

Attachment D

Inyo 2015 Regional Transportation Plan

FINAL

Prepared for the

Inyo County Transportation Commission
168 N. Edwards Street
Independence, CA 93526

Prepared by

LSC Transportation Consultants, Inc.
P.O. Box 5875
2690 Lake Forest Road, Suite C
Tahoe City, California 96145
530 ♦ 583-4053

September 16, 2015

LSC #147440

As the Regional Transportation Planning Agency (RTPA) for the region, the Inyo County Transportation Commission (ICLTC) is required by California law to adopt and submit an updated Regional Transportation Plan (RTP) to the California Transportation Commission (CTC) and to the California Department of Transportation (Caltrans) at least every five years. The region is defined as geographic Inyo County, California. Broad in scope, the purpose of the plan is to provide a transportation vision for the region, supported by goals, for 10- and 20-year planning horizons. This is accomplished by identifying transportation related needs and issues on a regional level, reaffirming the region's goals, objectives and policies, developing a list of improvements to the transportation system that meet the identified needs and prioritizing these improvements so as to create a financially constrained plan. The RTP for the Inyo region was last updated in 2009. After this update to the RTP, the ICLTC has agreed to update the RTP at least every four years. In exchange, the City of Bishop and County of Inyo will only be required to update the Housing Element to their respective General Plan once every eight years.

The Inyo County regional transportation system includes all types of transportation modes: roadways, public transit, bicycle paths, pedestrian facilities, airports, rail, and other strategies to improve the flow and safety of the regional transportation system. The improvement projects identified in the RTP are capital projects or long-term investment projects that develop, improve, or maintain physical elements of the transportation system. RTP projects can range in size and scope from bike paths to a divided highway on a state highway to purchase of new transit buses to installing fences at an airport. The RTP is only the first step in the actual construction of large capital transportation improvement projects in Inyo County. After a project has been identified in the RTP as a transportation need that is consistent with adopted goals and policies, additional engineering and environmental analysis, as well as public input, is required before the specific project is implemented.

This RTP document first presents an explanation of the regional transportation planning process, followed by information on the state of the region, including the local government entities as well as the Native American tribal governments. Regional issues, needs, and problems are identified within the existing conditions section and summarized in the policy element. Related goals, objectives, and policies are provided in the policy element along with performance indicators and measures. Appropriate solutions and actions are next discussed by transportation mode in the action element in the form of improvement project lists over the short- and long-term planning horizons. Finally, a discussion of finances is included that considers a comparison of costs and revenues.

The intent of this RTP is to provide the region with a coordinated transportation system and be a guideline for decision makers over the RTP plan period. A *Draft RTP* was circulated for public review and comment along with an accompanying environmental document. All appendices in the RTP are incorporated herein by reference. Acronyms and terms used in this RTP are listed and defined in Appendix A.

PLAN DEVELOPMENT REQUIREMENTS AND PROCESS

State Planning Requirements

State regional transportation planning requirements have evolved over the years. A brief history of the laws that have shaped the RTP process and requirements is presented below:

- ◆ The Transportation Development Act of 1971 (SB 325) resulted in the formation of the ICLTC as the RTPA to administer and allocate funds provided by the Act.
- ◆ Assembly Bill 69, enacted in 1972, created Caltrans and established requirements for preparation and administration of State and Regional Transportation Plans. Under this law, each RTPA is required to prepare and adopt an RTP with coordinated and balanced transportation systems consistent with regional needs and goals.
- ◆ In 1997, the Transportation Funding Act (SB 45) mandated major reforms impacting many areas of transportation planning, funding, and development. This sweeping legislation overhauled the State Transportation Improvement Program (STIP), providing for greater “regional choice,” with 75 percent of the program’s funds to be divided by formula among the regions. Periodically, each RTPA selects projects to be funded from its STIP share and lists them in its Regional Transportation Improvement Program (RTIP). Every RTIP adopted by a local agency must be consistent with its RTP.
- ◆ California Government Code 14522 requires that the CTC develop RTP Guidelines to facilitate the preparation, consistency, and utilization of RTPs throughout the state. In recent years there have been two updates to the RTP Guidelines (2007 and 2010). The 2007 RTP Guidelines incorporated several key changes to the RTP process to address changes in the planning process resulting from the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU, which is the most recent Federal surface transportation act):
 - An expanded public participation and public agency consultation process
 - Increased attention to environmental considerations
 - Safety and security issues
 - Expanded financial plan discussion
 - Expanded discussion on congestion and corridor management
 - Greater coordination with other related transportation planning and programming documents
 - Refined transportation system performance measures
 - Increased the RTP update requirement to every five years

The 2010 RTP Guidelines incorporated new regulations set forth by SB 375 and the addendum to the 2007 RTP Guidelines. SB 375 requires the Metropolitan Planning Organizations (MPOs) in California to address in their RTPs how the region will meet greenhouse gas emission reduction targets as specified by the California Air Resources Board (CARB). Although RTPAs (such as the ICLTC) are not subject to the stipulations of SB 375, incorporating strategies to reduce greenhouse gas emissions in the region is identified in the Guidelines as an important part of regional transportation planning for rural counties.

RTP PROCESS

The ICLTC is responsible for the preparation of the Inyo region’s RTP. The ICLTC must ensure that all of the requirements of the RTP process (as listed in Appendix B) are met. The ICLTC prepares a draft

document that includes all of the required elements and solicits public comment from a wide variety of groups, including the general public, the Native American tribes, natural resource agencies, and adjacent county RTPAs. Appropriate environmental documentation in conformance with the California Environmental Quality Act (CEQA) and an Air Quality Conformity Finding, as applicable, are also prepared and distributed to the groups noted above. Responses are prepared to any comments received through this process and included in the final document. The ICLTC then adopts the RTP and environmental documentation in accordance with state and federal requirements.

After adoption, the ICLTC is responsible on an ongoing basis for keeping the RTP current with respect to changing conditions throughout the region. As new or redefined projects are needed, the action and financial sections are amended.

Participation and Consultation Process

The planning of the regional transportation system is accomplished through the coordination of various governmental agencies, advisory committees, and public input. The organizational structure and composition of the ICLTC and advisory groups involved in the development of the RTP are as follows:

- ◆ The **ICLTC**, serving as the RTPA, includes three appointed representatives from the City of Bishop and three appointed representatives from the County of Inyo. The Caltrans District 9 Director is a non-voting ex-officio member of the LTC. The ICLTC is staffed by an Executive Director, Executive Secretary and other Inyo County or City of Bishop staff as necessary.
- ◆ The **Social Services Transportation Advisory Council (SSTAC)** is a transit specific advisory committee established by the Transportation Development Act (TDA). In Inyo County, the Council meets annually to discuss unmet transit needs particularly those of the disadvantaged.
- ◆ **Caltrans** is responsible for the design, construction, maintenance, and operation of the State Highway System and that portion of the Interstate Highway System within California. Enacted in 1972, Assembly Bill 69 set down the basic framework for Caltrans. Headquartered in Sacramento, Caltrans has twelve district offices throughout the state. Inyo County is located in District 9, with offices in Bishop. District 9 staff members serve as liaisons to the ICLTC.

A public involvement program is required for each RTP and is intended to provide reasonable opportunity for citizens, private and public transit and freight operators, tribal governments, and other interested parties to participate early in the process. ICLTC RTP Public Involvement Procedures were originally developed for the 2009 RTP and presented in Appendix C. These procedures are consistent with the 2010 RTP Guidelines. In accordance with the Public Involvement Procedures, the entities listed below were contacted for information, invited to a public workshop and solicited for input:

- Tribal Entities
- Adjacent County Regional Transportation Planning Agencies (RTPAs)
- Local, State, and Federal Resource Agencies
- Great Basin Unified Air Pollution Control District
- Truck Traffic Generators
- Public Transit Operators
- Private Transportation Operators
- Transportation Related Advocacy Groups

Appendix D presents correspondence with agencies/stakeholders contacted as well as copies of flyers and advertising materials for public input. Table 1 below lists specific events in the participation/consultation process pertaining to this RTP to date.

TABLE 1: Participation Process During RTP Development		
Participant	Activity	Date
Study Steering Committee	Project Kick-off Meeting	10/10/2014
Tribal Governments (NAHC, Benton Paiute, Big Pine Paiute, Bishop Paiute, Fort Independence, Lone Pine Paiute-Shoshone, Timbisha Shoshone)	Contacted Requesting Input and Invite to Public Workshop	11/19/2014
Natural Resource Agencies (BLM, USFS, NPS, CA Fish & Game, WQCB, APCD, LADWP)	Contacted Requesting Input and Invite to Public Workshop	11/19/2014, 11/20/2014, 12/08/2014
Private Sector Truck traffic generators, private transportation operators	Contacted Requesting Input	12/10/2014
Adjacent RTPAs Mono LTC, Kern COG, SANBAG, Nye County	Contacted Requesting Input	12/8/2014, 12/09/2014
Public and Human Service Transportation Operators ESTA, IMHA, ESAAA	Contacted Requesting Input and Invite to Public Workshop	11/19/2014, 12/09/2014
Transportation Advocacy Groups Aerohead Cycles, Adventure Trails, Eastside Velo, Eastern Sierra Shuttle	Contacted Requesting Input and Invite to Public Workshop	11/20 - 21/ 2014

Tribal Governments

There are five Native American tribal governments located in geographic Inyo County:

- Big Pine Paiute Tribe
- Bishop Paiute Tribe
- Fort Independence Tribe
- Lone Pine Paiute-Shoshone Tribe
- Timbisha Shoshone Tribe

The ICLTC encourages input from Native American Tribes on transportation related planning issues on a regular basis including through the Inyo County Social Service Technical Advisory Committee (SSTAC) unmet transit needs process. For this RTP update, representatives from each tribal entity were contacted

and emailed a description of the RTP, request for input and a copy of the public workshop flyer. The Bishop Paiute Tribe provided a copy of their most recent *Tribal Transit and Transportation Plan* along with draft plans for a new pedestrian path on the reservation. The *Bishop Reservation Pedestrian and Bicycle Safety Plan* (2007) and the *Bishop Reservation Long Range Transportation Plan* (2007) were also reviewed as part of this process. Other tribal entities have not provided input at present. A discussion on tribal transportation needs for each transportation facility type can be found in Chapter 2. Coordination with tribal representatives will continue throughout the RTP process.

Affected Regional Transportation Planning Agencies

An important part of the RTP consultation process is to contact RTPAs in adjacent counties which may be affected by the Inyo RTP. Inyo County borders Mono County to the north and Kern County and San Bernardino County to the south. Western Inyo County borders Fresno and Tulare County but there are no transportation links between these counties, as this is the Sierra Nevada Crest. To the east, Inyo County borders Esmeralda, Nye and a tiny portion of Clark County in Nevada. In terms of inter-county transportation connections to Nevada, Nye County has the only direct connections to Inyo County. The ICLTC, Mono County Local Transportation Commission (LTC), Kern Council of Governments (COG), and San Bernardino Associated Governments (SANBAG) have entered into multiple Memorandum of Understanding to leverage Interregional Transportation Improvement Program (ITIP) funds for top priority projects along the US 395 and State Route 14 corridors from Interstate 15 to the Mono County/Nevada State line and including State Route 120 in Mono County. The top priority MOU project is the Olancho to Cartago four lane project. All four members of the MOU along with Nye County were contacted for input in this RTP update. To date two have responded.

Kern Council of Governments

Kern Council of Governments (COG) staff indicated that the SR 14/US 395 corridor is important as it provides Kern County residents with access to multiple recreation destinations in the Eastern Sierra. Inyo County's public transit system, Eastern Sierra Transit Authority (ESTA) travels between Lancaster and Reno, providing Kern County residents with transportation to Eastern Sierra communities and services in Reno. Kern COG hopes to see the construction of high speed rail services as far north as Inyo County over the next twenty years. One important issue which will continue over the long term is the competition of Federal Highway Administration funding between RTPAs. There is also a current move toward Sustainable Growth Communities, (SGC), Active Transportation Program (ATP), and Cap and Trade funding programs that may impact the competitive funding actions of planning agencies. Kern COG would like to continue short and long range transportation planning efforts with the Eastern Sierra Planning Partnership.

Mono County

Mono County representatives stated that the two counties have had a long standing history of productive teamwork and hopes that two counties continue their transportation planning relationship. In addition, Mono County offered that following input going forward:

- ◆ Collaborate on improvements and planning efforts on roads of common interest, such as Rock Creek Road, and to consider other opportunities for routes such as Lower Rock Creek Road, Highway 6, and Highway 168;
- ◆ Participate in the Eastern California Transportation Planning Partnership, and continue multi-county MOUs for State Transportation Improvement Program (STIP) programming purposes;

- ◆ Share information on local initiatives, such as the ATV Adventure Trails, and address related signage concerns near the county boundary;
- ◆ Consider complimentary opportunities for scenic highway and scenic byway planning for Highway 395, such as past CURES interpretive improvements;
- ◆ Support common efforts to highlight and enhance community Main Streets situated along state highways, including recommendations from the Eastern Sierra Corridor Enhancement Plan;
- ◆ Address transit matters, such as recent transit plans and audits;
- ◆ Investigate participation in YARTS, noting that YARTS is currently considering adding Fresno and Tuolumne as new members;
- ◆ Link our trail and bikeway plans;
- ◆ Address common regional transportation environmental issues, such as sage grouse, frogs and toads, and deer migration routes;
- ◆ Work with Caltrans on common planning studies, such as the origin and destination studies;
- ◆ Support Digital 395 and last mile provider infrastructure coordination.

Environmental Agency Consultation

The 2010 RTP Guidelines state that “*the RTP shall reflect consultation with resource and permit agencies to ensure early coordination with environmental resource protection and management plans.*” The following natural resource agencies/land holders were contacted and input and relevant resource maps or plans were requested. Copies of all correspondence can be found in Appendix D.

- Inyo National Forest
- Bureau of Land Management
- California Department of Fish and Wildlife
- Lahonton Regional Water Quality Control Board
- Death Valley National Park
- California Department of Fish and Wildlife
- Los Angeles Department of Water and Power
- Great Basin Unified Air Pollution Control District
- China Lake Naval Weapons Center

Findings and input from environmental agencies who responded are summarized below.

Inyo National Forest

Inyo National Forest encompasses a significant proportion of the Eastern Sierra Nevada Mountains along with the White Mountains and a portion of the Inyo Mountains in Inyo County. Inyo National Forest was contacted to solicit input on the RTP process and invited to the public workshop. Two representatives from the Inyo National Forest attended the public workshop in Bishop. The issue of limited parking at popular trailheads (such as Whitney Portal) was raised as well as the need for increased connectivity between trailheads and Inyo County communities. Inyo County has two short-term Federal Lands Access Program (FLAP) projects that will reconstruct Whitney Portal Road and Rock Creek Road (only the last

mile is in Inyo County) and both include portions on USFS land. The Forest Service is actively studying ways to increase circulation, improve parking and non-motorized access to popular trail heads. The *Inyo National Forest Alternative Transportation Study* and *Whitney Portal Alternative Transportation Study* were also reviewed as part of this RTP update.

Bureau of Land Management

A significant amount of land in the Owens Valley corridor is managed by the Bureau of Land Management (BLM) Bishop and Ridgecrest offices. Specific points of interest include the Alabama Hills, Fossil Falls, Tungsten Hills, Inyo Mountains, Panamint Valley, Amargosa River Canyon, and the Volcanic Tableland. BLM land is popular for rock climbing, hiking as well as OHV use. BLM representatives were invited to the public workshop and provided with a brief description of the project. To date, no input has been provided.

Death Valley National Park

National Park Service (NPS) holdings in Inyo County include Death Valley National Park and Manzanar Historic Site. Death Valley National Park encompasses over 3,000,000 acres and receives around 1,000,000 visitors per year. Many of the park roads both paved and unpaved were built in the 1930's and therefore are narrow and winding. Two airports are located within the park: Furnace Creek Airport and Stovepipe Wells Airport. There is also a dirt airstrip located at Saline Valley. Roughly 200 visitors per year arrive at Death Valley via aircraft.

Death Valley National Park provided detailed input to both the development of this RTP and the Active Transportation Plan. Specific issues as noted by the NPS are outlined in the existing conditions section under their respective transportation facility.

California Department of Fish and Wildlife

As part of the consultation process, the California Department of Fish and Wildlife was contacted for input. To date, no input has been provided, however, the California Wildlife Action Plan was reviewed below:

As a requirement for receiving funding under the State Wildlife Grants Program, states must develop a Wildlife Action Plan. In California the *California Wildlife: Conservation Challenges* was developed in 2005. This document was reviewed as part of the RTP process. There are three conservation challenges listed in the document which pertain to a discussion of regional transportation planning: growth and land use management, recreational pressures, and climate change. The plan is currently being updated and will be complete in 2015.

New housing and commercial development is quite limited in Inyo County as the majority of the region is public land. Therefore, there is limited pressure on wildlife from development and expansion. Much of Inyo County is subject to recreational pressures. Climbing, hiking, camping, and off-road vehicle use is common in the region. All these activities can disturb wildlife. The California Wildlife Action Plan cites information kiosks and the management of garbage and sewage at visitor information centers as a method for managing recreational use and educating the public about wildlife. As indicated in the Inyo County Active Transportation Plan, there are plans to provide signage, kiosks, and trails to direct users around sensitive wildlife and habitat in the Lower Owens River and Lone Pine area.

Climate change has far reaching consequences on wildlife and wildlife habitat in Inyo County, ranging from above normal temperatures to changes in water/rainfall patterns to increased wildfires. As vehicle

emissions have been linked to climate change, an increase in vehicle traffic will increase the negative effects of climate change. As discussed later in the Action Element, this RTP does not include projects that will significantly increase vehicle traffic (and associated greenhouse gases) in Inyo County. Additionally, Caltrans data shows that overall traffic volumes in Inyo County have decreased over the last ten years.

Owens Valley Area and Los Angeles Department of Water and Power LADWP

Los Angeles Department of Water and Power (LADWP) is the primary land owner in the Owens Valley in Inyo County with over 310,497 acres. The *Owens Valley Land Management Plan (OVLMP) 2010* provides management direction for resources on all city of Los Angeles-owned lands in Inyo County, California, excluding the Lower Owens River Project (LORP) area. Much of LADWP land is available for public day use and/or is leased to other entities such as the City of Bishop or ranchers. Bicycling, hiking, and OHV use is permitted on existing trails except where posted. The OVLMP identified modifying the location and intensity of recreational activities to meet environmental and land use goals. Recreational impacts pertinent to this RTP are associated with roads, OHV use, parking areas and stream bank access.

The Lower Owens River Project (LORP) was identified in a 1991 EIR as mitigation for impacts related to groundwater pumping by LADWP from 1970 to 1990. The primary goal of the project was to release water to the lower Owens River and to restore the ecosystem while providing for sustainable recreation, livestock grazing, agriculture and other activities. The LORP area includes 77,656 acres near Lone Pine and Independence and includes nearly 62 miles of river. The return of water flow in the Lower Owens River has enhanced recreational opportunities for both residents and visitors. The Lower Owens River Project Recreation Use Plan was drafted to minimize conflicts between recreation users, resource conservationists, water providers, and ranchers.

The LORP Recreation Use Plan proposes several projects which are relevant to this RTP:

- ◆ Lower Owens River Trail – A multi-use trail for motorized and non-motorized users along almost the entire length of the river in the project area using established roads and trails. Some of the USFS roads will require maintenance and grading.
- ◆ Kiosks and Staging Areas – Six locations including kiosk, gravel driveway and parking area
- ◆ Directional Signage – Along US 395 at LORP gateway locations to direct users to the appropriate staging areas
- ◆ Other hiking, biking trails and signage throughout the interior of the project area

Representatives from LADWP were contacted for input and invited to the public workshop. LADWP responded with a letter voicing concerns with bicycle and pedestrian projects identified in the 2008 Inyo County Collaborative Bikeways Plan. Copies of this correspondence are presented in Appendix D. LADWP's concerns can be summarized as follows:

- ◆ Right of way acquisition or dedication will be required for many of the proposed bicycle projects.
- ◆ Marketing and promotion of bicycle paths on LADWP land may lead to liability issues.
- ◆ Projects should not interfere with LADWP operations and routine maintenance activities

- ◆ It will be important to establish who will be responsible for maintenance of paved bicycle paths
- ◆ Projects should not interfere with LADWP lessee activities
- ◆ Some proposed bicycle projects are located in wetlands and will require careful environmental analysis

As the various entities consider implementation of the bicycle and pedestrian projects listed in the Inyo County Collaborative Bikeways Plan and this RTP, more detailed analysis should be performed in collaboration with LADWP so as to provide the greatest safety and mobility for Inyo County residents with the least negative impact on the environment and private land holders. This RTP contains a policy which addresses LADWP concerns.

Great Basin Unified Air Pollution Control District

A description of air quality conditions and how they relate to regional transportation is included in the Air Quality Section of Chapter 2. The District responded to request for comments, citing dust control regulations which may relate to transportation improvement projects as well as requirements for cement and asphalt plants. Additionally, the district references air quality requirements for diesel vehicles.

Lahontan Regional Water Quality Control Board

The Lahontan Regional Water Quality Control Board responded to the proposed Negative Declaration circulated along with this RTP encouraging the ICLTC to take this opportunity to promote proper watershed management, support Low Impact Development and reduce the effects of hydromodification in the region. The Water Board recommended becoming an active stakeholder in the development of watershed management plans in the region as well as minimizing surface runoff during project construction through Low Impact Development strategies. Storm water management, such as the implementation of swales or vegetated infiltration basins, is an important consideration along roadways and applicable to this RTP. Hydromodification is the alteration of the natural flow of water through the landscape. It was recommended that guidelines be developed for reducing hydromodification when implementing transportation improvements. It was also noted that many activities included as a part of the various transportation improvement projects such as streambed alteration or land disturbance may require permits from the state and/or regional water quality boards.

In order address these comments a new objective and policy was added to the Policy Element to provide clear direction to the ICLTC and local project implementing agencies when considering environmental impacts of transportation projects.

Public Transit Operators

Inyo County is currently served by the Eastern Sierra Transit Authority (ESTA), and various human service transportation providers. ESTA provides public transit connections from as far south as Lancaster in Kern County to Reno in Nevada. The ESTA Executive Director was contacted for input and attended the public workshop along with representatives of transportation providers for disabled or disadvantaged residents such as the Inyo Mono Association for the Handicapped and Eastern Sierra Area Agency for the Aging. Public transit regional transportation needs and issues are outlined in the modal discussion section of Chapter 2.

Private Sector

An important user of the regional transportation system is the private sector. In Inyo County, this includes businesses which generate a significant amount of truck traffic on Inyo County highways as well as private transportation providers.

Truck Traffic Generators

Goods movement is an important part of the regional transportation system as well as the economic vitality of the region. US 395 carries between 470 to 1,200 trucks per day, depending on specific location. Truck traffic generators representing beverage distributors and mining operations in Inyo County were contacted to obtain input on the regional transportation system. The mining company contacted generally use back roads to travel between destinations while the beverage distributor typically uses US 395 south of Olancho. No major deficiencies in the regional transportation system were cited by the truck traffic generators.

Private Transportation Operators

The private transportation operator, Eastern Sierra Shuttle Service, transports clients between mountain trailheads and Inyo County communities. Some of the trailheads can only be accessed using four wheel drive vehicles and the roadways leading to the trailheads can sometimes be intimidating for visitors. Eastern Sierra Shuttle Service identified the following roadways which are considered in poor shape:

- Taboose Creek Road – Access Taboose Pass trailhead
- Foothill Road and Forest Service Roads – Access Shepherd Pass trailhead
- North Fork of Oak Creek Road – Access Baxter Pass trailhead
- Division Creek Powerhouse Road – Access Sawmill Pass trailhead
- North Lake Road – Narrow roadway with steep drop offs – Access fishing and the Paiute Pass trailhead
- Mc Murray Meadows Road and Forest Service Roads to access Red Lake trailhead

The operator also indicated a need for a parking/loading zone area at Whitney Portal, as this area can get congested on peak weekends. Road closures as part of the Whitney Portal Road resurfacing project may also cause some issues.

Public Workshops

An important objective for this RTP update is to obtain input on the transportation planning process from a wide variety of Inyo residents. For this reason, a public outreach program was conducted starting early in the RTP process. An evening public workshop was held at the Bishop City Council Chambers on December 4th to solicit input from northern Inyo County residents. A second workshop was held in the southern portion of the county at the Boulder Creek RV Park, just south of Lone Pine. The Consultant presented an overview of the RTP process and regional transportation needs and issues. A significant portion of the workshop was dedicated to listening to input on transportation needs and issues and what attendees see as top priorities for Inyo County. As there is significant overlap between the two projects, the public workshops also served as public input for the Active Transportation Program Plan.

To increase public awareness of the project, the Draft RTP was posted on the Inyo County website. Additionally, a one page flyer was developed that includes a description of an RTP, solicits input, advertises the public workshop, and provides contact information. This flyer was distributed to a wide variety of state/federal agencies as well as advocacy groups and forwarded the ICLTC for wider distribution. A smaller version of the flyer was published in the Inyo Register the Thursday and Saturday prior to the workshops. Lastly, the public workshops were noticed on the local radio station.

Appendix D includes a public comment log from the public workshops. There were roughly 16 attendees at the public workshop in Bishop, while only 2 Inyo County staff and the Caltrans representative attended the Lone Pine workshop. While this is not a statistically significant proportion of the total population of Inyo County, the responses indicated that Inyo County residents generally place a high level of importance on safety and connectivity in terms of regional transportation. Overall, the responses were varied and were considered in the development of the transportation needs and issues section.

A public hearing on the Draft RTP and associated environmental document was held as part of a regularly scheduled ICLTC meeting on June 17, 2015.

Social Equity and Environmental Justice Considerations

Both state and federal laws require that regions plan for and implement transportation system improvements that will benefit all residents. Transportation improvements should not have a disproportionate adverse impact on low income or other under-represented groups. Examples relevant to the RTP include access to transportation, displacement and gentrification, transportation affordability, and jobs/housing fit.

Approximately 12.8 percent of Inyo residents were living in poverty for at least a 12-month period between 2009 and 2013, as defined by the US Census Bureau. This is less than the statewide poverty rate of 15.9 percent during that period. Poverty rates by city are available for the same time period and demonstrate that the City of Bishop had a higher poverty rate of 16.8 percent. Approximately 19.9 percent of the Inyo County population is Hispanic, while 10.3 percent are Native American, 1.5 percent are Asian, and less than one percent are African American. Table 2 presents median household income for Inyo County by census tract. As shown, median income in Census Tract 4, City of Bishop, and the census tract which encompasses Lone Pine, Furnace Creek, Tecopa, and Shoshone was less than 60 percent of the statewide median income. With respect to the Bishop area, the reader should note that the incorporated part of Bishop represents a smaller population than the unincorporated areas (East and West Bishop).

The Action Element of this RTP does not include new roadways or bypass projects that would displace underrepresented groups or decrease access to transportation. The Action Element will include capital improvement projects which will increase mobility for residents with no vehicle available to them such as maintaining a safe and reliable public transit fleet and expanding the bicycle and pedestrian facilities network. Additionally, the *Inyo County Coordinated Public Transit Human Services Transportation Plan* was reviewed in development of this RTP to ensure that this document addresses the mobility needs of the low income and elderly population.

Report Organization

RTPs are long-range documents that guide the organized development of all modes of transportation within the area. State and federal requirements prescribe that, for approval, RTPs must include the following elements:

TABLE 2: Inyo County Median Household Income

Area	Median Income ⁽¹⁾	% of Statewide Median
Statewide	61,400	--
Census Tract 1 - Inyo County East of Bishop	53,603	87.3%
Census Tract 2 - Inyo County West of Bishop	58,854	95.9%
Census Tract 3 - West Bishop	85,250	138.8%
Census Tract 4 - City of Bishop	32,198	52.4%
Census Tract 5 - Big Pine, Independence	56,250	91.6%
Census Tract 8 - Lone Pine, Shoshone, Valley Wells, Furnace Creek	35,995	58.6%

Note 1: Median income in the past 12 months in 2012 inflation adjusted dollars
Bold indicated Census Tract meets Disadvantaged Community criteria

- ◆ The **Existing Conditions and Assessment of Needs** describes demographic, economic conditions that affect transportation as well as a description of all types of regional transportation facilities. This section sets the scene for regional transportation needs and issues.
- ◆ The **Policy Element** summarizes the transportation issues in the region, identifies and quantifies regional needs expressed within both a short- and long-range framework, and maintains internal consistency with the financial element fund estimates.
- ◆ The **Action Element** identifies plans to address the needs and issues for each transportation mode in accordance with the goals, objectives, and policies set forth in the policy element.
- ◆ The **Financial Element** identifies the current and anticipated revenue sources and financing techniques available to fund the planned transportation investments described in the action element. The intent is to define realistic financing constraints and opportunities.

Required Documentation

Environmental documentation is required under the CEQA. The environmental documentation states whether there will be an environmental impact of the plan, and if so, what that impact will be. Depending on the scope of the plan and local environment, environmental documentation may be a negative declaration, a mitigated negative declaration, or a full Environmental Impact Report (EIR). Under CEQA guidelines, public agencies are responsible to minimize or avoid environmental damage, where feasible. Agencies must balance a variety of objectives, including social, economic, and environmental concerns, to comply with CEQA obligations.

The ICLTC has preliminarily determined that the Inyo 2015 RTP will not result in significant impacts. Therefore, an Initial Study/Proposed Negative Declaration was prepared and was circulated for public review with the Draft document.

