Lassen County 2012
Regional Transportation Plan

Prepared for the

Lassen County Transportation Commission

Prepared by

TRANSPORTATION CONSULTANTS, INC.

LSC Transportation Consultants, Inc.

Lassen County 2012
Regional Transportation Plan

Final Report

Prepared for the

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As the Regional Transportation Planning Agency (RTPA) for the region, the Lassen County Transportation Commission (LCTC) 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) every five years. The region is defined as Lassen 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 Lassen region was last updated in 2006.

The Lassen 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 constructing bike paths to adding lanes on a state highway to purchasing new transit buses to installing new hangars at an airport. The RTP is only the first step in the actual construction of large capital transportation improvement projects in Lassen 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 a specific project is implemented.

The RTP includes 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 tribes. 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.

RTP PROCESS

The preparation of an RTP follows a set of guidelines developed by the CTC and is developed in accordance with applicable federal and state regulations.

Public Involvement and Consultation Process

As an important part of this study, the LCTC has solicited comment on regional transportation issues from a wide variety of groups, including the general public, representatives from Lassen County and the City of Susanville, and tribal governments. Copies of the RTP documents are available at LCTC offices and posted on a project website. Throughout the study process, potentially affected public agencies and governments were contacted for input and coordination, including natural resource agencies administering various public lands, the Native American tribes in the region, truck traffic generators, and surrounding counties. A public outreach effort was conducted early in the RTP process, which included staffing information tables at public locations, conducting a public workshop, conducting an on-line survey and

establishing a project website. Public responses were varied and indicated the need to focus on many types of transportation facilities.

Required Documentation

Environmental documentation for an RTP is required under the California Environmental Quality Act (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). The LCTC has preliminarily determined that the Lassen 2012 RTP will not result in significant impacts. Therefore, an Initial Study/Proposed Negative Declaration was prepared and is being circulated with this Draft RTP.

Coordination with Other Plans and Studies

As the RTP is the first step in making improvements to the regional transportation system, an RTP must be coordinated with and encompass elements from all types of transportation planning documents for the region. As part of the 2012 Lassen County RTP update the following documents were reviewed and incorporated into the RTP as necessary: *Lassen County General Plan*, *City of Susanville General Plan*, *Lassen County Draft Transit Development Plan* (2011), *Lassen County Coordinated Public Transit Human Services Transportation Plan* (2008), *Lassen County Bicycle Master Plan* (2011), and the *Susanville Indian Rancheria Long-Range Transportation Plan (2007).*

REGIONAL CHARACTERISTICS

Lassen County is located in the northeast corner of California, bordered by Modoc County to the north, Plumas and Sierra Counties to the south, Shasta County to the west and Washoe County in Nevada to the east. The City of Susanville is the only incorporated city as well as the county seat. Lassen County comprises 4,690 square miles of land, roughly 63 percent of which is managed by federal, state, and local agencies.

Demographics and Economics

The 2010 US Census estimated Lassen County's total population at 34,895 people. Of this total, roughly 17,460 people live in the City of Susanville (American Community Survey 2006-2010 5 year estimates). Lassen County's institutionalized population, which includes patients in medical institutions and inmates at the three correctional facilities, was 9,604 or 27.5 percent of the total population. The non-institutionalized population figure of 25,291 is more representative of the actual population with respect to transportation planning. The California DOF estimates that Lassen County will continue to grow at a rate of 11 percent every ten years, or roughly 1 percent annually through 2030.

The Lassen County economy has endured significant fluctuations over the years. Beginning in the 1900s, timber was the primary local industry, but several lumber mills have closed in the last 20 years. The Sierra Army Depot, established in the 1940s, provided a boost to the local economy but has since been subject to military spending cutbacks. Most recently, growth in the prison industry has driven much of the change in employment and corresponding population.

Commute Patterns

According to the US Census Bureau, roughly 67.7 percent of employed Lassen County residents also work in Lassen County. Of those commuting out-of-county, the greatest numbers are working in Shasta County and Plumas County. Roughly 25 percent of jobs in Lassen County are filled by out-of county residents, primarily from Shasta County, Plumas County and Washoe County. According to the *2006-2010 American Community* the survey, the majority of Lassen County residents (75.5 percent) drive alone to work, 10.4 percent carpooled and 6.9 percent walked while 5.0 percent worked from home. Very few residents used public transit (1.2 percent) or bicycled to work (less than 1.0 percent).

Native American Tribes

The Susanville Indian Rancheria (SIR) is the only federally-recognized Native American Tribe with land in Lassen County. The Rancheria operates the Diamond Mountain Casino, hotel/conference center, smoke shop, mini-mart and gas station in Susanville. According to the *SIR Long-Range Transportation Plan*, SIR had 429 members in 2006 and anticipates 2,000 members by 2025. The SIR Indian Reservation Road (IRR) roadway inventory includes roughly 7.9 miles of roadway.

Land Use Changes and Growth

There are several proposed new developments in the Lassen region that may have a significant impact on the regional transportation system over the next 20 years:

- Dyer Mountain Resort
- Almanor Basin residential development
- Sierra Army Depot Redevelopment Plan
- Susanville Indian Rancheria development plans in Susanville and Herlong
- Skyline Annexation

Blueprint planning is a collaborative planning process which will ultimately provide a region with a long-term vision and preferred growth scenario. Lassen is in the process of creating a blueprint plan for the region. Future RTP updates will be consistent with that plan.

REGIONAL TRANSPORTATION SYSTEM

Roadways

The maintained roadway system in Lassen totals approximately 1,770 centerline miles. In addition to private roadways, the public road system consists of 303 miles in the state highway system, 881 miles in the county roadway system, 50 in the Susanville roadway system, 346 miles in the jurisdiction of the US Forest Service, 11 miles in the National Park service, 172 miles in the US Army system, and 6 miles in Bureau of Indian Affairs (BIA) jurisdiction (*2010 California Public Road Data, Division of Transportation System Information*).

State Highways

The state highways serving Lassen County are US 395, SR 36, SR 44, SR 139, SR 147 and SR 70. In general, state highways in Lassen County are two-lane facilities with narrow shoulders in many locations. Traffic volumes range from a high on SR 36 in Susanville near the SR 139 intersection of 14,500 Average Daily Traffic (ADT) to a low on SR 139 at the Modoc County line of 470 ADT. Truck traffic represents a

significant proportion of overall traffic on state highways (an average of 11.5 percent on all state highways).

Level Of Service (LOS) is used to rate a roadway segment's traffic flow characteristics. 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. This RTP has set a goal of LOS C. LOS on all Lassen state highways meets preferred LOS, with the exception of SR 36 between SR 139 and US 395. In the future, Caltrans predicts some deterioration of level of service on US 395 south of Susanville by 2030. If no roadway improvements are made to SR 36 and the Skyline Extension is not constructed, traffic congestion will reach LOS "E" by 2030 on SR 36 between SR 139 and US 395.

Countywide Vehicle Miles Travelled (VMT) has decreased by 10.8 percent from 2000 to 2007. According to Caltrans Transportation Concept Reports, total collisions per million vehicle miles traveled slightly exceeds the statewide average for similar types of highways on segments of SR 36, SR 44 and US 395.

County and City Roadways

There are 881 centerline miles in the Lassen County roadway network. Current traffic conditions were estimated on several county roadways. Of the roadways studied, two currently fall below the target LOS C, operating at LOS D: Johnstonville Road (all segments studied) and Riverside Drive. Two more county roadway segments are projected to reach LOS D by 2030, if no improvements are made: Eagle Lake Road from SR 36 to 2.8 miles north and Center Road from Johnstonville Road to Rice Canyon Road. Lassen County has conducted an inventory of pavement conditions of county maintained roadways. There are a total of 41 roadways or approximately 12.5 lane miles with poor pavement conditions, reflecting that maintaining adequate pavement condition on county roadways is an important issue.

The City of Susanville maintains approximately 50 miles of roadway. Generally, traffic congestion within the City of Susanville occurs only along the state highways. The city roadways with the highest AADT are Paul Bunyan Road and Skyline Road.

Bridges

Of the local bridges, six bridges are considered structurally deficient. An additional three bridges in the county are considered functionally obsolete.

TRANSIT SERVICES

Public transportation is a vital service to many residents and to the region as a whole. Lassen Transit Services Agency (LTSA), the Susanville Indian Rancheria and Modoc Transportation Agency (Sage Stage) are the primary providers of public transit in the region. LTSA operates Lassen Rural Bus which provides fixed route service/complementary paratransit service in Susanville as well as various deviated fixed and commuter routes to the western, eastern and southern portions of the county. In order to connect Lassen County residents with jobs and services, Lassen Rural Bus must travel long distances in all types of weather conditions.

The Susanville Indian Rancheria recently began public transit service between Susanville and Red Bluff/Redding. The Susanville Indian Rancheria Health Clinic also provides transportation to medical appointments. Modoc Transportation Agency, Sage Stage, provides intercity transportation between Alturas in Modoc County and Reno, NV with a stop in Susanville.

NON-MOTORIZED FACILITIES

In 2011, Lassen County updated the Bicycle Master Plan that makes the county eligible for state Bicycle Transportation Account (BTA) funding. The plan is intended to construct and upgrade bicycle facilities that will provide multiple benefits to the visitors and residents of the County including provision of safer and more convenient facilities, improved quality of life and public health, and maximization of funding sources for implementation. Census data indicates that improving the bicycle network could encourage bicycle use. There are several existing bikeways in and around the Susanville area: Skyline Bicycle Path, River Front Trail, bicycle lanes on Town Hill and the Bizz Johnson Trail. Bicycle routes have been designated located at various locations on US 395, SR 36, SR 44, SR 139, Johnstonville Road, and Richmond Road

AVIATION

There are five publicly operated general aviation airports in Lassen County: Susanville Municipal, Herlong, Ravendale, Spaulding and Southard Field. An additional airport is located on the Sierra Army Depot property under the jurisdiction of the Lassen County Board of Supervisors, acting as the Local Reuse Authority (LRA). This airport is for military use only. All municipally operated airports are general aviation airports and only the Susanville airport is eligible for federal funding. None of the airports in Lassen County experience significant air traffic.

GOODS MOVEMENT

In the Lassen region, goods movement is focused on trucking, with limited rail transportation by Union Pacific and Burlington North Santa Fe. All state highways in Lassen County are open to standard size trucks with the exception of SR 147 and SR 139 between Susanville and Termo where length restrictions apply.

TRANSPORTATION SYSTEMS AND OPERATIONS MANAGEMENT

Transportation Demand Management (TDM) addresses traffic congestion by reducing travel demand rather than increasing transportation capacity and focuses on alternatives such as ride sharing, flextime, increased transit usage, walking, and bicycling. Currently in Lassen County there is a vanpool for employees commuting to the Sierra Army Depot in Herlong and an informal internet rideshare board for family members of inmates at the correctional facilities. There is one Park and Ride facility in Janesville off of US 395 and several “informal” Park and Ride lots.

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, and are deployed at various locations in Lassen County.

AIR QUALITY

Lassen County is part of the Northeast Plateau Air Basin with air quality managed by the Lassen County Air Pollution Control District. The county is considered “in attainment” for every state and federal air

quality standard except for the state PM10 standard (for small particulates). The low population density (7.7 people per square mile), limited number of industrial installations, the fact that over half of Lassen County is forest land all contribute to Lassen County's good air quality. As Lassen County is in attainment for all federal air quality standards, this RTP is not subject to transportation conformity requirements. Thus, this RTP can be considered to be in compliance with air quality plans.

REGIONAL TRANSPORTATION NEEDS AND ISSUES

The Policy Element of this RTP identifies a variety of regional transportation needs and issues:

- **Global Issues** - With a population of around 35,000 people and little traffic congestion, it is not likely that policies in Lassen County will have a noticeable effect on greenhouse gas emissions. However, it is important that Lassen region transportation and land use decision-makers pursue transportation and land use projects that adhere to adopted state strategies.

- **Demographics** - Census data indicates that Lassen region residents have fewer resources available and therefore are generally more dependent on alternative modes of transportation such as transit, bicycling or walking than the statewide population. The remote nature of Lassen County makes the region susceptible to population spikes that correspond to the boom and busts of industries and large employers. This pattern makes planning for long-term transportation needs difficult.

- **Roadways** – In general, traffic volumes on state highways has decreased over the last ten years. However, traffic congestion does exist on SR 36 in Susanville. Caltrans projects that without improvements, SR 36 will experience LOS "E" conditions by 2030. There will also be a need for transportation improvements in the Westwood/Clear Creek area as vacation homes are built and if Dyer Mountain is constructed. In the short-term, however, providing safe roadways by eliminating hazards and maintaining good pavement conditions is of greater importance.

- **Transportation Enhancements** - Economic vitality is a prominent issue in Lassen County. Methods of boosting the local economy include increasing tourism and attracting new businesses. Transportation infrastructure improvements in Susanville such as constructing welcome signage, landscaping, curb/gutter and sidewalks can assist with this goal.

- **Tribal Issues** – Susanville Indian Rancheria transportation needs include construction of new tribal roadways and continued rehabilitation and maintenance of existing roads. Of particular concern is Spring Ridge Road, for both roadway rehabilitation and bicycle path extension.

- **Transit Issues** – As 6.3 percent of households in Lassen County had no vehicle available to them, maintaining reliable and efficient public transit is an important regional transportation need for Lassen County. There are two primary transit capital needs: maintaining a safe and adequate fleet of vehicles and enhancing passenger amenities such as shelters, benches and a centralized transit center in downtown Susanville.

- **Non-Motorized Facilities** - Many roadway safety concerns stem from potential conflicts between automobiles, bicycles and pedestrians. 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 crosswalks will improve the overall experience for both visitors and residents. Sidewalks, crosswalks, and lighting are particularly important for residents with disabilities. Another important non-motorized facility need is to connect schools to bike paths and to create secure bicycle parking facilities.

- **Aviation** - The airports in the Lassen County serve a limited amount of general aviation, while serving an important role regarding emergency services. It is not likely that there is sufficient demand to expand these airport facilities in the short term. Lassen County will continue to use California State annual grant funds to maintain these airports to acceptable standards.

- **Goods Movement –** Goods movement is an important transportation issue for the Lassen region. The proportion of all traffic representing trucks reached as high as 24 percent on the state highway system. For trucks travelling between Reno and destinations along the I-5 corridor from Redding north to Oregon, US 395/SR 44 is the shortest travel route. Maintaining pavement, constructing passing lanes, enhancing ITS to alert truckers of weather or other roadway issues, and implementing safety projects on the state highways will continue to be important regional transportation needs.

- **Transportation Demand Management -** Ridesharing/carpooling programs are a relatively inexpensive and environmentally beneficial form of transportation assistance that can benefit all residents, particularly commuters and those in areas not served or served infrequently by public transit. As Lassen County's major employers are located outside of the core Susanville area, there is a need to continue and increase ridesharing efforts.

REGIONAL TRANSPORTATION GOALS

The Policy Element includes the following regional transportation goals:

GOAL: Develop and maintain a comprehensive, efficient, and safe transportation system to serve the needs of the County residents and to stimulate the economics progress of the County.

GOAL: To provide adequate cost-effective public transit services, especially to accommodate the needs of the elderly and handicapped.

GOAL: Promote the continuous flow of goods in and out of the County in a safe and economically efficient manner.

GOAL: Provide an adequate number of safe, efficient airports and airfields.

GOAL: Support the expansion of economical, efficient air services.

GOAL: Provide a safe and efficient bicycle and pedestrian circulation system that takes advantage of the natural scenery and physical characteristics of Lassen County.

GOAL: Minimize traffic congestion by increasing the efficiency of the existing transportation system through Transportation System Management (TSM) techniques.

GOAL: Where feasible, reduce the demand for travel by Single Occupant Vehicles (SOVs) through Transportation Demand Management (TDM) techniques.

GOAL: Reduce Greenhouse Gas (GHG) emissions from transportation related activities within the Lassen County boundaries to support the state's efforts under AB-32 and to mitigate the impact of climate change.

TRANSPORTATION SAFETY

Transportation safety is a concern for roadways and non-motorized transportation facilities in the Lassen region. 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 Action Element.

TRANSPORTATION SECURITY/EMERGENCY PREPAREDNESS

As an issue distinct from transportation safety, transportation security/emergency preparedness addresses issues associated with large-scale evacuation due to a natural disaster or terrorist attack. A safe and efficient regional transportation system is crucial to emergency preparedness and evacuation. The best preventative measures with respect to this document for emergency preparedness would be to implement projects in the RTP which upgrade roadways, airport facilities, bicycle and pedestrian 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 20 years. Therefore a basic funding strategy should be developed to help prioritize regional transportation improvements. Potential strategies considered for Lassen County are:

- **Capacity Increasing Focus** – This strategy allows for the majority of State Transportation Improvement Program (STIP) funds, the primary revenue source for regional roadway improvements, to be used for capacity increasing projects such as adding lanes to SR 36 and 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, local roadway rehabilitation is of greater concern than expanding the state highway system. Although the potential need for state highway expansion should not be dismissed entirely as the region grows. A balanced focus also includes an emphasis on alternative types of transportation improvement such as gateway enhancements, non-motorized facilities and public transit. This RTP update follows the balanced focus funding strategy.

TRANSPORTATION SYSTEM IMPROVEMENTS

The Action Element of the RTP identifies and prioritizes short- and long-term transportation capital improvements for the region, 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. Projects are categorized by transportation element and priority level. Both financially constrained and financially unconstrained projects are included. Each project is linked to a performance measure that will be used to evaluate the cost effectiveness of the project.

ENVIRONMENTAL CONSIDERATIONS

The majority of RTP projects located within the Lassen region are road reconstruction or rehabilitation and do not require disturbing or paving new lands. New roadway projects such as Skyline Extension will undergo thorough environmental review prior to construction. Before implementing road or bicycle/pedestrian improvement projects, the County of Lassen 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 Game, US Forest Service, Army Corp of Engineers and Regional Water Quality Control Board.

RTPAs which are not located within the boundaries of a metropolitan planning organization (which LCTC is not) are not subject to the provisions of SB 375 which require addressing region greenhouse gas (GHG) targets in the RTP and preparation of sustainable community strategies. However, given the importance of the consideration of climate change in transportation planning, this RTP outlines several strategies to reduce GHG emissions: 1) prioritize transportation enhancement; 2) construct non-motorized facility projects; 3) implement transit system improvements; 4) develop a rideshare program; and 4) educate the community.

Adoption of an RTP is considered a "project" under the California Environmental Quality Act (CEQA). The LCTC has preliminarily determined that the Lassen 2012 RTP will not result in significant impacts. Therefore, an Initial Study/Negative Declaration was prepared for this 2012 update.

FINANCIAL ELEMENT

The Financial Element identifies a variety of transportation funding sources both recurring and competitive which could be used to implement the transportation capital improvement projects listed in the Action Element over the next 20 years. In an effort to develop a financially constrained RTP, transportation revenue sources are projected for a 20 year period and compared to transportation project costs. Over the short-term, roadway and bridge projects are financially constrained; however, there are a significant number of roadway improvements which are considered financially unconstrained and will likely not be funded over the next 20 years. The Lassen region will implement projects as funding becomes available. It is estimated that there will be sufficient revenue available for transit vehicle replacements; however, funding is unknown for larger projects such as the downtown transit center and new maintenance facility. Many funding sources for non-motorized improvements are competitive and therefore difficult to predict. It is likely that many of the long-term non-motorized facility projects will go unfunded over the 20 year period. Additional revenue will be required for the local match to state and federal funding programs for airport improvement projects.

Chapter 1
Introduction

As the Regional Transportation Planning Agency (RTPA) for the region, the Lassen County Transportation Commission (LCTC) 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) every five years. The region is defined as Lassen 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 Lassen region was last updated in 2006.

The Lassen 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 adding lanes on a state highway to purchase of new transit buses to installing new hangars at an airport. The RTP is only the first step in the actual construction of large capital transportation improvement projects in Lassen 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 tribes. 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. This Final RTP reflects comments received on the *Draft RTP*. 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 LCTC 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 LCTC) 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 LCTC is responsible for the preparation of the Lassen region's RTP. The LCTC must ensure that all of the requirements of the RTP process are met (as listed in Appendix B). The LCTC 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 LCTC then adopts the RTP and environmental documentation in accordance with state and federal requirements.

After adoption, the LCTC is responsible on an ongoing basis for keeping the RTP current with respect to changing conditions throughout the County. As new or redefined projects are needed, the action and financial sections are amended. The LCTC considers funding only for those projects in the RTP that have been fully reviewed by all concerned agencies.

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 LCTC and advisory groups involved in the development of the RTP are as follows:

- The **LCTC**, serving as the RTPA, includes three appointed representatives from the Susanville City Council and three appointed representatives from the County of Lassen Board of Supervisors. The LCTC is staffed by an Executive Director, Transportation Project Manager and a Transportation Planner who oversees the management of the public transit system.

- A **Technical Advisory Committee** (TAC) provides technical advice to the LCTC with respect to prioritizing and programming transportation projects. The TAC consists of three staff people from the City of Susanville, three staff people from the County of Lassen, a representative from Caltrans, and a representative from the Susanville Indian Rancheria. The committee members are appointed by the LCTC and serve as the study steering committee for this 2012 RTP update.

- The **Social Services Transportation Advisory Council** (SSTAC) is a transit specific advisory committee established by the Transportation Development Act (TDA). In Lassen County, the Council meets annually to discuss unmet transit needs particularly those of the elderly and disabled.

- **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. Lassen County is located in District 2, with offices in Redding. District 2 staff members serve as liaisons to the LCTC.

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. LCTC RTP Public Involvement Procedures were originally developed for the 2006 RTP and updated for this RTP (Appendix C). In addition to following the Public Involvement Procedures, the entities listed below were contacted for information and solicited for input:

- Susanville Indian Rancheria
- Adjacent County Regional Transportation Planning Agencies (RTPAs)
- Local, State, and Federal Resource Agencies
- Lassen County Air Pollution Control District
- Truck Traffic Generators
- Public Transit Operators

Appendix D presents a comprehensive listing of entities and persons contacted.

In compliance with the *2010 Regional Transportation Guidelines*, the following provides details of correspondence to specific agencies. Correspondence associated with this RTP is provided in Appendix E. 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 Meeting (LCTC Technical Advisory Committee)	Project Kickoff Meeting	3/22/2012
Adjacent RTPAs	Contacted Requesting Input	Week of March 26th
Truck Traffic Generators	Contacted via Phone Requesting Input	Week of April 2nd
Natural Resource Agencies	Sent Notification Letters and Contacted Requesting Input and Consultation	03/05/12, 04/09/12
Tribal Governments	Attended Project Kickoff Meeting	3/22/2012
Information Tables (2)	Wal-Mart and Post Office in Susanville	5/17/2012
Lassen Economic Development Council	Information/Request Input	5/17/2012
Study Steering Committee Meeting/ Public Workshop	Stakeholder/Public Outreach	5/24/2012
Stakeholder Advisory Committee Meeting	Review of Tech Memo Two	5/24/2012
Public Workshop	Review of Regional Issues and Needs	5/24/2012
LCTC Meeting	Public Hearing on Draft Document	7/9/2012
Final RTP Adoption	LCTC Meeting	September

Citizen/Advocacy Group/Stakeholder Participation

An important objective for this RTP update is to obtain input on the transportation planning process from a wide variety of Lassen residents. For this reason, a public outreach program was conducted starting early in the RTP process, as outlined below:

- **Study Steering Committee Meetings** – The LCTC TAC was designated as the steering committee for the 2012 RTP update. TAC members were invited to a study kick-off meeting on March 22, 2012 where the Consultant provided an overview of the RTP process, circulated data needs requests, and solicited initial input on regional transportation needs. After completion of the first Technical Memorandum, a second meeting was held to discuss findings of the study to date. The TAC will continue to be involved in the RTP process.

- **Information Tables** – Information tables were set up and staffed by the consultant for two hour periods at the Wal-Mart and the US Post Office in Susanville on May 17, 2012. Two large graphic posters were displayed along with a map of Lassen County and Susanville. The posters briefly explained the purpose of an RTP and posed the questions, "*What do you see as the greatest transportation issues in Lassen? What do you think are the most important changes the region should make to improve mobility in Lassen County*?" The objective of the information tables was twofold: obtain input from a wider demographic (people who do not typically attend public meetings and workshops), and to encourage attendance at the public workshop the following week.

- **Public Workshop –** An evening public workshop was held at the Veteran's Hall in Susanville. The Consultant presented an overview of the RTP process and regional transportation needs and issues. Attendees provided input on needs and issues and what they see as the 20-year transportation vision for Lassen County.

- **Informational Material** – To increase public awareness of the project, a project website was developed. The website provides a brief summary of the RTP, links to the 2006 RTP, information on public input events and contact information for the consultant. The website is updated throughout the RTP process, including posting of comments and interim study documents. 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 at all public input events and forwarded the LCTC TAC for wider distribution.

