bicycles, creating safe access to numerous trailheads.



El Dorado County residents enjoy a number of first class pedestrian and bike facilities such as the Northside School Bike Path and plan to invest in more.



The Regional Transportation Commission of Washoe County (RTC) constructs sidewalks or pedestrian paths and shoulders accommodating bicycle lanes on all new roads and many reconstruction projects, when feasible. For example, the Plumb Lane Reconstruction project presented an opportunity to make bicycle and pedestrian improvements on a busy stretch of rural roadway, replacing drainage ditches with curb and gutter and providing a wide sidewalk and striped shoulders to improve safety for all users.



Transit: Where and When It Works

Change is happening throughout the Trans-Sierra Region, the Nation, and our world in the makeup of our population and

our travel preferences.

Expanded transit

investments will be key to

the Trans-Sierra Region's

ability to prosper with

these changes and sustain

our great quality of life.

Transit, used where and

when it works, can help

the Region accommodate

our growing number of

active seniors as well as the

increasing number of folks

who would rather use their

travel time for something

other than just driving.

Using transit frees us to

read, browse the web, reach

out to friends via e-mail or

text, or just think.

In congested areas of

the Trans-Sierra Region,

good transit service can

help relieve congestion

and get more value out of

our roadways. Given the

physical and environmental

constraints of Lake

Tahoe and the Region,

increased investments

in transit will be key for

getting a growing number of visitors and workers to and from their destinations with less congestion and fewer environmental impacts. Improved bus service, light rail transit, bus rapid transit, vanpools, water taxis and ferries, and services for our senior and disabled friends and neighbors are all part of the Trans-Sierra Transportation Plan!



Investing in the RAPID was key to the new investment in Midtown Reno.



Investment in a well thought-out, integrated, multimodal transit system will be a key component in providing effective, sustainable transportation solutions to serve an increasing number of residents and visitors while protecting the Region's environmental resources and natural beauty.



Continued investment in Americans with Disabilities Act (ADA)-compliant buses and paratransit services will ensure that disabled and senior citizens continue to have access to safe, reliable, and affordable transportation options.