Coordination with Other Plans and Studies

The *RTP Guidelines* recommend that the circulation elements of the general plans within a region are consistent with the RTPs in the region. The goals, policies, and objectives of this RTP are consistent with the goals in the Transportation and Circulation Elements of both the *Inyo County General Plan* and the *City of Bishop General Plan*. The primary goals and objectives of other important documents have been incorporated into the RTP including: *Inyo Mono Coordinated Public Transit Human Services Transportation Plan* (2014), *Inyo County Collaborative Bikeways Plan* (2008), *Bishop Reservation Pedestrian and Bicycle Safety Plan* (2007) and the *Bishop Paiute Reservation Long Range Transportation Plan* (2007). Information for the state highway system was developed in coordination with Caltrans District 9. Transportation Concept Reports for all state highways were used as a reference for existing and future transportation conditions.

The Active Transportation Program (ATP) Plan is being completed using the same public outreach as has been used for the RTP update. The proposed routes contained in the ATP are included as a more detailed supplement to the RTP update.

REGIONAL CHARACTERISTICS

Inyo County is located in easternmost portion of central California (as shown in Figure 1) and generally spans the southeastern length of Sierra Nevada Mountains between Bishop on the north and just north of Walker Pass on the south. The county is bordered by the State of Nevada to the east, Mono County to the north and San Bernardino and Kern Counties to the south. Although Tulare and Fresno Counties technically border Inyo County to the west, the Sierra Nevada Mountains form a geographic boundary. Inyo County’s landscape includes the low desert of Death Valley, the high desert of the Owens Valley and the dramatic escarpment of the eastern High Sierra including Mt. Whitney at an elevation of 14,495 feet. The City of Bishop is the only incorporated city in the region. Other major communities within the county include Big Pine, Independence, Lone Pine, and Shoshone.

US 395 is the primary roadway for the majority of the County’s population and runs north to south connecting the county with Mono County and the urban areas of Reno, Nevada to the north and the greater Los Angeles area to the south. There is no state highway in the study area which crosses the Sierra west to destinations in the California Central Valley. Other highways providing access east through Death Valley National Park toward Nevada are SR 190, SR 168, SR 178, Stateline Road, and Daylight Pass Road. SR 127 provides a regional north and south route in the eastern portion of the County and provides access between I-15 and US 95 in Nevada.

Roughly 98 percent of the land in Inyo County is held by public agencies such as the US Forest Service, National Park Service, the Bureau of Land Management, China Lake Naval Weapons Center, State of California, and the Los Angeles Department of Water and Power. Limited by public lands and geography, the developed areas of Inyo County consist largely of small communities along the US 395 corridor. Tourism and recreation is the major industry in the region. Approximately 3 million people visit the Eastern Sierra annually.

Population

According to the US Census 2013 American Community Survey, Inyo County has a total population of 18,482 people. This represents a 2.9 percent increase over 2000 Census counts. Of this total, roughly 3,856 people live in the City of Bishop. Table 3 presents an overview of age and race estimates for Inyo County, using 2013 American Community Survey data. According to this data, predominate ethnicities are White (65.2 percent), Hispanic (19.9 percent), and Native American (10.4 percent). Roughly 5.4 percent of the County speaks English less than “very well”. Just less than 20 percent of the population in Inyo County was age 65 and older in 2013.

TABLE 3 : Inyo County 2013 Demographic Estimates									
	Total	Race						Speak English Less Than "Very Well"	Age 65 and Above
		White Alone	Hispanic	Asian	African American	American Indian	Other/ Multirace		
Number of Persons	18,482	12,051	3,684	271	170	1,913	393	991	3,564
% of Population	--	65.2%	19.9%	1.5%	0.9%	10.4%	2.1%	5.4%	19.3%

Source: US Census American Community Survey 2009-2013 5 Year Estimates.

Figure 1

Population Trends and Projections

The California Department of Finance (DOF) provides population projections for California cities and counties (Table 4). The California DOF estimates that Inyo County population will grow at a rate of less than one percent annually over the next twenty years. By 2035, the Inyo County population is forecast to be 20,235. It should be noted that the DOF projections typically struggle with population estimates for Inyo County likely because the lack of privately owned land and geographical constraints. Since the 1980 census, the County has only had a population growth of 3% (17,895 to 18,482).

Year	Population	Change	
		# Persons	Annual %
2013 Census Est.	18,482	--	--
2020	19,622	1,140	0.86%
2025	20,004	382	0.39%
2030	20,211	207	0.21%
2035	20,235	24	0.02%

Source: CA DOF, 2015

The growth of the elderly population is an important consideration in terms of public transit needs. As demonstrated in Table 5, the proportion of the Inyo County population age 65 and older will increase from 3,526 in 2010 to 5,501 in 2030 or roughly 27 percent of the total population.

	Total (All ages)	Age Group							Total 65 or more years
		Preschool Age (0-4 years)	School Age (5-17 years)	College Age (18-24 years)	Working Age (25-64 years)	Young Retirees (65-74 years)	Mature Retirees (75-84 years)	Seniors (85 or more years)	
2010	18,528	1,061	2,790	1,229	9,923	1,830	1,176	520	3,526
2020	19,350	967	2,581	1,448	9,783	2,720	1,293	559	4,571
2030	20,428	975	2,534	1,447	9,972	2,824	1,993	684	5,501
Change 2010-2020	822	-93	-209	219	-140	890	117	39	1,046
Change 2010-2030	1,900	-86	-256	217	49	995	817	164	1,975
% Change 2010-2020	4%	-9%	-7%	18%	-1%	49%	10%	7%	30%
% Change 2010-2030	10%	-8%	-9%	18%	0%	54%	69%	32%	56%

Source: California Demographic Research Unit, Table P-1

Native American Tribes

Five tribal governments own land within Inyo County. A brief description of each entity follows. A more detailed discussion of transportation needs on reservation land is included as part of the transportation needs discussion for each facility.

- ◆ Bishop Paiute Tribe – The tribe is located in the western portion of Bishop. The tribe operates the Paiute Palace gaming property and gas station on North Sierra Highway (US 395) in Bishop. The tribe currently has around 2,000 enrolled members. Approximately 20 – 25 percent of ESTA’s DAR trips in Bishop have an origin or destination on the Reservation.
- ◆ Big Pine Paiute Tribe – The reservation is roughly 300 acres located in the community of Big Pine. Roughly two-thirds of the tribe’s 600 members live on the reservation.
- ◆ Fort Independence Tribe – Fort Independence consists of about 560 acres adjacent to Oak Creek in Independence. About half of the 136 tribal members live on site. The Tribe operates a 50 site RV campground, Winnedumah Wins Casino, and the Fort Independence Travel Plaza .
- ◆ Lone Pine Paiute Shoshone Tribe - The Tribe has a population of approximately 350 residents and consists of 240 acres of land near the community of Lone Pine.
- ◆ Timbisha Shoshone Tribe – The Tribe’s reservation, Death Valley Indian Community, is located within Death Valley National Park near Furnace Creek. Roughly 50 members live in the community however many members spend the summers in Lone Pine.

Visitor Statistics and Travel Patterns

US Census data do not reflect the high level of visitors to the region who also have impacts on the regional transportation system. Death Valley National Park alone serves on average 897,400 visitors annually between 2000 – 2013. The most popular month to visit Death Valley is in March. SR 190 transects the park as it runs from Olancho to the intersection of SR 127 at Death Valley Junction, north of Shoshone. SR 178 connects Ridgecrest to the Park while Nevada State Routes 267, 374 and 373 provide access to the park from the east. Daylight Pass and Stateline Roads, both part of the County’s Maintained Mileage System, provide access from Death Valley National Park to Nevada.

According to National Visitor Use Monitoring (NVUM) surveys conducted in Inyo National Forest in Fiscal Year 2006, there were roughly 3.9 million total estimated national forest visits. A 2003 NVUM report indicated that visitors to the forest spent an average of \$2,724 on all outdoor recreation activities including equipment, recreation trips, memberships, and licenses. US 395 is the primary roadway of travel for summer visitors with SR 168 and other County roadways which access trailheads and recreation destinations. Examples include Whitney Portal Rd, Onion Valley Rd, and South Lake Road.

During the winter months, Mammoth Mountain Ski Area attracts around 1.4 million skier visits annually. The majority travel on US 395 from the greater Los Angeles area. Heavier traffic volumes occur on US 395 during peak periods as a result.

Due to the rural nature of the region and mountainous topography, the automobile is the primary mode of transportation for both residents and visitors. This is not anticipated to change over the planning period.

Housing

The US Census 2013 American Community Survey estimated that there were a total of 9,478 housing units in Inyo County. This represents a growth of 436 housing units, or 4.8 percent. Approximately 1,605 units or 17.0 percent are considered vacant. There are roughly 2.1 persons per occupied household.

Economic Base

Currently, public sector jobs account for one-third of local employment in the Eastern Sierra Region, which includes Alpine, Mono, and Inyo counties. Leisure and hospitality jobs account for another third of employment (CA Employment Development Department, 2010). The next largest industry is retail trade which represents 10.8 percent of jobs in the Eastern Sierra. Major employers include the land management agencies, school districts, hospitals, Inyo County, City of Los Angeles, and big box stores.

The California Employment Development Department estimates that there were 8,330 employed individuals living in Inyo County in 2013. During the same year, the unemployment rate in Inyo (not adjusted seasonally) was 8.1 percent. This represents a decrease in unemployment from 2010 levels (10.1 percent). The County's unemployment rate is slightly lower than the California statewide average, which was 8.9 percent for the same period in 2013.

The Caltrans *Long-Term Socio-Economic Forecast for Inyo County* projects that, between 2014 and 2019, the number of jobs in Inyo County is expected to grow by 4.4 percent, with most increases occurring in the professional services sector. Retail sales are expected to grow by 10.8 percent. Total wage and salary jobs are projected to increase by 14 percent between 2014 and 2035. Relating economic conditions to transportation needs, an efficient and safe roadway and bicycle network will encourage tourism and recreational travel as well as provide safe and efficient travel routes for agriculture and other goods movement.

Income

Table 6 presents the median household income by census tract for Inyo County along with the percentage of the statewide median income. Figure 2 displays a census tract reference map for the region. As of 2012 (the most recently available data), the median household income for Census Tract 4 (which includes the City of Bishop area) and Census Tract 8 (which extends from Lone Pine across Death Valley to Shoshone) is less than 80 percent of the statewide median income, which qualifies the area as a disadvantaged community.

Another criteria which signifies an area as a disadvantaged community is the number of students receiving a free or reduced lunch. Table 6 demonstrates that greater than 75 percent of students receive a free or reduced lunch at the following schools: Big Pine High, Big Pine Elementary, Keith B. Bright High (Bishop), Death Valley High Academy, and Sierra Alternative Learning Academy (Lone Pine).

Commute Patterns

The US Census Bureau's Center for Economic Studies *Longitudinal Employer Household Dynamics* dataset offers the most recent commute pattern data statistics (2011). It should be noted that this data reflects all persons reporting their work location, regardless of how often they commute. As such, this data source can be misleading in that it includes persons that only report to their work location infrequently. However, it is the best commute data available for Inyo County. According to the data in

Table 7, 55.1 percent of employed people who live in Inyo County also work in the County. Around 712 employees travel north to Mono County while another 602 travel from Mono County to work in Inyo
Figure 2

TABLE 6: Eligibility for Free Reduced School Lunches

School Year 2013-14

School	% of Students Eligible	Disadvantaged?
<u>Big Pine USD</u>		
Big Pine High	79.5%	Y
Big Pine Elementary	76.6%	Y
<u>Bishop USD</u>		
Bishop Union Elementary Community Day	50.0%	N
Bishop Union Elementary Community Day II	0.0%	N
Bishop Independent Study	36.0%	N
Community Day School III	0.0%	N
Palisade Glacier High (Continuation)	66.7%	N
Keith B. Bright High (Juvenile Hall)	100.0%	Y
Bishop Union High	33.0%	N
Home Street Middle	45.3%	N
Pine Street Elementary	50.0%	N
Elm Street Elementary	51.0%	N
<u>Death Valley USD</u>		
Death Valley High Academy	83.3%	Y
Death Valley Elementary	60.0%	N
Shoshone Elementary	50.0%	N
Tecopa-Francis Elementary	50.0%	N
<u>Lone Pine USD</u>		
Sierra Alternative Learning Academy	100.0%	Y
Lone Pine High	50.5%	N
Lo Inyo Elementary	67.7%	N
<u>Owens Valley USD</u>		
Owens Valley High	30.4%	N
Owens Valley Elementary	41.9%	N
<u>Round Valley Joint Elementary</u>		
Round Valley Elementary	30.1%	N
Source: California Department of Education - Student Poverty Free or Reduced Price Meals (FRPM) - Adjusted % FRPM K - 12		

TABLE 7: Inyo County Commute Pattern Data

# Persons % of Total			# Persons % of Total		
Census Place of Employment for Inyo County Residents			Census Place of Residence for Inyo County Workers		
Bishop city, CA	2,258	30.6%	Bishop city, CA	966	14.1%
Mammoth Lakes town, CA	449	6.1%	West Bishop CDP, CA	792	11.6%
Lone Pine CDP, CA	365	4.9%	Dixon Lane-Meadow Creek CDP, CA	671	9.8%
Dixon Lane-Meadow Creek CDP, CA	295	4.0%	Big Pine CDP, CA	269	3.9%
Fresno city, CA	225	3.0%	Lone Pine CDP, CA	253	3.7%
West Bishop CDP, CA	196	2.7%	Pahrump CDP, NV	145	2.1%
Independence CDP, CA	161	2.2%	Wilkerson CDP, CA	136	2.0%
Big Pine CDP, CA	156	2.1%	Ridgecrest city, CA	133	1.9%
Crowley Lake CDP, CA	156	2.1%	Independence CDP, CA	112	1.6%
Sacramento city, CA	129	1.7%	Round Valley CDP, CA	90	1.3%
All Other Locations	2,997	40.6%	All Other Locations	3,289	48.0%
<i>Total Number of Persons</i> 7,387			<i>Total Number of Persons</i> 6,856		
County of Employment for Inyo County Residents			County of Residence for Inyo County Workers		
Inyo County, CA	4,068	55.1%	Inyo County, CA	4,068	59.3%
Mono County, CA	712	9.6%	Mono County, CA	602	8.8%
Fresno County, CA	359	4.9%	Kern County, CA	426	6.2%
Kern County, CA	338	4.6%	San Bernardino County, CA	225	3.3%
Sacramento County, CA	212	2.9%	Los Angeles County, CA	210	3.1%
Tulare County, CA	189	2.6%	Nye County, NV	173	2.5%
Santa Clara County, CA	163	2.2%	Fresno County, CA	142	2.1%
Monterey County, CA	103	1.4%	Clark County, NV	100	1.5%
San Joaquin County, CA	98	1.3%	Tulare County, CA	74	1.1%
Stanislaus County, CA	98	1.3%	San Diego County, CA	56	0.8%
All Other Locations	1,047	14.2%	All Other Locations	780	11.4%
<i>Total Number of Persons</i> 7,387			<i>Total Number of Persons</i> 6,856		
<i>Source: U.S. Census Bureau, Longitudinal Employer Household Dynamics, 2011</i>					

County. There are a small number of employees who commute between Inyo County and Kern County, San Bernardino County as well as Nye County in Nevada. The City of Bishop is the most common Census Place of employment for Inyo County residents. If the census places of Dixon-Lane/Meadow Creek and West Bishop are included, a total of 2,749 Inyo County residents work in the Bishop area. Another 449 work in Mammoth Lakes and 365 work in Lone Pine. As for Inyo County workers, the greatest number (2,429) live in the Bishop region. Other concentrations of Inyo County employees are in Big Pine, Lone Pine and Pahrump, Nevada.

The 2009-2013 American Community Survey conducted by the US Census Bureau provides additional commute data for Inyo County, including means of transportation to work and travel times. According to the survey, 72.4 percent of workers drove alone, 9.3 percent carpoled, 5.5 percent worked from home,

7.1 percent walked, 0.6 percent used public transportation, 4 percent bicycled and 1.1 percent used other means . Census data shows that commute times are not significantly long for Inyo County employees. The mean travel time to work was 14.8 minutes.

TRANSPORTATION LAND USE INTEGRATION

The County has adopted the following Vision Statement: *The Vision of Inyo County Government for its public is to provide responsive decision making while supporting cultural and historical values, the natural environment and rural quality of life.*” Coordinating land use changes and growth with transportation planning is one of the most important considerations in modern planning. A new transportation facility to an outlying area can have the effect of increasing land uses by providing convenient transportation. This can have negative effects on the environment and the regional transportation system. Additionally, it is important to consider transportation needs (roadways, bicycle paths and public transit) prior to approving and constructing a new development.

In Inyo County, development is generally limited to areas within the borders of already developed communities, as a high proportion of other land in Inyo County is owned by public agencies. Less than two percent of land in the county is under private ownership. At this time there is no significant growth expected in the county over the next 20 years. The southeastern portion of the county may see development pressure in the future as growth spills over from Nevada, though water availability in this portion of the County is limited. In the City of Bishop, there is the potential for land transfers from public to private ownership within the city limits. This could open up development within the City.

The Bishop Paiute Tribe has plans for a new 400 home development on the reservation. The new homes will need roads. The Tribe recently conducted an update to their Transit and Transportation Improvements Plan. Transportation needs and projects are discussed later in this document.

ROADWAY TRANSPORTATION SYSTEM DESCRIPTION

The Inyo County regional roadway network comprises over 3,500 miles of streets, roads and highways. The roadway network includes paved and dirt roadways owned by the National Park Service, US Forest Service, Bureau of Indian Affairs (BIA) jurisdiction and the Bureau of Land Management.

State Highways

The state highways transecting Inyo County are described below.

US 395 – This state highway is a major north–south roadway connecting Inyo County to Mono County and Reno, Nevada in Washoe County to the north and the Los Angeles Basin to the south. Most Inyo communities are located on or near US 395. These include Bishop, Big Pine, Independence and Lone Pine. US 395 is designated as a Principal Arterial and is part of the National Highway System. Recreational traffic and goods movement are currently and will continue to be the major sources of traffic on the highway. US 395 is designated as a High Priority Interregional Highway in the Interregional Transportation Strategic Plan (ITSP). According to the Transportation Concept Report the concept for the US 395 corridor in the ITSP includes four-lane expressway and four-lane conventional roadway from the San Bernardino/Kern county line to Lee Vining in Mono County. North of Lee Vining to the Nevada state line, the concept is described as a combination of four-lane conventional roadway, four-lane expressway, and two-lane fully improved conventional roadway with passing lanes. There are currently ten public charging stations for electric vehicles along US 395. The Tesla company has proposed US 395 as a one of the planned corridors for construction of its Supercharger charging stations within the next few years. US

395 is part of the STAA legal truck network meaning that trucks with approved kingpin-to-rear-axle dimensions can safely travel the route. STAA truck dimensions are the typical size for trucks travelling interstate.

US 6 – Highway 6 is classified as a rural minor arterial and travels from US 395 in Bishop, through Mono County to Nevada. The highway also intersects with SR 120 in Mono County. It is a two-lane highway which provides important connections to employment, goods and services in Bishop for residents in the Benton and Chalfant areas of Mono County. Eastern Sierra Transit Authority (ESTA) offers a lifeline route between Benton and Bishop on US 6 two times a week. US 6 is an alternative route to US 395 between Bishop and Mammoth Lakes. The Principal Arterial serves commuters, goods movement, agriculture and recreational day use. As part of the Strategic Highway Corridor Network (STRAHNET), US 6 is part of a highway network which provides defense access, continuity, and emergency capabilities to military bases for defense purposes. US 6 is part of the national STAA network. Caltrans and the City of Bishop are cooperatively planning and monitoring the need for improvements at the US 6 and Wye Road intersection including turn lanes. The TCR also identified a need for truck parking to replace current use of the shoulder.

SR 127 – SR 127 connects I15 in San Bernardino County to Nevada. This two lane rural minor arterial travels through the Inyo County community of Shoshone and intersects SR 190 at Death Valley Junction. The route serves local and interregional traffic, good movement and access to recreation. The highway is very rural and does not include traveler services for up to distances of 57 miles. When the Yucca Mountain Nuclear Waste Repository was being funded, SR 127 was being considered as a haul route for radioactive nuclear waste. Due to road conditions, periodic flash floods, seasonal tourism peaks, remoteness of emergency responders in the region, and impacts on the road from increased heavy traffic, improvements to SR 127 would be required before the transportation of nuclear waste could be considered.

SR 136 – SR 136 begins/ends at US 395 south of Lone Pine and travels along the north side of Owens Lake until it intersects with SR 190. The facility is a two lane rural minor arterial which provides access to the historic sites of Dolomite, Swansea, and Keeler and is a gateway to Death Valley. Only California Legal size trucks are allowed on this facility. The Eastern Sierra Interagency Visitor Center, where all Mt. Whitney wilderness permits must be obtained is located at the intersection of US 395 and SR 136. There is a future potential need to make improvements to limit vehicular, bicycle, and pedestrian conflicts in this area. Additionally the TCR recommends shoulder widening and rumble strips when the facility is scheduled for rehabilitation. As LORP projects are implemented there may be a need for increased recreational signage.

SR 168 – The SR 168 segment west of Bishop travels between the popular high elevation recreation area around Lake Sabrina and US 395 in Bishop. During the winter months only the section between Aspendell and Bishop is plowed. This section of roadway is two lanes with grades up to 6 – 8 percent and classified as a rural major collector. Near Bishop the two-lane facility includes a two-way left turn lane and is designated a bicycle route. The section from Sabrina Road to Meadow Lane is designated as a state scenic highway and a section of the eastern SR 168 is part of the National Forest Scenic Byway. After a break in the highway, SR 168 continues east from US 395 from the community of Big Pine. This section is classified as a rural minor arterial and provides access to the ancient bristlecone pine forest before continuing to Mono County. Future potential projects include extension of the Class III bike route to Cerro Coso Community College. The Bishop Paiute Tribe has proposed sidewalk projects in tribal lands along SR 168 that would connect to existing sidewalks in the City of Bishop. Within the City of Bishop, removal of some on-street parking may decrease conflicts with bicycles, pedestrians and traffic flow.

SR 178 – Located in the southeastern portion of the county, the Inyo County portion of SR 178 travels

between the eastern boundary of Death Valley at Badwater Road through Shoshone to Pahrump, Nevada. The segment between Death Valley and SR 127 is part of the STRAHNET network and is classified as a rural major collector. Only California Legal trucks are allowed to travel on SR 178 within Inyo County.

SR 190 – SR 190 travels along the south side of Owens Lake near Olancho and terminates at Death Valley Junction with SR 127. This highway is the gateway to Death Valley and is classified as a rural minor arterial. As such, the facility is subject to extreme environments such as flooding and heat which have direct impacts on pavement conditions. The majority of the facility is part of the California Legal Truck network and the section from the junction with SR 136 to Panamint Valley Road is California Legal Advisory. SR 190 within Death Valley National Park is designated a state scenic byway and a national scenic byway. Transportation needs on this highway included paved shoulders to better accommodate cyclists, rockfall mitigation and dip replacement.

Other Regionally Important Roads

A significant percentage of interregional travelers to and through Death Valley National Park use one or more roads that are not on the State Highway system. These roads include: Stateline Road, Panamint Valley Road, Old Spanish Trail Highway and Trona – Wildrose Road (part of the Inyo County Maintained Mileage System) and also Badwater Road, Scotty’s Castle Road, and Daylight Pass Road (maintained by DVNP). These routes serve as part of the interregional network through the County. The signage and mapping to travel on these routes is inconsistent. With new signage on the I-15 freeway in Las Vegas directing travelers to access DVNP via SR 160 in Nevada and Stateline Road, it is likely that traffic on this route will increase.

There are a number of State Highways and County maintained roads that provide access for residents and travelers to small communities and recreational areas in the Sierra Nevada. These include: Pine Creek Road, SR 168, South Lake Road, Sabrina Road, Glacier Lodge Road, Onion Valley Road, Whitney Portal Road, Horseshoe Meadows Road, and Nine Mile Canyon Road. Nine mile Canyon Road is unique in Inyo County in that it is the only road inside of Inyo County that crosses the Sierra crest and provides access to communities on the western slope of the Sierra Nevada. Paved roads elsewhere in the County that also provide access to recreation destinations include White Mountain Road and Death Valley Road. The condition of these roads is important to the economy of communities throughout Inyo County.

Interregional Transportation Strategic Plan

The Draft 2015 Interregional Transportation Strategic Plan identifies 11 Strategic Interregional Corridors throughout California, which have a high volume of freight movement and significant recreation tourism. US 395 through Inyo County has been identified as a High Priority Interregional Highway. As identified in the plan, priority investments for US 395 will focus on multimodal and freight access improvements such as improved shoulder widths, curve corrections, and removing barriers to STAA access. Also supported with be improvements to bicycle, pedestrian, transit services, and coordination of local transit with interregional bus services.

The 2014 ITIP has three simple objectives:

- ◆ Improve state highways
- ◆ Improve the intercity passenger rail system
- ◆ Improve interregional movement of people, vehicles and goods.

The Olancha-Cartago 4 lane project is part of the 2014 ITIP.

The primary purpose of the ICLTC entering into MOUs on US 395 and SR 14 had been to access ITIP funds.

Traffic Volumes

Annual Average Daily Traffic (AADT) is defined as the total volume of traffic (sum of both directions) over the year divided by 365 days. The Caltrans traffic count year is from October 1 through September 30. Traffic counting is generally performed by electronic counting instruments, moved to consistent locations throughout the state in a program of continuous traffic count sampling. The resulting counts are adjusted to reflect an estimate of annual average daily traffic by compensating for seasonal fluctuation, weekly variation, and other variables that may be present. AADT is used to present a statewide picture of traffic flow, evaluating traffic trends, computing accident rates, planning and designing highways, and other purposes.

The highest AADT volume in Inyo County in 2013 (the latest year for which data is available) was observed in Bishop along US 395 at the intersection with SR 168 (14,900), as shown in Table 8 and Figure 3. The lowest traffic volumes occurred on SR 168 at the Inyo Mono County line in Fish Lake Valley (170).

Table 8 also presents historic AADT data for roadways in the county from 2003 through 2013. Generally, traffic volumes on US 395 in the Bishop area have decreased over the past ten years. US 395 traffic volumes only increased near Lone Pine and Pine Creek Road (north of Bishop). Traffic volumes have increased in some of the recreational areas such as South Lake Road on SR 168 near Death Valley Junction at SR 127 and Stateline Road at the Death Valley NP South Boundary. However, traffic volumes through the National Park on SR 190 have decreased.

Table 9 presents the peak month Average Daily Traffic (ADT) volumes on the state routes in the County between 2003 and 2013. This data is reflective of traffic activity in the peak month of the year (typically July), which is impacted to a relatively high degree by recreational traffic. Peak month traffic volumes follow a similar trend to AADT volumes. The greatest increase in peak month traffic over the past ten years occurred at Pine Creek Road (800 ADT) and at Death Valley Junction on SR 127 and on US 395 at SR 136 near Lone Pine (700 ADT). Other increases in peak month traffic occurred on US 395 in Big Pine (500 ADT) and on SR 168 at South Lake Road (500 ADT). The largest decreases in peak month traffic volumes over the ten year period occurred on US 395 through Bishop and on SR 168 at Otey Road.

Death Valley National Park tracks visitor use statistics such as traffic counts in the park. As shown, in Table 10, traffic counts collected in 2000 and 2014 demonstrate an increase in visitor use and associated vehicle traffic at all count stations except for near the old mining community of Ryan, southeast of Furnace Creek where traffic counts have decreased by 0.4 percent annually. Traffic counts have increased by as much as 6.0 percent annually on Death Valley Road which travels through the northern portion of the park to Big Pine. In terms of total traffic volumes, Ryan and Townes Pass (on SR 190) had the greatest traffic volumes in 2014 (152,891 and 135,486, respectively).

Inyo National Forest has collected traffic data at popular trailheads. According to traffic counts conducted in 2011 the estimated Annual Daily Traffic (ADT) at the popular South Lake Trailhead is roughly 179

cars per day. Along Bishop Creek Road estimated ADT was 232 vehicles per day and 372 along Whitney Portal Road.