- **Online Survey** – A ten question survey was developed and posted on-line through surveymonkey.com. The survey was designed to obtain input from the public about what they thought were the most crucial transportation problems in Lassen County. To date, five responses have been received (Appendix E).

Appendix E includes a public comment log as well as on-line survey responses. Roughly 21 individuals provided comments through one of the above listed methods of public input. While this is not a statistically significant proportion of the total population of Lassen County, the responses indicate that Lassen County residents generally place a similar level of importance on improving non-motorized facilities and public transit as improving the roadways. Overall, the responses were varied and were considered in the development of the transportation needs and issues section.

The public input process continued throughout the course of the RTP update. A public hearing on the Draft RTP and associated environmental document was held as part of a regularly scheduled LCTC meeting.

Tribal Governments

The Susanville Indian Rancheria (SIR) tribal land is located in Lassen County. Representatives of the Tribe serve on the LCTC TAC, which acts as the steering committee for this 2012 RTP update. The SIR 2007 Long-Range Transportation Plan was reviewed as part of the RTP update and incorporated into the document. Additionally, the Tribe was personally invited to the public workshop. 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 Lassen RTP. Lassen County borders Shasta County, Modoc County, and Plumas County in California as well as Washoe County in Nevada. Lassen County's southernmost tip borders a small

portion of Sierra County along the US 395 corridor; however, Sierra County is not significantly affected by transportation projects in Lassen County. With the exception of Sierra County, all adjacent RTPAs were contacted for input on the Lassen 2012 RTP update. Agency responses received to date are summarized below, and will be augmented as additional responses are received.

Shasta County

Located to the west, Shasta County is accessed from Lassen County via State Route (SR) 299 and SR 44. Although Shasta County has a greater population, the two counties share similar issues. Shasta County's travel demand model update (2011) included major reductions in growth and development assumptions. State routes in Lassen County provide critical east –west transportation for goods movement and recreational travel to/from the Interstate 5 corridor in Shasta County. These highways also can serve as an alternative to Interstate 5 in case of a road closure. The *Shasta County 2010 Regional Transportation Plan* includes capacity-increasing projects along Interstate 5. Through Far Nor Cal GIS, Shasta County is establishing a GIS database which will include transportation, census, economic and other data. All North State regions are invited to piggy-back on the platform provided that data standards are met. The Fall River Mills Airport in Shasta County, which also serves Lassen County, has recently been upgraded.

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 were contacted and input and relevant resource maps or plans were requested. Copies of all correspondence can be found in Appendix E.

- Lassen National Forest
- Bureau of Land Management
- California Department of Fish and Game
- US Fish and Wildlife

Findings and input from the environmental agency consultation process are summarized below.

California Wildlife Action Plan

As a requirement for receiving funding under the State Wildlife Grants Program, states must develop a Wildlife Action Plan. The California Wildlife Action Plan (entitled *California Wildlife: Conservation Challenges*) identifies two conservation challenges which pertain to a discussion of regional transportation planning: recreational pressures and climate change.

Much of Lassen County is subject to recreational uses. Fishing, 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.

The Plan indicates that climate change has far reaching consequences on wildlife and wildlife habitat in California, 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 will be discussed later in the Action Element, this RTP does not include projects that will significantly increase vehicle traffic (and associated greenhouse gases) in Lassen County. Additionally, Caltrans data shows that County traffic volumes have generally decreased over the last ten years.

Bureau of Land Management

A significant amount of land in eastern Lassen County is managed by the Bureau of Land Management (BLM). The BLM oversees an intricate network of OHV trails and unpaved roads throughout its jurisdiction, as well as numerous non-motorized facilities, including the Bizz Johnson Trail. The "Bike the Bizz" program, where bicyclists are shuttled from Devils Corral and ride one-way back to Susanville, is a partnership between the BLM, Lassen Land and Trails Trust and Lassen Rural Bus. The majority of BLM land users prefer a wilderness experience and are not looking for well paved and maintained roadway facilities.

As part of the consultation process, the BLM 2006 Eagle Lake Field Office Resource Management Plan (RMP) was reviewed. The consultant also met with BLM representatives to discuss regional transportation needs and issues. This RTP is consistent with the RMP travel management goals and objectives, particularly the BLM's travel management goals of providing a high quality of life for residents and enhancing trail-based tourism to support the local economy. RTP projects will not negatively impact BLM roadways or other resource management plans. BLM representatives feel that county and state roads around Eagle Lake which provide access to the wilderness are adequate. The BLM has proposed several non-motorized trails which will enhance walking and biking in Lassen County, some of which may require crossing state highways. Appendix F presents existing BLM routes and existing and proposed non-motorized facilities.

California Department of Fish and Game and US Fish and Wildlife

As part of the consultation process, the California Natural Diversity Database (CNDDB) was reviewed to determine potential conflict between transportation improvement projects and wildlife. The CNDDB is a "natural heritage program" and is part of a nationwide network of similar programs overseen by NatureServe (formerly part of The Nature Conservancy). All natural heritage programs provide location and natural history information on special status plants, animals, and natural communities to the public, other agencies, and conservation organizations. The data helps drive conservation decisions, aids in the environmental review of projects and land use changes, and provides baseline data helpful in recovering endangered species and for research projects. Appendix G presents a list of species in Lassen County which are classified as "Endangered" or "Threatened" at either the federal or state level, as well as the name of the USGS 7.5 topographic quadrangle where the species have been found as identified in the CNDDB. The information in the appendix simply presents the general location of endangered and threatened wildlife. Transportation improvement projects in the identified areas should undergo environmental review prior to approval to minimize or prevent environmental impacts. As a rule, Caltrans and local entities should follow Best Management Practices for pavement rehabilitation and other maintenance projects to avoid negative impacts to endangered or threatened species.

Lassen County Air Pollution Control District

To date, the Lassen County Air Pollution Control District has not provided specific comments. A description of air quality conditions and how they relate to regional transportation is included in the Air Quality Section of Chapter 2.

Private Sector - Truck Traffic Generators

Goods movement is an important part of the regional transportation system as well as the economic vitality of the region. Truck traffic generators representing beverage distributers and logging operations in Lassen County were contacted to obtain input on the regional transportation system. The companies

contacted generally use the state highways to travel between Reno, Susanville, Alturas, and Quincy. No major deficiencies in the regional transportation system were cited by the truck traffic generators.

Public Transit Operators

Lassen County is currently served by Lassen Rural Bus, Modoc County Sage Stage, Susanville Indian Rancheria, and various human service transportation providers. Public transit regional transportation needs and issues are outlined in the modal discussion section of Chapter 2.

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 14.2 percent of Lassen residents were living in poverty for at least a 12-month period between 2006 and 2010, as defined by the US Census Bureau. This is slightly greater than the statewide poverty rate of 13.7 percent during that period. Poverty rates by city are available for the same time period and demonstrate that Susanville had a higher poverty rate of 17.4 percent. Approximately 17.5 percent of the Lassen population is Hispanic, another 8.0 percent are African American, and 2.9 percent are Native American. The Susanville Indian Rancheria is the tribal government located in Lassen County.

The Action Element of this RTP will 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 replacing public transit vehicles and expanding the bicycle and pedestrian facilities network. Additionally, the *Lassen 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.

Transportation Programming Process

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 three elements:

- The **Policy Element** describes 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

The *Air Quality Conformity Determination* provides an analysis of the emission of pollutants from transportation sources that can be expected to result from the implementation of this plan. This analysis must document that the projects included in the RTP, when constructed, will not emit more pollutants than allowed in the emissions budget set forth in the State Implementation Plan (SIP). The extent of required documentation is based on the current federal non-attainment designation and its requirements applicable to Lassen County. As Lassen County is in attainment for all federal air quality standards, this RTP is not subject to transportation conformity requirements.

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 LCTC has preliminarily determined that the Lassen 2012 RTP will not result in significant impacts. Therefore, an Initial Study/Proposed Negative Declaration was prepared and is being circulated with this 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 Lassen County General Plan and Susanville City General Plan. The primary goals and objectives of other important documents have been incorporated into the RTP including: *Lassen County Draft Transit Development Plan* (2011), *Lassen County Coordinated Public Transit Human Services Transportation Plan* (2008), *Lassen County Bicycle Master Plan* (2011), and the *Susanville Indian Rancheria Long-Range Transportation Plan (2007).* Information for the state highway system was developed in coordination with Caltrans District 2. The following documents were used: SR 36 Transportation Concept Route Report (2012), SR 299 Transportation Concept Route Report (2009), 299/44/36/395 Corridor Management Plan (2008), and the Almanor Regional Transportation Assessment (2008).

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Chapter 2
Existing Conditions and Travel Mode Discussion

REGIONAL CHARACTERISTICS

As shown in Figure 1, Lassen County is located in the northeast corner of California, bordered by Modoc County to the north, Plumas and Sierra Counties to the south, Shasta County to the west and Washoe County in Nevada to the east. The City of Susanville is the only incorporated city, and also serves as the county seat. Other major communities within the county include Westwood, Clear Creek, Bieber, Johnstonville, Janesville, Standish, Litchfield, Doyle, Herlong, Milford, Leavitt Lake, and Little Valley. Susanville is approximately 85 miles for Reno, Nevada, 110 miles from Redding, California, and 190 miles from Sacramento, California.

Lassen County comprises 4,690 square miles of land, roughly 63 percent of which is managed by federal, state, and local agencies. The Lassen County region was first settled after the 1849 Gold Rush. Historically, the railroad and timber industry were significant contributors to the local economy. In more recent history, the establishment of the Sierra Army Depot and prisons has led to the development of communities such as Herlong. Recreational opportunities abound in Lassen County with Eagle Lake north of Susanville, a portion of Lassen National Park, and Lassen National Forest and Bureau of Land Management land in the western portions of the County.

Population

The 2010 US Census estimated Lassen County's total population at 34,895 people. This represents a 3 percent increase over 2000 Census counts. Of this total, roughly 17,460 people live in the City of Susanville (American Community Survey 2006-2010 5 year estimates). Lassen County's institutionalized population, which includes patients in medical institutions and inmates at the three correctional facilities, was 9,604 or 27.5 percent of the total population. Of the 9,604 institutionalized, it was estimated that 8,491 people were institutionalized within the City of Susanville, making the estimated non-institutionalized population 8,969. The estimated institutionalized population for unincorporated Lassen County was 1,113 people, making the non-institutionalized population estimate 16,322. This institutionalized population is not currently using Lassen County transportation facilities and will likely not remain in Lassen County after their release. Therefore the non-institutionalized population figure of 25,291 for Lassen County is more representative of the actual population with respect to transportation planning.

Table 2 presents an overview of age and race estimates for Lassen County, using 2010 Census data. According to this data, predominate ethnicities are White (66.69 percent), Hispanic (17.53 percent), and African American (8.00 percent). Just less than 10 percent of the population in Lassen County was age 65 and older in 2010. The Susanville Indian Rancheria is the only Native American tribe with native land in Lassen County. According to the 2010 Census, the population of the Susanville Indian Rancheria was 549 persons.

Population Trends and Projections

The California Department of Finance (DOF) provides population projections for California cities and counties. DOF 2000 and 2010 estimates are higher than actual Census counts. The California DOF estimates that Lassen County will continue to grow at a rate of 11 percent every ten years, or roughly 1 percent annually through 2030. By applying this population growth rate to the 2010 Census figures, totals, it is estimated that the non-institutionalized population of Lassen County will be 31,257 by 2030 (Table 3).

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FIGURE 1

Lassen County Communities and Transportation Network

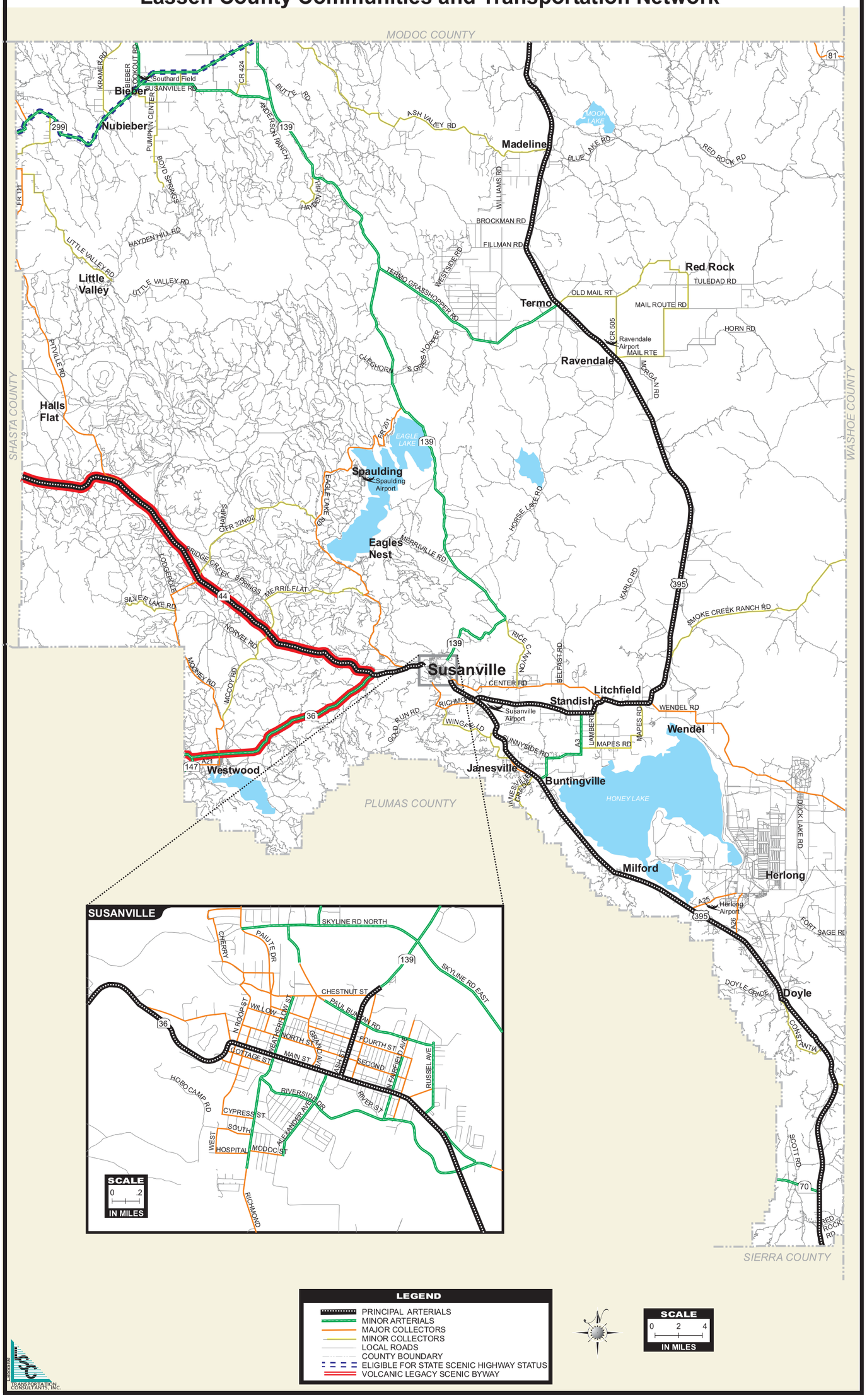

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TABLE 2 : Lassen County 2010 Demographic Estimates

	Total	Non-Institutionalized	Race: White	Hispanic	Asian	African American	American Indian	Other/ Multirace	Age 65 and Above
Number of Persons	34,895	25,291	23,270	6,117	337	2,790	999	1,382	3,474
Percent of Total Population	--	72.48%	66.69%	17.53%	0.97%	8.00%	2.86%	3.96%	9.96%

Source: US Census 2010 Demographic Profile

TABLE 3: Lassen County Future Population Estimates

Year	Non-Institutionalized Population	Ten Year Change # Persons	Ten Year Change %
2010	25,291	--	--
2020	28,116	2,825	11.17%
2030	31,257	3,141	11.17%

Note: California Department of Finance growth rate applied to 2010 US Census data.

Economic Base

The Lassen County economy has endured significant fluctuations over the years. Beginning in the 1900s, timber was the primary local industry, but several lumber mills have closed in the last 20 years. The Sierra Army Depot, established in the 1940s, provided a boost to the local economy but has since been subject to military spending cutbacks. Most recently, growth in the prison industry has driven much of the change in employment and corresponding population. Currently, public sector jobs account for 64 percent of local employment. Trade, transportation, and utilities are the second largest industry in Lassen County. Although farm-related jobs have decreased recently, agriculture still plays a role in the Lassen County economy. Top agricultural products are hay, timber, livestock, and strawberry plants. Lassen County is making an effort to diversify the local economy by encouraging tourism and outdoor recreation.

According to the Caltrans *Lassen County Long-Term Socio-Economic Forecast*, the three correctional facilities in Lassen County (High Desert State Prison near Susanville, California Correctional Facility near Susanville, and Federal Correctional Institution in Herlong) are the largest employers, with a total of 2,800 employees. Other major employers include the school districts, Lassen Community College, Forestry and Fire, Wal-Mart, Susanville Indian Rancheria, Sierra Army Depot, agriculture industry, Sierra Cascade Nursery, natural resource agencies, local governments and various health care facilities in Susanville.

The California Employment Development Department estimates that in 2011 the unemployment rate in Lassen (not adjusted seasonally) was 13.5 percent. This represents a significant jump in unemployment compared to 2006 levels (7.9 percent). The County's unemployment rate is higher than the California

statewide average, which was 11.7 percent for the same period in 2011. The Caltrans *Long-Term Socio-Economic Forecast for Lassen County* indicates that between 2011 and 2016, job growth is expected to average 2.0 percent annually, with most increases occurring in the government sector.

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. Specifically, the *2004 Lassen County Economic Strategic Development Plan* recommends improvements to US 395 in the southern portion of the County (especially intersections with County Roads A-25 and A-26 in Herlong), and between the North Valley/I-5 corridor and the Westwood/Almanor basin area, including SR 36.

Commute Patterns

The Center for Economic Studies of the US Census Bureau prepares the Longitudinal Employer-Household Dynamics (LEHD) dataset, which offers the most recent commute pattern data statistics (2010). While this data includes persons who may not commute every day, it is still the best up-to-date indicator of commute patterns. According to the data, 67.7 percent of employed people who live in Lassen County also work in the County. The majority of jobs are located in the greater Susanville area, followed by substantially lower numbers of jobs in Johnstonville, Litchfield, and Bieber. Just fewer than 5 percent of employed Lassen residents (390 people) commute along SR 44 to neighboring Shasta County and 4.3 percent (359 people) commute via SR 36 to Plumas County. Roughly 25 percent of jobs in Lassen County are filled by out-of-county residents. The top three counties that Lassen County workers commute from are: Shasta County (3.4 percent or 253 jobs), Plumas County (3.1 percent or 229 jobs), and Washoe County (2.3 percent or 172 jobs). These workers likely commute along the SR 44, SR 36 and US 395 corridors, respectively.

The *2006-2010 American Community Survey* conducted by the US Census Bureau provides additional commute data for Lassen County, including means of transportation to work and travel times. According to the survey, 75.5 percent of workers drove alone, 10.4 percent carpooled, 6.9 percent walked, 5.0 percent worked from home, 1.2 percent used public transportation and 1.0 percent used other means (including bicycling). Census data shows that commute times are not significantly long for Lassen County employees. The mean travel time to work was 17.9 minutes.

NATIVE AMERICAN TRIBES

The Susanville Indian Rancheria is the only federally-recognized Native American Tribe with land in Lassen County. The tribe includes descendents of the Maidu and Paiute Native Americans. The bulk of tribal land is located in Susanville (1,028 acres). The Susanville Indian Rancheria (SIR) also owns land in Ravendale (80 acres), at the old Sierra Army Depot site in Herlong (72 acres), and in Plumas County (160 acres). Appendix H presents maps of SIR holdings in Susanville and Herlong. The Rancheria operates the Diamond Mountain Casino, hotel/conference center, smoke shop, mini-mart and gas station in Susanville. As there are no public school facilities located on tribal land, children attend schools in Susanville. Other tribal facilities in Susanville include a gymnasium and a health center.

According to the *SIR Long-Range Transportation Plan*, SIR had 429 members in 2006 and anticipates 2,000 members by 2025. The median age of tribal members is 28.9 with 5 percent of the population 64 years of age or older. The average education level for tribal members is Grade 12. The SIR Indian Reservation Road (IRR) roadway inventory includes roughly 7.9 miles of roadway. Improvements to these roads are funded through the federal IRR grant program, which is administered jointly by the

Bureau of Indian Affairs (BIA) and Federal Highway Administration. Appendix H presents existing and projected traffic volumes on SIR roadways obtained from the *SIR 2007 Long Range Transportation Plan*.

LAND USE CHANGES AND GROWTH

There are several proposed new developments in the Lassen region that may have a significant impact on the regional transportation system.

Dyer Mountain Resort

Dyer Mountain Resort is proposed to be a large scale all-season resort near the community of Westwood east of Lake Almanor, in the western portion of Lassen County. The original vision of the resort incorporated a ski area, golf course, 600,000 square feet of commercial and retail floor area, lodging, and approximately 4,000 residential units. The project would also include a multi-use trail system internal to the project site and connections to key areas and facilities outside the project. A small transit system is proposed to shuttle residents and visitors from parking areas to the mountain and around the development. Although the Dyer Mountain project was approved by Lassen County several years ago, development of the project has been stalled by a lawsuit. If Dyer Mountain is constructed, there would be substantial impacts to the regional transportation system, as the land is currently undeveloped. According to the *Dyer Mountain Environmental Impact Report Traffic Analysis*, the completion of Phase I of the project (estimated year 2030) would add 485 external vehicle- trips during the summer PM peak hour to the nearby roadway system (including SR 36). At buildout of the project there would be an additional 2,220 external vehicle-trips during the summer PM peak hour. The *Almanor Regional Transportation Assessment* (discussed below) indicated that roadway improvements are required to maintain adequate traffic conditions in Lassen County as a result of the Dyer Mountain project and other land use developments in the western portion of the County.

Almanor Basin

The Almanor Basin has become increasing popular for vacation and retirement home sites. The *Almanor Regional Transportation Assessment* (ARTA) (2008) provides an analysis of traffic conditions for the Almanor Basin region in Plumas and Lassen counties for year 2030 and buildout of the area which is estimated to occur in the year 2100. The study area incorporates the Almanor Planning Area (including the community of Chester in Plumas County), the Westwood/Clear Creek Planning Area, and Dyer Mountain Resort in Lassen County. Roadways in Lassen County, particularly SR 147, SR 36 and County Road A-21, will be affected by residential and commercial growth of this area. If no roadway improvements are implemented, the ARTA analysis projects the following transportation conditions by 2030:

- The intersections of SR 36/SR 147 and SR 36/County Road A-21 will drop from Level of Service (LOS) B to LOS D.
- SR 36 roadway segment between County Road A-13 (Plumas County) and SR 147 (Lassen County) and Delwood Street and County Road A-21 will fall below LOS C.

The plan makes the following recommendations to maintain acceptable traffic conditions on state routes within Lassen County by 2030:

- One-half mile of passing lane in each direction along SR 36 between County Road A-13 and SR 147.
- One mile of five-lane cross-section on SR 36 through Westwood, including curb, gutter and sidewalk.

- A traffic signal at the intersection of SR 36 and SR 147.
- A traffic signal at SR 36 and County Road A-21.

Sierra Army Depot Redevelopment Plan

In 1995, total acreage and employment of the Sierra Army Depot (SIAD) base was reduced as a result of federal base closures and realignment. Some of the excess acreage (4,383 acres) was transferred to the Lassen Local Reuse Authority (LRA). A *Sierra Army Depot Redevelopment Plan* was developed in 1994, which provides for commercial, residential, and industrial projects in the Herlong area. No specific development proposals are in the pipeline at this time, but it is likely that the project will have an impact on County Road A-25 and the intersection with A-25 and US 395 in the future.

Susanville Indian Rancheria

SIR is planning construction of roughly 48 single family homes in the Upper Rancheria and adjacent 875 acre property along with 15 senior citizen modular type housing units. SIR is also planning renovation of 120 existing homes on the Herlong property along with new water and sewer services. The Herlong property has the potential for retail and food services development. Additionally, the tribe has plans to develop a new health clinic and urgent care facilities on the 875 acre parcel. The new development could potentially include a new administration facility, Elders dining facility, and fire station.

Skyline Annexation

Over the long term, there is potential for development of a 640-acre vacant parcel along Skyline Drive southeast of Lassen Community College and the Lassen Community Hospital. As the parcel is located within the City of Susanville Sphere of Influence, the landowner has requested that the City annex the property and assign a general plan designation. Potential uses for the property include active adult living, passive recreation, workforce housing, and additional resort components. The primary access for the project would be via Skyline Drive.