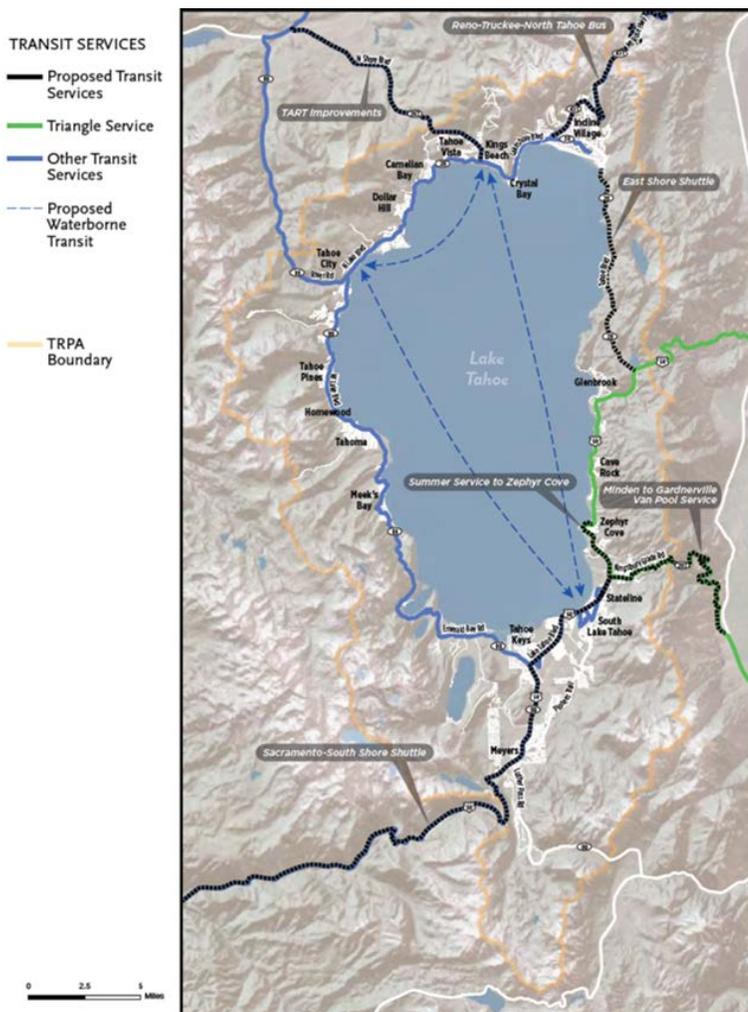


Investing in fuel efficient hybrid and alternative fuel vehicles and facilities will help reduce long-range operating costs while preserving air quality and protecting our region's sensitive environmental assets.





Integrated Transit Service from the I-80 to US-50 Corridor



- Year-round service on SR 267 between Truckee, Northstar, Kings Beach, and North Stateline
- Year-round extended hours of service in the SR 89/267/28 triangle
- Improved service frequency during peak seasons in the SR 89/267/28 triangle and the West Shore
- Expanded peak summer season
- Year-round consistent service in Truckee and between Truckee and Donner Summit
- Additional paratransit service in summer and winter daytime periods
- Automatic vehicle location, real-time traveler information and enhanced communications systems
- No passenger fares





Benefits of Good Transportation: What's in It for You

If the level of transportation investment were increased by \$15.9 billion through 2035, this would enable the vision of the Trans-Sierra Transportation Plan to become a reality, creating a stunning array of benefits for businesses, residents, and visitors. This additional incremental investment would boost business activity through 2035 by:

- **Creating and sustaining 10,000 new, well paying, middle class jobs across all sectors of the economy**



- **Increasing the economic competitiveness, diversity, and stability of the Trans-Sierra Region**
- **Expanding economic activity to generate an additional \$29.9 billion in economic output, including \$11.3 billion in labor income**
- **Improving our ability to recruit and retain top-notch workers**
- **Sustaining and expanding visitation and tourism**
- **Making our region more attractive for special events (Olympics, X-Games, conventions, etc.)**

For residents, these investments would not only support and improve our quality of life today, but would preserve it as a legacy for future generations by:

- **Expanding economic prosperity, competitiveness, and opportunity with sustainable jobs for generations to come**



- **Giving us more time to spend with family, friends, and other activities by reducing travel and delay time valued at \$6.4 billion**
- **Lowering the costs of personal travel and the transport of goods and services**
- **Offering a wider range of travel options including transit, walking, and bicycling**
- **Reducing vehicle operating costs saving an estimated \$9.9 billion through 2035**
- **Enhancing public resources with additional tens of millions of dollars annually in revenues that could be used to build stronger communities through investments in schools, parks, police, fire, and other community services**



- Increasing safety by reducing fatal crashes and serious injuries saving an estimated \$2.5 billion
- Making our neighborhoods, communities, and region safer, healthier, and more enjoyable places to live, work, and play

Fulfilling the Coalition's transportation vision would benefit our visitors by:

- Providing improved access to even more recreational opportunities across the region
- Improving the quality of the visitation experience by reducing the stress of travel to, from and within the region
- Offering the opportunity to choose eco-friendly transportation and recreation
- Enhancing their quality-of-life with an even better playground whether they come from the Northern California megapolitan, the Nation, or the world





Roadblocks and Opportunities: Moving Forward

Funding is the Primary Challenge

Funding is the primary challenge facing transportation agencies in the Trans-Sierra Region, individually and collectively.

Existing revenue sources are insufficient for sustaining the current transportation system, much less implementing the needed improvements to meet current and future demands.

The transportation investments identified in the Trans-Sierra Transportation Plan will require an estimated \$35 billion (in 2014 dollars) through 2035. Unfortunately, the current collective estimate of available transportation funding through 2035 is approximately \$19 billion (in 2014 dollars) leaving a \$16 billion shortfall. Table 1 summarizes the needs, revenues, and shortfalls by county and cumulatively for the Trans-Sierra Region.

