



2018

Regional Transportation Plan & Sustainable Communities Strategy for the Shasta Region

Adopted October 9, 2018



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Table of Contents

List of Figures.....	8
List of Tables	10
Appendices	11
List of Charts.....	11
Executive Summary	12
Introduction.....	15
About SRTA	15
Purpose and Content of the Regional Transportation Plan	16
New Planning Requirements for 2018.....	16
Four-Year RTP Planning Cycle	17
Transportation Decision Makers	17
RTP Planning Process.....	19
Building Blocks of the RTP	20
Public Participation and Inter-Agency Coordination.....	22
RTP Implementation	24
State of the Region	27
Regional Overview.....	27
Trends and Challenges.....	28
Modal Assessment	47
Streets and Roads.....	48
Public Transportation	58
Active Transportation	62
Aviation	70
Rail	74
Freight movement	78
Regional Transportation Policy and Action Plan	83
Regional Vision and Policies	83
Performance Management	93
Legislative Background	93
2018-2038 Regional Performance Measures	95
Regional Target Setting	96
Sustainable Communities Strategy.....	102

Legislative Background	102
Regional Target Setting	102
Regional Blueprint Planning	103
SCS Development	104
2018 SCS Inputs and Assumptions	107
progress since adoption of the 2015 SCS	107
Results of the 2018 SCS	114
Potential strategies for further Reducing greenhouse gas emissions.....	114
SB 375 Compliance and Consistency Findings.....	118
Financial Element	123

List of Figures

Figure 1 - SRTA Planning Area	15
Figure 2 - New Regional Transportation Plan and Housing Element Update Cycle	17
Figure 3 - Shasta <i>FORWARD</i> >> Values & Priorities	20
Figure 4 - Shasta <i>FORWARD</i> >> Scenarios B and C	20
Figure 5 - Dana-to-Downtown trail connection.....	24
Figure 6 - Ways and Means, Summer 2017 edition.....	25
Figure 7 - Regional Context	27
Figure 8 - Distribution of population in the Shasta Region.....	28
Figure 9 - Disadvantaged Community Analysis.....	32
Figure 10 - Employees Per Square Mile in the Shasta Region	36
Figure 11 - Healthy Places Index (sample output)	37
Figure 12 - Antlers Bridge construction	40
Figure 13 - North State Freight Flows.....	45
Figure 14 - Shasta County Regionally Significant Corridors	49
Figure 15 - Winter weather-related travel delays on northbound Interstate 5 at Shasta Dam Boulevard	51
Figure 16 - Representation of Level of Service (LOS) for Multi-Lane Highways	52
Figure 17 - PM Peak Hour Traffic Volume in the South-Central Urban Region in 2035, without RTP Projects.....	53
Figure 18 - Dignity Health Connected Living Bus.....	58
Figure 19 - RABA Demand Response Bus	59
Figure 20 - RABA Bus with Bike Rack	59
Figure 21 - New buffered bike land on Quartz Hill Road near Caldwell Park.....	62
Figure 22 - Shasta County Bikeways (2018 GoShasta Regional Active Transportation Plan)	64
Figure 23 - Shasta County Pedestrian Facilities (2018 GoShasta Regional Active Transportation Plan)	65
Figure 24 - Crowley Gulch project pedestrian bridge	66
Figure 26 - Planned active transportation improvements on Ashby Road in the city of Shasta Lake.....	66
Figure 25 - Caldwell Jr. Bike Park	66
Figure 27 - Green painted bike lanes on Hartnell Avenue in city of Redding	67
Figure 28 - Planned improvements on Victor Avenue in the city of Redding.....	67
Figure 29 - Wayfinding signage on Old 99 Trail in city of Anderson	67
Figure 30 - Conceptual GoShasta Regional Active Transportation Trunk Route network.....	69
Figure 32 - Fall River Mills Airport	71
Figure 31 - Benton Airpark	71
Figure 33 - Amtrak passenger rail service in Downtown Redding	74
Figure 34 - North State Passenger and Freight Rail Network	75
Figure 35 - Truck Freight Connections and Times to External Markets	79
Figure 36 - Freight assets and activities in the Shasta Region	80

Figure 37 - RABA demand response public transportation	95
Figure 38 - Bicycle commuter navigates Downtown Redding streets.....	96
Figure 39 - View of Mt. Shasta from Redding on a clear day.....	97
Figure 40 - Shasta <i>FORWARD</i> >> Values & Priorities	103
Figure 41 - Shasta <i>FORWARD</i> >> Scenarios B and C	103
Figure 42 - Summary of the Five 'D' Factors.....	104
Figure 43 - Strategic Growth Areas (SGAs)	106
Figure 44 - The first of two new mixed-use redevelopment projects begins in Downtown Redding.....	107
Figure 45 - Planned improvements on Continental Street (top) and Market Street Alley (bottom) in Redding	112
Figure 46 - Plug-in electric vehicle charging station in Redding	113
Figure 47 - Regional Transportation Projects Completed by Year 2035.....	115
Figure 48 - Forecast Residential Land Use Growth by Year 2035.....	116
Figure 49 - Forecast Employment (Jobs) Growth by Year 2035	117
Figure 50 - Resource Areas and Farmland to be impacted by 2015 RTP	119
Figure 51 - Location of Constrained Operations Projects	131
Figure 52 - Location of Constrained Capacity Projects	139
Figure 53 - Location of Constrained Interchange Projects.....	153
Figure 54 - Location of Constrained Safety Projects	163
Figure 55 - Location of Constrained ITS Projects	173
Figure 56 - Location of Constrained Ramp Meter Projects.....	185
Figure 57 - Location of Constrained Bridge Projects.....	189
Figure 58 - Location of Constrained Active Transportation Projects.....	201

List of Tables

Table 1 - SCS Daily GHG Emissions per Capita	13
Table 2 - SRTA 2016 Public Participation Plan Requirements for the RTP.....	22
Table 3 - Regional Planning & Programming Processes.....	23
Table 4 - Redding Urban Area Population Density Comparison to Similar-sized Urban Areas	28
Table 5 - Housing Stock Description.....	30
Table 8 - Change in Jobs by Industry Sector in Shasta County (2002-2015)	35
Table 9 - Connections Between Transportation and Community Health Outcomes in the Shasta Region	38
Table 10 - Underlying Factors That Impact Health Outcomes in the Shasta Region.....	39
Table 6 - Total Daily VMT and VMT/Capita*	40
Table 11 - Approximate Value of Commodities Produced in the North State in 2010 (\$ millions)	45
Table 12 - Pavement Condition Index Classification	49
Table 13 - Bridge Status by Jurisdiction	50
Table 14 - Miles of Roads at LOS 'D', 'E', or 'F' in 2035	54
Table 15 - Miles of Bikeways and Trails.....	63
Table 16 - Redding Passenger Air Service	70
Table 17 - FAST ACT FEDERAL PERFORMANCE GOALS.....	93
Table 18 - 2018 RTP and SCS Performance Measures	98
Table 19 - 2018 State Transportation Improvement Program (STIP) Performance Measures.....	100
Table 20 - MAP-21 Performance Measures	101
Table 21 - SCS Daily GHG Emissions per Capita	114
Table 23 - 2014-19 Shasta County RHNA (by income category) Per California HCD.....	118
Table 22 - Housing Forecasts for Shasta County.....	118
Table 24 - Financial Projection: Streets and Roads	125
Table 25 - Financial Projection: Active Transportation	125
Table 26 - Financial Projection: Transit.....	127
Table 27 - Financial Projection: Aviation.....	129
Table 28 - Unfunded or Deferred Maintenance	129
Table 29 - Summary of Projects: Operations and Rehabilitation	133
Table 30 - Summary of Projects: Regional Capacity.....	141
Table 31 - Summary of Projects: Shasta County Capacity.....	143
Table 32 - Summary of Projects: Redding Capacity	145
Table 33 - Summary of Projects: Anderson Capacity	149
Table 34 - Summary of Projects: City of Shasta Lake Capacity and Safety.....	151
Table 35 - Summary of Projects: Shasta County Interchanges.....	155
Table 36 - Summary of Projects: Redding Interchanges	157
Table 37 - Summary of Projects: Anderson Interchanges.....	159
Table 38 - Summary of Projects: City of Shasta Lake Interchanges.....	161
Table 39 - Summary of Projects: Shasta County Safety	165

Table 40 - Summary of Projects: Redding Safety	167
Table 41 - Summary of Projects: Anderson Safety.....	171
Table 42 - Summary of Projects: Caltrans ITS	175
Table 43 - Summary of Projects: Regional ITS.....	181
Table 44 - Summary of Projects: Caltrans Ramp Meters	187
Table 45 - Summary of Projects: Caltrans Bridges	191
Table 46 - Summary of Projects: Shasta County Bridges	193
Table 47 - Summary of Projects: Redding Bridges	199
Table 48 - Summary of Projects: Caltrans Active Transportation.....	203
Table 49 - Summary of Projects: Shasta County Active Transportation	205
Table 50 - Summary of Projects: Redding Active Transportation	215
Table 51 - Summary of Projects: Anderson Active Transportation	231
Table 52 - Summary of Projects: City of Shasta Lake Active Transportation	235
Table 53 - Summary of Projects: Regional Active Transportation/Recreation	241
Table 54 - Summary of Projects: Regional Transit.....	245
Table 55 - Summary of Projects: Native American Roads.....	247
Table 56 - Summary of Projects: Regional Transit Operations.....	247
Table 57 - Summary of Projects: Regional Aviation	249

List of Charts

Chart 1 - 2018-2040 Funding Availability by Mode (in \$1,000s).....	14
Chart 2 - Plan Funded and Unfunded by Activity (in \$1,000s).....	14
Chart 3 - Shasta County Population Growth (2010-2016)* and Forecast Growth (2016-2040)	29
Chart 4 - Age Distribution of Shasta County Population (2010)	30
Chart 5 - Average Work Commute Travel Time (By Time and Percentage).....	41
Chart 6 - Estimated Average Trip Length (Year 2035)	41
Chart 7 - Percentage of Commute Trips by Time of Day (2012-16 ACS)	42
Chart 8 - Means of Transportation to Work (2012-16 ACS).....	43
Chart 9 - Maintained Road Miles by Jurisdiction (2015).....	48
Chart 10 - Regional Speed Trends - AM/PM Peak Hour (Congested) and Daily Average (Free Flow).....	55
Chart 11 - 2018-2040 Funding Availability by Mode (in \$1,000s)	124
Chart 12 - Plan Funded and Unfunded by Activity (in \$1,000s).....	124

Appendices

- Appendix 1 - Shasta County Forecast Assumptions Memorandum
- Appendix 2 - SCS Technical Methodology
- Appendix 3 - Regional Transportation Plan Checklist

Executive Summary



Shasta Regional Transportation Agency (SRTA) is the federally-designated metropolitan planning organization (MPO) and state-designated regional transportation planning agency (RTPA) for the Shasta County region. SRTA is required by federal law (Title CFR 450.300, Subpart C) and state law (CA Government Code Section 65080) to prepare and adopt a comprehensive regional transportation plan (RTP) covering a minimum 20 year planning horizon. The RTP for Shasta County is updated every four years.

The purpose of the RTP is to “encourage and promote the safe and efficient management, operations, and development of a regional intermodal transportation system that, when linked with appropriate land use planning, will serve the mobility needs of goods and people” (California Transportation Commission 2017 RTP Guidelines).

RTP planning is an iterative process, building upon previous efforts and taking into account recent accomplishments and an ever-evolving demographic, political, economic, and environmental setting. RTP planning is also a collaborative process involving the general public and various federal, state, tribal, regional, and local agency partners. The RTP is implemented by way of shorter-term transportation improvement programs and the annual overall work program.

This RTP addresses all modes of travel used by people and for goods and freight movement, including: streets and roads, public transit, bicycle and pedestrian, aviation, and rail. Existing and projected mobility needs in each category are described, as well as recent accomplishments and priority projects and programs during the 2018-2022 RTP planning cycle.

The 2018 RTP is guided by the following overarching regional vision and goal statements:

Regional Vision

SRTA will meet the region’s evolving mobility needs and generally avoid traffic congestion and other growth-related pitfalls commonly observed in larger metropolitan regions. This will be accomplished through strategic and timely transportation system improvements; the integration of travel options into a seamless network; and collaborative effort toward transportation-efficient land use patterns where it is most beneficial. As appropriate, SRTA will utilize its unique regional role and resources to lead transformative projects aligned with the regional vision.

SRTA acknowledges that its efforts are intertwined with regional prosperity, environmental quality, community health and well-being, and various other elements that collectively define quality of life, and will use regional transportation planning, policy-making, and project programming to lead the development of projects that yield multiple community benefits. Planning and decision-making processes shall engage partner agencies, community stakeholders, and the public, and be transparent and responsive to documented community values and priorities.

Goal #1: Optimize the use of existing interregional and regionally significant roadways to prolong functionality and maximize return-on-investment.

Goal #2: Strategically increase capacity on interregional and regionally significant roadways to keep people and freight moving effectively and efficiently.

Goal #3: Provide an integrated, context-appropriate range of practical transportation choices.

Goal #4: Create people-centered communities that support public safety, health, and well-being

Goal #5: Strengthen regional economic competitiveness for long-term prosperity.

Goal #6: Promote public access, awareness, and action in planning and decision-making processes.

Goal #7: Practice and promote environmental and natural resource stewardship.

Each regional goal is accompanied by objectives and implementation strategies. Performance goals are used to gauge the effectiveness of the RTP and individual projects, policies, and programs in meeting the regional vision and goals.

The 2018 RTP includes an updated Sustainable Communities Strategy (SCS) as required by California Senate Bill 375, the Sustainable Communities and Climate Protection Act of 2008 (SB 375). Pursuant to this law, the California Air Resources Board (ARB) has established emission reduction targets for California's eighteen MPO regions for the year 2020 and 2035. Shasta County was assigned a 0% per capita change when compared to the 2005 baseline year.

The 2018 RTP meets these targets as a result of integrated land use, housing, and transportation planning. The SCS features seven Strategic Growth Areas (SGAs) where various strategies are focused to reduce per capita vehicle miles traveled and associated greenhouse gas emissions. Strategies are intended to increase population and employment density within SGAs and to provide a range of practical mobility alternatives.

On March 22, 2018, ARB revised the Shasta Region's target to -4% for both 2020 and 2035. Revised targets will apply to the 2022 RTP update cycle.

The RTP is subject to the California Environmental Quality Act (CEQA), meaning that SRTA must prepare an Environmental Impact Report (EIR). Various transportation control measures (TCMs) and mitigation activities were identified through this comprehensive technical and outreach process.

Finally, this RTP includes a financial element that documents projected available transportation revenues and cost estimates for needed transportation projects, services, and maintenance activities. A total of \$2,206,628,000 is forecast to be available during the 2018-2040 time period. The fiscally-constrained project list includes \$1,628,754,000 in transportation projects and services. An additional \$2,296,263,000 in transportation needs were identified but exceed forecast revenues needed to deliver these projects within the 20-year planning horizon of this RTP.

Table 1 - SCS Daily GHG Emissions per Capita

Year	Vehicle Miles Traveled Per Capita ¹	% Change in Vehicle Miles Traveled ¹	SB 375 CO ₂ Emissions Per Capita ²	CO ₂ Emissions Target for the Shasta Region	Regional CO ₂ Emissions as a result of 2018 RTP
2005 Baseline	26.18 miles	-	21.31 lbs	-	-
2020	26.84 miles	0.0%	20.46 lbs	0% over 2005	-3.97%
2035	28.44 miles	+6.3%	21.06 lbs	0% over 2005	-1.16%

¹ Results generated by ShastaSIM regional travel demand model for SB 375 trip and vehicle types only

² Results generated by California ARB Emissions FACTors (EMFAC) 2014 model

Chart 1 - 2018-2040 Funding Availability by Mode (in \$1,000s)

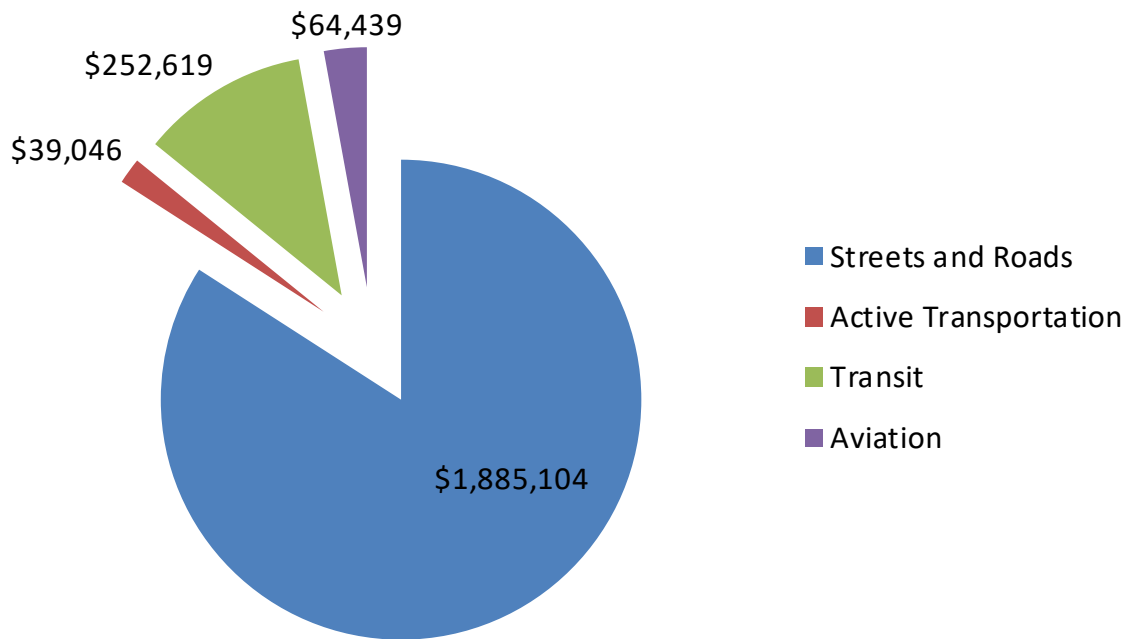
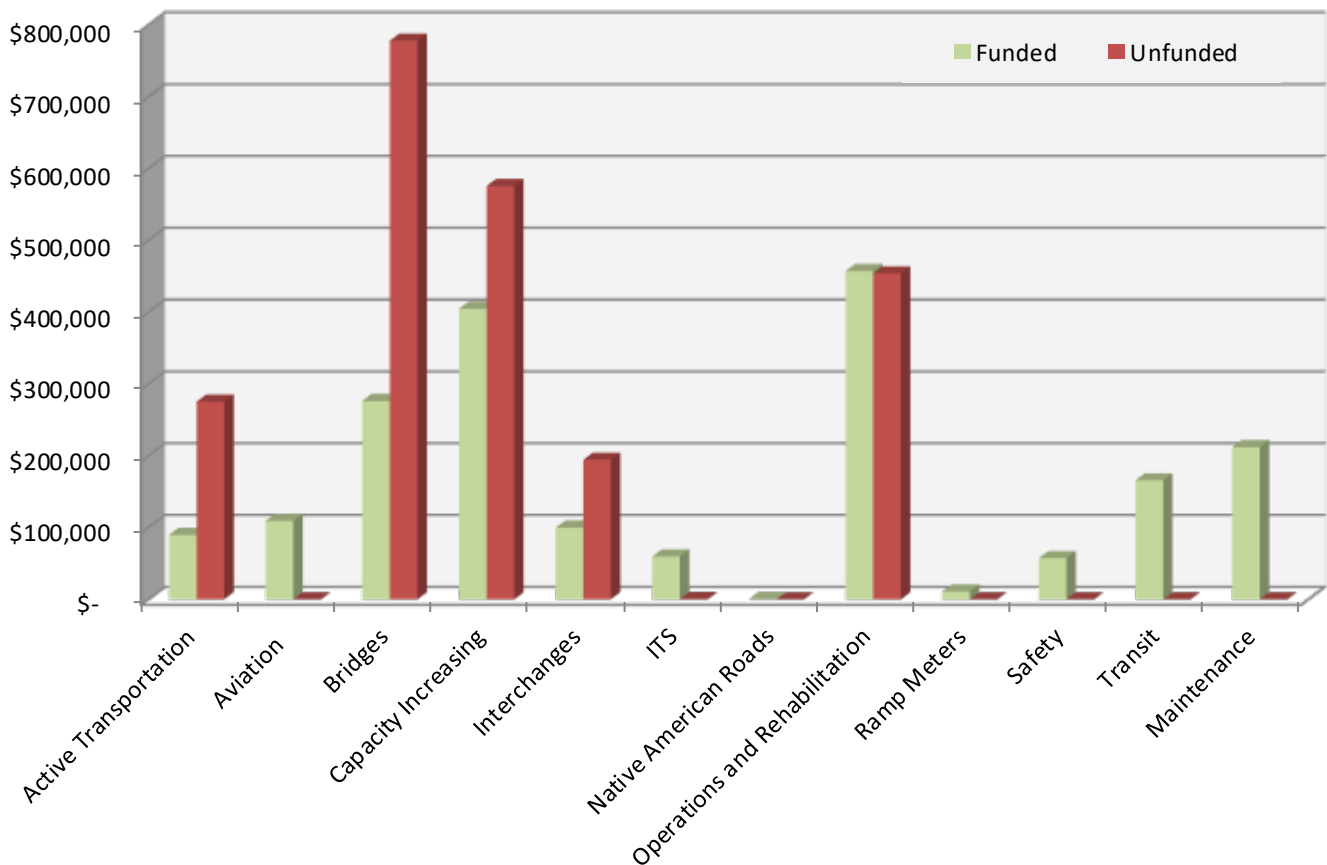


Chart 2 - Plan Funded and Unfunded by Activity (in \$1,000s)



Introduction



ABOUT SRTA

Shasta Regional Transportation Agency (SRTA) is the federally-designated metropolitan planning organization (MPO) and state-designated regional transportation planning agency (RTPA) for the Shasta County region. SRTA studies the region's transportation needs, identifies and programs transportation infrastructure improvements, and administers over \$24 million annually in state and federal funds for the planning, construction, operation, and maintenance of transportation infrastructure throughout Shasta County.

Precisely when, where, and in what manner these resources are allocated impacts personal mobility, environmental quality, economic opportunity, public health, public safety, and various other factors that collectively define quality of life. These choices affect both near- and long-term outcomes. Such benefits and foreclosed opportunities must be explored and weighed against community values as part of the planning process.

In the end, transportation planning, policy, and investment isn't so much a clear choice as it is a balancing act between diverse community needs, priorities, and expectations. Transportation planning has become increasingly attentive to its far-reaching impacts, shifting away from a narrow focus on relieving traffic congestion and toward personal mobility, destination accessibility and a more holistic and community-minded set of objectives.

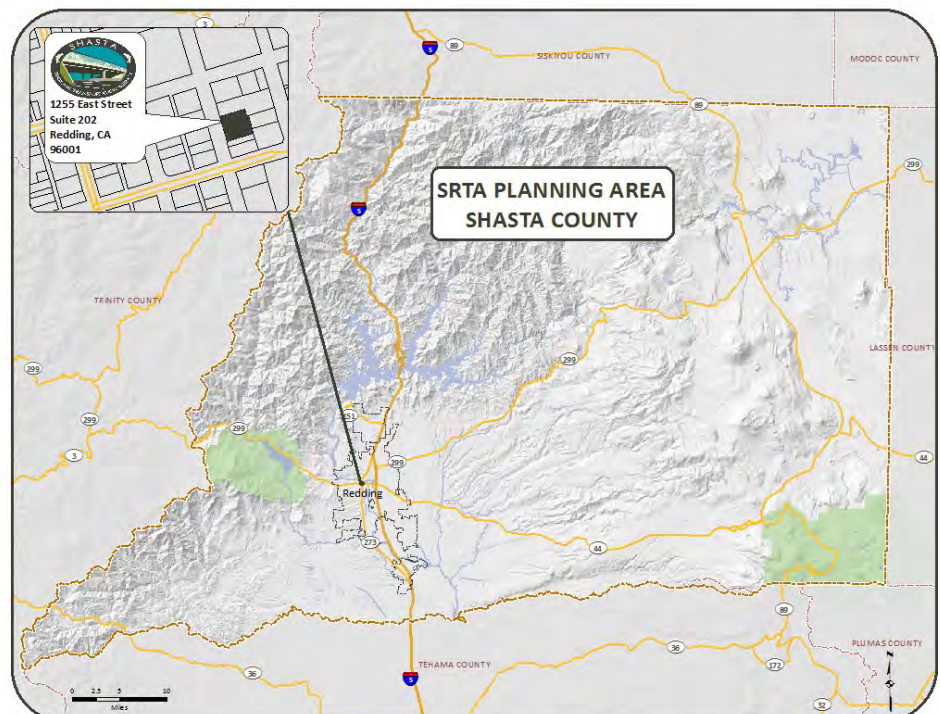


Figure 1 - SRTA Planning Area

SRTA's role in the region is unique because it shapes communities solely through investments and technical support. And because SRTA represents and regards all jurisdictions equally, SRTA provides a true regional forum for local government to work together with state and federal partners to meet regional needs – transportation or otherwise.

SRTA is governed by a seven-member board of directors, comprised of elected officials representing the City of Redding, City of Shasta Lake, City of Anderson, Shasta County, and Redding Area Bus Authority (RABA).

It is the SRTA Board of Directors' role to establish transportation policy and direct transportation investments on behalf of the region. Additional information regarding SRTA, the board of directors, staff, and regional plans and programs is available online at www.srta.ca.gov.

PURPOSE AND CONTENT OF THE REGIONAL TRANSPORTATION PLAN

As the designated MPO and RTPA for Shasta County, SRTA is required by federal law (Title 23 CFR 450.300, Subpart C) and state law (CA Government Code section 65080) to prepare and adopt a comprehensive, long range (minimum 20 years) Regional Transportation Plan (RTP). The RTP is updated every four years, adopted by the regional government, and submitted to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) for review and comment.

The purpose of an RTP is “to encourage and promote the safe and efficient management, operation, and development of a regional intermodal transportation system that, when linked with appropriate land use planning, will serve the mobility needs of goods and people.” With limited exceptions, transportation projects having any portion of state and federal funds must be included in an adopted RTP.

Key elements of the Shasta County RTP include:

- A regional vision and goals, supported by a program of short and long-range objectives and course of action;

- An evaluation of regional mobility needs in light of population, housing, and job forecasts; and
- A list of specific transportation improvements, anticipated construction timeline, and a funding plan.

An environmental impact report (EIR) is prepared alongside the RTP in accordance with the California Environmental Quality Act (CEQA, Public Resource Code 21000) and National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.).

NEW PLANNING REQUIREMENTS FOR 2018

Guidelines regarding the preparation of the RTP are routinely updated to reflect evolving state and federal needs and priorities. New state and federal laws, policies, and programs may also affect the content and focus of the RTP. Such changes are usually an evolution of existing practice and easily incorporated.

Occasionally, a more comprehensive retooling of the RTP is required. Recent legislation affecting the 2018 RTP cycle includes the following:

- **Fixing America's Surface Transportation (FAST) Act** – Signed into law December 4, 2015, the FAST Act continues the federal emphasis on performance-based transportation planning and programming. MPOs are required to incorporate performance goals, measures, and targets into the process of identifying needed transportation improvements and in the project selection process - after the federal government has adopted new rules. At the time of this update, only the safety rulemaking was adopted.
- **Senate Bill 743** – Signed into California law in 2013, SB 743 refocuses the environmental impacts of transportation away from vehicle delay and roadway level-of-services (LOS) to vehicle miles traveled (VMT). It is anticipated that regulatory language changes to CEQA will be adopted in 2018 by the California Natural Resources Agency and that statewide implementation will occur in 2020.
- **Senate Bill 150 (Allen, 2017)** – On or before September 1, 2018, and every four years

¹California Transportation Commission, 2010 California Regional Transportation Plan Guidelines

thereafter to align with target setting, the California Air Resources Board (ARB) must prepare a report that assesses progress made by each metropolitan planning organizations in meeting respective regional greenhouse gas emission reduction targets set by the ARB. The report shall include data-supported metrics for the those strategies utilized to meet the targets.

To help regions collectively support achievement of state goals, the report includes a discussion of best practices and the challenges faced by the metropolitan planning organizations in meeting the targets, including the effect of state policies and funding.

FOUR-YEAR RTP PLANNING CYCLE

The RTP must be consistent with local housing forecasts. Amendments to California state law as a result of Senate Bill 375 (Steinberg, Chapter 728, Statutes of 2009) allow local agencies to update their housing elements every eight years to correspond to every other four year RTP update.

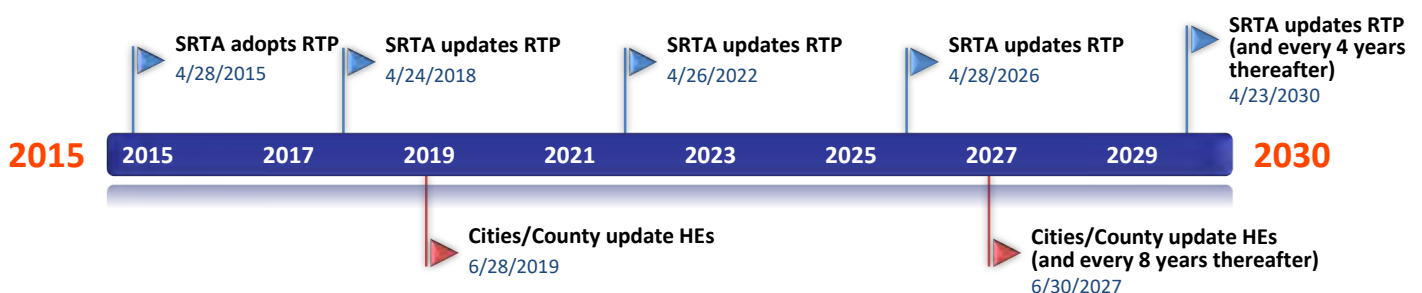
As a federal air quality attainment region, SRTA is only required to update the RTP every five years. The RTP and local housing elements have shared a five year cycle; however, the timing of these processes was not conducive to coordination and consistency. In consultation and coordination with local agencies, SRTA elected to move to a four year RTP cycle commencing in 2018. Local agencies in turn moved to an eight year housing element cycle. The new schedule is shown in Figure 2.

TRANSPORTATION DECISION MAKERS

The planning, financing, construction, operation, and maintenance of the regional transportation system is accomplished by decision makers at all levels of government. Each partner has distinct responsibilities that must be coordinated to ensure long-term system performance. In general, these responsibilities can be divided into the following levels:

- **Federal** – The President and Congress create national transportation policies and allocate funds to states through the federal transportation bill (MAP-21) and discretionary programs. Funding is administered by the United States Department of Transportation (U.S. DOT), which is comprised of multiple divisions. Caltrans and SRTA work primarily with regional offices of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).
- **State** – The California State Legislature institutes state policies resulting in transportation spending priorities and program initiatives. Each year the Governor and Legislature appropriate transportation funds through the annual budget. The California Transportation Commission (CTC) recommends policies and funding to the Legislature, provides project oversight for the state, adopts state transportation programs, and approves funding for transportation projects nominated by Caltrans and SRTA. Caltrans is responsible for planning, designing, constructing, and maintaining the state highway system. Caltrans nominates projects for funding to the CTC through the Interregional Transportation Improvement Program (ITIP).

Figure 2 - New Regional Transportation Plan and Housing Element Update Cycle



- **Tribal Government** – Tribal governments establish plans and policies for tribal lands and prepare transportation projects by way of tribal transportation improvement programs.
- **Regional** – SRTA is responsible for planning, coordinating, and administering state and federal transportation funds for the region. In addition to the 20-year RTP, SRTA develops an annual overall work program (OWP) and nominates projects for funding to the CTC through the Regional Transportation Improvement Program (RTIP).
- **Local** – Local governments have authority over roadways and land uses within their respective jurisdictional boundary. Local governments nominate all projects potentially having a state or federal funding component to SRTA for inclusion in the RTP.

RTP Planning Process



Regional transportation planning is an iterative process. Each RTP update builds upon previous efforts while taking into account recent accomplishments and an ever-evolving demographic, political, economic, and environmental setting. Between RTP update cycles, a variety of special studies focused on specific corridors, modes, or policy areas serve to expand the regional base of knowledge and data that undergirds a meaningful and effective planning process.

RTP planning is also collaborative process requiring ongoing communication and consensus building between all levels of government, community stakeholders, and the general public. RTP planning includes a program of public hearings, interagency notifications, and review and comment periods; however, the collaborative nature of the process does not stop and start with each planning cycle.

This section outlines the contributing components of this RTP and the general process whereby the community and affected stakeholders may participate in the development of the plan. A brief overview of how the RTP is implemented through shorter-term transportation improvement and work programs is likewise provided.

BUILDING BLOCKS OF THE RTP

SRTA prepares regional growth and travel demand forecasts and undertakes various planning studies and data analysis that feed into the RTP. The following efforts were accomplished since the 2010 RTP update and were instrumental in development of the RTP:

- ShastaSIM Activity-Based Travel Demand Model** – Adopted concurrently with the 2018 RTP, ShastaSIM v1.2 is a state-of-the-art modeling tool used to evaluate the impacts of future growth and development on the transportation network and the effectiveness of transportation policies and projects in addressing resultant travel demands. Transportation system performance measures are calculated by way of the model and, through additional post-processing of modeling outputs, vehicle emissions reports are produced. T More information is available at: <https://tinyurl.com/yc483mh5>.
- SRTA Board of Directors Regional Priorities** – As elected officials in direct and frequent contact with the public on a wide range of issues, and having a general understanding of the regulatory and fiscal realities of transportation funding, SRTA board members are uniquely qualified to consider the challenges, opportunities, and alternatives facing the region. The SRTA Board of Directors approves the regional vision, goals, objectives, and strategies found in this RTP as well as annual regional planning priorities.

- ShastaFORWARD>> Regional Blueprint** – Completed in March 2010, this long-range regional growth and development visioning process included a comprehensive, in-depth community values & priorities assessment (Figure 3). Despite being eight years old, results of the ShastaFORWARD>> process are still very much relevant given the depth of community participation and the limited growth and development occurring during the great recession.

A range of future growth and development scenarios were generated and a preferred regional growth vision was selected. Over 2,500 residents (one out of every 60 adults in Shasta County) actively contributed to the process through participation on focus groups and by way of community workshops, and surveys. More information is available at: <https://tinyurl.com/p4wcerc>.



Figure 4 - ShastaFORWARD>> Scenarios B and C



Figure 3 - ShastaFORWARD>> Values & Priorities

- North State Transportation for Economic Development Study** – Completed in October 2013, this sixteen-county study calculated the economic impact of planned transportation improvements; evaluated the degree of alignment between transportation and economic planning; and identified opportunities to coordinate transportation and economic development initiatives to enhance economic activity and regional prosperity. More information is available at: <https://tinyurl.com/y9ds8x3a>.
- Transit Needs Assessment & Unmet Transit Need findings** – Each year SRTA evaluates the adequacy of the region's public transportation services in meeting the community's mobility needs. In

making this determination, SRTA looks at the size and location of identifiable groups likely to be transit dependent or transit disadvantaged (e.g. elderly, disabled, and persons of limited means), evaluates new or modified services that might address identified needs, and finds that these needs are either reasonable or not reasonable to meet based on performance criteria adopted by the SRTA Board of Directors. More information is available at: <https://tinyurl.com/pdgwfgf>.

- **Disadvantaged Communities Assessment** – The California Office of Environmental Health Hazard Assessment (OEHHA) and California Environmental Protection Agency (EPA) partnered to develop CalEnviroScreen - a data-driven mapping tool used to identify California communities with high exposure to environmental pollutants and concentrations of individuals that are especially vulnerable to pollution's effects.

SRTA augments CalEnviroScreen results with a regionally-developed disadvantaged communities analysis (see State of the Region for additional detail). This tool looks at the degree to which all segments of the population – regardless of income, race, age, disability, or other distinguishing characteristic – enjoy equitable access to mobility. When combined, these analyses point to areas that would most benefit from the application of targeted policies, programs, and investments that support community mobility, health, and well-being.

- **Shasta Coordinated Transportation Plan** – The purpose of this plan is to improve coordination among the region's various service providers; address the transportation needs of older adults, persons with disabilities, and low-income individuals; and establish priorities that inform funding decisions for specialized transportation services. The planning process engages representatives of public, private, and non-profit transportation and human services providers as well as the general public. It was last updated in February 2017, and includes eight focused strategies for the next five years. Details of the plan are available at: <https://tinyurl.com/y7rpc9my>.
- **GoShasta Regional Active Transportation Plan** – Prepared in close collaboration with local partner agencies and community stakeholders

representing the interest of bicyclists and pedestrians, GoShasta was formally approved by the SRTA Board of Directors February 2018. It is a visionary but actionable plan designed to strategically guide the development of projects and programs that support walking and cycling, including connections to public transportation. A list of priority projects and complimentary programs are recommended for further planning, funding, and implementation. Details of the plan are available at: www.srta.ca.gov/286/GoShasta.

- **Coordination of Consolidated Transportation Service Agency (CTSA) Services Study** – A CTSA coordinates transportation services between transit providers and may operate safety-net transit services for elderly and disabled individuals who are generally outside of the Redding Area Bus Authority (RABA) service area. This study, completed in December 2014, presented a range of activities designed to improve transit provider communication, cooperation, coordination, and consolidation. Performance measures were also identified in order to assess the effectiveness of CTSA services and improvements over time. More information is available at: <http://www.srta.ca.gov/207/CTSA-Study>.
- **Transit Technology Plan** – Completed October 2014, this plan was commissioned to investigate the potential of transit technology to improve the volume, diversity and quality of transit data needed for the planning and operation of responsive public transit services. RABA's current use of technology was documented and prospective new technologies were discussed, including their costs and practical benefits. More information is available at: <https://tinyurl.com/y9blvmmj>.
- **Shasta County ITS Strategic Deployment Plan** – Completed October 2013, this effort reviewed existing traffic data collection systems and processes; documented the real-world applications and practical limitations of Intelligent Transportation Systems (ITS) technologies used by regional stakeholders; presented a range of available data collection tools; and recommended deployment strategies and approaches. More information is available at: <https://tinyurl.com/ybz2y3lf>.

Table 2 - SRTA 2016 Public Participation Plan Requirements for the RTP

1.	2.	3.	4.	5.	6.
Comprehensive project scope and timeline reviewed by advisory committee(s) and distributed. Includes early and continuing opportunities to comment.	Numerous targeted workshops w/advisory committees and stakeholder groups. SRTA contact database used to notify public of opportunities to participate.	Opportunities to participate via the Website. Draft documents posted online for public review and comment.	Inter-governmental consultation with affected agencies.	Draft plan released for 55-day public review. At least one formal public hearing before SRTA Board of Directors. Additional five day public review if final RTP differs significantly from draft RTP and/or raises new issues.	Adoption by the SRTA Board of Directors at a public meeting.

(Procedures above may not occur exclusively or in the order shown)

PUBLIC PARTICIPATION AND INTER-AGENCY COORDINATION

In addition to public outreach associated with each of the RTP building blocks described above, the RTP planning process includes various opportunities for the general public and public agencies to participate in developing the RTP document itself. The details of this process can be found in SRTA's most recently adopted public participation plan available at: www.srta.ca.gov/166/Public-Participation.

PARTICIPATION AND PARTNERSHIP PLAN (TITLE VI)

Adopted in June 2016, the Shasta Participation and Partnership Plan (Title VI) details the policies and strategies used to ensure that every citizen has the opportunity to evaluate and comment on the agency's plans, programs, and projects, including the RTP. Measures of effectiveness for procedures and strategies are routinely reviewed as part of the the Public Participation Plan (Title VI) update process to ensure a full and open public participation.

Consistent with the steps outlined in Table 2, SRTA provided opportunities for all affected public agencies, community organizations, and the general public to participate in the 2018 RTP planning process. Specific outreach activities included, but are not limited to the following:

- SRTA Board of Directors meetings - Regular progress reports and interim deliverables were widely distributed and public presentations were made during regularly scheduled SRTA Board of Directors meetings. As appropriate, these meetings included formal public hearings.
- City council and county board meetings - Presentations were provided during public meetings of local governing bodies.
- Web postings - All interim deliverables and draft documents were posted on the the agency's website and interactive web-tools and social media used to maximize public access, awareness, and opportunity to contribute.
- Public notices - Announcement regarding the RTP and accompanying Environmental Impact Report (EIR) were published in local newspapers. Social media was also utilized to "get the word out."

INTERAGENCY AND INTERGOVERNMENTAL COORDINATION AND PLANNING CONSISTENCY

The [2017 Regional Transportation Plan Guidelines for Metropolitan Planning Organizations](#) prepared by the California Transportation Commission encourages consistency between all levels of government having an interest and purview in the region.

SRTA is the lead agency tasked with development of the RTP; however, the end product is the result of extensive discussion, data exchange, and consensus-building among federal, state, tribal, and local agency partners. The details of this process are described

in the aforementioned Public Participation Plan. Wherever appropriate, SRTA considers and seeks to integrate the needs and priorities of all partners and entities that are materially invested or otherwise impacted by regional transportation policy and investment strategies.

More than a simple courtesy, interagency coordination and planning concurrency reduces redundancies, leverages resources, reinforces implementation activities, and ultimately improves performance outcomes. To ensure planning consistency, SRTA considers a broad range of plans and programs, including but not limited to:

- Local and regional plans and programs:
 - General plans (housing, land use and circulation elements in particular)
 - Capital improvement plans
 - Short range transit plan
 - City and county active transportation plans
 - Parks, trails, and open space plans
 - Regional air quality plan
 - Regional climate action plan
 - Interregional transportation corridor plans
 - Natural environment, habitat, and water resource plans
 - Comprehensive Economic Development Strategy
- State plans and initiatives:
 - California Transportation Plan 2040
 - Interregional Transportation Strategic Plan
 - California Freight Mobility Plan
 - California Sustainable Freight Action Plan
 - California State Rail Plan

- California Aviation System Plan
- California Statewide Transit Strategic Plan
- California Interregional Blueprint
- Smart Mobility Framework
- Complete Streets Implementation Action Plan
- California Essential Habitat Connectivity Plan
- Regional Advance Mitigation Planning and Statewide Advance Mitigation Initiative
- Caltrans Climate Action Program
- Strategic Highway Safety Program
- California Transportation Infrastructure Priorities: Vision and Interim Recommendations
- California State Wildlife Action Plan

The 2018 RTP was compared to the above plans and, as is specifically called out in the CTC's 2017 RTP Guidelines for MPOs, the 2015 California State Wildlife Action Plan (SWAP). Several transportation-related challenges were identified in the SWAP, including barriers to fish migration from road construction; the introduction and movement of invasive plants when adding to or improving the region's roadways; harm to sensitive wildlife habitat; fragmentation of wildlife habitats; public health impacts as a result of increase particulate matter; and the effects of rural roads on wildlife migratory patterns.

Notices were sent to local, state, and federal agencies (including federal land management agencies (FMLA)) having an interest and purview in the region, including those responsible for land use, natural resources, environmental protection, conservation, and historic preservation.

Table 3 - Regional Planning & Programming Processes

Document	Planning Horizon	Contents	Responsible Agency	Update Requirements
RTP	20+ year	Vision, goals and projects for region	MPO/RTPAs	Every 4 years
FTIP	4 years	Federally-funded and regionally significant transportation projects	MPOs	Every 2 years
OWP	1 year	Planning studies and activities	MPO/RTPAs	Annually
TIP	5 years	Transportation Projects	RTPAs	Every 2 years
ITIP	5 years	Transportation Projects	Caltrans	Every 2 years
STIP	5 years	Transportation Projects	CTC	Every 2 years
SHOPP	4 years	Maintenance, Rehabilitation, Operation, and Safety Projects	Caltrans	Every 2 years

The region's two federally recognized Native American Tribal Governments (Pit River Tribe and Redding Rancheria) were also advised throughout the planning process and directly invited to participate in the identification of transportation project needs, the development of regional policies, and review of draft documents.



Figure 5 - Dana-to-Downtown trail connection

RTP IMPLEMENTATION

As a long-range, planning-level document, the RTP communicates regional issues and outlines a general course direction. A transportation investment strategy is presented with accompanying project cost estimates.

It is important to note, that projects called out in the RTP have not yet been fully prepared, vetted, and programmed funding for construction. Rather, near-term projects are readied for implementation by way of short-term transportation improvement programs and annual work programs as outlined in Table 3.

The **State Transportation Improvement Program (STIP)** is a five-year capital improvement program of transportation projects on and off the California State Highway System. The California Transportation Commission (CTC) updates the STIP biennially, adding two new years to prior programming commitments.

The programming cycle begins with the release of a transportation fund estimate in July of odd-numbered years, followed by California Transportation Commission (CTC) adoption of the fund estimate in August. The fund estimate serves to identify the amount of new funds available for the programming of transportation projects.

Once the fund estimate is adopted, Caltrans and the regional transportation planning agencies prepare transportation improvement programs for submittal by December 15th of odd numbered years. Caltrans prepares the Interregional Transportation Improvement Program (ITIP) for their share (25%) of funding and regional agencies prepare Regional Transportation Improvement Programs (RTIPs) for their respective share (75%). State and regional agencies must work together to leverage each other's funds for greatest benefit.

In addition, Caltrans also biennially prepares a four-year **State Highway Operation and Protection Program (SHOPP)** that prioritizes maintenance, rehabilitation, operation and safety projects throughout the state. Caltrans must complete the SHOPP by March of even-numbered years. The SHOPP is based on the Ten Year SHOPP that Caltrans also must prepare. The SHOPP informs the funding distribution of funds in the State Transportation Improvement Program (STIP).

The California Transportation Commission (CTC) considers the RTIP, ITIP, and SHOPP when preparing the STIP. The STIP becomes the source document upon which California transportation monies are programmed and funded. This includes state transportation funds as well as federal transportation funds administered by the state on behalf of the federal government.

The STIP informs the **Federal Transportation Improvement Program (FTIP)**. Any transportation project having a federal funding component or that is considered regionally significant (regardless of the funding source) must be included in the FTIP. The FTIP is a four-year program of projects that is updated every two years by each region. Agencies' requests for, and subsequent obligations of, federal transportation monies cannot exceed the amount provided for within the FTIP. All regional FTIPs are combined under the **Federal Statewide Transportation Improvement Program (FSTIP)**.

For additional information and detail regarding the programming of transportation funds, see the latest version of 'Transportation Funding in California' prepared by Caltrans Division of Transportation Planning, available online at: http://www.dot.ca.gov/hq/tpp/offices/eab/fundchrt_files/Transportation_Funding_in_CA_New.pdf

WAYS AND MEANS RTP PROGRESS REPORT

The first Ways and Means report was introduced in 2017. In addition to serving as an outreach tool, it is timed to immediately precede each four-year RTP planning process. It functions as a report card on current RTP progress as well as a preview of new and upcoming projects and programs being considered for the upcoming RTP.

At the end of each modal section of this RTP is a list of short-term projects, programs, and initiatives that SRTA aims to accomplish or make meaningful progress on during the four year RTP planning cycle. Each new Ways and Means report will provide an accounting of these priorities - i.e. whether high-priority activities were completed, currently underway, or deferred.

The next Ways and Means report will also account for the effectiveness of SRTA's SCS strategies. Successes and challenges faced in meeting the targets will be discussed, including the effect of state policies and funding. Findings and accompanying data will be provided to ARB to support the evaluation of best practices and challenges as required by SB 150 (Allen, 2017).

Figure 6 - Ways and Means, Summer 2017 edition



WAYS AND MEANS
THE HOW AND WHERE OF MOBILITY IN THE SHASTA REGION
SUMMER 2017

10 WAYS TO GET INVOLVED...

Great communities don't just happen – we need you! SRTA offers a variety of tools and opportunities that welcome public participation at any level – from a simple question to partnering with SRTA.

- 1. COMMENT DURING A SRTA BOARD OF DIRECTORS MEETING** – Meetings are held five times a year. Sign up online at sрта.ca.gov/AgendaCenter to receive advance notice of upcoming meetings and agendas. Speaker request cards are available at the meeting.
- 2. PARTICIPATE IN AN ONLINE FORUM** – Visit the 'Community Voice' on SRTA's website at sрта.ca.gov/CommunityVoice to join in. Choose an existing topic, or introduce a new topic for discussion.
- 3. PROVIDE WRITTEN OR ONLINE COMMENTS** – Letters may be addressed to 1255 East Street, Suite 202, Redding, CA 96001, or visit our website to submit an online comment at: sрта.ca.gov/RequestTracker.aspx
- 4. LIKE US ON FACEBOOK AND FOLLOW US ON TWITTER** – Get regular updates on SRTA happenings via social media.
- 5. SUBSCRIBE TO SRTA NEWS AND PUBLIC NOTICES** – Sign up at sрта.ca.gov/list.aspx to receive an email or text message whenever a topic of interest comes up.
- 6. ATTEND A PUBLIC WORKSHOP** – Public workshops and outreach events are held in association with all planning processes. Register online to receive news and calendar invites via email or text message: sрта.ca.gov/list.aspx
- 7. REQUEST A PRESENTATION** – We'd love to visit your organization or interest group to discuss SRTA programs, learn more about your needs, and answer questions.
- 8. JOIN A TECHNICAL ADVISORY COMMITTEE** – SRTA maintains a general technical advisory committee and ad-hoc committees associated with specific planning projects. Public members are welcome.
- 9. TAKE OUR COMMUNITY SURVEY** – We're always interested in community feedback. Tell us how we're doing by taking a quick online survey: sрта.ca.gov/309/Community-Survey
- 10. CALL OR VISIT THE SRTA OFFICE** – A staff directory is available online at sрта.ca.gov/Directory.aspx. Not sure who to talk to? Call 530-262-6190 and we'll get you pointed in the right direction. Or visit our new offices located at 1255 East Street, Suite 202, Redding.



State of the Region



REGIONAL OVERVIEW

The county of Shasta is located at the geographic center of California's sixteen-county North State (see Figure 4). Shasta County encompasses 3,847 square miles, of which 72 square miles (1.9%) are bodies of water. Elevations range from 420 feet at the valley floor to Lassen Peak, standing 10,457 feet tall in Lassen Volcanic National Park.

Shasta County contains four distinct geographic regions. Western Shasta County is mountainous, collecting high precipitation amounts from up sloping Pacific storms. Several creeks draining these mountains provide riparian habitat and fish spawning grounds. The northern part of Shasta County is in the Siskiyou mountain range, which is recognized for its biological diversity and global botanical significance. The eastern part of Shasta County contains the convergence of the Sierra Nevada range and the Cascades. This region is dominated by oak woodlands at the lower elevations to mixed conifer forests at higher elevations. Significant amounts of snowfall feed numerous creeks and the Sacramento River. The central part of Shasta County contains the upper end of the Sacramento Valley. Growth and development, along with associated linear structures like roads, canals, and power lines, dominate this area.



Figure 7 - Regional Context

Prior to becoming a county in 1850, the area was home to five American Indian Tribes: the Achomawi, Atsugewi, Okwanuchu, Wintu and the Yana. In the mid- to late-1800s, the region's abundant natural resources, including gold and timber, drew legions of settlers in search of economic opportunity and a better life. The arrival of the railroad in 1872, construction of Shasta Dam between 1938 and 1945, and the completion of Interstate 5 in the early 1960s further fueled the growth and development of Shasta County.

Today, Shasta County is the second-most populous county in California's sixteen-county North State (just behind Butte County) while Redding is the largest urbanized population center north of Sacramento. The region serves as a hub for retail and service industries and is a popular destination for outdoor tourism and retirement. It is home to a number of iconic attractions, including the Sundial Bridge, Turtle Bay Exploration Park, Lassen Volcanic National Park, Whiskeytown National Recreation Area, Shasta Lake, and McArthur-Burney Falls Memorial State Park.

TRENDS AND CHALLENGES

The following factors present challenges and opportunities affecting the timing, location, type, and scale of investments in transportation infrastructure and services. Such investments can be reactive (i.e. a response to demand as it occurs) or decision makers may seek to proactively shape the future of the region in accordance with community values and priorities, fiscal sustainability and other objectives.

POPULATION AND GROWTH

As of the 2016 American Community Survey (ACS) 5-year estimates, Shasta County is home to 179,228 residents. Much of Shasta County is unpopulated or rural, having an average of 47 persons per square mile compared to an average of 239 persons per square mile statewide.

Table 4 - Redding Urban Area Population Density Comparison to Similar-sized Urban Areas

Urban Area	Pop (2016)	Pop/ Square Mile	Pop/ Acre
Redding, CA	145,050	2,002	2
Grants Pass, OR	69,938	2,544	4
Medford, OR	171,994	2,647	4.1
Reno, NV/CA	356,280	2,159	3.4
Carson City, NV	58,079	2,510	3.9
Chico, CA	183,931	3,806	5.9
Yuba City, CA	128,312	3,286	5.2
Santa Rosa, CA	406,897	4,142	6.5
Woodland, CA	44,442	3,643	5.7
Davis, CA	57,694	4,077	6.3

Figure 8 - Distribution of population in the Shasta Region

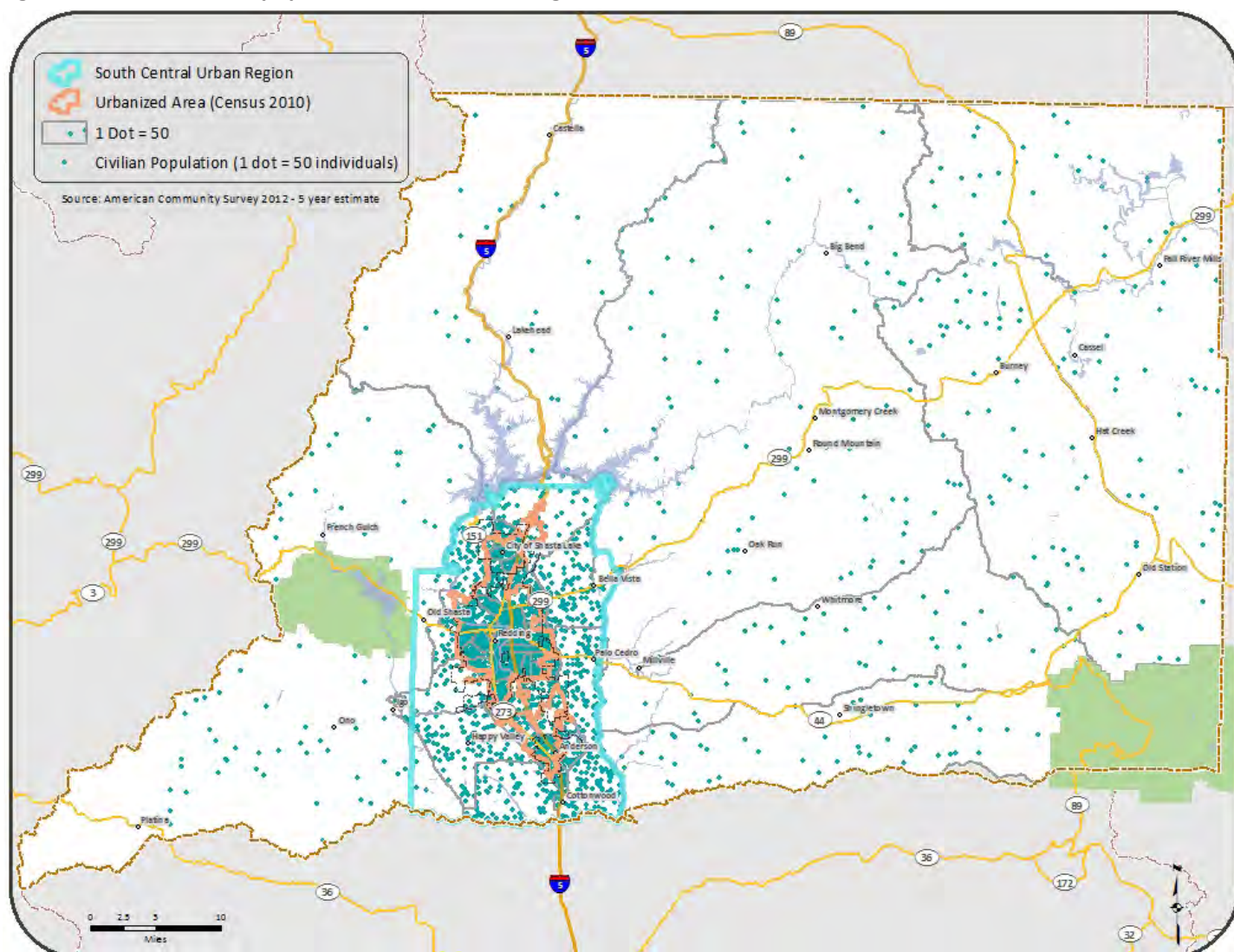
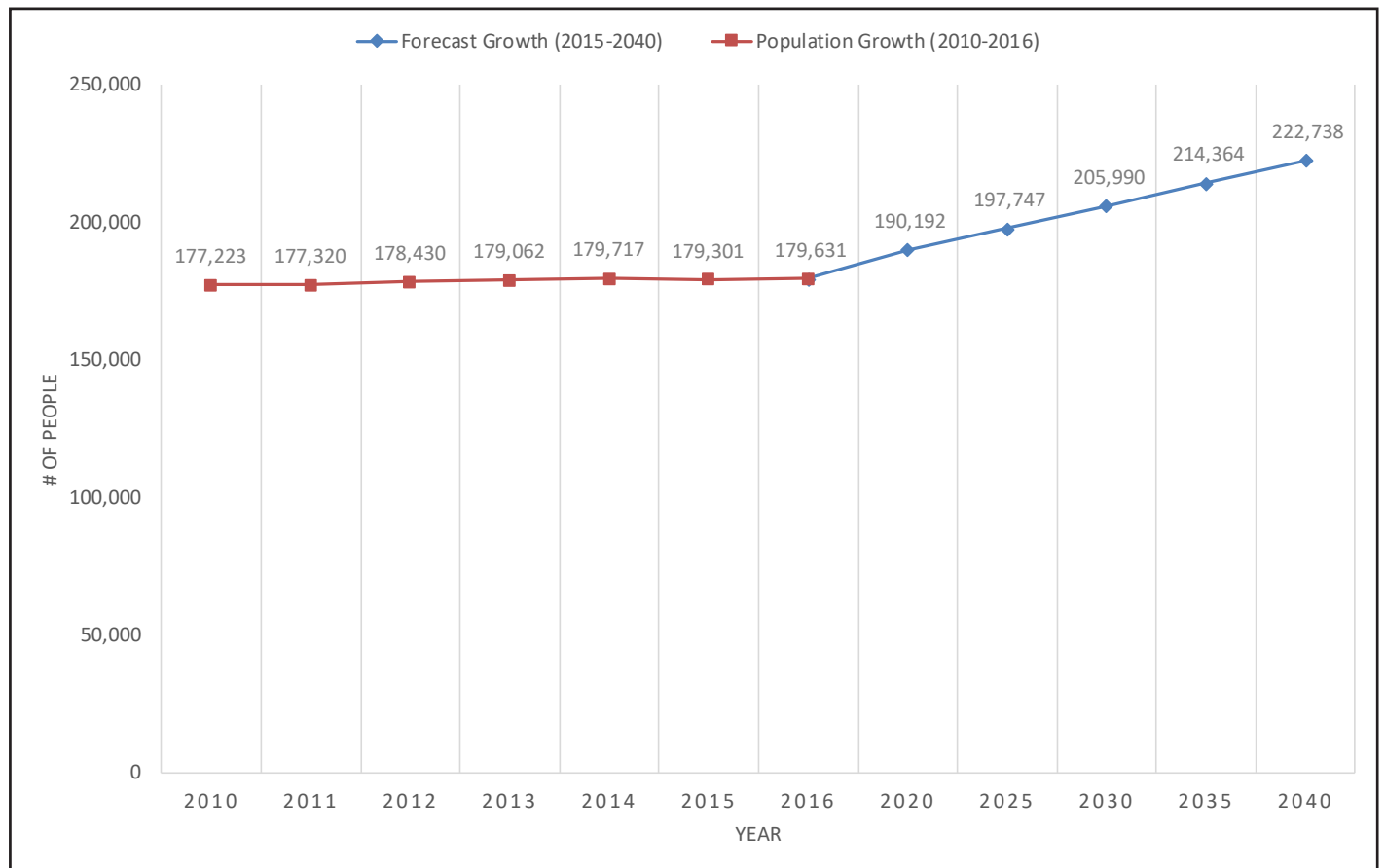


Chart 3 - Shasta County Population Growth (2010-2016)* and Forecast Growth (2016-2040)



Annual Estimates of Resident Population: April 1, 2010 to July 1, 2016. Source: U.S. Census Bureau, Population Division, May 2017

The Redding Urban Area, as defined by the U.S. Census and generally falling along the south county Interstate 5 corridor, is more densely populated. It represents about 2% of the county's total land area, yet is home to over 80% of the county's population.