Shasta Fast Forward Regional Blueprint Plan

"Blueprint planning" is a collaborative planning process that is intended to provide a region with a long-term vision and preferred growth scenario. Advanced Geographic Information Systems (GIS) technologies are employed to provide a picture of future land use conditions based on natural resource constraints and development policies. The process includes extensive public outreach in order to determine preferred growth principles that reflect residents' values and priorities. The process leads to the development of a preferred growth scenario which will guide regional and local land use and transportation decisions for a future that is sustainable and consistent with the needs and values of local residents. A blueprint plan is an important reference for the development of RTPs and general plans. As part of a regional blueprint planning effort, neighboring Shasta County developed a preferred growth scenario that combines growth focused on urban cores and corridors with maintaining individual communities. Year 2050 land use growth projections show a substantial increase in development along the SR 299 corridor in McArthur that could affect traffic volumes in Lassen County.

Lassen Blueprint

Lassen County is currently in the Blueprint planning process. A plan will not likely be finished prior to completion of this RTP update.

Reno Annexations

Located 85 miles from Susanville, Reno, Nevada is the closest major urban area to Lassen County. Future annexations by the City of Reno could increase land use in the northern portion of Reno and potentially impact traffic circulation traveling north on US 395 into Lassen County.

ROADWAY TRANSPORTATION SYSTEM DESCRIPTION

The maintained roadway system in Lassen totals approximately 1,770 centerline miles. In addition to private roadways, the public road system consists of 303 miles in the state highway system, 881 miles in the county roadway system, 50 in the Susanville roadway system, 346 miles in the jurisdiction of the US Forest Service, 11 miles in the National Park service, 172 miles in the US Army system, and 6 miles in Bureau of Indian Affairs (BIA) jurisdiction (*2010 California Public Road Data, Division of Transportation System Information*). Only 229 maintained miles (12.9 percent) of the roadway system are considered "urban."

ROADWAY CLASSIFICATION

Figure 1 depicts Lassen County's main roadway system, along with each roadway's functional classification. The following provides a description of the Federal Highway Administration (FHWA)'s roadway functional classification.

- **Principal Arterials** provide the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control. In Lassen County, US 395 and SR 44 are classified as principal arterials.
- In conjunction with principal arterials, **minor arterials** road system link cities and larger towns and form an integrated network providing interstate and intercounty service. Minor arterials constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to-through movement. Examples of minor arterials in Lassen County include SR 36 and SR 139.
- **Collectors** provide a less highly developed level of service at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials. The Federal Highway Administration (FHWA) further delineates collectors into major and minor rural collectors. Minor collectors generally connect local roadways to major collectors and major collectors connect to arterials or regional destinations. Examples of major collectors in Lassen include Center Road and Eagle Lake Road. Examples of minor collectors include Ash Valley Road and Wingfield Road.
- **Local Roads** consist of all roads not defined as arterials or collectors. Their primary function is to provide direct access to individual properties, with little or no through movement. The majority of maintained roads in Lassen County are classified as local roads.

STATE HIGHWAYS

The state highways transecting Lassen County are US 395, SR 44, SR 36 and SR 139, as described below.

US 395 – This state highway is a major north–south roadway connecting Lassen County to Reno, Nevada in Washoe County to the south and Alturas in Modoc County to the north. Lassen communities located on or near US 395 include Susanville, Herlong, Janesville, Doyle, Ravendale, Termo, and Madeline. The portion of the highway south of Susanville is part of a larger corridor extending along SR 299 from

Arcata, California in Humboldt County to SR 36, SR 44, US 395, and ending at the Nevada State border just north of Reno. In addition to being designated a Focus Route, this corridor is designated Maintenance Service Level 1, meaning that it is given the highest priority with respect to maintenance issues including snow removal and rock/debris removal. The Lassen County segment of US 395 is primarily two-lane with 4 to 8 foot paved shoulders and no median. Eight miles near the Nevada border is a 4-lane expressway.

Highway Segment Key Issues – This section of US 395 closes to trucks several times a year due to high wind and icy conditions. There are few alternate routes available, with limited services nearby such as gas stations and lodging.

Transportation Concept Report 20 year Vision – The long-term vision for US 395 south of SR 36 in Lassen County is a 4-lane expressway. US 395 north of the junction with SR 36 will likely remain a 2-lane facility over the next 20 years.

SR 44 – This state highway runs generally east–west through the county connecting Susanville to Shasta County through Lassen National Forest land. The Lassen County section is a 2-lane conventional highway with 2- to 4-foot shoulders. Traffic volumes are highest during the summer months due to recreational travel. Lassen National Park can be accessed via SR 44 and SR 89 in Shasta County.

Highway Segment Key Issues – Snowfall is an issue during the winter months. There is also limited public utilities and cell phone coverage along this section of highway.

Transportation Concept Report 20 year Vision – Caltrans has no plans to expand capacity of this segment of highway. Potential improvements include Intelligent Transportation System (ITS) projects such as Changeable Message Signs (CMS) to increase the availability of roadway conditions information to travelers.

SR 36 – In Lassen County, SR 36 travels from the junction with US 395 near Johnstonville to the Plumas County border. The eastern portion of the highway provides a critical link for local communities and regional trips with some longer interregional trips. SR 36 is part of the SR 299/SR44/SR36/US395 Focus Route Corridor between Arcata and Reno, and serves as Main Street through Susanville. The westernmost portion of the highway in Lassen County passes over Fredonyer Pass through Westwood, providing access to Chester, Lake Almanor, and the proposed Dyer Mountain Ski Resort. The highway is a 2-lane facility with varying shoulder widths, except in the immediate Susanville area where 4 to 5 lanes are provided.

Highway Segment Key Issues – Residential development is increasing at the southeastern section of the highway. Traffic congestion is experienced in downtown Susanville. An issue for Susanville residents is "Town Hill," a 6 percent grade hill with a curve at the base at the west entrance to Susanville. A south gateway enhancement project is also considered important for the economic vitality of the region.

Transportation Concept Report 20 year Vision – The long-term vision is a 4-lane section from County Road A-27/Johnstonville Road to the US 395 intersection. Possible modifications to the SR 36/US395 intersection would be necessary. Further improvements to the Town Hill segment just west of Susanville are also being considered.

SR 139 – This highway begins in Susanville as Ash Street and travels north through rural areas to SR 299 in Modoc County. This 2-lane rural highway serves the Eagle Lake recreational area and regional traffic between Reno and Alturas.

Transportation Concept Report 20 year Vision – Only operational improvements, such as maintenance and bringing the highway up to design standards, are proposed for SR 139 over the long term. The facility will likely remain a 2-lane roadway.

SR 299 – A small segment of SR 299 traverses the northwest corner of Lassen County serving the communities of Nubieber and Bieber. The facility is a rural 2-lane highway with 1- to 4-foot shoulders and provides access to the Ash Creek Wildlife Area.

Highway Segment Key Issues - Steep slopes over Big Valley Summit contribute to rock fall and limit the shoulder widening potential. Narrow shoulders and roadway drop-offs pose a hazard for farm equipment that travel on the highway. Some areas are subject to flooding.

Transportation Concept Report Potential Future Improvements – Community input indicated interest in truck climbing lanes on Big Valley Summit. Lengthening culverts should be considered in rehabilitation projects.

SR 147 - This highway connects the south end of Lake Almanor and SR 89 to SR 36 just west of Westwood. Only 1.8 miles lie within Lassen County. The highway directly serves the small recreation community of Clear Creek with indirect access to Westwood. The two-lane facility is primarily used for recreation, tourism and resource management activities.

Highway Segment Key Issues – The lack of paved shoulders is an issue, particularly for bicyclists.

Transportation Concept Report Potential Future Improvements – Potential roadway improvements in Lassen County over the next 20 years include: signalizing the SR 36/SR 147 intersection and improvements to the SR 147/ County Road A-21 intersection upon development of Dyer Mountain. Caltrans' future concept includes a two-lane facility with four-foot shoulders and limited encroachments, along a new alignment that would tie to County Road A-21 instead of SR 36. The new alignment would be designed to provide relief to Clear Creek for through traffic and would be designed to accommodate the proposed Dyer Mountain Resort project.

SR 70 – A short section of SR 70 passes through the southern tip of Lassen County. From Hallelujah Junction on US 395, SR 70 travels west to Marysville in Yuba County. SR 70 is a two lane facility that provides a parallel east-west link to Interstate 80 through the Sierra Nevada.

Interregional Transportation Strategic Plan

Caltrans' 1998 *Interregional Transportation Strategic Plan* (ITSP) sets forth the following vision for state highways in California:

> *Provide a dependable and reasonable level of service for the interregional movement of people and goods, accessibility into and through "gateways" and connectivity to intermodal transfer facilities.*

The plan identifies 81 state highway routes or portions of routes as the Interregional Road System and 34 High Emphasis Routes throughout California, which function as key goods movement corridors. Portions of the 34 High Emphasis Routes are termed "Focus Routes" and are given the highest priority for project funding. The Interregional Transportation Improvement Program (ITIP), as established by SB 45, funds projects identified in the ITSP. ITIP funding is utilized to bring Focus Routes to minimum facility standards within a 20 year period. Themes identified in the 2010 ITIP include:

- Complete the ITSP Focus Routes
- Reduce congestion and promote livable communities
- Improve Goods Movement
- Encourage rural funding partnerships

The SR 299/SR44/SR36/US395 corridor between the Nevada border and US 101(including the section stretching across Lassen County) is considered a Focus Route. This RTP update is consistent with the goals and objectives of the 2012 ITIP.

Scenic Highways

SR 44, SR 36 from the SR 44 junction to the Plumas County border and SR 147 are part of the federal Volcanic Legacy Scenic Byway, as shown in Figure 1. The byway traverses 500 miles of the southern portion of the Cascade Mountains from Lake Almanor to Crater Lake in Oregon. The byway provides access to a variety of recreation and scenic and wildlife viewing. At the state level, the small segment of SR 299 which crosses the northwest corner of the county is eligible for scenic highway status.

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 Lassen County in 2010 (the latest year for which data is available) was observed in Susanville along SR 36, just east of the intersection with SR 139 (14,500), as shown in Table 4 and Figure 2. The lowest traffic volumes occurred on SR 139 at the Modoc County line (470).

Table 4 also presents historic AADT data for roadways in the county from 2000 through 2010. Overall traffic volumes have decreased on state highways in Lassen County, with the exception of SR 139 where AADT increased from Lassen College to County Road A-2 (up to 22.4 percent) and along the western portion of the SR 299 segment (up to 31.3 percent). In the last ten years, traffic has decreased as much as 38.9 percent (US 395, north of Litchfield). Overall traffic volumes on state highways traveling through central Susanville have decreased over the last ten years.

Table 5 presents the peak month Average Daily Traffic (ADT) volumes on the state routes in the County between 2000 and 2010. 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 on SR 139 south of Lassen College (45.2 percent) followed by SR 299 West of Lookout Road (32.4 percent) and SR 299 at the Shasta County line (19.4 percent). Other increases in peak month traffic occurred on US 395 north of Janesville (5.7 percent increase). The largest decrease in peak month traffic volumes over the ten year period occurred on US 395 north of Standish Road. SR 299, SR 44, and SR 139 are particularly affected by recreational traffic as peak traffic volumes are substantially greater than annual average traffic volumes.

FIGURE 2

Existing Lassen County Average Annual Daily Traffic Volumes

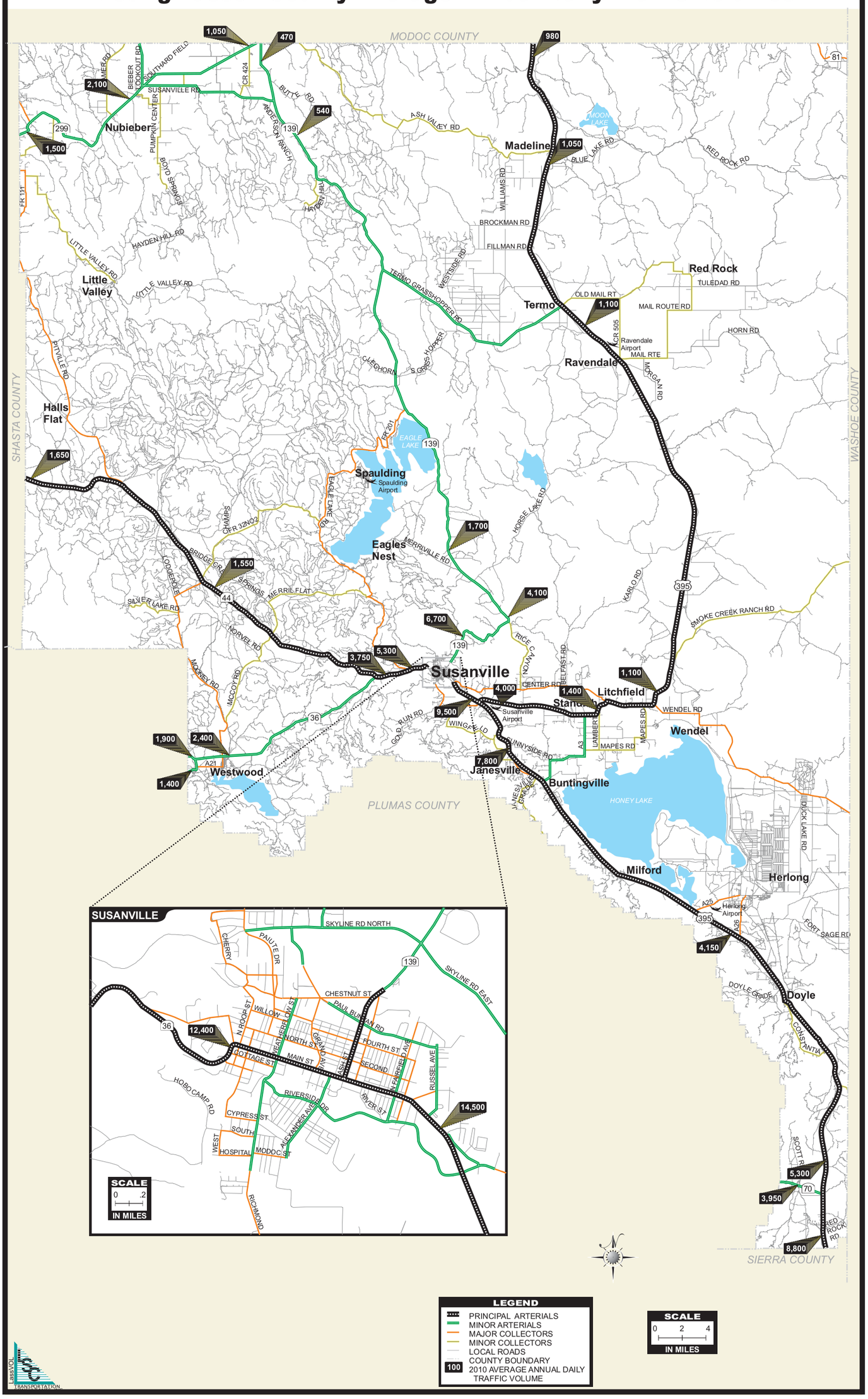

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TABLE 4: Lassen County Average Annual Daily Traffic Volumes on State Highways, 2000-2010

Highway / Counter Location	2000	2005	2010	Change: 2000-2010 #	Change: 2000-2010 %	Change: 2000-2010 Annual %
SR 36 at:						
Plumas County Line	2,900	2,200	1,900	-1,000	-34.5%	-4.1%
East of County Road A21	2,850	2,850	2,400	-450	-15.8%	-1.7%
East of State Route 44	4,650	4,450	3,750	-900	-19.4%	-2.1%
East of Eagle Lake Road	5,100	6,100	5,300	200	3.9%	0.4%
West of State Route 139 North	15,500	16,200	12,400	-3,100	-20.0%	-2.2%
East of State Route 139 North	19,300	20,400	14,500	-4,800	-24.9%	-2.8%
West of US 395	9,800	10,900	9,500	-300	-3.1%	-0.3%
SR 44 at:						
Shasta County Line	1,700	2,050	1,650	-50	-2.9%	-0.3%
East of County Road A21	1,850	1,750	1,550	-300	-16.2%	-1.8%
SR 70 at:						
West of US 395	4,350	4,400	3,950	-400	-9.2%	-1.0%
SR 139 at:						
North of SR 36	8,500	8,400	6,700	-1,800	-21.2%	-2.4%
South of Lassen College	3,350	4,800	4,100	750	22.4%	2.0%
North of Lassen College	1,600	1,700	1,700	100	6.3%	0.6%
South of County Road A2	490	480	540	50	10.2%	1.0%
Modoc County Line	470	470	470	0	0.0%	0.0%
SR 147 at:						
Plumas County Line	1,700	2,300	1,400	-300	-17.6%	-1.9%
SR 299 at:						
Shasta County Line	1,300	2,900	1,500	200	15.4%	1.4%
West of Lookout Road	1,600	2,100	2,100	500	31.3%	2.8%
Modoc County Line	1,300	1,050	1,050	-250	-19.2%	-2.1%
US 395 at:						
Sierra County Line	9,100	9,700	8,800	-300	-3.3%	-0.3%
North of SR 70	5,500	5,500	5,300	-200	-3.6%	-0.4%
North of Garnier Road	4,600	4,650	4,150	-450	-9.8%	-1.0%
North of Janesville Road	7,900	8,400	7,800	-100	-1.3%	-0.1%
North of State Route 36 West	4,500	4,500	4,000	-500	-11.1%	-1.2%
North of Standish Rd (A-3)	2,200	2,000	1,400	-800	-36.4%	-4.4%
North of Litchfield Rd (A-27)	1,800	1,850	1,100	-700	-38.9%	-4.8%
North of Ravendale	1,300	1,400	1,100	-200	-15.4%	-1.7%
South of Madeline	1,300	1,400	1,050	-250	-19.2%	-2.1%
Modoc County Line	1,000	1,150	980	-20	-2.0%	-0.2%

Source: Caltrans website accessed 2/2012.

TABLE 5: Lassen County Peak Month Daily Traffic Volumes on State Highways, 2000-2010

Highway / Counter Location	2000	2005	2010	Change: 2000-2010 #	Change: 2000-2010 %	Change: 2000-2010 Annual %
SR 36 at:						
Plumas County Line	4,450	2,950	2,600	-1,850	-41.6%	-5.2%
East of County Road A21	3,700	3,700	3,100	-600	-16.2%	-1.8%
East of State Route 44	6,900	5,800	4,900	-2,000	-29.0%	-3.4%
East of Eagle Lake Road	6,700	7,900	6,800	100	1.5%	0.1%
West of State Route 139 North	17,200	17,600	13,700	-3,500	-20.3%	-2.2%
East of State Route 139 North	21,400	22,600	19,300	-2,100	-9.8%	-1.0%
West of US 395	11,000	12,000	10,800	-200	-1.8%	-0.2%
SR 44 at:						
Shasta County Line	2,600	3,000	2,550	-50	-1.9%	-0.2%
East of County Road A21	2,800	2,400	2,250	-550	-19.6%	-2.2%
SR 70 at:						
West of US 395	5,900	5,200	5,200	-700	-11.9%	-1.3%
SR 139 at:						
North of SR 36	10,500	9,000	7,000	-3,500	-33.3%	-4.0%
South of Lassen College	3,650	5,300	5,300	1,650	45.2%	3.8%
North of Lassen College	3,100	2,800	2,850	-250	-8.1%	-0.8%
South of County Road A2	930	710	800	-130	-14.0%	-1.5%
Modoc County Line	920	700	700	-220	-23.9%	-2.7%
SR 147 at:						
Plumas County Line	2,800	3,600	2,300	-500	-17.9%	-1.9%
SR 299 at:						
Shasta County Line	1,550	3,200	1,850	300	19.4%	1.8%
West of Lookout Road	1,850	2,450	2,450	600	32.4%	2.8%
Modoc County Line	1,600	1,300	1,300	-300	-18.8%	-2.1%
US 395 at:						
Sierra County Line	11,500	12,100	10,600	-900	-7.8%	-0.8%
North of SR 70	7,800	7,100	6,800	-1,000	-12.8%	-1.4%
North of Garnier Road	6,600	6,100	5,600	-1,000	-15.2%	-1.6%
North of Janesville Road	8,700	9,800	9,200	500	5.7%	0.6%
North of State Route 36 West	4,700	4,950	4,250	-450	-9.6%	-1.0%
North of Standish Rd (A-3)	2,800	2,200	1,700	-1,100	-39.3%	-4.9%
North of Litchfield Rd (A-27)	2,200	2,150	1,350	-850	-38.6%	-4.8%
North of Ravendale	1,950	2,000	1,450	-500	-25.6%	-2.9%
South of Madeline	1,950	2,000	1,400	-550	-28.2%	-3.3%
Modoc County Line	1,550	1,500	1,200	-350	-22.6%	-2.5%

Source: Caltrans website accessed 2/2012.

Truck Traffic Volumes

Table 6 presents the most recent data regarding truck activity on the state highways (*Caltrans Annual Average Daily Truck Traffic on the California State Highway System*, 2000-2010). The highest truck traffic volumes in 2010 were observed on US 395 at the Sierra County line (898 trucks per day), followed by US 395 north of Janesville Road (810 trucks per day) and SR 36 west of US 395 (712 trucks per day). The proportion of all traffic consisting of trucks was highest on US 395 north of Standish Road to the Modoc County line, where trucks comprised between 23.4 and 36.8 percent of all traffic. This is a

reflection of the high level of regional goods movement along US 395 between Reno and Alturas. SR 36 and SR 44 are also strong goods movement corridors with up to 15.2 percent trucks in 2010 on SR 44 at the Shasta County line and up to 13.3 percent trucks on SR 36 East of SR 44.

TABLE 6: Truck Traffic on Lassen County State Highways

Highway	Average Annual Daily Truck Traffic 2000	2005	2010	Total Change: 2000-2010	Average Annual Change 2000-2010	Total Annual Avg. Daily Traffic Volume 2010	Percent Trucks 2010
SR 36 at:							
Plumas County Line	412	322	142	-270	-10.1%	2,300	6.2%
East of County Road A21	410	378	180	-230	-7.9%	2,400	7.5%
East of State Route 44	709	563	499	-210	-3.5%	3,750	13.3%
East of Eagle Lake Road	668	620	409	-259	-4.8%	5,300	7.7%
East of State Route 139 North	747	824	598	-149	-2.2%	14,500	4.1%
West of US 395	865	970	712	-153	-1.9%	9,500	7.5%
SR 44 at:							
Shasta County Line	382	290	274	-108	-3.3%	1,800	15.2%
East of County Road A21	489	223	194	-295	-8.8%	1,550	12.5%
SR 70 at:							
West of US 395	328	260	201	-127	-4.8%	3,950	5.1%
SR 139 at:							
North of SR 36	468	184	88	-380	-15.4%	6,700	1.3%
South of Lassen College	235	132	65	-170	-12.1%	4,100	1.6%
North of Lassen College	84	63	42	-42	-6.7%	520	8.1%
South of County Road A2	93	56	42	-51	-7.6%	540	7.8%
SR 147 at:							
East of County Road A21	36	168	50	14	3.3%	820	6.1%
SR 299 at:							
Shasta County Line	310	297	167	-143	-6.0%	1,500	11.1%
US 395 at:							
Sierra County Line	768	1,068	898	130	1.6%	8,800	10.2%
North of SR 70	859	779	695	-164	-2.1%	5,300	13.1%
North of Garnier Road	879	788	664	-215	-2.8%	4,150	16.0%
North of Janesville Road	861	969	810	-51	-0.6%	7,800	10.4%
South of State Route 36 West	891	984	662	-229	-2.9%	7,800	8.5%
North of State Route 36 West	320	309	225	-95	-3.5%	4,000	5.6%
North of Standish Rd (A-3)	497	361	328	-169	-4.1%	1,400	23.4%
North of Litchfield Rd (A-27)	466	356	264	-202	-5.5%	1,100	24.0%
At Ravendale	238	269	285	47	1.8%	1,200	23.8%
Modoc County Line	182	263	335	153	6.3%	910	36.8%

Note 1: Truck traffic includes all vehicles in the two-axle class (including 1 1/2 ton trucks with dual rear tire and excludes pickups and vans with only four tires) and above.

Source: Caltrans website accessed 2/2012.

A review of historical truck traffic on Lassen state highways shows that truck traffic has generally decreased over the last ten years, with the exception of US 395 at the Modoc County line (an increase of 153 trucks per day), Sierra County line (130 trucks per day), Ravendale (47 trucks per day), and SR 147 (14 trucks per day). The largest decrease in truck traffic during the ten year period was observed on SR 139 just north of SR 36 (380 trucks per day).

Level of Service

Level of Service (LOS) is used to rate a roadway segment's traffic flow characteristics (see Appendix I 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.