The estimated levels of future funding by the various transportation agencies within the Region assume that future federal and state

funding will mirror historic levels. There is no guarantee that this will occur and the estimated shortfalls may increase dramatically if our state and federal partners cannot sustain current levels of investment into the future.

One of the major causes of the transportation

funding shortfall, which is not unique to the Trans-Sierra Region, is the heavy reliance on fuel taxes. Fuel taxes have served as the primary transportation funding source for many decades at all levels of government. When applied as a fixed “cents-per-gallon”

COUNTY	NEEDS	CONSTRAINED REVENUE	SHORTFALL
ALPINE	\$132,525,446	\$51,926,100	-\$80,599,346
AMADOR	\$414,494,719	\$146,330,000	-\$268,164,719
CARSON	\$667,767,150	\$268,520,600	-\$399,246,550
DOUGLAS	\$1,026,208,038	\$80,814,000	-\$945,394,038
EL DORADO	\$2,919,400,000	\$2,155,800,000	-\$763,600,000
LYON	\$242,071,645	\$112,835,544	-\$129,236,101
NEVADA	\$1,102,391,445	\$274,630,000	-\$827,761,445
PLACER	\$13,990,549,680	\$6,945,400,000	-\$7,045,149,680
SIERRA	\$382,758,664	\$155,795,000	-\$226,963,664
STOREY	\$128,174,610	\$31,278,006	-\$96,896,604
TAHOE	\$2,375,572,327	\$1,591,534,268	-\$784,038,059
WASHOE	\$11,826,790,488	\$7,506,466,000	-\$4,320,324,488
TOTALS	\$35,208,704,212	\$19,321,329,518	-\$15,887,374,694

TABLE 1
Estimated region-wide 2015-2035 funding needs, revenue, and shortfalls by county (2014\$)



tax, fuel taxes do not respond to the erosion in purchasing power that occurs with inflation in construction and operations costs. In addition, fuel tax revenues are declining due to the increasing vehicle fuel efficiency and the rising popularity of electric, hybrid,

and alternative fuel vehicles. While increased vehicle efficiency has significant positive impacts in terms of reducing pollution and greenhouse gases, lessening our dependence on foreign oil, and saving us money at the pump, it also means that less revenue is being collected per mile driven. The combined impacts of inflation and increasing fuel economy mean that in real dollar terms we are collecting from the federal gas tax about 75% less per

“If there is no additional preservation funding through FY 2025, the pavement backlog (in Nevada) will rise from the current level of \$1.9 billion to \$3.3 billion in 2025”

Nevada Department of Transportation State Highway Preservation Report, February 2013

mile driven today than we were in 1993, the last time the federal gas tax rate was increased. Fuel tax indexing and sales taxes on gasoline sales can be powerful tools for recovering the lost purchasing power of our transportation revenues due to inflation, but additional measures are needed to address the long-term loss of revenue due to increased fuel efficiency and alternative fuel vehicles.

While transportation funding has increased nationwide over the past two decades, the significant majority of this increase has been at the local level. Between 1999 and 2014, there were approximately 475 local and 48 statewide transportation funding questions on ballots across the nation, 72% of which were approved. California and Nevada have been leaders in this regard. In these states, local money accounts for more than 50% of all transportation funding. Much of the local activity in both states has been motivated by the growing realization that neither the federal nor the state government has the capacity to fully fund local transportation needs, and that any increases in federal and state levies to do this would largely be paid by the residents of our communities. By going to residents directly, local communities increase the level of control, accountability, and efficiency in the use of these funds, and can take on a decisive role in determining their own economic destinies.