Even the Redding Urban Area is largely rural and suburban in nature, having 2,002 persons per square mile (2 persons per acre). Among comparable Urban Areas, the Redding Urban Area has the most dispersed population (see Table 4).

Average annual growth rate for Shasta County between 2000 and 2010 was approximately 0.9%, falling to <0.3% in more recent years (US Census Bureau). Population forecasts estimate future growth at a rate of 0.8% per year, with a population of 214,364 persons for the Shasta County region by year 2035 (*Appendix 1 - Shasta County Forecast Assumptions Memorandum, November 8, 2011*).

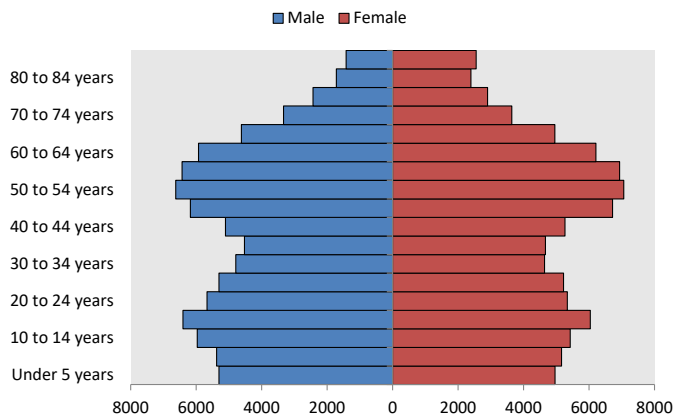
DEMOGRAPHICS

Shasta County is on the leading edge of the trend towards an aging population. At 42.9 years of age, the 2015 median will be 6.7 years above the statewide median age of 36.2 years. By 2040, Shasta County's median will reach 48.1, compared to the state's median of 40.4, or 7.7 years older.

Examining the differential growth rates projected for each age group reveals a graying population. Fifty-one percent of the County's increase in population between 2015 and 2040 will be in the age group of 65 and older. This is an 87 percent increase in this age group between 2015 and 2040 and 2.6 times the growth rate of the County population as a whole.

The number of people between the age of 25 and 64 are expected to increase by about 27 percent between 2015 and 2040. This age group is considered the prime market for larger single-family detached homes because they are most likely to be raising a

Chart 4 - Age Distribution of Shasta County Population (2010)



family. The number of people aged 0 to 19 years will, however, only increase by about 10 percent during the same time frame, suggesting a trend of smaller families and households with no children.

Shasta County is less diverse than the state. In 2013, 81.4% of Shasta County residents identified themselves as white alone (not Hispanic or Latino), compared to 39% statewide. Minority populations include Black and African American (0.9%), American Indian (2.1%), Asian (2.6%), Pacific Islander (0.2%), two or more races (3.4%), and Hispanic or Latino (8.4%).

Shasta County lags behind the state in higher education. Statewide in 2016, 32% of adults had a bachelor's degree or higher, compared to 20.1% in Shasta County (ACS 2012-2016). Although a number of degree programs are available through extension of Chico State University in Redding and the privately-owned Simpson College, the absence of a university hampers workforce training and business attraction in comparison to nearby urbanized areas, including Chico, CA (home to Chico State University), Davis, CA (home to University of California Davis), Arcata-Eureka, CA (home to Humboldt State University), and Medford-Ashland, OR (home to Southern Oregon University).

Shasta County does, however, have a higher number of high school graduates (90% versus 82.1% in all of California); those having some college but no degree (32.9% versus 21.7% in all of California); and Associates degree (11.5% versus 7.8% in all of California). Shasta College, a two-year junior college, plays a key role these statistics, providing a broad range of educational opportunities at its main campus as well as the Downtown Redding Health Sciences Division.

Shasta County is less prosperous than the state. The median household income is substantially below the state average. For the five-year time period (ACS 2012-2016), Shasta County median household income was \$45,582 compared to the state's average of \$63,783. About 17.5% of Shasta County residents are below the poverty level versus 15.8% statewide.

The overall cost-of-living in Shasta County, however, is substantially less than the state average. Based on the cost-of-living index, where a score of 100 represents the nationwide average, Shasta County is 7% above the national average whereas California as a whole is 52% above the national average. In effect, household income goes a lot farther in Shasta County than in many other California regions.

HOUSING

There were 77,942 housing units in Shasta County in 2016. Shasta County residents are more likely to own their home compared to California as a whole. Among occupied units, 62.1% are owner-occupied and 37.9% are renter-occupied compared to California at 54.1% and 45.9% respectively.

Table 5 - Housing Stock Description

Housing Type	Shasta	CA
Detached single family	70.4%	58.1%
Attached single family	2.1%	6.9%
2 multi-family	2.4%	2.5%
3-4 multi-family	5.3%	5.6%
5-9 multi-family	3.1%	6.2%
10+ multi-family	4.9%	17%
Mobile home or other	11.5%	3.7%

There are fewer persons per household in Shasta County – 2.54 compared to the statewide average of 2.95. Shasta County has far more detached single family dwellings units and substantially less higher density multi-family dwelling units (see Table 5).

The median value of owner-occupied units in Shasta County, at \$223,500, is approximately one-half of the \$409,300 median value for California. However, median monthly rent in Shasta County, at \$945,

³Sperling's (www.bestplaces.net)

⁴U.S. Census Bureau, 2012-2016 American Community Survey 5-year estimate.

is only 37% less than the \$1,297 median rent for California. Nearly 40% of owner-occupied households spend more than 30% of their household income on mortgage payments, whereas an alarming 59% for renter-occupied households.

A household's rent or mortgage payment is the primary, but not sole determining factor in housing affordability. Transportation costs are the second-largest budget item for most households, accounting for about 17 percent of annual income on average. In recent years, housing affordability has expanded to include the idea of 'location affordability'. This method takes into account household factors (e.g. household income, persons per household, commuters per household and median rent/mortgage) as well as mobility factors (e.g. community walkability, median commute distance, access to public transportation, and access to employment). Simply put, those who live in location-efficient neighborhoods (e.g. more compact with convenient access to jobs, schools, shopping, and services) that are served by a range of viable mobility options (e.g. high quality public transportation, complete and connected bicycle and pedestrian facilities, and rideshare services) tend to have lower transportation costs.

Furthermore, in such areas where alternative travel modes are practical and appealing options for everyday trips, households are more adaptable and resilient when faced with a change in income or ambulatory mobility; the additional demands of children in the home; or other challenges that accompany different life stages.

When housing and transportation costs are considered together, consumers are able to make more informed decisions about where to live to fit their income and desired lifestyle. As planners and policy makers strive to manage infrastructure costs, alleviate traffic congestion, and achieve equitable economic opportunity and prosperity within their jurisdiction, a comprehensive approach that includes coordinated land use, housing, and transportation investment strategies is needed.

Two sources provide data for Shasta County: the 'Housing + Transportation Affordability Index' (a product of the Center for Neighborhood Technology); and the 'Location Affordability Portal' (a collaborative

project by the U.S. Department of Housing and Urban Development, U.S. Department of Transportation, and the U.S. Environmental Protection Agency).

DISADVANTAGED COMMUNITIES

As part of the 2018 RTP public outreach process and extensive data analyses, SRTA seeks to understand the needs of those that are traditionally underserved by the transportation system. In other words, whether all segments of the population – regardless of income, race, age, disability, or other distinguishing characteristic – enjoy fair access to basic needs, including but not limited to mobility.

Historically, many California communities have inadvertently impeded or otherwise reinforced the geography of 'haves' and 'have-nots'. Although resource inequality is a systemic issue, opportunities do exist within the scope of the RTP and the purview of regional government to empower every individual who chooses to participate in society and works to raise their standard of living - including those with limited means or capacity to do so.

An expanded awareness and understanding of the burdens and benefits associated with prospective transportation policies, programs, and investments aids in the evaluation of alternatives and supports informed decision making. Actions range from 'do no harm' to targeted programs and investment strategies that address observed inequities.

For the purposes of this RTP, 'disadvantaged communities' are defined as areas that, according to statistical data, have a markedly higher share of individuals challenged by the cumulative impact of:

- Poverty and unemployment
- Lack of mobility options, including access to automobile, active transportation, and public transportation
- Housing and transportation cost burden
- Single parent households
- Young and elderly
- Educational attainment
- Linguistic isolation
- Minority status

The predominant data for defining a low resource community was derived from the American Community Survey (ACS) five-year estimates for the years 2012 through 2016 and GIS data representing

the non-motorized network and transit network for the region. Each indicator was divided into to classes of data based on natural breaks in the data and then manually editing the break point to the nearest multiplier of five. The indicators and break points are described below:

- Poverty - Census block groups where 45% or more of population lives at 200% or less of the federal poverty level based on 2016 5-year ACS data
- Unemployed - Census block groups where 20% or more of the labor force is unemployed based on 2016 5-year ACS data
- Minority - Census block groups where 20% or more of population is either Hispanic or not White based on 2016 5 year ACS data
- Single Parents - Census block groups where 20% or more of families are single parent families based on 2016 5 year ACS data
- Age (Elderly) - Census block groups where 10% or more of population is aged 75 or older based on 2016 5 year ACS data
- Age (Young) - Census block groups where 20% or more of population is under age 18 based on 2016 5 year ACS data
- Education Attainment - Census block groups where 15% or more of population aged 25 and older have less than a high school diploma based on 2016 5 year ACS data
- Linguistic Isolation - Census block groups where 5% or more of households have no one over 14 who speaks English only or speaks English very well based on 2016 5 year ACS data
- Limited Mobility (Vehicle Access) - Census block groups where 40% or more of housing units with 0- 1 vehicles based on 2016 5 year ACS data
- Limited Mobility (Active Transportation) - Smaller block groups without bike and pedestrian facilities access
- Limited Mobility (Transit) - Smaller block groups without transit access
- Housing Cost Burden - Census block groups where 20% or more of occupied housing units pay more than 50% of household income in housing costs based on 2016 5 year ACS data
- Median Household Income (MHI for California = \$63,783 from 2016 5 year ACS data) - 80% or less than the statewide median household income (80% of \$63,783 = \$51,026)

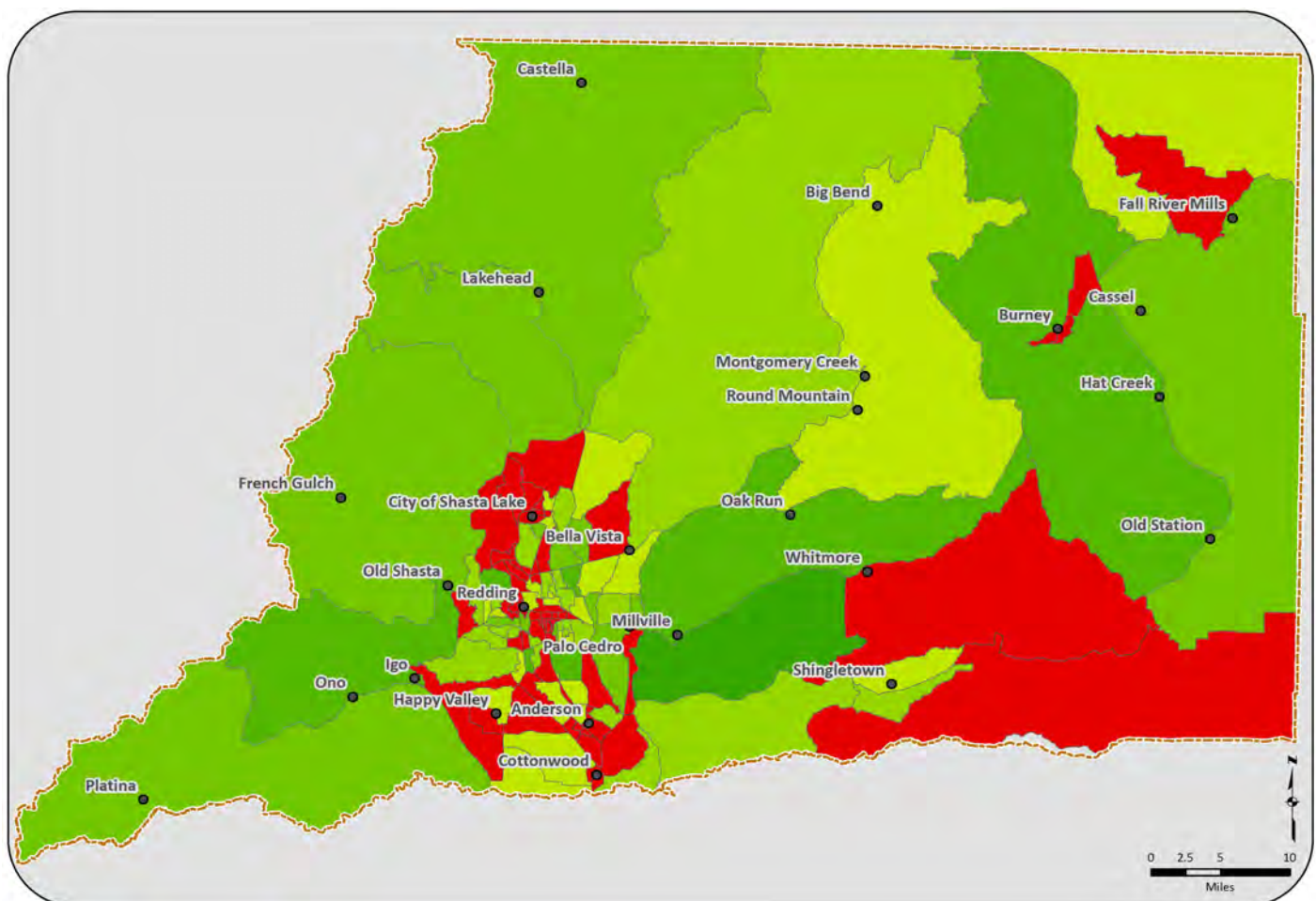


Figure 9 - Disadvantaged Community Analysis

The analysis created 13 total indicators and combined all indicators equally. Any block group that was flagged as low resource by five or more indicators was considered a low resource community (See Figure 6). Future planned enhancements to this analysis includes the mapping of essential services in relationship to disadvantaged communities.

In considering the above analysis, it must be recognized that transportation policies, programs, and investments play a limited and often indirect role in expanding opportunity in low-resource neighborhoods. Indeed, there are many contributing factors and complexities beyond the reach of transportation initiatives alone to affect. With this in mind, SRTA works proactively with its partner agencies and a broad range of community-based organizations to engender a more holistic and balanced approach.

Within the agency's scope as a transportation planning agency, SRTA has the greatest ability to directly impact or otherwise influence social equity through projects, programs, grant-seeking and other efforts that enhance the five 'D' factors correlated with mobility and known to affect travel behavior. More specifically:

- **Density** – the number of persons, jobs or dwellings in a given area;
- **Diversity of land use** – the number and variety of different land uses in a given area;
- **Design of streets and development** – the average block size, number of intersections, sidewalk coverage, building setbacks, street widths, pedestrian crossings, and other factors that result in a more human-scale environment;
- **Destination accessibility** – the number of common destinations (e.g. job sites, schools, shopping, etc) within a given travel time; and
- **Distance to transit** – the distance from home or work to the nearest transit stop by the shortest street route.

Due to limited resources and the number and degree of factors required to affect travel choice, these efforts are best focused in areas having disadvantaged populations and that fall within or adjacent to Strategic Growth Areas identified in the Sustainable Communities Strategy portion of this 2018 RTP.

ECONOMY

Transportation is more than a convenience; it enables economic activity by connecting people, goods, services, and resources together for gainful employment and commerce. In addition, responsive, flexible, and affordable transportation leads to increased productivity, income, property values, and tax revenues. Targeted transportation strategies and initiatives may also be used to lessen economic disparities within the region.

The following description of Shasta County's economy is not intended to be comprehensive or replace other, more detailed analysis, but rather to:

1. Provide a general economic context for the RTP; and
2. Highlight the most salient opportunities to support economic development through regional transportation policies, programs, and investment strategies.

Conventional economic analyses, wherein a variety of indicators are used to understand current conditions and future prospects, have been complicated by the volatile market conditions associated with the great recession and drawn-out, uneven economic recovery. This is further complicated by the lag-time in available data. In an unsteady economy, data and trends are less reliable. Traditional methods must be supplanted in part by boots-on-the-ground assessments from local business and finance leaders working in the everyday trenches of economic development.

The following overview is based on the best available data, recent analysis, and direct consultation with economic development professionals in and around the region.

Historic Economy

Shasta County's economy has historically been dominated by singular industries. In earlier years this included mining, forest products, and other natural resource extraction industries. Although still a relevant component of the North State economy, these industries are cyclical in nature and now represent only a fraction of their peak productivity achieved decades ago. Such industries are not expected to return to former levels due to resource depletion, regulatory controls, and various other factors.

The arrival of the railroad in 1872 and Interstate Highway System in 1966 helped fuel the economic development aspirations of their day by connecting people and goods to larger markets. Meanwhile, the construction of Shasta Dam from 1938 to 1945 and sporadic booms in the construction industry served the economy for a time but were not sustainable.

On the waning end of long-standing industries and economic boom periods, many jobs have been backfilled with those in retail, hospitality, and other lower wage industries. To create a more robust and resilient economy, core industries must be buoyed up in combination with the ongoing cultivation of new industries toward a more diversified economy.

Current Economy

What the region lacks in comparison to larger metropolitan regions (e.g. a large urban marketplace, intermodal transportation infrastructure, and a public four-year public university), are partly offset by secondary economic attractors.

Shasta County offers an appealing quality of life, including well-regarded public and charter schools, minimal traffic congestion and pollution, and a wealth of outdoor recreational activities. In addition lower land values, utility costs, and taxes improve businesses' bottom line and allow more rapid growth. Shasta County's location and built environment offer the following strategic advantages:

- Located at the geographic center and transportation crossroads of the sixteen-county North State – Shasta County serves as a hub for a range of professional services for consumers across a large, multi-county area.
- Access to major markets – Shasta County is bisected by Interstate 5, an international trade corridor spanning the entire west coast from the Mexican to Canadian border. In addition to linking all west coast ports, Interstate 5 allows for reliable one-day delivery to major markets (most notably Sacramento and San Francisco Bay Area). State Route 299/44 further connects Shasta County to California's North Coast to the west and Reno, Nevada to the east.
- Access to shovel-ready building sites – Shasta County has invested heavily in preparing a number of commercial and industrial sites with access to air, truck, and rail transportation. Notable

examples include the Stillwater Business Park located in Redding and industrial lands located in Anderson at Deschutes Road and Interstate-5.

The Shasta Region is unique in California in that it is an 'island' metropolitan area surrounded by rural counties. As such, the Shasta Region is a net importer of 2,367 jobs. The county of Tehama is the largest contributor of in-commuting workers (3,213 or 5.8% of the county's workforce), followed by the county of Trinity (1,489 or 2.7%). The top destination counties for county of Shasta out-commuting workers are the county of Tehama (2,195 or 4.1% of residents) and the county of Butte (1,513 or 2.9%).

Labor Market Profile and Industry Sectors

According to analysis published by the Northern Rural Training and Employment Consortium (NoRTEC) in 2016, top industry sectors in the Shasta Region by employment are Health Care and Social Assistance (13,475 jobs) and Government (13,400 jobs).

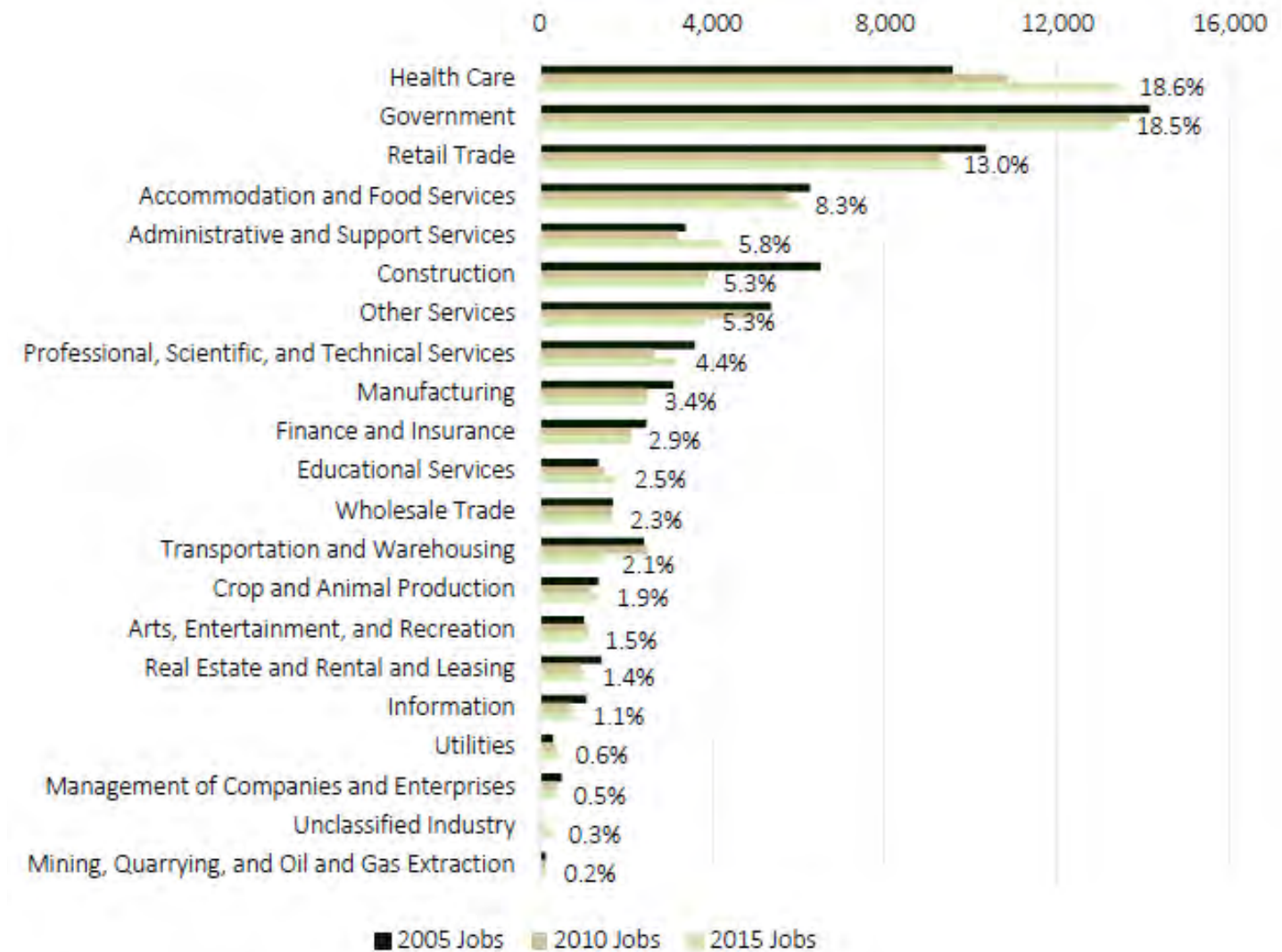
The following industry sectors are economically vital to the region, have experienced employment growth, are projected to grow through 2020, and/or tend to be concentrated within the region. Each industry has unique mobility and freight needs.

- Health Care - Health Care is the largest employment sector within the county, adding the greatest number of new jobs (2,609) since 2010, and is projected to add another 2,169 new jobs through 2020. Of the top ten high demand occupations within the county, eight are within the Health Care sector.

Health care-related transportation needs and focus areas include:

- Demand response (paratransit) and fixed-route public transportation for access to medical appointments;
- Intercity bus from surrounding rural counties to Redding and from Redding to Sacramento for access to specialized health care; and
- Dignity Health Connected Living, the designated Consolidated Transportation Services Agency (CTSA) under contract with SRTA, provides transportation to meal programs, adult day care, and other services that promote the physical, social, and spiritual health of seniors and disadvantaged families.

Table 8 - Change in Jobs by Industry Sector in Shasta County (2002-2015)



Source: Northern Rural Training and Employment Consortium (NoRTEC), Shasta County Labor Market Profile and Industry/Sector Analysis, December 2016.

- Manufacturing** - Key subsectors include Sawmills and Wood Preservation; Cement and Concrete Product Manufacturing; Other Nonmetallic Mineral Product Manufacturing; Architectural and Structural Metals Manufacturing; Miscellaneous Manufacturing; and Navigational, Measuring, Electromedical, and Control Instruments Manufacturing. These six subsectors each employ at least 100 within the county. The greatest growth in the number of jobs through 2020 is projected to be within Architectural and Structural Metals Manufacturing; Bakeries and Tortilla Manufacturing; Cement and Concrete Product Manufacturing; and Miscellaneous Manufacturing.

These industries rely on timely, cost-effective, and reliability freight movement options. Manufacturing related transportation needs include a combination of low-cost and time-sensitive freight options, including truck, rail, and air transport. Focus areas include:

- Congestion/bottleneck relief;
- More effective management of exceptional events such as weather-related closures, network maintenance and repair, and collisions;
- Intermodal and freight consolidation facilities;
- Access to industrial parks and rural agriculture and natural resource production areas.

- **Agriculture** - The Agriculture sector has experienced job growth since 2010, but is projected to remain flat through 2020. The majority of employment is found within Crop Production and Logging. Although total agricultural production in the Shasta Region is relatively modest, several industries were identified through the Far-Northern California Food Hub Study & Agricultural Industry Cluster Assessment based on a unique market advantages. These include wild rice, strawberry bare root plants, and organic vegetable production.

Because agriculture consists mainly of seasonal, high volume commodities, producers and distributors rely heavily on regional transportation systems to move products to market in a timely and efficient manner. Consolidating the transport of agricultural products is challenging because the origins of agricultural products are geographically dispersed and many products are perishable and therefore extremely time-sensitive. Moreover, agricultural products are typically low-value commodities on a cost-per-unit of volume or weight basis. Producers must compete against

higher value commodities when accessing open market transport services. Or, as is the case with many specialty agriculture products, shipments are small and irregular. Accordingly, producers often supply their own transport or utilize a handful of

- **Tourism** - The Tourism sector falls across several business categories including Hotels and Restaurants; Travel Agencies and Tour Operators; Arts, Entertainment and Recreation; and Sightseeing Transportation. Within the county, the largest subsectors include Restaurants and Other Eating Places; Traveler Accommodation; Other Amusement and Recreation Industries. All are projected to grow through 2020.

Tourism in and around the Shasta Region has historically focused on outdoor recreation, but continues to broaden into arts and entertainment. Popular destinations and events include Turtle Bay Exploration Park, Sundial Bridge, Cascade Theater, Kool April Nights. In 2017, California Arts Council selected Redding as one of fourteen California Cultural Districts.

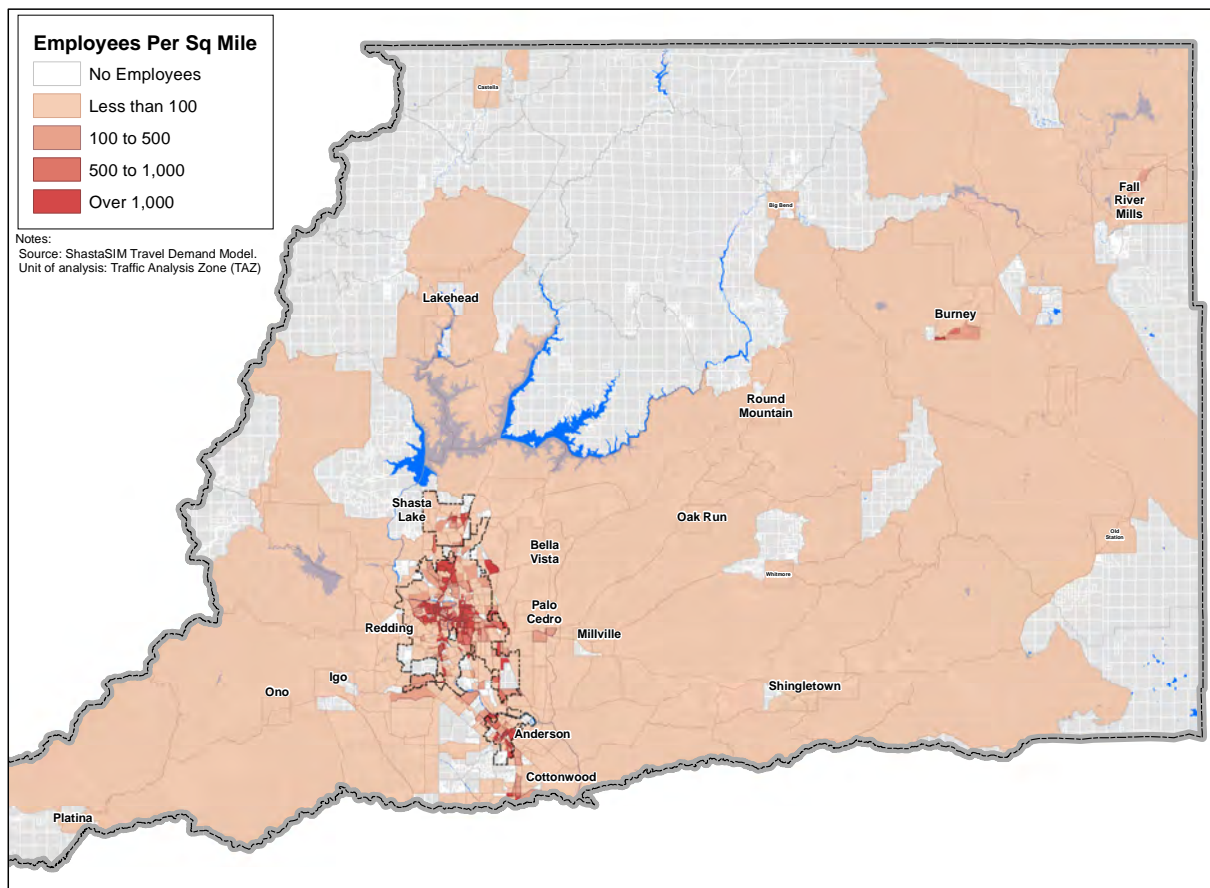


Figure 10 - Employees Per Square Mile in the Shasta Region

Transportation investments including the extension of the Sacramento River Trail to Downtown Redding’s cultural venues, serve to bolster tourism-related industry.

- **Information Technology** - The majority of industry employment is found within Computer Systems Design and Related Services. It has added 37 new jobs between 2010 and 2015.

Coordinated Economic Development and Transportation Initiatives

A goal of the 2018 RTP (Goal #5) is to strengthen high-value industries that generate below average travel demand and to improve the efficient movement of goods and services for industries that are reliant upon the transportation network. This is to be accomplished by reinforcing or otherwise facilitating sustainable economic development initiatives and by identifying and resolving transportation-related barriers to economic activity and productivity.

A more proactive and integrated approach to travel demand management will be used to get ahead of the curve, avoid the pitfalls of other regions, and fulfill

the RTP vision. For example, employment centers can be located in urban, mixed-use environments or consolidated in large business campuses (even when located away from residential areas) in order to support the viability of alternative travel mode choice, including public transportation and ridesharing. Supporting the development of information-based industries would likewise have a positive impact on the economy while casting a relatively small burden on transportation systems due the below-average number of trips generated. For those industries that rely on the efficient and affordable delivery of tangible goods and services, additional physical transportation infrastructure and/or the coordination and consolidation of goods movement would help to optimize the throughput and therefore capacity of the existing transportation network.

COMMUNITY HEALTH & WELL-BEING

No universal formula exists for addressing community health and wellness. Each region has its own unique challenges, resources, and flexibility when selecting tools, processes, and organizational structures to effectively influence health outcomes.

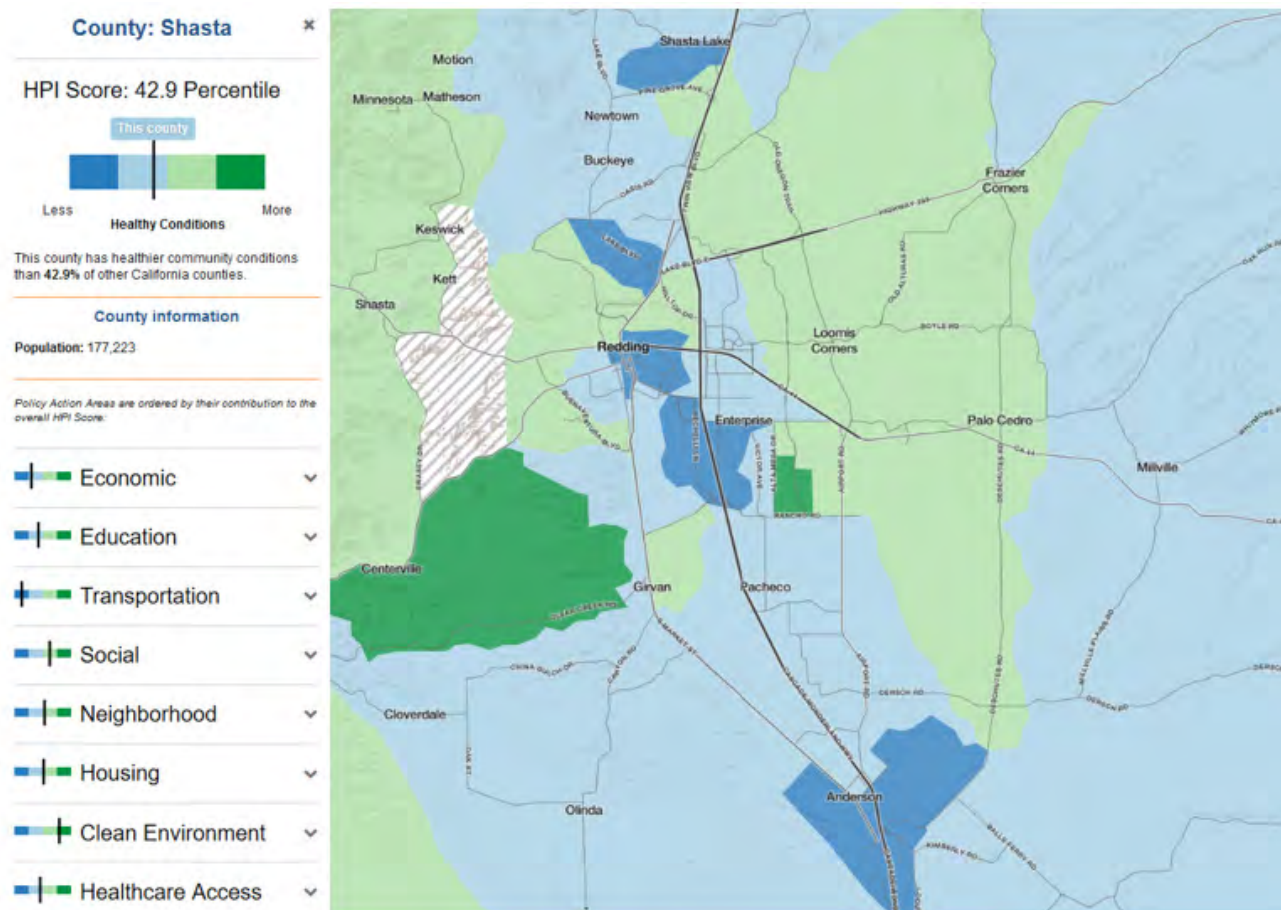


Figure 11 - Healthy Places Index (sample output)

The 2018 RTP seeks to positively impact public health outcomes by better understanding the region's risk factors, integrating public health considerations into the regional planning process, and seeking out community health co-benefits when funding transportation projects, services, and programs.

CONNECTIONS BETWEEN TRANSPORTATION AND COMMUNITY HEALTH

Regional transportation planning, policy, and funding are inseparably intertwined with community health and well-being. Utilizing data from the Healthy Places Index and the California Office of Traffic Safety, various health factors and outcomes were evaluated for the Shasta Region. Results are summarized in Table 9 and 10.

In consultation with local health professionals and community stakeholders, the following areas of potential regional collaboration were identified for consideration during the 2018-2022 RTP planning cycle:

1. Bicycle and pedestrian data collection - SRTA may provide support in the form of participation in manual field counts, purchasing trip tracking data from GPS-enabled mobile devices, and administering a program of fixed and movable bicycle and pedestrian count stations.

- 2. Bicycle facility spatial mapping** - Healthy Shasta partnered with The McConnell Foundation in the past to produce bicycling and walking map guides. Due to staffing changes at The McConnell Foundation, these services are no longer available. SRTA may provide assistance in these areas through in-house and consultant support services.
- 3. Promote and encourage the use of active transportation** - SRTA may coordinate with public health professionals on programs and events that support increased active transportation, with a focus on efforts that help individuals reduce motor vehicle trips. Examples include information sharing, Bike Month, and similar activities.
- 4. Outreach to the general public and disadvantaged communities** - SRTA and public health professionals may coordinate on the collection and sharing of data related to disadvantaged neighborhoods. Data may be generated through community surveys or project level outreach.
- 5. Placemaking** - SRTA may utilize its Infill & Redevelopment Incentive Program, Regional Active Transportation Program, and other activities to bolster local efforts to create vibrant, people-oriented communities. Opportunities include support for of the Redding Cultural District, mixed-use development, interactive community space, and human-scale urban design.

Table 9 - Connections Between Transportation and Community Health Outcomes in the Shasta Region

HEALTH OUTCOMES		CONNECTIONS BETWEEN TRANSPORTATION & COMMUNITY HEALTH OUTCOMES
Coronary Heart Disease	Among the worst in CA counties	<p>Convenient and inviting options to walk or bicycle increases physical activity levels - a key factor in preventing and controlling many of the chronic diseases that are leading causes of death, disability and illness.</p> <p>Active transportation options link people to resources they need to stay healthy (such as grocery stores, parks, and health care). People use sidewalks, bikeways, and trails for social interaction and recreation, in addition to transportation.</p> <p>High quality facilities and targeted safety measures (e.g. physical separation from motor vehicles and enhanced street crossings) decrease the risk of bicycle and pedestrian injuries and deaths.</p> <p>Air pollution from vehicle emissions has been linked with heart disease and respiratory illness.</p>
High Blood Pressure	Worse than 92% of CA counties	
Diabetes	Worse than 64% of CA counties	
Obesity	Worse than 60% of CA Counties	
Pedestrian Injuries and Fatalities	Worse than 73% of CA Counties	

Table 10 - Underlying Factors That Impact Health Outcomes in the Shasta Region

UNDERLYING FACTORS THAT IMPACT HEALTH OUTCOMES		
Low Income Homeowner Severe Housing Cost Burden	11% of low-income homeowners pay more than half their income on housing costs	Transportation is often the second highest household expense for low income households. Affordable transportation options help balance household budgets so families do not have to give up food, medicine, or other necessities that support health. High housing costs (or having to accept inadequate housing due to cost), combined with high transportation costs, is associated with stress, depression, and decreased children's well-being and educational attainment. Affordable transportation options help create stability. Inadequate transportation to services and medical care may result in missed appointments or delay care, resulting in deteriorating health.
Low Income Renter Severe Housing Cost Burden	28% of low income renters pay more than half their income on housing costs	
Incomes Above Poverty	59% of people have an income exceeding 200% of federal poverty level	Economic opportunity, especially having a job, is a powerful predictor of good health. Affordable, convenient transportation options allow people to get to a broader range of employment or training opportunities, as well as to access essentials such as healthy groceries. Transportation is fundamental to getting and keeping jobs, learning skills needed for employment, and accessing economic opportunities. Inadequate transportation is a barrier to the transition from welfare to work.
Employment	61.7% of people aged 25-64 are employed	
Higher Education	19.6% of people over age 25 have bachelor's education or higher	A college education is associated with higher-paying careers, better benefits (including health insurance), and positive health behaviors (such as healthier eating). Inexpensive transportation options allow people to get to classes and afford tuition.
Supermarket access	22% of people live near a supermarket	Having access to a supermarket can encourage healthier eating habits, lower the cost of healthy food, reduce chronic disease and lower the risk of food insecurity.
Ozone	0.04 ppm average of daily maximum 8-hour ozone concentration during summer	High ozone levels cause lung inflammation and more serious respiratory issues. Prolonged exposure to high ozone levels can increase risk of cardiovascular and respiratory disease, poor health outcomes, and premature death. Transportation strategies to reduce emissions from vehicle and freight contribute to better health. Fine particulate matter can reach deep in people's lungs, increasing risk for cardiovascular and respiratory diseases, poor birth outcomes, and premature death. Some PM 2.5 is from vehicle tailpipes, tires and brakes.
Clean Air – PM 2.5	5.96 µg/m3 is the yearly average of fine particulate matter concentration	
Extreme Heat Days	58 projected extreme heat days (annual)	Extreme heat can cause heat-related illness and exacerbate pre-existing health conditions. Extreme heat can be a barrier to utilizing active transportation options or to accessing transit if stops are not nearby, particularly if shade is not provided. Extensive asphalt and concrete, with little vegetation, can contribute to heat islands.

TRAVEL CHARACTERISTICS AND SYSTEM UTILIZATION

A detailed understanding of the nature and recurring patterns of regional travel is fundamental to the planning process.

TRAVEL DATA

Information on who, why, when, and how people travel in Shasta County is gathered from a variety of data sources, including but not limited to:

- U.S. Decennial Census and interim American Community Surveys;
- California Household Travel Survey;
- Traffic counts;
- On-board transit surveys;
- ShastaSIM activity-based travel demand model;
- Special studies (e.g. economic studies, corridor studies, transportation impact fee studies, origin and destination studies, etc.); and
- Data purchased from vendors that collect and process travel behavior patterns of individuals with GPS-equipped devices including smart phones and navigation systems.

Figure 12 - Antlers Bridge construction



Trip generation

Vehicle travel demand in Shasta County is the combined result of intra-regional trips (i.e. trips beginning and ending within Shasta County), interregional trips (i.e. trips having a local origin or destination but that enter or exit Shasta County), and through-trips (i.e. trips that enter and exit Shasta County without stopping).

The ShastaSIM regional travel model segregates trips into the eight trip types: work, school, escort (e.g.

transporting a child to/from an activity or similar trip type), personal business, shopping, meal, social interaction, and home.

Forecast Daily VMT (region and per capita)

According to the ShastaSIM regional travel model, total daily vehicle miles traveled in Shasta County will increase by approximately 32% between 2005 and 2035. Daily per capita vehicle miles traveled in Shasta County will, however, remain relatively steady, increasing by only 6% over the same period.

Table 6 - Total Daily VMT and VMT/Capita*

Year	Total Daily VMT	VMT/Capita
2005	5,606,121	26.81
2020	6,171,441	26.88
2035	7,390,629	28.51

*Results from ShastaSIM travel model reflect the current growth trend of the region without changes resulting from the 2015 RTP. Includes all trips types (inter-regional, intra-regional & through-trips).

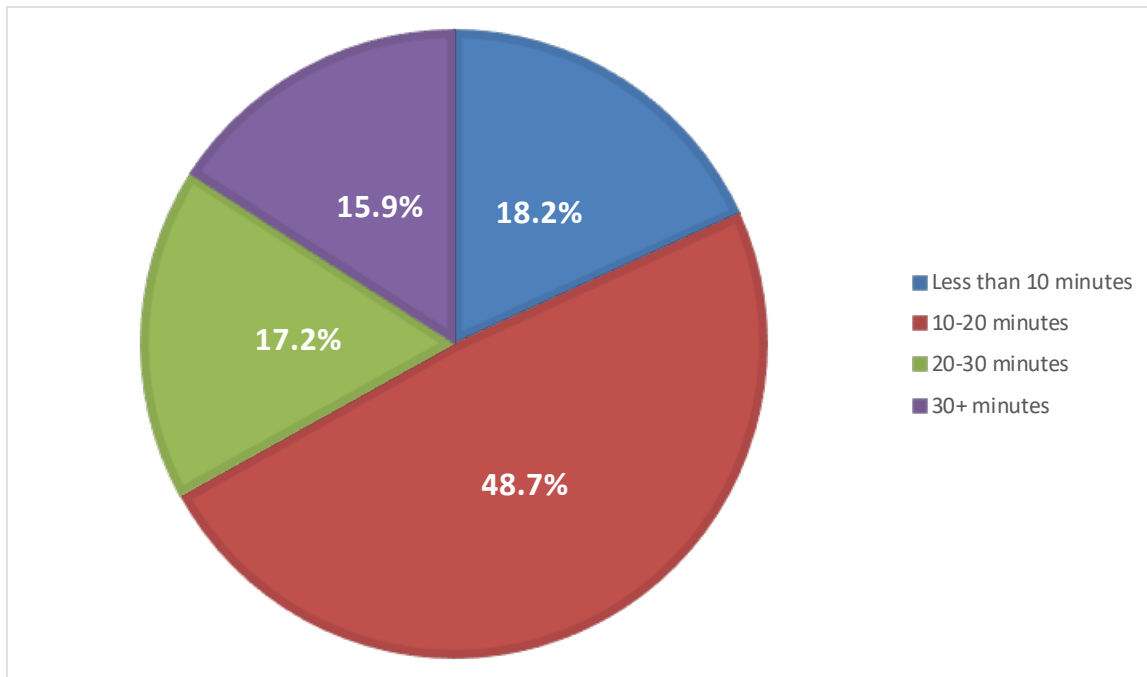
Residents living in the unincorporated regions of Shasta County have the highest VMT per capita (25.4), followed by Shasta Lake (18.1), Anderson (17.2), and then Redding (15.0). When comparing overall household VMT, Shasta Lake accounts for the smallest percentage (5%), followed by Anderson (6%), Redding (41%) and the unincorporated region of Shasta County (48).

Daily trips per household and trip lengths

Using only those trip categories that are subject to SB 375, average daily VMT per household in 2005 was 47.5. It is projected that this will decrease approximately 1% to 47.2 miles by 2035. In the year 2035 it is forecast that residents in Anderson will make the most trips per household (6.6), followed by Redding and unincorporated Shasta County household (6.4). City of Shasta Lake household will make the fewest trip on average (6.0).

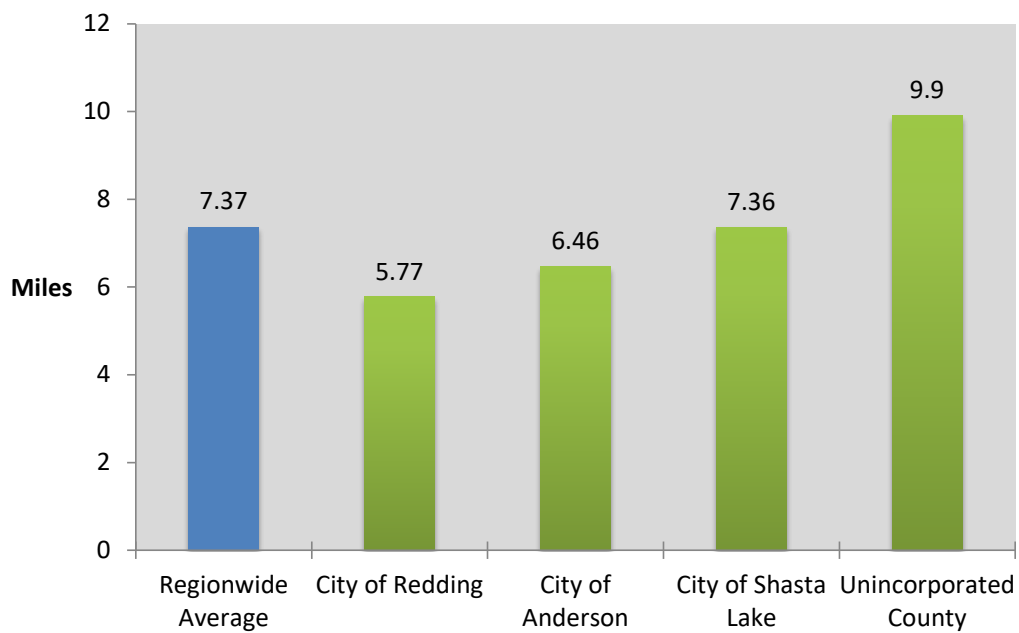
Although the number of trips per household is fairly consistent across the region, the average trip length is substantially different. Region wide in 2005 the average trip length is 7.4 miles. Due to the relative proximity to everyday destinations, City of Redding residents traveled the least per trip at 5.3 miles. On the other hand, residents in the rural unincorporated area of the County travel farthest, averaging 10.6 miles per trip.

Chart 5 - Average Work Commute Travel Time (By Time and Percentage)



The average daily commute time for Shasta County residents is approximately 20 minutes.

Chart 6 - Estimated Average Trip Length (Year 2035)



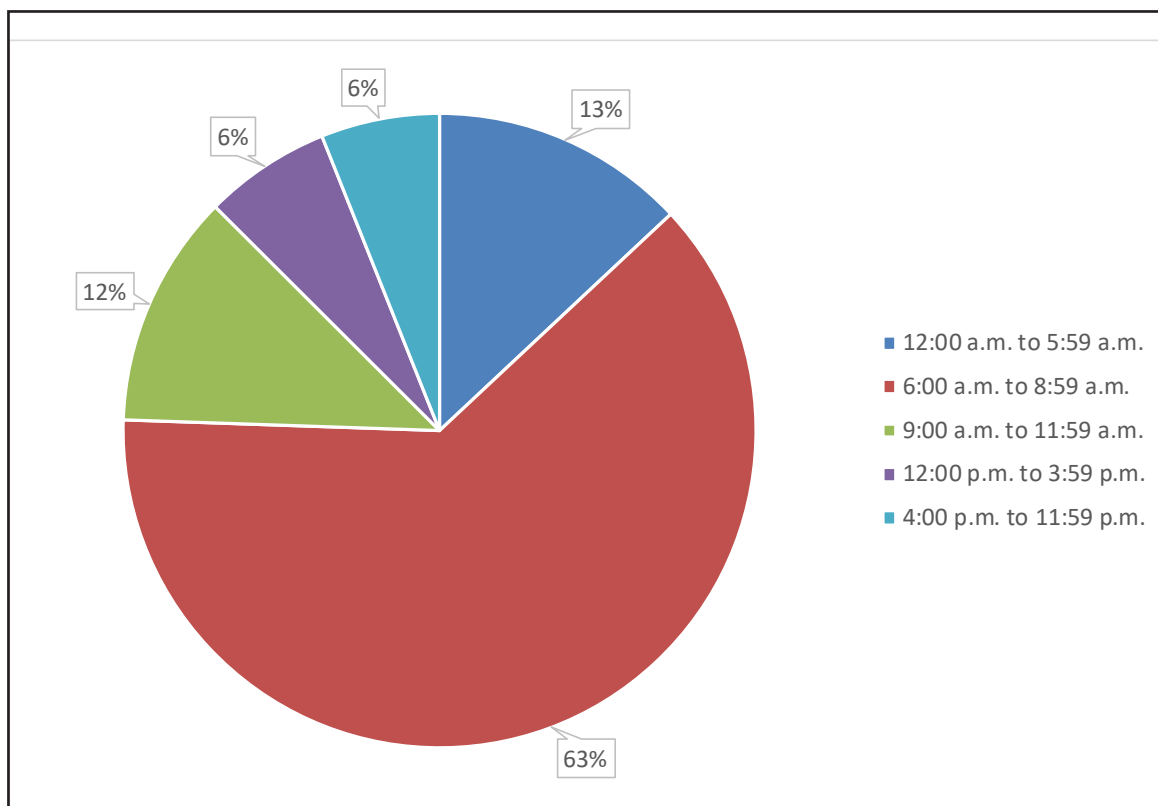
According to the 2012-16 ACS, the average commute time to work was 19.9 minutes. This is an increase over the previous 5-year ACS (2008-2012) of 19.7 minutes. Chart 5 shows the average commute travel time, today and Chart 6 shows the estimated average trip length by year 2035.

County-to-County Commute Patterns

Due to Shasta County's geographic isolation from other major population centers, travel patterns are less complex than those found in California's larger metropolitan regions. Nevertheless, there is notable inter-county commuting between Shasta County and bordering counties.

mobile devices has increased. In a recent nationwide county-to-county commute report for the month of April 2014, it reported that as many as 9,765 people commute at least 14 days or more a month into Shasta County for work, school or other activities that require them to stay a majority of their day in Shasta County. Similarly, it was reported that just over 10,000 people who live in Shasta County commute outside of the county for 14 days or more a month. SRTA is looking further into what interregional travel data is available in order to grasp the magnitude of travel into and out of the region.