Figure 3

TABLE 8: Inyo County Annual Average Daily Traffic Volumes on State Highways

2003 - 2013

Highway / Counter Location	2003	2004	2006	2008	2011	2013	Change: 2003 - 2013		
							#	%	Annual %
US 6 at:									
Jct. US 395	3,750	3,750	3,800	3,700	3,610	3,550	-200	-5.3%	-0.5%
Silver Canyon Rd	1,950	2,020	2,050	1,900	1,900	2,100	150	7.7%	0.8%
SR 127 at:									
Old Spanish Trail	-	-	1,000	700	700	700	-	-	-
Shoshone, South Jct SR 178	950	900	1,000	850	850	790	-160	-16.8%	-1.7%
Shoshone, North Jct SR 178	300	300	330	250	280	280	-20	-6.7%	-0.7%
South of Stateline Rd	750	1,000	1,000	1,200	1,170	1,170	420	56.0%	5.6%
Jct. SR 190	700	700	650	650	590	580	-120	-17.1%	-1.7%
Nevada State Line	700	700	650	650	590	560	-140	-20.0%	-2.0%
SR 136 at:									
Jct. US 395	500	600	650	600	540	540	40	8.0%	0.8%
Jct. SR 190	400	400	450	420	430	430	30	7.5%	0.8%
SR 168 at:									
South Lake Rd	330	600	600	550	550	550	220	66.7%	6.7%
Otey Road	6,400	6,400	6,400	6,300	6,300	6,250	-150	-2.3%	-0.2%
Brockman Lane	6,600	6,750	6,600	6,350	6,300	6,250	-350	-5.3%	-0.5%
Jct. US 395	8,900	9,000	8,400	8,200	8,000	7,700	-1,200	-13.5%	-1.3%
Inyo/Mono County Line	-	-	-	420	160	170	-	-	-
SR 178									
Death Valley, South Boundary	120	120	280	250	250	250	130	108.3%	10.8%
Nevada State Line	850	850	850	850	820	780	-70	-8.2%	-0.8%
SR 190									
Olanca, Jct. US 395	330	330	330	300	230	240	-90	-27.3%	-2.7%
Jct SR 136	400	400	450	500	520	540	140	35.0%	3.5%
Stovepipe Wells	1,350	1,050	1,050	900	900	900	-450	-33.3%	-3.3%
Scotty's Castle Rd	810	810	810	810	810	810	0	0.0%	0.0%
Beatty Cutoff Rd	1,600	1,250	1,250	1,250	950	920	-680	-42.5%	-4.3%
Fumace Creek Ranch	1,350	1,050	1,050	1,050	1,050	1,050	-300	-22.2%	-2.2%
Bad Water Rd	1,000	1,000	1,000	1,000	1,000	1,000	0	0.0%	0.0%
Death Valley Jct, SR 127	700	650	650	700	850	860	160	22.9%	2.3%
US 395 at:									
Jct. SR 190	6,000	6,200	6,200	5,600	5,600	5,500	-500	-8.3%	-0.8%
Jct. SR 136	6,000	6,400	7,400	6,700	6,600	6,500	500	8.3%	0.8%
Lone Pine, Whitney Portal Rd	6,000	6,300	6,700	6,000	6,500	6,500	500	8.3%	0.8%
Pangborn Lane	6,300	6,300	6,700	6,150	6,000	6,000	-300	-4.8%	-0.5%
Independence, Market St	6,300	6,800	6,800	6,400	6,300	6,300	0	0.0%	0.0%
Independence, Maintenance Station	6,300	6,300	6,400	6,000	6,050	6,300	0	0.0%	0.0%
Big Pine, SR 168 Northeast	7,400	8,400	8,300	7,800	7,800	7,700	300	4.1%	0.4%
Bishop, South Street	14,000	14,500	14,000	13,000	12,650	12,400	-1,600	-11.4%	-1.1%
Bishop, SR 168 West	16,900	17,300	14,150	15,500	15,200	14,900	-2,000	-11.8%	-1.2%
Jct. US 6	14,100	14,100	14,150	16,000	13,200	13,100	-1,000	-7.1%	-0.7%
Bishop Bike Path	13,500	13,500	13,550	13,550	13,200	13,100	-400	-3.0%	-0.3%
Ed Powers Rd	8,100	8,700	8,000	7,700	7,350	7,300	-800	-9.9%	-1.0%
Pine Creek Rd	5,300	5,300	7,000	7,000	6,550	6,550	1,250	23.6%	2.4%

Source: Caltrans Traffic Counts

**TABLE 9: Inyo County Peak Month Average Daily Traffic Volumes on State Highways
2003 - 2013**

Highway / Counter Location	2003	2004	2006	2008	2011	2013	Change: 2003 - 2013		
							#	%	Annual %
US 6 at:									
Jct. US 395	4,050	4,000	4,000	4,000	3,800	4,050	0	0.0%	0.0%
Silver Canyon Rd	2,050	2,050	2,050	2,000	2,000	2,400	350	17.1%	1.7%
SR 127 at:									
Old Spanish Trail	1,250	1,250	1,200	900	950	950	-300	-24.0%	-2.4%
Shoshone, South Jct SR 178	1,100	1,100	1,200	1,100	1,100	940	-160	-14.5%	-1.5%
Shoshone, North Jct SR 178	400	400	400	300	450	380	-20	-5.0%	-0.5%
South of Stataline Rd	850	1,200	1,200	1,450	1,500	1,550	700	82.4%	8.2%
Jct. SR 190	720	780	750	800	640	640	-80	-11.1%	-1.1%
Nevada State Line	710	710	750	800	640	560	-150	-21.1%	-2.1%
SR 136 at:									
Jct. US 395	750	700	900	800	800	880	130	17.3%	1.7%
Jct. SR 190	550	500	800	600	680	770	220	40.0%	4.0%
SR 168 at:									
South Lake Rd	550	1,100	1,150	1,100	1,050	1,050	500	90.9%	9.1%
Otey Road	9,700	9,700	7,200	6,900	6,800	6,900	-2,800	-28.9%	-2.9%
Brockman Lane	7,400	7,300	7,400	7,100	6,800	6,900	-500	-6.8%	-0.7%
Jct. US 395	9,400	9,500	9,200	8,700	8,300	8,200	-1,200	-12.8%	-1.3%
Inyo/Mono County Line	-	-	-	560	270	290	-	-	-
SR 178									
Death Valley, South Boundary	150	180	420	400	400	400	250	166.7%	16.7%
Nevada State Line	1,100	1,100	1,100	1,000	820	1,050	-50	-4.5%	-0.5%
SR 190									
Olancha, Jct. US 395	490	490	490	450	230	300	-190	-38.8%	-3.9%
Jct SR 136	550	550	600	900	520	1,000	450	81.8%	8.2%
Stovepipe Wells	2,200	1,900	1,900	1,200	900	1,200	-1,000	-45.5%	-4.5%
Scotty's Castle Rd	1,250	1,250	1,250	1,250	810	1,250	0	0.0%	0.0%
Beatty Cutoff Rd	2,400	2,050	2,050	2,050	950	1,300	-1,100	-45.8%	-4.6%
Furnace Creek Ranch	1,750	1,500	1,500	1,500	1,500	1,500	-250	-14.3%	-1.4%
Bad Water Rd	1,200	1,200	1,200	1,200	1,000	1,200	0	0.0%	0.0%
Death Valley Jct, SR 127	850	850	850	1,050	850	1,250	400	47.1%	4.7%
US 395 at:									
Jct. SR 190	7,900	7,700	7,700	7,100	7,300	7,400	-500	-6.3%	-0.6%
Jct. SR 136	8,200	8,000	9,300	8,800	8,600	8,900	700	8.5%	0.9%
Lone Pine, Whitney Portal Rd	8,300	7,700	8,300	7,800	8,500	8,500	200	2.4%	0.2%
Pangborn Lane	8,100	8,100	8,300	8,100	7,800	8,000	-100	-1.2%	-0.1%
Independence, Market St	8,700	8,300	8,300	7,800	8,200	8,400	-300	-3.4%	-0.3%
Independence, Maintenance Station	8,400	8,400	8,300	7,700	7,700	8,400	0	0.0%	0.0%
Big Pine, SR 168 Northeast	10,000	11,300	9,800	9,600	9,600	10,500	500	5.0%	0.5%
Bishop, South Street	16,500	16,000	15,700	15,000	14,900	14,800	-1,700	-10.3%	-1.0%
Bishop, SR 168 West	20,100	19,000	16,100	17,800	17,500	17,400	-2,700	-13.4%	-1.3%
Jct. US 6	16,300	16,300	16,100	18,400	15,400	15,300	-1,000	-6.1%	-0.6%
Bishop Bike Path	16,000	16,000	16,100	16,100	15,400	15,300	-700	-4.4%	-0.4%
Ed Powers Rd	10,100	9,700	10,000	9,600	9,600	9,400	-700	-6.9%	-0.7%
Pine Creek Rd	8,100	8,100	10,700	10,700	9,100	8,900	800	9.9%	1.0%
Source: Caltrans Traffic Counts									

TABLE 10: Traffic Counts in Death Valley National Park

Count Location	Annual Total		Change 2000 - 2014	
	2000	2014	Total	Average Annual %
Ashford Road	20,545	33,626	13,081	3.6%
Big Pine Road (Death Valley Rd)	1,636	3,711	2,075	6.0%
Ryan	160,722	152,891	-7,831	-0.4%
Townes Pass	111,230	135,486	24,256	1.4%
Wildrose	9,302	11,865	2,563	1.8%

Source: NPS Visitor Use Statistics, 2014

Level of Service

Level of Service (LOS) is used to rate a roadway segment's traffic flow characteristics (see Appendix E for descriptions of Levels of Service). LOS serves as an indicator of roadway performance, ranging from LOS A (best conditions) to LOS F (worst conditions), and assists in determining where roadway capacity needs to be improved. LOS of rural highways is largely determined by roadway geometry factors, such as grades, vertical and horizontal curves, and the presence of passing opportunities. In mountainous topography and particularly through canyons, roadway LOS can be relatively low, even absent substantial traffic volumes.

Caltrans has designated LOS "C" as the concept LOS for Inyo County state highway segments. Existing LOS estimates for certain state highway segments are presented in Table 11. As the SR 136 and US 395 Transportation Concept Reports have been updated as recently as 2014, existing and future LOS estimates in Table 11 were obtained from the TCRs. For other state highways, roadway Level of Service (LOS) was evaluated based on standard traffic engineering techniques presented in the Highway Capacity Manual (HCM) 2010, as applied in the Highway Capacity Software (HCS) application.

Table 11 demonstrates that only the section of US 395 in the Olancho – Cartago area currently operates at LOS D, below the concept LOS. After the construction of the proposed four lane highway project, LOS is anticipated to improve to "A" on this roadway segment.

Traffic and Level of Service Forecasts

Table 12 also presents an overview of future traffic conditions for the end of the RTP planning period in 2035. Estimated future AADT is displayed geographically in Figure 4. For US 395 and SR 136, future traffic volumes and LOS were obtained from TCRs. Future traffic volumes for other roadway segments were developed as follows:

- ◆ For state highways with a positive average annual percentage growth rate of AADT from 2000 to 2013, that growth rate was assumed for the duration of the planning period.
- ◆ For state highways with a negative average annual percentage growth rate of AADT from 2000 to 2013, flat growth of traffic volumes was assumed for the duration of the planning period.

TABLE 11: Truck Traffic on Inyo County State Highways

Highway				Total	Average	Percent
	2006	2010	2013	Change: 2006 - 2013	Annual Change 2006 - 2013	Trucks 2013
US 6 at:						
Jct. US 395	456	426	426	-30	-1.0%	12.0%
Silver Canyon Road	416	437	644	228	6.4%	30.6%
SR 127						
Shoshone, South of Jct SR 178 East	106	110	100	-6	-0.8%	11.6%
South of Stateline Road	--	91	87	--	--	31.1%
South of Jct SR 190	220	251	251	31	1.9%	21.4%
North of Jct SR 190	86	82	79	-7	-1.2%	13.7%
SR 168 at:						
South Lake Rd	29	10	13	-16	-10.8%	2.3%
Otey Rd	44	34	36	-8	-2.8%	3.0%
East of Brockman Lane	165	294	248	83	6.0%	4.0%
West of Brockman Lane	128	254	288	160	12.3%	4.6%
West of Jct US 395	252	440	414	162	7.3%	5.4%
South Jct US 395	42	43	52	10	3.1%	11.3%
SR 190 at:						
Olancho, Jct. US 395	11	44	35	24	18.0%	14.5%
West of Jct SR 136	2	4	4	2	10.4%	1.7%
Furnace Creek Ranch	37	41	41	4	1.5%	3.9%
Death Valley Junction, Jct. SR 127	45	61	62	17	4.7%	7.2%
SR 178 at:						
Death Valley Monument, South Boundary	12	15	15	3	3.2%	6.7%
West of Jct. SR 127	15	14	14	-1	-1.0%	5.5%
East of Jct SR 127	82	77	72	-10	-1.8%	9.1%
Nevada State Line	76	76	69	-7	-1.4%	8.9%
US 395 at:						
South of Jct. SR 190	768	684	660	-108	-2.1%	12.0%
North of Jct SR 190	539	513	479	-60	-1.7%	8.7%
South of Jct SR 136	726	666	626	-100	-2.1%	11.0%
North of Jct SR 136	1,228	1,154	1,079	-149	-1.8%	16.6%
Big Pine, South of Jct. SR 168	1,377	875	1,210	-167	-1.8%	20.5%
Big Pine, North of Jct. SR 168	913	1,161	847	-66	-1.1%	11.0%
Bishop, Jct SR 168	849	930	893	44	0.7%	6.0%
South of Jct. US 6	425	485	470	45	1.4%	3.0%
North of Jct. US 6	766	728	709	-57	-1.1%	5.4%
Ed Powers Rd	772	774	969	197	3.3%	13.3%

Source: Caltrans Truck AADT, 2015

TABLE 12: Inyo County State Highway Peak Hour Roadway Level of Service

Roadway Segment	2013		Concept LOS	Future (2035)	
	AADT	LOS		AADT	LOS
US 6					
US 395 to Dixon Lane	3,550	C	C	3,629	C
SR 127					
Jct SR 178 East to Jct SR 178 West (Shoshone)	790	B	C	790	B
Jct SR 190	1,170	B	C	1,170	B
SR 136⁽¹⁾					
Jct US 395 to Jct. 190	540	A	C	671	A
SR 168					
Big Pine	460	C	C	460	C
SR 178					
Shoshone to Nevada State Line	790	A	C	790	A
SR 190					
Furnace Creek	957	C	C	957	C
US 395⁽²⁾					
Kern County Line to South of Olancha	5,600	A	C	6,190	A
Olancha - Cartago	5,600	D	C	6,190	A
South of Lone Pine	5,710	A	C	6,300	A
Through Lone Pine	6,510	A	C	7,190	A
Lone Pine to Independence	6,160	A	C	6,800	A
Through Independence	6,210	A	C	6,860	A
Independence to Big Pine	6,100	A	C	6,740	A
Through Big Pine	6,100	A	C	6,740	A
Big Pine to Bishop	9,420	A	C	10,410	A
Through Bishop	12,700	A	C	14,040	A
Bishop to Mono County Line	8,440	A	C	9,520	A
Note 1: Per 2014 TCR existing = 2012 and future is 2032					
Note 2: Per 2014 TCR, existing = 2013 and future = 2033					

Future volumes on Inyo County state highways are not anticipated to increase by more than one percent annually by 2035. As such LOS on Inyo County state highways is projected to remain at or below concept LOS “C” at the end of the planning period, assuming the Olancha – Cartago four-lane project is constructed. Without the project, LOS on that section of roadway will remain at LOS “D”.

County and City Roadways

Traffic Conditions

Inyo County maintains roughly 1,124 miles of roadway. Generally, traffic conditions are not congested on Inyo County Roadways as the state highways act as the primary routes of travel.

Figure 4

The City of Bishop maintains roughly 17 miles of roadways. Traffic counts on City of Bishop roadways are displayed in Figure 5. As shown, the highest ADT traffic volumes were recorded on East Line Street just east of the intersection with US 395 (4,781 and 4,265). East Line Street turns into Poleta Road which provides the only paved access to the Bishop Airport. The next largest traffic volumes were recorded on Home Street near the intersection of West Line Street (4,132 and 3,700). Home Street provides access to all public schools in Bishop. The higher level of traffic on these primary roadways emphasizes the need for alternative east/west options through Bishop, particularly to the airport and for increased non-motorized travel safety to schools.

The City of Bishop General Plan Mobility Element (2012) identifies three opportunity areas. Opportunity areas have traffic issues that could also involve land use and business enhancements. The areas are as follows:

- ◆ Wye Road – Intersection issues complicated by the proximity of Kmart/Vons and land ownership by LADWP.
- ◆ Park Street – Operational issues occur at the intersection with US 395 at the commercial property particularly during special events at the park. Two bicycle/auto and one pedestrian/auto accident has occurred here over a four year period.
- ◆ Grove – Pine – Realigning East/West Pine and Grove Street to create an alternative east – west travel to Line Street would improve traffic operations. However, there are land use constraints.

Pavement Conditions

The County of Inyo and the City of Bishop utilize the MicroPAVER Management Program to analyze roadway pavement conditions and prioritize pavement projects. Original pavement conditions data was collected in 2009. Every year following, roughly one-third of roadways have been surveyed to update the Pavement Conditions Index (PCI) for Inyo County.

For roadways in the County of Inyo system, on a scale of 0 to 100 where a new road would have a PCI of 100 and a failed road of less than 10, the county average PCI is 62, as of 2014. Approximately 38 percent of Inyo County roadways have a PCI of greater than 70 (good to excellent) and 10.5 percent have a PCI of 0 to 25 (very poor to failed).

The City of Bishop's Pavement Management program was also originally developed in 2009 but completely updated in 2013. The average PCI for City of Bishop roadways is 56. Roughly 23 percent of roadways had a PCI of 70 or better (good to excellent), only 2 percent were rated less than 25 (very poor) but over half (54 percent) were rated as poor (26 – 55).

Vehicle-Miles of Travel

The amount of Vehicle-Miles of Travel (VMT) throughout the County has not changed significantly in recent years. The most recent estimate (2013) indicates that a total of 1.3 million daily vehicle-miles were traveled on roadways in Inyo County (California Public Road Data). This represents a seven percent reduction of Daily VMT from 2008 levels (1.4 million). According to the US Energy Information Administration 2014 Annual Energy Outlook, VMT is estimated to increase by 0.9 percent annually between 2012 and 2040 for the nation as a whole. Given the recent decline in VMT and population forecasts, it is likely that VMT in Inyo County will increase at a slower rate or remain steady over the RTP 20 year planning period.

Figure 5

Traffic Collisions

Automobile, bicycle and pedestrian accident data was reviewed from California Highway Patrol's Statewide Integrated Traffic Record System (SWITRS) 2013 reports. Results are displayed graphically in Figures 6 and 7 and a complete list of accidents is included as Appendix F. A total of 111 serious (injury and/or fatality) accidents were recorded in Inyo County in 2013. Three of these accidents involved fatalities. The majority of the accidents (77 accidents) were "solo" auto or motorcycle accidents. This can include running off the road, hitting fixed objects or a solo overturned vehicle. In fact, all three fatalities were solo accidents. Seven of the accidents in 2013 were alcohol related.

As shown in Figure 6, concentrations of auto accidents occurred in Death Valley at the intersection of SR 190, Daylight Pass Road and Scotty's Castle Road near Stovepipe Wells. The area near the intersection of Badwater Road and SR 190 at Furnace Creek has another cluster of accidents as well as the intersection of SR 178 and SR 190. Just south of Death Valley National Park near Shoshone at the intersection of SR 127 and SR 178 represents another common accident location.

The US 395 corridor has had a history of accidents, particularly in the section that remains a two-lane highway. Caltrans produced an informative graphic demonstrating the high number of accidents over a ten year period on the US 395 two-lane highway section near the intersection of SR 190 in Olancho. This graphic is presented as Appendix G. As for accidents in 2013, solo and collision accidents are dispersed throughout the US 395 corridor with small concentrations occurring near Olancho, Cartago, Lone Pine, and Independence.

Figure 7 specifically displays accidents in the Bishop area. Although there were three accidents on US 395 in Bishop (all collisions), a greater number of accidents occurred on SR 168, particularly near Pa Ha Lane and Barlow Lane. In general, the Bishop area sees a higher number of collisions (vs solo accidents) than the rest of Inyo County.

The mileage death rate (MDR) or fatalities per 100 million miles travelled is performance measure of safety. Statewide the number of fatalities per 100 million miles travelled is 0.94 in 2013. According to SWITRS data, in Inyo County there were 0.63 fatalities per 100 million vehicle miles travelled.

Bridges

The Caltrans District 9 Log of Bridges on State Highways and the Local Agency (Inyo) Bridge Inventories are presented in Appendix H. In Inyo County, there are a total of 29 state highway bridges and 37 local bridges. Structural deficiency ratings for state highway bridges are no longer available to the public; however, this information is provided for local bridges. In order to qualify for federal funding assistance through the Highway Bridge Program (HBP), a bridge must have a sufficiency rating of 80 or below. Eleven of the local bridges have a rating of 80 or below. "Structural deficiencies" indicate that a bridge has a loading limit and a permit is required prior to crossing with loads exceeding the limit, while "functionally obsolete" refers to bridges with access limits such as the presence of only one travel lane, the lack of proper bridge rails or lack of appropriate clearances. Of the local bridges, one bridge is considered structurally deficient. An additional two bridges in the county are considered functionally obsolete.

Figure 6

Figure 7

Summary of Roadway and Bridge Needs

State Highways

The US 395 widening project is the top priority project for the state highways in the region. The high level of accidents over the past ten years confirm the need to widen US 395 in the Olancha to Cartago area to four lanes. This is the only section of state highway which does not currently meet the concept LOS “C”.

Inyo County

Pavement management reports indicate that roughly 10.5 percent of Inyo County Roadways are in very poor condition or failing. The backlog of roadway maintenance is a high priority issue. A significant number of roadways in the County are in such a condition where complete reconstruction is required. County roads serve as part of a regional travel network and provide access to critical facilities and a variety of recreational destinations on National Park Service, Forest Service, and Bureau of Land Management land. Safety improvements on high speed rural roads is a significant need.

Bishop Area

Pavement management reports indicate that over half of city streets are in poor condition, making roadway rehabilitation and maintenance a high priority issue.

Another pertinent issue is the lack of connectivity. The Bishop roadway network includes many dead end streets or streets which are not continuous across US 395. Therefore, a significant amount of local traffic travels on US 395. Traffic congestion could be reduced and overall safety on US 395 could be increased if there were continuous alternatives to US 395. Additionally, very few streets are continuous in the east – west direction across US 395. The City of Bishop General Plan Mobility Element 2012 update identifies several potential future local streets and opportunity corridors. An opportunity corridor is a route that is of strategic importance in terms of connectivity but there are currently right-of-way and other constraints. These future streets and opportunity corridors are only conceptual at this time.

Tribal Roadway Issues/Needs

Tribal transportation needs have been well documented through various transportation planning efforts such as the 2009 RTP update and the Inyo County Collaborative Bikeways Plan. Appendix I presents a detailed overview of tribal transportation needs for all types of facilities. These needs and issues are summarized below.

- ◆ Bishop Paiute Tribe – With respect to roadways the reservation lacks connectivity. Dead-end streets pose turnaround challenges for the ESTA DAR. The Tribe is proposing to extend Winuba Lane to connect better to the state highways.
- ◆ Big Pine Paiute Tribe – Speeding is an issue through the reservation. There is also a need for more formal roads. The intersection of US 395 and Butcher Lane where a new travel center is planned needs improvements as well as the intersection of US 395 and Sepsey Lane, which is not an authorized intersection.
- ◆ Fort Independence – A new reservation road is proposed to provide access to the travel center and proposed golf course.

- ◆ Lone Pine Reservation – Vehicles use Zucco Road as a short-cut to the dump. There is a need for a left-turn pocket off Teya Road.

Death Valley National Park

The primary access point to Death Valley National Park is Death Valley Junction at SR 127 and Stateline Road. During peak season, 30 – 40 tour buses arrive from Las Vegas daily. With increased tourism and transportation of waste to the Nevada National Security Site, traffic congestion and roadway deterioration have become a problem. Additional lanes may be necessary in the future to accommodate all traffic. Inadequate signage was noted along SR 127 between Death Valley Junction and the Nevada state line. A “Welcome to California” sign and directional signage indicating a right turn on SR 127 to the National Park entrance is recommended.

There are some hydrology issues along SR 190 at the Furnace Creek Wash resulting from the restoration of a large spring in the park. The spring now flows along the shoulder of SR 190 and threatens to deteriorate the shoulder. NPS recommends constructing two drop-inlet culverts with horizontal grates in an effort to preserve the highway.

Bridges

As identified, 11 local bridges have a sufficiency rating of 80 or less, which makes these facilities eligible for federal funding. Replacement and continued maintenance of Inyo County and City of Bishop bridges are essential to the safety of the regional transportation system. The East Line Bridge is a top priority for the City of Bishop as this facility is 40 years old and does not meet seismic standards. The Bridge will reach the end of its useful life in 10 years.

TRANSIT SERVICES

Public transit services provide mobility to Inyo County residents, including access to important medical, recreational, social, educational and economic services and opportunities, many of which require travel outside of the County. However, providing effective and efficient public transit in Inyo is a challenge due to a low population density, rugged geography and limited funding. A discussion of public transit operators in Inyo County follows.

Eastern Sierra Transit Authority (ESTA)

ESTA was formed through a Joint Powers Agreement (JPA) between Inyo County, Mono County, City of Bishop and Town of Mammoth Lakes in 2006. Public transit service consists of a variety of demand-response, fixed route, deviated fixed route and intercity connections to multiple communities in both Inyo and Mono Counties. The service is operated out of facilities in Bishop, Mammoth Lakes, Lone Pine, Walker and Tecopa. Maintenance is contracted with outside vendors throughout the region. The services are described below and displayed graphically in Figure 8.

Intercity Routes

- ◆ Lone Pine to Reno – ESTA provides connections to the national intercity bus network and the international airport in Reno, Nevada with one round trip between Lone Pine and Reno, four days a week. Communities on US 395 served along the way include Independence, Big Pine, Bishop, Mammoth, Lee Vining, Bridgeport, Walker, Coleville, Topaz, Gardnerville and Carson City.

- ◆ Mammoth Lakes to Lancaster – Intercity connections to the Metrolink station in Lancaster are provided three days a week. This route serves the communities of Mammoth Lakes, Crowley Lake, Tom’s Place, Bishop, Big Pine, Independence, Lone Pine, Olancho, Coso Junction, Pearsonville, Inyokern, Mojave and Lancaster.

Town to Town Routes

- ◆ Mammoth Express – This route operates three round trips (morning, mid-day, and evening) between Bishop and Mammoth five days a week. Schedules are designed to accommodate commuters. Stops are also made in Tom’s Place and Crowley Lake.
- ◆ Lone Pine Express – Also a commuter route, this service travels between Lone Pine and Bishop three times a day, five days a week. Schedules are designed to accommodate commuters living in Bishop and working at county offices in Independence as well as southern Inyo County residents working in Bishop. A mid-day run allows for additional flexibility for non-commuting passengers in need of social services, medical, shopping and life line services.
- ◆ Tecopa - Pahrump - Lifeline service is provided between Tecopa and Pahrump, NV two Thursdays a month. The bus leaves the Senior Center in Tecopa at 8:00 AM, stops in Shoshone and arrives at the Walmart in Pahrump at 8:50 AM. The return trip departs at 11:00 AM.
- ◆ Benton - Bishop - Lifeline service is provided between Benton and Bishop along SR 6 on Tuesdays and Fridays with stops in Hamill Valley and Chalfant.

Inyo County Dial-A-Ride Services

- ◆ Lone Pine DAR - Door to door service is provided in Lone Pine to the general public between 7:30 AM and 3:30 PM, Monday - Friday.
- ◆ Bishop DAR - General public DAR is available from 7:00 AM to 6:00 PM Monday through Thursday, 7:00 AM to 2:00 AM on Fridays, 8:30 AM to 2:00 AM on Saturday and 8:00 AM to 1:00 PM on Sunday. During the day time hours, boarding check points have been established at various locations and times. Passengers boarding at checkpoints receive a one dollar discount on the fare.

In total, all ESTA services (excluding vanpool) carried 1,131,490 one-way passenger trips in FY 2012-13. ESTA operated a total of 936,363 vehicle miles and 56,739 vehicle hours. The ESTA vehicle fleet includes 48 vehicles.

Inyo-Mono Association for the Handicapped (IMAH)

IMAH provides a group of programs and services for adults aged 18 and older who are developmentally disabled who live in Inyo and Mono Counties. IMAH provides transportation for clients to and from programs as well as to work, using a fleet of six vehicles. Three of the vehicles were purchased with Federal Transit Administration (FTA) grant funds and a majority of the vehicles are wheelchair accessible. Most IMAH clients live in Mammoth, Benton, and Lone Pine and require transportation to the IMAH center in Bishop. IMAH operates roughly 600 miles per day for a total operating cost of around \$77,000 per year.

Toiyabe Indian Health Project

The Toiyabe Indian Health Project is a consortium and seven federally recognized tribes and two Indian communities which provide a variety of health care services, including dialysis, preventative health, mental health, dental, etc. There are three clinics located in the region: Bishop Clinic at 52 Tu Su Lane, Lone Pine Clinic at 1150 Goodwin Road, and Camp Antelope at 73 Camp Antelope Rd in Coleville. Some transportation is provided for tribal members without access to a vehicle to medical appointments and dialysis.

Eastern Sierra Area Agency for the Aging (ESAAA)

In Inyo County, ESAAA provides a variety of services including social services, services for the aging population, employment and eligibility, behavioral health services, public health services and prevention. ESAAA provides rides to individuals who are physically or logistically unable to use regular public transportation to obtain essential services such as medical appointments, grocery shopping, pharmacy and day care services. These individuals need transportation and assistance from the driver to find the out-of-town medical facility, purchase and carry groceries into the house, enter and exit the vehicle, etc. Based on individual needs, services are provided by Inyo County staff using program vehicles to residents through Inyo County. Staff provide short and long distance medical trips as far as Reno and Lancaster as well as regularly scheduled errand/shopping trips. ESAAA Site Coordinators assess individuals, plan trips and maintain records. In FY 12/13, through March, there were 20 unduplicated clients served for a total of 887 one way trips provided.

In addition to providing transportation, Inyo County HHS (ESAAA) spends roughly \$10,000 - \$12,000 in bus passes each year for clients. Clients mostly use the ESTA Bishop DAR service and Bishop to Lone Pine fixed route but some also use the Pahrump to Tecopa and Bishop to Reno route for work, school, shopping, and to access services.

Big Pine Education Center

The Big Pine Education Center provides support services for youth including: academic support for K-12 students; workshops on family formation and “out of wedlock” pregnancy; and transportation for youth sporting activities in Bishop. The program uses one 12 – 15 passenger van to transport students to Bishop Park and the Barlow Gym.

Coordinated Public Transit Human Services Transportation Plan Strategies

The Inyo Mono Coordinated Public Transit Human Services Transportation Plan (2014) identified a variety of transit needs for older adults, low income and residents with disabilities. High priority strategies to address these needs which relate to capital improvements include:

Consider acquiring a public transit vehicle to be shared among all human resource agencies - To ensure safety and continued mobility for residents, vehicles used for public transport should be replaced according to the FTA useful life guidelines. Operating costs increase significantly for vehicles that are operated beyond the recommended life span. Most human service agencies which provide transportation for clients cannot share their current vehicles due to insurance or other requirements; however, if a new vehicle is purchased through a joint grant, then the additional vehicle could be shared. The shared vehicle could be used as a primary or backup vehicle depending on the level of use. A shared vehicle would limit duplication of resources while meeting capital needs for the region.