The Lassen County General Plan was most recently updated in 2000. The document includes the following policy regarding LOS:

> *CE12 POLICY: No public highway or roadway should be allowed to fall to or exist for a substantial amount of time at or below a Level of Service rating of "E" (i.e., road at or near capacity; reduced speeds; extremely difficult to maneuver; some stoppages).*

Consistent with the previous RTP, this RTP establishes a LOS goal of "C" with policy of traffic conditions not falling below LOS "E." Caltrans' LOS threshold is LOS "C/D" for all state highways in Lassen County, meaning that LOS D triggers the need for roadway improvements.

Table 7 and Figure 3 present 2010 ADT and existing LOS for various state highway segments in Lassen County. LOS estimates were obtained from the most recent Caltrans Transportation Concept Report. As shown in Table 7, only two roadway segments on Lassen County state highways operate below LOS "C." On SR 36 ADT volumes between the intersection with SR 139 and US 395 (in and around Susanville) exceed LOS "C." None of the state highway segments reviewed were estimated to operate at LOS "E" or worse.

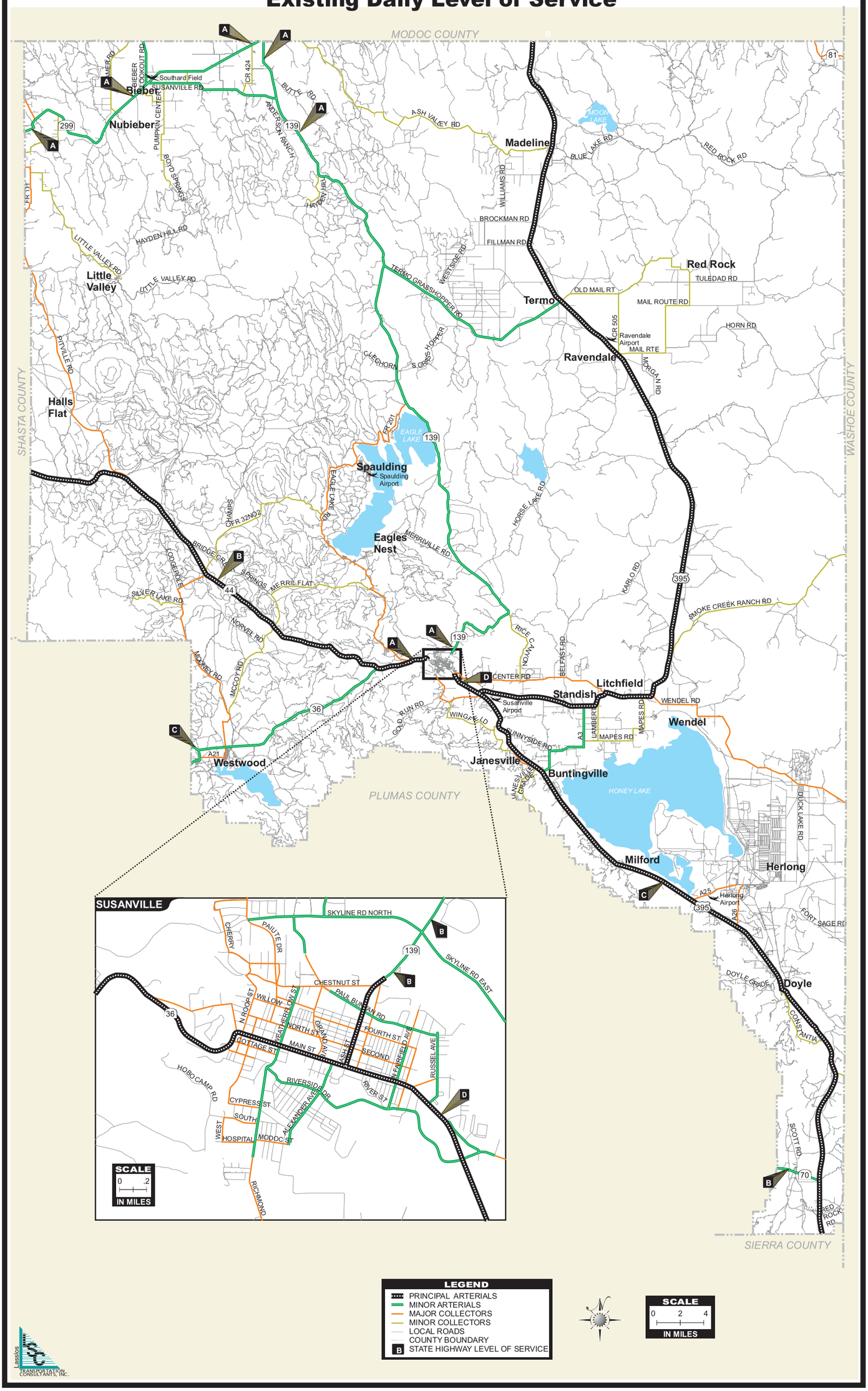
TABLE 7: Lassen County State Highway Segment Existing Daily Level of Service

Route and Description	2010 LOS
SR 36 at:	
Plumas County Line	B
East of State Route 44	B
East of State Route 139 North	D
West of US 395	D
SR 44 at:	
Shasta County Line to SR 36	B
SR 139 at:	
North of SR 36	B
South of Lassen College	B
North of Lassen College	A
South of County Road A2	A
Modoc County Line	A
SR 147 at:	
Plumas County Line	B
SR 299 at:	
Shasta County Line	A
West of Lookout Road	A
Modoc County Line	A
US 395 at:	
SR 36 to Nevada State Line	C
SR 70 at:	
Plumas County Line	B

Source: Per most recent Transportation Concept Reports.

FIGURE 3

Lassen County State Highway Segment
Existing Daily Level of Service



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Traffic and Level of Service Forecasts

Future traffic volumes for the state highway system for were obtained from Caltrans District 2 and presented in Table 8 and Figure 4. The roadway segment with the greatest projected increase in traffic over the next 20 years is SR 36, east of SR 139 (14,500 ADT or 100 percent increase), followed by SR 36 just west of the US 395 intersection (68,00 ADT or 71.6 percent increase). These projections reflect an annual increase in ADT of around three percent which is greater than the anticipated Lassen County population growth rate of 1.1 percent. Roadway segments with the smallest projected traffic growth are: SR 147 at the Plumas County Line (200 ADT or 14.3 percent increase) and US 395 (200 ADT or 20.4 percent increase).

Assuming the Skyline Extension project is constructed and SR 36 is expanded to four lanes from Susanville to US 395, LOS will not exceed LOS goal "C" on SR 36 at the end of the planning period in 2030 (Table 9 and Figure 5). However, if these projects are not constructed, Caltrans projects that the segment between SR 139 and US 395 will reach LOS "E." The only other Lassen County state highway which is projected to experience poor LOS by 2030 is US 395 from SR 36 to the Nevada State line.

County Roadways

Traffic Conditions

There are 881 centerline miles in the Lassen County roadway network. Lassen County conducted traffic counts on select roadways in 2009, 2010, and 2011. Recorded ADT volumes and estimated LOS for these roadway segments are displayed in Table 10. LOS was estimated using the capacity thresholds developed for the 2006 RTP and listed in Appendix J. Of the roadways studied, two currently fall below the target LOS C, operating at LOS D: Johnstonville Road (all segments studied) and Riverside Drive. No roadways operate at LOS E or worse.

Pavement Conditions

Pavement conditions data has been obtained from 2001 to 2009 for Lassen County roadways. A Pavement Condition Index (PCI) rating quantifies the degree of deterioration of a roadway. The PCI uses a scale of 0 to 100 with 100 representing a new road. A PCI is used to prioritize maintenance and rehabilitation projects. Generally, a PCI of 25 or less is considered "very poor" and the roadway requires rehabilitation. It is important for counties and cites to develop a regular maintenance program to avoid costly future roadway rehabilitation, if maintenance is ignored. Appendix K displays a summary of roadways with a PCI of 25 or less. As shown, there are a total of 41 roadways or approximately 12.5 lane miles in this category, reflecting that maintaining adequate pavement condition on county roadways is an important issue.

Traffic and Level of Service Forecasts

County road traffic volumes and LOS were projected for 2030, as presented in Table 11. Volume projections assume a one percent annual growth rate, which is consistent with population projections developed by the California Department of Finance. As shown, two more county roadway segments are projected to reach LOS "D" by 2030, if no improvements are made: Eagle Lake Road from SR 36 to 2.8 miles north and Center Road from Johnstonville Road to Rice Canyon Road. In addition, Johnstonville Road from Riverside Drive to Skyline Road is anticipated to drop to LOS "E" by 2030 if no improvements are made.

TABLE 8: Lassen County State Highway Segment Projected Future Traffic Conditions

Route and Description	Annual Average Daily Traffic 2010	Annual Average Daily Traffic 2030	Peak Month 2030	Change: 2010-2030 #	Change: 2010-2030 %	Change: 2010-2030 Annual %
SR 36 at:						
Plumas County Line	1,900	3,400	4,700	1,500	78.9%	3.0%
East of County Road A21	2,400	3,900	5,000	1,500	62.5%	2.5%
East of State Route 44	3,750	5,050	6,600	1,300	34.7%	1.5%
East of Eagle Lake Road	5,300	8,100	10,400	2,800	52.8%	2.1%
West of State Route 139 North	12,400	15,900	17,600	3,500	28.2%	1.3%
East of State Route 139 North	14,500	29,000	38,600	14,500	100.0%	3.5%
West of US 395	9,500	16,300	18,500	6,800	71.6%	2.7%
SR 44 at:						
Shasta County Line	1,650	2,050	3,200	400	24.2%	1.1%
East of County Road A21	1,550	1,950	2,800	400	25.8%	1.2%
SR 70 at:						
Plumas County Line	3,950	5,850	7,700	1,900	48.1%	2.0%
SR 139 at:						
North of SR 36	6,700	10,500	11,000	3,800	56.7%	2.3%
South of Lassen College	4,100	5,600	7,200	1,500	36.6%	1.6%
North of Lassen College	1,700	2,900	4,900	1,200	70.6%	2.7%
South of County Road A2	540	840	1,250	300	55.6%	2.2%
Modoc County Line	470	670	1,000	200	42.6%	1.8%
SR 147 at:						
Plumas County Line	1,400	1,600	2,650	200	14.3%	0.7%
SR 299 at:						
Shasta County Line	1,500	2,100	2,600	600	40.0%	1.7%
West of Lookout Road	2,100	2,700	3,150	600	28.6%	1.3%
Modoc County Line	1,050	1,700	2,100	650	61.9%	2.4%
US 395 at:						
Sierra County Line	8,800	12,300	14,800	3,500	39.8%	1.7%
North of SR 70	5,300	7,000	9,000	1,700	32.1%	1.4%
North of Garnier Road	4,150	5,250	7,100	1,100	26.5%	1.2%
North of Janesville Road	7,800	10,660	12,600	2,860	36.7%	1.6%
North of State Route 36 West	4,000	5,520	5,900	1,520	38.0%	1.6%
North of Standish Rd (A-3)	1,400	1,900	2,300	500	35.7%	1.5%
North of Litchfield Rd (A-27)	1,100	1,500	1,850	400	36.4%	1.6%
North of Ravendale	1,100	1,500	1,850	400	36.4%	1.6%
South of Madeline	1,050	1,350	1,800	300	28.6%	1.3%
Modoc County Line	980	1,180	1,450	200	20.4%	0.9%

Note 1: Almanor Regional Transportation Assessment

Note 2: SR 299 Transportation Concept Report.

Source: Caltrans 2012

FIGURE 4
Future Lassen County Average Annual Daily Traffic Volumes

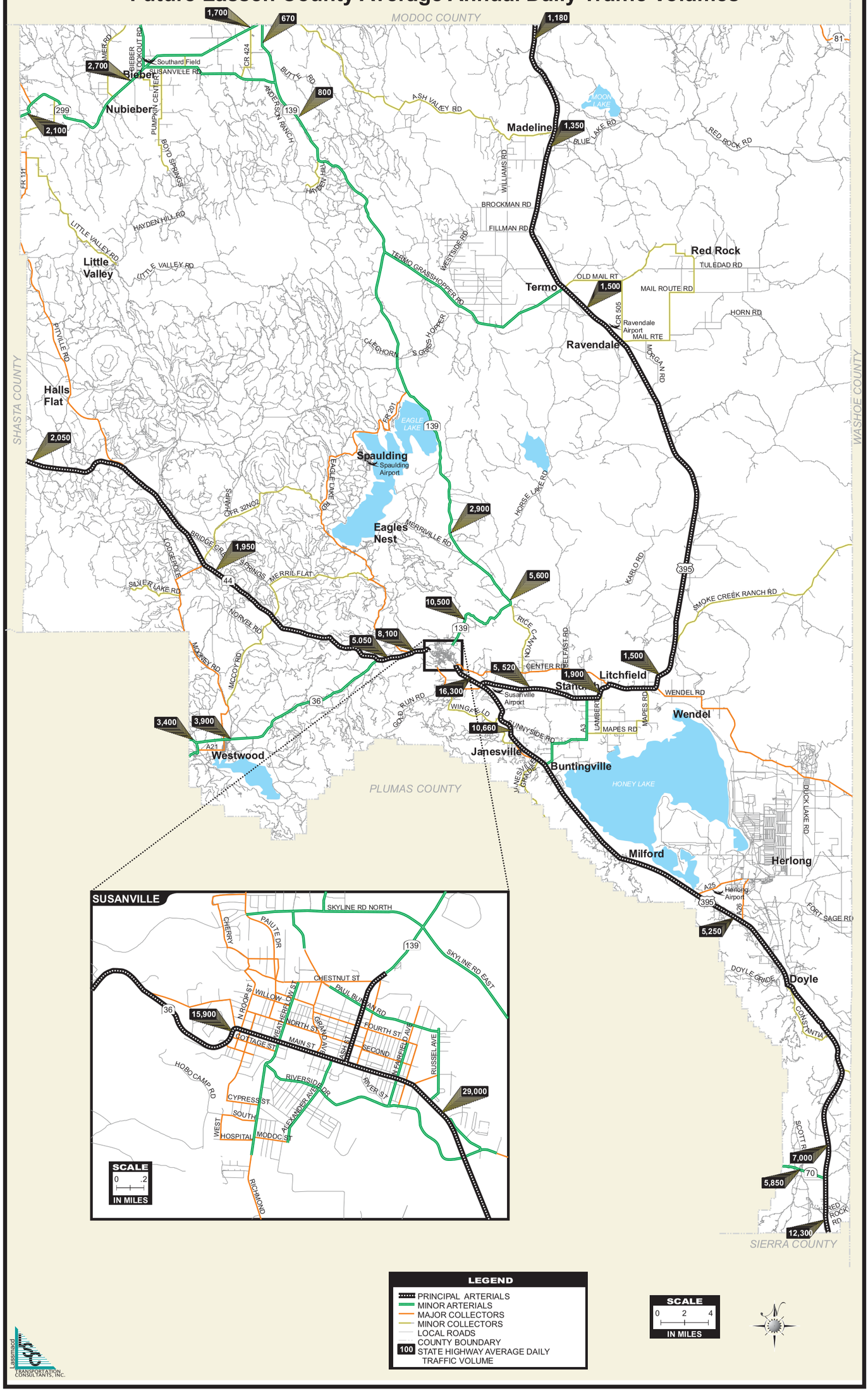

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TABLE 9: Lassen County State Highway Segment Future Daily Level of Service

Route and Description	2030 LOS
SR 36 at:	
Plumas County Line	C
East of State Route 44	C
East of State Route 139 North	E/C[(1)]
West of US 395	E/C[(2)]
SR 44 at:	
Shasta County Line to SR 36	C
SR 139 at:	
North of SR 36	C
South of Lassen College	B
North of Lassen College	B
South of County Road A2	A
Modoc County Line	A
SR 147 at:	
Plumas County Line	C
SR 299 at:	
Shasta County Line	A
West of Lookout Road	A
Modoc County Line	A
US 395 at:	
SR 36 to Nevada State Line	D
SR 70 at:	
Plumas County Line	B

Note 1: LOS C reflects construction of Skyline Extension.

Note 2: LOS C reflects expanding segment to 4 lanes.

Source: Per most recent Transportation Concept Reports.

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FIGURE 5

Lassen County State Highway Segment Future Daily Level of Service

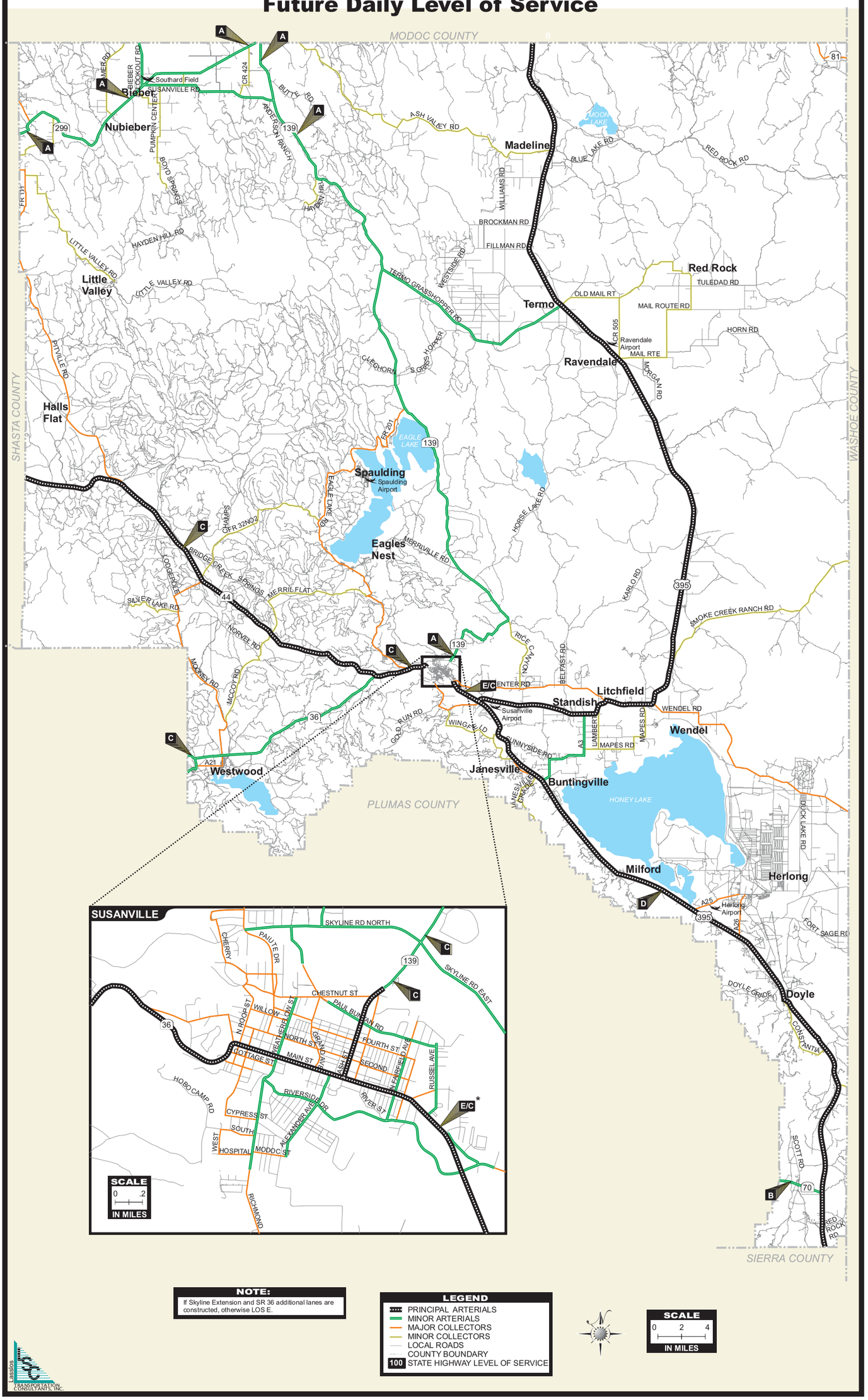

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TABLE 10: Existing Lassen County Roadway Conditions

Bold indicates LOS exceeding standards

Roadway Segment	2010 Average Daily Traffic	2010 Level of Service
Mooney Rd (CR A-21)	1,556	B
Eagle Lake Rd (CR A-1)		
From SR 36 to 2.8 miles north	2,130	C
From 2.8 miles north of SR 36 to 1.8 miles south of Gallatin Rd	739	C
From 1.8 miles south of Gallatin Rd to 1 mile south of Merrill Flat Rd	182	A
From SR 139 to 0.35 miles north of Stone Rd	395	A
Center Rd (CR 215)		
From Johnstonville Rd to Rice Canyon Rd	3,662	C
From Rice Canyon Rd to Belfast Rd	772	A
From 0.4 miles east of Ward Lake Rd to 0.25 miles west of Cutoff Rd	517	A
From 0.25 miles west of Cutoff Rd to US 395	436	A
Janesville Main Street (CR 235)		
From US 395 (south of town) to Sears Rd	574	A
From Sears Rd to Mountain Way	1,027	B
From Mountain Way to Church Street	640	A
From Church Street to Christie Street	1,002	B
From 700 feet south of R and S Rd to Wingfield Rd East	1,076	B
From Wingfield Rd East to US 395 (north of town)	1,276	B
Johnstonville Rd (CR 238)		
From Riverside Drive to Skyline Rd	6,520	**D**
From Skyline Rd to Commercial Rd	4,963	**D**
From Commercial Rd to 0.7 miles west of Center Rd	4,566	**D**
From 0.7 miles west of Center Rd to Center Rd	4,526	**D**
Doyle Old Highway (CR 342)		
From US 395 to 800 feet north of Erwin Ln	257	A
From 800 feet north of Erwin Ln to Laura Dr.	169	A
From Laura Dr. to US 395	187	A
Richmond Rd (CR 203)	2,828	C
Sears Rd (CR 209)	541	A
Spaulding Rd (CR 518)	536	A
Circle Drive (CR EL-01)	573	A
Riverside Drive (CR SV16)	4,130	**D**
Stone Rd (CR 245)	261	A
Skyline Rd East	2,534	C
Lake Crest Rd (CR 353)	216	A

Source: LCTC, 2009 - 2011 counts.

City Roadways

The City of Susanville maintains approximately 50 miles of roadway. Table 12 presents traffic volumes on selected city streets. Generally, traffic congestion within the City of Susanville occurs only along the state highways. The city roadways with the highest AADT are Paul Bunyan Road and Skyline Road.

TABLE 11: 2030 Projected Lassen County Roadway Conditions

Roadway Segment	Average Daily Traffic 2010[1]	Average Daily Traffic 2030	Level of Service
Mooney Rd (CR A-21)	1,556	1,899	B
Eagle Lake Rd (CR A-1)			
From SR 36 to 2.8 miles north	2,130	2,599	**D**
From 2.8 miles north of SR 36 to 1.8 miles south of Gallatin Rd	739	902	C
From 1.8 miles south of Gallatin Rd to 1 miles south of Merrill Flat Rd	182	222	A
From SR 139 to 0.35 miles north of Stone Rd	395	482	B
Center Rd (CR 215)			
From Johnstonville Rd to Rice Canyon Rd	3,662	4,468	**D**
From Rice Canyon Rd to Belfast Rd	772	942	B
From 0.4 miles east of Ward Lake Rd to 0.25 miles west of Cutoff Rd	517	631	A
From 0.25 miles west of Cutoff Rd to US 395	436	532	A
Janesville Main Street (CR 235)			
From US 395 (south of town) to Sears Rd	574	700	A
From Sears Rd to Mountain Way	1,027	1,253	B
From Mountain Way to Church Street	640	781	A
From Church Street to Christie Street	1,002	1,223	B
From 700 feet south of R and S Rd to Wingfield Rd East	1,076	1,313	B
From Wingfield Rd East to US 395 (north of town)	1,276	1,557	B
Johnstonville Rd (CR 238)			
From Riverside Drive to Skyline Rd	6,520	7,956	**E**
From Skyline Rd to Commercial Rd	4,963	6,056	**D**
From Commercial Rd to 0.7 miles west of Center Rd	4,566	5,571	**D**
From 0.7 miles west of Center Rd to Center Rd	4,526	5,523	**D**
Doyle Old Highway (CR 342)			
From US 395 to 800 feet north of Erwin Ln	257	314	A
From 800 feet north of Erwin Ln to Laura Dr.	169	206	A
From Laura Dr. to US 395	187	228	A
Richmond Rd (CR 203)	2,828	3,451	C
Sears Rd (CR 209)	541	660	A
Spaulding Rd (CR 518)	536	654	A
Circle Drive (CR EL-01)	573	699	A
Riverside Drive (CR SV16)	4,130	5,039	**D**
Stone Rd (CR 245)	261	318	A
Skyline Rd East	2,534	3,092	C
Lake Crest Rd (CR 353)	216	264	A

Note 1: 2009 - 2011 counts.