Chart 7 - Percentage of Commute Trips by Time of Day (2012-16 ACS)



According to US Census county-to-county travel data compiled by the Census Transportation Planning Products (CTPP) the largest potential influx of workers outside of Shasta County come from Tehama County, with almost 2,900 workers. As many as 400 workers travel in from Siskiyou County. Lassen and Butte counties each provide almost 200 workers traveling into Shasta County daily. However, the reliability of this type of census data is not always reflective of actual behavior because the data is based on a sampling of the actual population and is self-reported. In recent years, the use of GPS data collected from

DAILY PEAK TRAVEL DEMAND

Approximately 62% of all workers leave between 6:00-9:00am, with the largest amount of commuters (30.6%) traveling to work between 7:00-8:00am. Only 12.5% of commuters leave for work between the hours of noon and midnight on a given work day. Chart 7 shows the percentage of daily commute trips from home to work, by time of day. Lack of major disincentives for vehicle trips combined with limited, incomplete, and disconnected

<http://www.airsage.com/>

alternative modes limits the potential success of efforts to diversify mode choice. Alternative modes must appeal to value and priorities beyond mobility.

MODE CHOICE

Even among the largest metropolitan regions, the single occupancy vehicle is the travel mode of choice for the majority of the population. At some point in the growth and development of a region, however, over-reliance on the automobile becomes financially, operationally, and environmentally unsustainable. Alternative modes, including public transportation, bicycling, walking, and ridesharing in combination with land use strategies must be introduced to help manage travel demand.

Mode split is affected by the natural environment (e.g. topography and climate), the built environment (e.g. transportation facilities and land use patterns), and individual and community choices.

Individuals may make choices based on comfort and convenience, timeliness, cost, perceived safety, and/or personal values such as improved health and reduced environmental impact. In addition, a community's prioritization of transportation spending and the application of transportation and land use policies have the effect of encouraging or discouraging certain travel behaviors. For example, a lack of bicycle lanes, infrequent transit service, segregated land uses, deferred facility maintenance, road tolls and parking fees, and other factors greatly influence travel behavior.

General information regarding the use of different travel modes is collected by the US Census Bureau through an annual questionnaire, called the American Community Survey, or ACS. This survey asks general questions regarding people's commute to work, including mode choice, travel time, travel duration, and other characteristics. Work trips are the focus because it is the most common reason for travel and the primary cause for congestion during peak morning and afternoon hours of the day.

According to the 2012-2016 ACS, travel to work in the region is primarily by driving alone (83%), with carpooling (7%) the second most common form of travel. It is estimated that 5% of all workers in the region work from home. The remaining 5% of work trips are split by the following modes: public transportation (1%), walking (2%), and taxicab, motorcycle, bicycle, or others means (2%)

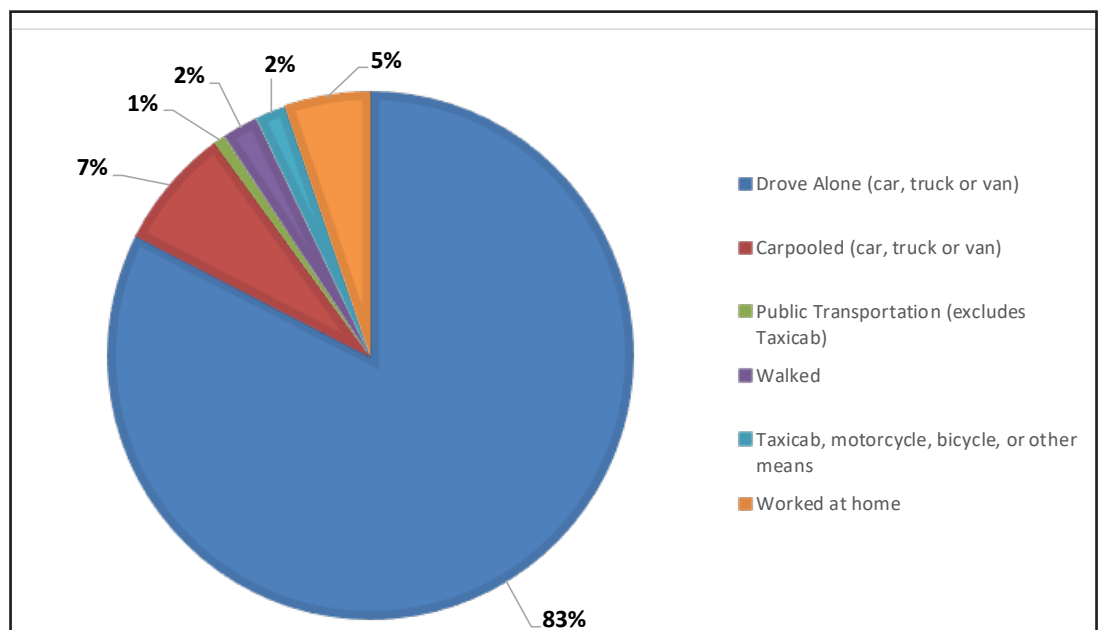
Since 2000, people driving alone has increased by 3%, carpooling has decreased by 5% and there has been a 1% increase in telecommuting and the use of taxis, motorcycles, and bicycles.

INTERMODAL TRAVEL

A major goal of the RTP (Goal #3) is the integration of various travel modes into a seamless network. Connectivity includes accessibility, physical connectivity, and schedule coordination.

Intermodal facilities include the Downtown Redding Transit Center that serves as the regional hub for local

Chart 8 - Means of Transportation to Work (2012-16 ACS)



and regional public transportation, including Trinity Transit (Trinity County), Sage Stage (Modoc County), Susanville Rancheria Public Transit, Greyhound and Amtrak. Improvements are being made on streets in downtown Redding, such as California Street, to provide better commuting options for bicyclists and in connecting downtown Redding and the transit center to the Sacramento River Trail. However, the transit center does have its own challenges. The timing of transfers between transit services do not always match, sometimes causing lengthy waiting periods between transfers, and the frequency of some services are limited.

Amtrak passenger rail service is available via the Downtown Transit center. However, passenger service is infrequent and available only in the early AM hours of the day (southbound – 2:21am; northbound – 3:06am). Currently no day time passenger rail service is available.

Improvements have been made in connecting transit to the Redding Airport thanks, in large part, to travel demand generated by the IASCO Flight Training School. Hourly service is available from the Canby transit center Monday through Friday and six times a day on Saturdays. Sunday service is not currently available, however SRTA is exploring options for a 1-year pilot project.

Flights from Redding Airport occur two times daily from Redding to San Francisco via SkyWest (United Express). However, frequent flight cancellations make reliable air service difficult. PenAir provided direct service to Portland for 15 months before declaring bankruptcy and eliminating many of their routes in the the western states, including Redding, in August 2017.

Facilities for bicycling and pedestrian activities are ever increasing throughout the region. Projects such as Dana to Downtown, which connects bike facilities to the east and west of the Sacramento River, are well used. Future efforts revolve around the creation of active transportation trunk lines that cater to activity and employment centers as well as connect to public transportation services.

Freight Movement

The movement of goods and freight in and out of the region represents a major component of overall

regional travel demand. Commodities flow in and out of the region by different modes:

- Air - Redding Municipal Airport supports airfreight and package movement services.
- Rail - Two active rail lines (Union Pacific and Burlington Northern) serve Shasta County. Rail spurs located in Redding and Anderson provide limited freight loading and unloading. In Redding, train car switching interferes with vehicle travel on several key downtown arterials.
- Trucking - The majority of regional goods and freight movement is (and will continue to be) performed by truck.

Critical corridors for trucking in Shasta County include Interstate 5, which is one of the first six 'Corridors of the Future' identified by the U.S. Department of Transportation in need of multi-state congestion relief initiatives. State Route 299/44/36 is considered a 'Priority Interregional Facility' in the 2015 Interregional Transportation Strategic Plan and is essential for connecting urban areas and linking rural areas to urban areas.

Reliable data is needed for the effective planning and programming of finite transportation resources. Information on commodity flows is derived from a combination of Caltrans Intermodal Transportation Management System (ITMS) data, Federal Freight Analysis Framework (FAF), and the IMPLAN regional economic analysis model. Unfortunately, much of this data is outdated and based on very limited data samples outside of California's major metropolitan areas. Little information is available regarding the off-highway movement of goods and freight, including air and rail modes. In order to draw reasonable conclusions, data must be augmented with a local understanding of regional economic activity. Recently completed and planned efforts are described below.

North State Transportation for Economic Development Study

Completed in October 2013 by SRTA on behalf of the sixteen-county North State Super Region, the North State Transportation for Economic Development Study combined the best available goods and freight movement data with information gleaned from various public and private sector economic and transportation stakeholders. The study analyzed the interactions between transportation (current and planned systems) and the economy (current

Figure 13 - North State Freight Flows

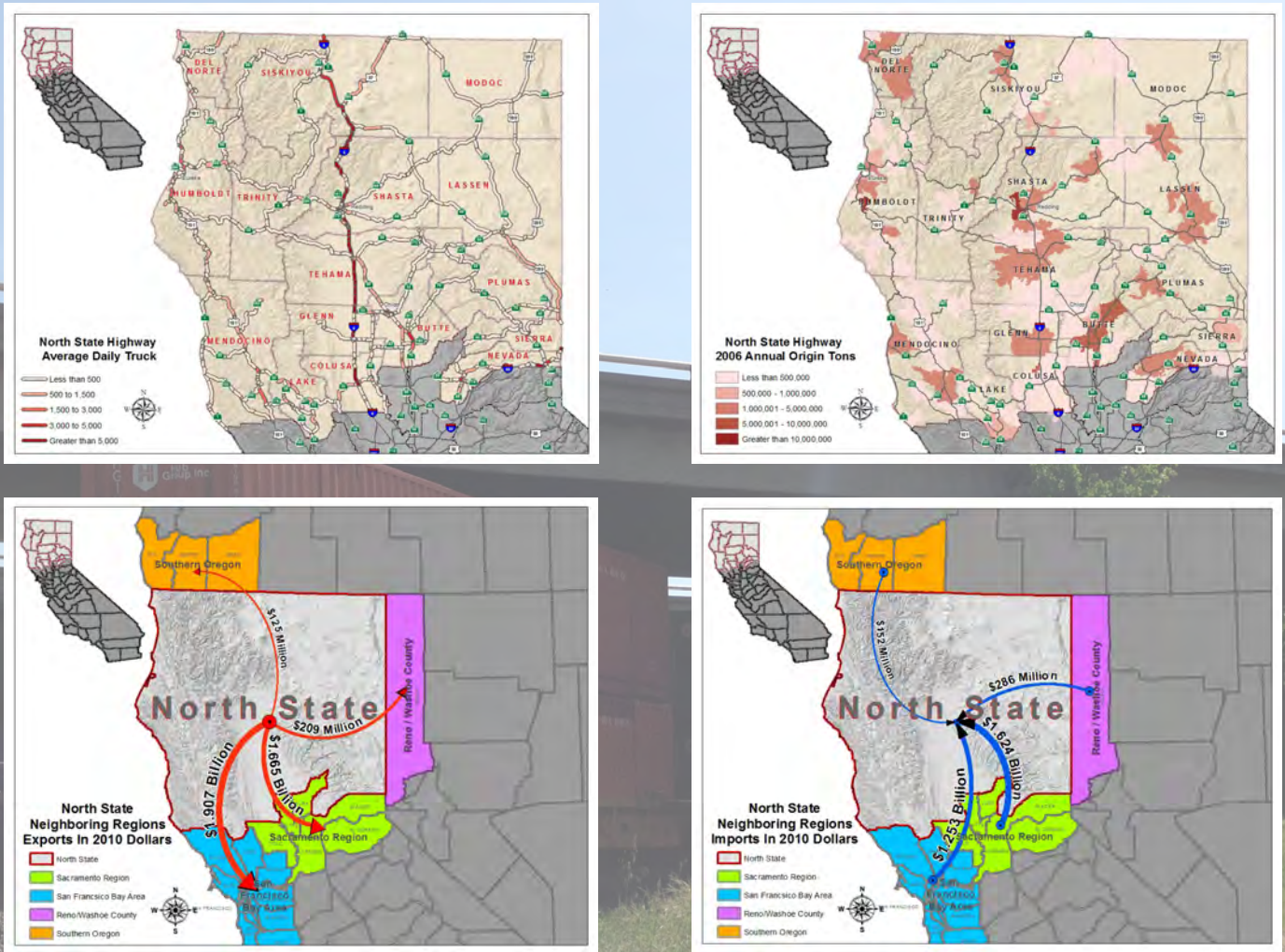


Table 11 - Approximate Value of Commodities Produced in the North State in 2010 (\$ millions)

Commodity ⁵	Value
Agriculture & Food Products	\$236
Machinery & Metal Products	\$129
Wood Products	\$319
Misc Manufactured Products	\$91
Mixed Freight/Cargo	\$35
Chemicals & Pharmaceutic	\$156
Petroleum & Coal Products	\$151
Stone, Gravel, Sand, Minerals, Ore and Related	\$123
Animal & Fish Products	\$6
Total	\$1,245

industries and economic development initiatives). As noted in the study, the value of Shasta County commodities produced in 2010 is approximately \$1.245 Billion. A further break down of major industries is provided in Table 8. About 15% of the region's commodities are locally consumed; the balance is exported to national and international markets. The region offers a lower cost of doing business (including lower taxes, labor costs and housing costs) and same-day access to several major markets (including Sacramento and the San Francisco Bay Area).

Key issues from a transportation perspective include the disconnected and inefficient movement of goods and freight to the marketplace and long distance to processing facilities for North State agricultural and natural resource commodities. The final report recommended the development of regional strategic action plans comprised of the following components:

- A project prioritization process based on mobility and economic performance metrics;
- A short list of 'total package' projects that solve mobility and economic development benefits as well as leverage funding from multiple partners and sectors;
- A short list of 'game changer' transportation projects that would effectively remove known obstacles to regional economic development objectives;
- A proactive strategy for the prevention of non-weather related closures and catastrophic failures on the interregional transportation system; and
- Facilitation of coordinated movement of goods and freight.

Additional analysis and regional policies related to freight movement is discussed further under the model section of this RTP.

California Freight Mobility Plan

Completed in December 2014 by the Caltrans Office of Freight Planning, the California Freight Mobility Plan (see <http://dot.ca.gov/hq/tpp/offices/ogm/cfmp.html>) identifies freight routes and transportation facilities that are critical to the state's economy and environment. The plan includes a list of good and freight movement projects, twenty-one of which are located in Shasta County. Project types include capacity increasing, system preservation, and operations and management. Projects are needed to:

- Address forecast congestion and bottlenecks, particularly on mainline Interstate 5 through the cities of Redding, Anderson, and Shasta Lake, where truck volumes represent up to 30% of total traffic;
- Remedy freight accessibility and safety issues, including inadequate vertical and horizontal clearances on the Union Pacific Railroad bridge over Interstate 5 and narrow, winding, and steep interregional corridors;
- Relay real-time roadway and traffic conditions to travelers; and
- Proactively maintain pavement, bridges, and other assets.

Modal Assessment



The following sections provide a modal break down of the regional transportation system in detail. Each modal narrative describes the following:

- Current state of modal system - A general description of existing infrastructure and its performance.
- Recent accomplishments (2015-2018) - An accounting of projects and other accomplishments during the prior RTP planning cycle. Since 2015, a total of \$255.4 million in projects have been delivered or are otherwise underway in the Shasta County region.
- SWOT analysis - A high-level summary of regional strengths, weaknesses, opportunities, and threats affecting the the current and future operation of the transportation network and SRTA's ability to sustain and evolve the system to meet regional and interregional mobility needs for people and freight.
- Near-term regional priorities (2018-2022) - What near-term projects, programs, and initiatives can SRTA lead or otherwise participate in to advance the regional vision and goals of the 2018 RTP.

STREETS AND ROADS



Streets and roads represent the primary means of local and interregional travel in the region. Streets and roads are essential for vehicle travel, truck travel, public transportation, as well as bicyclists and pedestrians. In addition, access provided by streets and roads greatly influences the location of new development and regional land use patterns.

CURRENT SYSTEM

Shasta County has approximately 3,543 miles of roadways maintained by various federal, state and local agencies and Tribal governments. The majority

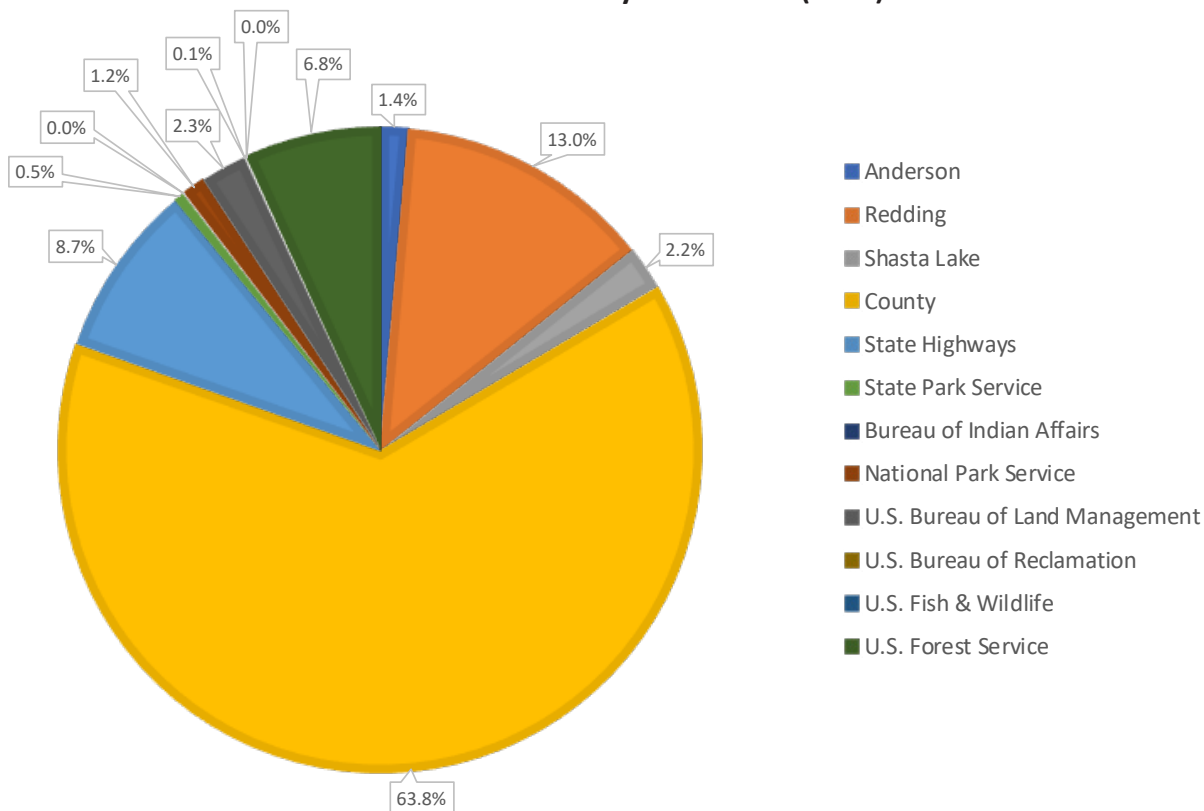
of roads are maintained by local jurisdictions, including: City of Anderson (1.4%), City of Redding (13.0%), City of Shasta Lake (2.2%) and Shasta County (63.8%). State highways represent 8.7% of the regional network. Native American tribal roads account for 0.1% of the regional network. The remaining 10.8% of the regional network consists of forestry or other service roads maintained by state and federal agencies.

Approximately 18% of the managed lane miles exist within the US Census defined Urbanized Area comprising the cities of Anderson, Redding, and Shasta Lake as well as portions of Shasta County between the cities. This proportion will increase as the region continues to grow in population.

Interregional and regionally significant corridors

Interstate 5 is the backbone of the region's transportation network, carrying upwards of 70,000 trips per day - the highest usage for 315 miles to the north (Eugene, OR) and 150 miles to the south (Interstate 5/State Route 99 junction). It is also part of a 1,382 mile north-south travel and freight corridor stretching from the Mexican to Canadian border. It is designed by the Federal Highway Administration as a

Chart 9 - Maintained Road Miles by Jurisdiction (2015)



Major Freight Corridor and a “Corridor of the Future”. State Routes 299 and 44 provide primary travel to and from California’s North Coast to the west and to Reno, Nevada to the east. SR 299 is the primary travel and commercial corridor serving Susanville, CA (population 17,947). Both routes are identified as a ‘Priority Interregional Facility’ in the 2015 California Interregional Transportation Strategic Plan.

State Route 36 traverses the south-western tip of the region, providing access to Fortuna (Humboldt County) to the west and to Susanville (Lassen County) to the east via Red Bluff (Tehama County). SR 36 connects to US 395 to Reno, NV. SR 36 is also identified as a “Focus Route” by Caltrans.

State Route 89 provides secondary north-south travel from SR 36 in Tehama County, through Lassen National Volcanic Park, and eventually intersecting with I-5 in Siskiyou County.

State Route 273 provides secondary north-south travel through the South-Central Urban Region from the city of Anderson to just past SR 299 in the city of Redding.

State Route 151 runs 4.7 miles from Interstate 5 through the City of Shasta Lake to Shasta Lake Dam. The western portion of SR 151 is designated a Scenic Route.

Table 12 - Pavement Condition Index Classification

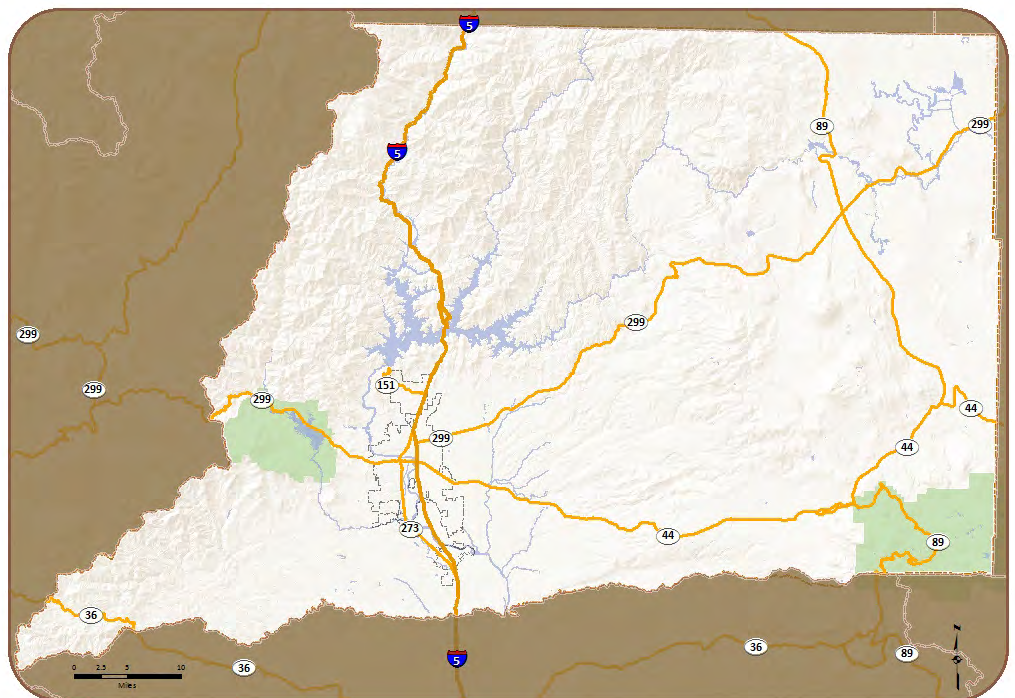
Numerical Rating	Classification
100-85	Good
85-70	Satisfactory
70-55	Fair
55-40	Poor
40-25	Very Poor
25-10	Serious
10-0	Failure

PAVEMENT CONDITIONS

The Pavement Condition Index, or PCI, is a numerical rating system that is used to evaluate the general condition of pavement on a roadway. Roads are rated on a scale of 100 to 0, with 100 being “best” and 0 being “worst” (see Table 9). A score less than 50 typically no longer able to receive a maintenance and must be reconstructed at much higher cost.

The overall pavement condition for the region’s cities is deteriorating. According to a February 2012 report by the city of Redding Department of Public Works, Redding’s overall PCI has dropped from a score of 78 in 2005 to 55 in 2012. The county of Shasta Public

Figure 14 - ShastaCounty Regionally Significant Corridors



Works department shows similar ratings. In 2012, major county maintained roads had an average score of 71, while residential and local roads average only a score of 56. The status of roads in the city of Anderson and Shasta Lake, and state highways maintained by Caltrans are currently unknown.

In the 2016 California Local Streets & Roads Needs Assessment, it is estimated that the region's average PCI is 57. This puts the region in a "high risk" category for California. Even with great local effort and an infusion of federal economic stimulus funds, the region's PCI remains the same. The study estimated a minimum financial need of \$815 million (in 2016 dollars) to just keep the road system maintained as it currently is for the next ten years. Without additional revenue, recent gains in the condition of regional roadways will soon be lost.

BRIDGES

According to the Caltrans Office of Structure Maintenance and Investigations there are approximately 517 bridges within Shasta County. The number of bridges maintained by each agency and the functional status of these bridges is shown in Table 10.

By FHWA criteria, approximately 26% of local agency bridges are considered "structurally deficient" (i.e. requires weight or speed limitations to ensure it is safe) or "functionally obsolete" (i.e. not designed for

how it presently used). This is a vast improvement since the 2015 RTP, where 32% of local agency bridges were in need of significant repair.

The 2016 California Local Streets & Roads Needs Assessment estimates that 15 bridges are in need of replacement and 101 bridges are in need of repair. This translates into a minimum financial need of \$62 million (in 2016 dollars) over the next 10 years. The biggest challenge is in the unincorporated area of Shasta County, where a total of 60 bridges are in need of replacement or repair.

26% of all bridges in Shasta County are "structurally deficient" or "functionally obsolete" and are in need of replacement or major repair.

As of June 2014, three bridges on the State highway system are eligible for listing on the National Register of Historic Places (NRHP). One local agency bridge is potentially eligible for listing on the NRHP. An additional 13 state and local bridges have not had their historical significance evaluated as of 2016.

The Pit River Bridge, which allows traffic on Interstate 5 to cross Shasta Lake, is listed on the federal list of 'Projects of National and Regional Significance.' The replacement cost of this bridge is estimated at \$640 million and is of great significance for moving people and goods through Shasta County, from the California-Mexico border to Canada.

Table 13 - Bridge Status by Jurisdiction

Jurisdiction	Bridges	Structurally Deficient	Functionally Obsolete
Shasta County	216	12	48
City of Anderson	2	0	0
City of Redding	56	2	10
City of Shasta Lake	13	0	1
Dept. of Forestry	7	0	2
Tehama County	1	0	0
Caltrans	220	Unknown	Unknown

SYSTEM UTILIZATION

Volume to capacity (V/C) ratio is a numerical representation of road congestion. "Volume" represents the number of vehicles on the roadway at a given time. "Capacity" refers to the maximum number of vehicles able occupy a road segment. The V/C ratio helps identify which roads segments are being used the most and which segments are being underutilized, based on their design capacity. Roadways with a V/C ratio of 0.75 or higher are considered "congested."

⁷Caltrans Structure Maintenance & Investigations Report, Local Agency Bridge List. Reviewed October 2016.

Level of service (LOS) is an alphabetic scale used to describe roadway congestion; 'LOS A' being free of congestion and 'LOS F' representing gridlock.

The ShastaSIM regional travel model simulates future travel demands and measures the impact on regional roadways in terms of V/C ratio, LOS, and other performance metrics. This information is used to identify which segments may need additional capacity or where traffic might be redirected to make better use of underutilized roadways. ShastaSIM also allows planners to evaluate the individual and combined benefit of enhanced traffic operations, travel demand management strategies, land-use strategies, and other potential solutions.

Future LOS on the roadway network is forecast to deteriorate over time. By 2020, over 132 miles of regional streets are expected to fall below the LOS planning threshold of C. By 2035, that number will increase to over 164 miles of streets with LOS D, E, or F. Table 11 summarizes those road segments reaching LOS D, E, or F by 2035.

IMPACT OF SYSTEM PERFORMANCE ON MOBILITY

A variety of performance metrics are calculated to

better understand and communicate the directly felt impacts congestion levels. It's worth noting that congestion – to some degree – is not a bad thing; it is an indicator of economic activity as it is reflective of more people with jobs, more delivery of services, and more freight and goods being transported to market.







Commonly used transportation performance metrics and calculations for Shasta County are as follows:

- Vehicle Hours of Delay (VHD) – An indicator of how much extra time drivers spend on the road traveling to their destination due to congestion. A majority of the delay experienced by travelers is on local arterial or collector roadways. Currently, commuters experience almost 2,000 VHD daily. By 2040, that number is expected to increase to over 3,300 VHD daily.
- AM/PM peak travel period – Commonly known as 'rush hour', the peak travel period is typically a one to three hour period during the morning and evening where the region's roadways carry the greatest number of vehicles, typically due to work commute. Implementing the RTP will improve the average vehicle miles per hour by 4.5% for the PM Peak period, 3% for the AM Peak Period and 3.6% for the Daily average, by 2035.



Figure 15 - Winter weather-related travel delays on northbound Interstate 5 at Shasta Dam Boulevard

Figure 16 - Representation of Level of Service (LOS) for Multi-Lane Highways

<h1>LEVELS OF SERVICE</h1> <h2>for Multi-Lane Highways</h2>			
Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		60	Highest level of service. Traffic flows freely with little or no restrictions on maneuverability. No delays
B		60	Traffic flows freely, but drivers have slightly less freedom to maneuver. No delays
C		60	Density becomes noticeable with ability to maneuver limited by other vehicles. Minimal delays
D		57	Speed and ability to maneuver is severely restricted by increasing density of vehicles. Minimal delays
E		55	Unstable traffic flow. Speeds vary greatly and are unpredictable. Minimal delays
F		<55	Traffic flow is unstable, with brief periods of movement followed by forced stops. Significant delays

Source: 2000 HCM, Exhibit 21-3, Speed-Flow Curves with LOS Criteria for Multi-Lane Highways

Figure 17 - PM Peak Hour Traffic Volume in the South-Central Urban Region in 2035, without RTP Projects

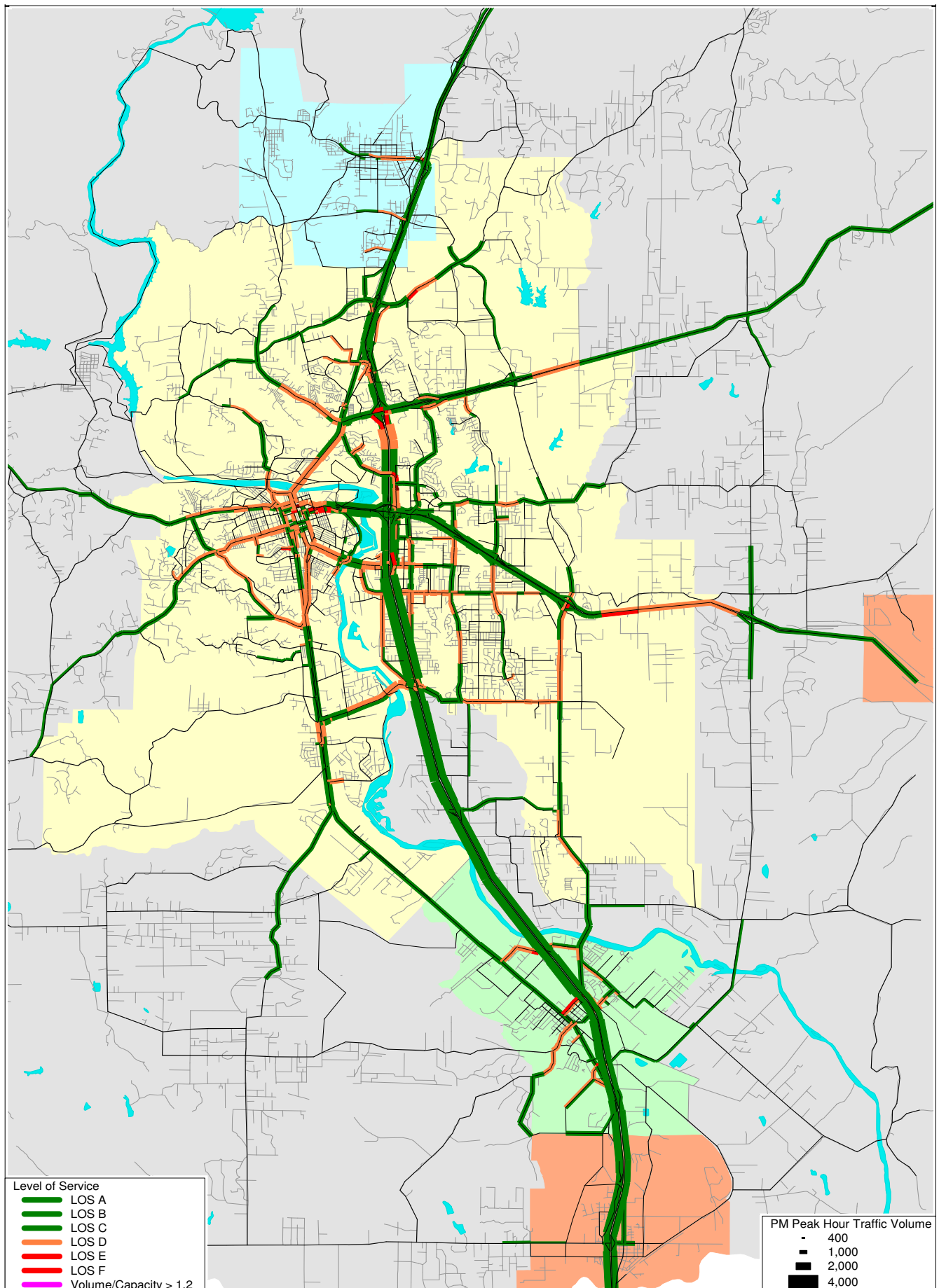


Table 14 - Miles of Roads at LOS 'D', 'E', or 'F' in 2035

MILES OF CONGESTED ROAD		LOS D	LOS E	LOS F	TOTAL
Freeway					
	Freeway	6.5	1.3	0.0	7.7
Highway					
	Multi-Lane Rural Highway	0.0	0.0	0.0	0.0
	2-Lane Rural Highway	41.0	3.1	0.0	44.1
	Total	41.0	3.1	0.0	44.1
Expressway					
	Urban Expressway	5.2	0.2	0.1	5.5
Arterial					
	Multi-Lane Rural Arterial	0.0	0.0	0.0	0.0
	2-Lane Rural Arterial	0.6	0.0	0.0	0.6
	Urban Arterial	81.6	4.0	0.4	85.9
	Total	82.1	4.0	0.4	86.5
Collector					
	Rural Collector	0.0	0.0	0.0	0.0
	Urban Collector	9.4	0.3	0.1	9.8
	Total	9.4	0.3	0.1	9.8
Local					
	Rural Local	0.0	0.0	0.0	0.0
	Urban Local	5.7	0.4	0.0	6.1
	Total	5.7	0.4	0.0	6.1
Ramp					
	Ramp	2.6	1.5	0.4	4.5
Connector					
	Zone Connector	0.0	0.0	0.0	0.0
TOTAL:		152.4	10.9	1.0	164.3

- Peak hour travel speed or “Congested Speed” is the reduction in the average speed on a roadway segment during the peak hour period (typically due to work commuting) than would otherwise be experienced during “free flow” traffic conditions.

Shasta County offers one of the shortest average commute times in California

(Source: U.S. Census Bureau, 2012-2016 American Community Survey)

- Travel time to work – Represents the average time it takes to get to work. Approximately 67% of all workers in the region average 20 minutes or less to reach their work destination, with the majority taking between 10-20 minutes. Only 4% of all workers take less than five minutes to get to work. Approximately, 7.4% of workers in the region take 45 minutes or more to reach work. Overall it takes less time on average for travelers to reach work today (19.7 minutes) than in 2000 (20.9 minutes).

NOTABLE ACCOMPLISHMENTS SINCE 2015

During the 2015-2018 RTP cycle, the Shasta Region made major progress toward meeting intra- and interregional roadway travel needs, including:

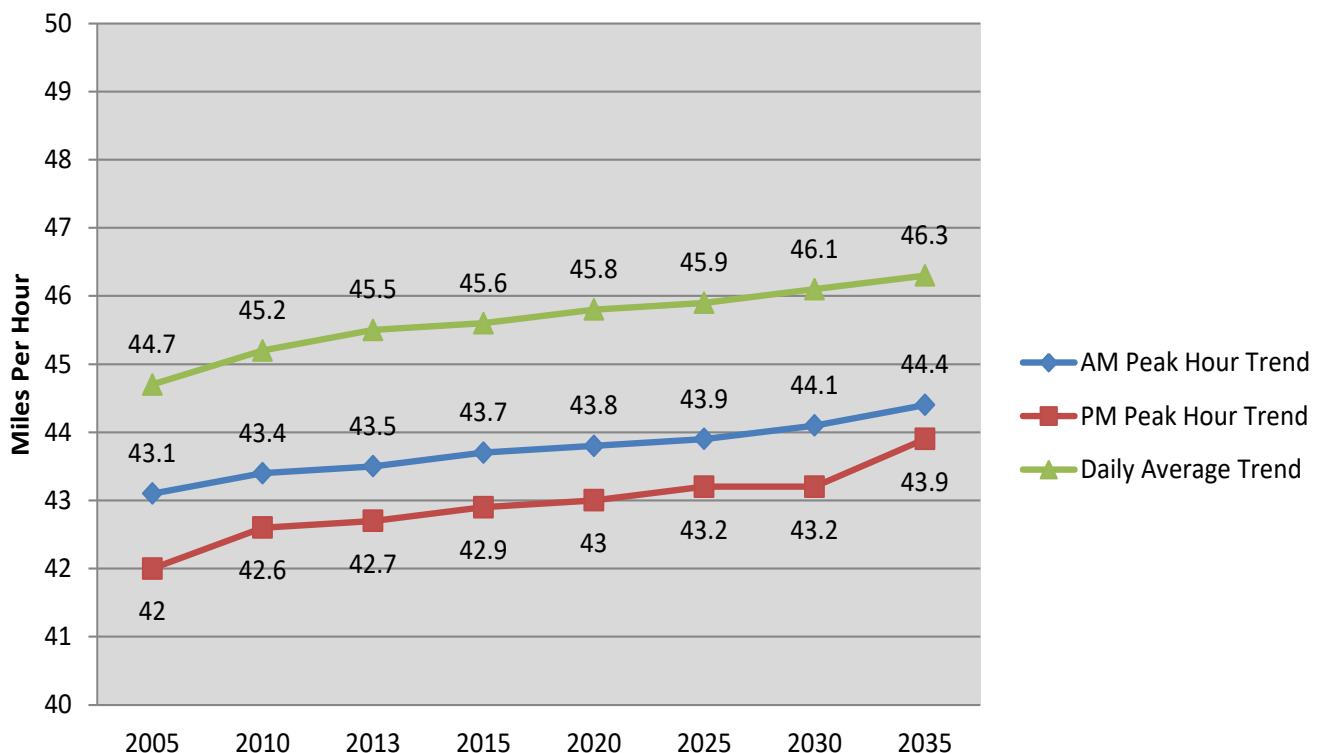
I-5 Union Pacific Redding-to-Anderson Six Lane Project (construction contract award anticipated late 2018) - With the help of a \$65.7 million Senate Bill 1 Trade Corridor Enhancement Program (TCEP) grant award, this \$126.3 million project will:

- Eliminate the freight and passenger rail bottleneck at the South Anderson Overhead where I-5 and the Union Pacific Railroad intersect; and
- Eliminate the Interstate 5 bottleneck between the cities of Anderson and Redding by adding an additional northbound and southbound lane for 7.5 miles.

State Route 44 Stillwater Interchange (construction start date May 2018) - Utilizing State Highway Operations and Protection Program (SHOPP) and federal High Priority Project (HPP) funding, this \$6.4 million project will:

- Remedy a major safety risk by eliminating an at grade, unsignalized intersection; and
- Maintain State Route 299 level of service for freight and the traveling public.

Chart 10 - Regional Speed Trends - AM/PM Peak Hour (Congested) and Daily Average (Free Flow)



STREETS AND ROADS SWOT ANALYSIS

The following observations are not intended to be comprehensive, but rather to highlight salient issues and opportunities related to regional mobility.

STRENGTHS:

- As an 'island' metropolitan area, regional traffic patterns are more within the region's purview to manage than in regions with complex interactions between nearby metropolitan areas.
- Compared to other California regions, Shasta's current roadway network is relatively congestion free.
- High degree of coordination and cooperation among Caltrans, SRTA, local jurisdictions, and various other community partners and stakeholders help the region compete for discretionary transportation funding.
- The sixteen-county North State Super Region is actively involved in elevating North State transportation needs to the state and federal level.

OPPORTUNITIES:

- Shasta County's location at the geographic and transportation crossroads of the sixteen-county North State as well as the center of the I-5 international trade corridor provides market accessibility, including one-day market access to several major urban markets (Sacramento, San Francisco Bay Area) and sea ports (Oakland, Stockton, Eureka).
- Strategies known to reduce travel demand, including complete streets, transit, rideshare, parking strategies, and other strategies are largely untapped.
- Recent and planned travel data collection efforts, statewide interregional travel demand modeling, and access to 'big data' gathered through GPS-enabled devices may provide more granular data needed for transportation planning.

WEAKNESSES:

- The Shasta Region must compete against California's 24 'Self Help' counties with a voter-approved transportation sales tax measure. Self-help regions are better able to leverage limited shares of state and federal discretionary transportation funds.
- The region's road network has outstripped the regional resources available to maintain the network, resulting in deferred maintenance and even more costly rehabilitation.
- Number of functionally obsolete bridges.
- Safety issues on rural roads and highways.
- Lack of ITS infrastructure for real-time information to assist transportation demand management efforts.
- Complete Streets that accommodate all travel modes are not consistent

THREATS:

- State and federal policy, performance metrics, and project evaluation criteria are often detrimental to smaller urban and rural areas when competing for limited discretionary transportation funds.
- Development trends and land use patterns are projected to increase vehicle miles traveled and limit the potential use of alternative transportation modes.
- Underdeveloped alternative transportation options and vehicle-dependent land use patterns limit individual and community adaptability and resilience to fluctuations in fuel and auto operating costs.
- Disproportionately high expenditures on streets and roads follow the failed model of other regions who now suffer from extreme traffic congestion and various social, health, and environmental impacts. State funding may also be jeopardized if the region cannot meet regional GHG emission targets.

REGIONAL STREETS AND ROADS PRIORITIES FOR THE 2018-2022 RTP CYCLE

SRTA aims to complete or substantially begin the following projects during the current four-year RTP cycle (2018-2022):

- **North Redding Six-Lane Project** – Complete environmental review, contingent upon allocation of STIP funds.
- **SR 273 corridor** – Work with Caltrans District 2, city of Redding, and affected citizens and stakeholders to identify safety and accessibility issues on SR 273. One emphasis area will be in Redding between Cypress Avenue and Breslauer Way. Develop solutions consistent with regional plans and fund improvements as identified.
- **Public Information Program** – Utilizing contracted consultant services, provide factual information to the public, information gatekeepers, and decision makers on roadway conditions and the current and future use of transportation funding in the region.

PUBLIC TRANSPORTATION



Public transportation includes a range of services for the general public as well as specialized services for the disabled, elderly, and those individuals unable to use traditional services. Public transit provides a widely accessible and affordable mobility option and is one of the primary strategies used to provide congestion relief and reduce vehicle miles traveled and associated greenhouse gas emissions.

CURRENT SERVICES

Interregional public transportation services:

- **Amtrak** – See Rail Section.
- **Greyhound** - Greyhound Lines is the largest provider of intercity bus transportation, serving more than 3,800 destinations across North America. Greyhound serves the Downtown Redding Transit Center.
- **Trinity Transit** – Trinity Transit offers Monday through Friday fixed route service between Weaverville and the Downtown Redding Transit Center.
- **Sage Stage** - Sage Stage provides intercity transit service between Alturas and the Downtown Redding Transit Center.

Tribal public transportation services:

- **Pit River Health Services** – Provides transportation to tribal members.
- **Redding Rancheria** – Provides transportation to and from Redding Rancheria Tribal Health Center tribal for tribal members.
- **Susanville Rancheria** – Provides rides Monday through Saturday using a fixed route service between Susanville and Redding via Red Bluff.

Fixed-route public transportation services:

- **Redding Area Bus Authority (RABA)** - Provides fixed route and demand response transit services. Fixed route service consists of ten local routes, a commuter route from the city of Anderson to downtown Redding, and three express routes. Local routes operate Monday through Friday, mostly on one-hour headways. Saturday begins three hours later than weekday service. No service is provided on Sundays. Routes depart from one of three RABA transit centers: the Downtown Redding Transit Center, the Masonic Transfer Center, and the Canby Transfer Center.
- **Burney Express** - Shasta County contracts with RABA to provide express service to the community of Burney. Burney Express operates Monday through Friday with three round-trips each day, starting in Burney.

Demand Response and Paratransit services:

- **RABA Demand Response** - Provides curb-to-curb transportation for individuals who, because of disability, are not able to utilize fixed route service. The service area is limited to within $\frac{3}{4}$ mile of fixed route service. Service is provided during the same operating hours as fixed route service.
- **Dignity Health Connected Living** – DHCL provides demand response services to individuals 60 and older, mobility-impaired person, and those with disabilities over 18 years of age, who live outside of the RABA service area. DHCL is the current Consolidated Transit Services Agency (CTSA) for the Shasta County region.



Figure 18 - Dignity Health Connected Living Bus



Figure 19 - RABA Demand Response Bus

Medical Transportation Services:

Various organizations provide non-emergency and assisted living transportation needs within Shasta County. A current list of organizations providing service is published in the “Need-a-Ride?” brochure which can be found on SRTA’s website:

Airport Shuttle Services:

- **RABA** – RABA offers an Airport Express route between The Downtown Redding Transit Center and the Redding Municipal Airport.
- **First Class Shuttle** – Ground transportation to Sacramento International Airport was discontinued January 15, 2017.

SYSTEM UTILIZATION AND PERFORMANCE

RABA riders are largely dependent upon public transit due to lack of vehicle, no driver’s license, and/or disability. Over 85% of transit riders surveyed have an annual household income of less than \$20,000.

Transit ridership – Overall ridership increased by



Figure 20 - RABA Bus with Bike Rack

20.1% from FY 2009/10 to FY 2012/13. System-wide productivity increased from 10.8 passengers per hour to 14.6 passengers per hour. Key system statistics include the following:

- **Transit productivity** – In FY 2012/13 RABA provided 40,798 vehicle service hours of fixed route service with an annual ridership of 807,894. RABA serves nearly 20 passengers per service hour, a commonly used metric of transit productivity.
- **Farebox recovery** - Overall fare revenue increased by 16.4% while costs remained relatively flat over the past two fiscal years. The system-wide farebox recovery ratio increased from 15.1% to 17.3%. The cost per trip decreased by 15.8% since FY 2009/10.
- **Demand response** – RABA provided 17,327 demand response service hours in FY 2012/13 with an annual ridership 55,699.

NOTABLE ACCOMPLISHMENTS SINCE 2015

SRTA began to assume a more active role in transit coordination during the 2015-2018 RTP cycle. The 2017 Shasta Coordinated Transportation Plan (approved by the SRTA Board of Directors February 2017) focused on public transportation for the elderly, disabled, and persons of limited means. The plan outlines priority strategies for consideration over the next five years. In addition to maintaining existing service levels, the plan looks to better coordinate service among providers, promote mobility management, and ultimately to deliver more efficient and effective services to the traveling public.

Other major accomplishments and changes include:

- New Crosstown Express service between Downtown Redding and Hilltop shopping area via Turtle Bay and the Redding Convention Center.
- Seasonal Beach Bus service to Whiskeytown Lake.
- Sunday Transit service study
- Intercity Bus feasibility study, business plan, and successful \$8.6 million Transit and Intercity Rail Capital Program (TIRCP) grant award for all-electric intercity transit service between Redding and Sacramento.

PUBLIC TRANSPORTATION SWOT ANALYSIS

The following observations are not intended to be comprehensive, but rather to highlight salient issues and opportunities related to regional mobility.

STRENGTHS:

- Transit vehicle fleet is modern and in good condition
- Technology-enabled dispatching capabilities, multi-modal transfer facilities, and other assets enhance transit operations and improve the customer experience.
- The Transportation Development Act provides a consistent, ongoing fund source for public transportation.

WEAKNESSES:

- On-time performance
- Infrequent headways – Fixed-routes service is designed around one-hour headways.
- No late evening service – Currently all routes end service by 8:00pm. Riders have asked for certain routes to be extended until at least 8:30pm to coincide with shift work common retail, food service, and other such industries.
- No Sunday service
- Missed opportunities to coordinate between transit service providers.
- Regional land use patterns are not conducive to providing or utilizing transit service.
- New directions in regional transit coordination are not unified under a clear regional vision/outcome.

OPPORTUNITIES:

- RABA-administered transit ridership data collection effort to be available to support system planning.
- Technology is available for improved data collection and real time service information for both planning and customer service applications.
- Coordination with Sustainable Communities Strategy implementation activities has potential to increase ridership.
- Technology-enabled on-demand transit services is being studied with the intent of carrying out a pilot project for new Sunday service in a limited geographic area.
- SRTA is pursuing funding to begin intercity passenger bus service between Redding and Sacramento, with rural feeder service operated by respective regional transit providers.

THREATS:

- Limited political and general public support expanded transit services.
- Transit funds not used on transit are available for local streets and roads maintenance, which has an extensive backlog of project needs.
- Shasta County does not have the typical incentives or disincentives to appeal to choice riders. For example, parking is free and abundant, traffic congestion is isolated and short in duration, and travel time by transit is not competitive.
- Fuel costs for transit may increase as much as 4% per year, increasing operating costs.

REGIONAL PUBLIC TRANSPORTATION GOALS FOR THE 2018-2022 RTP CYCLE

SRTA aims to complete or substantially begin the following projects during the current four-year RTP cycle (2018-2022):

- **Long-range transit plan** – Develop a plan that articulates regional priorities; SRTA’s transit coordination role; future transit capital needs (alternative fuel buses, facilities, technology, etc.); and an overarching transit funding strategy. The plan should also consider priority transit nodes and corridors that complement the Sustainable Communities Strategy, local land use activities, active transportation connections to transit, first and last mile solutions, and programs that increase usage of public transportation services.
- **On-demand transit pilot project service** - Beginning with pilot projects for Sunday service in high-demand areas and in the city of Shasta Lake. Based on real-world performance and lessons learned, explore possible service expansion to additional areas and times of day, in accordance with the adopted Long-Range Transit Plan.
- **Intercity bus to Sacramento** - Implement North State Express service in accordance with the project grant award, including completion of interagency agreements and ticketing, marketing and launching of new service, and fund seeking for feeder services.

ACTIVE TRANSPORTATION



Figure 21 - New buffered bike land on Quartz Hill Road near Caldwell Park

Active transportation means getting around by human energy, including bicycling and walking. Active transportation also plays an essential role in connectivity between modes. Virtually all public transportation trips begin and end with active transportation. In more urban environments, automobile trips often include some measure of active transportation to complete the trip.

As part of coordinated multi-modal strategy, active transportation helps alleviate traffic congestion, delay or obviate the need for costly infrastructure improvements, and reduces vehicle miles traveled with associated environmental and climate impacts. Active transportation infrastructure, in combination with human-scale land use patterns also helps to create more vibrant, healthy, and interactive communities.

Active transportation facilities are generally divided into four classes:

- **Class I** - A dedicated non-motorized facility, paved or unpaved, physically separated from motorized vehicular traffic by an open space or barrier.
- **Class II** - A bike lane on a roadway, delineated by pavement striping, markings, and signing for the preferential or exclusive use of bicyclists.

- **Class III** - A bike route designated by the jurisdiction having authority, with appropriate directional and informational markers, but without striping, signing and pavement markings for the preferential or exclusive use of bicyclists.
- **Class IV** - On-street facilities reserved for use by bicyclists, having physical separation between the bikeway and travel lanes. Separated Bikeways may be one-way facilities on both sides of the street or two-way facilities on one side of the street. Physical separation may include concrete curbs, landscaping, occupied vehicle parking, bollards, or other vertical elements.

In addition to facility type standards, a growing number of communities are including non-motorized level-of-service factors in their planning processes. Whereas roadway level of service traditionally measures the degree of vehicle congestion and delay experienced by travelers, non-motorized level of service focuses on a wider range of factors indicative of users' overall convenience, safety, and qualitative experience. Specific factors may include but are not limited to:

- Network continuity
- Network quality
- Road crossings
- Traffic protection
- Safety and user conflicts
- Topography
- Actual and perceived safety and security
- Wayfinding
- Weather protection
- Facility maintenance
- Amenities
- Bicycle parking
- Design and aesthetics of facilities and surroundings

Current facilities and services

Shasta County has a growing system of multi-use trails, bicycle lanes, and other facilities. A description of bicycle and pedestrian infrastructure is found in the GoShasta Regional Active Transportation Plan (adopted February 2018), available at: www.srta.ca.gov/286/GoShasta.

In general, bicycle and pedestrian facilities are more complete and more frequently utilized in urban areas

such as the City of Redding. The city has a growing network of Class I facilities, a formal complete streets policy, and an active bicycling advocacy community.

Table 15 - Miles of Bikeways and Trails

Class	Miles (GIS)
1 - Dedicated multi-use pathway	2.1
2 - Striped bike lane	52.0
3 - Signed bike route	71.3
4 - Cycle Tracks or Separated Bikeways	0.0
Paved Trails	44.2

The League of American Bicyclists has recognized the city of Redding as a ‘bronze’ level bicycle friendly community. An award means that the community is addressing the Five E’s consistently found in great bicycling communities: Engineering, Education, Encouragement, Enforcement, and Evaluation & Planning. By strengthening or expanding efforts in these areas, the City of Redding and other communities may become friendlier to bicyclists and earn the status of a silver, gold, platinum, or diamond level community.

SRTA’s greatest ability to influence bicycle and pedestrian safety is through planning and capital funding of infrastructure. In addition, SRTA provides administrative support and technical assistance when pursuing and managing grant funds utilized for capital improvements, education and promotional activities. For example, SRTA leads a Healthy Shasta work group to enhance active transportation options, assists in the annual promotion of bike week, and is developing an online bicycle parking application that can be used with mobile devices to find or update information on bike parking locations in the region.

Information on biking and walking throughout Shasta County can be found online by a variety of resources, including:

- SRTA’s Bike and Pedestrian Planning web page
- Healthy Shasta’s ‘Be Active’ web page
- City of Redding’s Community Services website
- City of Anderson’s Community Services website
- City of Shasta Lake’s Parks & Recreation website

SYSTEM UTILIZATION

Unlike streets and roads, there is limited information regarding the usage patterns of active transportation infrastructure. The Shasta County Health and Human Services Agency, in partnership with members of the Healthy Shasta collaborative, administers annual bicycle and pedestrian counts at key locations in the region. In addition, SRTA purchased the ‘Love to Ride’ application for Bike Month participants to use for tracking bicycle travel. It is hoped that bicycle travel behavior obtained through this process will be useful in the planning and prioritization of active transportation facilities.

NOTABLE ACCOMPLISHMENTS SINCE 2015

Efforts during the 2015-2018 RTP cycle focused primarily on planning and defining SRTA’s priorities for administration of regional active transportation funding. SRTA’s 2% Non-Motorized Program and Rural Bike Lanes and Sideways to Transit (BLAST) Program call for projects was put on hold for several cycles but will begin funding projects again with the GoShasta Regional Active Transportation Plan now completed.

Specific accomplishments include:

- Adoption of the GoShasta Regional Active Transportation Plan (February 2018)
- Adoption of the city of Redding Active Transportation Plan (April 2018)
- New Downtown Transportation Plan and updated the Downtown Specific Plan emphasis active transportation
- City of Redding awarded Active Transportation Program (ATP) grants for West side and...
- Crowley Gulch bridge completed in Cottonwood
- Various local projects successfully completed, including enhancements on Victor Avenue, Placer Street, and Buena Ventura Boulevard.