Construct a shared transit operations and maintenance facility - Shared transit operations and maintenance facilities particularly in Bishop and Mammoth have been identified as beneficial capital investments that could be shared between various agencies to reduce overall vehicle storage and maintenance cost of the region's transit fleet. A shared transit facility will provide a safe and secure location for vehicle storage and staging and would provide an opportunity to increase efficiency by performing vehicle maintenance in house. Both Yosemite Area Regional Transit (YARTS) and IMAH indicated an interest in sharing a new vehicle maintenance facility with ESTA.

Public Transit Ridership Projections

Although the Inyo County population is not expected to increase much by 2035, the population will age over the twenty year planning period. Table 5 above presents population forecast by age group from the CA Department of Finance. From 2010 to 2030, the Inyo County population age 65 and older is expected to increase by 56 percent. The number of seniors age 85 and older (those most likely to not drive) is expected to increase by 32 percent. In addition to increased transit demand from elderly residents, there is also expected to be an increase in demand for public transit to Inyo Counties many recreational destinations.

Transit Capital Needs

In terms of regional transportation capital improvement projects, stakeholders indicated that a larger network of sidewalks in the City of Bishop would help make boarding and alighting of ESTA demand response buses easier for residents with disabilities who use a wheelchair. Public input and planning efforts have also indicated a need and benefit for a new public transit maintenance and operations facility at the Bishop Airport. Other transit providers such as IMAH have indicated an interest in sharing this facility with the primary public transit provider, ESTA. This would help to maximize federal and state grant funding.

Tribal Transit Needs

On the Bishop Paiute Reservation a relatively high number of residents do not possess a driver's license and therefore are reliant on public transit and non-motorized travel. Previous studies have indicated a need for bus shelters at common pick up/drop off locations on the reservation. Residents of the Big Pine Reservation and Lone Pine would like to see increased public transit service. At Fort Independence residents would like public transit available for students attending after-school programs.

NON-MOTORIZED FACILITIES

Bicycle and pedestrian facility needs have been well documented in Inyo County. Inyo County recently (2011) revised the Inyo County Collaborative Bikeway Plan. The Bishop Paiute Tribe updated their Transit and Transportation Improvements Plan in 2013 which identifies improvements for walking and bicycling. Public input for this RTP update emphasized the need for non-motorized facility improvements. Non-motorized facilities encompass a wide variety of transportation improvements designed to provide safety and greater mobility for bicyclist, pedestrians, skateboards etc. For pedestrians this includes, sidewalks, crosswalks, push button signals, and curb ramps. Bicycle facilities are separated into three categories:

- ♦ Class I (Bike Path) – Provides a completely separated right-of way for bicyclists and pedestrians with cross flow by vehicles minimized

- ♦ Class II (Bike Lane) – Provides a striped lane for one-way bike travel on a street or highway
- ♦ Class III (Bike Route) – A signed route along a street or highway which provides a shared-use with other vehicles

Smaller projects such as bike racks, signage, and education programs are also considered non-motorized transportation improvements.

Existing non-motorized facilities in the City of Bishop and Inyo County consist of the following and are presented in Figure 9:

Bishop Area

Class I

- Sierra St. Path - 0.4 mile from the end of Sierra Street northward to US 395
- South Barlow Lane - 0.5 miles south of SR 168 along Barlow Lane.

Class II or III

- North Barlow Lane and Saniger Lane runs 0.9 miles from US 395 north to Juniper Street.
- SR 168 - 2.8 miles between Home Street and Red Hill Road.
- US 395 – 2.7 miles between Elm Street (southbound), City Park (northbound) and Brockman Lane

Wilkerson

- ♦ Class II or III facility follows Gerkin Road between Sunland Drive and Sierra Bonita Street

Death Valley

- ♦ Class I facility - 1.3 miles along SR 190 from the Furnace Creek Visitor Center to Harmony Borax Works

Tecopa

- ♦ Class II or III – Tecopa Hot Springs Road (2.7 miles) from Old Spanish Trail Highway to Tecopa Hot Springs Resort

Sidewalks are generally limited to those streets within a block of US 395 and along US 395 through the center of Inyo County communities. There is also an extensive network of sidewalks in the Meadow Creek subdivision. As shown in Figure 9, the City of Bishop has also constructed sidewalks along many of the streets within the incorporated portion of Bishop. Crosswalks exist along US 395 in the communities of Bishop, Lone Pine, Big Pine and Independence.

Cycling for recreational and utilitarian purposes is common on many of Inyo County state highways and local roadways, particularly in the Round Valley Area, Millpond area, and in Bishop.

Bicycle/Pedestrian Related Traffic Accidents

Figure 10 displays bicycle and pedestrian accidents involving automobiles in Inyo County between 2010 and 2013. Two bicycle/auto accidents occurred at Death Valley Junction (SR 127/SR 190) and two along

F9

F10

Badwater Road. Another two bicycle accidents occurred on or near Whitney Portal Road in Lone Pine and the remaining two bicycle/auto accidents occurred on US 395. Pedestrian/auto accidents in 2013 occurred at Onion Valley Campground and on US 395 at Black Rock Springs Road and in Big Pine.

Figure 11 displays bicycle/pedestrian conflicts with automobiles in the Bishop area. These accidents are generally focused on the US 395 and SR 168 corridor. Although a greater number of bicycle accidents occurred where there is no Class I, II, or III facility, multiple accidents occurred even where there is a Class II/III bike lane/route. Figure 11 clearly demonstrates a need for increased safety along Main Street (US 395) in Bishop.

Projections of Bicycle/Pedestrian Activities

It is difficult to project demand for bicycle facilities in rural areas as there is little existing survey data available. Demand for future bicycle facilities was projected in the Inyo County Collaborative Bikeways Plan based on journey to work mode split data. The 2009 – 2013 American Community Survey identifies the following travel to work mode share characteristics:

- ◆ Inyo County – Bicycle (4.0%), walk (7.1%)
- ◆ City of Bishop – Bicycle (11.1%), walk (7.6 percent)
- ◆ Bishop Paiute Tribal Census Tract – Bicycle (2.6%), walk (6.2%)

Applying these proportions to the estimated 2013 employed residents equates to roughly 170,400 annual bicycle commute trips and 298,200 annual walk commute trips in Inyo County as a whole. As connectivity improves, it is anticipated that the bicycle mode share will increase to at least 5.0 percent by 2035 and the walk mode share will increase to 8.0 percent. This would increase annual bicycle commute trips to at least 213,000 and annual walk commute trips to 298,200 for Inyo County as a whole.

As more facilities are constructed it is likely that the percentage of Inyo County residents commuting to work via bicycle will increase. It is also important to note that Census data only tracks travel to work trips. With a more continuous non-motorized network, Inyo County residents are more likely to walk or bike for recreation, everyday errands, or social engagements.

Non-Motorized Facility Needs

Due to the high proportion of land owned by public agencies, Inyo County communities are rather compact, lending the communities to being “walkable” or “bikeable” communities. However, the Inyo County Collaborative Bicycle Plan, Tribal Transportation Plans and various public input processes, identified some obstacles and needs for non-motorized travel safety and continuity. These issues are summarized below. Specific comments from the RTP public meetings are presented in Appendix D.

- ◆ Pavement conditions – Poor pavement conditions near the shoulders pose safety issues for cyclists if the cyclist is forced to travel farther away from the edge of the road.
- ◆ Narrow roadway shoulders – As in most rural areas with two lane highways and roads, the shoulder is not always wide enough for bicycle travel without requiring passing vehicles to cross the double yellow line. Roadway sections where this is particularly important for safety and connectivity reasons are:

F11

- SR 168 to Cerro Coso Community College
 - Red Hill Road between SR 168 and Ed Powers Rd
 - Ed Powers Rd between SR 168 and US 395
 - SR 178 accessing Death Valley National Park
 - Line Street (SR 168 in Bishop)
- ◆ Bishop – US 395, Main Street, bisects the Bishop area and many of the intersecting roadways do not cross the highway, making east-west travel discontinuous. Bicycle facilities are limited to US 395, SR 168 and three Class I paths on Sierra Street and Barlow Lane. Even with Class II or III bicycle lane on Main Street, traffic volumes are much higher than the side streets (Figure 5) and more congested. Many cyclists do not feel safe travelling on Main Street. Additionally, skateboarding is prohibited on Main Street, although it is a popular mode of travel for youth.
 - ◆ Safe Routes to Schools – Children travelling from the reservation to the schools need an all-weather safe route alternative to SR 168. Along the same lines, there is a need for a safe route alternative to US 395 from North Bishop to the schools between the end of Sierra Street and Keough Street. Traffic volumes on Home Street which provides access to all public schools in Bishop are larger than most other city streets (Figure 5), underscoring the need to maintain sidewalks and other non-motorized facilities for safe travel to school on this street.
 - ◆ Continuous Sidewalks – In the Bishop area, a network of continuous sidewalks is important for all pedestrian safety but particularly for school children. A good maintained sidewalk network also reduces conflicts between pedestrians and cyclists on roadway shoulders. Areas of concern are: Pine St, Grove St, and Elm St and in the Dixon Lane – Meadow Creek neighborhood. The community of Lone Pine is also lacking continuous sidewalks, particularly around the post office.
 - ◆ Crossing US 395 – Although there are multiple crosswalks on US 395 in Inyo County communities, safe crossings are still a concern according to input received through the Inyo County Active Transportation Plan outreach process. School staff cite this as the main issue for school children in Big Pine (the school is located on US 395).
 - ◆ Animals – Cyclists in the Bishop area have had confrontations with dogs. According to surveys conducted as part of the Collaborative Bikeway Plan, many parents will not let their children walk to school because of dogs.
 - ◆ Connectivity to Public Transit (multimodal)– An important part of constructing facilities which encourage safe non-motorized use is to ensure that there is connectivity between bicycle facilities/sidewalks and public transit. It may also be helpful to place bike racks at bus stops. As noted in the public transit section, construction of sidewalks and curb cuts near bus stops is important for transit passengers with disabilities.
 - ◆ Maintenance – After a bicycle or pedestrian facility is constructed it is important to maintain the facility or roadway, free of gravel and foliage that inhibit bicycle travel. Certain types of pavement treatments such as chip sealing provide a rough surface for bicyclists.
 - ◆ Signage and Education – Many residents are unaware of the bicycle and pedestrian facilities which exist in the Bishop area. As the area also receives a high number of visitors, an important regional transportation need is to create better awareness of facilities and safe routes. This could be done

through signage, pavement markings and education. Although as noted in the public input process, too many signs can decrease the value of signage so pavement treatments may be useful.

- ◆ Connections to Recreation – Inyo County recreation trailheads are often located several miles from communities which can be used as gateways or supply stops for visiting hikers, climbers, etc. Better non-motorized facility connections would increase tourism and recreation opportunities for residents with no access to a vehicle. The Lone Pine Heritage Trail Plan is an example. This proposed series of trails for walkers and bikers would improve non-motorized access along Main Street and provide connectivity between Lone Pine and the nearby communities of Alabama Hills, Pangborn Lane, Foothill Trailer Park, and the Lone Pine Reservation.
- ◆ LORP – There is abundant opportunity for recreation oriented non-motorized trails projects in the LORP area. The Lower Owens River Recreation Use Plan identified the following key issues:
 - Tule growth and management
 - Public information and outreach
 - Access, signage, and wayfinding
 - Recreation on privately-held lands
 - Environmental education and stewardship
 - Economic development
 - The interface between ranching and recreation uses
 - Protection of cultural resources
 - Recreation operations and management
- ◆ Equestrian Travel – When designing and planning for non-motorized travel, equestrian travel should be considered.
- ◆ Bishop Paiute - As the Bishop Paiute Reservation is located adjacent to the City of Bishop and between two state highways, walking and biking work, school, and services is convenient. Challenges arise because most of the roadway shoulders are soft dirt or overgrown with vegetation, making walking or biking more difficult. There is a dirt path which connects the Reservation to the schools just east of tribal lands known as the Indian Trail. Although it is a common route to school for children, it is dirt, not maintained, and poorly graded. There are also a series of trails in the Conservation and Open Space Area (COSA) in the southeastern portion of the reservation which do not currently connect to West Line Street. There are essentially no sidewalks on the reservation. There is a need for connectivity to existing sidewalks on the northern and southern boundaries of the reservation.
- ◆ Big Pine/Big Pine Paiute – There are no bicycle facilities on the Big Pine Reservation. There is a need to improve connectivity and create a safe bicycling/walking alternative to US 395 between Big Pine and the Reservation.
- ◆ Fort Independence/Independence – A safer non-motorized connection is also needed between the Fort Independence Reservation and the community of Independence.
- ◆ Lone Pine – The same issues occur in Long Pine. Non-motorized travel south of downtown is particularly unsafe due to a higher speed limit and the lack of sidewalks.

- ◆ Inyo National Forest – The distance on roadways with no bicycle and pedestrian facilities may discourage alternative transportation to Inyo National Forest trailheads. Depending on the level of the rider, steep grades and narrow shoulders are also an issue.

AVIATION

There are seven publicly operated airports in Inyo County and six private air strips. As shown in Figure 1, above, these include the Bishop Airport, and the Independence, Lone Pine, and Shoshone Airports which are operated by Inyo County. Trona Airport is operated by the Searles Valley Community Services Council and Stovepipe Wells and Furnace Creek airports are owned and operated by the National Park Service. There is also a public backcountry dirt airstrip in Saline Valley in Death Valley National Park. The Bishop Airport is the only airport in Inyo County which can accommodate regularly scheduled commercial freight service. For commercial airline service, Inyo County residents must travel to the nearby Mammoth Lakes Airport or south to the Inyokern Airport in Kern County.

The current conditions at the seven publicly operated general aviation airports are as follows:

- ◆ **Bishop Airport**– the Bishop Airport is located roughly two miles east of the City of Bishop. The airport is located on LADWP land which is leased to Inyo County. The airport includes fueling facilities but no control tower. As of January 2015, 45 fixed wing aircraft and 3 gliders were based at the airport. For the twelve month period ending June 2014, annual operations (takeoffs or landings) totaled 26,000, including 3,000 military operations. There are five helipads and several hangars located at the airport. The terminal building also serves as the administrative offices for ESTA and a restaurant. The Bishop Airport Master Plan is currently being updated.

Commercial passenger air service was available at the Bishop airport until 1993. Being located lower in elevation and farther from the mountains, the Bishop area has advantages for commercial passenger service over the Mammoth Lakes airport, particularly during inclement weather. However, airport improvements such as security fencing would be required to make the airport compliant with Federal Aviation Association (FAA) Rule Part 139 before the airport could support commercial passenger service. Improving the Bishop Airport to accommodate commercial passenger service is currently being evaluated and vetted in the community as part of an airport planning process.

Currently, Poleta Road is the only connection to Airport Road and the ESRA Airport from US 395. As such, heavy trucks tend to use residential streets to cut-through to US 395. A top priority project for the City of Bishop is to extend Wye street to the airport so as to provide an additional connection to US 395 without travelling through neighborhoods.

- ◆ **Independence Airport** - The Independence Airport lies just north of the community of Independence on the east side of US 395. This general aviation airport is not on the National Plan of Airport Integrated Systems (NPAIS), making the airport ineligible for most FAA funding. No fueling facilities are available and only two aircraft are based there. It is estimated that the airport sees roughly 3,000 operations annually and most activity is generated by the US Forest Service at the helitack base for fire suppression activities.
- ◆ **Lone Pine Airport** – The Lone Pine Airport is located south of town, east of US 395. Fueling facilities are available and five aircraft are based at this airport. Roughly 8,600 takeoffs and landings occur annually. The Airport Master Record reports cracks in the pavement and faded runway markings.

- ◆ **Shoshone Airport** – The Shoshone Airport is located just east of SR 127, south of SR 178. No services are available at this non-NPAIS airport and no aircraft are based there. Only 700 operations occur annually.
- ◆ **Stovepipe Wells Airport** – Owned and operated by the National Park Service, the Stovepipe Wells Airport is located within Death Valley National Park off of SR 190 near Stovepipe Wells Village. The airport is not on the NPAIS, has no facilities and no based aircraft. Roughly 1,000 aircraft operations are estimated to occur annually.
- ◆ **Trona Airport** – The Trona Airport is located north of the community of Trona off of Trona Wildrose Road. The airport is owned by the BLM and operated by the Searles Valley Community Services Center. There are no facilities and no fixed wing aircraft based there, although two ultra-lights are based at the airport. The airport estimates roughly 7,000 take-offs and landings annually.

Aviation Projections

Although airport operations are not officially recorded at Inyo County airports as there are no control towers, it is estimated that annual operations at the Bishop Airport has not increased over the past ten years. Therefore, unless improvements are made to the airport to allow for commercial passenger service, it is likely that aviation activity will remain relatively stable going forward.

GOODS MOVEMENT

The *RTP Guidelines* state that RTPAs must plan for the movement of goods in the same way they plan for the movement of people to support population growth and economic development. Developing strategies for improving the regional movement of goods can have positive impacts such as job creation, a reduction in land use conflicts or a decrease in air pollution. In Inyo County, goods movement is focused on trucking. According to a US 395 goods movement study commission by Caltrans in 2006, the majority of trucks on that highway are based in Southern California. The majority of northbound trucks are destined for Nevada.

Truck Routes

The Surface Transportation Assistance Act (STAA) sets forth specific dimension requirements for trucks related to the overall length, length of semitrailer and length from the King Pin to Rear Axle (KPRIA). Per the act, there are various levels of truck routes where different vehicle dimensions are allowed. Roadway limitations (such as sub-standard curves, absence of shoulders, and narrow lanes) affect the different designations. An STAA sized truck may only travel on state highways categorized as STAA National Highway Network or Terminal Access routes. STAA truck dimensions have been the trucking standard for 20 years and major trucking companies use STAA trucks in their fleet. US 395 and US 6 are part of the National STAA network while SR 127 is part of the Terminal Access STAA network. All other state highways in Inyo County are designated California Legal or California Legal Advisory routes. STAA sized trucks are not allowed on these highways.

Truck Traffic Volumes

Table 11 presents the most recent data regarding truck activity on the state highways (*Caltrans Annual Average Daily Truck Traffic on the California State Highway System, 2006-2013*). The highest truck traffic volumes in 2013 were observed on US 395 near the community of Big Pine (1,210 trucks per day), followed by US 395 north of SR136 in Lone Pine (1,079 trucks per day) and US 395 at Ed Powers Road

(969 trucks per day). This is a reflection of the high level of regional goods movement along US 395 between Southern California and Nevada. SR 168 sees a fair amount of truck traffic with truck AADT of 250 to 400 between Brockman Road and US 395. The proportion of all traffic consisting of trucks was highest on US 6 and SR 127 where trucks represent around 30 percent of all traffic.

A review of historical truck traffic on Inyo state highways shows that truck traffic has generally decreased over the last seven years on US 395 with the exception of SR 168 and US 6 in Bishop. SR 190 between Olancho and Junction with SR 136 has seen an increase in truck traffic of 10 to 18 percent from 2006 - 2013. Truck traffic has also increased on SR 168 between Brockman Lane and US 395 (3 to 12 percent increase). The largest decrease in truck traffic during the seven year period was observed on US 395 just south of the SR 168 junction in Big Pine (167 trucks per day).

Rail Facilities

There is no passenger or freight rail service in Inyo County. There are several rail corridors in the County where the tracks have been removed. The limited rail facilities are used for recreational purposes or historic interest. It is anticipated that freight or passenger rail facilities will not expand in Inyo County over the next 20 years.

Intermodal Transportation

Intermodal transportation is the movement of products using multiple forms of transportation such as trucking and rail. In Inyo County, most goods movement travels through the region but does not begin or end there. The Bishop Airport does not see much cargo transportation and there is no freight rail service. Therefore, intermodal transportation is not applicable to Inyo County.

Goods Movement Issues

In 2007, Caltrans conducted *the Bishop Area Access and Circulation Feasibility Study* in an effort to improve circulation and safety for all travel modes in downtown Bishop, facilitate access to the Bishop Airport, and accommodate commercial truck traffic while keeping services in Bishop visible to through traffic. The idea of a truck bypass around downtown Bishop has been studied since the 1960's. Several issues have led to a desire to reroute truck traffic around the Bishop downtown corridor:

- ◆ Truck traffic volumes on US 395 between SR 168 and US 6 have seen a 3 to 6 percent increase between 2006 and 2013 for a total increase in annual average truck traffic of around 45 trucks per day. However, truck volumes through downtown Bishop on US 395 are around 200 – 300 trucks per day lower than truck volumes near Big Pine.
- ◆ Truck traffic may increase in the future due to the growth of warehousing and manufacturing in the Reno/Carson City area.
- ◆ The relatively higher traffic volumes along US 395/ Main Street create an uncomfortable environment for bicyclists and pedestrians, particularly school children.
- ◆ The sharp turning radius at the corner of US 395 and Line Street is another concern. It is difficult for trucks and vehicles pulling trailers to make a left turn off of US 395 on to East Line Street without using a portion of westbound East Line Street.

- ♦ There are a higher number of bicycle/pedestrian accidents along the US 395 corridor in downtown Bishop as well as three auto collisions in 2013.
- ♦ In most cities, local traffic is naturally diverted to side streets during times of high congestion. In Bishop, however, there are only three north – south through corridors for vehicles with US 395/Main Street being the primary corridor. SR 168/Line Street is the primary east – west corridor although South Street and Yaney Street also make the connection. All other east – west streets in Bishop end in a “T” intersection.

The Bishop Area Access and Circulation Feasibility Study recommended the following:

- ◆ Driveway and sidewalk improvements along North Sierra Highway/US 395
- ◆ Improvements to the Wye Road/US 395/US6 junction
- ◆ Two-lane with four lane right of way eastern truck route from south of Bishop to the US 6/Wye Road junction.
- ◆ Extension of Sierra Street to See Vee Lane
- ◆ Extension of See Vee Lane north to Choctaw Drive to provide a new entrance for the Highlands Mobile Home Park.
- ◆ The addition of a new “B Street” which would parallel Main Street. The extension of Jay Street and Wye Street to B Street.
- ◆ Extension of Jay Street west to Barlow Lane
- ◆ Provide parallel streets to Main Streets on the West and East of Main Street.
- ◆ Align East/West city street connections

The construction of a truck bypass in Bishop has mixed approval among residents. Downtown business owners are generally opposed to a bypass for fear that interregional traffic will no longer stop in Bishop for services.

Goods Movement Projections

Although truck traffic volumes have decreased in many locations along with total traffic volumes, it is anticipated that trucking will remain the primary form of goods movement in Inyo County over the next 20 years. As improvements are made to the regional STAA network and warehousing grows in the Reno/Carson City area and the World Logistics Center in Moreno Valley, future truck volumes may increase. Goods movement will remain an important factor to consider when programming roadway improvements on US 395 and US 6.

TRANSPORTATION SYSTEM OPERATIONS AND MANAGEMENT

The *RTP Guidelines* require that a RTP address operational and management strategies to improve the performance of the regional transportation system by reducing congestion and maximizing the safety and mobility of people and goods. Reducing traffic congestion can be addressed in two ways: Transportation System Management (TSM) and Transportation Demand Management (TDM). TSM focuses on reducing traffic congestion by improving performance and efficiency, safety and capacity of the transportation system. Examples include High Occupancy Vehicle (HOV) lanes, facility design treatments, freeway management, traffic incident management, traffic signal coordination, and Intelligent Transportation Systems (ITS). TDM addresses traffic congestion by reducing travel demand rather than increasing

transportation capacity and focuses on alternatives such as ride sharing, flextime work schedules, increased transit usage, walking, and bicycling.

Travel Demand Management is more relevant to Inyo County. TDM incorporates decisions made at home before persons leave the house. If residents know that there is a safe and easy method of getting to their destination without their private vehicle, they are more likely to choose alternate modes. TDM strategies which apply to Inyo County include:

Rideshare Programs – Rideshare databases and websites are a good method of matching commuters and thereby reducing the number of vehicles on the road. ESTA administers a small vanpool program between Mammoth Lakes and Bishop.

Other TDM strategies which could help reduce traffic congestion and improve the performance of the regional transportation system include the encouragement of alternative modes of transportation by linking bicycle and pedestrian facilities to key bus stops and provide support facilities such as bike racks and lockers at shopping centers and bus stops so that bicyclists feel safe leaving their bicycle unattended.

Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) are advanced technology solutions designed to increase safety and improve reliability of the transportation system. Examples of ITS used on rural state highways include: Closed Circuit TV (CCTV) stations, Highway Advisory Radio (HAR), Changeable Message Signs (CMS), Extinguishable Message Sign (EMS) and a Road Weather Information Stations (RWIS). These tools provide motorists with real-time information regarding weather, road conditions, road work, road closures, diversions or expected delays so that they can adjust their route accordingly.

AIR QUALITY

Air quality is a significant consideration in planning for and evaluation of transportation systems. Both state and federal law contain significant regulations concerning the impact of transportation projects on air quality. Under state law, local and regional air pollution control districts have the primary responsibility for controlling air pollutant emissions from all sources other than vehicular sources. Control of vehicular air pollution is the responsibility of the California Air Resources Board (CARB). CARB divides California into air basins and adopts standards of quality for each air basin. Inyo County is part of the Great Basin Valleys Air Basin with air quality managed by the Great Basin Unified Air Pollution Control District.

The United States Environmental Protection Agency (EPA) established standards for air pollutants that affect the public health and welfare. Likewise, CARB established state standards and are higher than the federal standards. The six criteria pollutants are Carbon Monoxide (CO), Nitrogen Dioxide (NO₂), Ozone (O₃), Particulate Matter (PM), Lead (Pb), and Sulfur Dioxide (SO₂).

Inyo County is considered “in attainment” or unclassified for every federal air quality standard except for the PM-10 standard, which is not in attainment in the Owens Valley area. As for state standards, Inyo County is not in attainment for PM-2.5 and PM-10.

PM-2.5 and PM-10 are caused by a combination of sources, including fugitive dust, combustion from automobiles and heating, road salt, conifers, and others. The difference between the two pollutants is the size of the particles—PM-10 is particulate matter with an average maximum size of 10 microns and PM-2.5 is PM that is 2.5 microns or smaller. Constituents that comprise suspended particulates include

organic, sulfate, and nitrate aerosols that are formed in the air from emitted hydrocarbons, chloride, sulfur oxides, and oxides of nitrogen. Particulates reduce visibility and pose a health hazard by causing respiratory and related problems. In the Owens Valley area, PM-10 pollution is directly related to windblown dust from the dry Owens Lake Bed. The Great Basin Unified Air Pollution Control District prepared a SIP for PM-10 in 2008 with a 2013 amendment. The majority of the SIP addresses mitigation measures for LADWP to reduce windblown dust in the Owens Lake area. The plan does not attribute PM-10 levels to transportation. However, as indicated in the SIP and the input letter from the Great Basin Unified Air Pollution Control District regarding this RTP, all transportation projects must comply with district rules 400 – 402, asphalt plants require district permitting, diesel vehicles must comply with state regulations, and PM10 emissions must be quantified for transportation-related projects in the Owens Valley.

CLIMATE CHANGE

Global climate change or “global warming” is an important issue which is closely related to transportation. Climate change is caused by the release of greenhouse gases (GHG’s) such as carbon dioxide, methane, nitrous oxide, hydro fluorocarbons, perfluorocarbons, and sulfur hexafluoride into the atmosphere that traps heat and increases temperatures near the earth’s surface. Motorized vehicles emit carbon dioxide and are large contributors to GHG emissions. In fact, according to the CARB GHG Inventory for 2012, transportation accounts for roughly 37.5 percent of total GHG emissions in California. Forecasted, long-term consequences of climate change range from a rise in the sea level to a significant loss of the Sierra snowpack. Despite potentially devastating long term affects, climate change does not have immediately visible effects such as smog. However, GHG emissions are an important air quality issue which needs to be addressed in regional transportation planning documents. State climate change policies and strategies to further reduce GHG emissions locally in Inyo County are discussed further in Chapters 3 and 4.

This page left intentionally blank.

The purpose of the Policy Element of the RTP is to provide guidance to regional transportation decision makers and promote consistency among state, regional, and local agencies. California statutes, Government Code Section 65080 (b), states that the Policy Element must:

- ◆ Describe transportation issues in the region
- ◆ Identify and quantify regional needs expressed within both short- and long-range planning horizons
- ◆ Maintain internal consistency with the Financial Element and fund estimates

This chapter summarizes the transportation issues in the Inyo region and provides goals, objectives, and policies to assist in setting transportation priorities.

REGIONAL TRANSPORTATION NEEDS AND ISSUES

Global Issues

As the world's twelfth largest source of carbon dioxide, the State of California recognizes the need to establish climate change standards. Assembly Bill 32: Global Warming Solutions Act, adopted in 2006, requires the California Air Resources Board (CARB) to adopt rules and regulations that would achieve greenhouse gas (GHG) emissions equivalent to statewide levels in 1990, by 2020. Since AB 32, several laws and policies have been enacted to further direct the state toward reaching the emissions reduction goal. Executive Order S-01-07, signed on January 18, 2007, mandates the following: 1) that a statewide goal is established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020; and 2) that a Low Carbon Fuel Standard (LCFS) for transportation fuels is established for California. Other legislation provides for tax credits for the use of renewable energy sources. The Governor signed an Executive Order directing the CARB to adopt regulations increasing California's Renewable Portfolio Standard (RPS) to 33 percent by 2020.