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 (2007) indicates that a total of 516 million vehicle-miles were traveled on roadways in Lassen County (Caltrans). Historical data indicates that since 2000 when the total vehicle-miles traveled totaled 579 million, VMT has decreased by 10.8 percent in seven years. VMT projections presented in the *California Motor Vehicle Stock Travel and Fuel* Forecast (Caltrans, 2008) indicate that VMT could reach 831 million vehicle-miles in 2030 or a 61.0 percent increase from 2007 conditions, though these projections do not appear consistent with population and traffic volume forecasts.

TABLE 12: Existing and Projected Susanville Average Daily Traffic Volumes

Roadway Segment	Average Daily Traffic 2010	2030
Paul Bunyan Rd between Skyline and Chestnut	5,023	6,068
Paul Bunyan Rd between Chestnut and SR 139	3,048	3,682
Skyline Road, 500' West of SR 139	2,952	3,566
Skyline Road @ SR 139	2,789	3,369
Skyline Road @ Piaute Drive	2,354	2,844
1208 Riverside Drive	2,193	2,649
Paul Bunyan Rd between SR 139 and Fairfield	1,720	2,078
Cherry Terrace between Glenn and Lakewood	603	728
Richmond Road between Main and Cypress	570	689
Burma Road	58	69

Source: City of Susanville, 2011.

Traffic Collisions

According to California Highway Patrol's Statewide Integrated Traffic Record System (SWITRS) accident data, a total of 175 injury collisions, and 3 fatal collisions occurred within Lassen County in 2009. Of the injury accidents, 4 involved pedestrians, 4 involved bicyclists, and 10 involved motorcyclists. The majority of the accidents occurred on state highway segments in unincorporated areas of the County.

Collision rate information over the previous ten years was obtained from Transportation Concept Reports for available state highway segments in Lassen County, as presented in Table 13. The table compares collisions involving fatalities and injuries as well as the total number of collisions per million vehicle miles of travel on each Lassen County state highway segment to state highway average accidents per million vehicle miles of travel on similar highway types. It should be noted that collision rates alone do not determine feasibility of a safety project. For the state highway segments reviewed in Lassen County collision rates exceeded the state average on the following segments:

- SR 36 from Plumas County line to Junction SR 44
- SR 36 West Susanville City limit to Junction US 395 South
- SR 36 from Johnstonville Road to Junction US 395
- SR 44 from Junction SR 89 to SR 36
- US 395 from Junction 36 to Nevada State Line

Bridges

The Caltrans District 2 Log of Bridges on State Highways and the Local Agency (Lassen) Bridge Inventories are presented in Appendix L. As shown, there are a total of 31 state highway bridges, with two located within the Susanville city limits. There are 36 local bridges: 4 are located within the city of Susanville, 1 on California Department of Fish and Game land, while the other 31 are located on county roads.

TABLE 13: Lassen County State Highway Collision Rates

	Lassen County Accidents per Million Vehicle Miles		Statewide Average Accidents per Million Vehicle Miles[1]	
	Fatal + Injury	Total Collision	Fatal + Injury	Total Collision
SR 36[2]				
Plumas County Line to Jct. SR 44	0.46	1.14	0.5	1.07
Jct. SR 44 to Susanville	0.26	0.86	0.42	0.96
W. Susanville City Limit to Johnstonville Rd	0.64	3.81	1.19	3.22
Johnstonville Rd to Jct US 395 South	0.14	0.74	0.26	0.61
SR 44[3]				
Jct. SR 89 (Shasta County) to Jct SR 36	1.33	2.29	0.68	1.43
US 395[3]				
Jct 36 to Nevada State Line	0.35	0.95	0.37	0.75
SR 299[3]				
Shasta County Line to Adin	0.57	1.07	0.62	1.3

Note 1: For same highway type.

Note 2: Data source years 2004 - 2009.

Note 3: Data source years 2001 - 2006.

Note: Rates are ACC/MVM (Accidents per Million Vehicle Miles). Disclaimer: Collision rates alone do not determine whether a state highway safety project will be pursued. Many parameters in addition to collision rates determine feasibility of a project.

Source: Caltrans Transportation Concept Route Reports.

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. Fifteen 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, 6 bridges are considered structurally deficient. An additional 3 bridges in the County are considered functionally obsolete.

TRANSIT SERVICES

Public transit services provide mobility to Lassen 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 Lassen is a challenge due to a low population density, rugged geography and limited funding. A discussion of public transit operators in Lassen County follows.

Lassen Transit Services Agency

The Lassen Transit Services Agency (LTSA) is currently party to six transit operating agreements, as follows:

- The Lassen Rural Bus Agreement
- Maintenance Agreement with Lassen Senior Services and Paratransit Services
- Subsidized Vehicle for Hire Program
- Lassen Senior Services for Senior Transportation Services
- Alturas to Susanville Service Agreement with Modoc County
- The Lassen College Agreement

Lassen Rural Bus

Lassen Rural Bus (LRB) is primarily funded by Transportation Development Act funds and Federal Transit Administration funds. LRB provides the following services:

- West County Deviated Fixed Route - This route connects Susanville with Westwood, Lake Almanor, and Chester in Plumas County and deviates up to three-quarters of a mile for those unable to use a traditional fixed route.

- South County Commuter Route – This route brings Susanville residents to the Sierra Army Depot in the morning with stops in Johnstonville, Janesville, and Milford, with a return trip in the afternoon.

- South County to Susanville Deviated Fixed Route – This route travels in reverse to the South County Commuter with service from southern Lassen County (Herlong, Janesville, and Doyle) to Susanville in the mornings with a return trip in the afternoon. Three-quarter mile deviations are available to those who are unable to use a traditional fixed route.

- East County Deviated Fixed Route – In the morning, the bus begins service in Herlong, serves stops in Standish and Litchfield and ends at Lassen College in Susanville. Three-quarter mile deviations are available for passengers unable to use a traditional fixed route. There is a reverse trip in the afternoon.

- Susanville Fixed Route – This route provides one-hour-long loops in-town serving schools, medical facilities, public entities, residential neighborhoods and commercial areas within the city limits of Susanville. Complementary paratransit service is provided throughout the city limits for individuals unable to use the fixed route.

- Eagle Lake Deviated Fixed Route – This route provides seasonal service to Eagle Lake every Saturday from Memorial Day weekend until the road is closed for the winter season or the last Saturday in December, which ever comes first. Deviations up to three-quarters of a mile are available to passengers unable to use a traditional fixed route.

Transit service is provided Monday through Friday with limited service on Saturdays. Direct connections to Plumas County Transit and "Sage Stage" provide Lassen residents with public transit service as far as Reno, Alturas, and Portola.

In Fiscal Year 2010-11 a total of 82,303 one-way passenger trips were served by Lassen Rural Bus, as shown in Table 14. The majority of ridership occurs on the Susanville Fixed Route. In FY 2010-11 Lassen Rural Bus operated 11,961 vehicle service hours and traveled 236,337 vehicle service miles.

One of the challenges to providing public transit in a low density rural area is cost effectiveness. Even though some transit routes may have low ridership, they provide important connections to medical or commercial services for residents. Transit performance measures for Lassen Rural Bus for FY 2006-07 through 2010-11 are displayed in Table 14. Over the last five years, systemwide operating costs have fluctuated with an overall decrease of 6.6 percent. During the same time period ridership (measured in terms of one-way passenger trips) and service levels (vehicle hours and miles) have increased by roughly 10 percent. In FY 2010-11, Lassen Rural Bus had a relatively low operating cost per hour of $61.81. Transit productivity is typically measured in terms of one-way passenger trips per hour with a productivity measure of 10 trips per hour typical for a rural fixed route service and a productivity measure of 2.5 typical for demand response services. In FY 2010-11, Lassen Rural bus recorded 6.88 passenger-trips per hour systemwide. Farebox recovery ratio is the proportion of operating costs which is covered by

passenger fare revenue. The Transportation Development Act (TDA) sets forth a farebox ratio requirement for rural transit agencies of 10 percent. In FY 2010-11 Lassen Rural Bus had a farebox ratio of 23.88 percent.

TABLE 14: Lassen Rural Bus Performance Measures

	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	5 Year Change
Operating Cost	$791,720	$973,389	$812,928	$741,032	$739,281	-6.6%
Fare Revenue	$178,700	$190,293	$175,354	$168,668	$176,527	-1.2%
One-way Passenger-Trips	73,735	74,198	81,869	74,095	82,303	11.6%
Vehicle Service Hours	10,977	10,607	11,334	11,237	11,961	9.0%
Vehicle Service Miles	215,995	218,717	219,944	219,279	236,337	9.4%
Operating Cost per Hour	$72.13	$91.77	$71.72	$65.95	$61.81	-14.3%
Operating Cost per Mile	$3.67	$4.45	$3.70	$3.38	$3.13	-14.7%
Operating Cost per Passenger-Trip	$10.74	$13.12	$9.93	$10.00	$8.98	-16.3%
Passenger Trip per Hour	6.72	7.00	7.22	6.59	6.88	2.4%
Farebox Recovery Ratio	22.57%	19.55%	21.57%	22.76%	23.88%	5.8%

Source: 2011 Administrative Draft Transit Development Plan.

Table 15 shows the Lassen Rural Bus vehicle fleet for the 2012-13 Fiscal Year. There are a total of nine wheelchair accessible revenue vehicles and two non-revenue vehicles. In order to ensure a reliable public transportation system, public transit vehicles should be replaced periodically. The Federal Transit Administration (FTA) has established “useful life” standards for vehicles purchased with FTA grant funds. Larger heavy duty vehicles, such as those used for the commuter routes, should be replaced every 500,000 miles or 12 years. Medium duty vehicles, such as those used for the Susanville fixed routes, should be replaced every 200,000 miles or seven years. The older smaller vehicles used primarily as backup are overdue for replacement as they should be replaced every 150,000 miles or five years. The estimated replacement year for Lassen Rural Bus vehicles based on the FTA recommended schedule is identified in Table 15 and will be incorporated into the public transit capital improvement projects in the RTP Action Element. Over the next five years, the Lassen County 2011 Transit Development Plan (TDP) recommends the expansion of the Lassen Rural Bus fleet by two vehicles to accommodate an increase in frequencies of the Susanville fixed route and additional round trips for the South County to Susanville route.

Other transit amenities such as benches, shelter, bus stop signs, lighting and trash receptacles are important capital improvements for public transit systems. As well as acting as a marketing tool for potential passengers, they provide comfort and safety to existing passengers. The TDP identified the need for some additional benches, as well as transit information signs (schedules, maps and route identifiers) at all bus stops. As part of the TDP process, passengers expressed a concern over the lack of lighting at bus tops during the winter months. Adjustments to the bus stop at Wal-Mart have been proposed to improve convenience for passengers.

TABLE 15: Lassen Rural Bus Fleet

Bus Number	Make	Bus Type Model	Model Year	Seating Capacity Passengers	Seating Capacity Wheelchairs	Mileage (as of 04-23-12)	Fuel Type	Primary Service	Replacement Year
1	Ford E350	Collins	1992	12	2 tie downs	200,313	Gasoline	Backup	1997
2	Ford E350	StarTrans	1994	12	2 tie downs	107,255	Gasoline	Backup	1999
5	Bluebird	QBRE	2000	41	2 tie downs	498,196	Diesel	S Commuter	2012
7	GMC	Jimmy	1992	5	None	121,931	Gasoline	Varies	1996
14	El Dorado	Aero Elite 320	2006	30	2 tie downs	176,768	Diesel	City/DAR	2013
15	GMC 5500	Glaval Titan	2007	28	2 tie downs	133,042	Diesel	City/DAR	2014
16	GMC 5500	Glaval Titan	2007	28	2 tie downs	120,855	Diesel	City/DAR	2014
17	GMC 5500	Glaval Titan	2009	28	2 tie downs	73,464	Diesel	W Commuter	2016
18	GMC 5500	Glaval Titan	2009	28	2 tie downs	81,012	Diesel	City/DAR	2016
50	Ford	Explorer	2010	5	None	1,297	Gasoline	Varies	2014
101	Gillig	Low-Floor	2010	39	2 tie downs	71,142	Diesel	S Commuter	2022

Source: Lassen Transit Service Agency.

Lassen Senior Services Transportation Program

As the designated Consolidated Transportation Services Agency (CTSA) for Lassen County, Lassen Senior Services provides transportation for seniors to medical appointments, shopping, banking and nutrition programs using a small portion of Transportation Development Act funds. There are three nutrition sites in Lassen County operated by Lassen Senior Services: in Susanville, Westwood, and Doyle. The organization also provides trips to Reno from seniors' homes for medical appointments once a week.

Subsidized Vehicle for Hire Program

Administered and funded by LTSA, this program subsidizes transportation for eligible seniors or persons with disabilities. Trips for specific purposes such as medical appointments, shopping or other basic human needs are provided by Sierra Express Taxi or Lassen DAR.

Susanville Indian Rancheria (SIR)

The Susanville Indian Rancheria offers fare free transportation to Red Bluff and Redding from Susanville six days a week. Service begins at the SIR gym on Joaquin Street, includes a stop at the Westwood Community Center, Holiday Market in Chester (Plumas County), the transit hub in Red Bluff at Walnut Street and Rio Street, and terminates at the RABA Transit Center in downtown Redding. The service is currently is provided using one 8-passenger ADA compliant van. Typically the vehicle is full departing Susanville and Chester, but not all passengers make the return trip from Red Bluff and Redding. The service is funded using Tribal Transportation Program funds.

Additionally, the Susanville Indian Rancheria Health Clinic provides transportation to medical appointments, such as dialysis, on a daily basis. This service has reached capacity.

Modoc Transportation Agency (Sage Stage)

Sage Stage (the Modoc County public transit operator) provides intercity transportation between Alturas and Reno with a stop in Susanville three times a week (one round trip per operating day). The service is an important connection for Lassen County residents to the Reno-Tahoe International Airport, Greyhound

Station, Amtrak Station, and other commercial/medical destinations. Reflecting the benefits to Lassen County residents, LTSA provides a portion of the funds for this service.

Mt. Lassen Motor Transit

The primary purpose of Mt. Lassen Motor transit is mail delivery between Red Bluff and Susanville one round trip per day Monday through Saturday. The general public is able to ride along in the truck.

Far Northern Regional Center

The Far Northern Regional Center (FNRC) provides services for the developmentally disabled in Lassen County. FNRC funds public transit trips on Lassen Rural Bus for clients.

Summary of Transit Needs

Various documents were reviewed in an effort to determine public transit capital improvement needs and issues in Lassen County: *Lassen County 2011 Transit Development Plan, Coordinated Human Services Public Transportation Plan and* notes from the FY 2012-13 Social Services Transportation Advisory Council (SSTAC) meeting. The following summarizes these needs as they pertain to the development of this RTP.

- LRB vehicles frequently travel long distances over mountainous terrain in all types of weather conditions. These factors can increase wear and tear on the LRB vehicle fleet.

- The majority of Lassen Rural Bus passengers are transit dependent, meaning that they are either low-income, have no vehicle available, or unable to drive. A fair amount of passengers are students.

- Stakeholder interviews and focus groups conducted as part of the TDP process indicate a lack of awareness of Lassen Rural Bus services in the community and a need for increased coordination with human service agencies.

- Specific transit needs for the elderly, low income and disabled, as per the *Lassen County Coordinated Public Transit Human Services Transportation Plan*, 2008 include:

  - Service to Redding, Chico, Red Bluff, and Sacramento for medical and other needs
  - Trips from outlying Family Resource Centers to Susanville for medical appointments and shopping
  - Commute service to the Federal Correctional Institution in Herlong (currently vanpools)
  - Long waits for taxi service (subsidized vehicle for hire program)
  - Increased service to Reno via Sage Stage
  - Transportation for after-hours hospital releases
  - Replacement vehicles for LRB and Lassen Senior Services
  - Wheelchair accessible vehicle for Lassen Senior Services
  - Technology such as Automatic Vehicle Location to help coordinate demand-responsive services
  - Overcoming barriers to coordination, including distances, client groups with particular needs for assistance or supervision, and irregular social service schedules
  - Maintenance of vehicles, including Susanville Indian Rancheria and North Valley Services

- One method of addressing the coordination issues identified in the *Lassen County Coordinated Public Transit Human Services Transportation Plan* is to create a Mobility Management Center. This type of facility would act as a “one-stop shop” and call center for all information regarding all types of public

transportation throughout the County. An appropriate location for a Mobility Management Center would be in the proposed Downtown Transit Center (discussed below):

- There is a need for transportation of released prisoners to urban areas.

- Ongoing passenger complaints have indicated a need for a more conveniently located bus stop for mobility limited individuals at Wal-Mart. The relocation of the Wal-Mart bus stop to closer to the Garden Center is being considered.

- LRB has no central transit center in Susanville. The benefits of such a facility include providing greater visibility to the transit system and one central location for passengers to access all routes. A long-term goal for LTSA is to construct a downtown transit center at a central point in Susanville. The previous two TDPs have recommended that a potential downtown transit center include bus bays for up to four buses at one time as well as other amenities such as benches, shelters, driver restrooms, parking spaces for transit staff, public information kiosk and bicycle rack/parking. As constructing a transit center is a long-term project, the TDP recommends developing a phased approach to the downtown transit center beginning with bus shelters, benches and fewer bus loading areas. The vacant lot across the street from the IGA store on Grand Avenue in Susanville has been suggested as a potential central location.

- Upgrades are needed to the LRB maintenance facility. A combined Lassen Rural Bus and Susanville Indian Rancheria transit maintenance facility is being considered.

- Continued LRB vehicle replacement and bus stop amenity construction

- There is a need for a shelter at Lassen Senior Services as well as improvements to the sidewalk near the shelter to upgrade to ADA standards.

- There is a potential need for new service to the Big Valley/Bieber area.

- There is a need to transport released prisoners from the correctional facilities to their destinations in urban centers.

Public Transit Ridership Projections

The 2011 TDP estimates that fixed route and commuter ridership will increase at a rate of 10 percent per year over the next five years as a result of implementation of service alternatives.

NON-MOTORIZED FACILITIES

Lassen County recently (2011) updated the Bicycle Master Plan that makes the County eligible for state Bicycle Transportation Account (BTA) funding. The plan is intended to construct and upgrade bicycle facilities that will provide multiple benefits to the visitors and residents of the County including provision of safer and more convenient facilities, improved quality of life and public health, and maximization of funding sources for implementation. 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

The 2006-2010 American Community Survey conducted by the US Census provides information on the mode of travel to work. According to the Census, less than 1 percent of Lassen workers bike to work while nearly 7 percent walk to work. Additionally, 28 percent of the County residents commute time is 10 minutes or less. This indicates that an improved bicycle network could encourage bicycle use.

As for existing facilities there are several bikeways in and around the Susanville area:

- Skyline Class I Bike Path - A Class I facility generally parallels Skyline Road from Johnstonville Road to Numa Road with the exception of a small gap at SR 139. The long-term vision for this facility is to provide a connector around the city limits. To accomplish this, the bike path would continue south and west from Johnstonville Road along the proposed Skyline Extension as far as the Bizz Johnson Trailhead on Richmond Road. From Numa Road the proposed bike path will continue west to Cherry Terrace. The existing path receives a fair amount of bicycle and pedestrian use.

- Susan River Class I Bike Path (River Front Trail) - A portion of this bike path has been completed from Alexander Avenue to just beyond the Bureau of Land Management building on Riverside Drive. This portion of the trail provides a valuable safety connection for residents living in the Alexander Avenue area traveling to the major shopping centers of Safeway and Wal-Mart.

- Class II SR 36/Town Hill - A Class II bicycle lane was constructed in 2009 from the Town Hill portion of Susanville to Eagle Lake Road. This bikeway was constructed to address some of the safety concerns in the Town Hill area.

- Class III Routes – “Share the Road” signs are located at various locations on US 395, SR 36, SR 44, SR 139, Johnstonville Road, and Richmond Road.

Rail to Trails Project – The Bizz Johnson Trail is a significant multi-use unpaved trail which follows the old railroad alignment between Westwood and Susanville, approximately 32 miles. The trail is popular among bikers, equestrians, hikers, and fisherman and can be used for both point to point and out and back outings. Trailhead facilities are located in Susanville, Westwood, Devils Corral, and the Gourmaz Campground. During the winter months a portion of the trail can be used for cross-country skiing.

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. As more facilities are constructed it is likely that the percentage of Lassen County residents commuting to work via bicycle will increase. New land use developments will also create new demand.

Non-Motorized Facility Needs

In developing improvements to the bicycle transportation network the following elements should be considered.

- Safety - Limiting conflicts between bicyclists and motorists is of high priority, particularly along the state highways in Susanville. This can include the development of Class I, II or III facilities or simply shoulder widening.

- Bicycle facilities should provide links between major activity centers, residential neighborhoods, and schools.

- Multi-modal Connections – Although Lassen Rural Bus vehicles include bike racks, there are only two racks available per vehicle and no bicycle parking facilities at key bus stops. Additionally, there are no bicycle locker or storage facilities and park and ride lots.

- Regional Connections – Improved facilities such as Class II or III bike paths are important on state highways (US 395, SR 139, and SR 299) which link Lassen County communities to other counties.

- Rails to Trails – The abandoned Modoc Rail Line is a potential rails to trails project that could serve bicycle commuters in the communities along US 395 north of Susanville. The old Susanville – Wendel railroad alignment could connect commuters to the California Correctional Center and the High Desert State Prison.

- Continued maintenance including sweeping or clearing of debris from the bicycle network is important for safety and making bicycle facilities attractive to residents and visitors.

- Providing safe crossings such as crosswalks, striping, and flashing beacons is a continued need along major arterial roadways. Of particular importance is on SR 36 in Susanville, where pedestrians and bicyclists are forced to cross wide travel lanes and two-way left turn lanes. Incorporating pedestrian improvement into new roadway or rehabilitation projects is important.

- Sidewalks - In Susanville, SR 36 serves as main street through the downtown commercial core area. As this segment of SR 36 has the greatest traffic volumes in the county, adequate sidewalks are crucial to the safety and mobility of residents and visitors. Currently there are gaps in the sidewalk system.

AVIATION

There are five publicly operated general aviation airports in Lassen County. As shown in Figure 1 (page 13), these consist of Susanville Municipal, Herlong, Ravendale, Spaulding and Southard Field. An additional airport is located on the Sierra Army Depot property under the jurisdiction of the Lassen County Board of Supervisors, acting as the Local Reuse Authority (LRA). This airport is for military use only. For commercial airline service, Lassen County residents must travel roughly 90 miles to Reno/Tahoe International Airport. This airport is served by Modoc County's Sage Stage public transit program.

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

- **Susanville Municipal Airport –** The Susanville Municipal Airport is located roughly five miles southeast of downtown Susanville off of Johnstonville Road near the intersection with US 395.This facility is considered a regional general aviation airport and includes one primary paved runway (4,051 feet in length) and one short dirt runway (2,180 feet), fueling facilities, hangars, and tie downs. The runways do not meet minimum state standards for length. 2009 airport data indicates that 44 aircraft, one helicopter, and three ultra-lights were based at the Susanville Airport. Approximately 12,500 aircraft operations (take-offs and landings) were recorded during that year. Susanville is the only Lassen County airport on the National Plan of Airport Integrated Systems (NPAIS), making the airport eligible for Federal Aviation Association (FAA) funding.

- **Herlong Airport** – The Herlong limited use airport can be accessed from Sage Valley Road in the community of Herlong. There is one asphalt 3,260 foot runway. No aircraft are based at this airport and only 700 aircraft operations were recorded in 2010. Runway width and length do not currently meet federal and state standards; however, there is not likely sufficient demand to expand facilities at this airport. Numerous cracks and loose rocks have also been observed on the runway.

- **Ravendale Airport** – The Ravendale Airport is accessed from Chicken Ranch Road off of US 395 in the northern portion of the County. The asphalt runway is 2,920 feet long and cracking is visible. Also a limited use airport, no aircraft are based at the Ravendale Airport. Roughly 365 take offs and landings were recorded in 2009. As with the Herlong Airport, there is likely not sufficient demand to justify extending the runway to minimum state standards. This airport is needed for emergency access as there are no emergency medical transportation services within 50 to 60 miles of this community.

- **Spaulding Airport** – This facility is located on the west shore of Eagle Lake and is accessed via The Strand in the community of Spaulding. There is one 4,600 foot asphalt runway with tie downs and two based aircraft. In 2010, roughly 3,000 aircraft operations were recorded. Spaulding Airport is a limited use airport but considered a high priority facility according to the 2003 California Aviation Systems Plan. In other words, enhancements at this airport will improve regional state airport system safety and capacity. Runway width and length do not currently meet state standards and pavement is deteriorating.

- **Southard Field** - Located off of SR 299 outside the community of Bieber, Southard Field is a community use airport. The facility includes 2,980 foot asphalt runway and two based aircraft. Approximately 1,500 aircraft operations were recorded in 2009. According to the California Aviation Systems Plan, needs for this airport include fuel services, runway extension, and a visual approach slope indicator.