Figure 22 - Shasta County Bikeways (2018 GoShasta Regional Active Transportation Plan)

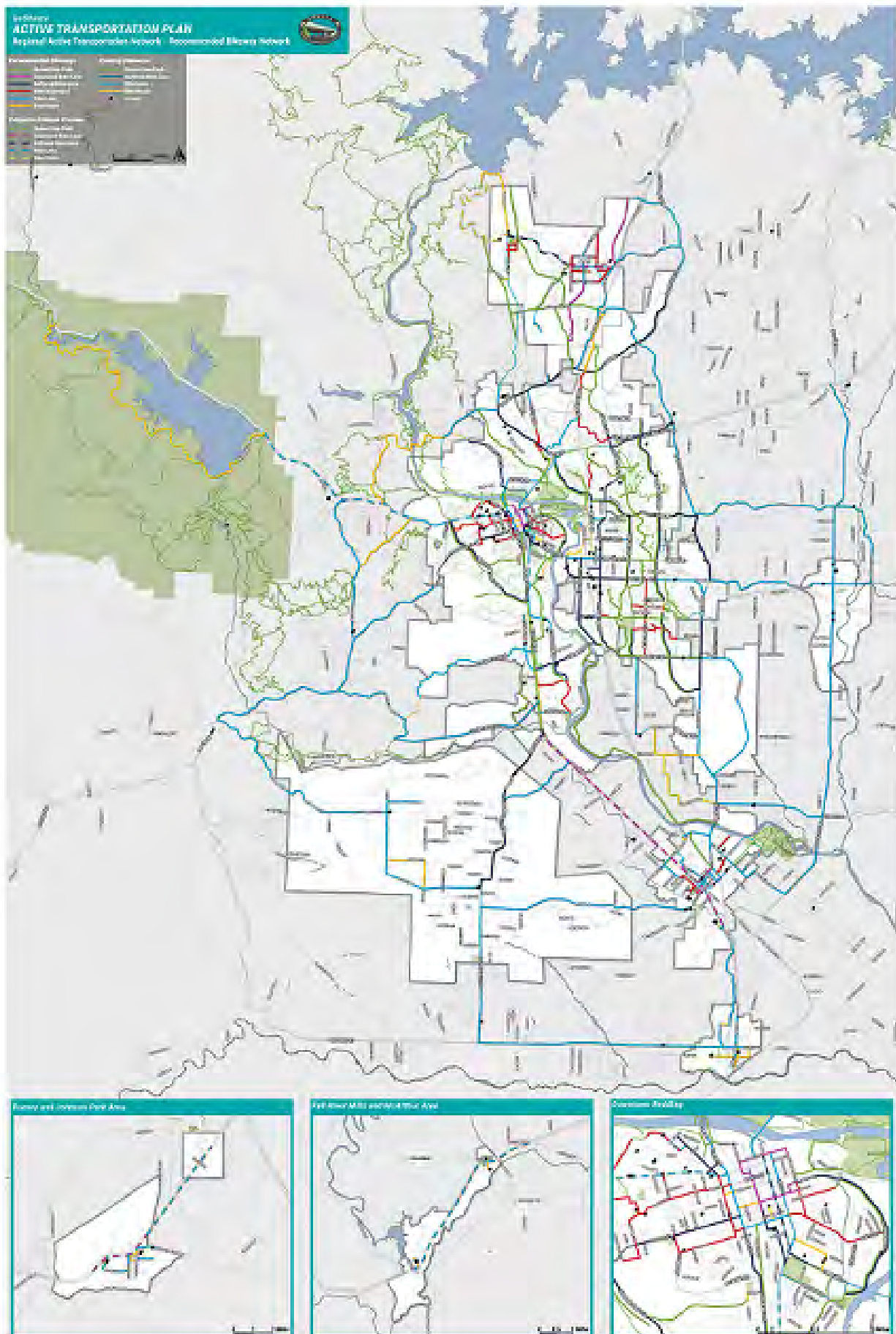


Figure 23 - Shasta County Pedestrian Facilities (2018 GoShasta Regional Active Transportation Plan)

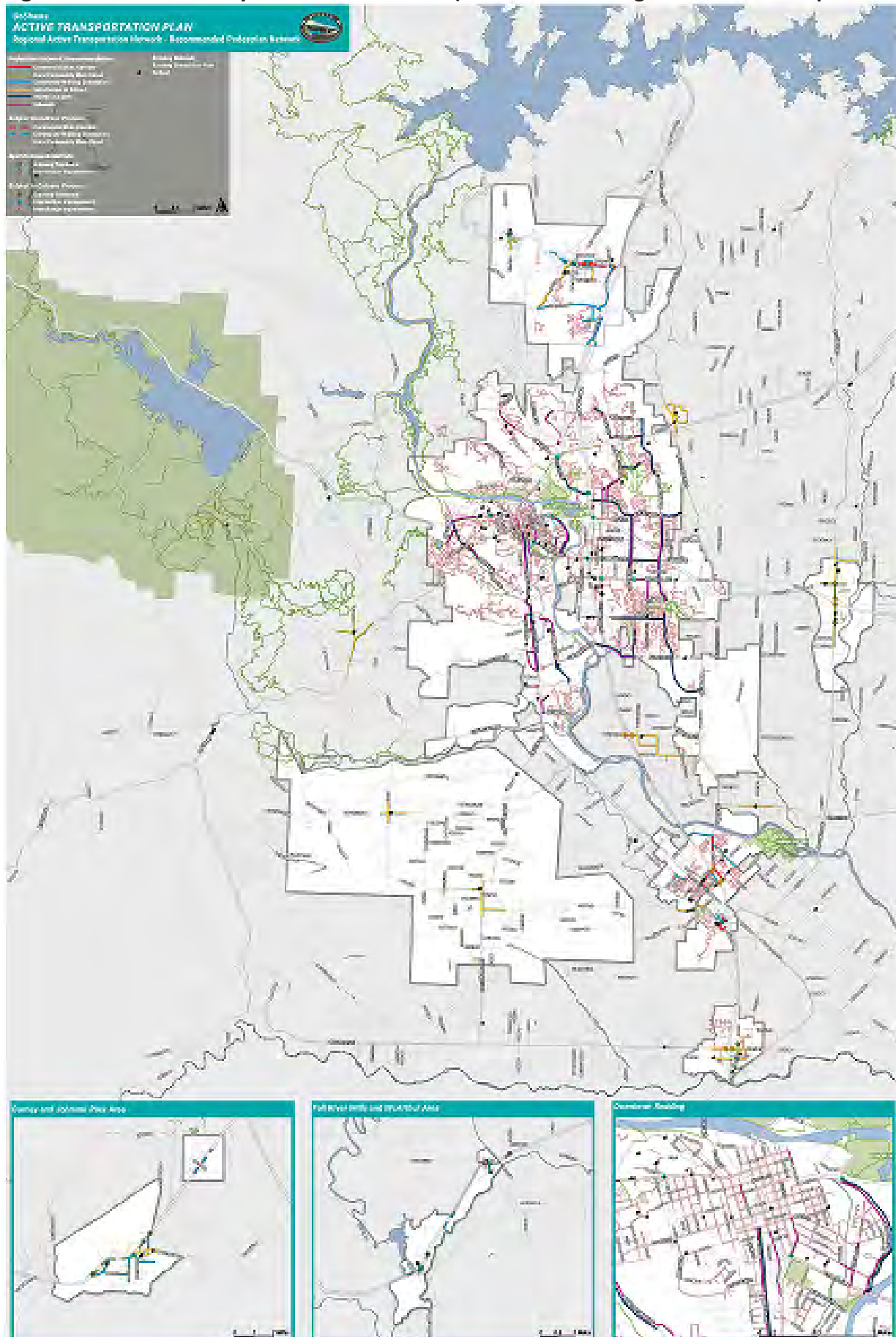


Figure 24 - Crowley Gulch project pedestrian bridge



Figure 25 - Caldwell Jr. Bike Park



Figure 26 - Planned active transportation improvements on Ashby Road in the city of Shasta Lake

Figure 27 - Green painted bike lanes on Hartnell Avenue in city of Redding



Figure 29 - Wayfinding signage on Old 99 Trail in city of Anderson



Figure 28 - Planned improvements on Victor Avenue in the city of Redding

ACTIVE TRANSPORTATION SWOT ANALYSIS

The following observations are not intended to be comprehensive, but rather to highlight salient issues and opportunities related to regional mobility for the 2018-2022 planning cycle.

STRENGTHS:

- Strong community advocacy groups have emerged or become more actively engaged.
- Regional trails investments (Sacramento River Trail, Diestelhorst Bridge, Sundial Bridge, etc), including major contributions from The McConnell Foundation.
- Public support and usage of trails.
- Adopted complete street policies in the City of Redding.
- City of Redding adopted a new, progressive Downtown Transportation Plan and Downtown Specific Plan, both of which feature a design preference for active transportation modes.
- GoShasta Regional Active Transportation Plan (adopted February 2018) provides a clear vision and regional priorities for active transportation infrastructure and programs.

OPPORTUNITIES:

- Active Transportation Program (ATP) funding was tripled to encourage transformative projects that result in active transportation mode shift.
- Potential to convert the large number of trail users from recreational users to transportation users.
- Potential use of GPS-enabled smart phones to track non-motorized travel characteristics for enhanced planning and project prioritization.
- Waterways and railroad lines offer linear corridors well-suited to right-of-way for the continued expansion of the paved trails to function as key segments of the regional active transportation trunkline network.

WEAKNESSES:

- Most active transportation facilities in the region cater to a small number of current riders who identify themselves as ‘strong and fearless’ or ‘enthused and confident’ rather than low stress facilities targeted at the majority of citizens (around 50-60%) who say that they are ‘interested but concerned’ when it comes to riding a bicycling in and an urban environment.
- Limited regional funds dedicated to active transportation.
- Competing for state and federal funding is more challenging with limited local match for leverage.
- Class I trails are incomplete and segmented.
- Regional trails not well connected to transportation network.

THREATS:

- Active transportation investments viewed by some as subtracting funds for projects serving motor vehicle operators who pay gas taxes.
- Actual and perceived threats to safety affect mode choice.
- Retrofitting bike and pedestrian infrastructure into urbanized areas designed to maximize vehicle circulation can be problematic.
- Physical barriers, including the Sacramento River, railroad, and Interstate 5 sometimes require less than direct routes.
- Implementing agencies may not share the same commitment to transformational facility designs that are necessary to entice new users and achieve mode shift assumptions in the Sustainable Communities Strategy (SCS).

REGIONAL ACTIVE TRANSPORTATION GOALS FOR THE 2018-2022 RTP CYCLE

SRTA aims to complete or substantially begin the following projects during the current four-year RTP cycle (2018-2022):

- **Active transportation trunk line model corridor (alignment to be determined)** - In conjunction with applicable local agency partners and utilizing SRTA's 'Sustainable Shasta' grant award and Regional Non-Motorized Program, translate GoShasta's 'Potential Trunk Line Alignments' (Final Report, Figure 1.2) into an initial Phase 1 trunk line alignment and design. Assemble Phase 1 financing through a combination of regional funds, local funds, and grants.
- **Active transportation data collection program** – Initiate a starter-program of automated bicycle and pedestrian counters that includes fixed counters at key gateways and mobile counters
- **Provide technical support needed for the continuation of regional active transportation mapping and guide** – Due to staffing changes, The McConnell Foundation will no longer be able to provide active transportation mapping and guidebooks. Through SRTA's in-house and contracted consultant services, provide resources to maintain accurate and up-to-date data and information on regional facilities.



Figure 30 - Conceptual GoShasta Regional Active Transportation Trunk Route network

AVIATION



Public use airports enhance interregional mobility and support greater participation in state, national, and international economies. The presence of an airport and passenger air services is often considered a requirement for attracting new business and industries to the region. Other key functions and benefits include emergency preparedness and response, aviation-related business development, and tourism.

Aviation planning occurs primarily at the state level and by individual airports. The California Aviation System Plan (CASP) is prepared by the Caltrans, Division of Aeronautics and updated every five years. Per California Public Utilities Code Section 21701, the CASP is to be developed in consultation with regional transportation planning agencies.

The primary purpose of the plan is to identify and prioritize needed airport capacity and safety related infrastructure enhancements that impact the safety and effectiveness of the California Aviation Transportation System. The plan is available online at the Caltrans website:

http://www.dot.ca.gov/hq/planning/aeronaut/documents/gasna/2010_GASNA.pdf

Current Facilities and Services

Redding Municipal Airport is the only airport in the county served by scheduled airline service. It encompasses 1,659 acres, 500 of which are zoned for commercial use. Originally built by the U.S. Army as a military airfield in 1942, it was later dedicated to the City of Redding in 1947. As the largest civilian facility in California's North State, it serves Shasta Region and the seven surrounding counties. A \$10 million terminal expansion project was completed in 2014.

Service providers and destinations have fluctuated over the years. Horizon Air discontinued service to Los Angeles in 2011. Penn Air discontinued service to Portland in 2017. As providers have switched from turboprop to higher cost jet-engined planes, many smaller markets such as Chico and Modesto have lost air services.

Despite such setbacks, the city of Redding continues to pursue increased air service frequencies and expand the number of destinations available through the Redding Municipal Airport. The City of Redding received a \$450,000 federal Small Community Air Service Development Program grant to help SkyWest Airlines bring regional jets to the North State. Daily jet service to and from San Francisco International Airport began in March of 2015. And in March of 2019, United Airlines will begin operating new nonstop flights to Los Angeles International Airport.

Table 16 - Redding Passenger Air Service

Scheduled Airlines	Direct Flights to
SkyWest	San Francisco
United Airlines	Los Angeles (starting March 2019)
Charter Air Service Companies	
Redding Aero Enterprises	
Redding Air Service Helicopters	
Redding Jet Center	
Western Air Charter	
Air Shasta Rotor & Wing	
Jim & I Aviators	

Charter air service is provided by several companies. These fixed-base operators also provide aircraft sales, maintenance service, aircraft fuels, and accessories. Federal Express, United Parcel Service, and United States Postal Service provide package service.

Ground access to the Redding Municipal Airport was enhanced in 2003 through the extension of Knighton Road, from Interstate 5 east to the airport. This project enhanced the economic viability of the airport and its surrounding industrially zoned lands. Planned improvements to Airport Road will provide four travel lanes, dedicated turning lanes, bike paths, and signals. In addition, RABA began operating the Airport Express Route in July, 2011.

The Redding Municipal Airport paid parking lot contains 329 vehicle spaces and is located directly across from the main entrance to the terminal building

Fall River Mills – Fall River Mills Airport is located at an elevation of 3,323 feet in the extreme northeast corner of the county, 70 miles from Redding. It was originally built in the 1940's as a graveled runway. Hangars, runway lights, tie-downs and security fencing have been added since 1965. This is a designated Remote Access airport.

Fall River Mills Airport is currently a General Aviation facility with a 5,000-foot runway, 14 based aircraft, and serving both piston-powered and turbine-powered general aviation transient aircraft. Services are limited to card-lock Aviation Fuel sales. There are currently no other services and no Fixed Base Operators on-site.

Recent improvements including runway and taxiway were extended to 5,000 feet, apron expansion, and construction of a nine unit T-hangar with pilots lounge and ADA bathrooms. The entire airfield is now protected by chain link security fencing.

Aviation growth in eastern Shasta County will be moderate, yet significant for the area. Arguably the most critical function the Fall River Mills airport plays is that of an operations base in the event of wildfires that often plaque the North State.



Figure 32 - Fall River Mills Airport

Benton Airport is situated within the city limits approximately one mile from Downtown Redding. Benton is a small, single runway, Visual Flight Rules (VFR) airport for single and small twin-engine general



Figure 31 - Benton Airpark

aviation aircraft. It is classified as a General Aviation Facility within the US DOT/FAA National Plan of Integrated Airport Systems. It contains 416 acres for aviation and commercial development, but its growth potential is constrained both by topography and residential encroachment. There are approximately 130 private aircraft based at Benton, in addition to the California Highway Patrol air operations. Hillside Aviation provides charter air service, sales, fuel, and maintenance.

Seaplane Facility – Located on Lake Shasta near Bridge Bay Resort, this facility serves aircraft used for wildfire suppression.

NOTABLE ACCOMPLISHMENTS SINCE 2015

- United Airline is increasing their frequency between Redding and San Francisco to four times daily in October 2018.
- New nonstop service on United Airlines from Redding to Los Angeles International Airport is scheduled to begin in March 2019.
- At Redding Municipal Airport, over 13 acres of old and failing general aviation pavement was replaced within the T-Hangar storage area. This was accomplished using a local contractor and was funded by two FAA-AIP grants. The two projects cost in excess of \$7,500,000.
- The FAA to replace several navigational aids at the Redding Municipal Airport in October 2018. In addition, the Approach Lighting System (MALSR) was replaced, Runway 16 Visual Approach Slope Indicators (VASI) were replaced with a new four-light Precision Approach Path Indicator (PAPI), and Runway End Indicator Lights (REIL) on Runway 16 were replaced.

AVIATION SWOT ANALYSIS

The following observations are not intended to be comprehensive, but rather to highlight salient issues and opportunities related to regional mobility for the 2018-2022 planning cycle.

STRENGTHS:

- Community financial support has been instrumental in attract new air service.
- Redding Municipal Airport Terminal Building was significantly expanded and upgraded to 32,000 square feet in 2014.
- Redding Municipal Airport utilizes all three types of aviation communication technology - a competitive advantage over surrounding regions.
- Nonstop service to two international airports (San Francisco and Los Angeles) provides access to and from countless domestic and international connections.

WEAKNESSES:

- A limited population within Redding Municipal Airport's air service market - generally defined as within a fifty (50) mile radius.
- Limited number of departure/arrival times and nonstop destinations.
- Geographic proximity to a larger, competitor airport (about 150 miles from Sacramento International Airport (SMF)).

OPPORTUNITIES:

- Loss of passenger air service in nearby Chico, CA provides potential to capture additional passengers.
- Synergy with new airline frequency and the new Los Angeles destination may increase the return on marketing efforts.

THREATS:

- Competition from Sacramento International Airport (SMF), Rogue Valley International-Medford Airport (MED), and even San Francisco International Airport (SFO).
- Visibility, weather, and fog at SFO impact reliability of the airline's nonstop flights to/from Redding.

REGIONAL AVIATION GOALS FOR THE 2018-2022 RTP CYCLE

SRTA aims to complete or substantially begin the following projects during the current four-year RTP cycle (2018-2022):

- Develop a plan that integrates all intercity transportation service options, including passenger air, intercity bus, and passenger rail.

RAIL



Rail's arrival in Shasta County in 1872 expanded economic development by connecting people and freight to Sacramento and the San Francisco Bay Area and beyond.

Rail service is largely privately funded; SRTA does not fund rail operations. Current facilities include two rail corridors, owed respectively by the Union Pacific Railroad (UPRR) and Burlington Northern (BSNF), which service both passenger and freight trains.

CURRENT SERVICES

Passenger rail

Amtrak's Coast Starlight runs between Seattle and Los Angeles with stops in Redding at 3:14 a.m. northbound and 2:21 a.m. southbound. This daily round trip is the second most popular long-distance train in the Amtrak system with 453,131 passengers in 2016.

In addition to passenger rail service, Amtrak operates state-supported feeder bus connections to the state-supported Capitol Corridor Route in Sacramento and San Joaquin Route in Sacramento/Stockton.

At the state level, the Draft 2018 California State Rail Plan (see <http://www.dot.ca.gov/californiarail/>) offers little promise for improvements to passenger rail to the Shasta Region, as only expanded express bus service to Redding is included in short, medium, or long goals through the year 2040.

California high speed rail continues to inch toward reality. Although there are no expectations for high speed rail north of Sacramento, it will be important for the region to plan for interregional connections in the future. The closest connection will be at the Sacramento Station - part of the second phase of high speed rail that is not likely to be operational during this RTP's 20-year planning horizon.

The most recent regional rail plan - the Northern Sacramento Valley Intercity Passenger Rail Study - was completed in 1995 and is no longer relevant to current conditions.

NOTABLE ACCOMPLISHMENTS SINCE 2015

- The McConnell Foundation and city of Redding have made progress toward a land swap that, if completed, would put the Downtown Redding rail yard (located adjacent to Downtown Transit Center) in city hands for location-appropriate infill development.



Figure 33 - Amtrak passenger rail service in Downtown Redding

Figure 34 - North State Passenger and Freight Rail Network



RAIL SWOT ANALYSIS

The following observations are not intended to be comprehensive, but rather to highlight salient issues and opportunities related to regional mobility.

STRENGTHS:

- Redding train station facility is located at the Downtown Redding Transit Center with connections to intercity bus, local public transit, and other modal opportunities.

WEAKNESSES:

- Early morning service schedule makes it difficult to attract ridership.
- Passenger service schedule is not reliable due to priority given to freight trains.
- Station facilities, including ticket window, lounge, and restrooms are not open for service.
- Lack of grade separation between rail tracks and local roadways is the cause of vehicle delay, most notably in Downtown Redding due to rail car switching.

OPPORTUNITIES:

- Renewed state interest in passenger rail planning and funding as a result of California High Speed Rail.
- Potential to work with Union Pacific Railroad to relocate rail switching operations from Downtown Redding to industrial property recently annexed by the city of Anderson. Located adjacent to the new Deschutes Road-Interstate 5 interchange project, the site is also well-suited for an intermodal freight hub. Completion of the I-5 Union Pacific Redding to Anderson Six Lane Project, including a new South Anderson Overhead, will provide the additional rail right of way needed for double tracking at the proposed site.

THREATS:

- The Union Pacific Railroad corridor through the Shasta regionl will have capacity issues by 2030 without additional capacity.
- North State passenger rail service is not a funding priority for the state.
- Safety concerns, especially where rail intersects with regional roadways, waterways, bridges and populated areas.
- History of freight car derailments in recent decades threaten to shut down rail corridors and adjacent roadways, including a number of critical interregional routes.

REGIONAL RAIL GOALS FOR THE 2018-2022 RTP CYCLE

SRTA aims to complete or substantially begin the following projects during the current four-year RTP cycle (2018-2022):

- Long-Range Passenger Rail Plan - Acquire grant funding and conduct a long-range plan for enhanced intercity public transportation alternatives that better connect north state residents to passenger rail and general aviation airports over the next 30 years. This would include the feasibility of daytime rail service to Redding and interim rapid transit bus connections to new train depots (i.e., Oroville). The study will consider factors such as air quality, congestion relief, sustainable communities, and greenhouse gas reduction with a goal of seamless travel across all modes. The information will be utilized by the North State Super Region and inform the state's rail and intercity transportation plans.

FREIGHT MOVEMENT



Freight is the transportation of goods to the point of purchase, beginning with the input of raw materials and components required for their development or manufacture. Freight infrastructure, including roadways, railways, airports, intermodal terminals, fueling stations, warehousing, and other facilities are interconnected via an elaborate network of service providers supported by logistics tools. All systems within the network are governed to varying degree by one or more regulatory bodies.

Regional freight policies, programs, and infrastructure may serve as the impetus for a larger and more diversified economy, or they may be the limiting factor suppressing economic growth and limiting broad community participation. Whereas each region has a unique mix of existing, emerging, and aspirational industries, and whereas goods have a wide range of freight needs, regional freight systems vary greatly in form and focus.

In the Shasta Region, freight needs have changed over time from a historically rural economy dominated by timber and natural resource extraction to a more urban economy that includes construction, service and hospitality, information technology, health services, higher education, and various other industries.

In addition to considering present industry freight needs, the region must also address emerging industries (less established, growth phase enterprises) and aspirational industries where an competitive edge or unique capability has been identified (e.g. wild rice production). Large-scale economic trends and shifts that alter how, when, and where freight occurs should likewise be monitored.

Freight doesn't care how it gets there. Primary decision factors, in order of importance ,are: 1) cost; 2) timeliness; and 3) reliability. As such, both public and private sector partners are vulnerable to practices and investment patterns that adversely affect the environment and reinforce social injustices. For example, freight facilities and activities that generate localized particulate emissions are more likely to be placed in a low-income community where residents possess fewer resources and clout to contest the project or to exact adequate mitigation measures. A well-planned and well-executed freight plan requires clear objectives and accountability to well-defined outcomes and performance metrics addressing the three E's of sustainability: Economy, Equity, and Environment.

Federal and State Freight Policy Framework

Regional freight planning, policies, and investment priorities should also support implementation of federal and state freight policy framework, as outlined by the following:

- FAST Act –
- California Sustainable Freight Action Plan –
- California Freight Mobility Plan –
- California State Rail Plan, Freight Rail Element
- Critical Urban/Rural Freight Corridors –

NOTABLE ACCOMPLISHMENTS SINCE 2015

- Far-Northern California Food Hub and Agricultural Cluster Study (October 2017).

Figure 35 - Truck Freight Connections and Times to External Markets



REDDING TO:	DISTANCE	TYPICAL TRAVEL TIME
Medford, OR	152 miles	3.0 hours
Reno, NV	217 miles	5.0 Hours
Sacramento	166 miles	3.3 hours
Bay Area	216 miles	4.5 hours

FREIGHT SWOT ANALYSIS

The following observations are not intended to be comprehensive, but rather to highlight salient issues and opportunities related to regional mobility.

STRENGTHS:

- Low traffic congestion current and future interregional roadways.
- One-day access to large markets and seaports
- Shasta's location at the geographic center and transportation crossroads of the North State is ideal for freight aggregation and distribution.
- Recent completed and funded transportation improvements, including the expansion of I-5 to six-lanes through the region's south-central urbanized area, SR 44-Stillwater Interchange (2018), and SR 299 Buckhorn Grade realignment to allow for 53-foot STAA truck passage.
- Access to technical capabilities of the Center for Economic Development at CSU Chico.
- Redding Municipal Airport has underutilized freight capacity.

OPPORTUNITIES:

- The cities of Anderson, Shasta Lake, and Redding all have shovel-ready industrial parks that are highly accessible to freight transportation, including freight rail access at the city of Anderson and Shasta Lake.
- Possibility of relocating freight rail switching operations from Redding's congested central business district to the city of Anderson industrial park, and the catalyst effect it would have on industrial development. The proposed location has been identified as an ideal truck-rail freight intermodal hub supported by enhanced I-5 access and planned replacement of the South Anderson Overhead.
- Evolving intelligent transportation systems (ITS) technologies such as vehicle-to-vehicle and vehicle-to-infrastructure communication may help improve network operations.
- State and federal funding for freight
- State support for alternative fuel infrastructure along I-5.
- California Northern Railroad short line ends just south of Shasta, with service to Bay Area.
- Better coordination and integration between freight planning and comprehensive economic development strategy (CEDS).

WEAKNESSES:

- Limited intermodal capacity for moving freight between rail and truck.
- Many rural industries including agriculture, timber, and natural resources are not well-suited to freight consolidation due to geographically dispersed production.
- Lack of critical mass for industry clusters makes it difficult to compete against larger, well-organized regions with vertically-integrated industries.
- Lack of accurate, local, up-to-data freight data needed for planning and project prioritization.
- Above average regional freight costs.
- Union Pacific Railroad corridor will be at capacity by 2035.

THREATS:

- Transportation corridor closures due to winter snow closures to the north.
- Lack of viable alternative routes for freight trains and trucks.
- Short, uphill onramps to I-5 cause conflicts between slow moving trucks and vehicles traveling at interstate speeds.

REGIONAL FREIGHT PROGRAM GOALS FOR THE 2018-2022 RTP CYCLE

SRTA aims to complete or substantially begin the following projects during the current four-year RTP cycle (2018-2022):

- Evaluate preliminary strategic freight nodes and corridors (see Page 80, Figure 36) – Perform stakeholder outreach and technical evaluation of obstacles and solutions to efficient goods movement inside the region and to/from external markets.

Regional Transportation Policy and Action Plan



The RTP is a technical analysis of mobility issues and potential solutions viewed through the lens of community values and priorities. The path forward is expressed as a regional vision with accompanying goals, objectives, and strategies.

- A **vision** defines an organization's purpose. It represents an aspirational, if not idealized, view of the future.
- **Goals** are broad statements that describe a desired product or end result toward which efforts are focused. They are coordinated so as to support and reinforce one another.
- **Objectives** are quantifiable, measurable outcomes in support of goals.
- **Strategies** represent a course of action. They include specific activities designed to accomplish stated objectives.

REGIONAL VISION AND POLICIES

SRTA will meet the region's evolving mobility needs and generally avoid traffic congestion and other growth-related pitfalls commonly observed in larger metropolitan regions. This will be accomplished through strategic and timely transportation system improvements; the integration of travel options into a seamless network; and collaborative effort toward transportation-efficient land use patterns where it is most beneficial. Where appropriate, SRTA will utilize its unique regional role and resources to take the lead on transformative projects aligned with the regional vision.

SRTA acknowledges that its efforts are intertwined with regional prosperity, environmental quality, community health and well-being, and various other elements that collectively define quality of life, and will use regional transportation planning, policy-making, and project programming to lead the development of projects that yield multiple community benefits. Planning and decision-making processes shall engage partner agencies, community stakeholders, and the public, and be transparent and responsive to documented community values and priorities.

In order to accomplish the regional vision, the following seven goals have been identified, each having objectives and a range of implementation strategies. Strategies are identified as either long-range (LR) strategies (i.e. to be accomplished over time as a result of persistent, ongoing effort) or short-range (SR) strategies (i.e. to be accomplished or anticipated to achieve substantial performance benefits during the current four-year planning cycle).



GOAL #1:

Optimize the use of existing interregional and regionally significant roadways to prolong functionality and maximize return-on-investment.

Objective 1.1 - Proactively maintain interregional and regionally significant roadways in a manner that balances cost and facility life-cycle.

Strategies

- A. Collect and maintain data on transportation system condition and performance (long range).
- B. Collaborate with state and federal partners to fund timely maintenance on the interregional network (long range).
- C. Consider the full life-cycle cost of new and replacement infrastructure early in the planning process and evaluate project alternatives that could lessen future maintenance burdens (long range).
- D. Integrate climate adaptation strategies early in the project planning and design phases in order to minimize future maintenance and repair costs (long range).

Objective 1.2 - Increase the throughput of people and freight on interregional and regionally significant roadways.

Strategies

- A. Develop and deploy projects and programs that reduce the number and duration of closures and lane restrictions on interregional corridors as a result of winter weather, collisions, and other exceptional events (short range).
- B. Support cost-effective travel demand management strategies that reduce the number and distance of single-occupancy vehicle trips (long range).
- C. Support freight consolidation and intermodal freight options to reduce partial loads, deadheading and other inefficient practices (long range).

Performance Measures

- Volume to capacity ratio on regionally significant corridors
- Travel mode share (percentage of trips by single occupancy vehicle, carpool, public transportation, bicycle, and walking)



GOAL #2:

Strategically increase capacity on interregional and regionally significant roadways to keep people and freight moving effectively and efficiently.

Objective 2.1 - Maximize funding available for transportation and mobility improvements in the region.

Strategies

- A. Utilize the region's limited transportation funds to leverage additional state and federal investment (long range).
- B. Work with regional partners (including the California Association of Councils of Governments and sixteen-county North State Super Region) to bring about consistent and sustainable transportation funding sources (long range).
- C. Work with state and federal partners to secure funding for transportation projects, planning, and programs that address the impacts of non-local traffic (i.e. interregional and through-trips) (short range).
- D. Position the region to compete for discretionary state and federal transportation funds by developing 'shovel-ready' projects (short range).
- E. Utilize 'fair share' methodology for ascribing transportation infrastructure funding responsibility to appropriate transportation system users and beneficiaries (short range).
- F. Explore potential local transportation revenue options (short range).

Objective 2.2 - Maintain adequate traffic capacity on the core interregional network

Strategies

- A. Employ targeted capacity increasing projects to relieve traffic bottlenecks and improve travel time reliability (long range).
- B. Preserve roadway right-of-way needed for future roadway expansion (long range).
- C. Consider transportation enhancements on key arterials to disincentivize the use of interregional corridors for local trips (long range).

Performance Measures

- Miles of roadway at Level of Service D, E, and F
- Average peak-period travel time and speed
- Average non-peak period travel time and speed



GOAL #3:

Provide an integrated, context-appropriate range of practical transportation choices.

Objective 3.1 - Develop an integrated, context-appropriate range of **local** transportation choices.

Strategies

- A. Incorporate accommodations for all applicable travel modes into the design of SRTA-funded projects (long range).
- B. Improve connectivity between public transportation and bicycling and walking to reflect the complete door-to-door trip from origin to destination (short range).
- C. Prioritize public transportation, bicycle, and pedestrian infrastructure and amenities within designated Strategic Growth Areas (SGAs) and on corridors that connect to/from SGAs (short range).
- D. Fill gaps between recreational trail corridors and integrate them into the greater transportation network (short range).
- E. Utilize multi-modal level of service criteria for evaluating and prioritizing projects and services for funding (short range).

Objective 3.2 - Develop an integrated, context-appropriate range of **interregional** transportation choices.

Strategies

- A. Facilitate multi-modal connectivity and service schedule alignment between local and interregional modes, including passenger rail, air, and intercity bus transportation (short range).
- B. Introduce new intercity public transportation options (short range).
- C. Coordinate with local and state partners toward the development of an integrated network of designated inter-community and inter-regional corridors for non-motorized travel (short range).
- D. Support efforts to expand passenger air and rail services (short range).

Performance Measures

- Active transportation mode share for the region and within Strategic Growth Areas
- Miles of active transportation facilities accessing transit stops and schools in Strategic Growth Areas
- Miles of low-stress bike facilities (Class I shared-use paths and Class IV separated bike lanes) for the region and within Strategic Growth Areas
- Average daily vehicle mile traveled per household within Strategic Growth Areas
- Percentage of households and jobs within 1/2 mile of transit



GOAL #4:

Create **people-centered communities that support public safety, health, and well-being**

Objective 4.1 - Support local governments in implementing the **Sustainable Communities Strategy**.

Strategies

- A. Initiate and participate in joint efforts with local agency partners to implement the five 'D' factors known to reduce vehicle miles traveled and associated emissions (i.e. Density, Diversity of land use, Design of streets and development, Destination accessibility, and Distance to transit), with an emphasis on Strategic Growth Areas (short range).
- B. Utilize financial incentives, technical assistance, policies, and/or other available tools to promote private sector involvement in transportation-efficient development practices, including infill, redevelopment, and trail-oriented development projects, with an emphasis on projects located in Strategic Growth Areas (short range).
- C. Avoid inducing growth and development where community services, public utilities, and transportation infrastructure capacity are inadequate to support it (long range).
- D. Pursue grant funding for Sustainable Communities Strategy implementation activities (short range).

Objective 4.2 - Enhance **community safety, health, and well-being**.

Strategies

- A. Support the development of transformational infrastructure and programs that serve to make active transportation modes a comfortable, safe, appealing, and competitive alternative to automobile trips (short range).
- B. Maintain the region's disadvantaged communities assessment; perform targeted surveying of disadvantaged communities to better understand their specific challenges and needs; and utilize regional programs and investments to strategically enhance personal mobility, destination accessibility, transportation affordability, and economic opportunity (short range).
- C. Develop transportation safety data and analysis for all modes, incorporate findings into regional planning processes, and seek funding to resolve identified safety issues (long range).

Performance Measures

- CO2 emissions per capita from vehicles and light trucks
- Number of deaths and injuries as a result of bicycle and pedestrian collisions



GOAL #5: Strengthen regional economic competitiveness for long-term prosperity.

Objective 5.1 - Facilitate **sustainable economic development** programs and projects.

Strategies

- A. Incorporate local and regional economic development strategies into regional transportation planning and project prioritization processes (long range).
- B. Seek-out public-private partnerships that leverage resources to accomplish shared objectives (short range).
- C. Support the infill and redevelopment of vacant and underutilized parcels in locations where transportation systems, community infrastructure, and community services are in place and adequate to accommodate additional demand (short range).

Objective 5.2 - Resolve **transportation-related barriers** to increased economic activity and productivity.

Strategies

- A. Support the development of detailed, comprehensive, and up-to-date North State freight and goods movement data (long range).
- B. Facilitate intermodal freight movement between truck, rail, and air modes (long range).
- C. Identify the region's key industry inputs and outputs and support the transport thereof to minimize costs and expand market access (short range).

Performance Measures

- In development for 2018 RTP update



GOAL #6: Promote **public access, awareness, and action** in planning and decision-making processes.

Objective 6.1 - Utilize a broad range of public participation involvement strategies.

Strategies

- A. Host public meetings at locations and times that are accessible and convenient to the general public (short range).
- B. Develop and maintain a comprehensive agency website with interactive capabilities (short range).
- C. Make use of maps, design renderings, and other visual communication methods as appropriate to make regional transportation issues more approachable and understandable (short range).
- D. Maintain a searchable, online resource center for various regional plans, agendas, reports, data, and documents (short range).

Objective 6.2 - Provide **meaningful opportunities for the public to participate** in regional planning and decision-making.

Strategies

- A. Publish and follow the agency's adopted Public Participation Plan to ensure transparency and clarity in regional transportation planning and influence decision making (short range).
- B. Develop and maintain relationships with a broad range of community stakeholders and associations in order to facilitate public consultation and information exchange (short range).
- C. Identify transportation disadvantaged populations and employ targeted efforts to encourage equitable representation of needs and alternatives (short range).
- D. Maintain technical and community advisory committees (short range).

Performance Measures

- Refer to SRTA's most recently adopted Public Participation Plan (available at: <http://www.srta.ca.gov/DocumentCenter/Home/View/1014>)



GOAL #7: Practice and promote **environmental and natural resource stewardship.**

Objective 7.1 - Identify and **minimize the direct and indirect adverse impacts of transportation on the environment**, including but not limited to: climate change, air quality, healthy watersheds, agriculture and grazing lands, and essential wildlife habitat.

Strategies

- A. Partner with natural resource and land management entities to incorporate ecological data and environmental outcomes into regional transportation planning processes (short range).
- B. Support local efforts to conserve irreplaceable natural resource, agriculture, grazing, and open space lands that are at risk for conversion to development.
- C. Seek funding for environmental impact mitigation and enhancement activities (long range).

Objective 7.2 - Lead the development of **resilient transportation systems and services** in the face of increasing environmental change and societal shifts in mobility.

Strategies

- A. Track data on environmental changes potentially affecting the region and conduct risk analyses on current and planned transportation system improvements (long range).
- B. Evaluate the inherent flexibility of regional transportation systems and services in responding to shifts in travel behavior and travel mode choice (long range).
- C. Develop and deliver flexible transportation systems and services able to adapt to changes in the environment, travel behavior, and travel mode choice (long range).
- D. Incorporate design features into regionally-funded projects that mitigate impacts related to climate change (short range).
- E. Incorporate green streets principles into regionally-funded projects to minimize stormwater runoff and create buffers between modes and tree shade for pedestrians and bicyclists (short range).

Potential Performance Measures

- Prime agricultural lands saved from conversion
- Environmentally sensitive lands saved from conversion
- Pounds CO₂ per year per capita (automobiles and light light trucks only)

Performance Management



LEGISLATIVE BACKGROUND

Federal Performance Management - The Moving Ahead for Progress in the 21st Century Act (MAP-21) transformed the federal transportation aid program by establishing new requirements for performance-based planning and programming to ensure the most efficient investment of federal transportation funds. Fixing America's Surface Transportation Act (FAST Act) continued this performance management and performance-based planning and programming requirements with minor changes.

Performance-based planning and programming increases the accountability and transparency of the federal aid program and offers a framework to support improved investment decision-making by focusing on performance outcomes for national transportation goals. State DOTs and MPOs are expected to use the updated regulations to make better-informed transportation planning and programming decisions.

Table 17 - FAST ACT FEDERAL PERFORMANCE GOALS

GOAL AREAS	FEDERAL GOALS
Safety	To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
Infrastructure condition	To maintain the highway infrastructure asset system in a state of good repair
Congestion reduction	To achieve a significant reduction in congestion on the National Highway System
System reliability	To improve the efficiency of the surface transportation system
Freight movement and economic vitality	To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
Environmental sustainability	To enhance the performance of the transportation system while protecting and enhancing the natural environment
Reduced project delivery delays	To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

Based on the above goals, performance measures are being established in the following in the areas:

- Pavement condition on the Interstate System and on remainder of the National Highway System (NHS)
- Performance of the Interstate System and the remainder of the NHS
- Bridge condition on the NHS
- Fatalities and serious injuries—both number and rate per vehicle mile traveled--on all public roads
- Traffic congestion
- On-road mobile source emissions
- Freight movement on the Interstate System

Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) are in process of establishing a performance management (PM) framework through a series of rules, each of which contains requirements and deadlines for transit providers, MPOs, and state DOTs. At the time of this RTP, the status of these rules and SRTA's position is as follows:

PM 1 - Safety

The Safety PM Final Rule establishes safety performance measure requirements for the purpose of carrying out the Highway Safety Improvement Program HSIP and to assess fatalities and serious injuries on all public roads.

The Safety PM Final Rule establishes five performance measures as the five-year rolling averages to include:

- Number of Fatalities
- Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)
- Number of Serious Injuries
- Rate of Serious Injuries per 100 million VMT
- Number of Non-motorized Fatalities and Non-motorized Serious Injuries

All metropolitan RTPs adopted after May 27, 2018, must include these safety measures and accompanying targets. SRTA elected to adopt the statewide 2- and 4-year targets.

PM 2 - Pavement and Bridge Performance Management

The Bridge and Pavement Performance Management (PM 2) Final Rule defines the following national performance measures for pavement and bridges:

- Percentage of Interstate pavements in Good condition
- Percentage of Interstate pavements in Poor condition
- Percentage of non-Interstate NHS pavements in Good condition
- Percentage of non-Interstate NHS pavements in Poor condition
- Percentage of NHS bridges in Good condition
- Percentage of NHS bridges in Poor condition

Caltrans will provide a whitepaper for PM 2 explaining the methodology Caltrans used to establish statewide targets. SRTA may elect to adopt the statewide goal or develop it's own for inclusion in the 2022 RTP.

PM 3 - System Performance/freight/Congestion Mitigation Air Quality (CMAQ)

- Percent of reliable person-miles traveled on the Interstate.
- Percent of reliable person-miles traveled on the Non-Interstate NHS.
- Percentage of Interstate system mileage providing for reliable truck travel time (Truck Travel Time Reliability Index).
- Total emissions reductions by applicable pollutants under the CMAQ program.
- Annual hours of peak hour excessive delay per capita.
- Percent of non-single occupancy vehicle travel which includes travel avoided by telecommuting.

Caltrans will provide a whitepaper for PM 3 explaining the methodology Caltrans used to establish statewide targets. SRTA may elect to adopt the statewide goal or develop it's own for inclusion in the 2022 RTP.

State Performance Measures - California Senate Bill 375 aims to reduce vehicle miles traveled and associated GHG emissions through the alignment of transportation and land use planning. Transportation-efficient land use patterns is one of several essential policy focus areas needed to achieve the state's climate action goals established by the California Global Warming Solutions Act of 2006 (AB 32).

Under SB 375, the California Air Resources Board (ARB) is responsible for setting regional targets for the reduction of per capita carbon dioxide (CO2) emissions associated with passenger vehicles and light-duty trucks. All regions share the same starting point or baseline year (2005) and all regional targets are based the same planning years (2020 and 2035).

The state's 18 metropolitan planning organization (MPO) regions are charged with developing a Sustainable Communities Strategy (SCS) illustrating how the region intends to achieve their respective target. It sets forth a future development pattern in coordination with transportation policies, programs, and investment strategies. Should the region's SCS fail to meet its reduction target, an Alternative Planning Strategy (APS) is prepared in its place, illustrating what measures the region would take if additional funding and other tools or measures were available.

The Shasta Region was initially assigned a target of 0% change in per capita greenhouse gas emissions for the year 2020 and 2035, when compared to 2005 levels. ARB has since revised both of these targets to -4%, however, the new targets will apply to the 2022 RTP planning cycle.

In addition, Senate Bill 150 (Allen, 2017) requires that the California Air Resources Board (ARB) prepare a report that assesses progress made by each metropolitan planning organizations in meeting respective regional greenhouse gas emission reduction targets set by the ARB. The report shall include data-supported metrics for the those strategies utilized to meet the targets.

2018-2038 REGIONAL PERFORMANCE MEASURES

Performance measures are used to gauge the effectiveness of the SRTA's program of projects, policies, and mobility strategies in meeting regionally-defined goals and priorities. Inadequate performance measures lead to some priorities being neglected while excess performance measures burden the agency with unnecessary costs and effort. When considering performance measures, the following criteria are used:

- Is it required by federal or state law?
- Is it instrumental when competing for transportation planning and capital funds?
- Is it tied to RTP goals and objectives?
- Is data readily available (e.g. no additional cost to generate or acquire data) and routinely updated so that performance can be tracked over time?
- Is it analogous to that which is used by other regions and state departments (i.e. is it consistent with accepted methodology and data standards to allow for comparison)?

It should be noted that for many policy areas it is not practical to measure direct impacts. In such instances, indicator data are often effective at signaling larger patterns and environmental changes that affect or are affected by regional transportation planning, program, and investments.

In previous RTP cycles, performance measures included in the latest State Transportation Improvement Program (STIP) Guidelines were attached as defacto metrics for the region. These measures were most recently updated in 2013 and are shown in Table 14. Since the 2010 RTP, performance measures have been the focus of much attention, effort, and policy-making at the federal and state level.

In 2013 the Strategic Growth Council awarded funds to the San Diego Association of Governments (SANDAG) for the purpose of coordinating with California's 18 metropolitan planning organizations and various state agencies to develop a common set of standardized performance measures. Ten performance monitoring indicators were proposed for statewide use. Documentation of this effort and the indicators is available online at: http://www.dot.ca.gov/hq/tpp/offices/ocp/ATLC/documents/august_15_2013/document_links/indicator.pdf.

The prominence of performance measures has also been elevated in the most recent federal transportation bill (MAP 21). MAP-21 is now a performance- and outcome-based program that looks to invest resources in projects that best address a set of national goals. Performance measures selected for the 2015 RTP are tentative pending the final outcome of federal performance measure rulemakings. Results will be incorporated into the scheduled 2018 RTP update.



Figure 37 - RABA demand response public transportation

REGIONAL TARGET SETTING

For target setting purposes, MPOs were split into three categories based on size of the region, technical capabilities, and population growth rate. These categories are the big-four metropolitan regions (Southern California, San Francisco Bay Area, San Diego, and Sacramento); the eight San Joaquin Valley regions; and the six smaller MPO regions including Shasta County.

In considering what is ambitious and achievable for individual regions, larger regions were generally found to have higher population growth rates and greater technical capacity and resources to implement vehicle miles traveled reduction strategies. Conversely, smaller MPO regions have markedly slower growth rates, less resources, and far fewer practical strategies for affecting near-term travel behavior and mode choice.

In February 2011, MPO regions received targets for the reduction of per capita CO₂ emissions from passenger vehicles and light trucks. Whereas regions had yet to complete their first SCS, initial targets were largely based on recommendations from each region's governing board. For the year 2020, targets ranged

from an 8% reduction to 1% increase. For the year 2035, targets ranged from a 16% reduction to a 1% increase. Shasta County's initial target is a 0% change for both the year 2020 and 2035. Under SB 375, ARB is charged with periodically reviewing and updating regional targets in consultation with regions and based on the best available information. As such, one or both of Shasta County's targets may at some point be revised.

SENATE BILL 150 (ALLEN, 2017)

On or before September 1, 2018, and every four years thereafter to align with target setting, the California Air Resources Board (ARB) must prepare a report that assesses progress made by each metropolitan planning organizations in meeting respective regional greenhouse gas emission reduction targets set by the ARB. The report shall include data-supported metrics for the those strategies utilized to meet the targets. To help regions collectively support achievement of state goals, the report will include a discussion of best practices and the challenges faced by the metropolitan planning organizations in meeting the targets, including the effect of state policies and funding.



Figure 38 - Bicycle commuter navigates Downtown Redding streets

Figure 39 - View of Mt. Shasta from Redding on a clear day



IMPROVED CONDITIONS AND PERFORMANCE AS A RESULT OF THE 2018 RTP

As part of the 2010 Shasta*FORWARD*>> Regional Blueprint process, several growth and development scenarios were modeled and performance outcomes evaluated against documented community values and priorities. Through this process, it became clear that repeating the same development patterns at ever-increasing scales will not yield the quality of life that residents expect.

Residents selected and the SRTA Board of Directors subsequently approved a plan to grow and invest in a manner that avoids the pitfalls to which many urban regions have succumbed. Rather than follow the path of least resistance and incrementally lose sight of the region's unique quality of life, the 2018 RTP and Sustainable Communities Strategy focuses on transformation projects, services, and programs to chart a more sustainable future - one that is more closely aligned with community values and priorities. If implemented, the 2018 RTP and Sustainable Communities Strategy will help provide the following benefits:

- Despite a 30% increase in the region's average daily vehicle miles traveled (VMT), per capita VMT will rise by less than 5%.
- Mile of roadway at Level-of-Service 'D', 'E', or 'F' will increase by less than six miles.
- Daily transit boardings will more than double from 3,000 to 6,564.
- Drive alone trips will be reduced by 1.8%.
- Number of households within 1/2 mile of transit will increase by 6,063.
- Number of jobs within 1/2 mile of transit will increase by 9,778.
- Average commute time will be reduced, from 18.1 minutes to 17.6 minutes.
- Average trip time for all purposes and modes will stay constant.

Additional performance outcomes resulting from the 2018 RTP and SCS are shown in Table 18. When reviewing performance outcomes, it is important to note the following:

- The greatest performance gains in the region are in and around designated strategic growth areas due to the increased number and intensity of 'D Factors' (i.e. Density, Diversity, Design, Distance to Transit, and Destination accessibility).
- Results reflect one possible future and is based on a set of forecasts, assumptions, revenues, and project-level decisions that have yet to occur.

Table 18 - 2018 RTP and SCS Performance Measures

PERFORMANCE MEASURES	2005	2015	2020 NO PROJECT	2020 PROJECT	2035 NO PROJECT	2035 PROJECT	2040 PROJECT
Transportation System Utilization & Mode Share							
Average Daily VMT (Total)	5,606,121	5,955,776	6,166,473	6,165,145	7,374,997	7,375,431	7,806,135
Average Daily SB 375 VMT (minus through trips)	4,638,709	4,969,064	5,106,514	5,105,238	6,095,620	6,096,106	6,453,567
Average Daily VMT per capita (minus through trips)	26.8	27.5	26.9	26.8	28.4	28.6	29.1
Miles of roadway at LOS 'D', 'E', and 'F'	12.0	10.7	7.2	7.5	9.9	10.8	16.6
Daily Transit Boardings (modeled)	2,638	3,000	3,936	3,500	6,452	6,573	6,564
# of miles of bikeways (by class)							
Class I	n/a	60.5	62.3	62.3	64.1	64.1	64.1
Class II	n/a	83.5	96.8	96.8	209.3	209.3	209.3
Percentage of trips by mode (Daily)							
Drive alone (% of trips)	47.8	47.6%	46.1%	46.2%	46.1%	46.1%	46.0%
Shared ride (2 persons) (% of trips)	26.1	26.4%	26.6%	26.5%	26.4%	26.4%	26.6%
Shared ride (3+ persons) (% trips)	17	17.1%	17.8%	17.9%	18.2%	18.2%	18.1%
School Bus (% trips)	1.7	1.7%	1.8%	1.8%	1.8%	1.8%	1.8%
Transit (% of trips)	0.3	0.3%	0.4%	0.4%	0.6%	0.6%	0.6%
Bike (% of trips)	1.3	1.2%	1.3%	1.3%	1.2%	1.2%	1.3%
Walk (% of trips)	5.8	5.6%	5.9%	5.9%	5.6%	5.6%	5.5%
Mobility/Accessibility							
Number of Households within 1/2 mile of transit	40,254	42,053	44,644	42,534	48,340	46,795	48,116
Number of Jobs within 1/2 mile of transit	49,097	57,711	61,780	60,175	68,753	67,674	67,489
Average commute time (minutes) by workers	18.3	18.1	17.5	17.3	17.4	17.4	17.6
Average trip duration (minutes) by mode							
Drive Alone	10.5	10.4	9.9	9.8	9.8	9.8	9.9
Shared Ride 2	7.9	8.0	7.8	7.8	7.8	7.8	7.7
Shared Ride 3+	7.9	8.0	8.1	8.0	8.1	8.1	8.1
School Bus	35.2	38.4	41.9	42.1	41.2	41.2	40.0
Transit	41.9	39.6	40.2	42.9	35.5	37.5	38.4
Bike	12.0	12.2	12.5	12.5	12.5	12.7	12.5
Walk	13.5	13.7	13.7	14.0	14.6	14.3	14.2
All Modes	10.1	10.2	10.0	9.9	10.0	10.0	10.0

PERFORMANCE MEASURES	2005	2015	2020 NO PROJECT	2020 PROJECT	2035 NO PROJECT	2035 PROJECT	2040 PROJECT
Safety							
Number of fatalities	38	n/a	n/a	n/a	n/a	n/a	n/a
Number of injuries	1,880	n/a	n/a	n/a	n/a	n/a	n/a
Number of bicycle and pedestrian collisions	97	n/a	n/a	n/a	n/a	n/a	n/a
Environment							
Pounds CO2/year/capita - Passenger Vehicles Only (SB 375) ¹	7,394	7,107	7,044	7,032	7,379	7,361	n/a
GHG Reductions (SB 375) per capita ¹	Baseline	n/a	n/a	-3.97%	n/a	-1.16%	n/a
Prime agricultural lands saved from conversion (acres)	n/a	n/a	n/a	n/a	n/a	87	n/a
Environmentally sensitive lands saved from conversion (acres)	n/a	n/a	1,779	n/a	n/a	6,541	n/a

Table 19 - 2018 State Transportation Improvement Program (STIP) Performance Measures

Goal	Indicator/Measure
Congestion Reduction	Vehicle Miles Traveled per capita
	Percent of congested Vehicle Miles Traveled (at or below 35mpg)
	Commute mode share (travel to work or school)
Infrastructure Condition	Percent of distressed state highway lane-miles
	Pavement Condition Index (local streets and roads)
	Percent of highway bridges by deck area classified in Poor condition
	Percent of transit assets that have surpassed the FTA usefull life period
System Reliability	Highway Buffer Index (the extra time cushion that most travelers add to their average travel time when planning trips to ensure on-time travel)
Safety	Facilities and serious injuries per capita
	Facilities and serious injuries per Vehicle Miles Traveled
Economic Vitality	Percent of housing and jobs within 0.5 miles of transit stops with frequent transit service
	Mean commute travel time (to work or school)
Environmental Sustainability	Change in acres of agricultural land
	CO ₂ emissions reduction per capita

Table 20 - MAP-21 Performance Measures

Note: SRTA has (or will be) adopting statewide targets for the Shasta Region

Performance Management 1 (PM1) - Safety <i>Adopted by SRTA December 12, 2017</i>				
Performance Target		Data Source	5-Year Rolling Average (2018)	Percent Reduction (2018)
Number of fatalities		FARS	3590.8	-7.69%
Rate of fatalities (per 100M VMT)		FARS & HPMS	1.029	-7.69%
Number of serious injuries		SWITRS	12,823.4	-1.5%
Rate of serious injuries (per 100M VMT)		SWITRS & HPMS	3.831	-1.5%
Number of non-notorized fatalities and non-motorized severe injuries		FARS & SWITRS	4,271.1	-10%
Performance Management 2 (PM2) - Asset Management				
Pavement & Bridge Performance Measures	2-Year NHS Targets		4-Year NHS Targets	
	(1/1/2018 - 12/31/2019)		(1/1/2020 - 12/31/2021)	
	Good	Poor	Good	Poor
Pavement on NHS				
Interstate	45.1%	3.5%	44.5%	3.8%
Non-Interstate	28.2%	7.3%	29.9%	7.2%
Bridges on NHS	69.1%	4.6%	70.5%	4.4%
Performance Management 3 (PM3) - System Performance				
Performance Measure	2017 Baseline Data		2-Year Target	4-Year Target
Percent of reliable person-miles traveled on the Interstate.	64.6%		65.1% (+0.5%)	65.6% (+1%)
Percent of reliable person-miles traveled on the Non-Interstate NHS.	73.0%		N/A	74.0% (+1%)
Percentage of Interstate system mileage providing for reliable truck travel time (Truck Travel Time Reliability Index).	1.69		1.68 (-0.01)	1.67 (-0.02)
Total emissions reductions by applicable pollutants under the CMAQ program.	Not applicable (Shasta Region is in air quality attainment status)			
Annual hours of peak hour excessive delay per capita.	Pending final approval of statewide 4-year target			
Percent of non-single occupancy vehicle travel which includes travel avoided by telecommuting.	Pending final approval of statewide 2-year target			

Sustainable Communities Strategy



LEGISLATIVE BACKGROUND

Senate Bill 375 aims to reduce vehicle miles traveled and associated GHG emissions through the alignment of transportation and land use planning. Transportation-efficient land use patterns is one of several essential policy focus areas needed to achieve the state's climate action goals established by the California Global Warming Solutions Act of 2006 (AB 32).

Under SB 375, the California Air Resources Board (ARB) is responsible for setting regional targets for the reduction of per capita carbon dioxide (CO₂) emissions associated with passenger vehicles and light-duty trucks. All regions share the same starting point or baseline year (2005) and all regional targets are based the same planning years (2020 and 2035).

The state's 18 metropolitan planning organization (MPO) regions are charged with developing a Sustainable Communities Strategy (SCS) illustrating how the region intends to achieve their respective target. It sets forth a future development pattern in coordination with transportation policies, programs, and investment strategies. Should the region's SCS fail to meet its reduction target, an Alternative Planning Strategy (APS) is prepared in its place, illustrating what measures the region would take if additional funding and other tools or measures were available.