In order to reach the AB 32 emissions reduction targets, CARB developed a Scoping Plan. The first update to the CARB AB 32 Scoping Plan was completed in May 2014. Transportation related strategies to reach GHG emissions goals include: (1) improve vehicle efficiency and develop zero emission technologies, (2) reduce the carbon content of fuels and provide market support to get these lower-carbon fuels into the marketplace, (3) plan and build communities to reduce vehicular GHG emissions and provide more transportation options, and (4) improve the efficiency and throughput of existing transportation systems.

In California, transportation sector tail pipe emissions accounts for 37 percent of climate change emissions (Scoping Plan, 2014). Therefore the impact that RTP projects will have on GHG emissions is a relevant issue. With a population of less than 20,000 people and limited traffic congestion, it is not likely that Inyo County will have a noticeable effect on greenhouse gas emissions. However, it is important that Inyo County transportation and land use decision-makers pursue transportation and land use projects that adhere to state strategies. Examples of projects already included in the RTP are improvement projects which encourage bikeway and pedestrian use by residents and visitors. Other types of projects which could be implemented in the future, and which will positively contribute to GHG emissions reductions, are public education as well as awareness of the best practices. A discussion on regional transportation strategies to reduce GHG emissions is included in Chapter 4.

LOCAL AND REGIONAL ISSUES AND NEEDS

Inyo County experiences many of the same regional transportation issues as other rural counties in California. In particular: (1) only limited funds are available for roadway operations and maintenance; (2) it is financially difficult to provide consistent transit service to all communities; and (3) there are insufficient facilities for pedestrian/bicycle access. Mobility issues in certain communities are exacerbated by its remoteness. Regional transportation needs and issues are discussed below in greater detail.

Demographics and Economics

Demographic and economic conditions are the root of many regional transportation issues. The median income in incorporated City of Bishop and Lone Pine is less than 60 percent of the statewide average. These statistics indicate that the residents of these communities have fewer resources available and therefore are generally more dependent on alternative modes of transportation, such as transit, bicycling, or walking.

Roadway and Bridge Needs

Roadway and Bridge needs for state highways, local roads and tribal roads generally fall into three categories: capacity, safety/system preservation, and connectivity. A high number of collisions and LOS “D” on US 395 between the communities of Olancho and Cartago are significant capacity and safety issues on the state highway system. Roadway rehabilitation is overdue on many county and city roads leading to costlier repairs and potentially unsafe roadway conditions. Connectivity is a big issue in the City of Bishop and the Inyo County tribal communities. There are many discontinuous and dead end streets in these communities. This leads to congestion and safety issues on the state highways which do traverse communities such as US 395 and SR 168. Seasonal visitor traffic also causes some congestion issues in Death Valley National Park in the eastern portion of the county.

Transit Need

According to the US Census American Community Survey 2006-2010, approximately 6.2 percent of households in Inyo County had no vehicle available to them and therefore are dependent on ESTA and/or family/friends for transportation. Maintaining reliable and efficient public transit is an important regional transportation need for Inyo County, underscored by the remoteness of many of the communities.

As far as transit capital improvement needs, in addition to replacing vehicles as they reach the end of their useful life, improvements such as sidewalks and curb cuts in the City of Bishop and adjoining areas will help for the loading/unloading of passengers with wheelchairs and other disabilities.

Non-Motorized Facility Needs

There is a need to enhance bicycle and pedestrian facilities for recreationalists, tourists, and residents alike. Wider shoulders, bike lanes and paths will greatly increase safety in the region while way-finding signage, sidewalks and connections between communities and trailheads will improve the overall experience for both visitors and residents. Sidewalks, crosswalks, and lighting are particularly important for residents with disabilities. Providing facilities which allow residents to connect between public transit, walking and biking increase the attractiveness of active forms of transportation. As with roadways, needs associated with non-motorized facilities do not end at construction. It is important to maintain bicycle paths and sidewalks by sweeping and repairing the facility surface. Not only does this increase safety but it also encourages non-motorized facility use.

The City of Bishop is a fairly compact urban center that lends itself well to bicycle commuting and/or walking. However, Main Street is US 395 and has high traffic volumes. To complicate matters, there are few side street alternatives which travel continuously through town. The same problem occurs in the east/west direction, where there is a need for alternative non-motorized routes to SR 168 to connect the community center with the Bishop Paiute Reservation and West Bishop neighborhoods. This is particularly important for school children living on the reservation.

Similar issues have been brought up for the other US 395 communities of Big Pine, Lone Pine and Independence. There is a need for an alternative safe non-motorized travel route to US 395 between downtown and the reservation areas.

Aviation Needs

The airports in the Inyo County serve a small amount of general aviation and emergency services air traffic. The Bishop Airport is a logical location for commercial air service into the Eastern Sierra due to a more moderate climate and location than the Mammoth Lakes airport. Security and other airport improvements will be required to become compliant with FAA Rule Part 139 before commercial service can be implemented.

It is not likely that there is sufficient demand to expand other airport facilities in the short term. Inyo County will continue to use California State annual grant funds to maintain these airports to acceptable standards.

Goods Movement Needs

Goods movement is an important transportation issue for the Inyo region. The proportion of all traffic representing trucks reached as high as 20 percent on US 395 in 2013. The potential for issues arise in the downtown areas of communities where bicycle/pedestrian travel is more common. Maintaining state highways to a level that is sufficient for goods movement and providing adequate truck parking will continue to be an important regional transportation need.

GOALS, POLICIES, AND OBJECTIVES

An important element of the RTP process is the development of valid and appropriate goals, objectives, and policies. The RTP guidelines define goals, objectives, and policies 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 for which effort is directed.
- ◆ A policy is a direction statement that guides decisions with specific actions.
- ◆ An objective is a measurable point to be attained. Objectives are capable of being quantified and realistically attained considering probable funding and political constraints. Objectives represent levels of achievement in movement toward a goal.

The RTP goals, objectives, and policies were developed to ensure that Inyo can maintain the regional transportation system within the financial constraints of state, federal, and local funding sources over both the short term and long term planning periods. The Policy Element is consistent with the Financial Element of the RTP. The following RTP goals, objectives, and policies are consistent with the Inyo County General Plan and the City of Bishop General Plan.

The California Transportation Plan (CTP) 2040 which is slated to be approved in December 2015 is the statewide long-range transportation plan designed to meet mobility needs as well as reduce GHG emissions. The purpose of the CTP is to provide a common policy framework which will guide transportation investments and decisions by all levels of government, the private sector, and other transportation stakeholders. The overall goal of the CTP 2040 is to provide support for three outcomes: 1) Prosperous Economy, 2) Human and Environmental Health, 3) Social Equity. The goals and policies of this RTP adhere to the goals and policies of the CTP 2040.

GOALS AND POLICIES

Goal 1: Streets, Roads, and Highways Maintained at a Safe and Acceptable Level

Objective 1.1: Adequate Road Maintenance. Provide proper levels of road maintenance to avoid unnecessary vehicle wear.

Policy 1.1.1: Priority List for Maintenance, Rehabilitation, and Reconstruction. Establish a priority list based on the premise that maintenance, rehabilitation, and reconstruction of the existing regionally significant roads have the highest consideration for available funds.

Goal 2: A Transportation System Which Is Safe, Efficient, and Comfortable, Which Meets the Needs of People and Goods, and Enhances the Lifestyle of the County's Residents.

Objective 2.1: Maintain and Improve Roadway Level of Service. Maintain or improve existing LOS on roadways within the county.

Policy 2.1.1: Better Road and Weather Conditions Information. Provide better road and weather condition information to the traveling public. This may include elements of the Sierra Nevada Region ITS Strategic Deployment Plan.

Policy 2.1.2: Safer Truck Transportation. Facilitate safer truck transportation and ease the impact of truck traffic on residential areas.

Policy 2.1.3: Increase Capacity of Arterials. Provide effective measures to maintain capacity for arterial roads.

Policy 2.1.4: Plan Comprehensive Transportation System. Ensure roadway improvements recognize and incorporate design features addressing the needs of local communities. This may include elements of the Sierra Nevada Region ITS Strategic Deployment Plan.

Objective 2.2: Review of Projects. Consider transportation issues during the review of projects.

Policy 2.2.1: Proper Access. Provide proper access to residential, commercial, and industrial areas.

Policy 2.2.2: Minimum Transportation Impacts. Ensure that all transportation projects have a minimum adverse effect on the environment of the county and on regional Greenhouse Gas (GHG) emissions.

Policy 2.2.3: Air Quality Standards. Maintain air quality standards established by the Environmental Protection Agency (EPA), and the California Air Resources Board (CARB).

Policy 2.2.4: Air Quality Consultation: Coordinate transportation planning with air quality planning at the technical and policy level.

Policy 2.2.5: If transportation improvements are required as part of a new development, require the developer to share the cost of the improvements.

Objective 2.3: Consider all types of environmental impacts including cumulative impacts as part of the transportation project selection process. Work with the project implementing agency to ensure that transportation projects will meet environmental quality standards set by Federal, State and Local Resource agencies.

Policy 2.3.1 – Coordinate with the project implementing agency to determine the impact of the project on biological resources, hydrology, geology, cultural resources and air quality prior to construction. Follow appropriate permitting processes and if necessary, mitigate the impacts according to natural resource agency standards.

Objective 2.4: Community Ability to Pay. Develop a transportation system consistent with the community's ability to pay.

Policy 2.4.1: Maximize State and Federal Funds. Pursue all means to maximize state and federal funds. This may include elements of the Sierra Nevada Region ITS Strategic Deployment Plan.

Policy 2.4.2: Allocation of Funds. Ensure that the allocation of transportation funding dollars maximizes the "highest and best use" for interregional and local projects.

Policy 2.4.3: Selection Criteria: Ensure that transportation investments use the ranking and selection criteria proposed as part of this plan.

Policy 2.4.4: Priority to Efficiency Projects. Give priority to transportation projects designed to improve the efficiency, safety, and quality of existing facilities. This may include elements of the Sierra Nevada Region ITS Strategic Deployment Plan.

Objective 2.5: Relationship between RTP and General Plans. Recognize the relationship between the RTP and the Inyo County and City of Bishop General Plans and strive to accomplish the aims and purposes of these plans.

Policy 2.5.1: Plan Comprehensive Transportation System. Continually plan, prioritize, design, and develop a comprehensive transportation system in cooperative partnership between the county, city, state officials, the Local Transportation Commission, the Inyo County Planning Commission, City of Bishop Planning Commission, public and private groups, Inyo County Tribal Governments, and other interested entities. This may include elements of the Sierra Nevada Region ITS Strategic Deployment Plan.

Goal 3: Maintain Adequate Capacity on State Routes (SRs) and Local Routes in and Surrounding Inyo County and City of Bishop

Objective 3.1: Widen U.S. 395 to 4-lanes. Provide a 4-lane facility for U.S. 395 in Inyo County by the year 2020.

Policy 3.1.1: Improve U.S. 395 in Sections. Widen U.S. 395 as funding allows.

Objective 3.2: Improve State Routes. Add additional capacity to other routes as needed to maintain concept LOS.

Policy 3.2.1: Improve State Routes as Necessary. Improve State Routes through maintenance, widening, bicycle/pedestrian improvements and landscaping as funding allows.

Objective 3.3: Improve County Routes.

Policy 3.3.1: Support Roadway Improvements to Optimize Public Safety. Improve county roads through specific safety improvements and maintenance.

Policy 3.3.2: Improve County Routes as Necessary. Improve county roads through maintenance and capacity enhancements, as funding and need are identified.

City of Bishop: (The full list of policies is included in the General Plan Circulation Element)

GP Goal: Provide a balanced transportation system that moves people and goods throughout the City efficiently, enhances livability and economic viability, and preserves residential neighborhoods and other environmental resources.

GP Goal: Provide safe and attractive roadways to serve existing and future traffic demand and enhance accessibility.

GP Goal: Facilitate public transportation services and facilities that enhance accessibility for residents and visitors, and serve the young, aged, handicapped and disadvantaged.

GP Goal: Provide safe and attractive bicycle facilities throughout the City thereby promoting bicycle commuting and facilitating recreation opportunities.

GP Goal: Improve access to the Bishop Airport and cooperate with Inyo County to promote air services that can promote tourism in the area.

GP Goal: Provide safe and attractive pedestrian facilities throughout the City.

GP Goal: Enhance accessibility to City businesses for residents and visitors by assuring adequate and convenient parking.

Objective 3.4: Provide a 4-lane facility for U.S. 395 and CA 14 between Southern California population centers and Inyo County.

Policy 3.4.1: Enter into Memorandums of Understanding with Mono County, Kern Council of Governments, and San Bernardino Associated Governments to leverage additional ITIP funding on regional roadways wherever feasible.

Policy 3.4.2: Enter into Memorandums of Understanding with Mono County, Kern Council of Governments, and San Bernardino Associated Governments to provide funding for safety and roadway improvements on U.S. 395 in Mono County.

Goal 4: Provide Effective, Economically Feasible, and Efficient Public Transportation in Inyo County That Is Safe, Convenient, And Efficient, Reduces the Dependence on Privately Owned Vehicles, and Meets the Identified Transportation Needs of the County, Emphasizing Service to the Transportation Disadvantaged

Objective 4.1: Financially Support Public Transportation. Financially support public transportation to the maximum extent possible that is determined by an “unmet transit needs” public hearing and the amount of funds available.

Policy 4.1.1: Identify Transit Facilities. Identify transit facilities, such as bus shelters, staging areas, base stations, transit hubs, etc., and potential funding sources.

Policy 4.1.2: Transportation Grants. Encourage and support the use of public transportation grants from state and federal programs to the maximum extent possible.

Objective 4.2: Accessible Transportation Services and Facilities. Provide accessible transportation services and facilities responsive to the needs of the young, elderly, handicapped, and disadvantaged.

Policy 4.2.1: Public Transit Accessibility. Support and promote accessibility in public transportation to the maximum extent practicable, including continued support of special service vans that provide a high level of service to low mobility groups. This may include ITS applications such as transit/paratransit links.

Objective 4.3: Improved Transit Level of Service. Develop a transit system that will provide an improved level of service, in terms of accessibility, convenience, dependability, economy, and safety, will consider alternative fuels, and is sensitive to environmental impacts (including air quality).

Policy 4.3.1: Develop Long-Range Transit Plans. Cooperatively develop long-range plans with transit operators that provide guidance and assistance in determining capital and operating requirements.

Policy 4.3.2: Consider Future Development. Consider future development of commercial or residential centers that will generate traffic and require transportation improvements.

Policy 4.3.3: Encourage Interregional and Intercity Bus Lines. Encourage interregional and intercity bus lines to provide more attractively scheduled service into and within Inyo County. This may include ITS applications such as transit/paratransit links.

Policy 4.3.4: Coordinate Transit Services. Continue to identify and coordinate existing transit services available throughout the various agencies. Identify ways these services can be coordinated to avoid duplication of service. This may include ITS applications such as bus-to-bus communication, transit kiosks, and transit management systems.

Objective 4.4: Promote Public Transit. Promote public transit to raise awareness, encourage ridership, and create an understanding of how to use transit systems.

Policy 4.4.1: Promote Public Transportation. Actively promote public transportation through mass media, personal contact, and other marketing techniques; improve marketing and information programs to assist current ridership and to attract potential riders. This may include ITS applications such as a transit information system.

Objective 4.5: Encourage Intermodal Transfers at Airports. Encourage intermodal transfer of both passengers and freight at airports.

Policy 4.5.1: Provide for multi-modal facilities at airports. Encourage development of multimodal facilities at airports where appropriate.

Goal 5: Encourage and Promote Greater Use of Active Means of Personal Transportation in the Region

Objective 5.1: Encourage Development of Non-motorized Facilities. Encourage the development of non-motorized facilities that will be convenient to use, easy to access, continuous, safe, and integrated into a multimodal transportation network. The facilities should serve as many segments of the population, both resident and tourist, as possible.

Policy 5.1.1: Consider the Non-motorized Mode in Planning. Consider the non-motorized mode as an alternative in the transportation planning process.

Policy 5.1.2: Bikeway System in the Region. Plan for and provide a continuous and easily accessible bikeway system within the region.

Objective 5.2: Include Bicycle Facilities on Streets and Highways. Encourage the modification of streets and highways to include bicycle facilities.

Policy 5.2.1: Multi-Modal Use of Road and Highway System. Support plans that propose multimodal use of the highway system.

Policy 5.2.2: Minimize Cyclist/Motorist Conflicts. Develop a regional bicycle system that will minimize cyclist/motorist conflicts. This may include bicycle and pedestrian-related ITS applications.

Goal 6: Provide for the Parking Needs of Local Residents, Visitors, and Tourists

Objective 6.1: Easily Accessed Rest Areas and Parking Lots. Require the planning and implementation of convenient and easily accessed rest areas and parking lots for travelers.

Policy 6.1.1: Adequate Allocation of Parking. Require development proposals to provide adequate allocation of parking for the intended uses.

Policy 6.1.2: Park-and-Ride Facilities. Encourage park-and-ride facilities along major roadways where feasible.

Policy 6.1.3: Rest Areas. Encourage the development of rest areas in appropriate locations.

Policy 6.1.4: Truck Parking. Encourage the development of truck parking in appropriate locations and designate truck parking locations where appropriate.

Goal 7: Enhanced Airports in the County

Objective 7.1: Maintain, Preserve, and Enhance Existing Airports and Airstrips. Maintain, preserve, and enhance the existing airports and airstrips within the county in the safest and most operational conditions consistent with current funding constraints.

Policy 7.1.1: Airport Funding. Seek all available funding sources for airport maintenance and enhancement.

Policy 7.1.2: Land Use Compatibility. Promote land use compatibility with the surrounding environment for each airport.

Policy 7.1.3: Effective and Efficient Use of Airports. Encourage and foster effective and efficient use of existing airport facilities.

Objective 7.2: Commercial Usage Around the Bishop Airport. Maintain and improve commercial usage at and around the Bishop Airport.

Policy 7.2.2: Air Carrier Service at the Bishop Airport. Establish dependable air carrier service at the Bishop Airport to serve the air passenger, cargo, and courier mail needs of the county.

Policy 7.2.3: Air Passenger Service at Eastern Sierra Regional Airport. Promote and secure adequate air passenger and other aviation and air transportation services.

Goal 8: Encourage and Pursue Railroad Facilities in the Region

Objective 8.1: Encourage Maintenance, Improvement, and Use of Railroad Facilities. Encourage the maintenance, improvement, and use of railroad facilities within the county.

Policy 8.1.1: Preservation of Railroad Right-of-Way. Support preservation of railroad rights-of way in Inyo County.

Policy 8.1.2: Railroad Corridor Studies. Encourage railroad corridor studies in Inyo County for appropriate public uses.

Policy 8.1.3: Reestablish Freight Service. Support efforts to reestablish freight service in Inyo County.

Goal 9: Incorporate New Developments in Transportation Technology, Including ITS Approaches

Objective 9.1: New Technology. Incorporate new technology into transportation systems within the county.

Policy 9.1.1: Transportation Technology Research and Development. Support public and private research and development efforts in new transportation technology.

Policy 9.1.2: Communications Technology. Support communications technology that reduces the need for vehicle travel.

Policy 9.1.3: Multimodal Use of Technology. Encourage multimodal uses of new technology.

Goal 10: Management of the Transportation System

Objective 10.1: Increase the efficiency of the existing transportation system. Implement Transportation System Management (TSM) techniques where feasible.

Policy 10.1.1: Periodically review traffic operations along State highways and major county roads and implement cost effective solutions to reduce congestion.

Policy 10.1.2: Promote access management and accident scene management measures to increase traffic flow.

Goal 11: Transportation Demand Management (TDM)

Objective 11.1: Reduce the Demand for Single Occupant Vehicle Travel. Where feasible, reduce the demand for travel by single-occupant vehicles and two-passenger one-way school trips through transportation demand management (TDM) techniques.

Policy 11.1.1: Increase the mode share for public transit by 10 percent by 2030.

Policy 11.1.2: Consider participation in the AlterNet Rides program by 2015.

Policy 11.1.3: Promote public awareness of Eastern Sierra Transit and rideshare opportunities through media and promotional events.

Goal 12: Land Use Integration

Objective 12.1: Improve livability in the County through land use and transportation decisions that encourage walking, transit, and bicycling.

Policy 12.1.1: Assist local jurisdictions in taking a regional approach in land use decisions during their General Plan process, and developing a road network that supports the RTP goals and objectives and the reduction of Greenhouse Gases.

Policy 12.1.2: Encourage all County entities to actively participate in the Regional Transportation Plan (RTP) Update process.

Policy 12.1.3: Establish formal agreements and acquire the appropriate right-of-way from the City of Los Angeles to implement transportation facilities on LADWP property in Inyo County as needed.

Policy 12.1.4: Address liability issues and potential impacts to resources and operations that may result from using LADWP right-of-way for public transportation facilities.

This chapter presents a plan to address the needs and issues for all transportation modes, in accordance with the goals, objectives, and policies set forth in the Policy Element. It is within the Action Element that projects and programs are prioritized as short- or long-term improvements, consistent with the identified needs and policies. These plans are based on the existing conditions, forecasts for future conditions and transportation needs discussed in the Existing Conditions Section and Policy Element and are consistent with the Financial Element.

PLAN ASSUMPTIONS

In addition to the data discussed above, it is necessary to base the Action Element on a series of planning assumptions, as presented below:

- ◆ **Environmental Conditions** – No change is assumed in attainment status for air or water quality affecting transportation projects.
- ◆ **Travel Mode** – The private automobile will remain the primary mode of transportation for residents and visitors. Public transportation will remain a vital service for the elderly, low-income, and for people with mobility limitations. Bicycle and pedestrian travel will increase modestly, for both recreational and utility purposes.
- ◆ **Changes in Truck Traffic/Goods Movement** – Due to economic activity in the Reno/Carson City area along the US 395/6 corridor, the truck traffic may increase slightly during the planning period.
- ◆ **Transit Service** – Though future planning efforts may lead to expansion of services in Inyo County, any expansion will not significantly impact overall traffic levels. Demand for public transit will increase with population growth, and as the population ages.
- ◆ **Population Growth** – The population of Inyo County will increase at the rate estimated by California Department of Finance, less than one percent annually.
- ◆ **Recreation/Visitor Use** – Recreation/visitor use at National Forest trailheads and in Death Valley National Park is likely to increase over the 20 year planning period. Inyo County roadways, forest roads, bicycle paths and parking areas will be affected. US 395 will also see an increase in traffic due, in part due to increased skier traffic to Mammoth Mountain. Tourism will continue to drive the economy with the most job increases occurring in the retail sector.
- ◆ **Limited Development** – The county will continue to maintain its rural atmosphere. No new influx of major commercial development is anticipated in the County.
- ◆ **Planning Requirements** – New state and federal requirements with respect to climate change and GHG emissions will continue to shape the planning process in the future. This RTP is a dynamic document which will be updated as requirements change.
- ◆ **Cost Estimates** – Inflation will continue at a rate consistent with the growth of the Consumer Price Index over the previous 20 years. Fuel tax revenues will increase at an average rate of one percent per year over the latter half of the planning period.

TRANSPORTATION SAFETY

Addressing transportation safety in a regional planning document can improve health, financial, and quality of life issues for travelers. In the past, transportation safety has been addressed in a reactionary mode. There is a need to establish methods to proactively improve the safety of the transportation network. In response to this, California developed a Strategic Highway Safety Plan (SHSP) in 2006. The document has since been updated in order to clarify some action items. This plan sets forth one primary safety goal: reduce roadway fatalities to less than one per one hundred million VMT. This was achieved in 2009. The state intends to revise the SHSP to build on previous accomplishments. The SHSP focuses on 17 “Challenge Areas” with respect to transportation safety in California.

- ◆ CA 1: Reduce Impaired Driving Related Fatalities
- ◆ CA 2: Reduce the Occurrence and Consequence of Leaving the Roadway and Head-on Collisions
- ◆ CA 3: Ensure Drivers are Properly Licensed
- ◆ CA 4: Increase Use of Safety Belts and Child Safety Seats
- ◆ CA 5: Improve Driver Decisions about Rights of Way and Turning
- ◆ CA 6: Reduce Young Driver Fatalities
- ◆ CA 7: Improve Intersection and Interchange Safety for Roadway Users
- ◆ CA 8: Make Walking and Street Crossing Safer
- ◆ CA 9: Improve Safety for Older Roadway Users
- ◆ CA 10: Reduce Speeding and Aggressive Driving
- ◆ CA 11: Improve Commercial Vehicle Safety
- ◆ CA 12: Improve Motorcycle Safety
- ◆ CA 13: Improve Bicycling Safety
- ◆ CA 14: Enhance Work Zone Safety
- ◆ CA 15: Improve Post Crash Survivability
- ◆ CA 16: Improve Safety Data Collection, Access, and Analysis
- ◆ CA 17: Reduce Distracted Driving

The policy element of this RTP includes safety goals and objectives that comply with the California Strategic Highway Safety Plan. Transportation improvement projects that specifically address safety for all types of transportation modes are included in the project list tables in this chapter. Transportation safety is a main concern for roadways and non-motorized transportation facilities in the Inyo region.

TRANSPORTATION SECURITY/EMERGENCY PREPAREDNESS

Transportation security/emergency preparedness is another element which is incorporated into the RTP. Separate from transportation safety, transportation security/emergency preparedness addresses issues associated with large-scale evacuation due to a natural disaster such as wildfire or flood. Emergency preparedness involves many aspects including training/education, planning appropriate responses to possible emergencies, and most importantly communication and coordination.

As this region is rather remote and not densely populated, it is not likely that Inyo County would be the focus of a terrorist attack. Natural disasters such as wildfire are more likely evacuation scenarios. Identifying evacuation routes and other methods of evacuation is pertinent to the scope of the RTP. The principal arterial traversing Inyo County is US 395 which acts as the primary evacuation route for many Inyo County communities, such as Bishop, Big Pine, Independence, and Lone Pine. SR 190 is an important highway as it traverses the county in an east –west direction and would be the primary evacuation route for Death Valley National Park. SR 127 and 178 are important evacuation routes for the

southeastern communities of Shoshone and Tecopa. The implementation of ITS projects such as Road Weather and Information Systems (RWIS), Changeable Message Signs (CMS), and Closed Circuit Television (CCTV) can assist with maintaining a steady flow of traffic on these state highways while keeping evacuees informed.

In the event of a natural disaster, ESTA vehicles should be made available to transport evacuees (particularly those with disabilities). Additionally, ambulances stationed in the various communities could be called upon for assistance in the transportation of special needs residents. The publicly operated airports in Inyo County are available for emergency evacuation.

The best preventative measures with respect to this document for an emergency evacuation or extreme weather events would be to continue to implement projects in the RTP which upgrade roadways, airport facilities and public transit.

FUNDING STRATEGIES

As demonstrated in the Financial Element, there are insufficient revenue sources available to construct all RTP transportation improvements identified in this plan over the next twenty years. Therefore a basic funding strategy should be developed to help prioritize regional transportation improvements. Potential strategies considered for Inyo County are:

- ◆ **Capacity Increasing Focus** – This strategy allows for the majority of STIP funds to be used for capacity increasing projects such as adding lanes to US 395. Applying STIP funding to local roadway rehabilitation would be of a much lesser priority.
- ◆ **Maintenance Only Focus** - This strategy focuses all possible STIP funding on local roadway rehabilitation and places little importance on state highway capacity increasing improvements as the county develops in the future.
- ◆ **Balanced Focus** – Stakeholders and the public have indicated that funding should be focused on a variety of transportation needs. Over the short-term, expanding the state highway system is a top priority to increase safety and maintain an acceptable LOS. However, pavement management reports have indicated the need for local roadway rehabilitation. A balanced focus also includes an emphasis on alternative types of transportation improvement such as non-motorized facilities and public transit. This RTP update follows the balanced focus funding strategy.

TRANSPORTATION SYSTEM IMPROVEMENTS

As a method of developing responses to the transportation needs and issues discussed in the earlier portions of this document, this RTP includes a list of transportation system improvements for each mode of transportation applicable to Inyo County. This RTP lists both financially constrained and financially unconstrained improvements. Financially constrained projects are funded over the short- and long-term periods as demonstrated in the Financial Element. The unconstrained project list is considered a “wish list” of projects that would provide benefit to the region, but that will unlikely receive funding over the next 20 years unless new funding sources become available.

Project Specific Performance Measurement Development

With diminishing transportation funding at the state level, it is becoming increasingly important to establish a method of comparing the benefits of various transportation projects and considering the cost

effectiveness of proposed projects. According to the RTP Guidelines, performance measures outlined in the RTP should set the context for judging the effectiveness of the Regional Transportation Improvement Program (RTIP) as a program. More detailed project specific performance measures used to quantitatively evaluate the benefit of a transportation improvement project should be addressed every two years in the region’s RTIP.

This section of the Action Element discusses performance measures used to evaluate regional transportation improvement projects in Inyo County. The performance measures listed in Table 13 are used in the development of short-term capital improvement plans to prioritize improvement projects and to determine each project’s cost-effectiveness. Performance measures will be used to monitor how well the transportation system is functioning both now and in the future. The RTP performance measures are amended as necessary to reflect future changes in regional needs, goals, and polices.