The Runway Safety Area (RSA) is the area surrounding the runway that is suitable for reducing the risk of a crash in the event an aircraft over shoots or undershoots the runway. All of the county operated airports require grading or removal of objects/brush in the RSA in order to meet FAA requirements.

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 Lassen County, goods movement is focused on trucking. In addition to truck traffic generated through local distributers between Reno and points north and west, there is a fair amount of interregional goods movement on the state highways in Lassen County along US 395 to Oregon and SR 36/44 toward the I–5 corridor.

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 (KPRA). 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. All state highways in Lassen

County are Terminal Access routes with the exception of SR 147 and SR 139 between Susanville and Termo. The 15 mile portion of SR 139 just north of SR 36 is designated California Legal Advisory route while the remaining segment to Termo is California Legal. STAA sized trucks are not allowed on these sections of highway.

Rail Facilities

There is no passenger rail service in Lassen County and limited freight rail. In the western portion of the county Burlington Northern Santa Fe (BNSF) operates a freight line which begins in Keddie in Plumas County and extends north through the western portion of Lassen County traveling through Clear Creek, Westwood, Little Valley, and Bieber. This line connects the Feather River canyon with Klamath Falls, Oregon and other destinations to the north. Union Pacific's Feather River Canyon line parallels SR 70 and US 395 in the southern section of Lassen County before turning east at Herlong to Nevada.

It is anticipated that freight or passenger rail facilities will not expand in Lassen County over the next 20 years.

Goods Movement Issues

According to Caltrans truck traffic data (Table 6), SR 36 between the US 395 junction and the SR 139 junction in Susanville has the highest truck traffic volumes in Lassen County. Greater truck volumes contribute to congestion in Susanville as well as increased road maintenance costs. Wind advisories for high profile vehicles are often issued on US 395 and chain requirements are common on SR 44 and SR 36 during the winter months. One particular issue on SR 36 that has been recently addressed is the 6 percent downgrade for east bound traffic on SR 36 ending in a sharp curve at the bottom of "Town Hill" just prior to downtown Susanville. This roadway geometry has created issues for trucks, bicycles, recreational vehicles, and pedestrians. Caltrans recently completed a number of improvements on "Town Hill" such as a median barrier, bicycle lane on the westbound shoulder, a reconfigured intersection at Prattville Road, and installed radar speed feedback signs. Additional improvements proposed by the Town Hill task force include a potential fortification of the median barrier and mandatory truck stop and scale prior to the steep grade where trucks would have the ability to inspect and adjust their load and let their brakes cool. Over the long-term, the Town Hill Task Force recommended an alternative truck route to divert traffic away from the problematic curves on SR 36.

Intelligent Transportation Systems would be appropriate to direct truckers to appropriate routes, particularly when road closures or chain conditions are in effect. Another safety issue associated with goods movement is truck parking near Susanville. Truckers travelling long distances on US 395 need a safe area to park, rest preferably next to food and gas facilities.

Goods Movement Projections

Although truck traffic volumes have decreased along with total traffic volumes, it is anticipated that trucking will remain the primary form of goods movement in Lassen County over the next 20 years. As improvements are made to the regional STAA network, future truck volumes may increase. Goods movement will remain an important factor to consider when programming roadway improvements.

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 Lassen 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 Lassen 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. US Census data shows that 10.4 percent of Lassen County employees carpool to work. Commute pattern data indicates that approximately 32 percent of Lassen County workers commute outside of the county for work (although some of these workers may be telecommuting). Currently in Lassen County there is a vanpool for employees commuting to the Sierra Army Depot in Herlong and an informal internet rideshare board for family members of inmates at the correctional facilities.

The 2011 TDP indicated a need for a carpool/vanpool program from Susanville, Janesville, Westwood/ Chester to the High Desert State Prison and California Correctional Center. Either a traditional vanpool program could be implemented or an employee express shuttle could be operated by Lassen Rural Bus.

Park and Ride – Park and Ride facilities reduce the single vehicle occupancy use by providing an alternative to accesses public transit or ridesharing opportunities. There is one Park and Ride facility in Janesville off of US 395. Several “informal” Park and Ride lots have emerged at dirt turnouts along US 395 and SR 36 partially due to an increase in transit use. Safety issues can arise from these informal lots if users park too close to the travel lane. LCTC recently applied for a grant to conduct an in-depth study of Park and Ride facilities in Lassen County.

Other TDM strategies which could help reduce traffic congestion and improve the performance of the regional transportation system include:

- Encourage commuting during non-peak hours to reduce congestion.
- Encourage 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. There are eight CCTV locations, four CMS locations (three of which are under construction), four EMS locations, three HAR stations, and four RWIS stations currently on Lassen County state highways.

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. Lassen County is part of the Northeast Plateau Air Basin with air quality managed by the Lassen County Air Pollution Control District. The low population density (7.7 people per square mile), limited number of industrial installations, the fact that over half of Lassen County is forest land all contribute to Lassen County's good air quality.

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 (NO_2), Ozone (O_3), Particulate Matter (PM), Lead (Pb), and Sulfur Dioxide (SO_2). Lassen County is considered "in attainment" or unclassified for every federal air quality standard. As such, Lassen County is not required to demonstrate transportation conformity to the State Implementation Plan (SIP) through the development of Transportation Control Measures (TCM). SIPs are comprehensive plans that describe how an area will attain national ambient air quality standards. As for state air quality standards Lassen is classified "in attainment" or "unclassified" for all standards except the state PM-10 (particulate matter 10 microns in diameter or less) standard. Notably, almost every county in California exceeds the state standards for airborne particulates.

PM-10 is caused by a combination of sources, including fugitive dust, combustion from automobiles and heating, road salt, conifers, and others. 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.

Global climate change or "global warming" is an important air quality issue closely related to transportation. Climate change is caused by the release of greenhouse gases (GHG's) such as carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, 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, CARB estimates that over 40 percent of California's GHG emissions can be attributed to the transportation sector. Forecasted, long-term consequences of climate change range from a rise in the sea level to a significant loss of mountain snow pack. 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 Lassen County are discussed further in the Action Element, below.

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Chapter 3
Policy Element

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 Lassen region and provides goals, objectives, and policies to assist in setting transportation priorities.

REGIONAL TRANSPORTATION NEEDS AND ISSUES

Global Issues

As the world's 12th-largest source of carbon dioxide, the State of California recognizes the need to establish climate change standards. Assembly Bill (AB) 32: Global Warming Solutions Act, adopted in 2006, requires the California Air Resources Board (CARB) to adopt rules and regulations that would achieve Green House Gas (GHG) emissions equivalent to statewide levels in 1990, by 2020.

In order to reach the AB 32 emissions reduction targets, CARB developed a Scoping Plan. This Scoping Plan, approved by the Air Resources Board in December 2008, provides the outline for actions to reduce California's GHG emissions. The measures in the Scoping Plan are being developed and should be in place by 2012. Appendix M presents the recommended actions in the Scoping Plan. The backbone of the plan is a cap-and-trade program, under which a limit or "cap" on the amount of GHG emissions that are permitted for a region is set. Firms or individuals subject to the cap then are allowed to trade permits or credits in order to meet the cap. Sectors subject to the cap include electricity, natural gas, transportation fuels, and large industrial uses. Other complementary GHG reduction measures described in the scoping plan include GHG emission standards for light and medium/heavy duty vehicles, increase energy efficiency in commercial, industrial and residential uses, increase solar water heating, increase vehicle efficiency, increase the use of renewable energy sources, methane capture at large dairies, and the implementation of land use strategies that will reduce Vehicle-Miles of Travel (VMT).

Recent science suggests that further effects of Climate Change are inevitable despite planned and implemented mitigation efforts. Because of its geographic diversity, California is extremely susceptible to a wide range of Climate Change effects. Examples include, but are not limited to, increase in temperatures, earlier snowpack melt, changed precipitation patterns, increased severity of wildfires, extreme weather events, and numerous changes and effects on biodiversity and habitats. These Climate Change impacts can have a negative impact on the State's transportation infrastructure depending on regional and local characteristics. This can include the natural as well as the human built environment, including various locations, types and functions of transportation facilities and assets.

In California, transportation accounts for 41.2 percent of climate change emissions (Caltrans Climate Action Program, 2006). Therefore, the impact that RTP projects will have on GHG emissions is a relevant issue on a statewide basis. Carbon dioxide reduction strategies have been addressed in the Climate Action

Program at Caltrans (December 2006). Transportation strategies across the state include reducing/ managing and eliminating superfluous, non-essential trips seen as the primary cause of congestion, GHGs and air pollution through smart land use, Intelligent Transportation Systems (ITS), demand management, value pricing, and market-based manipulation strategies.

It is important that region transportation and land use decision makers pursue transportation and land use projects that adhere to adopted state strategies. Examples of such projects already included in the RTP are projects that encourage bikeway and pedestrian use by residents and visitors. Other types of projects that could be implemented in the future that will positively contribute to reductions in GHG emissions are public education and awareness of "best practices" funded through transportation planning grants.

LOCAL AND REGIONAL ISSUES AND NEEDS

Lassen 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 and goods movement issues in the region 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 proportion of people living below the poverty line in Lassen County is higher than the statewide average, as is the unemployment rate. These statistics indicate that the residents of the Lassen region have fewer resources available and therefore are generally more dependent on alternative modes of transportation, such as transit, bicycling, or walking. The remote nature of Lassen County makes the region susceptible to population spikes that correspond to the boom and bust of industries (timber) and large employers (Sierra Army Depot). This pattern makes planning for long-term transportation needs difficult.

Roadway and Bridge Needs

State Highways

With the exception of SR 139 around Lassen College and the small segment of SR 299 near Shasta County, historical AADT on state highways has decreased over the last ten years. However, existing LOS falls below the desired goal of LOS "C" from western Susanville (along SR 36 west of the US 395 junction), in Janesville (along US 395) and on Johnstonville Road and Riverside Drive. Contributing factors to congestion in these areas include:

- Major employers such as the California Correctional Facility and High Desert State prison are located east of Johnstonville Road. Employees living Susanville commute via SR 36 and Johnstonville Road.

- Interstate truck traffic traveling through Lassen County to the north must travel on SR 36 through downtown Susanville to access SR 139.

- There is currently no complete link around the perimeter of the city of Susanville. Therefore, essentially all traffic flows through the center of town on SR 36.

The recently completed Skyline East project connects Johnstonville Road to SR 139 just south of Lassen College and is the first step in a series of regional improvements to reduce congestion on SR 36. In order to complete the link to SR 36 and provide an alternative route for regional traffic, the Skyline Extension project has been proposed. To further alleviate congestion over the long-term on SR 36, a Southern Susanville/Richmond Road local relief route has been proposed to provide a viable alternative between the southern and eastern portions of Susanville. By 2030 LOS is anticipated to degrade to LOS "E" between SR 139 and the US 395 junction. The Caltrans 20 year vision for this section of SR 36 is a four – lane expressway.

Currently, the two lane sections of US 395 in Lassen County operate at LOS C or better. However by 2030, LOS on US 395 is projected to decrease to LOS "D". Constructing additional passing lanes or expanding the capacity of US 395 to four lanes may be warranted in the future.

System Preservation

Other than congestion in Susanville and on Johnstonville Road, Lassen County has relatively low traffic volumes and acceptable LOS. As new land use developments are built and traffic volumes gradually increase, capacity or other traffic improvements may become important to providing stable traffic flow. Over the short-term, the primary focus for roadway improvements in Lassen County is system preservation. Improvements ranging from chipsealing to roadway reconstruction on several county and city maintained roadways are essential to providing a safe and efficient regional transportation system. The roadway maintenance issue is exacerbated by the fact that transportation funding is limited, particularly at the local road level. It is important to develop a regular maintenance program and pavement management system to avoid costly future roadway rehabilitation. In addition, streets in older Susanville neighborhoods have no curb, gutter, or adequate street surface.

Bridges

As identified in Chapter 2, 15 local bridges have a sufficiency rating of 80 or less, which makes these facilities eligible for federal funding. Replacement and continued maintenance of Lassen County bridges are essential to the safety of the regional transportation system.

New Development

Land use development in the Almanor Basin, Skyline Drive, and the Herlong area has the potential to impact roadway conditions over the long term. With limited funding available for local roadway improvements, it is important to consider the financial impact of new developments on the regional transportation system as a whole. As such, developers should be required to pay their fair share of costs to mitigate these impacts. Additionally, there is a need to identify future rights of way acquisition required to provide an adequate overall transportation network in Susanville.

Gateway and Beautification Improvements

Economic vitality is a prominent issue in Lassen County. Methods of boosting the local economy include increasing tourism and attracting new businesses. Transportation infrastructure improvements can assist with this goal. In particular, Susanville is located at a key junction in the state highway network. However, as one enters town there is little to indicate a sense of arrival at a desirable destination. A variety of transportation enhancement techniques can be employed to create the sense of arrival at an interesting destination and therefore influence the motorist to stop in town. The entrance to the city should feel like a gateway with welcome signage, landscaping, curb and gutter and sidewalks. This can

encourage the perception among tourist drivers that the community is an attractive place to stay and explore, rather than simply a place to pass through.

Tribal Issues

SIR transportation needs include construction of new tribal roadways and continued rehabilitation and maintenance of existing roads. Of particular concern is Spring Ridge Road, which is failing structurally. Additionally, drivers misjudge the roadway alignment at the terminus of Spring Ridge Road and often miss the turn onto Numa Road. As for non-motorized facilities, SIR has indicated the need to construct a multi-use trail between Spring Ridge Road and Paiute Lane and eventually connect the facility to SR 139.

Transit Needs

According to the US Census American Community Survey 2006-2010, approximately 6.3 percent of households in Lassen County had no vehicle available to them and therefore are dependent on Lassen Rural Bus, family/friends or taxi service for transportation. Maintaining reliable and efficient public transit is an important regional transportation need for Lassen County.

A detailed outline of public transit needs in Lassen County is included in Chapter 2. As far as transit capital improvement needs, there are two primary transit needs: maintaining a safe and adequate fleet of vehicles and enhancing passenger amenities such as shelters, benches and a centralized transit center in downtown Susanville.

Non-Motorized Facility Needs

Many roadway safety concerns stem from potential conflicts between automobiles, bicycles and pedestrians. Previously transportation planning efforts have identified SR 139 in Susanville and County Road A-1 around Eagle Lake and Historic Uptown in Susanville as particular areas of concern. 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 crosswalks will improve the overall experience for both visitors and residents. Sidewalks, crosswalks, and lighting are particularly important for residents with disabilities. Another important non-motorized facility need is to connect Lassen region schools to bike paths and to create secure bicycle parking facilities. Finally, 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.

Susanville is a fairly compact urban center that lends itself well to bicycle commuting and/or walking. However, there are gaps in the sidewalk along SR 36 (Main Street) and along Memorial Park. As SR 36 in downtown Susanville has the highest traffic volumes in the county, adequate pedestrian facilities are particularly important for the safety of residents and visitors. Both sidewalks and crosswalks increase the attractiveness of downtown commercial areas contributing to the safety and economic vitality of the city.

Problems are exacerbated by the fact that one of the main bicycle improvement funding sources, the Bicycle Transportation Account, is quite competitive and can be difficult to obtain. One solution is to consider the needs of all transportation modes as part of a roadway improvement project. For example, the proposed Skyline Extension will incorporate an adjacent Class I bicycle path.

Aviation Needs

The airports in the Lassen County serve a small amount of general aviation and emergency services air traffic. It is not likely that there is sufficient demand to expand these airport facilities in the short term. Lassen County will continue to use California State annual grant funds to maintain these airports to acceptable standards. Only the Susanville Municipal Airport is eligible for federal funding. As Lassen County grows, it will be important to ensure that land uses surrounding the airports, particularly Susanville, remain compatible with airport uses.

Goods Movement Needs

Goods movement is an important transportation issue for the Lassen region. The proportion of all traffic representing trucks reached as high as 24 percent on US 395 in 2010. For trucks travelling between Reno and destinations along the I-5 corridor from Redding north to Oregon, US 395 and SR 44 is the shortest travel route. Maintaining pavement, constructing passing lanes, installing ITS to alert truckers of weather or other roadway issues, and implementing safety projects on the state highways to a level that is sufficient for goods movement will continue to be an important regional transportation need.

Transportation Demand Management Needs

Ridesharing/carpooling programs are a relatively inexpensive and environmentally beneficial form of transportation assistance that can benefit all residents, particularly commuters and those in areas not served or served infrequently by public transit. As Lassen County's major employers are located outside of the core Susanville area, there is a need to continue and increase ridesharing efforts.

North State Super Region

Historically, state and federal funding for transportation infrastructure improvements have been focused on portions of the state with large populations. Although rural areas have less traffic congestion, rural areas must deal with the effects of sudden population growth on an aging transportation network combined with shrinking revenue sources due to the most recent economic downturn. Local governments do not have sufficient funding available to adequately maintain the lane mileage within their jurisdiction. In an effort to better communicate these issues to the state, sixteen northern California counties (including Lassen County) joined together to create the North State Super Region. The region includes 26 percent of California's land area and 37 percent of California state and federal roads. The North State Super Region has identified the following goals:

- *To collaborate on endorsement of projects, share resources and information, and bring political attention to the needs of the area, including interregional roads, transit, and goods movement.*
- *To unite as a larger voice to influence state federal policy and funding priorities.*
- *To coordinate compliance with state and federal requirements, including blueprint planning and air quality regulation.*
- *To share and generate innovative ideas for project delivery and funding, among others.*

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 Lassen can maintain the regional transportation system within the financial constraints of state, federal, and local funding sources. The Policy Element is consistent with the Financial Element of the RTP. The following RTP goals, objectives, and policies are consistent with the Lassen County General Plan and the Susanville General Plan.

1. Highways and Roads

GOAL: Develop and maintain a comprehensive, efficient, and safe transportation system to serve the needs of the County residents and to stimulate the economics progress of the County.

1.1 POLICY: Classify existing roadways using the functional classifications set forth in this document.

1-A Implementation Measure: Use Figure 1 of this document to identify service classifications for existing roads.

1.2 POLICY: Periodically update the classification system to account for advances in methodologies used to determine roadway carrying capacities.

1-B Implementation Measure: Use methods approved by the LCTC, Caltrans, Lassen County, and the City of Susanville that provide adequate methods to determine the carrying capacity of roadways. County roads, city streets, and Tribe road classifications should be reviewed and updated annually.

1.3 POLICY: Require that the classification system developed helps determine design standards for new roadway placement and assessment of existing roadways as future development occurs.

1-C Implementation Measure: Review new roadway plans and determine the classification based on connectivity to local and regional facilities. Ensure the design meets the intended use of the new roadway.

1.4 POLICY: LCTC shall pursue all possible State, federal, and local funding to address high priority (i.e., public health and safety) road and bridge maintenance needs.

I-D Implementation Measure: Support state-only funds for maintaining roads and state-only funds for matching federal funds for bridge projects. State-only funding can be used on local streets and roads that are not eligible for federal funds. Local streets and roads have the greatest maintenance deficiencies.

1.5 POLICY: Maintain as many County roads for year-round travel as financially feasible.

1.6 POLICY: Encourage federal agencies (e.g., U.S. Forest Service) to consult with the County in the planning of major road projects, and to adequately maintain their road systems to serve tourism, local residents and businesses that rely on the use of resources on or near public lands.

1.7 POLICY: Encourage leveraging funds by coordination of multi-jurisdictional agency cooperation/considerations for partnership projects.

1.8 POLICY: Work cooperatively with Caltrans, Susanville Indian Rancheria, Lassen County, and the City of Susanville in the preparation of the Regional Transportation Plan.

1.9 POLICY: Expand the interaction and consideration of land use planning issues and capital facility plans in the course of preparation of the RTP.

1.10 POLICY: Continue to review and, if warranted, formulate improved standards for the necessary improvement and maintenance of roads serving new development, including standards for the incremental improvement or development of public roads.

1.11 POLICY: The LCTC shall strive to improve the regional roadway system to maintain LOS "C" conditions on an average daily basis. No public highway or roadway should be allowed to fall below LOS "E" (i.e., road at or near capacity; reduced speeds; extremely difficult to maneuver; some stoppages).

1-E Implementation Measure: Update the RTP a minimum of every five years with appropriate projects to improve LOS, mobility and safety on State and local roadways.

1.12 POLICY: Continue to encourage and support the improvement of SR 36 from Susanville to Johnstonville as a four-lane expressway.

1.13 POLICY: The LCTC shall support the incremental addition of lanes on U.S. 395 to a four-lane expressway and work with Caltrans in the consideration and implementation of access management policies to protect traffic efficiency and safety and to facilitate future highway improvements. Such measures include the limitation of new encroachments onto U.S. 395. The LCTC shall support an increased number of passing lanes where a four-lane expressway is not feasible.

1-F Implementation Measure: Support the completion of the Project Study Reports and the decisions and actions by the involved agencies to facilitate the progressive resolution of needed highway improvements. This implementation measure applies to Policies 1.12 and 1.13.

1.14 POLICY: The LCTC supports completion of project-specific environmental impact analysis of each improvement listed in the RTP in accordance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) when applicable. Full disclosure of all potentially significant impacts should occur at the appropriate stage of the project approval process.

1-G Implementation Measure: The LCTC shall work with Caltrans, Susanville Indian Rancheria, Lassen County, and the City of Susanville in the consideration of highway realignments and new public roads. The LCTC also may propose mitigation measures to reduce the adverse environmental impacts from any such improvements. As part of the

purchase of right-of-way involving agricultural lands for transportation projects, the LCTC shall consider the following:

- Purchase agricultural conservation easements on land of at least equal quality and size as partial compensation for the direct loss of agricultural land, as well as for the mitigation of growth inducing and cumulative impacts on agricultural land.

- Mitigation by the outright purchase of conservation easements tied to the project or by donation of mitigation fees to an appropriate agency whose purpose includes the purchase, holding, and maintenance of agricultural conservation easements.

- Evaluation of agricultural land designated for transportation improvements using the LESA model (land, evaluation, site assessment) to ensure that potentially significant effects on the environment of agriculture land conversions are quantitative and consistently considered in the CEQA process.

- Following guidelines for the preparation of agriculture conservation easements appraisals as outlined on the Department of Conservation Land Resources website (http://www.conservation.ca.gov).

1.15 POLICY: The LCTC supports the use of Intelligent Transportation System (ITS) technology on state highways and major roads to improve traveler safety, traffic flow, and road and traffic conditions.

1.16 POLICY: The LCTC shall support the efforts of the City and County in working toward a local transportation network that provides safe and adequate multiple access opportunities for existing and future development, to be consistent with City and County General Plan(s) and Fire Safety Ordinances.

1-H Implementation Measure: Facilitate the coordination between City or County and other affected agencies to identify areas with inadequate multiple access opportunities and to develop plans and funding options for improvements.

2. Public Transportation

GOAL: To provide adequate cost-effective public transit services, especially to accommodate the needs of the elderly and handicapped.

2.1 POLICY: Continue to aggressively pursue federal, state, local, and private contracting funds and grants for grants for additional transit capital and operational expenses.

2.2 POLICY: Continue to update the Regional Transit Plans to identify transit needs and opportunities to expand facilities to better serve transit users.

2-A Implementation Measure: The LCTC shall work closely with Lassen County, the City of Susanville and transit providers to plan for transit needs as identified in Regional Transit Plans, as well as needs apparent through public inquiry and input from unmet needs hearings and other public meetings.

3. Goods Movement

GOAL: Promote the continuous flow of goods in and out of the County in a safe and economically efficient manner.

Rail

3.1 POLICY: Support efforts that will implement and improve freight and excursion rail service in the region including neighboring counties.

3.2 POLICY: If continuation of current rail use of railroads within Lassen County is not feasible, railroad right-of-ways should be retained for alternative uses including but not limited to buried utility corridors, access to and through public lands, alternative transportation routes and trails, and routes for railroad reactivation if rail use becomes feasible in the future.

Truck

3.3 POLICY: Encourage and partner with Caltrans to meet the needs of local shippers, and businesses moving freight by truck, when planning truck routes in and out of the County.

3-A Implementation Measure: Continue to implement roadway improvement projects along state highways which will improve safety and reliability for trucks.

4. Airports

GOAL: Provide an adequate number of safe, efficient airports and airfields.

4.1 POLICY: Support maintenance of airfields in safe condition pursuant to applicable State and federal requirements.

4.2 POLICY: Support land use decisions that discourage, and when possible, prevent development in the vicinity of airfields and airports that may present significant public safety issues and/or which could constrain the continued operation and needed expansion of those facilities.

4-A Implementation Measure: The LCTC shall continue to rely upon Airport Land Use Plans and the recommendations of the Airport Land Use Commission in consideration of proposed land uses around airfields and airports. Acquire airport funds for various improvement projects.

GOAL: Support the expansion of economical, efficient air services.