REGIONAL TARGET SETTING

For target setting purposes, MPOs were split into three categories based on size of the region, technical capabilities, and population growth rate. These categories are the big-four metropolitan regions (Southern California, San Francisco Bay Area, San Diego, and Sacramento); the eight San Joaquin Valley regions; and the six smaller MPO regions including Shasta County.

In considering what is ambitious and achievable for individual regions, larger regions were generally found to have higher population growth rates and greater technical capacity and resources to implement vehicle miles traveled reduction strategies. Conversely, smaller MPO region have markedly slower growth rates, less resources, and far fewer practical strategies for affecting near-term travel behavior and mode choice.

In February 2011, MPO regions received targets for the reduction of per capita CO₂ emissions from passenger vehicles and light trucks. Whereas regions had yet to complete their first SCS, initial targets were largely based on recommendations from each region's governing board. For the year 2020, targets ranged from an 8% reduction to 1% increase. For the year 2035, targets ranged from a 16% reduction to a 1% increase. Shasta County's initial target is a 0% change for both the year 2020 and 2035. Under SB 375, ARB is charged with periodically reviewing and updating regional targets in consultation with regions and based on the best available information. Revised targets we're adopted by the ARB in March 2018. The Shasta Region has been given a target GHG reduction of 4% for both 2020 and 2035. Whereas these targets were not adopted in time for consideration in the 2018 RTP update process, the following SCS is based on the original 0% targets.

REGIONAL BLUEPRINT PLANNING

Development of the SCS for the Shasta County region began with the ShastaFORWARD>> Regional Blueprint, a three-year regional visioning effort completed in 2010. ShastaFORWARD>> included a comprehensive assessment of community values and priorities (Figure 14).

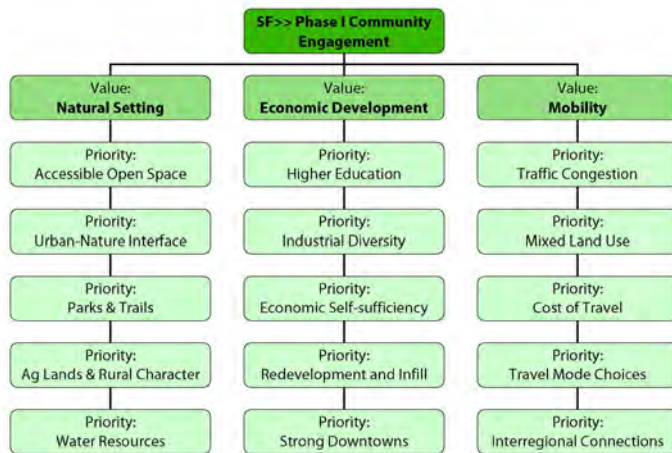


Figure 40 - ShastaFORWARD>> Values & Priorities

From documented community values and priorities and community workshops grew three regional growth and development scenarios, namely:

- **Scenario A:** Rural & Peripheral Growth;
- **Scenario B:** Urban Core & Corridors; and
- **Scenario C:** Distinct Cities & Towns.

The three scenarios were tested using the 'UPlan' urban growth model. UPlan geographically allocates forecast growth and associated development throughout the region based on numerically weighted growth 'attractors' (such as transportation accessibility, infrastructure capacity, and enterprise zones); growth 'discouragers' (such as flood zones, severe topography, and environmentally sensitive lands); and growth 'masks' (such as bodies of water). Land is developed within the model in order of highest attraction value, until all growth has been accommodated within the region.

GIS-based performance measures, travel demand modeling, and vehicle emissions modeling were used to evaluate the impact of each scenario in the following areas:

- Land Developed Ratio – i.e. among those lands in combined general plans designated for development, the percentage of which is needed to accommodate new growth.
- Environmentally Sensitive Lands Impacted – i.e. areas of environmentally sensitive land over which development may occur.
- Air Quality – i.e. Smog forming gases and particulate emissions from cars and trucks.
- Fuel Consumption – i.e. gas and diesel fuel used in Shasta County (intra-regional trips only)
- Greenhouse Gas Emissions – i.e. CO2 emissions from on-road vehicles (passenger cars and light-duty trucks).
- Infrastructure Costs for New Development – i.e. cost of streets, water, sewer, and utilities infrastructure. Walkability/Transportation Choices – i.e. percent of households within ¼ mile of shopping and transit service.
- Average Commute Time – i.e. average per capita drive time from home to employment.
- Vehicle Miles Traveled – i.e. daily VMT per household (based on 2.43 persons per household).
- Prime Agricultural Land Impacted – i.e. lands having prime soil for agriculture over which development may occur.
- Water Consumption – i.e. based on primary land-use related consumption categories.

Following an extensive public engagement effort, during which approximately one in seventy adult residents in Shasta County participated, near-equal



Figure 41 - ShastaFORWARD>> Scenarios B and C

preference was expressed for Scenario B (Urban Core & Corridor) and Scenario C (Distinct Cities & Towns) as shown in Figure 15. Viewed together, these two scenarios captured nearly 90% of the community's votes. The final report recommended that a melding of Scenario B and Scenario C be used to inform implementation efforts.

The completion of the ShastaFORWARD>> Regional Blueprint in March of 2010 aligned with the arrival of Sustainable Communities Strategy (SCS) planning requirements under SB 375. It was determined that the preferred regional growth vision and associated public input from the ShastaFORWARD>> Regional Blueprint would serve well as the building blocks for development of the SCS.

SCS DEVELOPMENT

At the core of every SCS produced by California's eighteen metropolitan planning regions is the principle of location efficiency. Households located in communities with highly dispersed and segregated land uses are more dependent on the automobile to meet day-to-day needs. Households in communities that are more compact and connected are able to meet the same needs with fewer and shorter trips, resulting in fewer vehicle miles traveled. Individuals are also more likely to choose alternative travel modes, including public transportation, bicycling, and walking.

In addition to mobility benefits, location-efficient communities enable households to better manage their transportation costs, which typically represent the second-highest household expense after housing. And since the urban footprint is smaller, adverse impacts from growth and development on lands essential for agriculture, grazing, natural resource production, wildlife habitat, healthy ecosystems, and outdoor recreation are minimized. Location-efficient neighborhoods also support a more active lifestyle, which strongly correlates to health and well-being.

The key variables known to effectively reduce vehicle miles traveled have been extensively researched and verified through observed data. These variables, summarized in Figure 16, are commonly known as the five 'D' factors.

In Shasta County, achieving the necessary

combination and critical mass of 'D' factors is a challenge given the region's dispersed development patterns, segregation of land uses, limited access to practical travel alternatives, and slow growth rate. Furthermore, no single 'D' factor by itself will yield reduction in automobile dependency; rather, it is the combination of factors and the degree to which they are present in a given area.

The Five 'D' Factors Affecting Automobile Dependency & Travel Mode Choice

Density – Number of persons, jobs, and dwellings

Diversity – Balance of residential, retail, office, and other land uses

Design – Street network and non-motorized travel accommodations

Destination Accessibility – Number of jobs and other attractions accessible via any travel mode

Distance to Transit – Proximity of high quality public service to home and work

Figure 42 - Summary of the Five 'D' Factors

Applying the 'D' factors a little here and a little there over a predominately rural region such as Shasta County would provide marginal return-on-investment. Layering many strategies within geographically small areas should, in theory, yield measurable transportation efficiencies while at the same time reinforcing local planning and economic development objectives. In the context of Shasta County, it is recognized that some the 'D' factors will be more appropriate and effective than others. Consultation and coordination with local agencies is essential in selecting the right mix and intensity of activities.

The most likely candidate locations for application of the five 'D' factors are existing urban centers and corridors – locations where some measure of the 'D' factors is already present; where the necessary infrastructure is largely in place; and where existing local plans permit an appropriate range and intensity of land uses. Such locations are also where the community is more receptive to change.

To this end, SRTA worked alongside local agency staff to identify small geographic areas known as ‘Strategic Growth Areas’ (SGAs). Within SGAs, regional and local policies, programs, and investments are jointly focused and private sector investments are leveraged to achieve measurable short-term progress – if not cumulatively across the region, at least within designated focus areas.

Whereas there have been no changes to SGAs for the 2018 SCS, steps used to identify SGAs during the 2015 SCS process are repeated below:

STEP 1: IDENTIFY PROSPECTIVE STRATEGIC GROWTH AREAS (SGAs)

SRTA utilized the following geographic information systems (GIS) spatial analysis tools to highlight prospective Strategic Growth Areas:

- Mobility Assessment Tool – A spatial measure of multi-modal connectivity between trip origins and destinations.
- Neighborhood Dynamic Scale – A spatial measure of economic activity (based on new business permits) and diversity of land uses.

These analyses, in combination with locally-identified factors and considerations, served to highlight a range of candidate SGA locations within each jurisdiction for further testing and consideration.

STEP 2: MEASURE THE ELASTICITY OF VMT AS A VARIABLE OF DENSITY WITHIN THE THREE CITIES STRATEGIC GROWTH AREAS

Once prospective SGAs had been identified, SRTA tested the elasticity of vehicle miles traveled as a variable of increased density therein. Based on total growth and development forecast figures for each respective jurisdiction, increments of residential, commercial, and office land uses were theoretically loaded within each SGA and the affects tested via ShastaSIM, the agency’s activity-based travel demand model. Three specific travel model runs were performed for the years 2020 and 2035:

- 25% of all future growth assumed within the jurisdiction occurs within SGAs;
- 50% of all future growth assumed within the jurisdiction occurs within SGAs; and
- 100% of all future growth assumed within the jurisdiction occurs within SGAs.

These model runs should not be viewed as scenarios,

but rather a simple means of testing the relationship between population density and vehicle miles traveled, and highlighting those SGAs with a greater inherent propensity for reducing transportation-sector greenhouse gas emissions. As a result of this analysis, the field of SGAs within incorporated city limits was reduced from eight SGAs to four SGAs.

STEP 3: IDENTIFY POPULATION AND DEVELOPMENT LIMITATIONS IN SGAs WITHIN THE THREE CITIES

Anticipated population and development capture rates (i.e. the portion of future growth that is expected to occur within identified SGAs) must take into consideration practical limiting factors. The following analyses provide a method and justifiable basis for estimating reasonable growth assumptions for each SGA:

- Land availability – i.e. the number of vacant and underutilized parcels suitable for infill or redevelopment and respective density restrictions. Parcel underutilization was based on the ratio of assessed structure value compared to the value of the underlying land. This technical analysis was then ground-truthed by local agency planning staff.
- Infrastructure capacity – i.e. available water and wastewater capacity (analysis was limited to city of Redding SGAs).
- Transportation capacity – i.e. excess transportation network capacity, while still maintaining acceptable peak hour vehicle level of service.
- Market demand – i.e. number of new housing units by type (e.g. mixed use, multi-family, semi-detached, etc.) and square footage of non-residential building space (e.g., retail, office, etc.) that the market will demand over the planning horizon.

STEP 4: ADD UNINCORPORATED COUNTY SGAs

A simplified version of the above steps was applied in unincorporated Shasta County, wherein wildfire risk and emergency response time were used as a proxy to screen for transportation efficiency and suitability for future growth and development. Based on this analysis and consultation with the Shasta County Planning Department, an additional four town centers were selected as SGAs and reasonable growth and development assumptions were assigned to each.

STEP 5: PERFORM TRAVEL DEMAND AND EMISSIONS MODELING FOR SCS

Inputs and assumptions for individual SGAs were modeled. One of the city SGAs was eliminated because per capita vehicle miles traveled fell above the regional average. A combined region-wide travel forecast was then modeled that included the final seven SGAs (one in each of the three cities plus four in unincorporated areas). Air-quality model post-processing (EMFAC 2011 (updated to EMFAC 2014 for the 2018 SCS)) was used to calculate regional vehicle emissions for 2020 and 2035. Where the impact of individual strategies could not be calculated with the ShastaSIM travel demand model, well-documented and widely-accepted research was relied upon and referenced in the technical methodology portion of this RTP.

STEP 6 : ADJUST SGA BOUNDARIES AND INCREASE ASSUMPTIONS TO MEET REGIONAL TARGETS.

Where the SCS failed to reduce per capita greenhouse gas emissions sufficient to meet the region's targets, more aggressive scenarios were modeled. The Downtown Redding SGA was substantially enlarged to include additional vacant and underutilized parcels needed to reasonably accommodate higher growth assumptions. The new growth assumptions were reevaluated and determined to be ambitious but reasonably achievable if accompanied by coordinated local and regional policies, programs, incentives, and investment strategies.

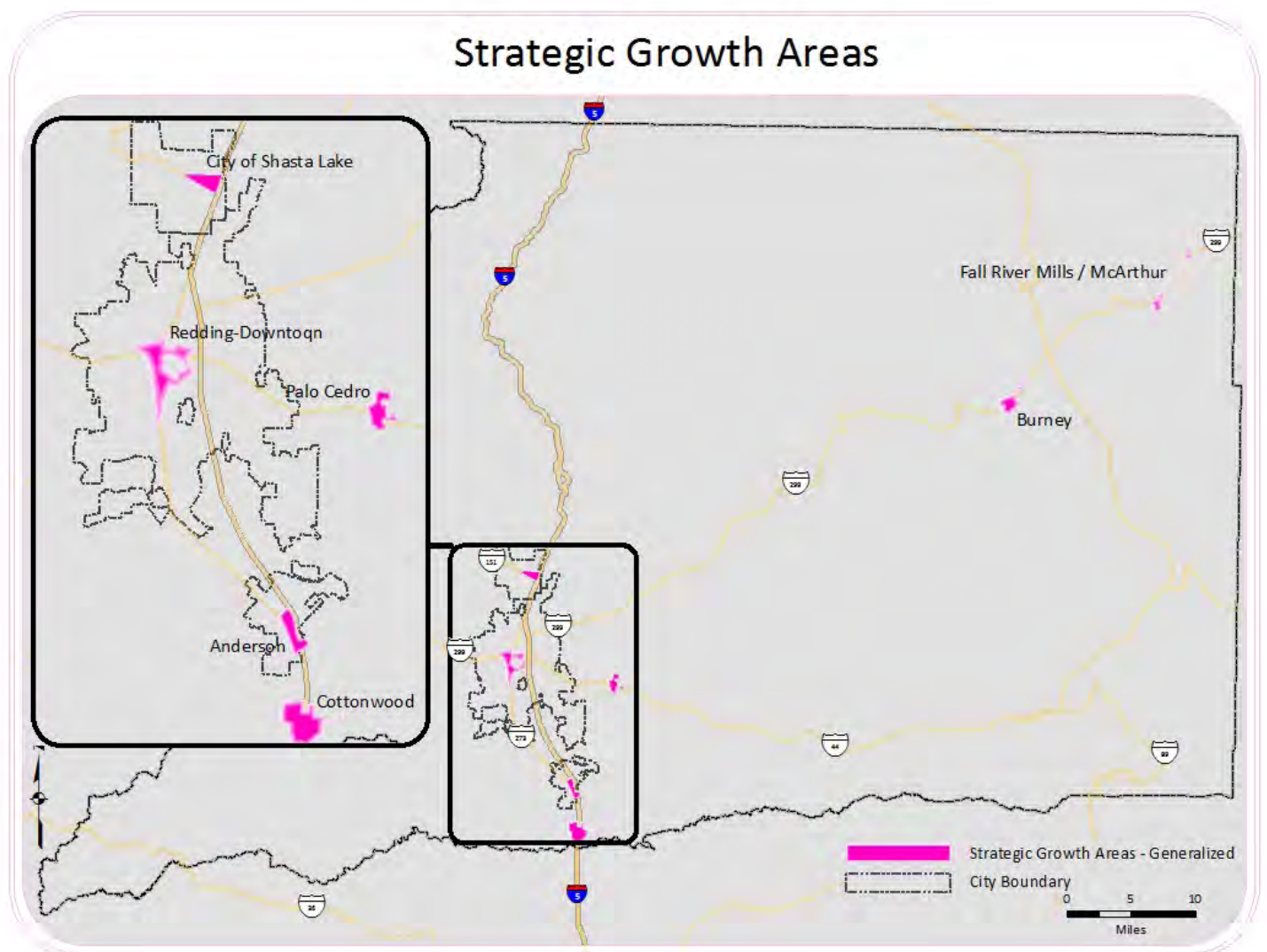


Figure 43 - Strategic Growth Areas (SGAs)

2018 SCS INPUTS AND ASSUMPTIONS

As a result of the SCS development process, seven Strategic Growth Areas (SGAs) were ultimately included in the final SCS. As illustrated in Figure 17, these include urban core areas within the cities of Shasta Lake, Redding, and Anderson plus four town centers in unincorporated Shasta County (Cottonwood, Palo Cedro, Burney, and Fall River Mills/McArthur).

FACTORS AFFECTING VEHICLE MILES TRAVELED

Factors included in the SCS and utilized in travel demand and emissions modeling are described in the following pages and expounded upon via Appendix 2: SCS Technical Methodology. They are:

FACTOR #1: Population and employment shift to Strategic Growth Areas (carryover strategy)

FACTOR #2: Increased residential densities in Strategic Growth Areas (carryover strategy)

FACTOR #3: Increased automobile operation costs (carryover strategy, updated with most current data)

FACTOR #4: Increased public transportation service frequency plus on-demand transit (modified strategy for 2018)

FACTOR #5: Accelerated delivery of active transportation investments in SGAs, with an emphasis on transformational projects and program that expand accessibility to all ages and abilities (modified strategy for 2018)

FACTOR #6: Accelerated adoption of plug-in electric vehicles (new strategy for 2018)

PROGRESS SINCE ADOPTION OF THE 2015 SCS

The package-set of strategies, assumptions, and inputs utilized for the 2015 SCS represents one potential future for the region. Actual results can and do vary from the plan. While SRTA may influence land use patterns and travel behavior via the allocation of regional funds, programmatic support and other indirect activities, the design and delivery of specific projects and services are carried out by local agencies, transit operators, private-sector developers, and community partners - each having their own set of values and priorities. Furthermore, the degree to which these investments and programs change the general public's travel habits will also differ from forecast patterns for various reasons.

Some strategies were successfully implemented. Some strategies were the subject of great effort but have yet to be delivered or need additional time to mature. Some unanticipated variables came to play. The purpose of this summary evaluation is to celebrate success and to be honest about those areas and aspects of the SCS that have been challenging.

Findings are also reported to the California Air Resources Board (ARB) pursuant to Senate Bill 150 (2017, Allen) for the purpose of documenting best practices across the state, better understanding the real-world challenges faced by the metropolitan planning organizations, and to track statewide progress toward statewide greenhouse gas emission reduction goals, including the effect of state policies and funding.



Figure 44 - The first of two new mixed-use redevelopment projects begins in Downtown Redding

NOTEWORTHY PROGRESS AND CHALLENGES DURING THE 2015-2018 PLANNING CYCLE:

Successful transformational projects and initiatives:

- SRTA developed a new Infill & Redevelopment Incentive Program that provides technical assistance to developers and local agencies. Two cycles were administered.
- SRTA participated in the development of two successful Affordable Housing and Sustainable Communities (AHSC) grant applications:
 - '1551 Market Street' Project - A partnership between the city of Redding and K2 Development to redevelop the long-vacant Dicker's Department Store and introduce complete streets back into the urban core. Project includes ground floor commercial, 79 new housing units, about three-quarters of which are affordable units).
 - 'Block 7' Project - A partnership between K2 Development, the city of Redding, and The McConnell Foundation to replace the dilapidated Downtown Parking Structure with mixed use development, community space, complete street connections, and extend the Sacramento River Trail into the central business district.
- Phase one and two of the Downtown trail loop funding gap addressed with Active Transportation Program and AHSC grant funds respectively. The project extends the Sacramento River Trail to Downtown Redding and the transit center, integrating the river trail into the greater network to serve commute and utilitarian trips.
- Funding received for North State express intercity electric bus service will replace many vehicle trips to destinations in the Sacramento area.

Has promise/potentially to be transformational if able to execute and fully develop:

- GoShasta regional active transportation trunk line network, designed to attract users of all ages and abilities and provide a viable alternative to the motor vehicles for many trips.
- The new Redding Cultural District combined with The McConnell Foundation investments will add vibrancy and increase market demand for location-efficient housing in the Downtown Redding strategic growth area.
- City of Redding's adoption of Downtown Transportation Plan and Specific Plan opens the way for a variety of transformative projects.

- City of Redding's bicycle infrastructure improvements - current spot treatments (green paint, buffered bike lanes) need to be connected and evolve into a more consistent network that addresses high-stress locations and physical obstacles.
- SRTA Non-Motorized Program depending on what projects are funded.
- Downtown trail loop, depend on final design
- New Crosstown Express service as part of future high-intensity transit service between activity centers.
- On-demand transit
- Anderson Intermodal freight depot potential to improve jobs housing balance, eliminate freight rail switching delays in Downtown Redding, reduce I-5 truck freight demand, expand freight and passenger rail capacity at the South Anderson overhead bottleneck, and open land next to downtown Redding transit center for redevelopment.
- Electric transit vehicles, including intercity
- Bike depot, including bike share and programmatic support
- Leverage tourism to accelerate implementation and utilization of alternative transportation modes
- City of Shasta Lake active transportation trunk line plans

Unsuccessful projects and initiatives:

- Food hub/ag clustering study was completed and shortlisted as a potential pilot project under the California Sustainable Freight Action Plan, but was ultimately not selected and failed to attract private sector investment required to move forward.
- City of Shasta Lake complete streets project - The study was funded but then discontinued before it commenced to focus on other city priorities.
- Cottonwood Express Service - New service was implemented, but soon discontinued due to extremely low ridership.

Notable challenges/hurdles encountered:

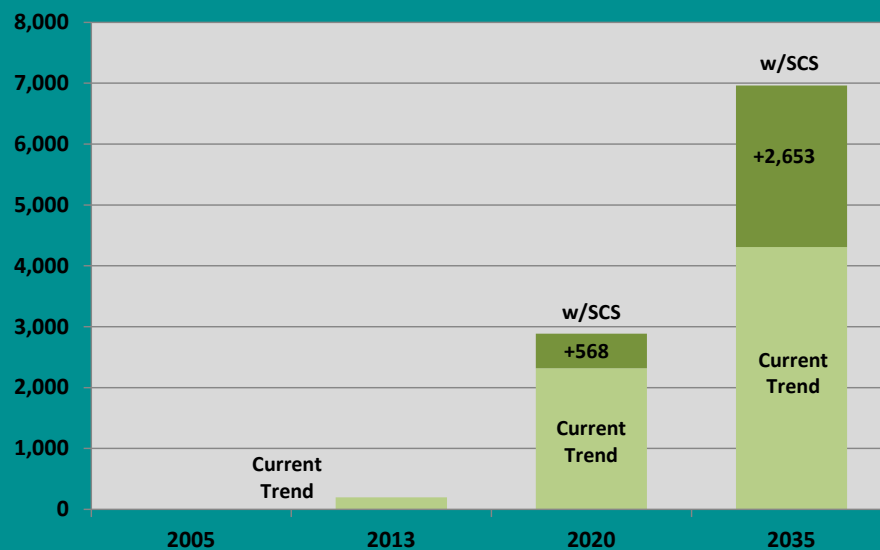
- Transformational improvements are difficult to bring to reality because such actions focus on future desired development patterns and travel behavior rather than a familiar reaction to current conditions and trends.
 - Multimodal funding portfolio relies almost exclusively on outside funding through competitive state grants.

FACTOR #1 - POPULATION AND EMPLOYMENT SHIFT TO SGAs (CARRYOVER STRATEGY)

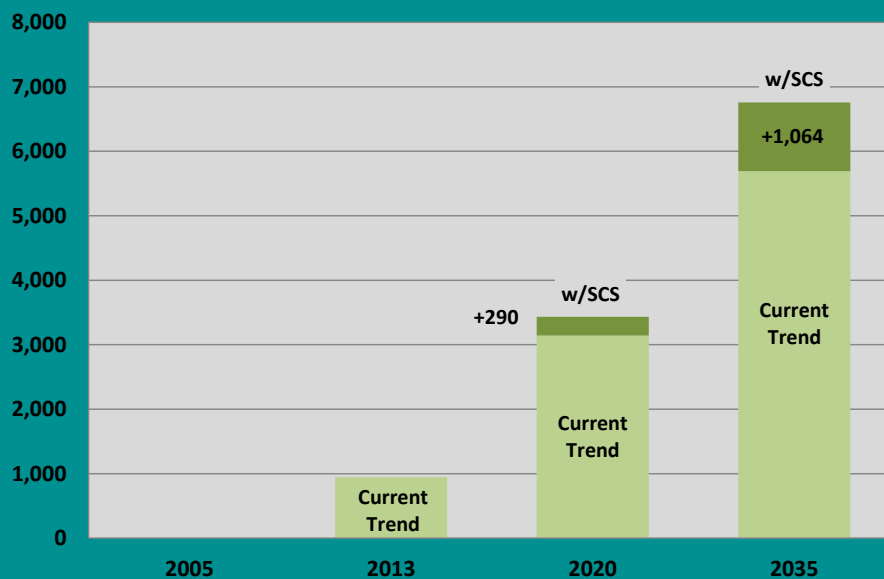
To determine what portion of future population growth might reasonably occur within designated SGAs, SRTA's activity-based travel demand model (ShastaSIM) was utilized to forecast regional growth and development patterns. Land available, infrastructure capacity, transportation system capacity, and real estate market trends were also evaluated and considered.

As a result of coordinated local and regional policies, programs, incentives, and target transportation infrastructure investments, forecast growth and development within SGAs was assumed to occur at a significantly higher rate (+6-10% over the 20-year plan) than the current trend. Employment was assumed to be attracted to SGAs at a rate similar to residential development, with a context-appropriate assignment of employment type (e.g. office, industrial, retail, food, service, medical, government, and so forth).

Population Capture Rate in SGAs

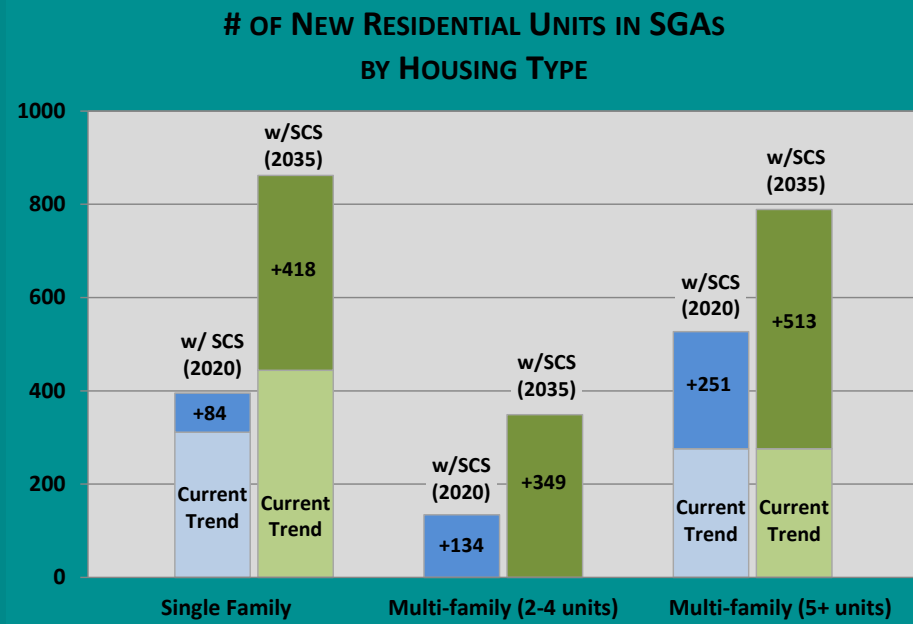


Employment Capture Rate in SGAs



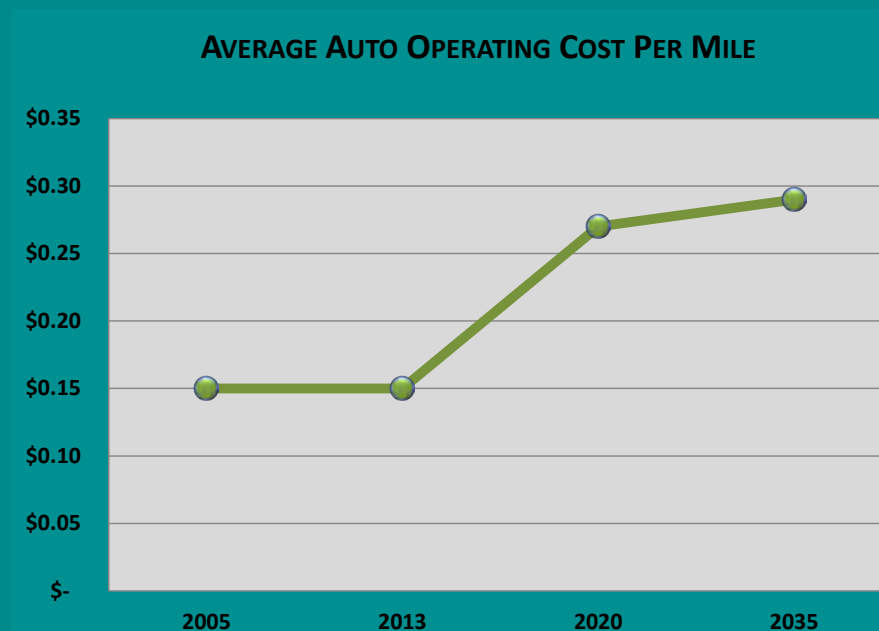
FACTOR #2 - INCREASED RESIDENTIAL DENSITIES IN SGAS (CARRYOVER STRATEGY)

Based on technical analysis of regional demographics, real estate market trends, and consultation with local agency planning departments, assumptions were drawn regarding the number of residential single family, multi-family 2-4 unit, and multi-family 5+ unit dwellings. An incremental increase in multi-family development over projected market rate development was assumed as a result of coordinated local policies, regional infill and redevelopment incentives, and affordable housing grant funding opportunities.



FACTOR #3 - INCREASED AUTOMOBILE OPERATING COSTS (CARRYOVER STRATEGY, UPDATED WITH MOST CURRENT DATA)

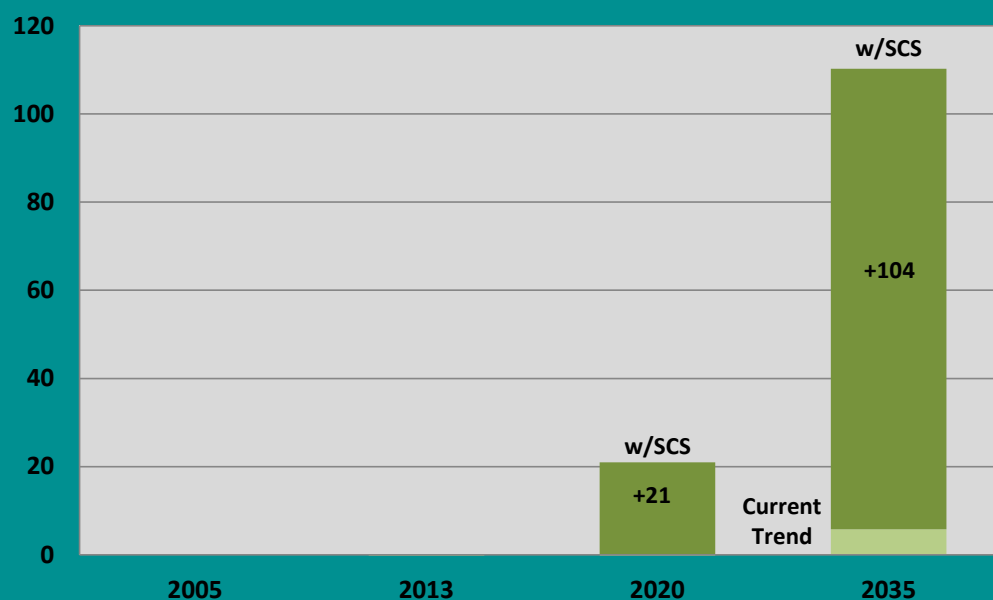
Auto operating costs ramp up from \$0.15/mile to \$0.29 by 2035.



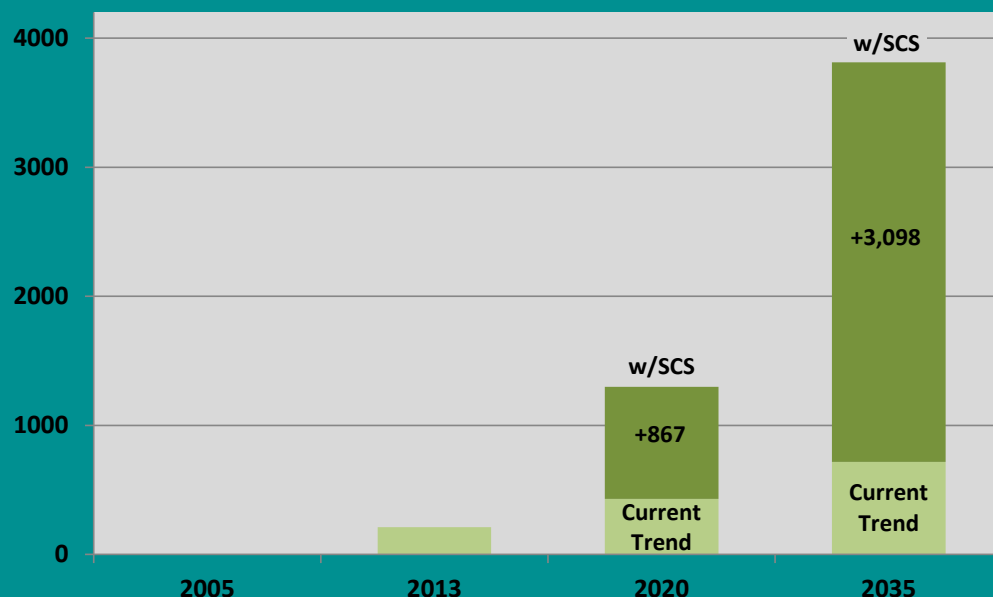
FACTOR #4 - INCREASED PUBLIC TRANSPORTATION SERVICE (MODIFIED STRATEGY FOR 2018)

Public transportation frequency was increased on select routes for 2020 and more extensively for 2035. Current 60-minute headways will be reduced to 30-minute or less headways on most routes. The 2018 RTP also assumes the introduction of on-demand transit to provide more customer-responsive and economical services in targeted areas (e.g. SGAs and large activity centers) and times (peak AM/PM commute, early/late service, and Sunday service). Subsidized transit pass programs will be furnished to all residents in new AHSC-funded multi-family housing in Downtown Redding. Together, these service improvements and programmatic strategies will increase the number of choice riders that would otherwise drive.

Increase In Daily Transit Service Hours



Increase in Daily Regional Transit Boardings



FACTOR #5 - ACCELERATED DELIVERY OF ACTIVE TRANSPORTATION INVESTMENT IN SGAs, WITH AN EMPHASIS ON TRANSFORMATIONAL PROJECTS AND PROGRAMS THAT EXPAND ACCESSIBILITY TO ALL AGES AND ABILITIES (MODIFIED STRATEGY FOR 2018)

As a result of the aggressive pursuit of active transportation funding, it is assumed that the region's non-motorized infrastructure projects will be delivered earlier, and those projects located in transportation-efficient Strategic Growth Areas will be prioritized. Spending is not enough. Incremental spot improvements that do not reflect the complete trip and projects that do not improve intersections and crossings are failing to convert large numbers of new cyclists and to replace vehicle trips with bicycle trips. Factor #5 is amended to focus on transformational projects and programs that expand accessibility to all ages and abilities. Examples include the development of a network of active transportation trunk lines and subsidizing membership in a new bike depot bike sharing program.

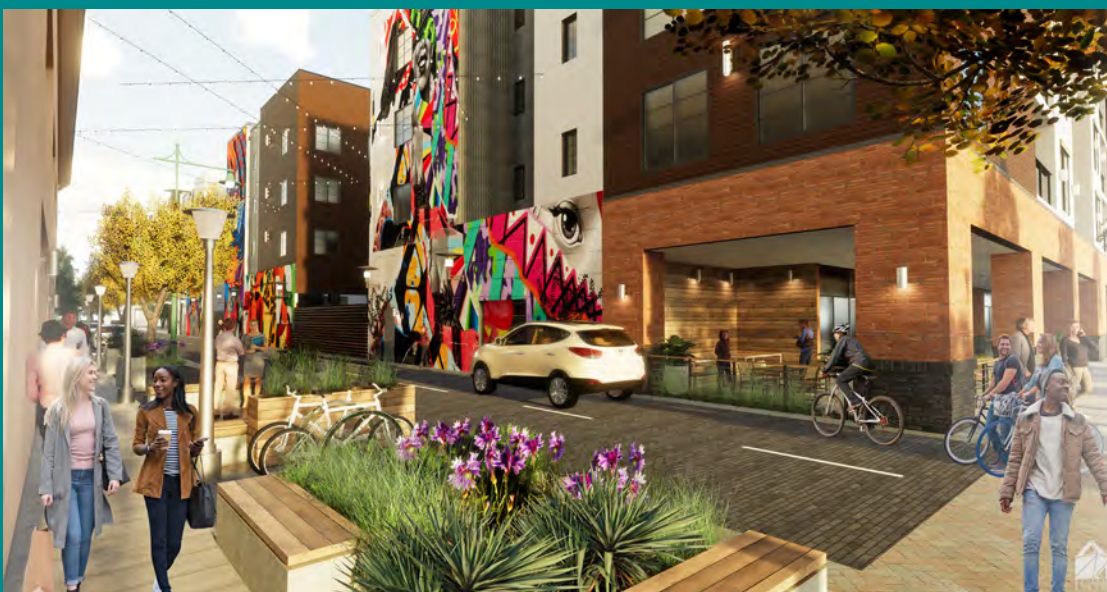


Figure 45 - Planned improvements on Continental Street (top) and Market Street Alley (bottom) in Redding

FACTOR #6 - ACCELERATED ADOPTION OF PLUG-IN ELECTRIC VEHICLES (NEW STRATEGY FOR 2018)

As a result of coordinated state, regional, and local initiatives combined with market-driven private sector investment, it is assumed that the market penetration for plug-in electric vehicles will increase X% over the current trend. This is largely based on the accelerated construction of electric vehicle charging infrastructure, including facilities located along interregional corridors and within Strategic Growth Areas.



Figure 46 - Plug-in electric vehicle charging station in Redding

RESULTS OF THE 2018 SCS

The 2018 RTP SCS achieves per capita greenhouse gas emissions from passenger vehicles and light trucks in accordance with regional targets assigned by the California Air Resources Board (ARB) for the year 2020 and 2035. The general location of land uses, residential densities, and building intensities under the region's SCS includes areas sufficient to house all forecast population through the year 2035, taking into account all economic segments of the population, net migration into the region, population growth, household formation, and employment growth.

Table 21 - SCS Daily GHG Emissions per Capita

Year	Vehicle Miles Traveled Per Capita ¹	% Change in Vehicle Miles Traveled ¹	SB 375 CO ₂ Emissions Per Capita ²	CO ₂ Emissions Target for the Shasta Region	Regional CO ₂ Emissions Per Capita as a result of 2018 RTP-SCS
2005 (baseline)	26.18 miles	-	21.31 lbs	-	-
2020	26.84 miles	0.0%	20.46 lbs	0% over 2005	-3.97%
2035	28.44 miles	+6.3%	21.06 lbs	0% over 2005	-1.16%

¹ Results generated by ShastaSIM regional travel demand model for SB 375 trip and vehicle types only

² Results generated by California ARB Emissions FACTors (EMFAC) 2014 model

POTENTIAL STRATEGIES FOR FURTHER REDUCING GREENHOUSE GAS EMISSIONS

In light of substantially more ambitious GHG emission reduction targets adopted by the California Air Resources Board in March 2018, current strategies will need to be reevaluated and additional new strategies will likely need to be added in preparation for the 2022 RTP update.

The following strategies, if implemented, are believed to offer the highest greenhouse gas emission reduction benefit-per-dollar and greatest community support due to their direct and collateral benefits, including economic development, public health and safety, and quality of life benefits.

Expansion of SRTA's Infill & Redevelopment Incentive Program combined with first-and last-mile strategies

Utilizing SB 1 formula funds, SRTA may increase incentives available for infill and redevelopment projects inside SGAs and along high-frequency transit corridors and designated active transportation trunk lines. SRTA will also lead and participate in complementary projects and programs that address the crucial first- and last-mile between transit stops and trip origins and destinations.

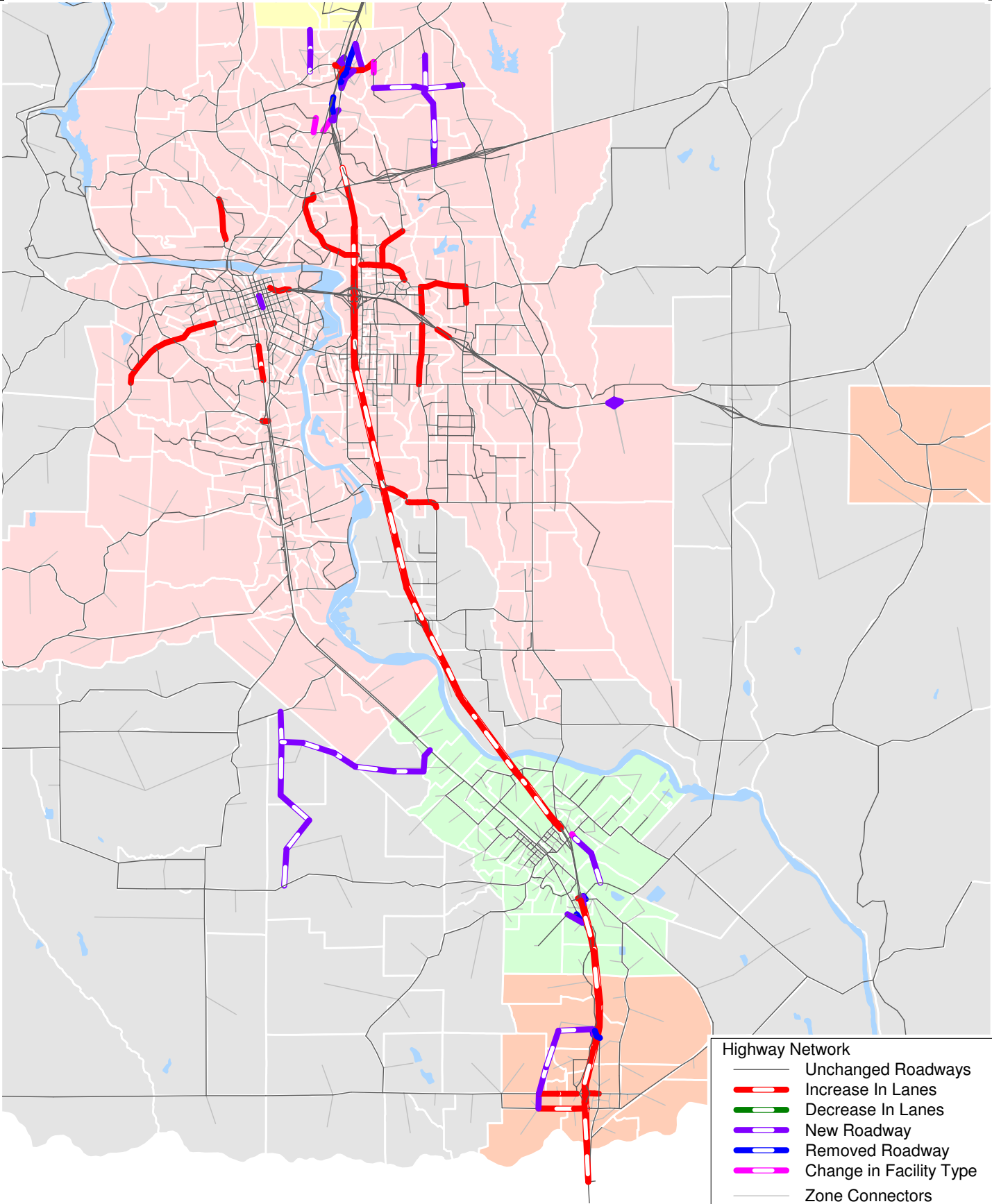
Enhanced management of interregional corridors during exceptional events

Intelligent transportation systems (ITS), traffic operations, advanced vehicle-to-vehicle and vehicle-to-infrastructure technologies, and other such strategies will be used to reduce the scale and duration of traffic congestion as a result of winter storm and collision-related closures and lane restrictions, thereby minimizing idling and low-speed stop-and-go travel.



Figure 47 - Regional Transportation Projects Completed by Year 2035

2015 RTP Projects Completed by 2035



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Figure 48 - Forecast Residential Land Use Growth by Year 2035

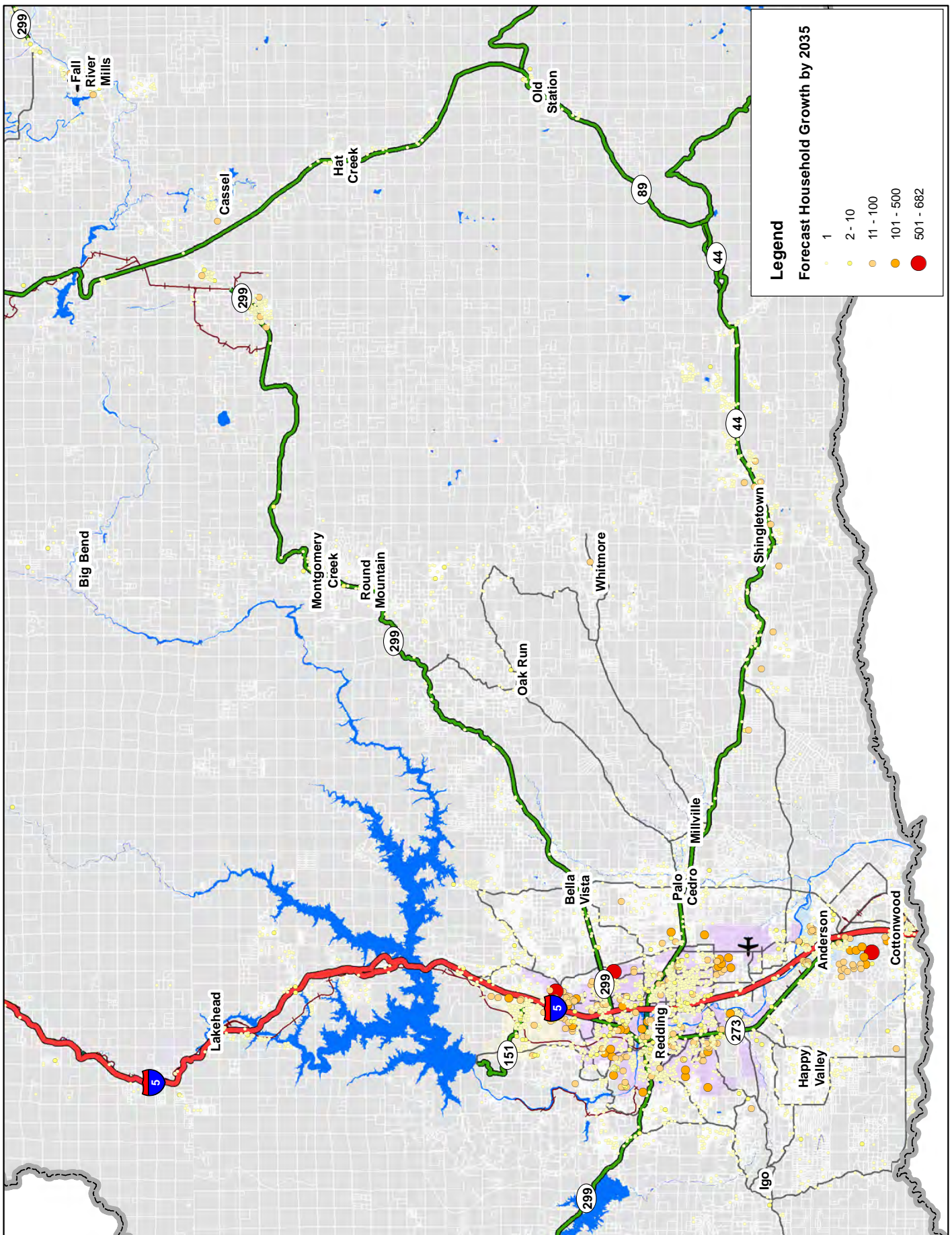
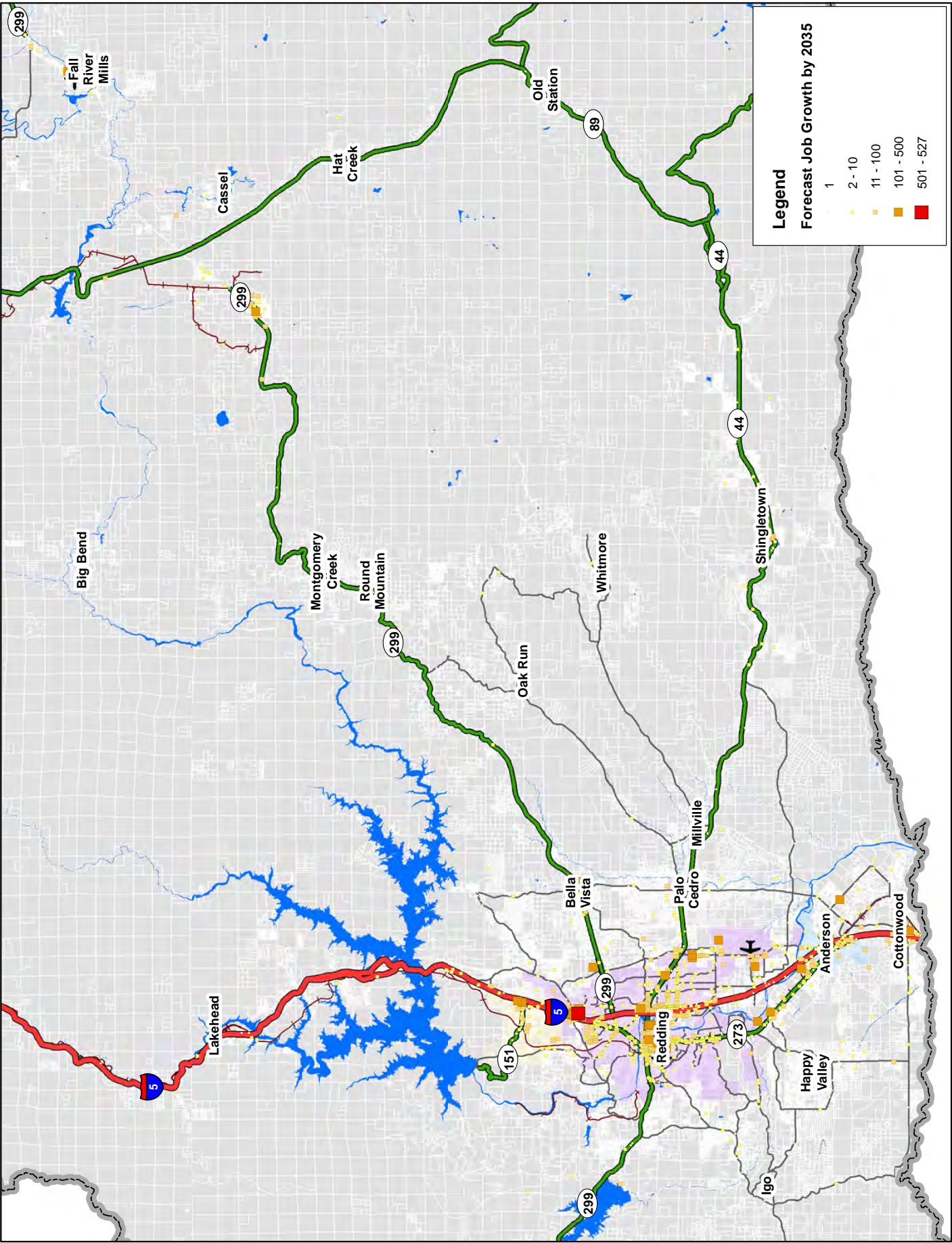


Figure 49 - Forecast Employment (Jobs) Growth by Year 2035



SB 375 COMPLIANCE AND CONSISTENCY FINDINGS

CONSISTENCY WITH LOCALLY-ADOPTED GENERAL PLANS

All land use assumptions used in the 2018 SCS are wholly consistent with local agency general plans.

CONSISTENCY WITH REGIONAL HOUSING NEEDS ALLOCATION (RHNA)

SB 375 requires that the SCS component of the RTP be consistent with the Regional Housing Needs Allocation (RHNA). The Shasta County region received its 2014-2019 RHNA on June 30, 2012. The SCS includes areas sufficient to house all forecast population, including all economic segments. SRTA reviewed the 2014-2019 RHNA allocations and has made adjustments to the November 2011 housing forecasts to ensure the RTP is consistent with RHNA.

As shown in the table below, SRTA estimates that the housing projections exceed the totals for the 2014-2019 RHNA. Approximately, 4,129 households are expected to be added to the region by 2020, far more than the 2,200 housing households required by local jurisdictions to plan for in approximately the same timeframe. These totals show that the RTP is consistent with the 2014-19 RHNA as provided by the

California Department of Housing and Community Development (HCD). Because SRTA is not responsible for land use planning, it will be up to each local agency to ensure adequate planning of housing units by income category. Additional information regarding the 2014-19 RHNA can be found on SRTA's website at: <http://www.srta.ca.gov/240/Regional-Housing-Need-Allocation-RHNA>.

SB 375-SPECIFIC PUBLIC OUTREACH REQUIREMENTS

Local agencies were, by virtue of the steps described in the SCS portion of this RTP, integral to the planning process. All key decisions regarding the location of growth, development intensities, and the selection of secondary strategies were generated directly by local agencies or by SRTA in close consultation with local agencies. In addition, individual presentations were provided to respective city councils and county board of supervisors.

Public input for the SCS began with the three-year ShastaFORWARD>> Regional Blueprint process, which engaged upwards of 2,500 residents. The 2015 RTP Public outreach regarding specific land use and transportation strategies, policies, and project priorities featured two public hearings and 55-day public comment period pursuant to SB 375.

Table 22 - Housing Forecasts for Shasta County

Year	City of Anderson	City of Redding	City of Shasta Lake	Shasta County (unincorporated)	Total
2015	4,495	38,669	4,339	26,452	73,956
2020	4,682	40,704	4,545	28,123	78,085
Total Change in Growth:	187	2,035	206	1,671	4,129

Table 23 - 2014-19 Shasta County RHNA (by income category) Per California HCD

Jurisdiction	Very-Low	Low	Moderate	Above-Moderate	Total
Anderson	32	21	24	59	136
Redding	287	181	205	502	1,175
Shasta Lake	32	21	23	58	134
Unincorporated	189	117	128	321	755
TOTAL:	540	340	380	940	2,200

AREAS OF SIGNIFICANT RESOURCES AND FARMLAND NOT DEVELOPED AS A RESULT OF THE 2018 RTP-SCS

Scientific information regarding resource areas and farmland in Shasta County was gathered and considered in the development of the SCS. The region has approximately 1.3 million acres of resource land and 12,600 acres of farmland. Land development assumptions in the travel demand model show that approximately 2,600 acres of resource areas and approximately 8 acres of farmland would not be developed as a result of the SCS land use forecast.

The location of resources areas and the increase/decrease of households and employment as a result of the SCS is illustrated in Figure 18.

CALIFORNIA AIR RESOURCES BOARD (ARB) ACCEPTANCE OF SCS TECHNICAL METHODOLOGY

Calculating SCS Vehicle miles traveled

In accordance with SB 375, the year 2005 was used as the baseline for calculating changes in per capita greenhouse gas emissions. SRTA's activity-based model, known as ShastaSIM, was utilized for all travel modeling in the 2015 RTP. The base year for ShastaSIM is 2010. 2013 base year for EIR analysis. For SB 375 purposes, ShastaSIM was used to back-cast to the year 2005, using the latest population, housing, and employment information.

Data originally submitted to ARB during consideration of initial regional targets was based on SRTA's previous four-step travel demand model. Using the new activity-based model for all model years – including the 2005 base year – provides consistency and efficiency moving forward during future planning cycles and when ARB reevaluates regional targets. ARB's EMFAC 2011 air quality model was used to calculate GHG emissions for the SCS component.