Table 13: RTP Program Level Performance Measures

Performance Measure	Data Source	RTP Measure	RTP Objective/Desired Outcome
Mobility and Accessibility (M/A)	Caltrans traffic volumes, Project Study Reports, Transportation Concept Reports and Special Studies	Maintain acceptable LOS Peak period travel time on high volume segments (US 395, 6, SR 168) Increase transportation options in/out of county	Work with Caltrans to provide acceptable LOS on all regionally significant roadways Complete US 395 4-lane projects Improve Airports, non-motorized facilities, and public transit
Safety and Security (S) State Highways	Caltrans, California Highway Patrol	Collision rate per 1,000,000 VMT as compared to state. Fatality rate per 1,000,000 VMT as compared to state.	Work with Caltrans to reduce accidents on all regionally significant roadways Complete US 395 4-lane projects
Safety and Security (S) Local Roads	Inyo County, City of Bishop, California Highway Patrol	Number of Fatal Collisions Number of Injury Collisions Number of Annual Intersection Collisions	Reduce number of fatal collisions from baseline Reduce number of injuries per ADT on major roadways Recommend roadway and intersection improvements to reduce incidence Monitor the number and location of intersection collisions
System Preservation (SP)	Caltrans, County and City Department of Public Works	Pavement Conditions/ % of Distressed Lane Miles/ # of Structurally Deficient Bridges	Maintain city and county roadways at an average PCI of 70 or better/ Reduce Distressed State Highway Miles Zero Structurally Deficient Local Bridges
Economic Well-Being (EW)	Caltrans, County and City	Increased sales tax revenues	Provide acceptable LOS on all State highways, provide safe and attractive transportation facilities Improve airports

- ♦ **Mobility/Accessibility (M/A)** – The Performance Measures for Rural Transportation Systems Guidebook defines mobility as “the ease or difficulty of traveling from an origin to a destination.” For highly populated regions, mobility refers to delay and travel time. As demonstrated in Table 12, Inyo County experiences some traffic congestion along the only remaining two-lane section of US 395 in terms of poor LOS (below LOS C). The top priority RTP projects designed at adding capacity to US 395 will improve mobility for Inyo County residents.

Accessibility is defined as “the opportunity and ease of reaching desired destinations.” Accessibility refers to the number of options available to travel from point A to point B or the number of travel

options to a state highway for a resident of an outlying community. The Performance Measures for Rural Transportation Systems Guidebook cites several relatively easy methods of quantitatively measuring accessibility such as evaluating travel time between key points. In Inyo County, there are no projects proposed that will construct new roadways to or from outlying communities, although the Olancho – Cartago project will improve travel time along the US 395 corridor for both residents and visitors. Improving the Eastern Sierra Regional Airport to accommodate commercial air travel will also increase accessibility. Other non-motorized facility RTP projects propose new trails or expanded trails. Accessibility is also appropriate when measuring transit projects. Public transit links the Inyo County communities and provides access to medical and commercial services in Reno and Lancaster. Any expansion of public transit would improve accessibility for Inyo residents.

- ♦ **Safety and Security (S)** – Safety plays a large role in the consideration of transportation projects in the Inyo region. A reduction in the number of fatal vehicle accidents per VMT is a good quantitative measure of the impact of a project on regional safety. In 2013, Inyo County’s fatality rate was 0.63 per million vehicle miles travelled. This is lower than the statewide rate of 0.94 fatalities per million vehicle miles travelled. Two of the three vehicle fatalities which occurred in 2013, were located on state highways. For the same year Inyo County had 23.2 injury vehicle accidents per 100 million vehicle miles travelled. Most RTP projects will increase safety, including Inyo County’s top priority project, 4-lane US 395. Also, the expansion of the regional non-motorized facility network will reduce vehicle/bicycle/pedestrian conflicts and roadway rehabilitation provides a smoother and safer driving surface. Bridge replacement projects also address safety concerns.
- ♦ **System Preservation (SP)** – Maintaining regional roadways in satisfactory condition is a top priority for the region as well as the number one priority in the California Vehicle Code. In Inyo County, roughly 37 percent of county roadways have a PCI of 55 or less and the average PCI is 62. For Bishop City streets, roughly 56 percent of streets have a PCI of 55 or less and the average PCI is 56. By performing routine roadway maintenance, the County of Inyo and City of Bishop will reduce the need for larger roadway rehabilitation projects in the future.
- ♦ **Economic Well Being (EW)** – Improving the transportation infrastructure is an important part of boosting the economic well-being of Inyo County. All types of capital transportation improvements ranging from local roadway rehabilitation to bicycle paths to airport improvements may encourage tourism and attract new businesses.

Project Selection Criteria

The following project ranking criteria displayed in Table 14 was developed as part of previous RTP efforts to assist with project selection for future RTIP projects.

Transportation Capital Improvements

Completed Projects

Since the last RTP update, ICLTC has completed a number of transportation improvement projects ranging from improvements ranging from roadway rehabilitation to replacing old transit vehicles. These accomplishments are listed in Table 15.

Plan Level Purpose and Need Statements

The 2010 RTP Guidelines state that RTP’s should include planning level statements of purpose and need for proposed. transportation improvements The statement should identify the problem and describe the

intended outcome of the proposed project to fix the problem. As per previous RTP updates, this document presents a qualitative assessment of purpose and need for RTP projects in terms of broad categories of

Table 14: Project Selection Criteria		Scoring Points
Roadway Capacity	Volume Range on Existing Roadway/Improvement	
	0 – 500 ADT	1
	501 – 1,000 ADT	3
	1,000+ ADT	5
Safety	Collision Severity	
	Project addresses location with unsafe design feature	3
	Project addresses location with injury collisions	5
	Project addresses location with fatal collisions	7
Maintenance	Pavement Condition (Projects ranked by PCI. Break into thirds out of projects submitted)	
	Best 33%	1
	Middle 33%	3
	Poorest 33%	5
Cost Effectiveness	Cost Effectiveness	
	Project is consistent with other project needs and funding availability	5
	Project constrains funds in an unusual quantity or length of time	-5
	Project pools funds with other regions and better leverages justification for IIP contribution	4
	Project Cost Per ADT (Submitted projects ranked in thirds – lower scores rank higher)	
	Third 33%	1
	Second 33%	3
First 33%	5	
	Maintainability (Ease of maintenance)	
	Easy (inexpensive) to maintain	4
	Easy to moderately difficult to maintain	2
	Difficult to maintain	-1
Accessibility	Circulation	
	Provides connectivity to community centers / major destinations	1
	Provides connectivity between local collectors and arterials	3
	Provides gap closure on State or Federal Highways	5
Non-auto Modes	Type/Location of Improvement	
	Provides connectivity between housing and service nodes	1
	Provides connectivity to community centers / major destinations	3
	Provides needed non-motorized safety improvements, facilitates gap closure	5
Transit	Type/Location of Improvement	
	Accessibility to transit system	1
	Located on existing transit route	2
	Includes bus turn outs and shelters	3
Other Criteria	Community Project Benefits	
	Improves traffic conditions at park, historic district, community center or school	3
	Local Support	
	Does the project have a great deal of local support? (Resolutions, petitions, correspondence)	1
	Coordination and Multi-Jurisdictional Benefits	
Entity	1	
Source of Funds		
Partnerships leveraging additional funding	1	
Total Points Possible		50

TABLE 15: Recently Completed Transportation Improvement Projects in Inyo County

Lead Agency	Project Description	Construct Year	Funding Source
County	Virtual Transportation Museum	2011	ARRA TE
County	Independence Town Rehabilitation - Reconstruct 2 miles of roadway	2013	STIP
County	North Barlow Lane/Saniger Lane/ Dixon Lane - Rehabilitation and overlay	2010	STIP
County	Shabbell Lane - Reconstruct and replace drainage	2009	STIP
County	Ed Powers and Red Hill Road - Resurface and reconstruct	2009	STIP
County	Nine Mile Road - Guardrail	2010	HSIP
County	Sabrina Bridge Project	2013	HBP
County	Riverside Bridge - Replacement	2011	HBP
City	Pine to Park Path - Construct 1,000 paved path	2013	STIP
City	Wye Road - Intersection Improvements	2013	STIP
City	Grove Street - Sidewalks	2013	STIP
City	Hanby Ave - Pavement reconstruction	2010	ARRA/STP
City	Road Improvement Project A - North Third Street and South Second Street	2011	STIP
City/ESTA	Construct bus pullouts and other ADA improvements	2011	STIP
ESTA	Transit vehicle replacements	2011	STIP
County	Bishop Airport Lighting Project	2013	AIP

Source: Inyo County and City of Bishop

intended outcomes: system preservation, capacity enhancement, safety, and/or multi-modal enhancements. In the Action Element tables, each proposed project is linked to one of the purpose and need categories.

System Preservation (SP) – As identified above, deferred maintenance is a significant issue for County of Inyo and City of Bishop roadways, as evidenced by PCI reports. Maintaining a safe and acceptable transportation system is the number one goal for the Inyo County region. Not only does a well maintained regional transportation system not impede mobility but it provides for safer travel. System preservation includes on-going rehabilitation and maintenance for roadways, bridges, signage, traffic control devices, sidewalks, bicycle lanes, and airports. The majority of RTP projects are roadway rehabilitation and reconstruction. Examples of top priority system preservation projects are: West Bishop and South Bishop roadway reconstruction projects.

Capacity Enhancement (C) – A capacity enhancement project is one which is intended to increase traffic flow, help alleviate traffic congestion and improve LOS. In Inyo County there is one section of state highway which operates below the concept LOS C. This is on US 395 between Olancho and Cartago. As such, the top priority RTIP project for Inyo County is to add lanes to the two lane highway section to make a four lane expressway. This capacity enhancing project will allow for more desirable travel speeds for residents, visitors and goods movement. Increased capacity will provide for significantly safer passing opportunities on a section of highway with a relatively high accident rate over a ten year period.

Capacity enhancement is also applicable to roadway extension projects in the Bishop area including tribal lands. As detailed in the assessment of needs section, there are few roadways which travel continuously in the north – south direction other than US 395 and few which travel continuously in the east – west direction other than Line Street. Extending roadways to create alternative routes through the Bishop area will improve traffic flow on these arterials and in turn create a more desirable and safer environment for non-motorized travel.

Over the long term, capacity enhancement is applicable to the Bishop Airport as improvements are needed to bring commercial air service to the region.

Multi-modal Enhancement (M) – Another significant portion of transportation improvements are needed to enhance safety and mobility for alternative modes of travel. This includes enhancements to pedestrian facilities, bicycle facilities, transit and air travel. The intent of multi-modal projects is to provide safer and more convenient non-auto access to major destinations and activity centers, more opportunities for active/non-motorized travel and greater connectivity between all types of alternative transportation modes. The Seibu to School Bike Path project is a good example of a top priority project which is intended to enhance multi-modal facilities. The bike path will create a safer route to Bishop schools for children in the City of Bishop and Bishop Paiute Tribe.

Proposed Projects

Proposed transportation improvement projects are listed in Tables 16 - 25. Projects are categorized by transportation facility and funding source. Each project is linked to one of the performance measures described above. The following improvement projects are consistent with those included in the Interregional Transportation Improvement Program (ITIP), Federal Transportation Improvement Program (FTIP) and the 2014 Regional Transportation Improvement Program (RTIP).

Improvements to address both short-term (10 years) and long-term (20 years) transportation needs are included in this RTP. Transportation improvement projects are classified into one of the following priority categories:

- ◆ **Tier 1** projects are considered fully fundable during the 2014 State Transportation Improvement Plan five-year cycle.
- ◆ **Tier 2** projects are considered fully fundable during the first ten years of the RTP (by 2025).
- ◆ **Tier 3** projects are considered fundable given current revenue projections over the long-term (11-20 years) or by 2035.
- ◆ **Financially Unconstrained** - The unconstrained project list is considered a “wish list” of projects that would provide benefit to the region, but will unlikely receive funding over the next 20 years unless new funding sources become available.

Determining exact construction costs of transportation projects is difficult, especially for long-term projects. Over recent years, construction prices have varied greatly, first increasing as the price of raw materials used for transportation projects rose before dropping as the recession reduced materials prices and increased competition. In an effort to produce a realistic view of the Inyo region’s transportation improvement costs, the cost estimates in the ensuing tables have been adjusted for inflation. A projected rate of inflation of 2.65 percent was applied to RTP projects, reflecting the average annual rate of change of the Consumer Price Index from 1995 to 2015. Many of the projects in the following transportation improvement tables do not have construction years specified. Therefore, short-term project costs with unknown construction dates were adjusted to represent 5 years of inflation, mid-term project costs were adjusted to represent 10 years of inflation and long-term projects were adjusted to represent 20 years of inflation.

Route	Back Post Mile	Ahead Post Mile	Project Location	Project Description	Total Project Cost (\$1,000s)	PID Cycle
168	16.2	17.9	SR 168 from the intersection of Pa-Me Lane to the intersection of Sunland Drive	168 3-lane	\$4,000	2016
178	43.4	44.2	Near Shoshone	Culvert Replacement	\$1,950	2016
395	0	8.4	Near Owens Lake, from the Kern County line to 1.2 miles south of South Little Lake Road	Rehabilitate pavement	\$0	2018
190	48.6	48.8	Death Valley National Park east of Padre Point Rd and west of Darwin Canyon Rd	Metal beam guard rail	\$2,080	2016
395	117.3	117.6	N Sierra Hwy ped/bike safety improvements	Sidewalk, curb and gutter	\$5,000	2018
395	117.6	117.8	N Sierra Hwy pedestrian bridge	Widen bridge to ADA Standards	\$4,300	2018
					\$17,330	

Source: Caltrans District 9

**TABLE 17: Inyo County Top Priority Funded Regional Roadway
Currently Programmed Projects in STIP or grant funded**

Priority ⁽¹⁾	Route	Specific Location	Proposed Project Description	Construct Year	Total Cost (1,000s)	Funding Source	Performance Indicator	Purpose and Need	Corresponding Goal
<u>State - MOU</u>									
1	US 395	Olancha to Cartago	4 - lane expressway from PM 29.2 to 41.8 ⁽²⁾	2018	Prior Funding	STIP / ITIP / MOU	S, M/A	C	2
1	SR 14	Kern County - Freeman Gulch - Segment 1	4 - lane expressway (funded through CON)	2016	Prior Funding	STIP / ITIP / MOU	S, M/A	C	2
1	SR 14	Kern County - Freeman Gulch - Segment 2	4 - lane expressway (funded through ROW)	2016	Prior Funding	STIP / ITIP / MOU	S, M/A	C	2
<u>County</u>									
1	West Bishop Roadways	Pa Me Lane and other residential streets	Roadway reconstruction	2016	Prior Funding	STIP	SP	SP	1
1	South Bishop Roadways	Sunland Road, Sunland Indian Reservation Road	Roadway reconstruction - 4.3 miles	2015	Prior Funding	STIP	SP	SP	1
1	Whitney Portal Rd	Whitney Portal Rd	Reconstruct	2016	Prior Funding	FLAP ⁽³⁾	SP	SP	SP
1	Rock Creek Rd	Mono with one mile section in Inyo County	Reconstruct	2015	Prior Funding	FLAP	SP	SP	SP
					Total Cost	\$0			

Source: 2014 Summary of STIP County Shares or grant specific source

Note 1: Priority: 1 = Funded/construction 0 - 5 years, 2 = Unfunded/potential construction 0 - 10 years, 3 = Unfunded/potential construction 10 - 20 years

Note 3: FLAP = Federal Lands Access Program

**TABLE 18: Inyo County Regional Roadway Projects
Mid-Term - 0 - 10 years**

Priority ⁽¹⁾	Route	Specific Location	Proposed Project Description	Construct Year	Total Cost (1,000s)(2)	Funding Source	Performance Indicator	Purpose and Need	Corresponding Goal
State - MOU									
2	SR 14	Kern County - Freeman Gulch Segment 2 Construction	4-lane expressway	TBD	\$2,500	STP / ITIP / MOU	S, MA	C	2
2	SR 14	Kern County - Freeman Gulch Segment 3 all phases	4-lane expressway	TBD	\$5,000	STP / ITIP / MOU	S, MA	C	2
2	US 395	Mono County (Bridgeport area passing lanes	Passing lanes in both directions at two locations	TBD	\$2,000	STP / ITIP / MOU	S, MA	C	2
County									
2	Lone Pine Town Rehabilitation Project	Several roadways within townsite	Reconstruct roadway with transverse cracks and uneven surface	TBD	\$2,871	STIP	SP	SP	1
2	Trona-Wildrose Rd	0.5 mile section from San Bernardino County Line	Level out uneven road surface (dips) on high speed rural road	TBD	\$500	STIP	S	SP	1,2
2	Sawmill Rd	Sawmill Rd	Rehabilitation - transverse cracks Possible bicycle lane	TBD	\$2,000	STIP	SP, S	SP	1,5
2	Alabama Hills Rehabilitation Project	Streets in Alabama Hills Residential Area	Rehabilitation - transverse cracks	TBD	\$2,000	STIP	SP	SP	1
2	Poleta Rd / East Line Street Joint City/County	Poleta Rd / East Line Street	Bridge replacement for structurally deficient bridge which does not qualify for HBP funding	TBD	\$1,500	STIP	S	SP	1,3
2	Glacier Lodge Rd	From US 395 to road end	Reconstruct	TBD	\$1,000	STIP FLAP match	SP	SP	1
2	South Lake Rd	From SR 168 to road end at South Lake	Reconstruct, add turn lanes, bicycle lanes	TBD	\$1,000	STIP FLAP match	SP	SP	1
2	Onion Valley Rd	From west end of Independence to road end	Reconstruct	TBD	\$1,000	STIP FLAP match	SP	SP	1
City									
2	Warren St Improvements Phase 2	Warren Street	Pavement, curb, gutter, amenities	TBD	\$4,000	STIP	SP, S, M/A	SP, M	2,3,5
2	East Line St Improvements	East Line St	Rehabilitate pavement, construct curb, gutter, and sidewalk, improve drainage	TBD	\$2,600	STIP	SP, S, M/A	SP, M	2,3,5
2	Short Street Improvements Phase 1	Short St	Rehabilitate pavement, construct curb, gutter, and sidewalk, improve drainage as practical West of Sheden	TBD	\$600	STIP	SP, S, M/A	SP, M	2,3,5
2	Third St Improvements	Third St	Rehabilitate pavement, curb, gutter, sidewalk, drainage along Third South to Pine	TBD	\$2,598	STIP	SP, S, M/A	SP, M	2,3,5
2	May St Improvements	May St	Rehabilitate pavement, curb, gutter, sidewalk along May Main to Hanby	TBD	\$2,598	STIP	SP, S, M/A	SP, M	2,3,5
2	Wye Road (Joint City/County)	Wye Road Extension to Bishop Airport	New access to Bishop Airport, possibly to correspond with other airport improvements	TBD	\$3,000	STIP	M/A, S	C	3,7
2	Alley Rehabilitation	Misc City of Bishop	Rehabilitate alley pavement and improve drainage	TBD	\$3,117	STIP	SP	SP	2
Total Cost									\$39,884

Source: Inyo County, City of Bishop

Note 1: Priority: 1 = Funded/potential construction 0 - 5 years, 2 = Unfunded/potential construction 0 - 10 years, 3 = Unfunded/potential construction 10 - 20 years

Note 2: Construction costs adjusted to reflect 10 years of inflation based on the growth of the CPI from 1995 - 2015

TABLE 19: Inyo County Regional Roadway Projects
Long-Term - 10 - 20 years

Priority ⁽¹⁾	Route	Specific Location	Proposed Project Description	Construct Year	Total Cost (1,000s)	Funding Source	Performance Indicator	Purpose and Need	Corresponding Goal
County									
3	Nine Mile Canyon Rd	Nine Mile Canyon Rd	Reconstruct	TBD	\$1,000	STIP FLAP Match	SP	SP	1
3	South Barlow Lane	South Barlow Lane / Reata Road	Rehabilitation - transverse cracks Possible bicycle lane	TBD	\$2,251	STIP	SP, S	SP	1,5
3	Mummy Lane	Mummy Lane Bridge	Deteriorating bridge, does not qualify for regular bridge program funds	TBD	\$1,500	STIP, HSIP, Local	S, SP	SP	1,3
3	West Bishop Phase II	McLaren and other streets	Reconstruct roadway - transverse cracks	TBD	\$3,000	STIP	SP	SP	1,3
3	Independence Rehabilitation Phase II	Town streets in Independence	Reconstruct roadway - transverse cracks	TBD	\$2,000	STIP	SP	SP	1,3
City									
3	Willow Street Improvements	Willow St	Rehabilitate pavement, curb, gutter, sidewalk along Willow Main to Hanby	TBD	\$3,374	STIP	SP, S, M/A	SP, M	2,3,5
3	Iris Street Improvements	Iris St	Rehabilitate pavement, curb, gutter, sidewalk	TBD	\$422	STIP	SP, S, M/A		2,3,5
3	Clarke Street Improvements	Clarke St	Rehabilitate pavement, curb, gutter, sidewalk along Clarke Main to Third	TBD	\$1,687	STIP	SP, S, M/A	SP, M	2,3,5
3	Short Street Improvements Phase 2	Short St	Rehabilitate pavement, const curb, gutter, and sidewalk, imp drainage as practical east of Second	TBD	\$1,012	STIP	SP, S, M/A	SP, M	2,3,5
3	Moffet Street Improvements	Moffet St	Rehabilitate pavement, curb, gutter, sidewalk	TBD	\$844	STIP	SP, S, M/A	SP, M	2,3,5
3	West Yaney Improvements	Yaney St	Rehabilitate pavement, construct continuous curb, gutter, and sidewalk, improve drainage	TBD	\$2,700	STIP	SP, S, M/A	SP, M	2,3,5
3	Church Street Improvements	Church St	Rehabilitate pavement, construct continuous curb, gutter, and sidewalk as practical	TBD	\$844	STIP	SP, S, M/A	SP, M	2,3,5
3	Fowler Extension	Fowler St	Extend Fowler to Sierra Street	TBD	\$3,374	STIP	M/A	C	2
3	See Vee Extension	See Vee Lane	Signalize and extend See Vee Lane (joint with County and Caltrans)	TBD	\$5,905	STIP	S, M/A	C	1,3
3	Sierra Street Extension	Sierra St	Extend Sierra Street to See Vee Lane	TBD	\$5,062	STIP	S, M/A	C	1,3
3	Wye Road Intersection	Wye Rd	Improve intersections with Highway 6 and highway 395 (joint with Caltrans)	TBD	\$3,374	STIP	S, M/A	C	1,3
3	First Street Improvements	First St	Drainage, pavement, curb, gutter, sidewalk	TBD	\$844	STIP	S, M/A	SP	1,3,5
3	West Pine Street Improvements	West Pine St	Rehabilitate pavement, continuous curb, gutter, and sidewalk, improve drainage Home to Main	TBD	\$2,970	STIP	S, M/A	SP, M	1,3,5
3	Snedden Street Improvements	Snedden St	Rehabilitate pavement, continuous curb, gutter, and sidewalk, improve drainage South to Line	TBD	\$1,654	STIP	S, M/A	SP, M	1,3,5
3	Rome Drive Extension	Rome Drive	Extend Rome Drive west to A Street and east to Main Street and realign Park Street at Main	TBD	\$5,062	STIP	M/A	C	3
Total Cost					\$48,878				

Source: Inyo County, City of Bishop

Note 1: Priority: 1 = Funded/construction 0 - 5 years, 2 = Unfunded/potential construction 0 - 10 years, 3 = Unfunded/potential construction 10 - 20 years, U = Financially unconstrained

Note 2: Construction costs adjusted to reflect 20 years of inflation based on the growth of the CPI from 1995 - 2015

TABLE 20: Inyo County Regional Highway Bridge Program Projects

Priority ⁽¹⁾	Funding Source	Project Proponent	Location	Project Description	Total Cost (\$1,000) ⁽²⁾	Construction Year	Funding Source	Performance Indicator	Purpose and Need	Corresponding Goal
1	HBP	City/County	East Line Street Bridge	Replace bridge over Bishop Creek Canal	\$2,849	2020	HBP	SP, S	SP	1
1	HBP	County	Carroll Creek Road Bridge	Replace bridge	\$3,500	2020	HBP	SP, S	SP	1
1	HBP	County	Oak Creek Road Bridge	Replace bridge	\$3,500	2020	HBP	SP, S	SP	1
1	HBP	County	Walker Creek Road Bridge	Replace Bridge No. 48C-39, across the Los Angeles Aqueduct. The existing one-lane, 9-foot wide bridge will be replaced with a 28 foot wide bridge	\$4,217	2020	HBP	SP, S	SP	1
2	HBP	County	Fall Creek Road Bridge	Replace bridge	\$4,546	2025	HBP	SP, S	SP	1
3	HBP	County	All bridge locations	Replace all bridges on County's bridge list that are structurally deficient/functionally obsolete	\$33,745	TBD	HBP	SP, S	SP	1
Total Cost					\$52,357					

Source: Inyo County, City of Bishop
 Note 1: Priority: 1 = Funded/construction 0 - 5 years, 2 = Unfunded/potential construction 0 - 10 years, 3 = Unfunded/potential construction 10 - 20 years
 Note 2: Construction costs adjusted to reflect inflation based on the growth of the CPI from 1995 - 2015

**TABLE 21: Inyo County Regional Roadway Projects
Financially Unconstrained**

Priority ⁽¹⁾	Location	Proposed Project Description	Construct Year	Total Cost (1,000s)(2)	Funding Source	Performance Indicator	Corresponding Goal
County							
U	Old Spanish Trail Highway	Reconstruct roadway - transverse cracks	TBD	\$24,026	FLAP	SP	1
U	Sage Flat Rd	Reconstruct first mile of Sage Flat Rd and Olancha town streets	TBD	\$4,368	FLAP	SP	1,3
U	Pine Creek Road	Reconstruct - From US 395 to Rovana	TBD	\$2,485	FLAP	SP	1,3
U	Glacier Lodge Road	Reconstruct - From US 395 to Glacier Lodge	TBD	\$12,000	FLAP	SP	1
U	Onion Valley Road	Reconstruct - From US 395 to Onion Valley	TBD	\$15,000	FLAP	SP	1,3
U	Upper Horseshoe Meadows Road	Reconstruct - From first turn to Horseshoe Meadows recreational areas	TBD	\$12,000	FLAP	SP	1,3
U	Lower Horseshoe Meadows Road	2" overlay - From Whitney Portal Road to 1st turn, bicycle lanes from Whitney Portal to Sunset	TBD	\$12,000	FLAP / Local	SP	1,3
U	South Lake Road	Reconstruct, add turn lanes, bicycle lanes to South Fork	TBD	\$7,000	FLAP	SP	1,3
U	Ninemile Canyon Road Rehabilitation Project	Reconstruct, add additional guardrail	TBD	\$8,000	FLAP	SP	1,3
U	Pine Creek Road	Reconstruct - From US 395 to Rovana	TBD	\$2,485	FLAP	SP	1,3
U	Various	Provide surface treatment every 10 years and repaving/reconstruction every 20 years	Ongoing	NA	STIP	SP	1,3
U	Butcher Lane	Reconstruct	TBD	NA	IRR	SP	1,3
U	Bishop & Big Pine Roadway Restoration Phase I	2" AC overlay on 8.2 miles of County maintained roads in and around Bishop & Big Pine	TBD	\$1,556	Prop 1B equivalent	SP	1,3
U	Bishop & Big Pine Roadway restoration Phase II	Chip seal on 31.4 miles of road in and around Bishop & Big Pine	TBD	\$981	Prop 1B equivalent	SP	1,3
U	Old Spanish Trail Highway	Chip seal on the entire 30 mile length from SR 127 to the NV border	TBD	\$750	Prop 1B equivalent	SP	1,3
U	Lone Pine roadway restoration project	2" AC overlay on 6.7 miles of roadway in Lone Pine & the Alabama Hills subdivision	TBD	\$1,698	Prop 1B equivalent	SP	1,3
U	Independence area roadway improvement project	2" AC overlay on 6.0 miles of roadway on rural roads near Independence	TBD	\$978	Prop 1B equivalent	SP	1,3
U	Ninemile Canyon Road Rehabilitation Project	2" AC overlay on a 6.0 mile stretch of Ninemile Canyon Road	TBD	\$950	FLAP Prop 1B equiv.	SP	1,3
U	Olancha, Cartago, & Darwin Road Rehabilitation Project	2" AC overlay on 1.9 miles of road located near these rural communities	TBD	\$282	Prop 1B equivalent	SP	1,3
U	West Bishop Road Reconstruction Phase II	Reconstruct 2.0 miles of streets in the Lazy A & Meadows Farms subdivisions	TBD	\$1,744	STIP	SP	1,3
City							
U	A Street	Construct new street between Line Street and North Sierra Highway (joint with Tribe)	TBD	\$10,123	STIP	M/A	3
U	Lagoon Street Extension	Extend Lagoon Street to Sunland Drive	TBD	\$2,531	STIP	M/A	3
U	South Street West	Extend South Street to Sunland Drive	TBD	\$3,374	STIP	M/A	3
U	Hanby Extension	Extend Hanby to Wye Road	TBD	\$5,062	STIP	M/A	3
U	West Jay Street Extension	Extend Jay Street west to Sunland Avenue	TBD	\$5,062	STIP	M/A	3
U	North Second Connections	Connect and extend North Second Street between East Line Street and Hanby Avenue	TBD	\$2,531	STIP	M/A	3
U	See Vee Extension	Extend See Vee Lane to Jay Street	TBD	\$8,436	STIP	M/A	3
U	Grove/Pine Realignment	Realign Grove Street and Pine Street at Main Street and signalize	TBD	\$13,498	STIP	M/A	3
U	Wye Road Improvements	Rehabilitate pavement, construct curb, gutter, and sidewalk on south side west of Spruce	TBD	\$1,350	STIP	M/A	3
U	West Park Street	Realign Park/Main intersection and construct street to connect at Rome and Home	TBD	\$5,062	STIP	M/A	3
Total Cost				\$165,333			

Source: Inyo County, City of Bishop

Note 1: Priority: 1 = Funded/construction 0 - 5 years, 2 = Unfunded/potential construction 0 - 10 years, 3 = Unfunded/potential construction 10 - 20 years, U = Financially unconstrained

Note 2: Construction costs adjusted to reflect 20 years of inflation based on the growth of the CPI from 1995 - 2015