4.3 POLICY: The LCTC supports the expansion of the Susanville Municipal Airport for purposes of public safety and to expand its capacity to accommodate larger aircraft and new air services.

4.4 POLICY: The LCTC supports the consideration of development and use of the Sierra Army Depot airfield for public or limited special commercial use if and when such uses are invited and supported by the Depot.

5. Bicycle and Pedestrian Facilities

GOAL: Provide a safe and efficient bicycle and pedestrian circulation system that takes advantage of the natural scenery and physical characteristics of Lassen County.

5.1 POLICY: Work with Lassen County, the City of Susanville, Susanville Indian Rancheria, and Caltrans to implement the current Bikeway Master Plan to develop a comprehensive bike/pedestrian plan that provides facilities in both the urbanized and rural areas.

5.2 POLICY: Where feasible and practical, support provision of shelters and off-street facilities to promote bicycle and pedestrian travel. This includes connections to local and regional schools and recreational facilities in Lassen County with primary consideration to providing for the safety of school children and local residents.

5-A Implementation Measure: Review the status of ongoing circulation plans for various projects and require that some provisions be made for bicycle travel where appropriate. This could include requiring wider roadways from developers to accommodate on-street bike paths, or additional bike facilities to connect to existing or planned bikeways.
5-B Implementation Measure: Maintain and update the Lassen County Bikeway Master Plan to support the acquisition of State and federal funds for improvements to the bicycle and pedestrian system.

5-C Implementation Measure Apply for State Bicycle Transportation Account (BTA) and federal TE funds for the purpose of constructing projects listed in Bicycle Master Plan.

6. Management of the Transportation System

GOAL: Minimize traffic congestion by increasing the efficiency of the existing transportation system through Transportation System Management (TSM) techniques.

6.1 POLICY: Periodically review traffic operations along State highways and major county roads. Promote signal timing, access management, transit priority treatments, accident scene management measures, and closed circuit TV to help increase traffic flow.

GOAL: Where feasible, reduce the demand for travel by Single Occupant Vehicles (SOVs) through Transportation Demand Management (TDM) techniques.

6.2 POLICY: Increase the mode share for public transit by implementing recommendations in Regional Transit Plans.

6.3 POLICY: Increase mode share for non-motorized travel by implementing projects in the Bicycle Master Plan.

6.4 POLICY: Establish a formal ride-share program within the County. Promote public awareness of Lassen Rural Bus and rideshare opportunities through media and promotional events.

7. Climate Change

GOAL: Reduce GHG emissions from transportation related activities within the Lassen County boundaries to support the state's efforts under AB-32 and to mitigate the impact of climate change.

7.1 POLICY: Consider GHG emissions as part of every transportation capital improvement project decision.

7.2 POLICY: Pursue projects with positive GHG impacts and that are realistic given the very rural nature of the Lassen County region, including transit programs, ridesharing programs, bicycle and pedestrian improvements, Intelligent Transportation Systems strategies, and maintenance of existing roadways to reduce vehicle emissions.

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Chapter 4
Action Element

This chapter presents a plan to addresses 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 – Due to population growth and economic activity and the migration of truck traffic from the I-80 corridor to the US 395 corridor, the proportion of truck traffic on state highways will increase slightly during the planning period.

- Transit Service – Though future planning efforts may lead to expansion of services in Lassen 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 Lassen County will increase at a rate not greater than California Department of Finance projections of 1.1 percent annually.

- 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.

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 Lassen 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 or terrorist attack. 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 Lassen County would be the focus of a terrorist attack or become a refuge for persons displaced by an attack or natural disaster elsewhere in the state. In the Lassen County region, forced evacuation due to wildfire is the most likely emergency scenario.

Identifying evacuation routes and other methods of evacuation is pertinent to the scope of the RTP. The principal arterials traversing Lassen County are US 395 and SR 44 and act as the primary evacuation route for many Lassen County communities, such as Susanville, Janesville, Milford, Doyle, Ravendale, Termo and Madeline. Evacuation routes for the Spaulding/Eagle Lake follow Eagle Lake Road and SR 139. Westwood residents would follow SR 36 into Plumas County and Bieber residents would use SR 299 to evacuate to either Modoc County or Shasta County. In the southern portion of the county, County Road A-25 serves as an important evacuation route. 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, Lassen Rural Bus 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 five publicly operated airports in Lassen County are available for emergency evacuation.

The best preventative measures with respect to this document for an emergency evacuation would be to continue to implement projects in the RTP which upgrade roadways, airport facilities and public transit. Additionally, LCTC and the public transit operators should work with the County Office of Emergency Services to develop a more active role in disaster preparedness.

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 Lassen 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 SR 36 and 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, local roadway rehabilitation is of greater concern than expanding the state highway system. Although the potential need for state highway expansion should not be dismissed entirely in the future. A balanced focus also includes an emphasis on alternative types of transportation improvement such as gateway enhancements, 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 Lassen 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 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 Lassen County. The performance measures listed in Table 16 are used in the development of short-term capital improvement plans to prioritize improvement projects and to determine each project's cost-effectiveness. The RTP performance measures are amended as necessary to reflect future changes in regional needs, goals, and polices.

- **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." Accessibility is defined as "the opportunity and ease of reaching desired destinations." For more populated regions, mobility refers to delay and travel time. As demonstrated in Table 7, Lassen County experiences some traffic congestion in Susanville in terms of poor LOS. Long-term RTP projects designed at providing additional routes and increasing capacity of SR 36 and US 395 will improve mobility for Lassen County residents.

- 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 Lassen County, there are no projects proposed that will construct new roadways to or from outlying communities. However, the Skyline Extension project will create an additional travel route around Susanville. Other non-motorized facility RTP projects propose new trails or expanding trails. Accessibility is also appropriate when measuring transit projects. Public transit links the outlying communities to the urban portion of the county, Susanville and provides access to medical and commercial services any expansion of public transit would improve accessibility for Lassen residents.

- **Safety and Security (S) –** Safety plays a large role in the consideration of transportation projects in the Lassen 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. Most RTP projects will increase safety. For example 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 Lassen County, there are a total of 41 roadways or approximately 12.5 lane miles with a PCI of 25 or less. By performing routine roadway maintenance, the County of Lassen and City of Susanville will reduce the need for larger roadway rehabilitation projects in the future.

- **Equity (E) –** An equitable transportation system applies funding to where it is most needed as opposed to simply allocating funding to the largest populations. This measure will ensure that all transportation types and jurisdictions are considered equally including state highways, county roads, city streets and tribal roads.

- **Environmental Quality (EQ) –** As RTP projects are constructed, they must comply with environmental criteria identified in the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

- **Economic Well Being (EW) –** Improving the transportation infrastructure is an important part of boosting the economic well being of Lassen County. All types of capital transportation improvements ranging from local roadway rehabilitation to bicycle paths to gateway enhancements in Susanville may encourage tourism and attract new businesses.

TABLE 16: RTP Program Level Performance Measures

Performance Measure	Data Source	RTP Measure	RTP Objective
Mobility and Accessibility (M/A)	Caltrans traffic volumes, Project Study Reports, Transportation Concept Reports and Special Studies	Minimum acceptable LOS on average daily basis	Provide acceptable LOS on all regionally significant roadways
Safety and Security (S)	Caltrans, California Highway Patrol, County and City Department of Public Works	Number of accidents on State highways per 1,000,000 vehicle miles of travel	Reduce the number of accidents on State highways below State average for similar facilities
System Preservation (SP)	County and City Department of Public Works	Pavement Condition Index	Maintain city and county roadways at an average PCI of 75 or better
Equity (E)	STIP estimates from CTC	Ratio of STIP allocations to County revenue shortfall for highway projects	Make the distribution of transportation funds more consistent with transportation needs, rather than population
Environmental Quality (EQ)	Environmental thresholds or significance criteria adopted in General Plans and/or independently for application in CEQA documents	Avoid or minimize significant impacts	Analyze the potential short-term and long-term environmental impacts of transportation decisions and mitigate adverse impacts to "less than significant"
Economic Well Being (EW)	County and City	Increase sales tax revenues	Provide acceptable LOS on all State highways, provide safe and attractive transportation facilities

Project Lists

Completed Projects

Since the last RTP update, LCTC has completed a number of transportation improvement projects ranging from improvements to the state highway system to replacing old transit vehicles. These accomplishments are listed in Table N-1 in Appendix N.

Proposed transportation improvement projects are listed in Tables N-2 – N15 in Appendix N. Projects are categorized by transportation element 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 2012 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. Consistent with prior RTPs, transportation improvement projects are also classified into one of the following priority categories:

- Tier 1 projects are considered fully fundable during the 2012 State Transportation Improvement Plan five-year cycle.

- Tier 2 projects are considered fully fundable during the life of the RTP (by 2032).

- Tier 3 projects are 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 Lassen region's transportation improvement costs, the cost estimates in the ensuing tables have been adjusted for inflation. A projected rate of inflation of 2.7 percent was applied to RTP projects, reflecting the average annual rate of change of the Consumer Price Index from 2001 to 2011. 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 10 years of inflation and long-term projects were adjusted to represent 20 years of inflation.

Caltrans State Highway Operation and Protection Program (SHOPP) Projects (Table N-2) – The financially-constrained SHOPP plan for Lassen County includes a variety of safety and system preservation projects on US 395 south of Susanville. The safety and maintenance projects range from roadway rehabilitation to fixing the waste water system at the Honey Lake Roadside safety area. Projects are anticipated to total nearly $115 million over the next ten years.

2012 Regional Transportation Improvement Program (Table N-3) – Lassen County's Regional Transportation Improvement Program (RTIP) for fiscal years 2012-13 to 2016-17 is presented in Table N-3. This table represents programmed State Transportation Improvement Program (STIP) funds for the Lassen region. The discussion below outlines the purpose and need of Lassen County 2012 RTIP projects.

- **Skyline Road Extension with Class I Bicycle Path** – This project will increase mobility in Susanville by alleviating congestion in central Susanville on SR 36. The roadway extension will

provide an alternate route for residents and truck traffic travelling through the most congested part of Susanville for residents and truck traffic between SR 36 and SR 139. Caltrans traffic analysis cited in this RTP indicates that, by 2030, SR 36 will reach LOS E if the Skyline extension is not constructed. With the improvement, LOS is anticipated to be LOS C. The Skyline Extension will also enable motorists to access the existing Skyline East Road without travelling on Johnstonville Road which also experiences congestion during peak commute periods.

- In addition to new roadway construction, the Skyline Extension project includes a Class I bike path. The bike path is part of a long-term goal to increase safety for bicyclists and pedestrians by providing a bicycle route around the city and eventually connecting with the Bizz Johnson Trail.

- **Mapes Lane Susan River Overflow #3 and #5** – Both of these bridges have a sufficiency rating of less than 80 and therefore are eligible for HBP funds. STIP funds will be used as the match. The #3 overflow bridge is classified as functionally obsolete. These projects will improve safety of the regional transportation system.

- **Local Roadway Reconstruction** – Riverside Drive and Janesville Main Street are regionally significant roadways which provide connections to services within the communities. In an effort to provide non-motorized alternatives, adjacent bicycle paths will be constructed.

- **County and City Roadway Rehabilitation** – Discussions with stakeholders and the public have indicated that system preservation is of high importance in the region. There is very little funding available at the local level to rehabilitate roadways. As repair and maintenance is deferred the cost of roadway rehabilitation increases. Directing regional funds to local roadway rehabilitation is consistent with the balanced focus funding strategy.

- **Transit Vehicle Replacement** – Also consistent with the idea of a balanced regional transportation system, STIP funds will be used to replace Lassen Rural Bus vehicles which have reached the end of their useful life.

Top Priority Regional STIP Candidate Projects – Table N-4 in Appendix N lists in order of priority regional improvement projects to be funded primarily through the STIP. These projects are top priority projects to be programmed in future RTIPs. Approximately $28 million in regional funds will be required to construct these projects. These top priority projects will address a variety of transportation issues identified in Chapter 3 of this RTP.

Financially Unconstrained Regional Roadway STIP Projects – Table N-5 presents Lassen 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 projects reach nearly $305 million.

Local Roadway Bridge Improvement Projects – Table N-6 presents local roadway bridge rehabilitation and replacement projects. In total, short-term local bridge improvement projects will require around $13 million in Federal Highway Bridge Program (HBP) and local match funds. Long-term projects are expected to cost around $ 24 million. STIP funds will likely be used as the required local match. Table N-7 presents the region's financially unconstrained local bridge improvement project list. Another $9.4 million in improvements are identified in this list.

Short-Term Local Roadway Improvement Projects – Table N-8 presents improvement projects on Lassen County and City of Susanville maintained roadways that will likely be funded with STIP or Regional Surface Transportation Program (RSTP) funds over the next ten years. Roughly $6.6 million in

roadway overlay and rehabilitation improvements have been proposed. These projects will address system preservation.

Long-Term Local Roadway Improvement Projects – Table N-9 presents long-term roadway rehabilitation projects for the city and the county which will likely be constructed over the second half of the 20 year RTP planning period. Up to $14 million in improvements have been identified.

City and County Financially Unconstrained Projects – Table N-10 (pages 1 through 3) presents County of Lassen roadway rehabilitation improvements which will likely remain unfunded over the next twenty years unless significant additional transportation revenue becomes available. Susanville's financially unconstrained roadway improvement projects are listed in Table N-11.

Transit Capital Improvement Projects

Similar to other rural transit agencies, Lassen Rural Bus 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 and attracting new riders. Table N-12 in Appendix N 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) funds, STIP, Transportation Development Act (TDA) funds. Phased improvements for the proposed downtown transit center and smaller passenger amenity upgrades will likely be funded with STIP and TDA funds. In an effort to meet future regionwide transit demands a new maintenance facility which could be used jointly by Lassen Rural Bus and the Susanville Indian Rancheria is proposed as a financially unconstrained capital improvement project along with the completion of the downtown transit center. As shown in Table N-12, short-term transit capital improvement projects will cost roughly $1.2 million and long-term projects will cost roughly $4 million.

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 and the public. Bicycle and pedestrian facilities also contribute to the economic vitality of the region by providing an attractive and safe method of travelling through a community and between communities. LCTC recently updated the *Bicycle Master Plan* for the region. The plan provides a good discussion of bicycle needs and also outlines a series of improvement projects. These projects are listed in Table N-13 and Appendix N. Figure 6 and 7 graphically display existing and proposed bicycle facilities in Susanville and all of Lassen County, respectively.

Table N-13 also includes sidewalk improvements and transportation enhancement projects. The Susanville South Gateway Enhancements project provides for improvements along SR 36 between Johnstonville Road and a point just east of McDonalds. The primary objective of the project is to create a sense of arrival into the community as motorists enter Susanville from the south. This top priority vision for south Susanville includes new sidewalks, curb and gutter, landscape, welcome signage, and a visitor kiosk.

Construction of top priority non-motorized facility projects with cost estimates available (Skyline Bike Path, Susan River Bike Path and Riverside Drive Bike lanes) are anticipated to total nearly $430,000. Long-term non-motorized facility projects total over $5 million. Of high importance is shoulder widening projects on Riverside Drive, Richmond Road and SR 36 along Town Hill. Financially unconstrained projects with costs estimates available total $26.5 million. Bicycle and pedestrian projects can be partially or fully funded through a wide variety of transportation revenue sources, as discussed in the Financial Element, particularly if a non-motorized facility is part of a larger roadway project. The primary

FIGURE 6

Existing and Proposed Bicycle Facilities in Susanville Vicinity

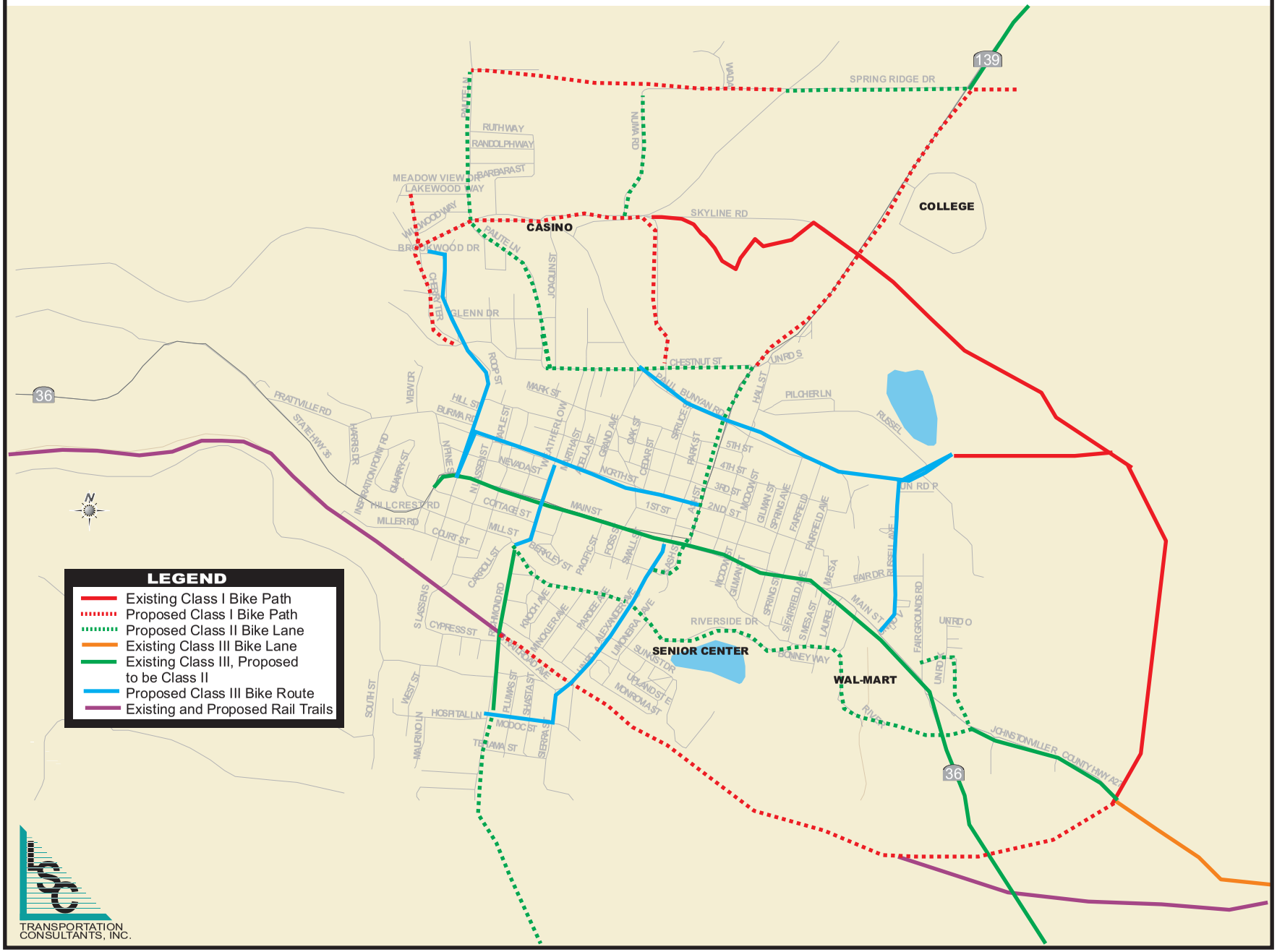

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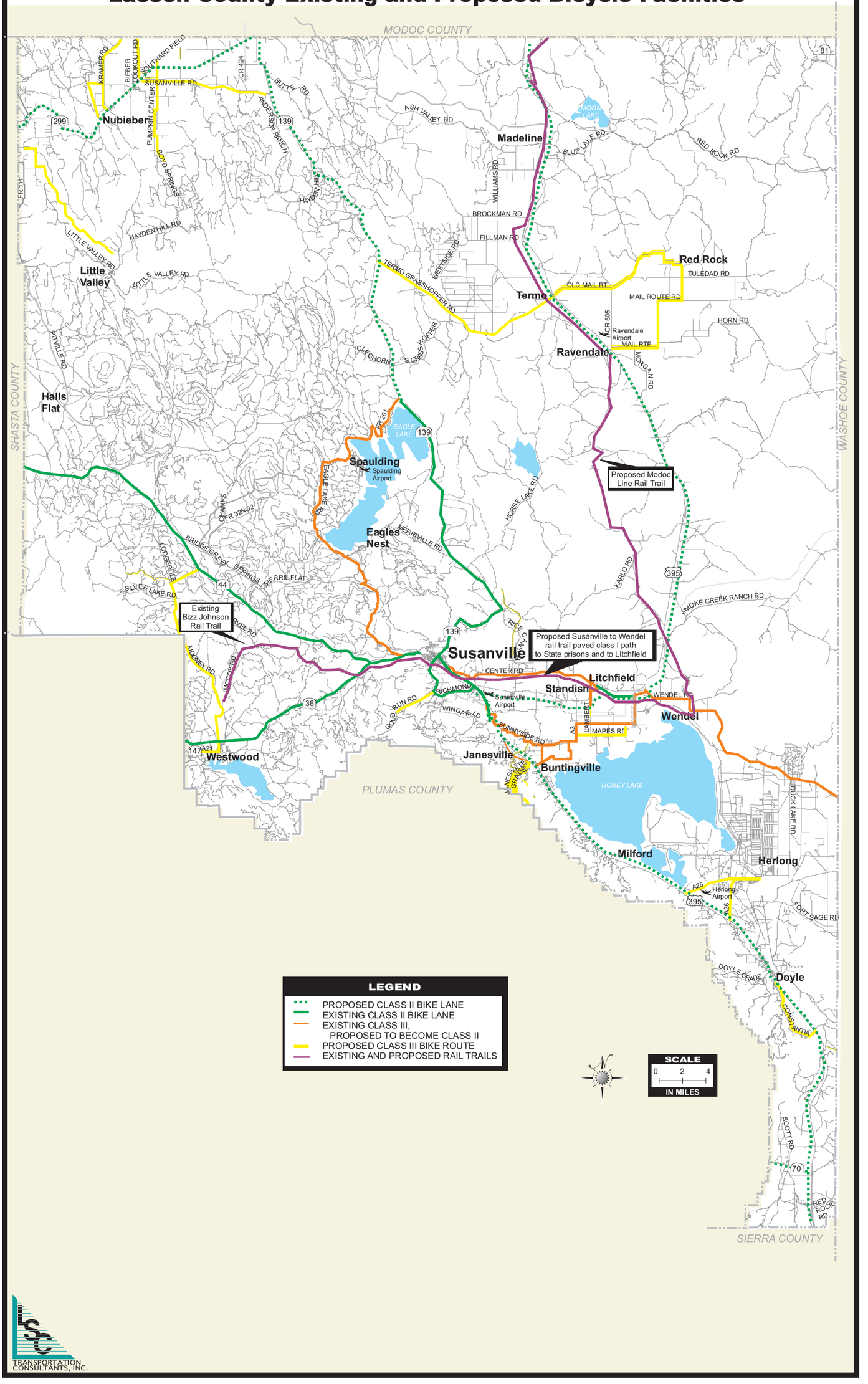
FIGURE 7

Lassen County Existing and Proposed Bicycle Facilities



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funding sources for bicycle and pedestrian projects in Lassen County will be Transportation Enhancement, Regional Surface Transportation Program, Transportation Development Act and Safe Routes to Schools programs. Bicycle Transportation Account funding is also available for bicycle projects; however these funds are quite competitive. These sources are described in greater detail in Chapter 5.

Airport Improvement Projects

Capital improvement projects for the Susanville Airport focus on land acquisition for runway extension, fencing, lighting and pavement rehabilitation (Table N-14 in Appendix N). These projects will be financed with a combination of federal, state and local aviation funds. The other four publicly operated airports in Lassen County are not eligible for federal funding. These airports must rely on the $10,000 per year California Aid to Airports Program (CAAP) grant from the state. This level of funding does not allow for large scale projects and will be used to simply maintain the airports to Caltrans safety standards. In total, airport improvement projects for all Lassen County airports will cost approximately $3.5 million over the next years. No specific long-term airport projects have been identified at this time.

Tribal Transportation Projects

In response to tribal mobility needs, the Susanville Indian Rancheria Transportation developed a list of six transportation improvement projects on BIA routes as part of the Susanville Indian Rancheria Long Range Transportation Plan. The lists include the construction of bicycle paths, new roadway segments and rehabilitation of Spring Ridge Road (Table N-15 in Appendix N).

Goods Movement

Freight transportation, particularly trucking, is an important function of the Lassen regional transportation system. Trucking generates up to 36 percent of all traffic volumes on portions of US 395 in northern Lassen County. Roadway rehabilitation and reconstruction projects throughout the region as well as long-term expansion of US 395 and SR 36 will improve the safety and reliability of goods movement throughout Lassen County.