Continued Collaboration to Leverage the Power of Our Transportation Investments

An opportunity to accelerate the realization of the Trans-Sierra transportation vision is continued and expanded integration and collaboration among system operators. Dramatic progress has been made in integrated and collaborative management of weather events and incidents on the I-80 corridor by the California Department of Transportation (CALTRANS) and Nevada Department of Transportation (NDOT) including real-time road condition and weather data being gathered and disseminated to corridor users. Transit operators are teaming to coordinate schedules, stops, and services where their systems interface to improve efficiency and reduce door-to-door travel times for their customers. Many jurisdictions are jointly contracting to achieve economies of scale, sharing equipment, and pooling expertise to make every precious dollar go further. Additional opportunities for further improvements in these areas and expanded collaboration include providing regional services such as:

- **Real-time traveler information on congestion at popular attractions with suggestions for alternate routes or destinations**
- **Unified regional wayfinding signage that will offer visitors more to do and make it easier for them to do it**
- **Regional trip planning services that match visitor interests to an itinerary of amenities, services, and destinations throughout the Region**

The Status Quo Moves Us Backward

Taking steps to halt the erosion of the Region's current transportation funding streams is an important step, but we cannot stop there. The Trans-Sierra Region is in a national and world-wide competition to sustain a vibrant economy while maintaining our quality of life. As our competitors increase their levels of transportation investment, stagnant levels of transportation investment in the Trans-Sierra Region will feed an ever widening gap between what we offer our residents, our businesses, and our visitors and what is available in other communities. The message is clear: Good transportation is not an adjunct to great economies and great communities, it is fundamental.



Solutions are Within Our Grasp and will be Unique to Each Community

Driving on roads that are in poor condition currently costs Trans-Sierra drivers an estimated average of \$660 per year in additional vehicle operating costs. This is real money that is being wasted and bringing our region no benefit. If we could capture this loss and invest it in transportation improvements, it would cover roughly 60% of the current projected shortfall. Covering the other half of the shortfall would cost the typical resident in the Trans-Sierra Region approximately \$2.25 per week, about the price of a cup of coffee. Given the enormous benefits to our region's prosperity and to our quality of life, investing this amount in our transportation systems would more than pay for itself.



The path for addressing the transportation funding shortfall will be a decision made by each community in the Trans-Sierra Region. Local preferences will determine the combination of measures and the implementation timing that will be “right” for each individual community.

One option for Trans-Sierra communities in California is sales taxes dedicated to transportation. Such taxes have already been approved by voters in about 20 California counties. Most recently in 2014, voters in Monterey County approved a 0.125% transportation sales tax and voters in Alameda County approved doubling the existing transportation sales tax from 0.5% to 1.0%. This is even more impressive when one considers that approval by a two-thirds majority was required for passage. Among the options available to several Nevada counties in the Trans-Sierra Region is indexing of fuel taxes to recover the purchasing power lost through inflation. Indexing in Nevada was pioneered by Washoe County in 2008 followed by Clark County in 2013. The Nevada legislature has mandated that an indexing question be placed on the 2016 ballot in all of Nevada's remaining counties.

As a practical matter, reaching the level of additional funding needed to fully realize the transportation system desired by the Trans-Sierra communities will likely be accomplished in several stages, and a reasonable part of this burden will be borne by visitors. Regardless of the path taken, the successes in each community should be lauded and celebrated by all since improvements anywhere in the Region benefit everyone in the Region.



The Call to Action: What You Can Do



Full realization of the Trans-Sierra Transportation Plan will deliver enormous and lasting benefits: greater prosperity, outstanding quality of life, a healthy environment, and vibrant communities. If this is the future you would like to see, here are four things you can do to make it happen:

- **Get involved in building and maintaining consensus in your community around what you want your transportation system to achieve and the specific projects and services needed to make it happen.**
- **Support efforts to fund and sustainably implement these transportation projects and services politically, environmentally, and financially.**
- **Urge collaboration and cooperation with public and private sector partners throughout the Region to maximize the effectiveness and efficiency of our collective transportation investments.**
- **Recognize and applaud the successes of your community and of your neighbors since success anywhere in the Region benefits everyone in the Region.**

The journey to the full realization of the Trans-Sierra Transportation plan will be neither quick nor easy, but with patience and commitment, we can get there. The efforts of our parents and grandparents bequeathed to us a region of unsurpassed beauty and an outstanding quality of life. We have the opportunity to pass these precious gifts on to our children and grandchildren by making sound decisions and wise investments that will bring the vision of the Trans-Sierra Transportation Plan to reality.

Transportation: It's That Important!