TABLE 22: Inyo County Regional Public Transit Projects

Priority ⁽¹⁾	Proposed Project Description	Construct Year	Total Cost (1,000s)(2)	Funding Source	Performance Indicator	Purpose and Need	Corresponding Goal
1	Continual Fleet Replacement	Beginning FY 2017 - 18	NA	PTMISEA / FTA	SP	SP	4
2	Phase I Operations and Maintenance Facility Improvements Bus Parking Improvements	TBD	NA	STIP	SP	SP	4
3	Phase II Operations and Maintenance Facility Improvements Construct New Administrative and Operations Facility	TBD	NA	STIP	SP	SP	4

Source: ESTA
 Note 1: Priority: 1 = Funded/construction 0 - 5 years, 2 = Unfunded/potential construction 5 - 10 years, 3 = Unfunded/potential construction 10 - 20 years, U = Financially unconstrained

TABLE 23: Inyo County Active Transportation Funded Projects

Priority ¹⁾	Route	Specific Location	Proposed Project Description	Construction Year	Total Cost (\$1,000s)	Funding Source	Performance and Need Indicator	Purpose and Need	Corresponding Goal
State									
1	Bishop Area	Northside of West Line St.	Sidewalk - 3/4 mile of 6 ft sidewalk with curb and gutter	2015	\$1,419	STIP TE	S, MA	M	5
County									
1	Bishop Area	Sunland Drive	Bicycle lanes - 3.8 miles of 4 ft wide Class III (combined with South Bishop Resurfacing STIP project	2015	\$670	STIP TE	S, M/A	M	5
1	Bishop Area	Ed Powers Road	Bicycle lanes - 1.4 miles of 4 ft wide Class III	2015	\$463	STIP TE	S, M/A	M	5
1	Independence	Dehy Park near Independence	Path through park with interpretive material	2016	\$650	STIP TE	S, M/A	M	5
1	Lone Pine Area	Bicycle lanes on Whitney Portal Road	Class III bicycle lanes from Tuttle Creek Rd to Horseshoe Meadows Rd	See Whitney Portal FLAP	See Whitney Portal FLAP	FLAP	S, M/A	M	5
City									
1	City of Bishop	Seibu to School Bike Path	Class 1 facility from Keough St to Bishop Paiute tribe boundary	2016	\$480	STIP TE	S, M/A	M	5
					Total Cost	\$3,682	Funded		

Source: Inyo County, City of Bishop
 Note 1: Priority: 1 = Funded/construction 0 - 5 years, 2 = Unfunded/high priority potential construction 0 - 10 years, 3 = Unfunded/potential construction 10 - 20 years, U = Financially unconstrained

TABLE 24: Inyo County Unfunded Active Transportation Projects - Part 1

Priority ⁽¹⁾	Location	Proposed Project Description	Total Cost (1,000s)	Funding Source	Performance Indicator	Purpose and Need	Corresponding Goal
County							
U	Big Pine	Town to Tract Class II/III Bicycle Lanes - 1.7 miles On Reynolds and County Roads from Myrtle Lane to US 395	NA	ATP	S, M/A	M	5
U	Bishop Area	Meadow Farms North Sidewalk (0.23 miles of sidewalk on the north side of US 395 or North Sierra Highway from Cherry Lane to the art store)	NA	ATP	S, M/A	M	5
U	Lone Pine	South Lone Pine Sidewalk (0.45 miles of sidewalk on one side of US 395 from end of sidewalk near LADWP to Teya Road)	NA	ATP	S, M/A	M	5
U	Bishop Area	Class II/III Bicycle Lanes Sawmill Road (1.7 miles from Ed Powers Road west to US 395)	NA	ATP	S, M/A	M	5
U	Bishop Area	Class II/III Bicycle Lanes Schober Lane (1.1 miles between Barlow Lane and Sunland Lane)	NA	ATP	S, M/A	M	5
U	Lone Pine	Class II/III Bicycle Lanes Horseshoe Meadows Road (2.1 miles from Sunset Road to Whitney Portal Road)	NA	ATP	S, M/A	M	5
U	Bishop Area	Class II/III Bicycle Lanes on Red Hill Road from Ed Powers Rd to SR 168	\$700	ATP	S, M/A	M	5
U	Bishop Area	CA 168 (West Line Street) from US 395 to Cerro Coso Community College Add shoulders and signage	\$25,373	ATP	S, M/A	M	5
U	Bishop Area	Collins Rd from Gerkin Rd to US 395 - Expand shoulder	\$3,700	ATP	S, M/A	M	5
U	Bishop Area	Diaz Ln from N Barlow Ln to N See Vee Ln - Expand shoulder	\$2,660	ATP	S, M/A	M	5
U	Bishop Area	Dixon Ln from Saniger Ln to US 6 - Expand Shoulder	\$6,683	ATP	S, M/A	M	5
U	Bishop Area	E Yaney St from Spruce St to Hanby Ave - Expand shoulder	\$639	ATP	S, M/A	M	5
U	Bishop Area	Ed Powers Rd from US 395 to SR 168 - Expand shoulder	\$12,686	ATP	S, M/A	M	5
U	Bishop Area	Five Bridges Rd from Jean Blanc to US 6 - Expand shoulder	\$9,701	ATP	S, M/A	M	5
U	Tecopa	Old Spanish Trail Highway (0.72 miles from Tecopa Hot Springs Road to Downey Road)	NA	ATP	S, M/A	M	5
Death Valley National Park							
U	Death Valley NP	Class II/III bicycle lanes on SR 190 from Cow Creek Rd to the Furnace Creek Inn	NA	ATP/FLAP	S, M/A	M	5
U	Death Valley NP	Class II/III bicycle lanes on SR 190 from Cow Creek Rd to Stovepipe Wells Resort	NA	ATP/FLAP	S, M/A	M	5
U	Death Valley NP	Class II/III bicycle lanes on Badwater Road from SR 190 to Badwater	NA	ATP/FLAP	S, M/A	M	5
City							
U	City of Bishop	Spruce Yaney Hanby Sidewalks - Along Spruce, west of Hanby, south side of Yaney at City Park	\$1,000	ATP	S, M/A	M	5
U	City of Bishop	Fowler Sidewalk - Provide continuous curb, gutter, sidewalk	\$980	ATP	S, M/A	M	5
U	City of Bishop	Academy Sidewalk - Provide continuous curb, gutter, sidewalk	\$400	ATP	S, M/A	M	5
U	City of Bishop	Bike Path Rehab - Reconstruct bike path between Sierra Street and North Sierra Highway	\$250	ATP	S, M/A	M	5
U	City of Bishop	Sierra Street Sidewalk- Construct sidewalk along at least the north side of Sierra between Main and Home	\$300	ATP	S, M/A	M	5
U	City of Bishop	Hanby Sidewalks - Curb, gutter, and sidewalk Line to Pine	\$500	ATP	S, M/A	M	5
U	City of Bishop	Diaz to School Class I Bike Path - Diaz Lane to elementary schools	\$1,000	ATP	S, M/A	M	5
U	City of Bishop	Sierra to School Path - Extend Class 1 bike path from Sierra Street to elementary schools	\$400	ATP	S, M/A	M	5
U	City of Bishop	Hobson to Coats Path - Class 1 bike path/pedestrian path from Hobson Street to Coats Street	\$450	ATP	S, M/A	M	5
U	City of Bishop	Home St. Connection - Class I path west of elementary schools to Home Street School campus	\$500	ATP	S, M/A	M	5
U	City of Bishop	North Fork of Bishop Creek - Improve path along North Fork Bishop Creek between Highway 6 and Bishop Creek Canal	\$50	ATP	S, M/A	M	5
U	City of Bishop	Bishop to Chalk Bluffs Path - Improve highway and water crossings Sierra Street to Chalk Bluffs Road along Bishop Canal	\$750	ATP	S, M/A	M	5
U	City of Bishop	Pine to Canal Path - Class 1 bike path from East Pine street to east side of Bishop Creek Canal	\$500	ATP	S, M/A	M	5
U	City of Bishop	Bishop to Laws Path - Improve water crossings Bishop to Laws on proposed rail alignment	\$1,000	ATP	S, M/A	M	5
Total Cost			\$70,222				

Source: Inyo County, City of Bishop

Note 1: Priority: 1 = Funded/construction 0 - 5 years, 2 = Unfunded/potential construction 0 - 10 years, 3 = Unfunded/potential construction 10 - 20 years, U = Financially unconstrained

This page left intentionally blank.

T25

T25

Caltrans State Highway Operation and Protection Program (SHOPP) Projects (Table 16) – The financially-constrained SHOPP plan for Inyo County includes a variety of safety, capacity enhancement and system preservation projects on Inyo County state highways. Projects are anticipated to total nearly \$17 million over the next ten years.

Inyo County Top Priority Funded Regional Roadway Projects (Table 17) – Inyo County’s portion of the Statewide Transportation Improvement Program (STIP) for fiscal years 2014-15 to 2018-19 is presented in Table 17. This table represents programmed Regional Improvement Program (RIP) funds for the Inyo region. The discussion below outlines the purpose and need of Inyo County 2014 STIP projects.

- ◆ **Olancha/Cartago 4 Lane** – This is the top priority MOU project with Kern COG and Mono LTC in an effort to leverage ITIP funding. This project will address safety and capacity constraint issues along the remaining two-lane section of US 395 in Inyo County. Environmental work is under way and construction is anticipated in 2018.
- ◆ **Kern County Freeman Gulch** – This four lane expressway project is the top priority MOU project for Kern County.
- ◆ **West Bishop Improvement Project** - Residential streets in this unincorporated part of West Bishop have severe transverse cracks and are in need of rehabilitation.
- ◆ **South Bishop Resurfacing/ Sunland Drive Bicycle Lanes Projects** – In the interest of system preservation, Sunland Drive is in need of resurfacing. At the same time Class III bicycle lanes will be constructed to provide greater safety and connectivity for cyclists between existing bicycle lanes on Gerkin Road in Wilkerson and the existing bicycle lane on SR 168.
- ◆ **Federal Lands Access Program (FLAP)** – Federal Lands Access Program funds have been acquired to reconstruct the popular recreational routes, Whitney Portal Road and Rock Creek Road. Only a small portion of Rock Creek road lies within Inyo County.

Mid-term Priority Regional Projects – Table 18 lists projects which will potentially be funded over the first ten years of the RTP planning period. STIP and Federal Lands Access Program (FLAP) funds are potential funding sources for these county and city projects. Approximately \$39 million in regional funds will be required to construct these projects. These projects will address a variety of transportation issues identified in Chapter 3 of this RTP.

Long-term Priority Regional Projects – Table 19 presents projects to address regional transportation needs which will potentially be funded during the latter half of the RTP planning period. Approximately \$48.8 million in STIP, FLAP and other funds will be required.

Regional Highway Bridge Program Projects – Table 20 presents local roadway bridge rehabilitation and reconstruction projects to be funded with Highway Bridge Program (HBP) funds. The local match for these projects will likely stem from Toll Credits. A total of 52.3 million in project costs is estimated.

Financially Unconstrained Regional Roadway STIP Projects – Table 21 presents Inyo County’s “wish list” of transportation improvements to the state highway system and regionally significant roadways. Although not considered top priority projects, these improvements are important to the region. Cost estimates for unconstrained STIP, FLAP and IRR projects reach over \$165 million.

Transit Capital Improvement Projects

Similar to other rural transit agencies, ESTA must operate long distances and in all types of weather conditions. As such, it is important to develop an appropriate transit vehicle replacement schedule. Upgrading passenger facilities and amenities is important for providing mobility to existing passengers, particularly ADA eligible passengers. There is also a need to upgrade the existing operations facility at the Bishop Airport. Table 22 presents transit capital improvement projects for the short and long-term planning periods. Transit vehicles will be replaced at the end of their useful life using a combination of Federal Transit Administration (FTA) and state bond funds. Phased improvements for a new operations and maintenance facility will likely be funded with STIP funds.

Non-Motorized Facility Improvement Projects

Throughout the development of this RTP, the importance of increasing safety for bicyclists and pedestrians has been identified by stakeholders, tribal entities and the public. The Eastern Sierra communities are fairly compact, lending to the ease of non-motorized transportation provided it is relatively safe. Additionally, many residents do not have a vehicle. In order to promote safe active transportation, the County and the City of Bishop have identified a list of bicycle path and sidewalk projects. Short-term funded projects are identified in Table 23. Other long-term and financially unconstrained bicycle improvement projects outlined in the Inyo County Collaborative Bikeways Plan 2008 and Active Transportation Plan are displayed in Table 24 and 25.

Airport Improvement Projects

The Inyo County Airport Capital Improvement Program for short-term projects are listed in Table 26. Over \$15 million in runway rehabilitation, airport lighting and other projects have been identified. Long-term improvement projects such as runway extension for the Bishop Airport are displayed in Table 27.

Tribal Transportation Projects

Tribal transportation needs for various types of transportation facilities have been discussed throughout this document. The Bishop Paiute Tribe has provided several transportation planning documents as part of this RTP effort. Projects identified in the most recent 2013 Transit and Transportation Improvement Plan are summarized below:

- ◆ **Winuba North Extension** - Extend Winuba Lane to the North to connect with Hwy 395 so as to provide better traffic circulation and access to services.
- ◆ **Winuba South Extension** - Extend Winuba lane from Hwy 168 south to the southern boundary of the Reservation.
- ◆ **Interior Roads** – Construct interior roads to provide better access to land locked assignments and improve circulation and accessibility throughout the Reservation.
- ◆ **Street Lighting** - Upgrade existing street lights and add additional street lights on the Reservation to improve night safety for both vehicles and pedestrians.
- ◆ **Walking and bicycle trails** – New trails in the Conservation and Open Space Area (COSA) located on the eastern portion of the Reservation for recreational use as well as to transportation to local area

schools and hospitals. Connections to City of Bishop bicycle path and potential paving of the Indian Trail.

- ◆ **Sidewalks** - Possible projects are sidewalks connecting to the new Hwy168 sidewalks on Barlow, Tu Su and See Vee lanes to improve pedestrian and wheelchair access between the Reservation and City of Bishop.
- ◆ **Parking** – Parking lots at the OV CDC center at Barlow Lane and Diaz Lane to help eliminate the on street parking along Diaz Lane. Also more parking at tribal headquarters and the Cultural Center.

TABLE 26: Inyo County Regional Airport Capital Improvement Projects

Short-Term Projects

Priority ⁽¹⁾	Location	Proposed Project Description	Construct Year	Total Cost (1,000s)	Funding Source	Performance Indicator	Purpose and Need	Corresponding Goal
1	Independence Airport	Runway 14-32 & Taxiway Pavement & Lighting Rehabilitation	2015	\$300	AIP	SP	SP	7
1	Bishop Airport	Runway 16-34 & Exits Overlay, RSA Brush Removal - Phase 1	2015	\$1,655	AIP	SP	SP	7
1	Lone Pine Airport	Airport Lighting, Signs, and Visual Aids (Design)	2015	\$175	AIP	SP	SP	7
1	Bishop Airport	Rwy 16-34 & Exits Overlay, RSA Brush Removal - Phase 2	2016	\$1,400	AIP	SP	SP	7
1	Lone Pine Airport	Airport Lighting, Signs, and Visual Aids (Construction)	2016	\$600	AIP	SP	SP	7
1	Independence Airport	Design and Construct Perimeter Fence and Access Gates	2017	\$500	AIP	SP	SP	7
1	Bishop Airport	Runway 12-30 and Taxiway A Pavement Rehabilitation (Design)	2017	\$250	AIP	SP	SP	7
1	Bishop Airport	Terminal Area Apron Pavement Rehabilitation (Design and Construction)	2017	\$2,000	AIP	SP	SP	7
1	Lone Pine Airport	Runway 16-34, Txwy's A and B Pavement Rehabilitation and Terminal Area Fencing (Design)	2017	\$275	AIP	SP	SP	7
1	Bishop Airport	Rwy 12-30 and Txwy A Pavement Rehabilitation (Construction)	2018	\$3,000	AIP	SP	SP	7
1	Lone Pine Airport	Runway 16-34, Txwy's A and B Pavement Rehabilitation and Terminal Area Fencing (Construction)	2018	\$2,000	AIP	SP	SP	7
1	Independence Airport	Runway 5-23 Corrective Grading	2019	\$300	AIP	SP	SP	7
1	Bishop Airport	Rwy 7-25 and Txwy B, C, & G Pavement Rehabilitation (Design)	2019	\$200	AIP	SP	SP	7
1	Bishop Airport	Runway 7-25 and TW B, C, & G Pavement Rehabilitation (Construction)	2019	\$2,000	AIP	SP	SP	7
1	Bishop Airport	Perimeter Fencing - Terminal Area/Southerly AOA - Phase 1 (Design and Construction)	2019	\$500	AIP	SP	SP	7
1	Lone Pine Airport	Airport Terminal Building Replacement (Design and Construction)	2019	\$350	AIP	SP	SP	7
Total Cost				\$15,505				

Source: 2015 - 2019 ACIP

Note 1: Priority: 1 = Funded/construction 0 - 5 years, 2 = Unfunded/potential construction 5 - 10 years, 3 = Unfunded/potential construction 10 - 20 years, U = Financially unconstrained

TABLE 27: Inyo County Regional Airport Capital Improvement Projects

Long-Term Projects

Priority ⁽¹⁾	Location	Proposed Project Description	Construct Year	Total Cost (1,000s)	Funding Source	Performance Indicator	Purpose and Need	Corresponding Goal
3	Bishop Airport	Extend runway 12/30 and Taxiway A approximately 1,200 feet to NW (8,700 feet), extend clear zone and runway safety area, continue development of infrastructure for convention center and commercial areas in Airport Master Plan, construct additional hangars and aprons, construct control tower, install navigational aids and markings, develop new passenger terminal	TBD	NA	AIP	SP	SP	7
3	Independence Airport	Pave and extend Runway 05/23 by 2,000 feet to east (3,500 feet), construct Taxiway C to provide parallel taxiway to Runway 05/23, install navigational aids and markings	TBD	NA	AIP	SP	SP	7
3	Lone Pine Airport	Pave runway 13/31, construct parallel taxiway along Runway 13/31 to improve safety, construct additional hangars and aprons	TBD	NA	AIP	SP	SP	7
3	Shoshone Airport	Reconstruct runway 15/33 to remove sag, extend and widen Runway 15/33 to accommodate larger aircraft, replace lighting system along Runway 15/33	TBD	NA	AIP	SP	SP	7

Source: 2015 - 2019 ACIP

Note 1: Priority: 1 = Funded/construction 0 - 5 years, 2 = Unfunded/potential construction 5 - 10 years, 3 = Unfunded/potential construction 10 - 20 years, U = Financially unconstrained

Goods Movement

Freight transportation, particularly trucking, is an important function of the Inyo regional transportation system. Trucking generates up to 20.5 percent of all traffic volumes on portions of US 395 in Inyo County. Roadway rehabilitation and reconstruction projects throughout the region as well as the four-lane US 395 project and US 6 improvements will improve the safety and reliability of goods movement throughout Inyo County.

ENVIRONMENTAL MITIGATION

The 2010 RTP Guidelines recommend that RTPs include a discussion of potential environmental mitigation activities and areas, including those mitigation activities that might maintain or restore the environment that is affected by the plan. The majority RTP projects located within the Inyo region are road reconstruction or rehabilitation and do not require disturbing or paving new lands. New roadway projects such as Olancho to Cartago 4 lane will undergo thorough environmental review prior to construction.

Before implementing road or bicycle/pedestrian improvement projects, the County of Inyo and City of Susanville abide by all permitting requirements stipulated by applicable state and federal natural resource agencies, such as California Department of Fish and Wildlife, US Forest Service, Army Corp of Engineers and Regional Water Quality Control Board. The County and the City follow all state regulations and BMPs with respect to storm-water pollution prevention and water pollution control.

As part of the public participation process (described in Chapter 1 and documented in Appendix D), state and federal resource agencies were contacted and maps of natural resources under each agency's jurisdiction were requested. These agencies were contacted at the beginning of the RTP update process. Available natural resource agency maps and documents were compared to this RTP in an attempt to find potential conflicts between transportation improvement projects and natural resources. The details of these comparisons are summarized in the environmental agency consultation section of Chapter 1.

INYO COUNTY STRATEGIES TO REDUCE GHG EMISSIONS

RTPAs that are not located within the boundaries of a metropolitan planning organization (which ICLTC is not) are not subject to the provisions of SB 375 that require addressing regional GHG targets in the RTP and preparation of sustainable community strategies. With the exception of the remaining 2 lane section of US 395, the Inyo region experiences little traffic congestion. As demonstrated in Chapter 2, overall traffic volumes on Inyo state highways have generally decreased in the last ten years. As such, the Inyo region is not a significant contributor to statewide GHG emissions. Regardless, this RTP identifies improvements to bicycle and pedestrian facilities which will encourage residents and visitors to use alternatives to the private vehicle for transportation, thereby helping to reduce GHG emissions.

Given the importance of the consideration of climate change in transportation planning, this RTP outlines the following strategies to reduce GHG emissions:

- ♦ **Implement Active Transportation Project Improvements** – One GHG reduction strategy that is repeatedly identified in legislation and policy documents is to reduce VMT. The regional transportation issues discussion demonstrates a need to create a safer environment for pedestrians and bicyclists along the state highway corridors and on school routes. Projects such as the sidewalks at SR 168 and the Seibu to School bike path will make non-motorized travel for residents and visitors both safer and more appealing, thereby reducing the number of vehicle trips.
- ♦ **Implement Transit System Improvements** – Transit capital improvement projects which could further reduce vehicle trips by encouraging transit ridership are included in this RTP, including upkeep of the transit fleet. Safe, comfortable, and attractive buses make the transit system more visible and thereby encourage non-regular riders or visitors to utilize the bus system.
- ♦ **Vanpool/Rideshare Program** – Expanding existing vanpool program administered through ESTA is another strategy to reduce VMT.

This page left intentionally blank.

The Financial Element is fundamental to the development and implementation of the RTP. This chapter identifies the current and anticipated revenue resources and financing techniques available to fund the planned transportation investments that are described in the Action Element, as needed to address the issues, goals, policies and objectives presented in the Policy Element. The intent is to define realistic financing constraints and opportunities. The following provides a summary of the federal, state, and local funding sources and programs available to the Inyo region for transportation facility improvements, a comparison of anticipated revenues with proposed projects, and financial strategies. From a practical perspective, finances and funding availability ultimately determine which projects are constructed.

It is important to note that there are different funding sources for different types of projects. The region is bound by strict rules in obtaining and using transportation funds. Some funding sources are “discretionary,” meaning they can be used for general operations and maintenance, and are not tied to a specific project or type of project. However, even these discretionary funds must be used to directly benefit the transportation system for which they are collected. For example, funds derived from gasoline taxes can only be spent on roads, and aviation fuel taxes must be spent on airports. State and federal grant funding is even more specific. There are several sources of grant funds, each designated to a specific type of facility (e.g. bridges or state highways), and/or for a specific type of project (e.g. reconstruction or storm damage). This system makes it critical for ICLTC and the local governments to pursue various funding sources for various projects simultaneously and to have the flexibility to implement projects as funding becomes available.

The majority of RTP Action Element projects will be funded by recurring or non-competitive federal or state grants. In addition to recurring money, many competitive grants are available for transportation projects but success in obtaining these types of funds is difficult to predict. A wide variety of funding sources which could be employed by the Inyo region to complete the financially constrained and unconstrained projects in the Action Element are listed below. For reference, recurring funding sources are marked with an (R) and competitive grant sources are marked with a (C).

ROADWAY IMPROVEMENT FUNDING

Federal Transportation Funding

Moving Ahead for Progress in the 21st Century (MAP-21)

MAP-21 is the successor to Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), which provided \$286.4 billion in guaranteed funding for federal surface transportation programs over six years through Fiscal Year (FY) 2009. On July 6 2012, President Obama signed MAP-21 into law. Traditionally, the federal transportation bill has been funded through federal gas taxes. As vehicles have become more efficient, there is less revenue to draw from and an increase in the tax is politically unpopular. The original bill expired in 2014 and a short-term reauthorization was passed. However, this will expire in May 2015. MAP-21 funds the Transportation Trust Fund and includes the following elements:

- ◆ Generally reauthorizes the federal-aid highway programs at previous SAFETEA-LU funding levels plus inflation for two fiscal years.

- ◆ Consolidates more than 80 Federal Highway Administration (FHWA) programs into a handful of broad core programs.
- ◆ Provides states with more flexibility to fund programs within the core programs.

The bill establishes an outcome-driven approach that tracks performance and will hold states and metropolitan planning organizations accountable for improving the conditions and performance of their transportation assets.

Many of the previous SAFETEA-LU programs have been reorganized and consolidated under MAP-21. The following programs are potential funding sources for Inyo County transportation improvement projects:

- ◆ **National Highway Performance Program (C)** – This core program will focus on repairing and improving the National Highway System. The existing Highway Bridge Program (HBP), which provides funding for highway bridges in need of repair according to federal safety standards, falls under this core program. State and local bridge replacement projects are funded through Caltrans with HBP grants. The goal of the program is to rehabilitate or replace public highway bridges when it has been determined that the bridge is significantly important and unsafe. The federal share of a HBP project is 80 percent. To be eligible for rehabilitation a bridge must be rated Structurally Deficient or Functionally Obsolete with a sufficiency rate of less than 80.
- ◆ **Surface Transportation Program (STP) (R)** – Generally, the Surface Transportation Program (STP) provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. Roughly \$10.3 billion in flexible funding will be available in FY 2015 nationwide. Some projects such as transportation enhancements which were previously eligible activities under STP are now incorporated into other programs such as Transportation Alternatives. New eligibilities include electric vehicle charging infrastructure and projects and strategies that support congestion pricing and travel demand management.

Fifty percent of a State’s STP funds (after the set aside for Transportation Alternatives and State Planning and Research) are distributed to areas based on population with the remainder to be used in any area. A portion of a state’s STP funds must be set aside for bridges not on Federal-aid highways. A special rule allows a portion of funds reserved for rural areas to be spent on rural minor collectors.

- ◆ **Highway Safety Improvement Program (HSIP) (C)** – This program authorizes roughly \$2.4 billion in annual funding for projects with the purpose of achieving a significant reduction in traffic fatalities and serious injuries on all public roads. Safety projects include railway-highway crossing and infrastructure safety needs, in addition to safety programs such as education, enforcement, and emergency medical services. States must continue to update their State Highway Safety Plan and set targets for the number of injuries and fatalities per vehicle mile of travel. Although the States are no longer required to set aside funds for High Risk Rural Roads, they are required to obligate funds for this purpose if the fatality rate increases. States are also required to incorporate strategies focused on older drivers and pedestrians if fatalities increase for these population groups. In California, roughly \$21 million in HSIP funds are directed toward the Active Transportation Program.
- ◆ **Transportation Alternatives (C)** – This new core program under MAP-21 incorporates elements from the alternative type of transportation programs under SAFETEA-LU such as Transportation

Enhancements (TE), Safe Routes To Schools and Recreational Trails Program. There are nine eligible transportation alternative categories:

- Construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists and other non-motorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act.
- Construction, planning and design for facilities which provide safe routes for non-drivers, including children, older adults and individuals with disabilities.
- Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists or other non-motorized transportation users.
- Construction of turnouts, overlooks and viewing areas.
- Inventory, control or removal of outdoor advertising.
- Historic preservation and rehabilitation of historic transportation facilities.
- Vegetation management practices in transportation rights-of-way to improve roadway safety, prevent against invasive species, and provide erosion control.
- Archaeological activities relating to impacts from implementation of a transportation project.
- Environmental mitigation including pollution prevention, storm water management due to roadway construction or highway runoff, reduce vehicle-caused wildlife mortality or maintain connectivity among terrestrial or aquatic habitats.

Four previously eligible transportation enhancement activities are not included in the MAP-21 legislation: pedestrian and bicycle safety and educational programs (except for programs targeting children K – 8 going to school), acquisition of scenic or historic easements and sites, scenic or historic highway programs including tourist and welcome centers and establishment of transportation museums.

The TA program will be funded at a level equal to roughly two percent of all MAP-21 funds. A portion of each state's amount will be set aside for the Recreational Trails Program which provides for the development and maintenance of recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. However, states have the choice to "opt out" of the Recreational Trails Program. Fifty percent of remaining TA funds must be allocated within each state based on population. MPO's must distribute funds for projects within their jurisdiction through a competitive grant program. State Departments of Transportation (DOT) will allocate funds to rural areas through a competitive grant program. The remaining 50 percent of TA funds will be distributed through the state DOT competitive grant program among all eligible applicants. However, the state can redirect at their discretion this second portion of TA funds to other MAP-21 core programs instead of TA projects.

- ◆ **Federal Lands and Tribal Transportation Programs (C)** – This core program will continue to provide funding for transportation facilities on federal and tribal lands.
 - *Federal Lands Transportation Program* – Provides \$300 million annually for projects that improve access in national forests, national recreation areas or other infrastructure owned by the

federal government. This program combines the former Park Roads and Refuge Roads programs. The majority of funding, \$240 million, is allocated to the National Park Service, another \$30 million to US Fish and Wildlife, and the remaining \$30 million is allocated competitively among the US Forest Service, Bureau of Land Management and Army Corps of Engineers using a performance management model.

- *Federal Lands Access Program (FLAP)* – This program replaces and expands the Forest Highways program by providing \$250 million for projects that improve access to all Federal Lands. Funds are distributed to each state by formula based on recreational visitation, land area, public road mileage and number of public bridges. States must provide a non-federal match.
- *Tribal Transportation Program* – This program continues the Indian Reservation Roads program and adds set asides for tribal bridge projects and tribal safety projects. It continues to provide set asides for program management and oversight and tribal transportation planning. Roughly \$450 million will be available annually and distributed based on population, road mileage, average funding under SAFETEA-LU and an equity provision.
- *Tribal High Priority Projects Program* – This new discretionary program will provide \$30 million per year in funding. This program provides fund to Native American Tribes whose annually allocation of Tribal Transportation Program funds is insufficient to complete the highest priority project or for emergency or disaster on a tribal transportation facility which renders the facility unusable.
- ◆ *Emergency Relief* - Through this program, federal, state, tribal and local governments can apply for funding to repair serious damage to federal-aid, tribal and federal lands resulting from disasters or catastrophic failures.