Intelligent Transportation Systems (ITS)

An important element of the regional transportation system is the regional ITS network. Computerized, electronic and communications technologies are relatively simple methods of reducing traffic congestion, increasing safety and improving overall traveler mobility. ITS provides real time weather and road conditions information, enabling travelers to choose a safe and efficient travel route. Caltrans District 2 has developed an ITS program for Lassen County. Both existing and possible ITS facilities are displayed in Figure 8.

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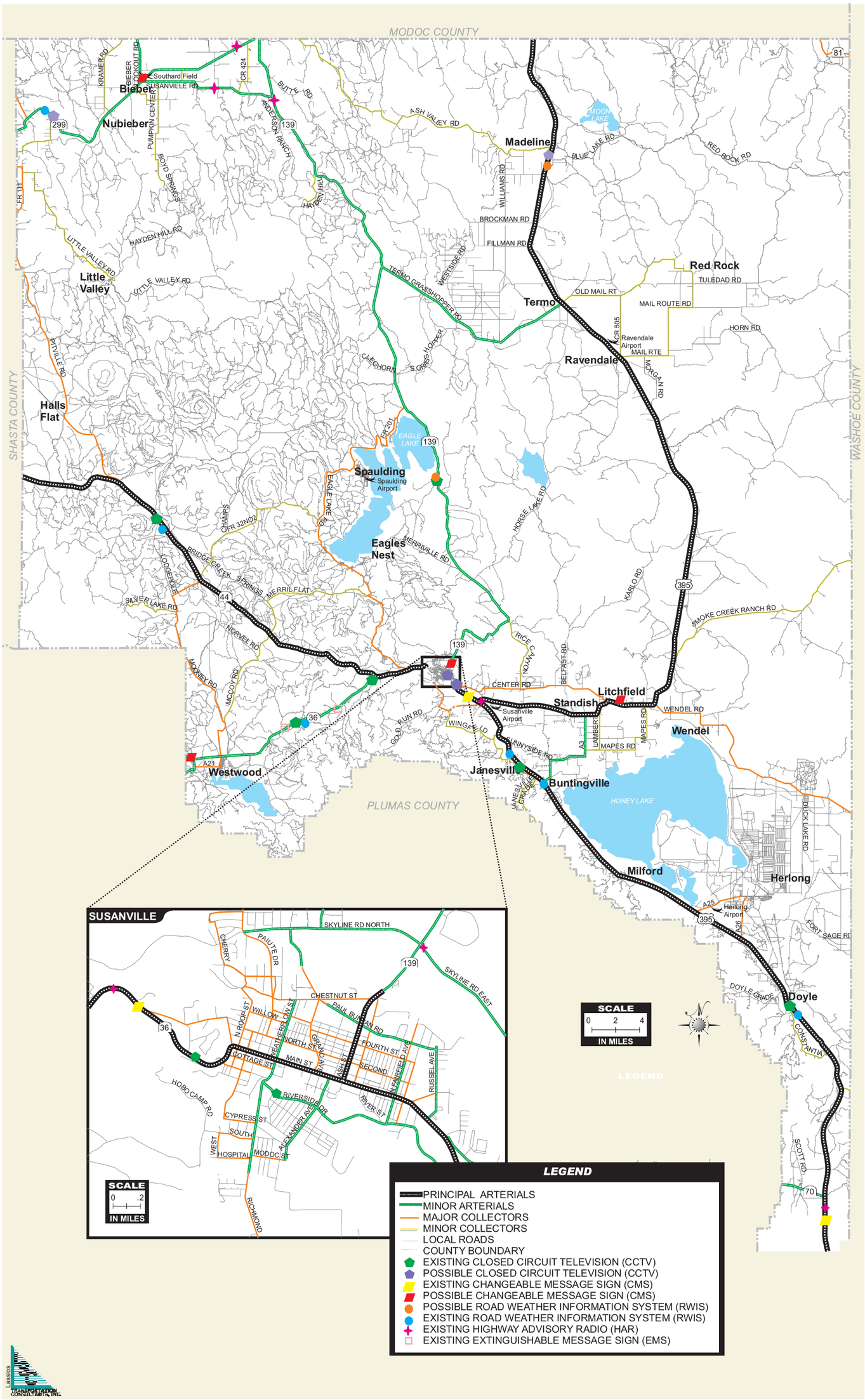
FIGURE 8

Lassen County Intelligent Transportation Systems (ITS) Elements



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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 Lassen region are road reconstruction or rehabilitation and do not require disturbing or paving new lands. New roadway projects such as Skyline Extension will undergo thorough environmental review prior to construction.

Before implementing road or bicycle/pedestrian improvement projects, the County of Lassen 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 Game, 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 E), state and federal resource agencies were contacted and maps of natural resources under each agency's jurisdiction were requested. Three agencies were contacted at the beginning of the RTP update process. Natural resource agency maps and documents such as the California Natural Diversity Database, California Wildlife Action Plan and the Bureau of Land Management Resource Management Plan 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 public participation/consultation section of Chapter 1.

LASSEN COUNTY STRATEGIES TO REDUCE GHG EMISSIONS

RTPAs that are not located within the boundaries of a metropolitan planning organization (which LCTC 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 SR 36 in Susanville, the Lassen region experiences little traffic congestion. As demonstrated in Chapter 2, overall traffic volumes on Lassen state highways have decreased in the last ten years. As such, the Lassen region is not a significant contributor to 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:

- Transportation enhancement projects – One GHG reduction strategy that is repeatedly identified in legislation and policy documents is to reduce VMT by implementing smart growth strategies which concentrate land use expansion in urbanized cores where public transportation is available and increases the "walkability" of communities. Pedestrian projects and gateway enhancements in Susanville will help to achieve this goal.

- Implement Non-Motorized Facility Improvements – The regional transportation issues discussion demonstrates a need to create a safer environment for pedestrians and bicyclists along the state highway corridors. Projects such as the Skyline bike path extension will make bicycle 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

improvements to passenger facilities, development of a downtown transit center and increase signage throughout the region. These improvements would make the transit system more visible and thereby encourage non-regular riders or visitors to utilize the bus system.

- Rideshare Program – Expanding existing rideshare programs and Park and Ride locations are other strategies to reduce VMT.

- Education – Reducing GHG emissions in Lassen County relies heavily on personal decisions of residents. Education is therefore an important part of a climate action program. LCTC should apply for Community Based Transportation Planning Grants as a way to educate and involve the public in the climate change planning process. Examples of studies which qualify for funding under this Caltrans program are:

  - Long-term sustainable community/economic development growth
  - Safe, innovative, and complete pedestrian/bicycle/transit linkage
  - Community to school linkage
  - Jobs and affordable housing proximity
  - Transit oriented/adjacent development or “transit village”
  - Community transit facility/infrastructure
  - Mixed-land use development

Chapter 5
Financial Element

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 Lassen 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 LCTC 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 Lassen region to complete the Action Element financially constrained and unconstrained projects 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 Sources

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. SAFETEA-LU expired in 2009; however Congress has passed several temporary extensions to the bill with the most recent ending on June 30, 2012. On July 6, 2012, Obama signed into law MAP-21. 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 in these hard economic times. MAP-21 funds the Transportation Trust Fund for the next two years. MAP-21 includes the following elements:

- Generally reauthorizes the federal-aid highway programs at current 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 Lassen 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, will fall under this core program. State and local bridge replacement projects are funded with HBP grants. The goal of the program is to support progress towards the achievement of performance targets established in a State Asset Management Plan.

- *Surface Transportation Program (STP) (R)* – Generally, the STP program will continue as it was under SAFETEA-LU. Roughly $10 million in flexible funding will be available for capital improvement to: Federal-aid highways, bridges on any public road, non-motorized facilities, transit, public bus terminals and facilities. 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 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.

- *Transportation Alternatives (C)* – This new core program 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, 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 and adds three new Federal land management agencies.

  - *Federal Lands Access Program* – 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 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.

- *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.

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 raised the excise tax on gasoline by 17.3 cents per gallon 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 pass 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.

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 programs are provided below along with other state funding sources:

  - Regional Transportation Improvement Program (RTIP) – The RTIP receives 75 percent of the STIP funding. The 75 percent portion is subdivided by formula into county shares. Caltrans and LCTC can program funds which are apportioned to the region and allocated by the LCTC. These funds may be used to finance some projects that are "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 Transportation Improvement Program (ITIP) – The ITIP receives the remaining 25 percent of the STIP funding. 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 ITIP funding is the very limited availability of "local match" for ITIP-funded programs. (However, RTIP 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.

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 2012. In the past federal Transportation Enhancement funds have been programmed through the STIP program.

- 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 EEM offers 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 State Resources Agency manages this grant program, and the RTPA makes project-funding decisions. In the past, the EEM program has allocated up to $4 million to the Northern California counties.

- Bicycle Transportation Account (BTA) Program (C) – This state program provides funding for projects that improve safety and convenience of bicycle commuters. To be eligible for funding, local jurisdictions must have an adopted Bicycle Transportation Plan approved by Caltrans. Projects must conform to the requirements of Caltrans' Highway Design Manual, Chapter 1000. Only commuter bikeway projects are eligible. Maximum project award is $500,000.

- AB 57 - Safe Routes to School (SR2S) (C) – This state legislated program allocates funds for projects that improve school commuter routes. Fundable projects include the construction of bicycle and pedestrian safety and traffic calming projects such as sidewalk improvements, traffic calming and speed reduction, pedestrian/bicycle crossing improvements, on-street bicycle facilities, traffic control devices, and traffic diversion improvements. AB 57 extended this program indefinitely. In FY 2010-11, approximately $24.25 million will be available for projects in California. This is a competitive funding source and a 10 percent local match is required.

- 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. In recent years, local planning activities increased several fold as regional STIP and TE shares provided increased funding opportunities for local projects.

- Community Based Transportation Planning Grants (CBTP) (C) – As part of the Caltrans Transportation Planning Grant package, the CBTP Grant Program funds coordinated transportation and land use planning projects that encourage community involvement and partnership. Projects should support livable community concepts with transportation or mobility objectives and promote community identity and quality of life. Examples of projects include the following studies/plans:

  - Long-term sustainable community/economic development growth
  - Safe, innovative, and complete pedestrian/bicycle/transit linkage
  - Community to school linkage
  - Jobs and affordable housing proximity
  - Transit oriented/adjacent development or "transit village"
  - Community transit facility/infrastructure
  - Mixed-land use development
  - Form-based or smart code development

  MPOs, RTPAs, cities, counties, transit districts and federally-recognized Native American tribal governments may apply for this grant program directly. A 10 percent local match is required and the grant maximum is $300,000.

- Environmental Justice (C) – Also part of the Caltrans Transportation Planning Package, Environmental Justice grants are intended to promote the involvement of low-income and minority communities, and Native American Tribal Governments, in the planning for transportation projects. Example projects are similar to those of CBTP grants but must address the interests of under-represented communities. A 10 percent local match is required and the grant maximum is $250,000.

- FHWA Partnership Planning Grants (C) – Caltrans administers this FHWA grant through their Transportation Planning Package. The objective of this competitive grant is to fund transportation planning studies that have a statewide or regional benefit such as a corridor study. A 20 percent local match is required and the grant maximum is $300,000.

- Gas Tax Revenues (R) – In addition, the state "passes through" gas tax revenues to local jurisdictions.

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:

- 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 right-of-ways needed as a result of the proposed development. As with impact fees, developer mitigations are not generally available to fund ongoing transportation maintenance and operations costs. Large scale development projects can be charged development mitigation fees.

- State Fuel Excise Taxes (R) – Also known as the Highway Users Tax Account (HUTA), the State of California returns a portion of the statewide fuel excise tax revenues to each jurisdiction for maintaining roadways. These funds are restricted for use to the city or county road fund and are accrued on a monthly basis. The formula for determining the amount of allocation to each local jurisdiction is complex; it is based on the number of registered vehicles, assessed property valuation and population. These funds are used for local roadway maintenance and operations.

- Motor Vehicle In-Lieu Fees (R) – These local revenues are motor vehicle registration funds returned to the county from the state based on a jurisdiction's population. These funds are general fund revenues and are not restricted for roadway use.

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 5309 Grants (C) – are split into three categories: New Starts, Fixed Guideway Modernization, and Bus and Bus Facilities. Typically, an intensive lobbying effort is necessary to receive a Section 5309 earmark through Congress.

- FTA Section 5310 Capital for Elderly and Disabled Transportation (C) – FTA funds are also potentially available through the Section 5310 Elderly and People with Disabilities Program (largely vehicles), which is administered by Caltrans and funded through the federal transportation bill. Both non-profit organizations and local governmental jurisdictions are eligible for funding.

- FTA Section 5311 Public Transportation for Rural Areas (R) – Federal transit funding for rural areas 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 47.77 percent match for operating expenditures. Per FTA section 5319, only a 10 percent local match is required for capital projects used to provide access for bicycles to transit facilities, or to install racks or other equipment for transporting bicycles on transit vehicles. These federal 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.

- FTA 5316 Job Access and Reverse Commute Program (JARC) (C) – The JARC Section 5316 grant program assists states and localities in developing new or expanded transportation services that connect welfare recipients and other low income people to jobs and other employment related services. JARC projects are targeted at developing new or expanded transportation services such as shuttles, vanpools, new bus routes, connector services to mass transit, and guaranteed ride home programs for welfare recipients and low-income people. Reverse Commute projects provide transportation services to suburban employment centers from urban, rural and other suburban locations for all populations.

- A 50 percent non-Department of Transportation (DOT) match is required; however, other (non-DOT) federal funds may be used as part of the match. FTA gives high priority to applications that address the transportation needs of areas that are un-served or under-served by public transportation. The maximum per project per year grant award is $200,000.

- FTA Section 5317 - New Freedom Program (C) – This program, enacted under SAFETEA-LU, provides formula funding for "new" public transportation services beyond those required by ADA for people with disabilities. The idea behind the program is to help communities provide transportation services beyond those required by ADA and to help people with disabilities participate more fully in the workforce and in community life. Eligible projects include voucher programs, volunteer driver programs and accessibility improvements to transit stations not designated as key stations. Funds are apportioned to the individual states based on the disabled population, and only 20 percent is available to non-urbanized areas. Projects outside urbanized areas must be included in, or be consistent with the Statewide Long-Range Transportation Plan, as developed by the state. As with the JARC program, projects must be derived from the Coordinated Human Services Transportation Plan. An 80/20 match is required for capital projects, and at least a 50/50 match is required for operating assistance projects. The maximum per project per year grant award is $125,000.

- FTA Section 5304 – Transit Planning (C) – Also part of the Caltrans Transportation Planning Package, Transit Planning grants are available to fund proposed planning studies which are intended to improve transit services and to facilitate congestion relief by offering an alternative to the single occupant vehicle. Example projects include short-range transit plans, ridership surveys and transit marketing plans. An 11.47 percent local match is required.

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 LCTC for the following prioritized purposes:

  - Whatever reasonable amount is needed by the LCTC for TDA administration

  - Two percent of the remaining amount may be provided for pedestrian 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 LCTC finds that either there are 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

  Currently, no LTF funds are allocated for streets and roads purposes in the Lassen region.

- State Transit Assistance (STA) – In addition to LTF funding, the TDA includes a STA funding mechanism. Currently, STA funds are derived from diesel sales tax revenues funneled through the Public Transportation Account as part of the "gas tax swap". STA funds can be used for both operating and capital transit purposes.

AVIATION

- Capital Improvement Program (CIP) – The CIP is not a grant program but rather is a ten-year list of all federally or state funded public-use airport projects, divided into two five-year phases. The CIP is an element of the California Aviation Systems Plan.

- Federal Airport Improvement Program (AIP) – The AIP provides 95 percent federal funding (requiring a 5 percent local and state match of which the state will pay 2.5 percent of the FAA AIP Grant amount) for general aviation programs. 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. AIP projects must be listed in the CIP. Only the Susanville Airport is on the National Plan of Integrated Airport Systems (NPIAS) and therefore eligible for Federal Aviation Administration (FAA) grant funding.

- State of California Aid to Airports Program (CAAP) – The CAAP makes grant funds available for airport development and operations. Three types of state financial aid to publicly owned airports are available through the CAAP.

- Annual Credit Grants for up to $10,000 per eligible airport per year
- AIP Matching Grants are available to help local entities with the 5.0 percent match requirement for the federal AIP program. The state will pay up to 2.5 percent of total project costs. The sponsor must meet the same eligibility requirements as for the Annual Grant; however, reliever airports can receive AIP Matching grants. The airport must also meet FAA eligibility requirements.
- 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 can not 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.
- Loans of 100 percent are available for projects with self-amortizing improvements. Such loans can be a continuing source of funds for hangar construction at airports.
- Airport grants are allocated based on a complex project rating methodology used by the state, with a similar methodology used for the Federal AIP. The highest rated projects are those that relate to safety and state mandates.

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.

With the ongoing state budget crisis, transportation funding in California has become less dependable. The 2012 STIP Fund Estimate projects new capacity for STIP and SHOPP projects over the short-term however the Fund Estimate reveals that the State Highway Account could become insolvent by 2014 unless additional loans can be made. Projecting STIP and SHOPP revenues over the long term is difficult as they are primarily dependent on fuel prices and consumption.

Regardless, recurring regional transportation revenues were projected over the next 20 years, as shown in Table 17. 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 Draft 2012 STIP Fund Estimate. Due to the uncertainties of the State Highway Account and the Public Transportation Account, long-term revenue projections for SHOPP funds are projected to remain flat throughout the planning period. Most other long-term revenue projections including TE funds (which are derived from federal dollars) take into account estimated inflation based on historical growth of the Consumer Price Index (CPI). On a federal level, this RTP assumes that MAP-21 will be authorized at apportionment levels similar to SAFETEA-LU.

A total of $339 million in recurring transportation revenue is anticipated to be available over the 20 year planning period for roadway, bridge, bicycle pedestrian and transportation enhancement projects. A combination of these revenues could be used to finance improvement projects in Tables N-2 through N-13. Aviation capital revenues over the planning period total to approximately $4.2 million. Roughly $32 million in total transit capital and operating revenue is projected. As many funding sources for bicycle and pedestrian projects such as BTA and SR2S are discretionary and difficult to obtain, these are not included in the projections.

TABLE 17: RTP Forecast Revenue Summary

All Figures in 1000s, adjusted annually for inflation

Funding Source/Program		Fiscal Years 12/13-16/17	17/18-21/22	22/23-26/27	27/28-31/32	Total
Regional Transportation Capital Revenues						
State Transportation Improvement Program (STIP) [1]		$22,352	$22,717	$25,556	$29,200	$99,826
Transportation Enhancement (TE) [1]		$2,507	$2,718	$3,105	$3,548	$11,877
State Highway Operations Protection Program (SHOPP)/Minor [2]		$45,948	$45,900	$45,900	$45,900	$183,648
Highway Bridge Program (HBP) [3]		$7,803	$7,803	$8,459	$9,665	$33,730
Regional Surface Transportation Program (RSTP) [4]		$2,365	$2,365	$2,564	$2,929	$10,223
	Subtotal	*$80,975*	*$81,503*	*$85,584*	*$91,241*	*$339,304*
Aviation Capital Revenues						
Federal Airport Improvement Program (AIP) [5]		$1,909	$403	$461	$526	$3,299
State Annual Credit Grant [6]		$250	$250	$250	$250	$1,000
	Subtotal	*$2,159*	*$653*	*$711*	*$776*	*$4,299*
Transit Capital and Operating Revenues						
Transportation Development Act (TDA) - Local Transportation Fund (LTF) [7]		$4,581	$5,161	$5,816	$6,553	$22,110
TDA - State Transportation Assistance (STA) [8]		$1,079	$1,233	$1,409	$1,610	$5,331
FTA Capital [9]		$993	$1,340	$1,311	$1,687	$5,331
	Subtotal	*$6,654*	*$7,734*	*$8,536*	*$9,849*	*$32,773*
	TOTAL	**$89,788**	**$89,891**	**$94,831**	**$101,867**	**$376,376**

Note 1: Short-term based on 2012 RTIP. Includes previously programmed shares for 12/13 to 14/15. Flat revenue growth projected over the long-term, except for TE funds.

Note 2: Based on financially constrained SHOPP projects for first 5 years. Long-term projections assume flat revenue growth.

Note 3: Based on previous obligated revenues. Long-term projections adjusted to keep pace with inflation.

Note 4: Based on historical revenues. Long-term projections increased annually to keep pace with inflation.

Note 5: Per CIP for Susanville Airport. Long-term projections assume similar level of funding to short-term project lists.

Note 6: Assumed annual State CAAP grant of $10K per airport per year.

Note 7: Based on historical revenues. Increased annually by the population growth rate plus half of the inflation rate.

Note 8: Per State Controller 12/13 allocations estimate. Increased annually by the inflation rate.

Note 9: Based on short-term/long-term project lists. Long-term projections increased annually to keep pace with inflation.

Revenue to Expenditure Comparison

Table 18 compares projected revenues to expenditures for Lassen regional roadway, bridge, non-motorized facilities, transportation enhancements and transit capital improvements for the next ten years. STIP, TE and RSTP funds can be used for a variety of types of projects. Bridge rehabilitation projects require a local match (typically STIP funds). FTA revenue can only be used for transit projects however a local match is also required for this funding source and can be derived from STIP funds. Airport projects have a specific funding source not available for other types of improvements as do SHOPP projects. Therefore, airport and SHOPP projects are not included in Table 18. All other recurring roadway, bridge, transit, non-motorized facility and transportation enhancement funding sources were summed in five year periods and compared to total project costs. As shown, Lassen County capital improvement projects are financially constrained over the first half of the planning period with a small surplus available for top priority projects for which costs estimates have not yet been identified. However, over the long-term, (including financially unconstrained projects) there is a deficit of around $400 million. Table 18 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 Lassen region will continue to plan and program transportation projects which are consistent with the goals, policies and objectives in the Policy Element.

Transit Projects

It is anticipated that planned LRB vehicle replacements and small passenger facility improvements will be funded in the long- and short-term planning periods with a combination of FTA, STIP and TDA funding. The larger long-term projects such as the downtown transit center and new maintenance facility are considered financially unconstrained and will depend on the level of STIP and TDA funding available for these projects.

Bicycle and Pedestrian Projects

A variety of funding sources are available for non-motorized facility projects: TE, RSTP, TDA, and Safe Routes to Schools funding. Bicycle and pedestrian projects (with costs estimates available) listed in Appendix N will cost approximately $26 million dollars. TE revenues for the 20 year planning period are estimated at only $11.8 million. TDA funding is primarily used to finance transit operations; there are more stringent eligibility requirements for projects funded with Safe Routes to Schools grants and BTA grant funding is quite competitive. 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 incorporate improvements to non-motorized facilities into roadway rehabilitation projects.

Aviation Capital Improvement Projects

Airport capital improvements for all airports total $3.5 million for the first half of the 20 year planning period, while FAA, state CAAP revenue is estimated at total $4.2 million for the same period. Additional revenue for the local match to state and federal funding programs will be required. Projects will be implemented as funding becomes available.

TABLE 18: Regional Transportation Capital Improvement Revenue to Expenditure Comparison

All Figures in 1000s

Program	Fiscal Years 12/13-16/7	17/18-21/22	22/23-26/27	27/28-31/32	Total
Estimated Recurring Regional Revenues[1]					
Regional STIP/TE Revenues	$24,859	$25,435	$28,662	$32,747	**$111,703**
Highway Bridge Program Revenues	$7,803	$7,803	$8,459	$9,665	**$33,730**
Regional Surface Transportation Program Revenues	$2,365	$2,365	$2,564	$2,929	**$10,223**
Federal Transit Administration Capital Funding	$993	$1,340	$1,311	$1,687	**$5,331**
Total Revenue	**$36,021**	**$36,943**	**$40,996**	**$47,028**	**$160,988**
Estimated Expenditures					
Regional STIP Funded Projects[2]	$24,000	$24,000	$30,747	$30,747	$109,494
Local Bridge Projects	$6,864	$6,864	$12,089	$12,089	$37,904
Local Roadway Projects	$3,764	$3,764	$4,664	$4,664	$16,856
Non-Motorized/Transportation Enhancement Projects[3]	$430	$1,686	$1,686	$1,686	$5,488
Transit Capital Projects[2]	$764	$764	$2,018	$2,018	$5,564
Total Expenditures	**$35,822**	**$37,078**	**$51,204**	**$51,204**	**$175,307**
Balance Constrained Projects	**$199**	**-$134**	**-$10,208**	**-$4,176**	**-$14,319**
Unconstrained Projects					
Regional STIP Funded Projects					$333,145
Local Bridge Projects					$9,489
Local Road Projects					$18,851
Non-Motorized/Transportation Enhancement[3]					$26,493
Total Unconstrained Projects					**$387,977**
Balance Including Unconstrained Projects					**-$402,297**

Note 1: Excludes SHOPP projects, airport projects and competitive funding sources.

Note 2: Project cost estimates are unavailable for some projects.

Note 3: Additional funding may be available through BTA, SR2S and TDA. Project costs are unavailable for some large long-term projects.