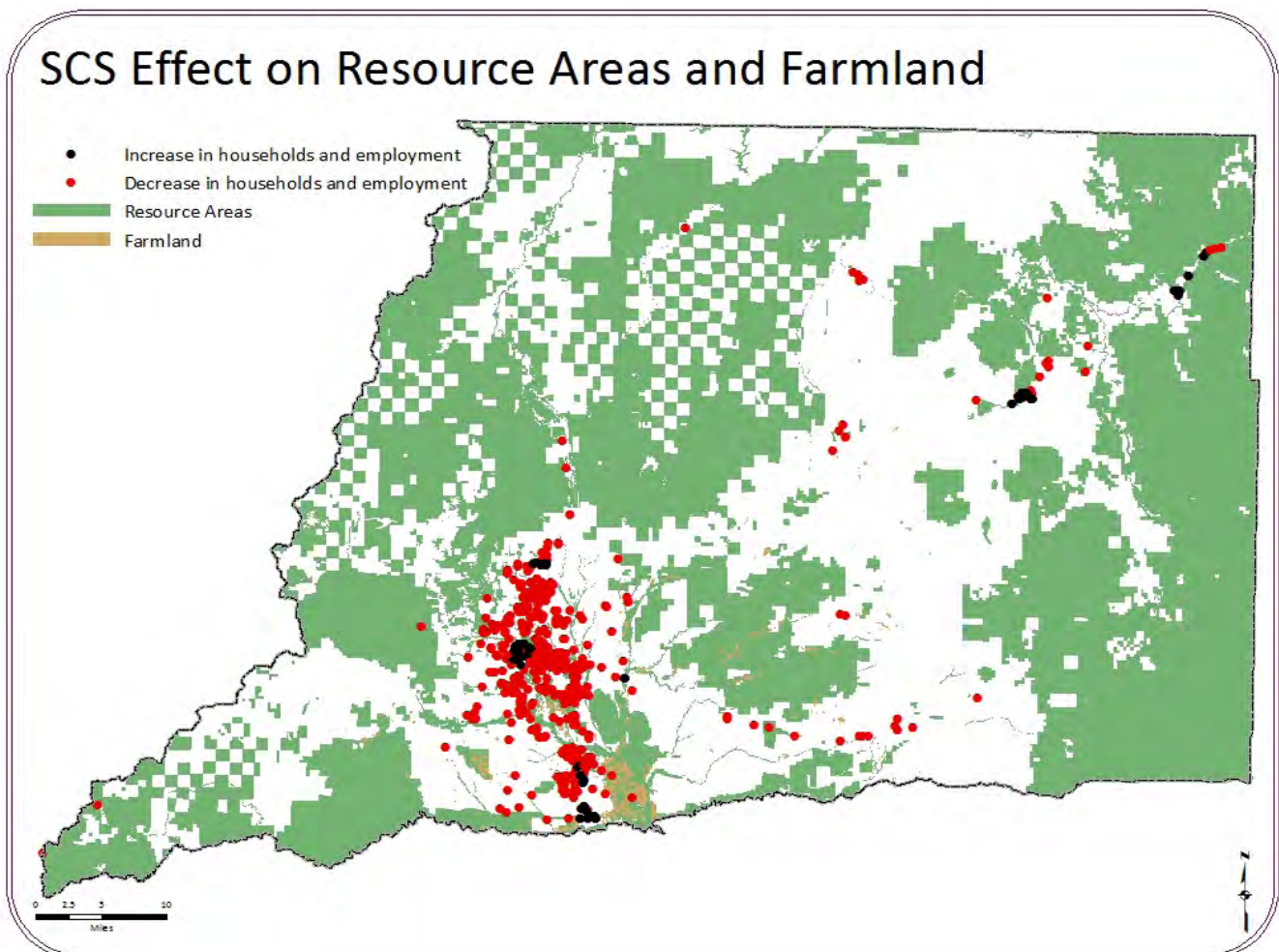


Figure 50 - Resource Areas and Farmland to be impacted by 2015 RTP

Modeling of Interregional Trips

SRTA follows the 2009 “Recommendations of the Regional Targets Advisory Committee (RTAC) Pursuant to Senate Bill 375” report on modeling interregional trips and calculating VMT. Interregional trips are described as follows:

1. Internal-External (I-X) trips are trips that originate within Shasta County and have a destination outside of the region.
2. External-Internal (X-I) trips are trips that originate outside Shasta County and have a destination within the region.
3. External-External (X-X) or “through” trips are trips that travel through the region, but never stop.

The following methodology is applied regarding interregional trips for purposes of GHG emissions estimation for the 2015 RTP:

- I-X trips – are modeled from their origin up to the Shasta County boundary.
- X-I trips – are modeled from the Shasta County boundary to their destination.
- X-X trips – are excluded from the SCS for GHG calculation.

VMT associated with interregional trips are calculated for years 2005, 2010, 2013 (EIR baseline), 2020, and 2035. While the exclusion of interregional trips as described above will be used for calculating the region’s effort to meet the SB 375 GHG reduction target, all VMT is calculated to estimate the overall impact VMT has on the region’s transportation system.

Greenhouse Gas Emissions Quantification and Reduction Estimation

For purposes of estimating GHG emissions for the 2015 RTP, SRTA utilizes the CARB’s EMFAC2011 air quality model. EMFAC2011 is the most current model available in California for estimating on-road vehicle emissions.

VMT outputs from the agency’s activity-based model serve as inputs into EMFAC2014. Emissions were estimated for years 2005, 2010, 2013, 2020 and 2035 to determine if the 2015 RTP would effectively meet the regional target of 0% increase in per capita CO₂

(carbon dioxide) emissions from passenger vehicles and light-duty trucks for the year 2020 and 2035 when compared to 2005 levels.

Consultation with ARB

SB 375 requires that SRTA consult with ARB throughout development of the SCS. As part of this process, SRTA must share the technical methodology used to determine if the SCS will meet the Shasta Region’s 2020 and 2035 greenhouse gas emission reduction targets.

On March 15, 2018, ARB issued a letter accepting SRTA’s technical methodology used in the 2018 RTP and SCS. After final approval of the RTP and SCS by the SRTA Board of Directors, ARB will review and issue a formal approval.

AIR QUALITY CONFORMITY

Consistent with Section 176 of the federal Clean Air Act (U.S.C. Section 7506), the 2018 RTP will not cause or contribute to any violation in federal air quality standards. Complete details, including mitigation measures, are provided in Section 4.2 of the 2018 RTP Supplemental Environmental Impact Report.

Financial Element



Federal law requires that the RTP be “fiscally constrained”, meaning that the collective program of projects found in the RTP and subjected to environmental impact review must be consistent with reasonably anticipated revenue over the 20 year planning horizon. Under California state law, the region’s Sustainable Communities Strategy for reducing per capita greenhouse gas emissions must also be fiscally constrained. Funding sources included in the Federal State Transportation Improvement Program (FTIP) and Regional Transportation Improvement Program (RTIP) were evaluated. Other anticipated revenue sources, including impact fees and other specific jurisdictional revenues, were also considered. Funding levels were based on typical amounts that come to the region by way of formula allocations and competitively awarded grants.

Varying assumptions regarding the escalation of revenues are included for each fund source. An escalation rate of 2.5% per year was generally used for local jurisdiction-derived fees, transit fares, and Local Transportation Fund (LTF) revenues. Federal and state revenues as well as city and county gas tax subventions were held constant over the life of the plan, representing a conservative fund estimate from these sources. No new funding sources, such as local sales tax measure or other innovative financing methods, are included in the plan. The 2018 RTP is consistent with the first four years of the State Transportation Improvement Program (STIP) fund estimate in accordance with 23 CFR Part 450.324(f)(11)(ii); consistent with the Interregional Transportation Improvement Program (ITIP) in accordance with the 2016 STIP Guidelines, Section 33; and consistent with the RTIP in accordance with STIP Guidelines, Section 19).

The Financial Element addresses the following required elements:

- 1. Projected Available Funds** – Includes all anticipated public and private financial resources that will reasonably be available to support RTP implementation for all modes of transportation over the 20 year planning horizon.
- 2. Projected Costs** – Estimate of costs to implement the projects identified in RTP. Near term projects in the four-year Federal Transportation Improvement Program (FTIP) require a higher level of detail while longer term projects can be estimated. Project costs are in “year of expenditure dollars” to reflect inflation rates
- 3. Projected Operation and Maintenance Costs** – Includes a summary of costs to operate and maintain the current and future transportation system to ensure its preservation. Costs are identified by mode and with the cumulative cost of deferred maintenance on the existing infrastructure.
- 4. Constrained RTP** - Financially constrained list of candidate projects consistent with available funding (short and long-term). Projects are consistent with the FTIP, RTIP and the Interregional Transportation Improvement Program (ITIP).
- 5. Un-Constrained List of Projects** – An illustrative list of candidate projects if additional funding becomes available (short and long-term).
- 6. Potential Funding Shortfall** – Identifies where funding is not adequate to fund projects in the long-range transportation plan. If new funding sources are assumed, when these funds are reasonably expected to be available.

PROJECTED AVAILABLE FUNDS

Total forecast revenue for the 2018-2040 RTP cycle is \$2,241,208,000, broken down by mode in Chart 12 below.

Chart 11 - 2018-2040 Funding Availability by Mode (in \$1,000s)

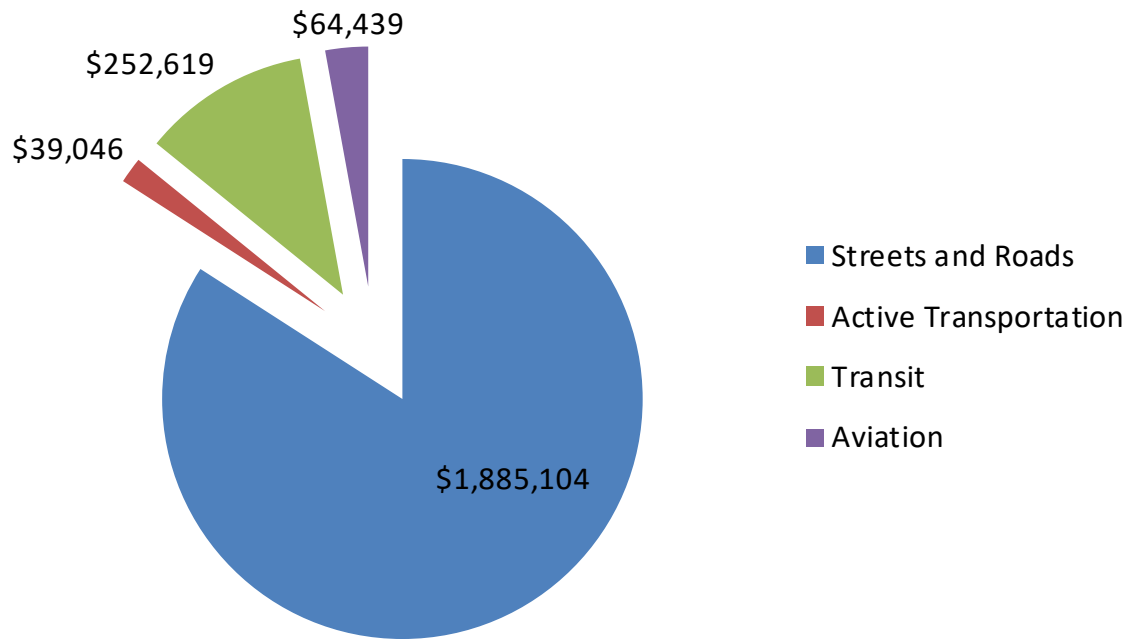


Chart 12 - Plan Funded and Unfunded by Activity (in \$1,000s)

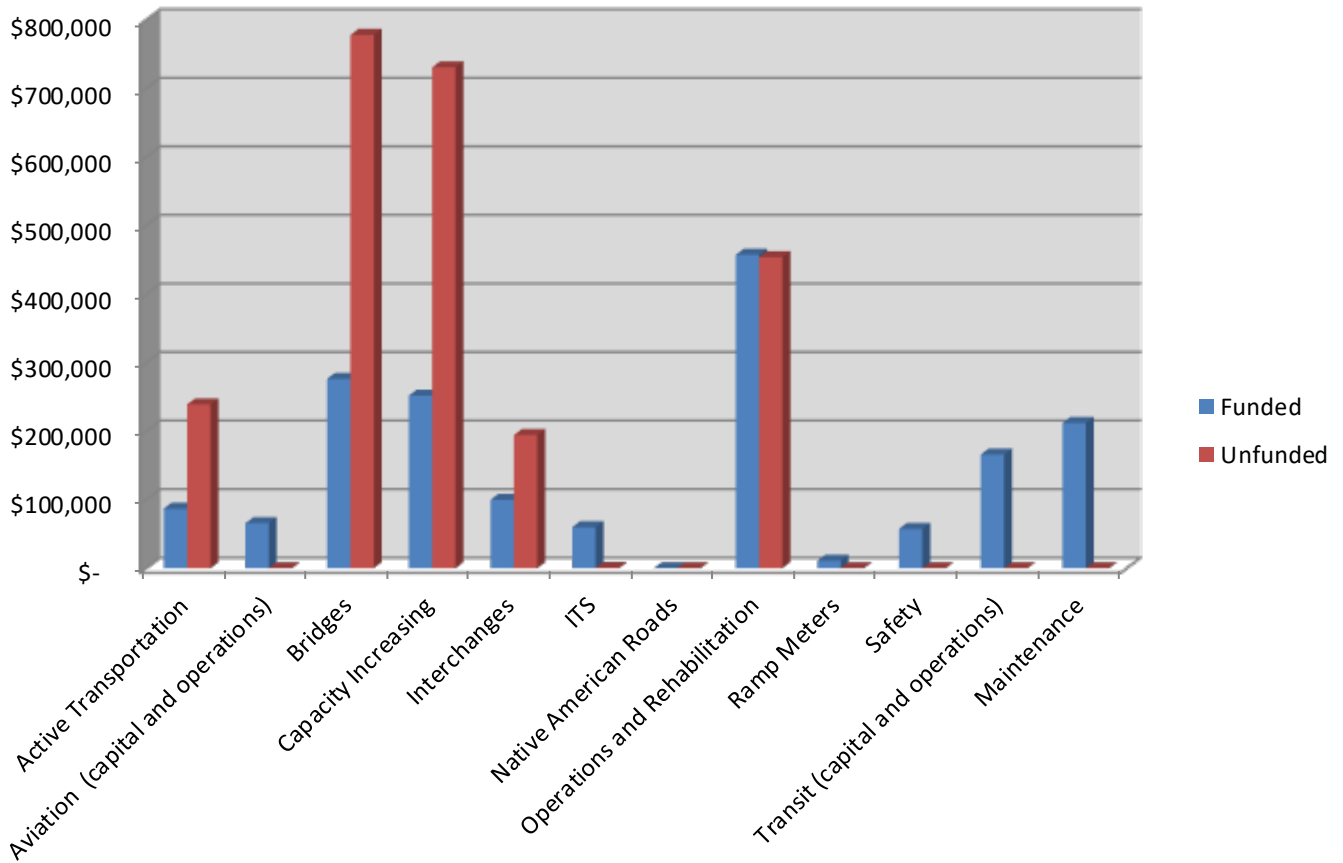


Table 24 - Financial Projection: Streets and Roads

FINANCIAL PROJECTION: STREETS AND ROADS												
PROJECTED AVAILABLE FUNDS	SHORT TERM FUNDING (\$1,000S)						LONG TERM FUNDING (\$1,000S)					
	ANDERSON	REDDING	SHASTA LAKE	SHASTA COUNTY	STATE	CONSOLIDATED	ANDERSON	REDDING	SHASTA LAKE	SHASTA COUNTY	STATE	CONSOLIDATED
Gas Tax (Direct to cities and county)	\$3,214	\$26,215	\$2,932	\$80,186	\$-	\$112,547	\$7,762	\$62,875	\$6,986	\$191,841	\$-	\$269,465
Traffic Impact Fee	\$3,745	\$12,819	\$150	\$553	\$-	\$17,266	\$10,007	\$34,252	\$401	\$1,476	\$-	\$46,137
RSTP Exchange	\$922	\$8,219	\$906	\$6,132	\$-	\$16,178	\$1,976	\$17,611	\$1,941	\$13,139	\$-	\$34,668
Transportation Development Act (TDA)	\$2,657	\$8,563	\$2,290	\$17,561	\$-	\$31,071	\$7,503	\$24,184	\$6,467	\$49,597	\$-	\$87,751
Highway Bridge Program (HBP)	\$-	\$3,007	\$155	\$7,233	\$-	\$10,395	\$-	\$6,444	\$332	\$15,499	\$-	\$22,275
Highway Safety Improvement Program (HSIP)	\$-	\$6,938	\$1,803	\$6,874	\$-	\$15,614	\$-	\$16,015	\$332	\$20,621	\$-	\$36,968
High Priority Projects (HPP)	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
State Highway Operation and Protection Program (SHOPP)	\$-	\$-	\$-	\$-	\$334,712	\$334,712	\$-	\$-	\$-	\$-	\$717,240	\$717,240
Railway Highway Crossings (Section 130)	\$2,073	\$7,255	\$-	\$1,036	\$-	\$10,364	\$4,442	\$15,546	\$-	\$2,221		\$22,209
State Transportation Improvement Program (STIP)	\$-	\$-	\$-	\$-	\$27,902	\$27,902	\$-	\$-	\$-	\$-	\$42,718	\$42,718
Trade Corridors Enhancement Program (TCEP)	\$-	\$-	\$-	\$-	\$41,700	\$41,700						\$23,000
TOTAL PROJECTED AVAILABLE FUNDS	\$12,611	\$73,015	\$8,236	\$119,575	\$404,314	\$617,751	\$31,690	\$176,928	\$16,460	\$294,395	\$782,958	\$1,302,431
PROJECTED COSTS												
Capital Improvements	\$8,000	\$79,992	\$6,400	\$78,910	\$411,625	\$584,926	\$19,329	\$75,459	\$-	\$94,548	\$592,748	\$782,082
Operations and Maintenance	\$2,066	\$15,100	\$8,495	\$80,315		\$105,975	\$2,066	\$15,100	\$8,495	\$80,315		\$105,975
TOTAL PROJECTED COSTS	\$10,066	\$95,092	\$14,895	\$159,225	\$411,625	\$690,902	\$21,394	\$90,559	\$8,495	\$174,863	\$592,748	\$888,057

Table 25 - Financial Projection: Active Transportation

FINANCIAL PROJECTION: ACTIVE TRANSPORTATION												
PROJECTED AVAILABLE FUNDS	SHORT TERM FUNDING (\$1,000S)						LONG TERM FUNDING (\$1,000S)					
	ANDERSON	REDDING	SHASTA LAKE	SHASTA COUNTY	STATE	CONSOLIDATED	ANDERSON	REDDING	SHASTA LAKE	SHASTA COUNTY	STATE	CONSOLIDATED
2% LTF Pedestrian and Bicycle Allocations	\$59	\$520	\$58	\$386	\$-	\$1,023	\$167	\$1,468	\$163	\$1,090	\$-	\$2,888
Active Transportation Program (ATP)	\$-	\$11,370	\$-	\$2,498	\$-	\$13,868	\$-	\$30,619	\$-	\$5,539	\$-	\$36,158
TOTAL PROJECTED AVAILABLE FUNDS	\$59	\$11,890	\$58	\$2,884	\$-	\$14,891	\$167	\$32,087	\$163	\$6,629	\$-	\$39,046
PROJECTED COSTS												
Capital Improvements	\$226	\$-	\$7,621	\$1,461	\$200	\$9,508	\$56	\$22,380	\$980	\$26,110	\$-	\$49,527
TOTAL PROJECTED COSTS	\$226	\$-	\$7,621	\$1,461	\$200	\$9,508	\$56	\$22,380	\$980	\$26,110	\$-	\$49,527

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Table 26 - Financial Projection: Transit

PROJECTED AVAILABLE FUNDS	SHORT TERM FUNDING (\$1,000S)						LONG TERM FUNDING (\$1,000S)					
	RABA	SHASTA COUNTY	CTSA	PRIVATE/ NON-PROFIT	SRTA	CONSOLIDATED	RABA	SHASTA COUNTY	CTSA	PRIVATE/ NON-PROFIT	SRTA	CONSOLIDATED
State Transit Assistance (STA)	\$9,555	\$-	\$-	\$-	\$-	\$9,555	\$81,383	\$-	\$-	\$-	\$-	\$81,383
SB 1 State of Good Repair	\$-	\$-	\$-	\$-	\$1,811	\$1,811					\$4,333	\$4,333
Transit Fares	\$6,477	\$-	\$-	\$-	\$-	\$6,477	\$15,496	\$-	\$-	\$-	\$-	\$15,496
Local Transportation Fund (LTF) for Transit	\$20,977	\$-	\$-	\$-	\$-	\$20,977	\$50,186	\$-	\$-	\$-	\$-	\$50,186
Low Carbon Transit Operations Program (LCTOP)	\$-	\$-	\$-	\$-	\$1,134	\$1,134	\$-	\$-	\$-	\$-	\$2,430	\$2,430
FTA Section 5307/5340 - Urbanized Area Formula Program	\$9,627	\$-	\$-	\$-	\$-	\$9,627	\$20,775	\$-	\$-	\$-	\$-	\$20,775
FTA Section 5339 - Bus and Bus Facilities	\$2,352	\$-	\$-	\$-	\$-	\$2,352	\$5,040	\$-	\$-	\$-	\$-	\$5,040
FTA Section 5339c - Low-No Emission Reduction Program	\$1,306					\$1,306	\$2,798					\$2,798
FTA Section 5310 - Mobility of Seniors and Individuals with Disabilities	\$-	\$-	\$550	\$550	\$-	\$1,100	\$-	\$-	\$3,300	\$3,300	\$-	\$6,600
FTA Section 5311 - Nonurbanized Area Formula Program	\$-	\$2,345	\$-	\$-	\$-	\$2,345	\$-	\$5,025	\$-	\$-	\$-	\$5,025
FTA Section 5311c - Public Transportation on Tribal Reservations	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
FTA Section 5311f - Intercity Bus	\$-	\$-	\$-	\$595	\$-	\$595	\$-	\$-	\$-	\$1,275	\$-	\$1,275
Transit and Intercity Rail Capital Program (TIRCP)	\$-	\$-	\$-	\$-	\$18,000	\$18,000	\$-	\$-	\$-	\$-	\$-	
State Rail Funds	\$-	\$-	\$-	\$-	\$1,000	\$1,000	\$-	\$-	\$-	\$-	\$3,000	
TOTAL PROJECTED AVAILABLE FUNDS	\$50,294	\$2,345	\$550	\$1,145	\$21,945	\$57,278	\$175,678	\$5,025	\$3,300	\$4,575	\$6,763	\$195,340
PROJECTED COSTS												
Capital Improvements	\$10,184	\$-	\$180	\$550	\$19,811	\$30,725	\$-	\$-	\$-	\$3,300	\$4,333	\$7,633
Operations and Maintenance	\$53,219	\$4,230	\$2,990	\$595	\$2,134	\$63,168	\$83,155	\$6,609	\$4,671	\$1,275	\$5,430	\$101,141
TOTAL PROJECTED COSTS	\$63,404	\$4,230	\$3,170	\$1,145	\$21,945	\$93,893	\$83,155	\$6,609	\$4,671	\$4,575	\$9,763	\$108,774

Table 27 - Financial Projection: Aviation

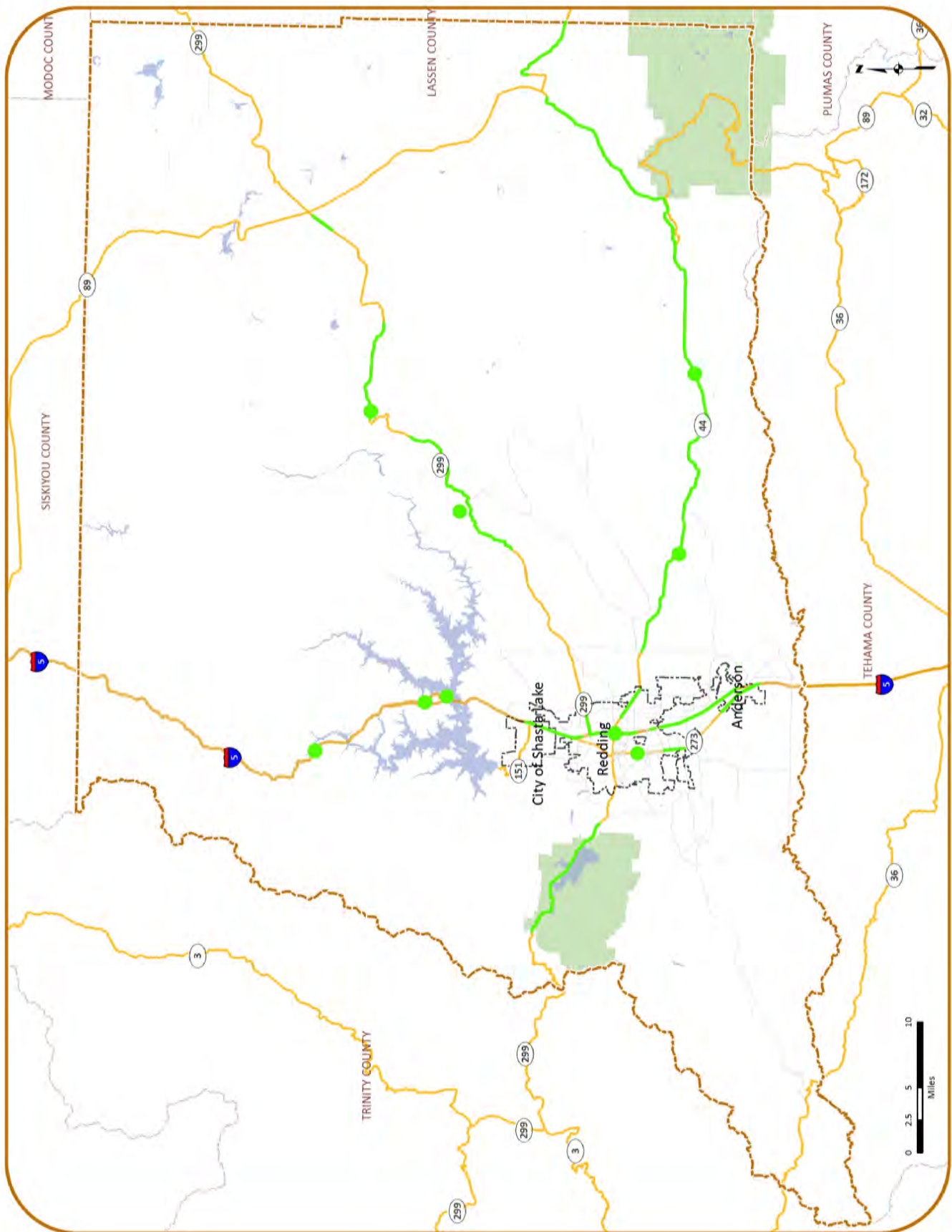
	REDDING MUNICIPAL AIRPORT	BENTON AIRPARK	FALL RIVER MILLS AIRPORT	CONSOLIDATED	REDDING MUNICIPAL AIRPORT	BENTON AIRPARK	FALL RIVER MILLS AIRPORT	CONSOLIDATED
Federal Aviation Administration (FAA) - Airport Improvement Program (AIP)	\$14,239	\$4,922	\$1,197	\$20,358	\$-	\$-	\$100	\$100
CA State Division of Aeronautics - State AIP Match	\$-	\$246	\$60	\$306	\$-	\$-	\$5	\$5
Operating Revenue	\$20,144	\$301	\$823	\$21,268	\$20,144	\$1,102	\$756	\$22,002
California Aid to Airports (CAAP)	\$-	\$100	\$100	\$200		\$100	\$100	\$200
Redding Airport Fund	\$58.19	\$25			\$49.81	\$21		
TOTAL PROJECTED AVAILABLE FUNDS	\$34,441	\$5,594	\$2,180	\$42,132	\$20,194	\$1,223	\$961	\$22,307
PROJECTED COSTS								
Capital Improvements	\$15,706	\$5,469	\$1,330	\$22,505	\$-	\$-	\$111	\$111
Operations and Maintenance	\$19,549	\$1,102	\$850	\$21,501	\$19,549	\$1,102	\$850	\$21,501
TOTAL PROJECTED COSTS	\$35,255	\$6,571	\$2,180	\$44,006	\$19,549	\$1,102	\$961	\$21,612

Table 28 - Unfunded or Deferred Maintenance

JURISDICTION	ESTIMATED CURRENT TOTAL MAINTENANCE	ESTIMATED ANNUAL AVAILABLE FUNDING FOR MAINTENANCE	ESTIMATED DEFERRED MAINTENANCE
Anderson	\$4,629,070	\$498,000	\$4,131,070
Redding	\$35,000,000	\$4,800,000	\$30,200,000
Shasta Lake	\$17,459,036	\$470,000	\$16,989,036
Shasta County	\$168,458,532	\$7,828,000	\$160,630,532
	\$225,546,638	\$13,596,000	\$211,950,638

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Figure 51 - Location of Constrained Operations Projects



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Table 29 - Summary of Projects: Operations and Rehabilitation

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	I-5, Start PM/End PM 15.43, 06-0126G N5-W44 Connector	\$2,000,000		(2018-2025)	Increase VC	SHOPP
2	I-5, Start PM/End PM 15.43, 06-0126L East Redding Separation	\$2,000,000		(2018-2025)	Increase VC	SHOPP
3	I-5, Start PM/End PM 15.43, 06-0126R East Redding Separation	\$2,000,000		(2018-2025)	Increase VC	SHOPP
4	SR 44, At various locations	\$2,000,000		(2018-2025)	Rumble strips	SHOPP
5	I-5, Start/End PM 31.1, North of Shasta Lake City - O'Brien SRRA	\$3,100,000		(2018-2025)	Upgrade sewage system	SHOPP
6	Route 5, Begin PM Var, End PM Var, In Shasta County at various locations on Interstate 5	\$2,300,000		(2018-2025)	Upgrade MBGR and possibly flatten some slopes	SHOPP
7	Route 299, Begin PM 7.6, End PM 18.3, 1.5 miles west of Crystal Creek Road to Buell Alley	\$20,410,000		(2018-2025)	Rehabilitate Roadway	SHOPP
8	Route 299, Begin PM 77.8, End PM 79.6, Near Burney	\$6,204,000		(2018-2025)	Rehabilitate Roadway	SHOPP
9	SR 299, Start PM 60/End PM 67.9, In Shasta County	\$6,263,000		(2018-2025)	Hatchet Mtn CAP M	SHOPP
10	Route 273 GAPS - SR 273, Start PM 3.8/End PM7.1; Start PM 11.0/End PM12.7	\$14,652,000		(2018-2025)	CAPM	SHOPP
11	Route 5, In Shasta County at various locations on Interstate 5, Relocate roadside facilities and install hardscaping in high exposure areas.	\$2,600,000		(2018-2025)	Relocate roadside facilities and install hardscaping in high exposure areas.	SHOPP
12	Route 299, Begin PM 41.5, End PM 55.2, Safety Device Paving and Pullouts	\$600,000		(2018-2025)	Safety Device Paving and Pullouts	SHOPP
13	SR 44, Start/End PM 34.7, Near the town of Shingletown - Shingletown SRRA	\$1,800,000		(2018-2025)	Upgrade sewage system	SHOPP
14	SR 299, Start/End PM 60.6, Hillcrest	\$4,200,000		(2018-2025)	Upgrade sewage system	SHOPP
15	I-5, Start/End PM 43.2, Lakehead	\$4,200,000		(2018-2025)	Upgrade sewage system	SHOPP
16	SR 273, Start/End PM 14.77, RR U/P	\$2,000,000		(2018-2025)	Vertical Clearance / Horizontal Clearance	SHOPP
17	I-5, Start/End PM 29.32, 06-0130R Turntable Bay Road OC	\$766,000		(2018-2025)	Rail Upgrade	SHOPP
18	SR 44, Start PM 65.4/End PM 71.4, Plum Valley Rehab	\$7,273,000		(2018-2025)	Plum Valley Rehab	SHOPP
19	Route 5, Begin PM R 5.1, End PM R 5.9, Anderson, Upgrade Landscaping - Highway Planting Restoration	\$1,800,000		(2018-2025)	Upgrade Landscaping - Highway Planting Restoration	SHOPP
20	Route 5, Begin PM R 18, End PM R 22.5, North Redding/Shasta Lake City, Freeway Maintenance Access Roads and Pullouts	\$600,000		(2018-2025)	Freeway Maintenance Access Roads and Pullouts	SHOPP
21	Route 5, Begin PM R 12.3, End PM R 12.6, I-5 in Redding, Extend NB South Bonneyview on ramp and SB off ramp	\$3,600,000		(2018-2025)	Ramps	SHOPP
22	Route 5, Begin PM R 16.1, End PM R 17.1, I-5 in Redding, Construct auxiliary lane on NB I-5 from Hilltop Drive OC to Lake Blvd.	\$3,900,000		(2018-2025)	Auxiliary lane	SHOPP
23	Route 44, Begin PM 1.4, End PM 1.9, Redding, Construct ramp auxiliary lane from EB Victor on-ramp to EB Shasta View off-ramp	\$2,000,000		(2018-2025)	Auxiliary lane	SHOPP
	Total Short Term Needs =	\$96,268,000				
24	Route 5, Begin PM R 13.8, End PM R 16.1, Central Redding Interchange, Highway Planting Restoration		\$1,280,000	(2026-2040)	Highway Planting Restoration	SHOPP
25	Route 44, Begin PM 15.43, End PM 15.43, Central Redding Interchange, Correct Vertical Clearance		\$10,241,000	(2026-2040)	Correct Vertical Clearance	SHOPP
26	Route 5, Begin PM R 21.2, End PM R 22, Pine Grove to Shasta Lake City, Highway Planting Restoration		\$1,280,000	(2026-2040)	Highway Planting Restoration	SHOPP

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27	Route 5, Begin PM R 5.9, End PM R 11.9, North Anderson to South Redding, New Highway Planting		\$2,048,000	(2026-2040)	New Highway Planting	SHOPP
28	Route 44, Begin PM 1.5, End PM 3.9, Victor to Old Oregon Trail, New Highway Planting		\$1,920,000	(2026-2040)	New Highway Planting	SHOPP
29	Route 44, Begin PM 7, End PM 62, Drainage Restoration, Drainage Restoration		\$2,048,000	(2026-2040)	Drainage Restoration	SHOPP
30	Route 299, Begin PM 24.8, End PM 27.2, 299/5 interchange to Stillwater Bridge, New Highway Planting		\$2,048,000	(2026-2040)	New Highway Planting	SHOPP
31	Route 5, Begin PM VAR, End PM VAR, Various Locations, Rehabilitate Roadway		\$128,008,000	(2026-2040)	Rehabilitate Roadway	SHOPP
32	Route 44, Begin PM VAR, End PM VAR, Various Locations, Rehabilitate Roadway		\$89,606,000	(2026-2040)	Rehabilitate Roadway	SHOPP
33	Route 299, Begin PM VAR, End PM VAR, Various Locations, Rehabilitate Roadway		\$89,606,000	(2026-2040)	Rehabilitate Roadway	SHOPP
34	Route I-5, Postmile R 7.45 - R 7.67, Direction Southbound, .75 mile north of Ox Yoke Road		\$785,000	(2026-2040)	Sound wall for sound attenuation	SHOPP
35	Route I-5, Postmile R 8.06- R 8.99, Direction Southbound, 1.25 miles north of Ox Yoke Road		\$6,080,000	(2026-2040)	Sound wall for sound attenuation	SHOPP
36	Route I-5, Postmile R 8.48 - R 8.9, Direction Northbound, 1.75 miles north of Ox Yoke Road		\$941,000	(2026-2040)	Sound wall for sound attenuation	SHOPP
37	Route I-5, Postmile R 14.81- R 14.96, Direction Northbound, .5 mile south of Cypress Avenue interchange		\$561,000	(2026-2040)	Sound wall for sound attenuation	SHOPP
38	Route I-5, Postmile R 15.8 - R 16.0, Direction Northbound, .25 mile south of Hilltop overcrossing		\$768,000	(2026-2040)	Sound wall for sound attenuation	SHOPP
39	Route 5, Begin PM R 16.1, End PM R 18, Hilltop OC, New Highway Planting		\$1,280,000	(2026-2040)	New Highway Planting	SHOPP
40	Route 89, Begin PM 29.337, End PM 29.337, Lake Britton R/R UP, Improve clearances		\$3,840,000	(2026-2040)	Improve clearances	SHOPP
41	Route 89, Begin PM 42.8, End PM 42.8, Pondosa, Proposed Safety Roadside Rest Area from 2000 Master Plan		\$10,241,000	(2026-2040)	Proposed Safety Roadside Rest Area from 2000 Master Plan	SHOPP
42	Route 89, Begin PM VAR, End PM VAR, Various Locations, Rehabilitate Roadway		\$83,205,000	(2026-2040)	Rehabilitate Roadway	SHOPP
43	Route 273, Begin PM VAR, End PM VAR, Various Locations, Rehabilitate Roadway		\$38,403,000	(2026-2040)	Rehabilitate Roadway	SHOPP
44	Route 151, Begin PM VAR, End PM VAR, Various Locations, Rehabilitate Roadway		\$23,042,000	(2026-2040)	Rehabilitate Roadway	SHOPP
45	Route I-5, Postmile 1.43-1.69, Direction Northbound, .5 mile north of Gas Point interchange		\$768,000	(2026-2040)	Sound wall for sound attenuation	SHOPP
46	Route I-5, Postmile R 12.1-R 14.5, Direction Northbound, Just north of Churn Creek interchange		\$7,681,000	(2026-2040)	Sound wall for sound attenuation	SHOPP
47	Route I-5, Postmile R 13.95 - R 14.5, Direction Southbound, Near Hartnell Avenue overcrossing		\$1,664,000	(2026-2040)	Sound wall for sound attenuation	SHOPP
48	Route 5, Begin PM 42, End PM 66.9, Sacramento River Canyon, Chain on Area Freeway Maintenance Access		\$4,096,000	(2026-2040)		SHOPP
49	Route 5, various locations in Canyon, Curve improvements at Sidehill Viaduct		\$25,602,000	(2026-2040)		SHOPP
50	Route 44, Begin PM L 0.8, End PM L 1.3, Redding, Extend #3 auxiliary lane through Sundial Bridge Drive		\$6,784,000	(2026-2040)		SHOPP
51	Route 44, Begin PM R 10.0, End PM R 13, Millville Horizontal and Vertical Alignment Improvements		\$11,265,000	(2026-2040)		SHOPP
52	Route 44, Begin PM R 21.4, End PM 32.1, Shingletown, Passing lanes		\$5,120,000	(2026-2040)		SHOPP
53	Route 273, Begin PM 12.68, End PM 12.68, South Bonneyview Road at 273, Grade separation		\$3,840,000	(2026-2040)		SHOPP
54	Route 5, Begin PM R 26.27, End PM R 27.46, Extend NB truck climbing lane		\$3,840,000	(2026-2040)		SHOPP
55	Route 5, Begin PM R 28.9, End PM R 26, Add Southbound Truck Climbing Lane		\$2,816,000	(2026-2040)		SHOPP
56	Route 5, Begin PM R 31.224, End PM R 32.48, Extend northbound truck climbing lane		\$4,480,000	(2026-2040)		SHOPP
57	Route 5, Begin PM R 31.968, End PM R 30.606, Extend southbound truck climbing lane		\$5,120,000	(2026-2040)		SHOPP
58	Route 5, Begin PM R 36.787, End PM R 34.202, Extend southbound truck climbing lane		\$8,321,000	(2026-2040)		SHOPP
59	Route 5, Begin PM R 37.3, End PM R 38.7, Extend northbound truck climbing lane		\$4,480,000	(2026-2040)		SHOPP
60	Route 5, Begin PM R 49.213, End PM R 49.754, Extend northbound truck climbing lane		\$1,920,000	(2026-2040)		SHOPP
61	Route 36, Begin PM 0.0, End PM 3.5, at various locations, Shoulder widenings and curve improvements		\$8,961,000	(2026-2040)	shoulder widening; curve improvements	SHOPP
62	Route 44, Begin PM 0.0, End PM 71.39, at various locations, Achieve concepts shoulders		\$25,602,000	(2026-2040)		SHOPP
63	Route 44, Begin PM R 14.8, End PM R 15.9, Passing lanes		\$4,480,000	(2026-2040)		SHOPP
64	Route 44, Begin PM 52.7, End PM 53.3, Passing lane		\$1,920,000	(2026-2040)		SHOPP
65	Route 44, Begin PM 65.2, End PM 66.2, Passing lane		\$3,840,000	(2026-2040)		SHOPP
66	Route 89 various locations along route, establish eight-foot (or greater) treated shoulders		\$35,842,000	(2026-2040)		SHOPP

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67	Route 89, Begin PM 21.719, End PM 21.719, SR 89/SR 299 Intersection, signalize intersection (conventional signal)		\$1,920,000	(2026-2040)		SHOPP
68	Route 89, Begin PM 25.3, End PM 31.7, Near Britton Bridge - Locations TBD, Add northbound and southbound passing lanes		\$4,480,000	(2026-2040)		SHOPP
69	Route 273, Begin PM 15.92, End PM 16.83, Cypress Avenue to Market Street/Eureka Way, open road linkages through the Promenade (TBD)		\$9,601,000	(2026-2040)		SHOPP
70	Route 273, Begin PM 15.92, End PM 16.83, Cypress Avenue to Market Street/Eureka Way, Implement adaptive signal control technology		\$3,200,000	(2026-2040)		SHOPP
71	Route 299, Route PM 0.0, End PM 24.09, various locations, Achieve concept shoulders		\$6,400,000	(2026-2040)		SHOPP
72	Route 299, Begin PM 20.5, End PM 21.7, in Old Shasta, Construct two-way left turn lane		\$1,536,000	(2026-2040)		SHOPP
73	Route 299, Begin PM 27.9, End PM 32, Bella Vista, Two-Way Left Turn Lane		\$5,120,000	(2026-2040)		SHOPP
74	Route 299, Begin PM 37.5, End PM 38.5, West of Javelina Road, Eastbound and westbound passing lanes		\$4,480,000	(2026-2040)		SHOPP
75	Route 299, Begin PM 41, End PM 57, Near Diddy Wells, Round Mountain and Montgomery Creek, Turnouts or Truck Climbing Lanes along steep grades		\$3,840,000	(2026-2040)		SHOPP
76	Route 299, Begin PM R 51.51, End PM 57.219, Near Dubois Road and Woodhill Drive, Extend Passing Lanes		\$1,920,000	(2026-2040)		SHOPP
77	Route 299, Begin PM 53, End PM 59, Round Mountain and Montgomery Creek, Traffic Calming		\$3,200,000	(2026-2040)		SHOPP
78	Route 299, Begin PM 80.09, End PM 99.36, Pit 1 Grade and Rocky Ledge, Shoulder and Lane Widening		\$21,761,000	(2026-2040)		SHOPP
79	Route 299, Begin PM 88.4, End PM 90.4, Pit 1 Grade, Turnouts or Truck Climbing Lanes		\$6,400,000	(2026-2040)		SHOPP
80	Route 5, Begin PM R 14.5, End PM R 16.2, I-5/44 Interchange, Reconfigure Interchange: Direct Connector Flyover Ramp		\$65,284,000	(2026-2040)	reconfigure interchange	SHOPP
Total Long Term Fundable Needs =			\$328,085,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$96,268,000	\$814,815,000	\$911,083,000
Recap of Expected/Estimated/Unknown Resources			
State Highway Operations and Protection Program (SHOPP) =	\$96,268,000	\$360,985,000	\$457,253,000
Total Funding Reasonably Available =	\$96,268,000	\$360,985,000	\$457,253,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(453,830,000)	\$(453,830,000)
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Figure 52 - Location of Constrained Capacity Projects

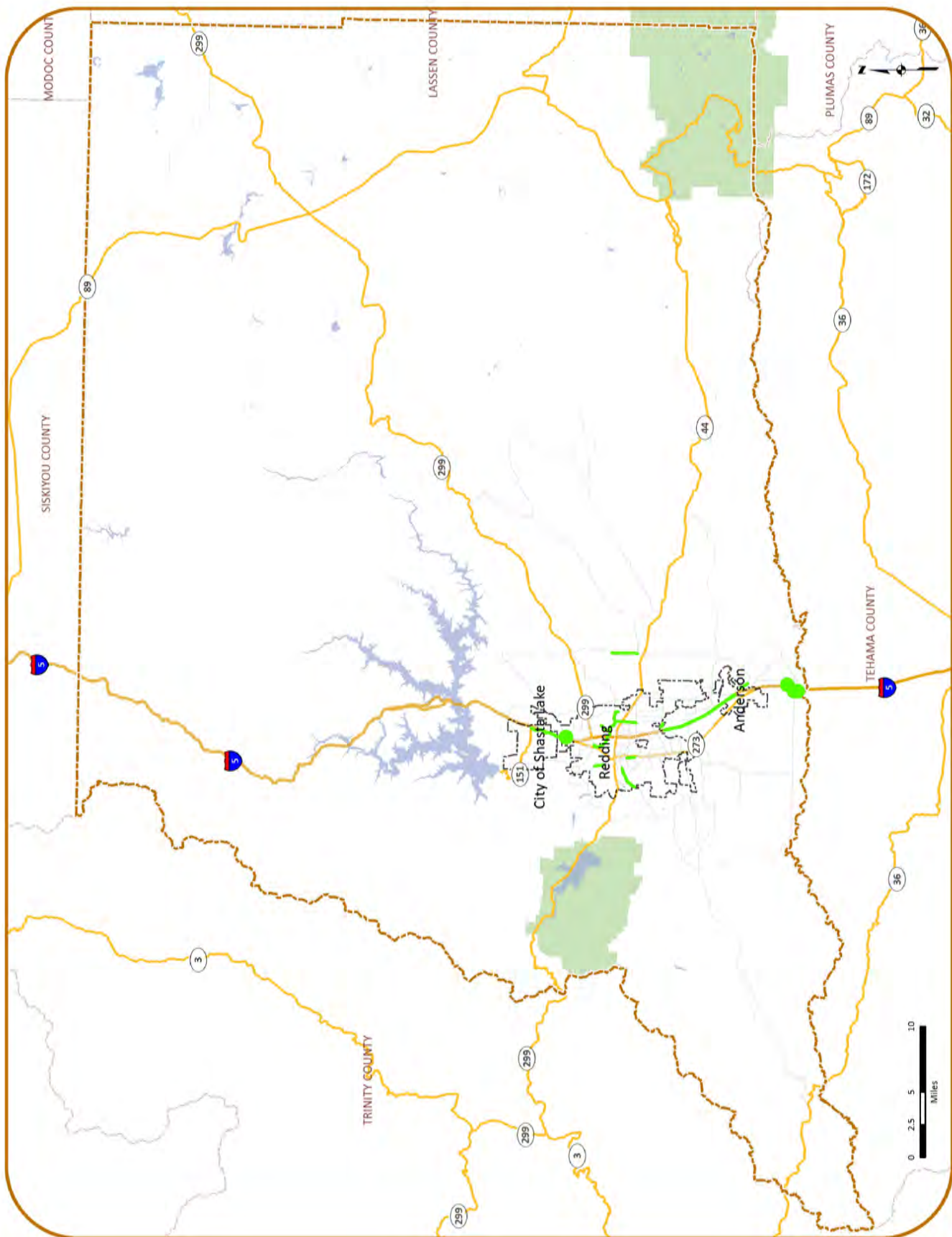


Table 30 - Summary of Projects: Regional Capacity

PROJECT COUNT	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Route 5, Begin PM R 6.2, End PM, R 11.7, .6 mile south of Knighton Road Overcrossing to 0.4 mile south of Churn Creek Road Overcrossing. (Redding to Anderson 6-Lane Phase 1 “Little Easy”)	\$30,663,000		FY 2018/19 (construction)	add capacity, fills a gap	STIP/ SHOPP/ Local/ Other
2	Route 5, Begin PM R 3.8, End PM R 7.0, 0.2 mile south of North Street to Knighton Road Overcrossing. (Redding to Anderson 6-Lane Phase 2)	\$113,595,000		2016 (project development) FY 17/18 (construction)	add capacity, fills a gap, ITS, Safety	STIP/ SHOPP/ TCEP/ Local/ Other
	Total Short Term Needs =	\$144,258,000				
3	Route 5, Begin PM R 14.8, End PM R 20.0, In Shasta County in Redding from 0.3 mile north of Cypress Avenue Overcrossing to 0.6 mile north of Oasis Road Overcrossing: widen Interstate 5 from 4 lanes to 6 lanes. (Interstate 5 North Redding 6 Lane)		\$43,894,000	2018-23 (project development) (2026-2040)	add capacity, fills a gap, safety	STIP/Other
4	Route 5, Begin PM R 22.1, End PM R 27.46, SR 151 to Mtn Gate Overcrossing, Expand freeway to six lanes		\$29,263,000	(2026-2040)	add capacity	STIP
5	Route 44, Begin PM 2.6/, End PM 7, Highway 44 - Stillwater Project: Airport Road to Deschutes Road. Expand facility from 2E to 4F.		\$81,925,000	(2026-2040)	add capacity	unknown
	Total Long Term Fundable Needs =		\$155,082,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$144,258,000	\$155,082,000	\$299,340,000
Recap of Expected/Estimated/Unknown Resources			
State Transportation Improvement Program (STIP) =	144,258,000	\$155,082,000	\$299,340,000
			\$-
			\$-
			\$-
			\$-
Total Funding Reasonably Available =	\$144,258,000	\$155,082,000	\$299,340,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$-	\$-
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Table 31 - Summary of Projects: Shasta County Capacity

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	FUNDABLE PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Gas Point Road from New N-S to Rhonda - Widen to 4 lanes	\$4,789,000		(2021-2025)	Capacity Increase	Local/Other
	Total Short Term Needs =	\$4,789,000.00				
2	Rhonda Road Gas Point - I-5 Main New realigned 3 lane road		\$8,799,000	(2026-2040)	Capacity Increase	Local/Other
3	New N-S Road - First St to New E-W Construct to 3 lanes		\$6,001,000	(2026-2040)	Capacity Increase	Local/Other
4	New E-W Road -New N-S to Rhonda Construct 3 lane road		\$3,017,000	(2026-2040)	Capacity Increase	Local/Other
5	Churn Ck Rd, Hartmeyer to Huntington, Widen, Realign		\$4,096,000	(2026-2040)	Capacity Increase	Local/Other
6	Deschutes Road Widen to 3-Lanes, Old 44 Drive to Boyle Road		\$3,603,000	(2026-2040)	Capacity Increase	Local/Other
7	First Street Widen from 2 to 5 lanes, N/S Arterial to Overcrossing		\$720,000	(2026-2040)	Capacity Increase	Local/Other
8	New N-S Road - New E-W to Rhonda		\$16,330,000	(2026-2040)	Capacity Increase	Unfunded or Developer
9	Deschutes Road Widen to 3-Lanes, Palo Cedro to Dersch Road		\$6,400,000	(2026-2040)	Capacity/Safety	Unfunded or Developer
10	Dry Creek Road Shoulder Widening, Deschutes Rd to Bear Mtn Rd		\$5,440,000	(2026-2040)	Capacity Increase	Unfunded or Developer
11	Oasis Road Widen to 4-Lanes, Randolph to Old Oasis		\$1,216,000	(2026-2040)	Capacity Increase	Unfunded or Developer
12	Black Ranch Road Extension		\$3,008,000	(2026-2040)	New Facility	Unfunded or Developer
13	Cottonwood - Front, Magnolia, Pine and Chestnut St Roundabouts		\$1,123,000	(2026-2040)	Capacity Increase	Unfunded or Developer
14	Knighton Road West		\$37,122,000	(2026-2040)	New Facility	Unfunded or Developer
15	Intermountain Road, SR 299 to Bear Mtn Road		\$9,076,000	(2026-2040)	New Facility	Unfunded or Developer
16	East Stillwater Way, Shoulder Widen and Extend to Bear Mtn Road		\$6,477,000	(2026-2040)	New Facility	Unfunded or Developer
	Total Long Term Fundable Needs =		\$26,236,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$4,789,000	\$112,428,000	\$117,217,000
Recap of Expected/Estimated/Unknown Resources			
Local/Other =	4,789,000	26,236,000	\$31,025,000
Total Funding Reasonably Available =	\$4,789,000	\$26,236,000	\$31,025,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(86,192,000)	\$(86,192,000)
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

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Table 32 - Summary of Projects: Redding Capacity

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Placer Street Widening - Airpark Drive to Buenaventura Blvd	\$1,800,000		(2018-2025)	Capacity Increase	Local/Other
2	Quartz Hill Road Widening - Snow Lane to Top of the Hill	\$3,700,000		(2018-2025)	Capacity Increase	Local/Other
3	Bechelli Lane/South Bonnyview Roundabout	\$3,500,000		(2018-2025)	Capacity Increase	Local/Developer
4	Hilltop Drive Widening - Lake Boulevard to I-5	\$1,600,000		(2018-2025)	Capacity Increase	Local/Other
5	Churn Creek Road Widening - Browning St. to Boulder Creek	\$3,468,000		(2018-2025)	Capacity Increase	Local/Other
6	Old Alturas Road Widening - Victor Avenue to Shasta View Drive	\$5,500,000		(2018-2025)	Capacity Increase	Local/Other
7	Victor Avenue Widening - Hartnell Avenue to E. Cypress Avenue	\$1,993,000		(2018-2025)	Capacity Increase	Local/Other
8	Oasis Road Widening - Northbound I-5 Ramps to Gold Hills Drive	\$11,608,800		(2018-2025)	Interchange	Local/Other
9	Twin View Road Realignment - North and South of Oasis Road	\$6,483,064		(2018-2025)	Capacity Increase	Local/Other
	Total Short Term Needs =	\$39,652,864				
10	Railroad Avenue Widening (including class II bike lanes) - Sheridan Street to Grandview Avenue		\$2,308,000	(2026-2040)	Capacity Increase	Local/Other
11	Victor Avenue Widening - E.Cypress Avenue to Mistletoe Lane		\$5,472,000	(2026-2040)	Capacity Increase	Local/Other
12	Victor Avenue Widening - SR44 to Old Alturas Road		\$3,584,000	(2026-2040)	Capacity Increase	Local/Other
13	Browning Street Reconfigure to 4 Lane - Hilltop Drive to Old Alturas		\$5,120,000	(2026-2040)	Capacity Increase	Local/Other
14	Shasta View Drive Widening - Atrium Way to Old Alturas		\$512,000	(2026-2040)	Capacity Increase	Local/Other
15	Victor Avenue Widening - Vega Street to Hartnell		\$6,080,000	(2026-2040)	Capacity Increase	Unfunded or Developer
16	Bechelli Lane Widening- 3rd Street to Loma Vista		\$2,061,000	(2026-2040)	Capacity Increase	Unfunded or Developer
17	Churn Creek Rd, Rancho Rd, and Victor Avenue Roundabout		\$3,817,000	(2026-2040)	Capacity Increase	Unfunded or Developer
18	Hartnell Avenue Widening - Victor Avenue to Alta Mesa Drive		\$6,966,000	(2026-2040)	Capacity Increase	Unfunded or Developer
19	Churn Creek Road Widening - Boulder Creek to SR 299E		\$3,994,000	(2026-2040)	Capacity Increase	Unfunded or Developer
20	Hartnell Avenue Widening - Alta Mesa to Shasta View		\$2,432,000	(2026-2040)	Widening	Unfunded or Developer
21	Oasis Road Widening - Randolph Road to Old Oasis Road		\$4,480,000	(2026-2040)	Capacity Increase	Unfunded or Developer
22	Cascade Blvd Realignment- North and South of Oasis Road		\$11,154,000	(2026-2040)	Capacity Increase	Unfunded or Developer
23	Caterpillar Road - George Drive to SR273 Widen Roadway and Signal		\$2,176,000	(2026-2040)	Capacity Increase	Unfunded or Developer
24	Shasta View Drive Extension - 2 Lane Widening - Collyer Drive to Manzanoaks Drive		\$7,681,000	(2026-2040)	New Facility	Unfunded or Developer
25	Quartz Hill Road Widening - Top of Hill to City Limits		\$5,376,000	(2026-2040)	Capacity Increase	Unfunded or Developer
26	Shasta View Drive Widening - College View to Inspiration Place		\$3,200,000	(2026-2040)	Capacity Increase	Unfunded or Developer
27	Airport Road Widening - SR 44 to Rancho Rd.		\$7,835,000	(2026-2040)	Capacity Increase	Unfunded or Developer
28	Cypress Ave Connection - Victor Avenue to Shasta View Drive		\$21,761,000	(2026-2040)	New Facility	Unfunded or Developer
29	Hilltop Drive Extension - Lake Boulevard to Twin View		\$1,280,000	(2026-2040)	New Facility	Unfunded or Developer
30	Palacio Drive Connection - Churn Creek to Cornell Place		\$10,881,000	(2026-2040)	New Facility	Unfunded or Developer
31	Shasta View Drive Widening - Hartnell Avenue to Goodwater Drive		\$7,449,000	(2026-2040)	Capacity Increase	Unfunded or Developer
32	Airport Road Widening - Sacramento River to Rancho Road		\$44,803,000	(2026-2040)	Capacity Increase	Unfunded or Developer
33	Buenaventura Blvd Reconfigure to 4 lane - Summit Drive to Railroad Avenue		\$1,920,000	(2026-2040)	Capacity Increase	Unfunded or Developer
34	Buenaventura Blvd Widening - Starlight Boulevard to Placer Road		\$1,920,000	(2026-2040)	Capacity Increase	Unfunded or Developer