In addition, Federal funds are available for transit operations and capital assistance through the Federal Transit Administration discussed below.

State Sources

Transportation funding in California is both complex and full of uncertainty. Generally, revenue sources for transportation improvements are generated from fuel excise taxes, fuel sales taxes, and the statewide sales tax. In recent years, California transportation funding has become dependent on motor fuel sales tax. Since 2001, proceeds from these taxes have been diverted from the transportation program in an effort to address the general fund deficit, despite legislation prohibiting these actions except in the case of severe state fiscal hardship. As a result, the STIP and SHOPP funds (primary funding programs for the state highway system) as well as transit funding sources have been raided for general fund purposes.

The struggle to balance the state budget and adequately fund transportation projects in California is ongoing. Various state legislation and ballot propositions in recent years have changed revenue flows for state transportation sources. The “gas tax swap” eliminated the sales tax on gasoline and implemented the price-based excise tax on gasoline to fund transportation improvements. As part of the legislation an increase in the diesel fuel sales tax was offset by a decrease in the diesel fuel excise tax. The objective of the gas tax swap was to provide a mechanism to fund transportation bond debt service (gasoline sales tax revenues have more stringent restrictions on uses). At the same time voters passed Proposition 22 which restricted diversions of fuel excise tax revenues in the State Highway Account for non-transportation purposes. Therefore new legislation was passed which swapped weight fees, previously used for Caltrans operations to be used for bond debt service. The end result is that STIP roadway projects (State Highway Account) will be funded through fuel excise taxes. STIP Transit and transportation planning projects

(Public Transportation Account) are funded primarily through sales tax on diesel fuel. State excise fuel taxes flow through the Motor Vehicle Fuel Account to fund the STIP, SHOPP, Active Transportation Program, and City and County Road Funds. Appendix** displays a chart of Caltrans' Overview of Transportation Funding in California for reference.

The following section lists the transportation funding sources available through the State of California.

- ♦ **State Transportation Improvement Program (STIP) (R)** – consists of two broad transportation improvement programs: (1) the regional program funded by 75 percent of new STIP funding, and (2) the interregional program funded by 25 percent of new STIP funding. Brief summaries of these funds are provided below along with other state funding sources:
 - **Regional Improvement Program (RIP)** – RIP funds account for 75 percent of STIP funding. The 75 percent portion is subdivided by formula into county shares. The ICLTC programs funds which are apportioned to the region. These funds may be used to finance projects that are both “on” and “off” the state highway system. This “regional share” must be relied on to fund capacity increasing projects on much of the state highway system. Critical to rural California counties, regional STIP funding may be used for local rehabilitation projects.
 - **Interregional Improvement Program (IIP)** – The IIP receives the remaining 25 percent of the STIP funding. The IIP funds taken collectively form the Interregional Transportation Improvement Program (ITIP). This program is controlled and programmed by Caltrans, although regional agencies provide input on the specific ITIP projects for their region. One of the goals of the program is to encourage regional agencies and the state to establish partnerships to conduct certain projects. For the rural California counties, a challenge to use IIP funding is the very limited availability of “local match” for IIP-funded programs. (However, RIP funds can be used as match for the ITIP program.) In actuality, Caltrans receives 15 percent for state highway projects on the interregional system; potential projects must compete statewide for the remaining funds. Much of the state highway system is not eligible for interregional funding and must rely on the regional share to fund capacity improvement projects. US 395 is eligible. One of the primary objectives of the MOU between Inyo County, Mono County LTC and Kern County COG is to be able to leverage IIP funds.

Caltrans estimates the amount of funding available for the STIP program for a five-year period every two years. The most recent STIP Fund Estimate was developed in 2013 and the next fund estimate will be released in 2015. Based on that fund estimate and the STIP Guidelines, the ICLTC develops a program of projects for the five-year period. The ICLTC submits this program of projects called the Regional Transportation Improvement Program (RTIP) to the California Transportation Commission (CTC). The RTIP specifies cost per project component and fiscal year over a five-year period. When the CTC approves the RTIP, it becomes part of the STIP.

- ♦ **State Highway Operations and Protection Program (SHOPP) (R)** – The purpose of the SHOPP is to maintain the integrity of the state highway system. Funding for this program is provided through gas tax revenues. Projects are nominated within each Caltrans District office. Proposed projects are sent to Caltrans Headquarters for programming on a competitive basis statewide. Final project funding determinations are subject to the CTC review. Individual districts are not guaranteed a minimum level of funding. SHOPP projects are based on statewide priorities within each program category (i.e. safety, rehabilitation, operations, etc.) within each Caltrans district. SHOPP funds cannot be used for capacity-enhancing projects.

- ◆ **SHOPP Minor Programs (R)** – The “Minor A” Program is a Caltrans discretionary funding program based on annual statewide allocations by district. This program allows some level of discretion to Caltrans district offices in funding projects up to \$1,000,000. The “Minor B” Program funds are used for projects up to \$117,000. The advantage of the program is its streamlined funding process and the local district discretion for decision-making. Funding is locally competitive within each district and limited to the extent of its allocation.

- ◆ **Regional Surface Transportation Program (RSTP) (R)** – Rural counties can currently exchange federal Surface Transportation dollars for State Highway Account (SHA) funds (a process known as “RSTP Exchange”). This is advantageous to RTPAs as federal funds have more stringent requirements such as a 20 percent local match, while state funds do not require any local match. The state also provides additional state funds to the county, as a match to the exchanged federal dollars. Eligible RSTP projects include:
 - Construction, reconstruction, rehabilitation, resurfacing, restoration and operational improvements on Federal Aid Highways (any highways which are not classified as local or rural minor collectors) and bridges (on public roads of all functional classifications)
 - Environmental mitigation for an RSTP project.
 - Capital transit projects
 - Carpool projects
 - Highway and transit safety projects
 - Capital and operating costs for traffic monitoring
 - Surface transportation planning programs
 - Transportation enhancement activities
 - Transportation control measures
 - Highway and transit R&D and technology transfer programs

- ◆ **Environmental Enhancement and Mitigation (EEM) Program (C)** –The purpose of the EEM was to offer state-level funding to remedy environmental impacts of new or improved transportation facilities. Mitigation can include highway landscapes and urban forestry or development of roadside recreational facilities such as roadside rest stops, trails, scenic overlooks, trailheads, parks, and snow parks. The bill which authorizes the Active Transportation Program also appropriates \$7 million from the Environmental Enhancement and Mitigation Program Fund, to the Secretary of the California Natural Resources Agency for grants awarded by the secretary to support local environmental enhancement and mitigation programs.

- ◆ **The Active Transportation Program (ATP) (C)** (Senate Bill 99, Chapter 359 and Assembly Bill 101, Chapter 354) was signed in to law on September 26, 2013. The ATP consolidates existing federal and state transportation programs, including TAP, Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single program with a focus to make California a national leader in active transportation. Furthermore, disadvantaged communities must receive at least 25 percent of the program’s funding.

The purpose of ATP is to encourage increased use of active modes of transportation by achieving the following goals:

- Increase the proportion of trips accomplished by biking and walking,
- Increase safety and mobility for non-motorized users,
- Advance the active transportation efforts of regional agencies to achieve greenhouse gas (GHG)

reduction goals,

- Enhance public health, including reduction of childhood obesity through the use of programs including, but not limited to, projects eligible for Safe Routes to School Program funding
- Ensure that disadvantaged communities fully share in the benefits of the program, and
- Provide a broad spectrum of projects to benefit many types of active transportation users.

There is a local match of 11.47 percent except for projects predominately benefiting a disadvantaged community.

- ♦ **Rural Planning Assistance (RPA) (R)** – Formerly called State Subvention funding, this program provides funds to rural RTPAs – on a reimbursement basis – specifically for purposes of transportation planning. Activities and products developed using these funds are governed by an annual Overall Work Program, prepared by the region and approved by Caltrans.
- ♦ **Sustainable Transportation Planning Grant Program** – This grant program was created to support Caltrans’ current Mission: *Provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability*. Overarching objectives of this grant program are to ensure consideration of these major efforts in transportation planning, including: Sustainability, Preservation, Mobility, Safety, Innovation, Economy, Health, and Equity. There are two separate grant programs: Strategic Partnerships and Sustainable Communities which effectively replace former Environmental Justice, Community-Based Transportation Planning, and Transit Planning grant programs.
 - Strategic Partnerships – Funded through the FHWA, for transportation planning studies of interregional and statewide significance in partnership with Caltrans. Minimum grant award is \$100,000 with a maximum award of \$500,000. RTPAs and MPOs are eligible primary applicants with transit agencies, local governments, tribal governments, universities, and non-profit organizations eligible to apply as a sub-applicant. There is a 20 percent minimum local match. Example transportation planning studies include: corridor studies, transportation demand management strategies, system investment prioritization plans, and studies which identify interregional or statewide mobility and access needs.
 - Sustainable Communities – Funded through FTA Section 5304 and the SHA, to study multimodal transportation issues which assist in achieving Caltrans’ mission and overarching objectives. Primary eligible applicants include: RTPAs, MPOs, transit agencies, local governments, and tribal governments. Non-profit organizations and other public entities are eligible to apply as sub-applicants. Grants are available in amounts of \$50,000 to \$500,000 with a local match of 11.47 percent. Example projects include:
 - Studies that advances a community’s effort to reduce transportation related greenhouse gases
 - Studies that assist transportation agencies in creating sustainable communities
 - Studies that advances a community’s effort to address the impacts of climate change and sea level rise
 - Community to school studies or safe routes to school studies or plans
 - Jobs and affordable housing proximity studies
 - Context-sensitive streetscapes or town center plans
 - Complete street plans

- Bike and pedestrian safety enhancement plans
- Traffic calming and safety enhancement plans
- Corridor enhancement studies
- Health equity transportation studies
- Climate change adaptation plans for transportation facilities
- Transit planning surveys and research
- Identification of policies, strategies, and programs to preserve transit facilities and optimize transit infrastructure
- Studies that evaluate accessibility and connectivity of the multimodal transportation network
- Short-range transit development plans
- Transit marketing plans
- Social service improvement studies
- Student Internships (Only for Rural Agencies)
- Studies that address environmental justice issues in a transportation related context

Grant awards for the FY 2015-16 cycle will be announced Spring 2015.

- ♦ **Fuel Excise Tax Revenues, Highway Users Tax Account (R)** – Roughly 36 percent of the state base excise tax and 44 percent of the price-based fuel excise tax, gas tax swap, (after revenue used to backfill weight fees which have been diverted) are allocated to cities and counties for road projects. Allocation formulas are complex and based on population, proportion of registered vehicles, and proportion of maintained county road miles. These funds can be used for maintenance, new construction, engineering, administration, right of way and other uses.
- ♦ **Vehicle License Fees** – Revenue from motor vehicle license fees are allocated back to local jurisdictions for any purpose.

Local Sources

At present, there are no local dedicated sources available for ongoing transportation costs other than those “passed through” from state or federal programs. The following sources of funding for transportation projects are available to local governments through various means:

- ♦ *Traffic Mitigation Fees* – Traffic mitigation fees are one-time charges on new developments to pay for required public facilities and to mitigate impacts created by or reasonably related to development. There are a number of approaches to charging developers for the provision of public facilities. In all cases, however, the fees must be clearly related to the costs incurred as a result of the development. Passed to govern the imposition of development fees, AB 1600 requires that a rational connection be made between a fee and the type of development on which the fee is based. Furthermore, fees cannot be used to correct existing problems or pay for improvements needed for existing development. A county may only levy such fees in the unincorporated area over which it has jurisdiction, while a city must levy fees within the city limits. Any fee program to pay for regional facilities must have the cooperation of all jurisdictions in which future growth is expected to take place. Traffic mitigation fees would be difficult to implement in Inyo County, due to (1) the dispersion of development over a wide area, which makes it difficult to allocate specific improvements to a range of developments, and (2) the desire to avoid discouraging development through the imposition of additional fees. In any case, the extreme low level of new development in Inyo County would generate minimal fee revenues.
- ♦ *Development Mitigation Measures/Agreements* – Development mitigation measures are imposed

whenever development requires approval by a local entity. Generally, mitigation measures are imposed as conditions on tentative maps. These conditions reflect on- and off-site project mitigation that must be completed in order to be able to develop. Development agreements are also used to gain cooperation of developers in constructing off-site infrastructure improvements, or dedicating rights-of-way needed as a result of the proposed development. As with impact fees, developer mitigations are not generally available to fund on-going transportation maintenance and operations costs. Further, this funding source is improbable and insignificant in Inyo County.

TRANSIT IMPROVEMENT FUNDING

A wide range of potential transit funding sources is available, particularly within California. The following discussion provides an overview of these programs.

Federal Funding Sources

The following are discussions of federal transit funding programs available to rural areas:

- ♦ **FTA Capital Program Section 5339 Bus and Bus Facilities Grants (C)** – Capital projects to replace, rehabilitate and purchase buses, vans, and related equipment, and to construct bus-related facilities.
- ♦ **FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities (C)** – This program is intended to enhance mobility for seniors and persons with disabilities by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and Americans with Disabilities Act (ADA) complementary paratransit services. This program consolidates the old New Freedom Program with the Elderly and Disabled Program. Grants are available for both capital (20 percent local match) and operating purposes (50% local match) to areas with less than 200,000 in population. Projects to be funded with FTA 5310 funds must be derived from a Coordinated Public Transit Human Services Transportation Plan.
- ♦ **FTA Section 5311 Public Transportation for Rural Areas (R)** – Federal transit funding for rural areas (population of less than 50,000) is currently provided through the FTA Section 5311 Nonurbanized Area Formula Program. In California, an 11.47 percent local match is required for capital programs and a 44.67 percent match for operating expenditures. These funds, administered by Caltrans, are segmented into “apportioned” and “discretionary” programs. The bulk of the funds are apportioned directly to rural counties based on population levels. The remaining funds are distributed by Caltrans on a discretionary basis and are typically used for capital purposes. Statewide, nearly \$25.7 million is available.
- ♦ **Rural Transit Assistance Program (RTAP) (R)** – The RTAP (49 USC. 5311(b)(3)) provides a source of funding to assist in the design and implementation of training and technical assistance projects and other support services tailored to meet the needs of transit operators in non-urbanized areas. RTAP has both state and national program components. The state program provides an annual allocation to each state to develop and implement training and technical assistance programs in conjunction with the state’s administration of the Section 5311 formula assistance program. The national program provides for the development of information and materials for use by local operators and state administering agencies and supports research and technical assistance projects of national interest. There is no federal requirement for a local match. Under MAP-21 RTAP is funded with a two percent set-aside of the Section 5311 appropriation, as was previously the case.

State Funding Sources

A mainstay of funding for transit programs in California is provided by the Transportation Development Act (TDA). The TDA provides two major sources of funding for public transportation: the Local Transportation Fund (LTF), which began in 1972, and the State Transit Assistance (STA) fund, established in 1980.

- ♦ **Local Transportation Fund (R)** – The major portion of TDA funds are provided through the LTF. These funds are generated by a one-fourth cent statewide sales tax and returned to the county of origin. Consequently, LTF funds are based on local population and spending. The LTF may be allocated by the ICLTC for the following prioritized purposes:
 - Whatever reasonable amount is needed by the ICLTC for TDA administration.
 - Two percent of the remaining amount may be provided for pedestrian and/or bicycle facilities.
 - Up to five percent of remaining funds may be allocated for coordinated community transit services.
 - The remaining funds must be spent for transit and paratransit purposes, unless the Transportation Commission finds that either no unmet transit needs, or that unmet needs cannot be reasonably met.
 - If there are no reasonable-to-meet unmet transit needs, remaining funds may be allocated to local streets and roads to jurisdictions based on population.
- ♦ **State Transit Assistance** – In addition to LTF funding, the TDA includes a STA funding mechanism. The sales tax on gasoline is used to reimburse the state coffers for the impacts of the one-fourth cent sales tax used for LTF. Any remaining funds (or spillover) are available to the counties for local transportation purposes. The ICLTC allocates STA funds to eligible transit claimants.
- ♦ **The Low Carbon Transit Operations Program (LCTOP)** - This is one of several programs that are part of the Transit, Affordable Housing, and Sustainable Communities Program established by the California Legislature in 2014 by Senate Bill 862. The LCTOP was created to provide operating and capital assistance for transit agencies to reduce greenhouse gas emission and improve mobility, with a priority on serving disadvantaged communities. Eligible projects include new or expanded bus or rail services, expanded intermodal transit facilities, and may include equipment acquisition, fueling, maintenance and other costs to operate those services or facilities, as long as each project reduces greenhouse gas emissions. For agencies whose service area includes disadvantaged communities, at least 50 percent of the total moneys received shall be expended on projects that will benefit disadvantaged communities. This new program is administered by Caltrans in coordination with Air Resource Board (ARB) and the State Controller's Office (SCO).

AVIATION

Funding Sources

- ♦ **Federal Airport Improvement Program (AIP)** – The AIP provides 90 percent federal funding (requiring a 10 percent local and state match) for public use airports that are part of the National Plan

of Integrated Airport Systems (NPIAS). Available for most capital expenditures, this funding program must be approved annually by Congress. In recent years it has experienced major funding reductions. AIP funds are derived from user charges such as aviation fuel tax, civil aircraft tax, and air passenger fare surcharges. The Bishop Airport and Lone Pine Airport are on the NPIAS.

- ♦ **State of California Airport Grants** – The California Division of Aeronautics makes grant funds available for airport development and operations. Three types of state financial aid to publicly owned airports are available.
 - Annual grants for up to \$10,000 per airport per year. These funds can be used for a variety of purposes from runway reconstruction, obstruction removal to radios.
 - Acquisition and Development (A&D) Grants provide funds for the cost of qualified airport developments on a matching basis, to the extent that state funds are available. Grant amounts can range from a minimum of \$20,000 to a maximum of \$500,000. The local match requirement is set annually by the CTC and can vary from 10 to 50 percent of total project costs. A&D grants cannot be used as a local match for FAA grants. A&D projects must be listed in the CIP and A&D grants are available to both NPIAS and non NPIAS airports. The amount available for A&D grants is what is left in the Aeronautics Account after funding State Operations, Annual Grants and AIP Matching.
 - Local Airport Loan Program This program provides discretionary low interest State loans to eligible airports for projects that enhance an airport's ability to provide general aviation services (hangars, terminals, utilities, fueling facilities, A&D-eligible projects, etc.). A loan may also provide the local share for an AIP grant. Such a loan can be used in conjunction with a State-funded AIP Matching grant. The maximum term of a loan is 17 years.

Funding for airport improvements is limited. At the state level excise taxes on AVGAS and General Aviation jet fuel are the only source of revenue for the Division of Aeronautics. Funding currently available represents a 25 percent decrease from historical levels. There is little revenue from aircraft fees in Inyo County to fund all maintenance needs and necessary improvements for substandard airport facilities, which makes state and federal grants and loans difficult to obtain.

PROJECTED REVENUES

Projecting revenues and expenditures over a 20-year horizon is difficult, in that funding levels can dramatically fluctuate or be eliminated by legislation and policy changes. In addition, many projects are eligible for discretionary funds, which are nearly impossible to forecast as discretionary funds are allocated through a competitive grant process.

The 2014 STIP Fund Estimate projects new programming STIP capacity of \$1.262 billion. It should be noted that programming capacity does not represent cash. It represents the level of programming commitments that the California Transportation Commission (CTC) may make to projects for each year within the STIP period. With the elimination of the Transportation Enhancement (TE) fund program, the STIP is overprogrammed for the three year period between FY 2014-15 and FY 2016-17. Much of the overprogrammed or under-funded amount will be resolved through schedule adjustments and elimination of TE projects unless they are eligible for SHA funds. However, some projects will need to be delayed.

Roughly \$7.3 billion in new SHOPP programming capacity is estimated for the two year fund estimate. However, there is still a projected shortfall in SHOPP funding and therefore there will be delays in project programming.

Recurring regional transportation revenues were projected over the next 20 years, as shown in Table 28. As referenced in the *RTP Guidelines* and required in Government Code Section 65080(b)(4)(A), STIP revenues projections over the first four years of the planning period are consistent with the 2014 STIP Fund Estimate. Although the base excise tax on motor fuel has remained the same over the past 20 years or so, vehicles have become more fuel efficient. Adding inflation in to the equation, fuel tax revenues have been slowly decreasing over time. Therefore, transportation funding sources which are dependent on fuel tax revenues such as STIP and SHOPP are only assumed to increase by one percent annually over the long term planning period. On a federal level, this RTP assumes that MAP-21 will be authorized at apportionment levels similar to previous years.

A total of \$429 million in recurring transportation revenue is anticipated to be available over the 20 year planning period for transportation projects. As many funding sources for bicycle and pedestrian projects such as ATP funds are discretionary and difficult to predict, these are not included in the projections.

Revenue to Expenditure Comparison

Table 29 compares projected revenues to expenditures for Inyo regional roadway/bridge and STIP funded bicycle/pedestrian improvements which are anticipated to be funded with recurring revenue sources. Projects to be funded with competitive revenues sources such as ATP and FLAP are not included in the table. As shown, Inyo County capital improvement projects are financially constrained over the twenty year planning period with a surplus available for top priority projects for which costs estimates have not yet been identified. However, including financially unconstrained projects there is a deficit of around \$147 million. Table 29 depicts a general picture of the level of transportation expenditures that are financially feasible in the next twenty years. Specific implementation dates for projects will depend on actual revenue available. Additionally some competitive grant funding may be available. The Inyo region will continue to plan and program transportation projects which are consistent with the goals, policies and objectives in the Policy Element.

Operations and Maintenance Costs

In addition to ensuring that the implementation of new or reconstructed transportation facilities identified in this RTP are financially constrained, it is also important to consider if there will be sufficient funds over the planning period to operate and maintain the facilities once constructed. Funds for roadway operation and maintenance stem from a variety of sources depending on the operator of the facility. SHOPP funds can be used to maintain the state highways. Gas tax funds are used to maintain roadways at the county and city level. Table 28 shows projections for transportation planning, operations and maintenance. These revenue projections are based on historical funding levels. As the majority of roadway projects in this RTP represent reconstruction of existing facilities and therefore not increase the roadways operations and maintenance budgets significantly, it is estimated that there will be sufficient revenue over the RTP planning period to operate and maintain roadways.

Transit Projects

It is anticipated that planned ESTA vehicle replacements will occur beginning in FY 2017-18 and will be funded with STIP and FTA funds. The new operations and maintenance facility will be funded in the mid and long planning periods with PTMISEA and FTA funds.

Non-Motorized Facility Projects

A variety of funding sources are available for non-motorized facility projects: ATP, STIP, RSTP, and TDA. In the interest of complete streets, many STIP funded roadway rehabilitation projects will include the construction of safer non-motorized facilities such as sidewalks or striped bike lanes. TDA funding is primarily used to finance transit operations. ATP is a new state competitive funding source which could be used to fund top priority projects. Overall, there is insufficient funding available to implement all identified bicycle and pedestrian improvement projects over the life of this RTP. Therefore, a good strategy for non-motorized facility projects is to continue to incorporate improvements to non-motorized facilities into roadway rehabilitation projects.

Aviation Capital Improvement Projects

Table 26 presents top priority airport capital improvements to be funded as part of the competitive FAA Airport Improvement Program (AIP). Local match will be derived from state CAAP annual grants and loans. Projects will be implemented as funding becomes available.

Table 28: RTP Forecast Revenue Summary

All Figures in 1000s, adjusted annually for inflation

Funding Source/Program	FY 14/15	Fiscal Years				Total
		15/16-19/20	20-21-24/25	25/26-29/30	30/31-35/36	
<u>Recurring Roadway and Bridge Capital Revenues</u>						
STIP ⁽¹⁾	\$7,750	\$54,180	\$17,639	\$18,175	\$19,103	\$116,847
ITIP	\$6,620	\$37,400	\$0	\$0	\$0	\$44,020
SHOPP/Minor ⁽²⁾	\$0	\$17,330	\$0	\$8,928	\$9,384	\$35,642
HBP/Toll Credits ⁽³⁾	\$0	\$14,066	\$4,546	\$17,352	\$19,776	\$55,740
Regional Surface Transportation Program (RSTP) ⁽⁴⁾	\$773	\$3,865	\$3,983	\$4,186	\$4,399	\$17,205
<i>Subtotal</i>	\$15,143	\$126,841	\$26,168	\$48,641	\$52,662	\$269,455
<u>Competitive Roadway Transportation Funding</u>						
Highway Safety Improvement Program (HSIP)		Discretionary and competitive. Difficult to project				
Federal Land Highway Program (FLAP) ⁽⁵⁾	\$0	\$0	\$8,313	\$0	\$0	\$8,313
<i>Subtotal</i>	\$0	\$0	\$8,313	\$0	\$0	\$8,313
<u>Transportation Planning, Operations and Maintenance Revenues</u>						
STIP PPM ⁽¹⁾	\$200	\$1,000	\$1,000	\$1,030	\$1,083	\$4,313
Highway Users Tax (Gas) ⁽⁴⁾	\$3,853	\$19,265	\$19,654	\$20,657	\$21,710	\$85,139
Interest ,Road Permits, Miscellaneous ⁽⁴⁾	\$35	\$175	\$189	\$216	\$246	\$861
City of Bishop Gas Tax Fund ⁽⁶⁾	\$101	\$506	\$521	\$548	\$576	\$2,252
S1608/HR2389 (Forest Reserves) ⁽⁴⁾	\$200	\$1,000	\$1,000	\$1,000	\$1,000	\$4,200
<i>Subtotal</i>	\$4,389	\$21,946	\$22,365	\$23,451	\$24,615	\$96,767
<u>Bicycle and Pedestrian Revenues</u>						
STIP ⁽¹⁾	\$1,300	\$836	\$1,780	\$1,834	\$1,928	\$7,678
ATP		Discretionary and competitive. Difficult to project				
<i>Subtotal</i>	\$1,300	\$836	\$1,780	\$1,834	\$1,928	\$7,678
<u>Aviation Capital Revenues</u>						
State CAAP ⁽⁷⁾	\$40	\$15,705	\$200	\$200	\$200	\$16,345
<i>Subtotal</i>	\$40	\$15,705	\$200	\$200	\$200	\$16,345
<u>Transit Capital and Operating Revenues ⁽⁸⁾</u>						
State Transportation Development Act (TDA) Funds	\$1,200	\$6,000	\$6,494	\$7,402	\$8,436	\$29,531
Federal Transit Administration Funds	\$405	\$2,025	\$2,192	\$2,498	\$2,847	\$9,967
<i>Subtotal</i>	\$1,605	\$8,025	\$8,686	\$9,900	\$11,283	\$39,498
Total	\$22,477	\$173,353	\$59,199	\$84,026	\$90,687	\$429,743

Note 1: Short-term based on 2014 Summary of STIP County Shares (Orange Book). Most short-term funding has been allocated to funded projects in Table 17 and 23. An additional \$1 million per FY is assumed over the short-term for small projects. Mid-term based on 2014 STIP Fund Estimate Max Share through 19-20. A 1.0 percent growth rate is assumed from FY 26/27 forward.

Note 2: Based on financially constrained SHOPP 10-Year Plan. FY 25/26 forward based on average anticipated funding from previous 10 years and increased by 1.0 percent annually.

Note 3: Based on short-term project lists. Long-term projections assume a 2.65 percent growth rate to keep pace with inflation.

Note 4: Based on Inyo County FY 14-15 Budget. Mid-term and long-term projections assume a 1 percent annual growth rate of fuel tax revenues and flat growth for Forest Reserves and annual inflation rate for other sources.

Note 5: Based on project lists. FLAP is a discretionary funding source. Additional funds may potentially be available for future projects.

Note 6: Based on City of Bishop Preliminary FY 15-16 Budget. Mid-term and long-term projections assume a 1 percent annual growth rate of fuel tax revenues.

Note 7: Assumed annual CAAP grant of \$10K per year for four Inyo County Airports and funding for short-term project lists.

Note 8: Short-term projections based on ESTA FY 2013-14 Annual Report. Mid-term and long term increased by assumed inflation rate.

Table 29: Regional Roadway/Bridge and STIP Funded Bicycle/Pedestrian Capital Improvement Revenue to Expenditure Comparison

Recurring Revenue Funded Projects

All Figures in 1000s, adjusted annually for inflation

Program	Fiscal Years				Total
	15/16-19/20	20-21-24/25	25/26-29/30	30/31-35/36	
2014 RTIP					
Priority 1 STIP Regional Programmed Project - Costs	\$84,532	--	--	--	
Priority 1 STIP Regional Programmed Project - Revenues	\$84,532	--	--	--	
Balance	\$0				
Non-Programmed Roadway and Bridge Revenues	\$43,145	\$27,948	\$50,476	\$54,589	\$176,158
Estimated Expenditures⁽¹⁾					
SHOPP Projects	\$17,330	\$0	\$0	\$0	\$17,330
STIP Regional Projects (Priority 2 and 3)	\$19,942	\$19,942	\$24,439	\$24,439	\$88,762
HBP Bridge Projects (Priority 1, 2 and 3)	\$14,066	\$4,546	\$16,872	\$16,872	\$52,357
Total Expenditures	\$51,338	\$24,488	\$41,312	\$41,312	\$158,449
Balance: Constrained Projects	-\$8,193	-\$4,733	\$4,431	\$17,708	\$17,708
Regional STIP Unconstrained Projects					\$165,333
Balance: Including Unconstrained Projects					-\$147,624

Note 1: Does not include projects with unknown costs or projects funded with discretionary funding sources.