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35	Court Street Widening - 11th Street to Riverside Drive		\$640,000	(2026-2040)	Capacity Increase	Unfunded or Developer
36	Hartnell Avenue at Airport Road Widening and Realignment		\$10,145,000	(2026-2040)	Capacity Increase	Unfunded or Developer
37	Oak Mesa Lane Extension - Tarmac Road to Candlewood Drive		\$1,441,000	(2026-2040)	New Facility	Unfunded or Developer
38	Oasis Road Widening - Gold Hills Drive to Shasta View Drive		\$2,560,000	(2026-2040)	Capacity Increase	Unfunded or Developer
39	Old Alturas Road Widening - Shasta View Drive to City Limits		\$5,869,000	(2026-2040)	Capacity Increase	Unfunded or Developer
40	Old Oregon Trail Widening - Old Highway 44 to Viking Way		\$5,120,000	(2026-2040)	Capacity Increase	Unfunded or Developer
41	Parkview Ave Widening - ACID Canal to Park Marina		\$1,184,000	(2026-2040)	Capacity Increase	Unfunded or Developer
42	Rancho Road Widening - Goodwater to Airport Road		\$8,641,000	(2026-2040)	Capacity Increase	Unfunded or Developer
43	Shasta View Drive Extension - Manzanoaks Drive to Oasis Road		\$5,120,000	(2026-2040)	New Facility	Unfunded or Developer
44	Shasta View Drive Extension - Rancho Road to Airport Road		\$6,400,000	(2026-2040)	New Facility	Unfunded or Developer
45	Stillwater Business Park Improvements - Phase 3		\$6,400,000	(2026-2040)	New Facility	Unfunded or Developer
46	Tarmac Road Extension to Old Oregon Trail		\$7,647,000	(2026-2040)	New Facility	Unfunded or Developer
47	Westside Road Frontage Extension - Glengary Drive to Clear Creek Road		\$1,669,000	(2026-2040)	New Facility	Unfunded or Developer
48	Beltline Road Extension - Oasis Rd to Ashby Rd		\$6,048,000	(2026-2040)	New Facility	Unfunded or Developer
49	Buenaventura Blvd Extension - Eureka Way to Keswick Dam Road		\$12,801,000	(2026-2040)	New Facility	Unfunded or Developer
50	Cedars Road Extension - El Reno Lane to Buenaventura Boulevard		\$1,152,000	(2026-2040)	New Facility	Unfunded or Developer
51	Creekside Drive Extension - Sacramento Drive to South Bonnyview Road		\$1,280,000	(2026-2040)	New Facility	Unfunded or Developer
52	Cypress Avenue Reliever Project - Industrial Street Extension Over crossing of I-5		\$7,345,000	(2026-2040)	Capacity Increase	Unfunded or Developer
53	Eastside Road Extension - Girvan Road to Southern City Limits		\$7,232,000	(2026-2040)	New Facility	Unfunded or Developer
54	George Drive Extension - North Terminus to Oasis Road		\$1,280,000	(2026-2040)	New Facility	Unfunded or Developer
55	Kenyon Drive Extension - West Terminus to Placer Road		\$12,801,000	(2026-2040)	New Facility	Unfunded or Developer
56	Loma Vista Drive Extension - Churn Creek Road to Victor Avenue		\$7,681,000	(2026-2040)	New Facility	Unfunded or Developer
57	Palacio Drive Extension - Shasta View Drive to Old Oregon Trail		\$4,480,000	(2026-2040)	New Facility	Unfunded or Developer
58	S. Bonnyview Road @ SR273 - Grade Separation		\$38,403,000	(2026-2040)	Intersection	Unfunded or Developer
59	Santa Rosa Avenue Extension - Quartz Hill Road to Lake Boulevard		\$2,560,000	(2026-2040)	New Facility	Unfunded or Developer
60	Shasta View Drive Extension - 4 Lane Widening - Collyer Drive to Manzanoaks Drive		\$8,961,000	(2026-2040)	Capacity Increase	Unfunded or Developer
61	Shasta View Drive Extension - College View Drive to Collyer Drive - SR299 OC		\$12,801,000	(2026-2040)	New Facility	Unfunded or Developer
62	Shasta View Drive Extension - Oasis Road to North City Limits		\$5,120,000	(2026-2040)	New Facility	Unfunded or Developer
63	South Street Railroad Crossing- Grade Separation		\$12,097,000	(2026-2040)	Intersection	Unfunded or Developer
Total Long Term Fundable Needs =			\$16,996,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$39,652,864	\$379,140,000	\$418,792,864
Recap of Expected/Estimated/Unknown Resources			
Local/Other =	39,652,864	\$16,996,000	\$56,648,864
Total Funding Reasonably Available =	\$39,652,864	\$16,996,000	\$56,648,864
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(362,144,000)	\$(362,144,000)
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Table 33 - Summary of Projects: Anderson Capacity

PROJECT REGIONAL TRANSPORTATION PROJECTS NUMBER		SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Gateway Drive - Balls Ferry to Deschutes - construct 2 lane road	\$6,500,000		(2018-2025)	New Facility	Local/Other
	Total Short Term Fundable =	\$6,500,000				
2	Auto Mall - Extend to North Street - Extension		\$4,864,000	(2026-2040)	Capacity Increase	Local/Other
3	McMurray Drive - North of Ganyon Drive - Widening		\$640,000	(2026-2040)	Capacity Increase	Unfunded or Developer
4	Gateway Drive - From Balls Ferry South - Widening		\$1,528,000	(2026-2040)	New Facility	Unfunded or Developer
5	East Street - North of Willow Glen Dr. - Extension		\$2,128,000	(2026-2040)	New Facility	Unfunded or Developer
6	Pleasant Hills SR 273 Vineyards - construct 2 lane road extension		\$4,255,000	(2026-2040)	New Facility	Unfunded or Developer
7	Rhonda Road - Factory Outlets Drive to Pleasant Hills - Intersection Reconstruction		\$2,927,000	(2026-2040)	New Facility	Unfunded or Developer
8	Anderson Hills Parkway -W of Pleasant Hills - Construct 4 lane road		\$6,375,000	(2026-2040)	New Facility	Unfunded or Developer
9	Anderson Hills Parkway Pleasant to Rhonda - Construct 4 lane road		\$3,840,000	(2026-2040)	New Facility	Unfunded or Developer
10	Anderson Hills Parkway - Rhonda to Locust - Construct 4 lane road		\$3,404,000	(2026-2040)	New Facility	Unfunded or Developer
11	Ox Yoke Rd. - SR 273 to Riverside Av - Widening to 5 lanes		\$2,560,000	(2026-2040)	Capacity Increase	Unfunded or Developer
12	Riverside Avenue - Ox Yoke to North St. - Widening to 5 lanes		\$8,961,000	(2026-2040)	Capacity Increase	Unfunded or Developer
13	Balls Ferry Rd. - From Stingy Lane to the City Limits - Widening		\$1,528,000	(2026-2040)	Capacity Increase	Unfunded or Developer
14	South Street - SR 273 west to City Limits - Widening		\$4,800,000	(2026-2040)	Capacity Increase	Unfunded or Developer
15	Stingy Lane - North St. to Balls Ferry - Widening		\$17,281,000	(2026-2040)	Capacity Increase	Unfunded or Developer
16	Gateway Drive - From Existing Improvements to Deschutes - Widen		\$7,196,000	(2026-2040)	New Facility	Unfunded or Developer
17	Fairgrounds Drive - 1st St. to 3rd St. -Widening		\$1,408,000	(2026-2040)	Capacity Increase	Unfunded or Developer
18	Third Street - SR 273 to Fairgrounds Dr. - Widening		\$2,304,000	(2026-2040)	Capacity Increase	Unfunded or Developer
19	South County Extension - Ronda Rd to Anderson Hills - Extension		\$7,040,000	(2026-2040)	New Facility	Unfunded or Developer
	Total Long Term Fundable Needs =		\$4,864,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$6,500,000	\$83,039,000	\$89,539,000
Recap of Expected/Estimated/Unknown Resources			
Local/Other =	6,500,000	\$4,864,000	\$11,364,000
			\$-
			\$-
Total Funding Reasonably Available =	\$6,500,000	\$4,864,000	\$11,364,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(78,175,000)	\$(78,175,000)
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

Table 34 - Summary of Projects: City of Shasta Lake Capacity and Safety

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Cascade Boulevard Reconstruction including bike/ped	\$6,400,000		(2016-2025)	Capacity and Safety	Unfunded
	Total Short Term Needs =	\$6,400,000				
2	North/South Road between Wonderland Boulevard and Cascade Boulevard		\$5,120,000	(2026-2040)	New Facility	Unfunded or Developer
3	Ashby Rd. widening, sidewalks, separated bike(Class 1) - SR 151 to Pine Grove Ave.		\$8,961,000	(2026-2040)	Capacity Increase and Safety	Unfunded or Developer
4	Pine Grove Reconstruction		\$5,120,000	(2026-2040)	Capacity and Safety	Unfunded
5	Shasta Gateway Dr. Extension to Cascade Blvd.		\$14,337,000	(2026-2040)	New Facility	Unfunded or Developer
6	Cabello Extension - Vallecito to Pine Grove Ave.		\$2,592,000	(2026-2040)	New Facility	Unfunded or Developer
7	Pine Grove Avenue Extension to Akrich		\$5,760,000	(2026-2040)	New Facility	Unfunded or Developer
8	Reconstruct Lake Blvd. N/O SR 151		\$3,840,000	(2026-2040)	Capacity and Safety	Unfunded or Developer (see BOR,BLM,NFS)
9	Cascade Blvd Realignment, SR 151 N of Trinity to Arrowhead(South City Limit) D/N include Pine Grove to creek)		\$3,392,000	(2026-2040)	Capacity Increase	Unfunded or Developer
	Total Long Term Fundable Needs =		\$-			

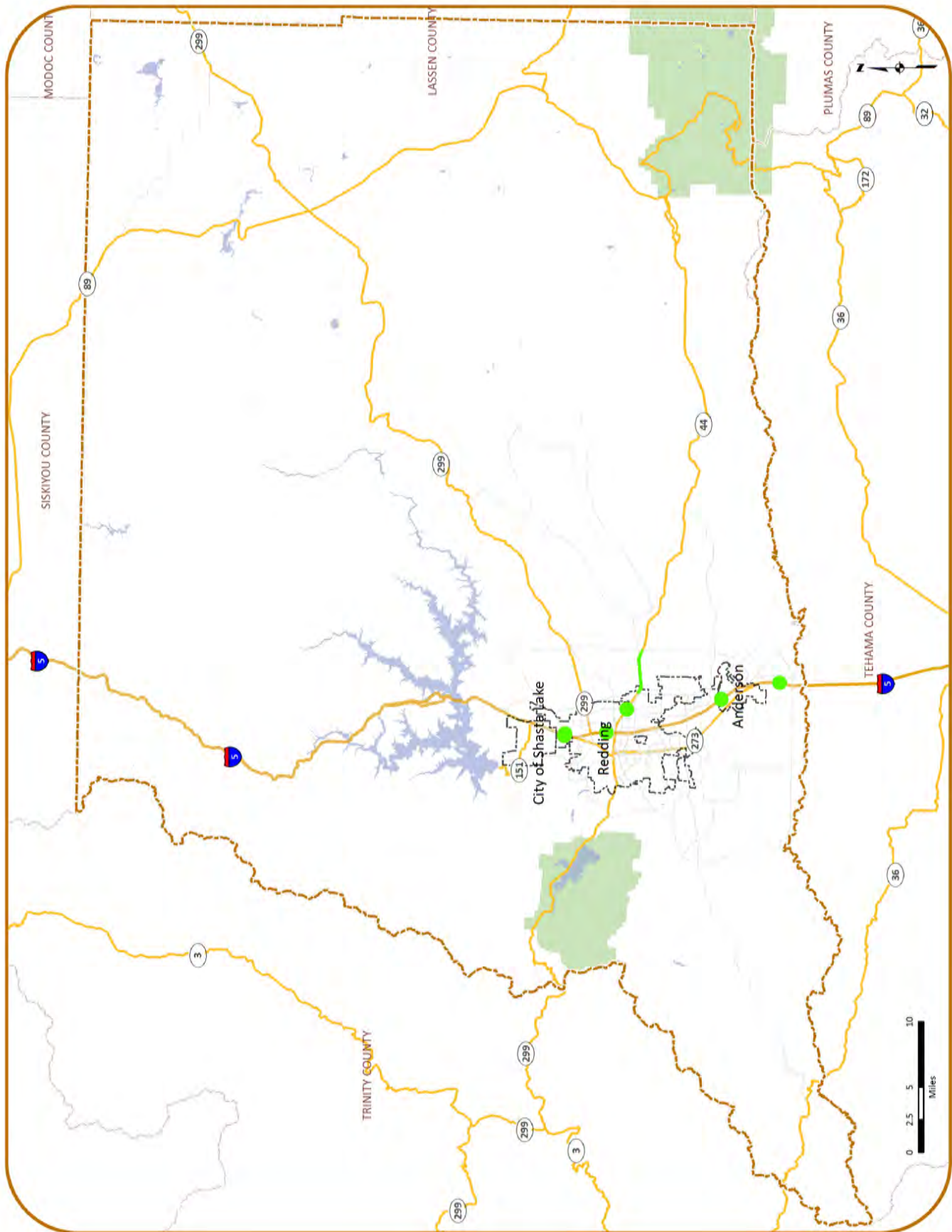
DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$6,400,000	\$49,122,000	\$55,522,000
Recap of Expected/Estimated/Unknown Resources			
Local/Other =	\$3,200,000	\$-	\$3,200,000
Highway Safety Improvement Program (HSIP) =	3,200,000	-	\$3,200,000
Total Funding Reasonably Available =	\$6,400,000	\$-	\$6,400,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(49,122,000)	\$(49,122,000)
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Figure 53 - Location of Constrained Interchange Projects



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Table 35 - Summary of Projects: Shasta County Interchanges

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	FUNDABLE PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Route 44, Postmile 5.8, Stillwater Road - New interchange	\$22,000,000		(2018-2025)	Interchange	SHOPP/Local/Other
	Total Short Term Needs =	\$22,000,000				
2	I-5 Main St Interchange Exit 665 - Connect to Rhonda, add roundabouts		\$21,955,000	(2026-2040)	Interchange	SHOPP/Local/Other
3	Reconfigure Knighton Road Over-Crossing at Interchange Exit 673		\$51,627,000	(2026-2040)	Interchange	Unfunded or Developer
4	I-5 Gas Point Interchange Improvements exit 664		\$27,463,000	(2026-2040)	Interchange	Unfunded or Developer
5	Improve SR 299 Old Oregon Trail Interchange - Exit 143		\$3,200,000	(2026-2040)	Interchange	Unfunded or Developer
	Total Long Term Fundable Needs =		\$21,955,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$22,000,000	\$104,245,000	\$126,245,000
Recap of Expected/Estimated/Unknown Resources			
Local/Other =	9,400,000	10,977,500	\$20,377,500
State Highway Operations and Protection Program (SHOPP) =	9,400,000	10,977,500	\$20,377,500
High Priority Projects (HPP) =	3,200,000		\$3,200,000
Total Funding Reasonably Available =	\$22,000,000	\$21,955,000	\$43,955,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(82,290,000)	\$(82,290,000)
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Table 36 - Summary of Projects: Redding Interchanges

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Signal: SR44 and Shasta View Dr (WB Ramp)	\$500,000		(2018-2025)	Intersection	Developer
2	South Bonnyview & I-5 Interchange Exit 675 - NB On-ramp Improvements	\$2,500,000		(2018-2025)	Interchange	TIF/Developer
3	South Bonnyview & I-5 Interchange Exit 675 - NB/SB Off-ramp Improvements	\$5,000,000		(2018-2025)	Interchange	TIF/Developer
	Total Short Term Needs =	\$500,000				
4	Hilltop Drive Overcrossing - over I-5, Build second structure to the north		\$6,759,000	(2026-2040)	Capacity Increase	TIF
5	Oasis Road & I-5 Interchange Exit 682 - Reconstruction and Widening		\$26,498,000	(2026-2040)	Interchange	NRTBD/Developer
6	Route 299, Postmile 25.35, Exit #141, Churn Creek Interchange		\$3,840,000	(2026-2040)	Interchange	Future Need
7	Route I-5, Postmile 17.32, Exit #680, SR 299E Interchange		\$3,840,000	(2026-2040)	Interchange	Future Need
8	Route I-5, Postmile 18.48, State Route 273/I-5 Interchange		\$15,361,000	(2026-2040)	Interchange	Unfunded or Developer
9	South Bonnyview & I-5 Interchange Exit 675 - Diverging Diamond Improvements		\$18,000,000	(2026-2040)	Interchange	Unfunded or Developer
10	Twin View Blvd & I-5 Interchange Exit 681 - Improvements		\$5,120,000	(2026-2040)	Interchange	Unfunded or Developer
11	Airport Road & SR44 Interchange Exit 5 - Improvements		\$19,201,000	(2026-2040)	Interchange	Unfunded or Developer
12	Cypress Ave and Bechelli Lane to Industrial Street & I-5 Interchange Exit 677 - Reconstruction		\$16,677,000	(2026-2040)	Interchange	Unfunded or Developer
	Total Long Term Fundable Needs =		\$33,257,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$500,000	\$115,296,000	\$115,796,000
Recap of Expected/Estimated/Unknown Resources			
Local/Other =	250,000	\$16,628,500	\$16,878,500
State Highway Operations and Protection Program (SHOPP) =	250,000	16,628,500	\$16,878,500
Total Funding Reasonably Available =	\$500,000	\$33,257,000	\$33,757,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(82,039,000)	\$(82,039,000)
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Table 37 - Summary of Projects: Anderson Interchanges

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
	NO SHORT RANGE PROJECTS					
	Total Short Term Fundable =	\$-				
1	Reconfigure I-5 Riverside Interchange, Postmile 6.74, Exit #670		\$22,017,000	(2026-2040)	Interchange	Safety, TIF, SHOPP
2	Reconfigure I-5 Central Anderson Interchange (Balls Ferry/North Street) Postmile 5.64, Exit #668		\$3,968,000	(2026-2040)	Interchange	Unfunded or Developer
3	Deschutes/I-5 Interchange phase 2		\$13,441,000	(2026-2040)	Interchange	Unfunded or Developer
	Total Long Term Fundable Needs =		\$22,017,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$-	\$39,426,000	\$39,426,000
Recap of Expected/Estimated/Unknown Resources			
Local/Other =	-	\$11,008,500	\$11,008,500
State Highway Operations and Protection Program (SHOPP) =	-	11,008,500	\$11,008,500
Total Funding Reasonably Available =	\$-	\$22,017,000	\$22,017,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(17,409,000)	\$(17,409,000)
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Table 38 - Summary of Projects: City of Shasta Lake Interchanges

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
	NO SHORT RANGE PROJECTS					
	Total Short Term Needs =	\$-				
1	Improve Mountain Gate Interchange Exit 687		\$2,560,000	(2026-2040)	Interchange	Unfunded or Developer
2	Reconfigure Pine Grove Interchange East Exit 684		\$4,960,000	(2026-2040)	Interchange	Unfunded or Developer
3	Improve Shasta Dam Blvd Interchange Exit 685		\$5,120,000	(2026-2040)	Interchange	Unfunded or Developer
	Total Long Term Fundable Needs =		\$-			

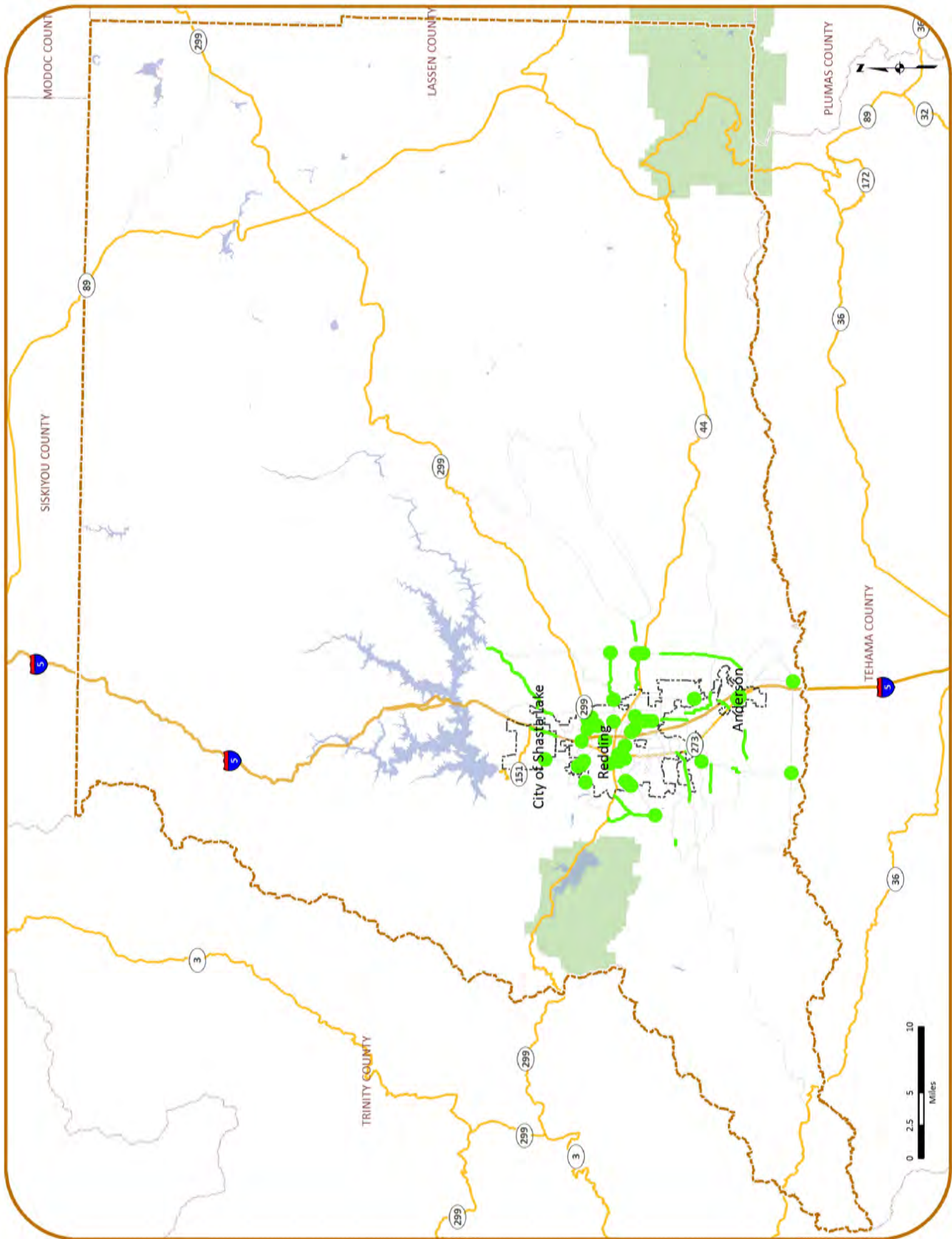
DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$-	\$12,640,000	\$12,640,000
Recap of Expected/Estimated/Unknown Resources			
Local/Other =	-	\$-	\$-
State Highway Operations and Protection Program (SHOPP) =	-	-	\$-
Total Funding Reasonably Available =	\$-	\$-	\$-
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(12,640,000)	\$(12,640,000)
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Figure 54 - Location of Constrained Safety Projects



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Table 39 - Summary of Projects: Shasta County Safety

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	FUNDABLE PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Olinda Road Shoulder Widening, Sammy Lane to Red Leaf Lane	\$1,100,000		(2018-2025)	Safety	HSIP/Local/Other
2	Riverland Drive Shoulder Widening, Knighton Road to two miles south	\$1,200,000		(2018-2025)	Safety	HSIP/Local/Other
3	Deschutes Road Shoulder Widening, Brundage Rd. to Balls Ferry Rd.	\$2,000,000		(2018-2025)	Safety	HSIP/Local/Other
4	Canyon Road Bike Lanes, Valley View Rd to China Gulch	\$600,000		(2018-2025)	Safety	HSIP/Local/Other/ATP
5	Canyon Road Bike Lanes, SR 273 to Valley View Rd	\$650,000		(2018-2025)	Safety	HSIP/Local/Other/ATP
6	Lake Boulevard Roundabout/Signal at Pine Grove Avenue	\$500,000		(2018-2025)	Intersection	HSIP/Local/Other
7	Happy Valley Road Shoulder Widening and Realign, Palm Avenue to Warwick St	\$1,875,000		(2018-2025)	Safety	HSIP/Local/Other
8	Placer Road, Shoulder Widening and Realign, Muletown Rd to Leaning Pine Rd	\$650,000		(2018-2025)	Safety	HSIP/Local/Other
9	Churn Creek Road, Shoulder Widening from Rancho to Knighton	\$1,500,000		(2018-2025)	Safety	HSIP/Local/Other
10	4th Street Median Lane, Main Street to Balls Ferry Road	\$1,500,000		(2018-2025)	Capacity/Safety	HSIP/Local/Other
11	Bear Mountain Road - Shoulder Widening and Improve Alignment	\$1,500,000		(2018-2025)	Safety	HSIP/Local/Other
12	Old Alturas Road, Shoulder Widening and Realign, Old Oregon Tr to Stillwater Ck	\$490,000		(2018-2025)	Safety	HSIP/Local/Other
13	Old Alturas/Boyle Roads, Shoulder Widening, Stillwater Ck to Deschutes Rd	\$1,500,000		(2018-2025)	Safety	HSIP/Local/Other
14	Placer Road at Swasey Drive, Roundabout	\$500,000		(2018-2025)	Safety	Unfunded or Developer
	Total Short Term Needs =	\$15,565,000				
15	Canyon Road at China Gulch Drive Roundabout/Signal		\$640,000	(2026-2040)	Intersection	HSIP/Local/Other
16	Old Oregon Trail at Old Alturas Roundabout/Signal		\$640,000	(2026-2040)	Intersection	HSIP/Local/Other
17	Churn Creek Road, Shoulder Widening from Knighton to Airport		\$1,920,000	(2026-2040)	Safety	HSIP/Local/Other
18	Clear Creek Road Shoulder Widening, 273 to Honey Bee		\$1,920,000	(2026-2040)	Safety	HSIP/Local/Other
19	Old 44 Drive Shoulder Widening, COR to Deschutes Road		\$1,920,000	(2026-2040)	Safety	HSIP/Local/Other
20	Old 44 Drive Shoulder Widening and Realignment, Silver Bridge Rd to Oak Run Rd		\$1,920,000	(2026-2040)	Safety	HSIP/Local/Other
21	Swasey Drive Shoulder Widening, SH 299 to Placer		\$3,955,000	(2026-2040)	Safety	HSIP/Local/Other
22	Lower Springs Road Shoulder Widening, SH 299 to Swasey Drive		\$1,920,000	(2026-2040)	Safety	HSIP/Local/Other
23	Deschutes Road at Boyle and Old Deschutes Rd Roundabout/Signal		\$640,000	(2026-2040)	Intersection	HSIP/Local/Other
24	Cottonwood - Fourth Street and Locust Street Roundabout/Signal		\$640,000	(2026-2040)	Intersection	HSIP/Local/Other
25	Quartz Hill and Keswick Dam Roads, Roundabout/Signal		\$640,000	(2026-2040)	Intersection	HSIP/Local/Other
26	Cottonwood - Happy Valley at Gas Point Road Roundabout/Signal		\$640,000	(2026-2040)	Intersection	HSIP/Local/Other
27	Deschutes Rd @ SR 44 Ramps and Old 44 Dr, Roundabouts/Signals		\$2,560,000	(2026-2040)	Intersection	HSIP/Local/Other
	Total Long Term Fundable Needs =		\$19,955,000			

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DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$15,565,000	\$19,955,000	\$35,520,000
Recap of Expected/Estimated/Unknown Resources			
Highway Safety Improvement Program (HSIP) =	13,230,250	\$16,961,750	\$30,192,000
Local/Other =	1,556,500	2,993,250	\$4,549,750
Active Transportation Program (ATP) =	778,250	\$-	\$778,250
Total Funding Reasonably Available =	\$15,565,000	\$19,955,000	\$35,520,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$-	\$-
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

Table 40 - Summary of Projects: Redding Safety

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Roundabout: Victor Avenue - Old Alturas	\$1,500,000		(2018-2025)	Intersection	HSIP/Local/Other
2	Restripe and improvements: Court Street - Schley Avenue	\$400,000		(2018-2025)	Intersection	HSIP/Local/Other
3	2 lane Realignment and Widening: Old Oregon Trail - Midland Drive to Frontier Road	\$1,800,000		(2018-2025)	Safety	HSIP/Local/Other
4	Hartnell Avenue Improvements: Churn Creek to Victor	\$1,900,000		(2018-2025)	Safety	HSIP/Local/Other
5	Churn Creek Road and Maraglia Improvements: Hartnell to Cypress and Churn Creek to Hilltop	\$1,400,000		(2018-2025)	Safety	HSIP/Local/Other
6	Signal: West Street - Placer Street	\$400,000		(2018-2025)	Intersection	HSIP/Local/Other
7	Signal: Lake Blvd - Keswick Dam Road	\$350,000		(2018-2025)	Intersection	HSIP/Local/Other
8	Signal: Churn Creek - Maraglia Street	\$400,000		(2018-2025)	Intersection	HSIP/Local/Other
9	Signal: Victor Avenue - Vega Street	\$400,000		(2018-2025)	Intersection	HSIP/Local/Other
10	Signal: East Street - South Street	\$400,000		(2018-2025)	Intersection	HSIP/Local/Other
11	Signal: Alta Mesa Drive - Hartnell Avenue	\$400,000		(2018-2025)	Intersection	HSIP/Local/Other
12	Signal: Shasta View Drive - Simpson Blvd	\$400,000		(2018-2025)	Intersection	HSIP/Local/Other
13	Signal: Placer Road - Cumberland	\$400,000		(2018-2025)	Intersection	HSIP/Local/Other
14	Signal: Placer Road - Wisconsin Avenue	\$400,000		(2018-2025)	Intersection	HSIP/Local/Other
15	Signal: Court Street - Riverside Drive	\$400,000		(2018-2025)	Intersection	HSIP/Local/Other
16	Signal: Park Marina Drive - Locust Street	\$400,000		(2018-2025)	Intersection	HSIP/Local/Other
17	Signal: Airport Road - Meadowview Drive	\$400,000		(2018-2025)	Intersection	HSIP/Local/Other
	Total Short Term Needs =	\$11,750,000				

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18	Signal: Lake Boulevard - Panorama Drive		\$512,000	(2026-2040)	Intersection	HSIP/Local/Other
19	Signal: Placer - O’conner Avenue		\$512,000	(2026-2040)	Intersection	HSIP/Local/Other
20	Signal: Twin View - Caterpillar		\$512,000	(2026-2040)	Intersection	HSIP/Local/Other
21	Signal: Hilltop Drive - Sand Point Drive		\$512,000	(2026-2040)	Intersection	HSIP/Local/Other
22	Signal: Churn Creek/Hawley Road - Collyer Drive		\$512,000	(2026-2040)	Intersection	HSIP/Local/Other
23	Signal: Churn Creek Road - Palacio Drive		\$512,000	(2026-2040)	Intersection	HSIP/Local/Other
24	Signal: Shasta View Drive - College View		\$512,000	(2026-2040)	Intersection	HSIP/Local/Other
25	Signal: Victor Ave - El Vista Street		\$512,000	(2026-2040)	Intersection	HSIP/Local/Other
26	Signal: Lake Boulevard - Santa Rosa Way		\$512,000	(2026-2040)	Intersection	HSIP/Local/Other
27	Signal: Hartnell Avenue - Lawrence Road		\$512,000	(2026-2040)	Intersection	HSIP/Local/Other
	Total Long Term Fundable Needs =		\$5,120,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$11,750,000	\$5,120,000	\$16,870,000
Recap of Expected/Estimated/Unknown Resources			
Highway Safety Improvement Program (HSIP) =	5,875,000	\$2,560,000	\$8,435,000
Local/Other =	5,875,000	2,560,000	\$8,435,000
Total Funding Reasonably Available =	\$11,750,000	\$5,120,000	\$16,870,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$-	\$-
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

Table 41 - Summary of Projects: Anderson Safety

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	SR 273 @ North Street - Intersection Improvements	\$1,500,000		(2018-2025)	Safety	HSIP/Local/Other
	Total Short Term Needs =	\$1,500,000				
2	SR 273 @ South Street - Intersection Improvements		\$1,920,000	(2026-2040)	Safety	HSIP/Local/Other
3	Little Street - Realignment		\$896,000	(2026-2040)	Safety	HSIP/Local/Other
4	Alexander St - Widening		\$640,000	(2026-2040)	Safety	HSIP/Local/Other
	Total Long Term Fundable Needs =		\$3,456,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$1,500,000	\$3,456,000	\$4,956,000
Recap of Expected/Estimated/Unknown Resources			
Highway Safety Improvement Program (HSIP) =	\$1,350,000	\$3,110,400	\$4,460,400
Local/Other =	\$150,000	\$345,600	\$495,600
Total Funding Reasonably Available =	\$1,500,000	\$3,456,000	\$4,956,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$-	\$-

Note 1 : Green highlighted projects above can be funded in the constrained funding analysis

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Figure 55 - Location of Constrained ITS Projects

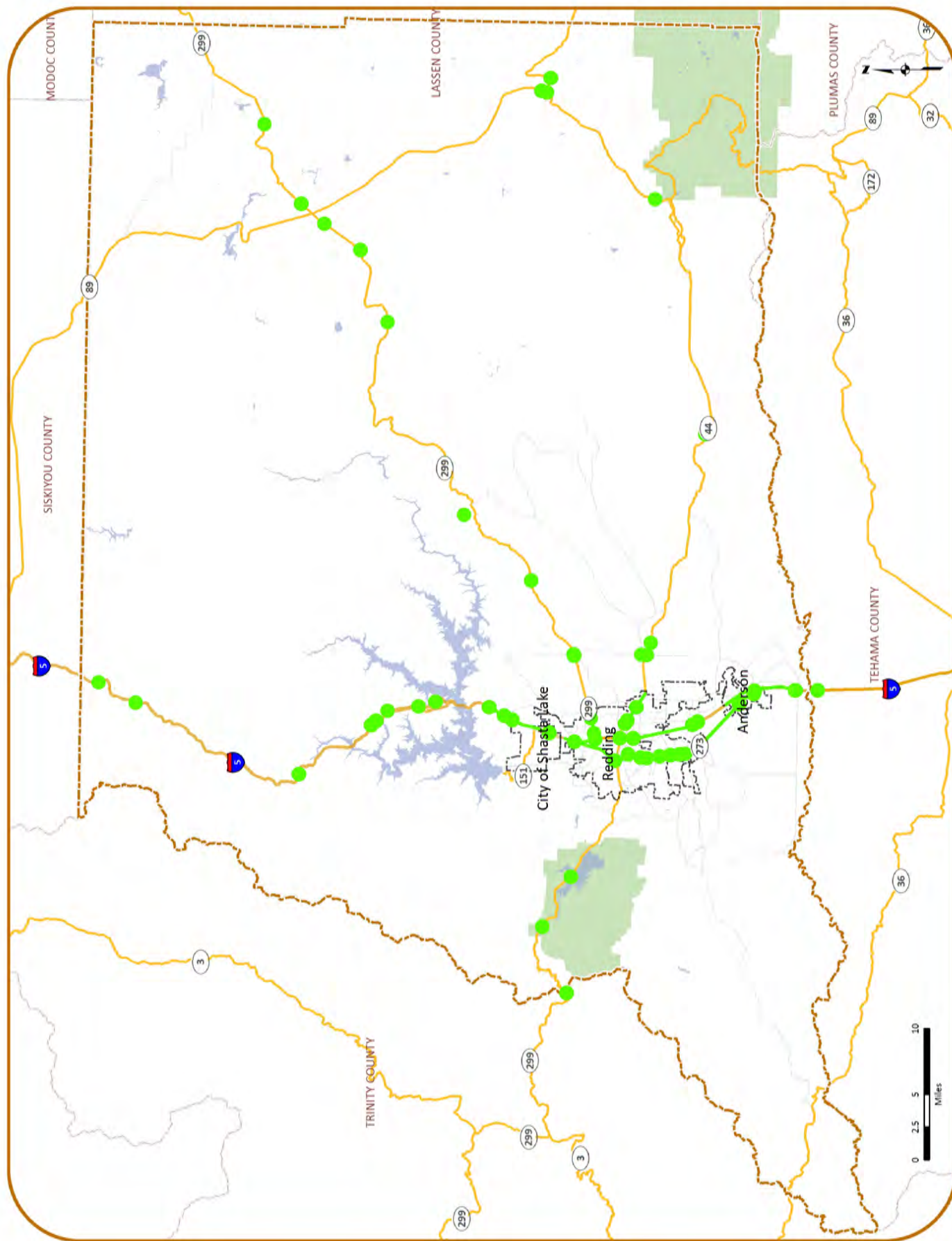


Table 42 - Summary of Projects: Caltrans ITS
 (projects are consistent with the [Integrated Traffic Data Collection and Management Plan for the Shasta County South Central Urban Region](#))

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	I-5, Start/End PM 9.77, Knighton Road, 1 CCTV at Knighton Road on I-5	\$554,000		(2018-2025)	ITS	SHOPP
2	I-5, Start/End PM 24.7, Mountain Gate, 1 CMS FNBT at Mountain Gate on I-5 W/ Sign Bridge structure	\$1,040,000		(2018-2025)	ITS	SHOPP
3	SR 299, various locations, Hatchet Mountain, Microwave. TMS Wireless Backbone East Extension (Hatchet Mtn.)	\$233,000		(2018-2025)	ITS	SHOPP
4	Various Locations in Shasta County, Microwave. TMS Wireless Backbone South/West Ext (Tuscan Butte; Hoadley)	\$8,000,000		(2018-2025)	ITS	SHOPP
5	SR 273/299, Redding, Signal Upgrades and Synchronization on 299 between Lake Blvd and I-5	\$210,000		(2018-2025)	ITS	SHOPP
6	SR 44/299, Shasta County, Connect I-5 Fiber Backbone to District Office	\$4,482,000		(2018-2025)	ITS	SHOPP
7	SR 44/299, Redding, Redding Local TMS Fiber Spurs	\$1,377,000		(2018-2025)	ITS	SHOPP
8	SR 44/I-5, Shasta County, Connect I-5 Fiber Backbone to District Office via Microwave and Hub House at CRI	\$824,000		(2018-2025)	ITS	SHOPP
9	SR 44/89, Old Station, 1 CCTV,1 HAR, and 3 CMS signs at Old Station at Jct SR44-SR89	\$27,000		(2018-2025)	ITS	SHOPP
10	I-5/SR 273, Redding, Northern Redding TMS Fiber	\$345,000		(2018-2025)	ITS	SHOPP
11	I-5, Start/End PM 61.7, Sweetbrier Rd, 1 CCTV at Sweetbrier Road on I-5	\$702,000		(2018-2025)	ITS	SHOPP
12	I-5, Various Locations, Bailey/Anderson/Walters HAR Simulcast and Upgrade Walters HAR	\$709,000		(2018-2025)	ITS	SHOPP
13	I-5, Various Locations, Fawndale HAR Extender & Simulcast upgrade to Redding HAR	\$210,000		(2018-2025)	ITS	SHOPP
14	I-5, various locations,Redding, Detection. Redding Area TMS System - A series of TMS sites along I-5	\$635,000		(2018-2025)	ITS	SHOPP
15	SR 44, Start/End PM 1.24, Victor Avenue, 1 CCTV at Victor Avenue on SR44	\$474,000		(2018-2025)	ITS	SHOPP
16	SR 273, Start/End PM 5.83, Briggs St, 1 CCTV at Briggs Street on SR273	\$210,000		(2018-2025)	ITS	SHOPP
17	SR 273, Start/End PM 12.68, Bonnyview Road, 1 CCTV at S. Bonnyview Road on SR273	\$237,000		(2018-2025)	ITS	SHOPP
18	SR 273, Redding, South Redding TMS Fiber Loop	\$54,000		(2018-2025)	ITS	SHOPP
19	SR 273, Redding, Redding Rural TMC	\$1,357,000		(2018-2025)	ITS	SHOPP
20	SR 273, Anderson/Redding, Complete Signalization and Synchronization plan of SR 273	\$210,000		(2018-2025)	ITS	SHOPP
	Total Short Term Needs =	\$21,890,000				
21	I-5, Start/End PM 24.7, 1 CMS FNBT at Mountain Gate on I-5 W/ Sign Bridge structure, CMS		\$1,763,000	(2026-2040)	ITS	SHOPP
22	I-5, Various Locations, Upgrade and expand traffic data collection system		\$4,992,000	(2026-2040)	ITS	SHOPP
23	SR 89, Start/End PM 0.4, Old Station, CMS FSBT - Model 510		\$320,000	(2026-2040)	ITS	SHOPP
24	SR 299, Start/End PM 0.18, Buckhorn Summit, CCTV		\$192,000	(2026-2040)	ITS	SHOPP
25	SR 299, Start/End PM 13.7, Whiskey Creek Bridge, CCTV EB Shldr at West end of Bridge		\$192,000	(2026-2040)	ITS	SHOPP
26	SR 299, Start/End PM 26.5, Hawley Offramp, CMS FEBT - Model 500		\$320,000	(2026-2040)	ITS	SHOPP
27	SR 299, Start/End PM 26.5, Old Oregon Trail, CCTV		\$192,000	(2026-2040)	ITS	SHOPP

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28	I-5, Start/End PM 1.1, Gas Point Road, CCTV SB Shldr		\$192,000	(2026-2040)	ITS	SHOPP
29	I-5, Start/End PM 4.29, Deschutes Road UC (Anderson), CCTV To be relocated to ~ PM 4.30 BBS installed		\$192,000	(2026-2040)	ITS	SHOPP
30	I-5, Start/End PM 9.33, Redding Area, TMS MVDS in median - Solar		\$224,000	(2026-2040)	ITS	SHOPP
31	I-5, Start/End PM 14.44, Cypress Avenue, CCTV		\$192,000	(2026-2040)	ITS	SHOPP
32	I-5, Start/End PM 21, Pine Grove OC (Shasta Lake City), HAR Flasher EMS FSBT - Upgrade to Flasher w/BBS or replace w/ CMS		\$640,000	(2026-2040)	ITS	SHOPP
33	I-5, Start/End PM 24, Mountain Gate (Shasta Lake City), CCTV Fawndale Ops Truck Turnaround Site		\$224,000	(2026-2040)	ITS	SHOPP
34	I-5, Start/End PM 30.5, Packers Bay S/B On Ramp, RWIS Packers Bay S/B Onramp at crest		\$960,000	(2026-2040)	ITS	SHOPP
35	I-5, Start/End PM 32.3, O'Brien, RWIS O'Brien N/B Onramp at crest		\$960,000	(2026-2040)	ITS	SHOPP
36	I-5, Start/End PM 36.1, Black Oak (South of Gilman Road OC), CMS #26 FNBT - Model 500 - Upgrade phone service		\$64,000	(2026-2040)	ITS	SHOPP
37	I-5, Start/End PM 37.44, Salt Creek (Near Gillman Road), Curve Warning - Upgrade CCTV to Pan/Tilt/Zoom BBS installed		\$64,000	(2026-2040)	ITS	SHOPP
38	I-5, Start/End PM 37.94, Antlers Summit OC, RWIS Upgrade w/BBS & connect comm to ITS Node LAN NB (1) Puck @ PM 37.93 SB (1) Puck @ PM 37.93 and (1) Subsurface Probe @ PM 37.93		\$256,000	(2026-2040)	ITS	SHOPP
39	I-5, Start/End PM 45.8, Vollmers UC, RWIS Upgrade w/BBS & connect comm to ITS Node LAN NB (1)PUCK @ PM 45.85 and (1) Subsurface Probe @ PM 45.85 SB (1)PUCK @ PM 45.85		\$256,000	(2026-2040)	ITS	SHOPP
40	I-5, Start/End PM 65.5, Castle Crags, CMS FNBT, for chain area		\$960,000	(2026-2040)	ITS	SHOPP
41	SR 44, Start/End PM 1.3, Victor Avenue OC (Redding), CMS FWBT - Model 500		\$960,000	(2026-2040)	ITS	SHOPP
42	SR 44, Start/End PM 1.56, Victor Avenue, HAR Flasher FEBT - Upgrade w/BBS		\$128,000	(2026-2040)	ITS	SHOPP
43	SR 44, Start/End PM 2.77, Airport Road OC (Redding), CCTV Exist power/phone at nearby CMS		\$256,000	(2026-2040)	ITS	SHOPP
44	SR 44, Start/End PM 7, Deschutes Road, CCTV NW Corner		\$192,000	(2026-2040)	ITS	SHOPP
45	SR 44, Start/End PM 8, Silver Bridge Road, HAR Flasher FWBT - Upgrade w/BBS		\$256,000	(2026-2040)	ITS	SHOPP
46	SR 44, Start/End PM 26, Shasta Forest Village, CCTV Southside of Hwy-44		\$192,000	(2026-2040)	ITS	SHOPP
47	SR 44, Start/End PM 26.3, Shasta Forest Drive, RWIS WB lanes at top of luge for icy rds		\$960,000	(2026-2040)	ITS	SHOPP
48	SR 44, Start/End PM 50.54, Eskimo Hill Summit, CCTV		\$384,000	(2026-2040)	ITS	SHOPP
49	SR 44, Start/End PM 50.54, Eskimo Hill Summit, RWIS		\$896,000	(2026-2040)	ITS	SHOPP
50	SR 44, Start/End PM 64, The Rim, RWIS		\$384,000	(2026-2040)	ITS	SHOPP
51	SR 273, Start/End PM 4.44, Pinon Ave / Barney St., CCTV NE corner		\$192,000	(2026-2040)	ITS	SHOPP
52	SR 273, Start PM 5/End PM 20.033, From Anderson to JCT I-5, Fiber Installation		\$7,681,000	(2026-2040)	ITS	SHOPP
53	SR 273, Start/End PM 11.8, Clear Creek Road Intersection, CCTV		\$192,000	(2026-2040)	ITS	SHOPP
54	SR 273, Start/End PM 12, South Bonnyview Rd., CMS FNBT		\$1,024,000	(2026-2040)	ITS	SHOPP
55	SR 273, Start/End PM 13.5, South Bonnyview Rd., CMS FSBT		\$1,024,000	(2026-2040)	ITS	SHOPP
56	SR 273, Start/End PM 14.47, Buenaventura Blvd., CCTV NW corner - Power lines check for clearance		\$192,000	(2026-2040)	ITS	SHOPP

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57	SR 273, Start/End PM 14.96, Wyndham Ln., CCTV NE corner		\$192,000	(2026-2040)	ITS	SHOPP
58	SR 273, Start/End PM 17.03, Riverside Dr., CCTV Possible Microwave Installation. Install Northwest corner near existing Cabinet.		\$384,000	(2026-2040)	ITS	SHOPP
59	SR 299, Start/End PM 0.18, Buckhorn Summit, RWIS		\$1,024,000	(2026-2040)	ITS	SHOPP
60	SR 299, Start/End PM 8.65, French Gulch Road Area, CCTV EB Shldr		\$384,000	(2026-2040)	ITS	SHOPP
61	SR 299, Start/End PM 25.3, Hawley Road, CMS FWBT - Model 500		\$960,000	(2026-2040)	ITS	SHOPP
62	SR 299, Start/End PM 28.38, Stillwater Way, HAR Flasher FWBT - Upgrade w/ BBS		\$128,000	(2026-2040)	ITS	SHOPP
63	SR 299, Start/End PM 75.47, Mountain View Road, CCTV Downtown Intersection		\$192,000	(2026-2040)	ITS	SHOPP
64	SR 299, Start/End PM 78.85, West of SR299-SR89 Jct, CMS FEBT - Model 510		\$960,000	(2026-2040)	ITS	SHOPP
65	SR 299, Start/End PM 81.2, East of SR299-SR89 Jct, CMS FWBT - Model 510		\$960,000	(2026-2040)	ITS	SHOPP
66	SR 299, Start/End PM 89.4, Pit One Grade-Fall River Area, CCTV Limited roadside for cabinets		\$448,000	(2026-2040)	ITS	SHOPP
	Total Long Term Fundable Needs =		\$33,700,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$21,890,000	\$33,700,000	\$55,590,000
Recap of Expected/Estimated/Unknown Resources			
State Highway Operations and Protection Program (SHOPP) =	\$21,890,000	\$33,700,000	\$55,590,000
Total Funding Reasonably Available =	\$21,890,000	\$33,700,000	\$55,590,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$-	\$-

Note 1 : Green highlighted projects above can be funded in the constrained funding analysis

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Table 43 - Summary of Projects: Regional ITS
 (projects are consistent with the [Integrated Traffic Data Collection and Management Plan for the Shasta County South Central Urban Region](#))

PROJECT COUNT	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	I-5, south of Fawndale Road and north of Bowman Road; Bluetooth Pilot Test at urban area Gateways	\$20,000		(2018-2025)	ITS	SHOPP
2	I-5, south of Fawndale Road and north of Bowman Road; Install O-D stations at I-5 Urban Gateways	\$196,000		(2018-2025)	ITS	SHOPP
3	CA-299, west of French Gulch Rd and east of Dry Creek Rd.; CA-44, east of Deschutes Rd.; Install O-D stations at CA-299 and CA-44 Urban Gateways	\$294,000		(2018-2025)	ITS	SHOPP
4	I-5 from CA-44 to Knighton Road, Install new permanent mainline station and new permanent on and off-ramp station along I-5. (Detector Project 1)	\$567,000		(2018-2025)	ITS	SHOPP
5	CA-44/I-5 interchange, Install new permanent mainline station and new permanent on and off-ramp station along CA-44. (Detector Project 1)	\$284,000		(2018-2025)	ITS	SHOPP
6	I-5, Ox Yoke Road to Gas Point Road (South Gateway), Install new permanent mainline station and new permanent on and off-ramp station along I-5 (Detector Project 2)	\$496,000		(2018-2025)	ITS	SHOPP
	Total Short Term Needs =	\$1,857,000				
7	I-5, Oasis Road to CA-299, Install new permanent mainline station and new permanent on and off-ramp station along I-5 (Detector Project 3)		\$544,000	(2026-2040)	ITS	SHOPP
8	CA-299/Interstate 5 Interchange, Upgrade existing mainline station to a permanent station and install new permanent on and off-ramp station along CA-299 (Detector Project 3)		\$84,000	(2026-2040)	ITS	SHOPP
9	CA-299/Interstate 5 Interchange, Install new permanent mainline station and new permanent on and off-ramp station along CA-299 (Detector Project 3)		\$91,000	(2026-2040)	ITS	SHOPP
10	I-5, Fawndale Road (North Gateway) to Pine Grove Avenue, Install new permanent mainline station and new permanent on and off-ramp station along I-5 (Detector Project 4)		\$635,000	(2026-2040)	ITS	SHOPP
11	I-5, Fawndale Road (North Gateway) to Pine Grove Avenue, Upgrade existing mainline station to a permanent station and install new permanent on and off-ramp station along I-5 (Detector Project 4)		\$84,000	(2026-2040)	ITS	SHOPP
12	CA-44, Shasta View Drive to Airport Drive, Install new permanent mainline station and new permanent on and off-ramp station along CA-44 (Detector Project 5)		\$364,000	(2026-2040)	ITS	SHOPP
13	CA-299, Churn Creek Road to Old Oregon Trail, Install new permanent mainline station and new permanent on and off-ramp station along CA-299 (Detector Project 6)		\$182,000	(2026-2040)	ITS	SHOPP
14	CA-299 at Deschutes Road, Upgrade existing profile station to a permanent profile station (Detector Project 7)		\$84,000	(2026-2040)	ITS	SHOPP
15	CA-44 at Deschutes Road, Upgrade existing mainline station to a permanent station and install new permanent on and off-ramp station along CA-44 (Detector Project 7)		\$170,000	(2026-2040)	ITS	SHOPP
16	I-5: CA-44 to Knighton Road; CA-44: CA-44/I-5 Interchange, Convert stations to TMS		\$101,000	(2026-2040)	ITS	SHOPP
17	I-5: Ox Yoke Road to Gas Point Road, Convert stations to TMS		\$59,000	(2026-2040)	ITS	SHOPP
18	I-5: Oasis Road to CA-299, CA-299: CA-299/I-5 Interchange, Convert stations to TMS		\$68,000	(2026-2040)	ITS	SHOPP
19	I-5: Fawndale Road to Pine Grove Avenue, Convert stations to TMS		\$68,000	(2026-2040)	ITS	SHOPP
20	CA-44: Shasta View Drive to Airport Drive, Convert stations to TMS		\$33,000	(2026-2040)	ITS	SHOPP
21	CA-299: Churn Creek Road to Old Oregon Trail, Convert stations to TMS		\$17,000	(2026-2040)	ITS	SHOPP
22	CA-299 at Deschutes Road, CA-44 at Deschutes Road, Convert stations to TMS		\$26,000	(2026-2040)	ITS	SHOPP
	Total Long Term Fundable Needs =		\$2,238,000			

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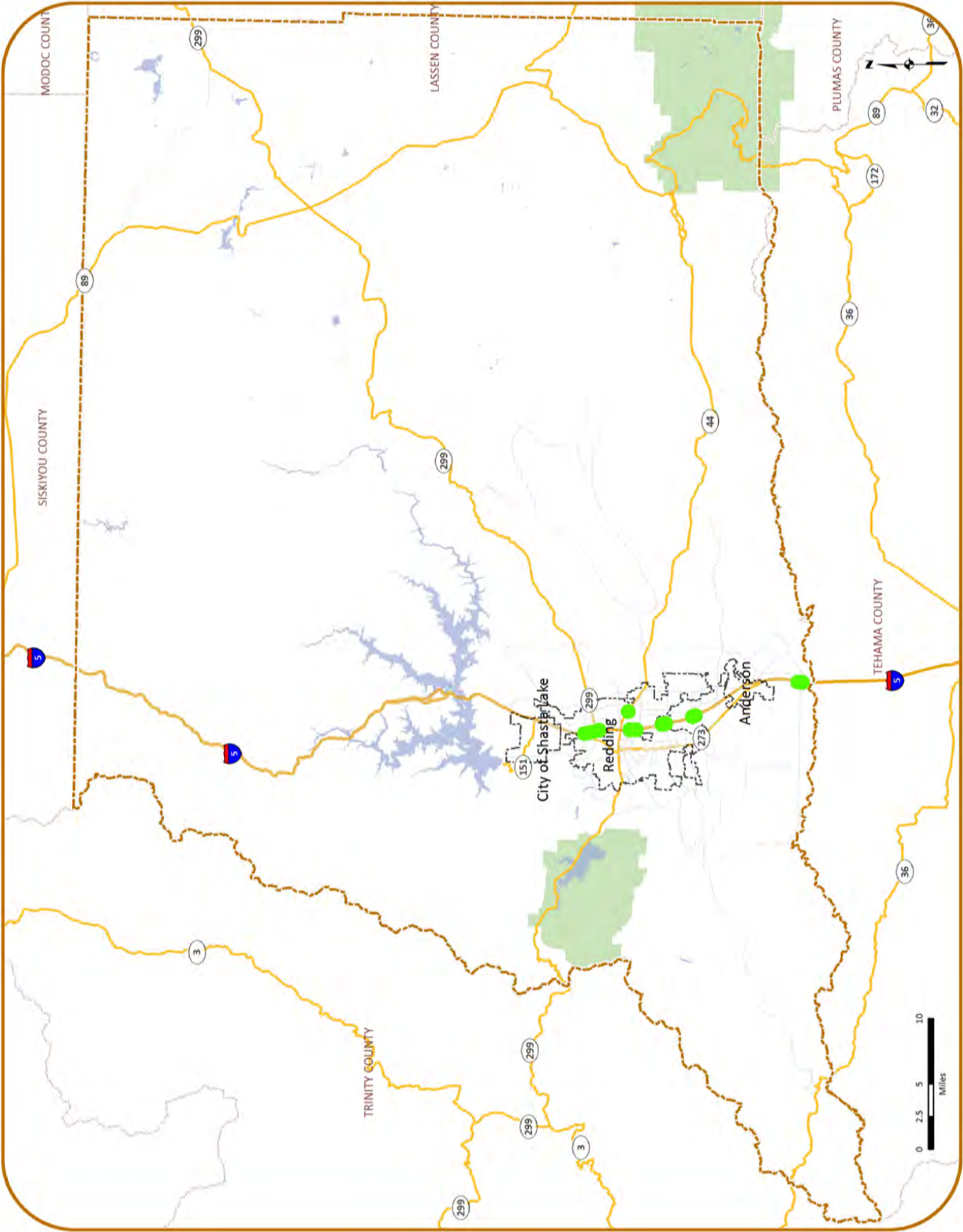
DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$1,857,000	\$2,610,000	\$4,467,000
Recap of Expected/Estimated/Unknown Resources			
State Highway Operations and Protection Program (SHOPP) =	1,857,000	\$2,238,000	\$4,095,000
Total Funding Reasonably Available =	\$1,857,000	\$2,238,000	\$4,095,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(372,000)	\$(372,000)
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Figure 56 - Location of Constrained Ramp Meter Projects



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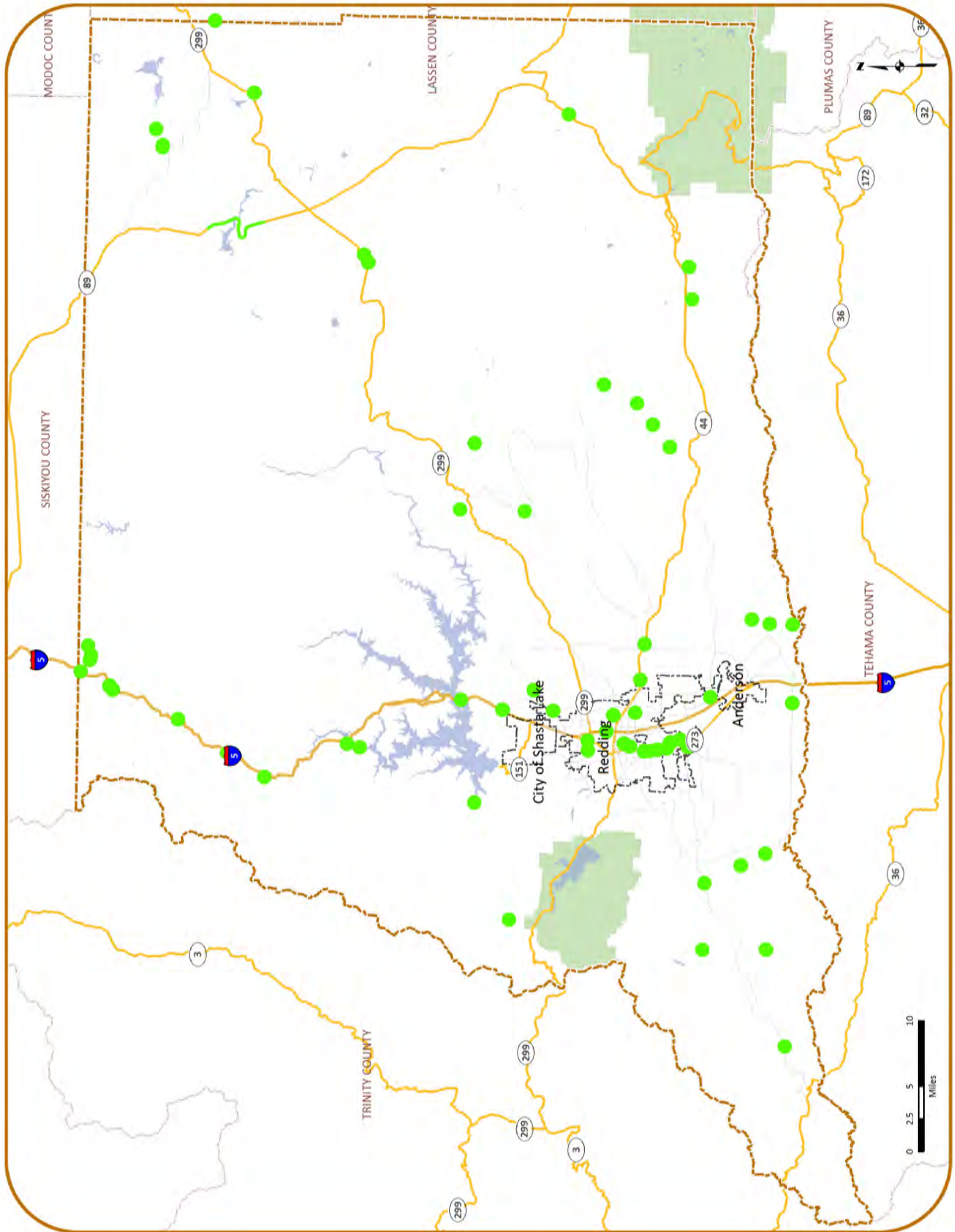
Table 44 - Summary of Projects: Caltrans Ramp Meters

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	I-5, Start/End PM 14.76, Cypress, Ramp Meter - Northbound	\$750,000		(2018-2025)	Ramp meter	SHOPP/Local
2	I-5, Start/End PM 14.28, Cypress, Ramp Meter - Southbound	\$750,000		(2018-2025)	Ramp meter	SHOPP/Local
3	I-5, Start/End PM 11.96, S. Bonnyview, Ramp Meter - Southbound	\$800,000		(2018-2025)	Ramp meter	SHOPP/Local
4	SR 44, Start/End PM 1.57, Dana, Ramp Meter - Westbound	\$150,000		(2018-2025)	Ramp meter	SHOPP/Local
	Total Short Term Needs =	\$2,450,000				
5	I-5, Start/End PM 0.78, Gas Point Road, Ramp Meter - Southbound		\$960,000	(2026-2040)	Ramp meter	SHOPP/Local
6	I-5, Start/End PM 1.1, Gas Point Road, Ramp Meter - Northbound		\$960,000	(2026-2040)	Ramp meter	SHOPP/Local
7	I-5, Start/End PM 9.65, Knighton Road, Ramp Meter - Southbound		\$960,000	(2026-2040)	Ramp meter	SHOPP/Local
8	I-5, Start/End PM 9.9, Knighton Road, Ramp Meter - Northbound		\$960,000	(2026-2040)	Ramp meter	SHOPP/Local
9	I-5, Start/End PM 12.26, S. Bonnyview, Ramp Meter - Northbound		\$1,024,000	(2026-2040)	Ramp meter	SHOPP/Local
10	I-5, Start/End PM 17.05, Lake Blvd., Ramp Meter - Southbound		\$768,000	(2026-2040)	Ramp meter	SHOPP/Local
11	I-5, Start/End PM 17.57, Lake Blvd., Ramp Meter - Northbound		\$960,000	(2026-2040)	Ramp meter	SHOPP/Local
12	I-5, Start/End PM 17.92, Twin View Boulevard, Ramp Meter - Southbound		\$960,000	(2026-2040)	Ramp meter	SHOPP/Local
13	I-5, Start/End PM 18.22, Twin View Boulevard, Ramp Meter - Northbound		\$960,000	(2026-2040)	Ramp meter	SHOPP/Local
	Total Long Term Fundable Needs =		\$8,512,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$2,450,000	\$8,512,000	\$10,962,000
Recap of Expected/Estimated/Unknown Resources			
State Highway Operations and Protection Program (SHOPP) =	\$612,500	\$2,128,000	\$2,740,500
Local/Other =	\$1,837,500	\$6,384,000	\$8,221,500
Total Funding Reasonably Available =	\$2,450,000	\$8,512,000	\$10,962,000
Total Unfunded Needs =	\$-	\$-	\$-
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis.			
Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.			
Note 3 : Long term projects are escalated by 2.5%			

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Figure 57 - Location of Constrained Bridge Projects



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Table 45 - Summary of Projects: Caltrans Bridges

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Route 44, Begin PM 59.62, 06-0084 Hat Creek	\$4,125,000		(2018-2025)	Replace Bridge	SHOPP
2	Route 5, Begin PM 66.8, 06-0095 Craig View Drive	\$11,800,000		(2018-2025)	Replace Bridge	SHOPP
3	Route 5, Begin PM 57.41, 06-0111 Sims Road UC	\$5,313,000		(2018-2025)	Replace Superstructure (or replace bridge)	SHOPP
4	SR 44, Start/End PM 7.4, 06-0152 Cow Creek	\$3,841,000		(2018-2025)	Seismic Retrofit	SHOPP
5	SR 44, Start/End PM 4.55, 06-0151 Clough Creek	\$2,650,000		(2018-2025)	Rehab	SHOPP
6	Route 5, Begin PM 28.14, Pit River Bridge	\$20,000,000		(2018-2025)	Seismic and Paint	SHOPP
7	Route 89, Begin PM 25.3, End PM 31.7, Lake Britton, Replace Bridge and realign roadway	\$80,000,000		(2018-2025)	Replace Bridge and realign roadway	SHOPP
8	SR 44, Start PM 0/ End PM 60, Bridges at various locations	\$3,760,000		(2018-2025)	Deck rehab, paint, joints, etc	SHOPP
9	SR 299, various locations in Shasta County	\$3,800,000		(2018-2025)	Deck rehab, paint and joint repair/replacement	SHOPP
	Total Short Term Needs =	\$135,289,000				
10	Route 5, Begin PM 28.14, End PM 28.14, Pit River Bridge		\$640,042,000	(2026-2040)	Replace Bridge	SHOPP
11	06-0015 UNION SCHOOL RD OC (FO, SR=58.2), Bridge Rehabilitation		\$2,560,000	(2026-2040)	Bridge Rehabilitation	SHOPP
12	06-0035 REDDING OH (FO, SR=69), Bridge Rehabilitation		\$2,560,000	(2026-2040)	Bridge Rehabilitation	SHOPP
13	06-0036 CLEAR CREEK (SD, SR=76), Bridge Rehabilitation		\$2,560,000	(2026-2040)	Bridge Rehabilitation	SHOPP
14	06-0058 MONTGOMERY CK (SD, SR=76.1), Bridge Rehabilitation		\$2,560,000	(2026-2040)	Bridge Rehabilitation	SHOPP
15	06-0113 CREEKSIDE UC (SD, SR=75), Bridge Rehabilitation		\$2,560,000	(2026-2040)	Bridge Rehabilitation	SHOPP
16	06-0118 STATE PARK UC (FO, SR=73.5), Bridge Rehabilitation		\$2,560,000	(2026-2040)	Bridge Rehabilitation	SHOPP
17	06-0126L E REDDING SEP (FO, SR=67.3), Bridge Rehabilitation		\$2,560,000	(2026-2040)	Bridge Rehabilitation	SHOPP
18	06-0137G N273-N5 CONN OC (FO, SR=73.6), Bridge Rehabilitation		\$2,560,000	(2026-2040)	Bridge Rehabilitation	SHOPP
19	06-0152 COW CREEK (SD, SR=72.2), Bridge Rehabilitation		\$2,560,000	(2026-2040)	Bridge Rehabilitation	SHOPP
20	06-0154 MOUNTAIN GATE OC (FO, SR=56.3), Bridge Rehabilitation		\$2,560,000	(2026-2040)	Bridge Rehabilitation	SHOPP
21	06-0155 OASIS ROAD OC (FO, SR=55), Bridge Rehabilitation		\$2,560,000	(2026-2040)	Bridge Rehabilitation	SHOPP
22	06-0156 ROUTE 151/5 SEP (FO, SR=60.1), Bridge Rehabilitation		\$2,560,000	(2026-2040)	Bridge Rehabilitation	SHOPP
23	Route 273, Begin PM 17.08, End PM 17.08, Sacramento River Bridge, Replace Bridge		\$64,004,000	(2026-2040)	Replace Bridge	SHOPP
	Total Long Term Fundable Needs =		\$-			

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DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$135,289,000	\$734,766,000	\$870,055,000
Recap of Expected/Estimated/Unknown Resources			
State Highway Operations and Protection Program (SHOPP) =	135,289,000	\$-	\$135,289,000
Total Funding Reasonably Available =	\$135,289,000	\$-	\$135,289,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(734,766,000)	\$(734,766,000)
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

Table 46 - Summary of Projects: Shasta County Bridges

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Spring Creek Road @ Fall River - Replace Bridge	\$2,122,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
2	Cassel Fall River Road @ Pit River - Replace Bridge	\$6,238,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
3	Soda Creek Road @ Soda Creek - Replace Bridge	\$1,255,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
4	Gas Point Road at No Name Ditch - Replace Bridge	\$1,500,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
5	Lower Gas Pt Road @ NFk Cottonwood Creek - Replace Bridge	\$2,344,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
6	Ash Creek Road @ Sacramento River overflow - Replace Bridge	\$1,399,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
7	Parkville Road @ Ash Creek - Replace Bridge	\$1,280,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
8	Inwood Road @ South Fork Bear Creek - Replace Bridge	\$1,066,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
9	Ponderosa Way @ NFk Bear Creek - Replace Bridge	\$860,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
10	White House Road @ ACID Canal - Replace Bridge	\$440,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
11	Soda Creek Road @ SFk Soda Creek - Replace Bridge	\$640,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
12	Bear Mtn. Road @ Deep Hole Creek - Replace Bridge	\$950,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
13	Holiday Rd @ Spr. Branch Stillwater Crk - Replace Bridge	\$640,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
14	Adobe Road @ Anderson Creek - Replace Bridge	\$2,460,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
15	Oak Run Road @ Oak Run Crk - 6C-188 - Replace Bridge	\$2,380,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
16	Lakeshore Road @ Doney Crk - Replace Bridge	\$7,830,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
17	Lakeshore Road @ Charley Crk - Replace Bridge	\$6,480,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
18	Ponderosa Way @ Snow Creek - Replace Bridge	\$830,000		(2018-2025)	Bridge Replacement	HBP/Local/Other

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19	Ash Creek Road @ Anderson Creek - Replace Bridge	\$1,930,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
20	Dersch Road @ Cow Creek - Replace Bridge	\$2,140,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
21	Placer Road @ Dry Creek - Replace Bridge	\$500,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
22	Tamarack Road @ Old Cow Creek - Replace Bridge	\$530,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
23	Middle Creek Road at Middle Creek - Replace Bridge	\$920,000		(2018-2025)	Bridge Replacement	HBP/Local/Other
	Total Short Term Needs =	\$46,734,000				
24	Zogg Mine Road @ Andrews Creek - Replace Bridge		\$704,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
25	Main Street @ Castle Creek - Replace Bridge		\$2,637,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
26	Pittville Road @ Pit River - Replace Bridge		\$4,660,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
27	Riverside Road @ Sacramento River - Replace Bridge		\$2,714,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
28	Park Avenue at Burney Creek - Replace Bridge		\$896,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
29	La Moine Road @ Slate Creek - Replace Bridge		\$3,008,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
30	Platina Road @ Arbuckle Gulch - Replace Bridge		\$1,216,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
31	Gibson Road @ Boulder Creek - Replace Bridge		\$3,328,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
32	Jackrabbit Flat Rd @ Burney Creek - Replace Bridge		\$1,446,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
33	Churn Creek Rd @ Churn Creek 6C-86 - Replace Bridge		\$4,839,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
34	Bland Road @ NF Wilson Creek - Replace Bridge		\$870,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
35	Westside Road @ Squaw Creek - Replace Bridge		\$1,946,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
36	Platina Road @ Huling Creek - Replace Bridge		\$691,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
37	Bland Road @ SF Wilson Creek - Replace Bridge		\$1,216,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
38	Mineral Road @ Bailey Creek - Replace Bridge		\$627,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
39	Phillips Road @ Little Cow Crk - Replace Bridge		\$1,549,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
40	Rock Creek Road @ Bailey Creek - Replace Bridge		\$1,165,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
41	Sunny Hill Road @ Ducket Creek - Replace Bridge		\$922,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
42	Trinity Mountain Road @ French Gulch - Replace Bridge		\$858,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
43	Ponderosa Way @ SFk Cow Creek - Replace Bridge		\$2,087,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
44	Dersch Road @ Lack Creek - 6C-131 - Replace Bridge		\$2,266,000	(2026-2040)	Bridge Replacement	HBP
45	Mountain Meadow Road @ Battle Creek - Replace Bridge		\$947,000	(2026-2040)	Bridge Replacement	HBP
46	Clark Creek Road @ Burney Creek - Replace Bridge		\$973,000	(2026-2040)	Bridge Replacement	HBP
47	Statton Road @ Salt Creek - Replace Bridge		\$1,370,000	(2026-2040)	Bridge Replacement	HBP
48	Churn Creek Rd @ Churn Creek 6C-128 - Replace Bridge		\$8,564,000	(2026-2040)	Bridge Replacement	HBP

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49	Gas Point Road @ Antelope Creek - Replace Bridge		\$2,419,000	(2026-2040)	Bridge Replacement	HBP
50	Tamarack Road @ Burney Creek - Replace Bridge		\$2,010,000	(2026-2040)	Bridge Replacement	HBP
51	Mears Ridge Road @ Mears Creek - Replace Bridge		\$3,187,000	(2026-2040)	Bridge Replacement	HBP
52	Nelson Creek Road @ Nelson Creek - Replace Bridge		\$2,355,000	(2026-2040)	Bridge Replacement	HBP
53	Meyers Road @ Dry Creek - Replace Bridge		\$1,895,000	(2026-2040)	Bridge Replacement	HBP
54	Soda Creek Road @ Soda Creek, 6C-139 - Replace Bridge		\$1,510,000	(2026-2040)	Bridge Replacement	HBP
55	Platina Road @ NFk Cottonwood Creek - Replace Bridge		\$2,035,000	(2026-2040)	Bridge Replacement	HBP
56	Gas Point Road @ Dry Creek - Replace Bridge		\$2,202,000	(2026-2040)	Bridge Replacement	HBP
57	Soda Creek Road @ Sacramento River - Replace Bridge		\$4,493,000	(2026-2040)	Bridge Replacement	HBP
58	Cline Gulch @ Clear Creek - Replace Bridge		\$4,442,000	(2026-2040)	Bridge Replacement	HBP
59	Deer Flat Road @ NF Battle Creek - Replace Bridge		\$973,000	(2026-2040)	Bridge Replacement	HBP
60	Big Bend Road @ Roaring Creek - Replace Bridge		\$934,000	(2026-2040)	Bridge Replacement	HBP
61	Island Road @ Little Tule River - Replace Bridge		\$678,000	(2026-2040)	Bridge Replacement	HBP/Local/Other
62	Ash Creek Road at Ash Creek Tributary - Replace Bridge		unknown	beyond 2040	Bridge Replacement	HBP
63	Fenders Ferry Road at Snow Creek - Replace Bridge		unknown	beyond 2040	Bridge Replacement	HBP
64	Rock Creek Road at Rock Creek - Replace Bridge		unknown	beyond 2040	Bridge Replacement	HBP
65	Highland Lakes Road at Boulder Creek - Replace Bridge		unknown	beyond 2040	Bridge Replacement	HBP
66	Cline Gulch Road at Cline Gulch - Replace Bridge		unknown	beyond 2040	Bridge Replacement	HBP
67	Tamarack Road at Old Cow Creek - Replace Bridge		unknown	beyond 2040	Bridge Replacement	HBP
Total Long Term Fundable Needs =			\$37,379,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$46,734,000	\$80,632,000	\$127,366,000
Recap of Expected/Estimated/Unknown Resources			
Highway Bridge Program (HBP) =	\$44,397,300	\$35,510,050	\$79,907,350
Local/Other =	\$2,336,700	1,868,950	\$4,205,650
Total Funding Reasonably Available =	\$46,734,000	\$37,379,000	\$84,113,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(43,253,000)	\$(43,253,000)

Note 1 : Green highlighted projects above can be funded in the constrained funding analysis

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Table 47 - Summary of Projects: Redding Bridges

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	State Bridge #06C0340, Sacramento Drive @ Olney Creek - Bridge Replacement	\$4,613,000		(2018-2025)	Bridge Replacement	HBP/Local
2	State Bridge #06C0344, Sharon Ave over ACID Canal - Bridge Replacement	\$1,056,006		(2018-2025)	Bridge Replacement	HBP/Local
3	State Bridge #06C0104, Old Alturas Road @ Churn Creek - Bridge Replacement	\$3,226,000		(2018-2025)	Bridge Replacement	HBP/Local
4	State Bridge #06C0335, Eastside Road @ Olney Creek - Bridge Replacement	\$2,053,850		(2018-2025)	Bridge Replacement	HBP/Local
5	State Bridge #06C0341, Girvan Road @ Olney Creek - Bridge Replacement	\$3,014,039		(2018-2025)	Bridge Replacement	HBP/Local
6	State Bridge # 06C0071, Railroad Ave over Canyon Hollow - Bridge Rehabilitation	\$2,985,612		(2018-2025)	Bridge Rehabilitation	HBP/Local
8	State Bridge # 06C0085, Eastside Rd @ Canyon Hollow - Bridge Replacement	\$1,731,000		(2018-2025)	Bridge Replacement	HBP/Local
9	State Bridge #06C0307, Canyon Road @ ACID Canal - Bridge Replacement	\$2,542,339		(2018-2025)	Bridge Replacement	HBP/Local
10	State Bridge # 06C0106, Hilltop Dr @ I-5 - Bridge Rehabilitation (South Replacement)	\$5,280,000		(2018-2025)	Bridge Rehabilitation	HBP/Local
	Total Short Term Needs =	\$26,501,846				
11	State Bridge # 06C0088, Old Oregon Trail @ W. Fork Stillwater Creek - Bridge Replacement		\$6,893,000	(2026-2040)	Bridge Replacement	HBP/Local
12	State Bridge # 06C0033, Lake Blvd @ SPRR - Bridge Rehabilitation		\$6,893,000	(2026-2040)	Bridge Rehabilitation	HBP/Local
13	State Bridge # 06C0047, Locust St @ ACID Canal - Bridge Rehabilitation		\$1,379,000	(2026-2040)	Bridge Rehabilitation	HBP/Local
14	State Bridge # 06C0057, Twin View Blvd @ Boulder Creek - Bridge Rehabilitation		\$6,893,000	(2026-2040)	Bridge Rehabilitation	HBP/Local
15	State Bridge # 06C0106, Hartnell Ave @ Churn Court - Bridge Rehabilitation		\$6,893,000	(2026-2040)	Bridge Rehabilitation	HBP/Local
16	State Bridge # 06C0070, Westside Rd @ Oregon Gulch - Bridge Rehabilitation		\$1,379,000	(2026-2040)	Bridge Rehabilitation	HBP/Local
	Total Long Term Fundable Needs =		\$30,330,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$26,501,846	\$30,330,000	\$56,831,846
Recap of Expected/Estimated/Unknown Resources			
Highway Bridge Program (HBP) =	25,176,754	\$28,813,500	\$53,990,254
Local/Other =	1,325,092	1,516,500	\$2,841,592
Total Funding Reasonably Available =	\$26,501,846	\$30,330,000	\$56,831,846
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$-	\$-

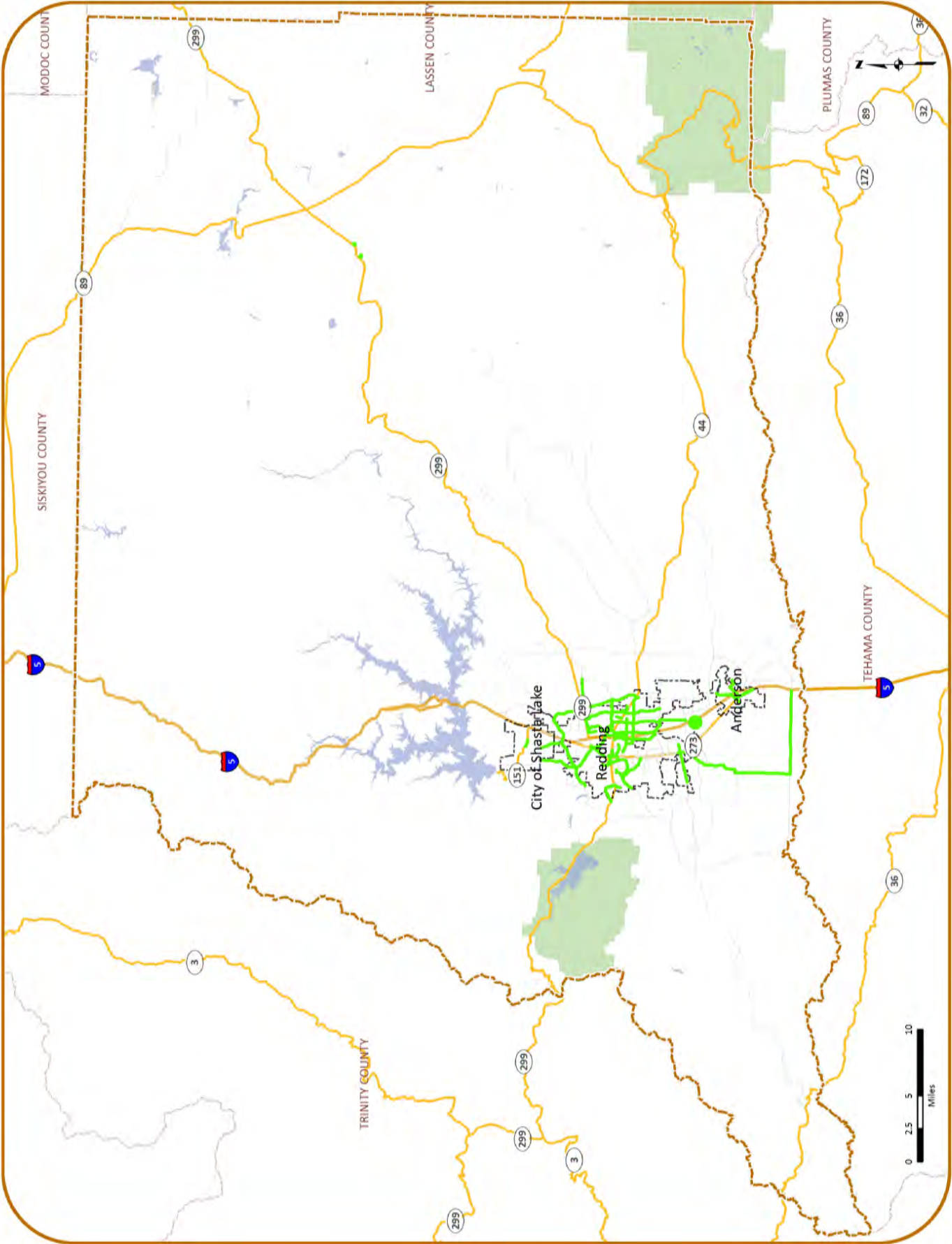
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Figure 58 - Location of Constrained Active Transportation Projects



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Table 48 - Summary of Projects: Caltrans Active Transportation

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	151, Begin PM 5.4, End PM 5.9, Shasta Lake City from 0.5 mile west to 0.4 mile east of Poplar Lane	\$2,000,000		(2018-2025)	Construct curb ramps, reconstruct sidewalks and possibly add sidewalks and adjust traffic signal pedestrian buttons.	SHOPP
2	Route 299, Begin PM 18.6, End 19.0, construct Class I facility	\$2,385,000		(2018-2025)	Construct Class I facility	Other/ATP
	Total Short Term Needs =	\$2,000,000				
3	Lake Blvd (SR 299), between SR 273 and Interstate 5, Begin PM 24.238, End PM 24.822, Complete Streets gap closure for multimodal use facilities and aesthetic treatments		\$2,560,000	(2026-2040)	Bicycle and pedestrian, complete streets	SHOPP/ATP
4	Route 299, Begin PM 16.5, End PM 18.3, From Old Shasta to Whiskeytown NRA, Provide westbound truck climbing lane and bike lane.		\$1,536,000	(2026-2040)	Bicycle and pedestrian, truck climbing lane	SHOPP/ATP
5	Entire length of SR 273, multi-modal facility		\$15,361,000	(2026-2040)	construct bike lanes	SHOPP/ATP
6	Route 273, Begin PM 3.812, End PM 11.1, various locations in high pedestrian areas, Pedestrian Facilities - Consistent with ADA and Caltrans Design Standards		\$8,961,000	(2026-2040)		SHOPP/ATP
	Total Long Term Fundable Needs =		\$-			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$2,000,000	\$28,418,000	\$30,418,000
Recap of Expected/Estimated/Unknown Resources			
Active Transportation Program (ATP) =	200,000	\$-	\$200,000
State Highway Operations and Protection Program (SHOPP) =	1,800,000	\$-	\$1,800,000
Total Funding Reasonably Available =	\$2,000,000	\$-	\$2,000,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(28,418,000)	\$(28,418,000)

Note 1: Green highlighted projects above can be funded in the constrained funding analysis

Note 2: Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3: Long term projects are escalated by 2.5%

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Table 49 - Summary of Projects: Shasta County Active Transportation

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS			SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
	Bicycle Projects							
	Street Name	From Street	To Street					
1	HUDSON ST	MOUNTAIN VIEW RD/STATE HWY 299 E	CYPRESS AVE	\$64,749		(2018-2025)		ATP, local, LTF, HSIP
2	MOUNTAIN VIEW RD	CARBERRY ST	MUSKEGON ST/STATE HWY 299 E	\$91,196		(2018-2025)		ATP, local, LTF, HSIP
3	RHONDA RD	CREMIA PL	MATTHEW CT/ROBINSON GLEN DR	\$34,251		(2018-2025)		ATP, local, LTF, HSIP
4	PARK AVE/CYPRESS AVE	HUDSON ST	BARTEL ST	\$71,184		(2018-2025)		ATP, local, LTF, HSIP
5	DESCHUTES RD	BOYLE RD/OLD DESCHUTES RD	LASSEN VIEW DR	\$233,992		(2018-2025)		ATP, local, LTF, HSIP
6	OAK ST/HAWTHORNE AVE	DIXIELAND LN	CLOVERDALE RD	\$187,314		(2018-2025)		ATP, local, LTF, HSIP
			Total Short Term Needs =	\$682,686				
	Bicycle Projects							
	Street Name	From Street	To Street					
7	FIRST ST	MAIN ST	MAIN ST		\$1,133	(2026-2040)	Bike Route	unknown
8	HURON AVE/ERIE ST	MOUNTAIN VIEW RD	HUDSON ST		\$45,978	(2026-2040)	Bike Route	unknown
9	BRUSH ST	FOURTH ST	FRONT ST		\$62,958	(2026-2040)	Bike Route	unknown
10	MARQUETTE ST	HURON AVE	CYPRESS AVE		\$54,990	(2026-2040)	Bike Route	unknown
11	ASH AVE	MARQUETTE ST	HUDSON ST		\$26,281	(2026-2040)	Bike Route	unknown
12	STATE HWY 273	PLEASANT HILLS DR	CITY OF REDDING BOUNDARY		\$11,786,458	(2026-2040)	Caltrans Project Development Process - Separated Bike Lane	unknown
13	FIRST ST/MAIN ST/SECOND ST/ THIRD ST/OLIVE ST/FOURTH ST/ FRONT ST/ HIGH ST	CATTLEMAN DR	MUSKET WAY/STOWA WAY		\$304,836	(2026-2040)	Bike Lane	unknown
14	BAILEY AVE	100 ft WEST of CARBERRY ST	MARQUETTE ST		\$73,049	(2026-2040)	Bike Lane	unknown
15	GROVE ST	B ST	WALNUT ST		\$50,149	(2026-2040)	Bike Route	unknown
16	FOURTH ST/GAS POINT RD	LOCUST RD/LOCUST ST	DELLA LN		\$172,427	(2026-2040)	Bike Lane	unknown
17	CURVE ST	DEAD END	STATE HWY 299 E		\$41,614	(2026-2040)	Bike Route	unknown
18	STATE HWY 299	LONG ST	GROVE ST		\$671,909	(2026-2040)	Caltrans Project Development Process - Bike Lane	unknown
19	STATE HWY 299	COMMERCE WAY	TAMARACK AVE		\$1,534,767	(2026-2040)	Caltrans Project Development Process - Separated Bike Lane	unknown
20	DESCHUTES RD	LASSEN VIEW DR	GRAND ESTATES DR		\$262,432	(2026-2040)	Bike Lane	unknown
21	RHONDA RD	MATTHEW CT/ROBINSON GLEN DR	GAS POINT RD		\$99,915	(2026-2040)	Bike Lane	unknown
22	LOCUST ST/FIRST ST	FOURTH ST/LOCUST RD	MEMORY LN		\$158,481	(2026-2040)	Bike Route	unknown
23	TAMARACK AVE	STATE HWY 299 E	FIR ST		\$52,056	(2026-2040)	Bike Lane	unknown
24	STATE HWY 151	LAKE BLVD	SHASTA DAM RD		\$495,106	(2026-2040)	Caltrans Project Development Process - Bike Route	unknown
25	OLD OREGON TRL	COLLYER DR/SHASTA COLLEGE DR	OLD ALTURAS RD		\$414,899	(2026-2040)	Bike Lane	unknown
26	KESWICK DAM RD	BUENAVENTURA BLVD/MENLO WAY	BUENAVENTURA BLVD/MENLO WAY		\$145,090	(2026-2040)	Bike Lane	unknown
27	STATE HWY 299	ROCKY RIDGE RD	COMMERCE WAY		\$467,487	(2026-2040)	Caltrans Project Development Process - Bike Lane	unknown

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28	CANYON DR	STATE HWY 273	PALM AVE		\$526,010	(2026-2040)	Buffered Bike Lane	unknown
29	OFF-STREET	NORTH ST	CITY BOUNDARY (NEAR RIVERSIDE DR)		\$6,218,215	(2026-2040)	Shared-Use Path	unknown
30	DESCHUTES RD	MAYNARD RD	GREENBROOK LN		\$495,599	(2026-2040)	Bike Lane	unknown
31	AIRPORT RD	RIVERSIDE AVE	FIG TREE LN		\$269,260	(2026-2040)	Bike Lane	unknown
32	RHONDA RD/PLEASANT HILLS DR	STATE HWY 273	CREMIA PL		\$474,873	(2026-2040)	Bike Lane	unknown
33	DESCHUTES RD	CHOLET WAY	LANCELOT LN		\$548,752	(2026-2040)	Bike Lane	unknown
34	STATE HWY 299	GROVE ST	PITTVILLE RD		\$244,693	(2026-2040)	Caltrans Project Development Process - Bike Lane	unknown
35	KESWICK DAM RD	BUENAVENTURA BLVD/MENLO WAY	ROXANA DR		\$27,476	(2026-2040)	Bike Route	unknown
36	DESCHUTES RD	DERSCH RD	BALLS FERRY RD		\$383,556	(2026-2040)	Bike Lane	unknown
37	HAPPY VALLEY RD	OLINDA RD	GAS POINT RD		\$580,149	(2026-2040)	Bike Lane	unknown
38	COLLYER DR	OLD OREGON TRL/SHASTA COLLEGE DR	POISON OAK LN		\$70,332	(2026-2040)	Buffered Bike Lane	unknown
39	OAK ST/PALM AVE	CLOVERDALE RD	HAPPY VALLEY RD		\$679,783	(2026-2040)	Bike Lane	unknown
40	STATE HWY 299	LOWER SPRINGS RD	JFK MEMORIAL DR		\$771,807	(2026-2040)	Caltrans Project Development Process - Bike Lane	unknown
41	DESCHUTES RD	DREAM CATCHER LN	DERSCH RD		\$338,125	(2026-2040)	Bike Lane	unknown
42	CLOVERDALE RD	OAK ST	MODESTA VIEW CT		\$600,395	(2026-2040)	Bike Lane	unknown
43	OLIVE ST/SCOUT AVE	OAK ST	PALM AVE		\$222,600	(2026-2040)	Bike Route	unknown
44	DERSCH RD	DESCHUTES RD	AIRPORT RD/CHURN CREEK RD		\$461,724	(2026-2040)	Bike Lane	unknown
45	OLD ALTURAS RD	OLD OREGON TRL	BROWNING ST		\$108,870	(2026-2040)	Buffered Bike Lane	unknown
46	OLINDA RD	SOUTH ST/WEST ANDERSON DR	HAPPY VALLEY RD		\$919,933	(2026-2040)	Bike Lane	unknown
47	OLD 44 DR	SILVER BRIDGE RD/SWEDE CREEK RD	VIA LINDA DR		\$227,519	(2026-2040)	Bike Lane	unknown
48	WILLIAMSON RD/BELT LINE RD/ BELTLINE RD	LAKE BLVD	STATE HWY 151		\$2,283,925	(2026-2040)	Shared-Use Path	unknown
49	PLACER RD	SWASEY DR	HORSELESS CARRIAGE DR		\$7,799	(2026-2040)	Bike Lane	unknown
50	OLD OREGON TRL/OLD OREGON TRL	AKRICH ST/OASIS RD	COLLYER DR/SHASTA COLLEGE DR		\$398,200	(2026-2040)	Bike Lane	unknown
51	CLEAR CREEK RD/HONEYBEE RD	TEXAS SPRINGS RD	STATE HWY 273		\$797,726	(2026-2040)	Bike Lane	unknown
52	LOWER SPRINGS RD	EUREKA WAY/STATE HWY 299	SWASEY DR		\$242,636	(2026-2040)	Bike Route	unknown
53	HAPPY VALLEY RD	STATE HWY 273	CANYON DR/MEEKS LANDING LN		\$352,840	(2026-2040)	Bike Lane	unknown
54	AIRPORT RD	BILLY JEAN LN	NORDONA LN		\$104,813	(2026-2040)	Buffered Bike Lane	unknown
55	SWASEY DR	LOWER SPRINGS RD	PLACER RD		\$321,954	(2026-2040)	Bike Lane	unknown
56	KESWICK DAM RD	ROXANA DR	IRON MOUNTAIN RD		\$252,878	(2026-2040)	Bike Route	unknown
57	PLACER RD	PLACER ST/THOMPSON LN	SWASEY DR		\$433,381	(2026-2040)	Bike Lane	unknown
58	SWASEY DR	STATE HWY 299	LOWER SPRINGS RD		\$338,069	(2026-2040)	Bike Lane	unknown
59	CHURN CREEK RD	WEEKS RD	KNIGHTON RD		\$438,170	(2026-2040)	Bike Route	unknown
60	OLD 44 DR	VIA LINDA DR	OLD 44 DR		\$519,358	(2026-2040)	Bike Lane	unknown
61	SWEDE CREEK RD	BUCKBOARD TRL/FRENCH CREEK RD	OLD 44 DR/SILVER BRIDGE RD		\$325,920	(2026-2040)	Bike Lane	unknown
62	MEADOW VIEW DR	LOCKHEED DR	CHURN CREEK RD		\$119,276	(2026-2040)	Bike Route	unknown
63	PLACER RD/CLOVERDALE RD	TEXAS SPRINGS RD	MODESTA VIEW CT		\$926,678	(2026-2040)	Bike Lane	unknown
64	GAS POINT RD	DELLA LN	HAPPY VALLEY RD		\$985,277	(2026-2040)	Bike Lane	unknown

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65	OLD OREGON TRL	OLD ALTURAS RD	DUFFY LN		\$192,559	(2026-2040)	Buffered Bike Lane	unknown
66	OLD OREGON TRL/OP 687	TRANQUILO LN	WONDERLAND BLVD		\$417,030	(2026-2040)	Bike Lane	unknown
67	UNION SCHOOL RD	OLD OREGON TRL	CASCADE BLVD		\$291,574	(2026-2040)	Bike Lane	unknown
68	OLD ALTURAS RD/BOYLE RD/ SWEDE CREEK RD/OLD DESCHUTES RD	DESCHUTES RD	OLD OREGON TRL		\$773,189	(2026-2040)	Bike Lane	unknown
69	PLACER RD	HORSELESS CARRIAGE DR	TEXAS SPRINGS RD		\$226,347	(2026-2040)	Bike Lane	unknown
70	CHURN CREEK RD	RANCHO RD	KNIGHTON RD/PACHECO RD		\$339,391	(2026-2040)	Bike Lane	unknown
71	SOUTH SHORE DR/JUDGE FRANCIS CARR POWERHOUSE RD/JFK MEMORIAL DR	STATE HWY 299	STATE HWY 299		\$1,509,025	(2026-2040)	Bike Route	unknown
72	TEXAS SPRINGS RD	HONEYBEE RD	PLACER RD		\$364,147	(2026-2040)	Bike Lane	unknown
73	IRON MOUNTAIN RD	HOMESTAKE RD	KESWICK DAM RD		\$249,824	(2026-2040)	Bike Route	unknown
74	OFF-STREET	600FT EAST OF CLEAR CREEK RD	JEWELL LN		\$1,433,037	(2026-2040)	Shared-Use Path	unknown
75	PLACER RD	DIGGINS WAY	LEANING PINE RD		\$11,753	(2026-2040)	Bike Lane	unknown
	Pedestrian Projects							
	Street Name	From Street	To Street					
76	ERIE ST	MOUNTAIN VIEW RD	TORONTO AVE		\$168,725	(2026-2040)	Safe Routes to School	unknown
77	QUEBEC ST	MOUNTAIN VIEW RD	TORONTO AVE		\$185,988	(2026-2040)	Safe Routes to School	unknown
78	TORONTO AVE	100FT EAST OF TALL TIMBER ST	ERIE ST		\$445,400	(2026-2040)	Safe Routes to School	unknown
79	TALL TIMBER ST	MOUNTAIN VIEW RD	TORONTO AVE		\$184,675	(2026-2040)	Safe Routes to School	unknown
80	MOUNTAIN VIEW RD	CARBERRY ST	TALL TIMBER LN		\$465,316	(2026-2040)	Safe Routes to School	unknown
81	BAILEY AVE	100FT WEST OF CARBERRY ST	MARQUETTE ST		\$399,773	(2026-2040)	Community Walking Connection	unknown
82	MARQUETTE ST	STATE HWY 299 E	BAILEY AVE		\$189,625	(2026-2040)	Community Walking Connection	unknown
83	MOUNTAIN VIEW RD	CARBERRY ST	TALL TIMBER LN		\$478,478	(2026-2040)	Safe Routes to School	unknown
84	HUDSON ST	MOUNTAIN VIEW RD/STATE HWY 299 E	TIMBER HILL DR		\$503,168	(2026-2040)	Community Walking Connection	unknown
85	STATE HWY 299 E	CORNAZ DR	HUDSON ST/MOUNTAIN VIEW RD		\$1,394,620	(2026-2040)	Rural Community Main Street, subject to Caltrans process	unknown
86	TAMARACK AVE	STATE HWY 299 E	PARK AVE		\$320,973	(2026-2040)	Community Walking Connection	unknown
87	STATE HWY 299 E	HUDSON ST/MOUNTAIN VIEW RD	TAMARACK AVE		\$882,299	(2026-2040)	Rural Community Main St, subject to Caltrans process	unknown
88	PARK AVE/CYPRESS AVE	HUDSON ST	TAMARACK AVE		\$625,252	(2026-2040)	Community Walking Connection	unknown
89	STATE HWY 299 E	TAMARACK AVE	TAMARACK AVE		\$911,382	(2026-2040)	Subject to Caltrans Process - Rural Community Main St	unknown
90	TAMARACK AVE	PARK AVE	STATE HWY 299 E		\$258,067	(2026-2040)	Community Walking Connection	unknown
91	STATE HWY 299 E	ROCKY RIDGE RD	SONOMA ST		\$705,682	(2026-2040)	Community Walking Connection, subject to Caltrans process	unknown
92	BRUSH ST	FOURTH ST	FIRST ST		\$429,386	(2026-2040)	Safe Routes to School	unknown
93	MAIN ST/SECOND ST/THIRD ST/ OLIVE ST/FOURTH ST/FRONT ST/ HIGH ST/FIRST ST	MUSKET WAY	COTTONWOOD CREEK CHARTER		\$2,512,954	(2026-2040)	Rural Community Main St	unknown
94	WILLOW ST	FOURTH ST	THIRD ST		\$182,628	(2026-2040)	Safe Routes to School	unknown
95	FOURTH ST	WILLOW ST	GAS POINT RD/I 5 NBOFF/R/I 5 NBON/R		\$554,058	(2026-2040)	Safe Routes to School	unknown
96	WILLOW ST	THIRD ST	SECOND ST		\$122,821	(2026-2040)	Safe Routes to School	unknown

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97	FRONT ST/WALNUT ST	MAGNOLIA ST	MAIN ST		\$350,985	(2026-2040)	Rural Community Main Street	unknown
98	WILLOW ST	SECOND ST	FIRST ST		\$122,360	(2026-2040)	Safe Routes to School	unknown
99	FIRST ST	WILLOW ST	WILLOW ST		\$778,472	(2026-2040)	Safe Routes to School	unknown
100	GAS POINT RD	FOURTH ST/I 5 NBOFF/R/I 5 NBON/R	DELLA LN		\$931,561	(2026-2040)	Safe Routes to School	unknown
101	FIRST ST	CITIZENS LN	MEMORY LN		\$620,700	(2026-2040)	Safe Routes to School	unknown
102	CURVE ST	BURNEY ST	STATE HWY 299 E		\$129,056	(2026-2040)	Community Walking Connection	unknown
103	CURVE ST/BURNEY ST	THIRD ST	THIRD ST		\$43,327	(2026-2040)	Community Walking Connection	unknown
104	MAIN ST	STATE HWY 299 E	BRIDGE ST		\$253,995	(2026-2040)	Rural Community Main Street	unknown
105	THIRD ST	BURNEY ST	STATE HWY 299 E		\$102,532	(2026-2040)	Community Walking Connection	unknown
106	STATE HWY 299 E	MAIN ST	OAK ST		\$409,877	(2026-2040)	Subject to Caltrans Process - Rural Community Main Street	unknown
107	STATE HWY 299 E	MAIN ST	BRIDGE ST/FORT CROOK AVE/GLENBURN RD		\$345,839	(2026-2040)	Subject to Caltrans Process - Community Walking Connection	unknown
108	GROVE ST	B ST	WALNUT ST		\$353,987	(2026-2040)	Community Walking Connection	unknown
109	STATE HWY 299 E	MECHANIC ST	MAIN ST		\$938,193	(2026-2040)	Subject to Caltrans Process - Rural Community Main Street	unknown
110	STATE HWY 299 E	TWO BILL LN	NA		\$533,153	(2026-2040)	Subject to Caltrans Process - Community Walking Connection	unknown
111	STATE HWY 299 E	LEWIS RD	MAIN ST		\$968,743	(2026-2040)	Subject to Caltrans Process - Rural Community Main Street	unknown
112	PALM AVE	HAPPY VALLEY RD	CURLEY LN		\$424,770	(2026-2040)	Safe Routes to School	unknown
113	HAPPY VALLEY RD	MARYANN LN	ARTIC LN		\$1,490,035	(2026-2040)	Safe Routes to School	unknown
114	OAK ST	HAWTHORNE AVE	CRAIG LN		\$832,845	(2026-2040)	Safe Routes to School	unknown
115	CLOVERDALE RD	HAPPY VALLEY PRIMARY SCHOOL	MAGNUM DR		\$1,120,054	(2026-2040)	Safe Routes to School	unknown
116	OLINDA RD	MAYBELLE WAY	HAPPY VALLEY RD		\$979,015	(2026-2040)	Safe Routes to School	unknown
117	DESCHUTES RD	OLD 44 DR	GRAND ESTATES DR		\$1,638,931	(2026-2040)	Rural Community Main Street	unknown
118	OLD 44 DR	CEDRO LN	VIA LINDA DR		\$1,024,563	(2026-2040)	Rural Community Main Street	unknown
119	DESCHUTES RD	GRAND ESTATES DR	HILLSIDE DR		\$1,023,682	(2026-2040)	Rural Community Main Street	unknown
120	DESCHUTES RD	WESLEY DR	OLD 44 DR		\$1,587,213	(2026-2040)	Safe Routes to School	unknown
121	LASSEN VIEW DR	ORIOLE LN	DESCHUTES RD		\$937,011	(2026-2040)	Safe Routes to School	unknown
122	DERSCH RD	CLEAR VIEW DR	DRAKE LN		\$1,509,123	(2026-2040)	Safe Routes to School	unknown
123	SHASTA COLLEGE DR	SOUTHERN LIMIT	NORTHERN LIMIT		\$1,082,638	(2026-2040)	Safe Routes to School	unknown
124	OLD OREGON TRL	SHASTA COLLEGE DR	COLLEGE VIEW DR		\$1,247,227	(2026-2040)	Safe Routes to School	unknown
125	SHASTA COLLEGE DR	COLLYER DR/OLD OREGON TRL	OLD OREGON TRL		\$2,219,451	(2026-2040)	Safe Routes to School	unknown

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126	STATE HWY 299 E	JACKSON LN	BISHOPS WHEEL DR		\$91,052	(2026-2040)	Subject to Caltrans Process - Rural Community Main Street	unknown
127	WHITMORE RD	WHITMORE VILLAGE RD	ATKINS RD		\$224,074	(2026-2040)	Community Walking Connection	unknown
128	MAIN ST	MAIN ST/FRONTAGE RD	CASTELLA LOOP		\$778,673	(2026-2040)	Safe Routes to School	unknown
129	CASTELLA LOOP	CASTELLA LOOP/FRONTAGE rD	CASTELLA LOOP/EASTSIDE ST		\$1,165,186	(2026-2040)	Safe Routes to School	unknown
130	SWASEY DR	NAUVOO TRL	PLACER RD		\$798,386	(2026-2040)	Safe Routes to School	unknown
131	PLACER RD	CLOVERDALE RD	IGO-ONO ELEMENTARY		\$638,830	(2026-2040)	Rural Community Main Street	unknown
132	MIDDLETOWN PARK DR	SWASEY DR	GOLDSTONE LN		\$782,139	(2026-2040)	Safe Routes to School	unknown
133	ATKINS RD	BOGGS LN	WHITMORE RD		\$28,556	(2026-2040)	Community Walking Connection	unknown
134	PLACER RD	PLATEAU CIR	SWASEY DR		\$1,049,481	(2026-2040)	Safe Routes to School	unknown
135	STATE HWY 299 E	BISHOPS WHEEL DR	OLD BERTAGNA PL		\$430,829	(2026-2040)	Subject to Caltrans Process - Rural Community Main Street	unknown
136	KNIGHTON RD/CLOVER RD/ PACHECO RD	DANISH LN	CHURN CREEK RD		\$2,122,246	(2026-2040)	Safe Routes to School	unknown
137	OAK RUN TO FERN RD	ENGLISH WAY	200FT WEST OF ENGLISH WAY		\$35,563	(2026-2040)	Community Walking Connection	unknown
138	ENGLISH WAY	OAK RUN TO FERN RD	RASPBERRY LN		\$67,445	(2026-2040)	Community Walking Connection	unknown
139	PLACER RD	SWASEY DR	RANCHLAND DR		\$920,558	(2026-2040)	Safe Routes to School	unknown
140	CHURN CREEK RD/MEADOW VIEW DR/PACHECO SCHOOL RD	GREEN HOLLOW LN	ROBLES DR		\$2,777,858	(2026-2040)	Safe Routes to School	unknown
141	MAIN ST	CLINE GULCH RD	FRENCH GULCH RD		\$838,543	(2026-2040)	Rural Community Main Street	unknown
			Total Long Term Fundable Needs =		\$26,110,449			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$682,686	\$94,418,489	\$95,101,175
Recap of Expected/Estimated/Unknown Resources			
Active Transportation Program (ATP) =	\$252,594	\$9,660,866	\$9,913,460
Local/Other =	\$34,134	\$1,305,522	\$1,339,657
2% LTF =	\$34,134	\$1,305,522	\$1,339,657
Highway Safety Improvement Program (HSIP) =	\$361,824	\$13,838,538	\$14,200,362
Total Funding Reasonably Available =	\$682,686	\$26,110,449	\$26,793,135
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(68,308,040)	\$(68,308,040)

Note 1 : Green highlighted projects above can be funded in the constrained funding analysis

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

Table 50 - Summary of Projects: Redding Active Transportation

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS			SHORT TERM TOTAL EST COST	LONG TERM TOTAL EST COST	PROJECT BAND	NETWORK TYPE	FACILITY TYPE	EXPECTED FUNDING SOURCES
Short-Term Bicycle and Pedestrian Projects									
	Street Name	From Street	To Street						
1	Butte St	Sundial Bridge Dr	Continential St	\$500,000		(2018-2025)	Bicycle	Buffered Bike Lane	Unknown
2	Collyer Dr	Poison Oak Ln	Hawley Rd	\$2,750,000		(2018-2025)	Bicycle	Buffered Bike Lane	Unknown
3	Continental St	Butte St	Trinity St	\$850,000		(2018-2025)	Bicycle	Separated Bike Lane	Unknown
4	Hawley Rd; Churn Creek Rd	Hawley Rd/Collyer Dr	Churn Creek Rd/Palacio Dr	\$1,700,000		(2018-2025)	Bicycle	Buffered Bike Lane	Unknown
5	Off-street (Turtle Bay to Downtown Trail)	Turtle Bay	Continental St	\$1,800,000		(2018-2025)	Bicycle	Shared Use Path	Unknown
6	Park Marina Dr (east side)	Sundial Bridge Dr	E Cypress Ave	\$850,000		(2018-2025)	Bicycle; Pedestrian	Shared Use Path	Unknown
7	Park Marina Dr	Sundial Bridge Dr	E Cypress Ave	\$1,373,109		(2018-2025)	Pedestrian	Sidewalk	Unknown
8	Park Marina Dr	Sundial Bridge Dr	Parkview Ave	\$1,700,000		(2018-2025)	Bicycle	Buffered Bike Lane	Unknown
9	Railroad Ave	South St	Buenaventura Blvd	\$2,001,463		(2018-2025)	Pedestrian	Sidewalk	Unknown
10	Railroad Ave (east side)	South St	Buenaventura Blvd	\$645,934		(2018-2025)	Pedestrian	Shared Use Path	Unknown
11	Shasta St; Willis St; Pleasant St; South St	South St/San Francisco St	Shasta St/Court St	\$1,800,000		(2018-2025)	Bicycle	Bike Boulevard	Unknown
12	Shasta View Dr	Saturn Skwy	Goodwater Ave	\$1,875,000		(2018-2025)	Bicycle	Buffered Bike Lane	Unknown
13	Shasta View Dr	Saturn Skwy	Goodwater Ave	\$1,317,989		(2018-2025)	Pedestrian	Sidewalk	Unknown
14	Shasta View Dr (east side)	Saturn Skwy	Goodwater Ave	\$800,000		(2018-2025)	Bicycle; Pedestrian	Shared Use Path	Unknown
15	South St	East St	Park Marina Dr	\$1,275,000		(2018-2025)	Bicycle	Bike Boulevard	Unknown
16	Trinity St	Center St	Continental St	\$1,400,000		(2018-2025)	Bicycle	Separated Bike Lane	Unknown
17	Victor Ave (west side)	Bramble Pl	Old Alturas Rd	\$720,000		(2018-2025)	Bicycle; Pedestrian	Shared Use Path	Unknown
18	Victor Ave	Bramble Pl	Old Alturas Rd	\$3,175,000		(2018-2025)	Bicycle	Buffered Bike Lane	Unknown
19	Victor Ave (east side)	Bramble Pl	Old Alturas Rd	\$1,997,543		(2018-2025)	Pedestrian	Sidewalk	Unknown
20	Bechelli Ln	S Bonnyview Rd	E Cypress Ave	\$8,400,000		(2018-2025)	Bicycle	Buffered Bike Lane; Sidewalks	ATP/Other
	Loma Vista Dr	El Portal Dr	Churn Creek Rd						
21	Churn Creek Rd	Hartnell Ave	E Cypress Ave	\$1,777,000		(2018-2025)	Bicycle	Buffered Bike Lane; Sidewalks	HSIP/Other
	Maraglia St	Churn Creek Rd	Hilltop Dr						
22	Off-street (Diestelhorst to Downtown Trail--Over Benton Dr)	w/o Diestelhorst Bridge	Riverside Dr	\$2,600,000		(2018-2025)	Bicycle	Shared Use Path	ATP/Other
	Off-street (Diestelhorst to Downtown Trail--Under Benton Dr)	s/o Diestelhorst Bridge	Benton Dr/Riverside Dr					Shared Use Path	
	Riverside Dr; Center St; Division St	Benton Dr/Riverside Dr	Division St/California St					Separated Bike Lane; Sidewalks	
23	Hartnell Ave	Churn Creek Rd	Victor Ave	\$1,914,700		(2018-2025)	Bicycle	Buffered Bike Lane; Sidewalks	HSIP/Other
24	Quartz Hill Rd	Terra Nova Dr	Benton Dr	\$3,500,000		(2018-2025)	Bicycle	Buffered Bike Lane; Sidewalks	ATP/Other
25	California St	Division St	Yuba St	\$550,000		(2018-2025)	Bicycle	Separated Bike Lane	AHSC/Other
26	11th St	Eureka Way	N Court St	\$3,196,000		(2018-2025)	Bicycle	Buffered Bike Lane; Sidewalks	ATP/Other
	8th St	West St	Mary St					Bike Lane; Sidewalks	
	West St	7th St	Eureka Way					Buffered Bike Lane	
Total short term needs =				\$50,468,738					

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Long-Term Bicycle and Pedestrian Projects									
	Street Name	From Street	To Street						
27	Airport Rd	SR 44	Rancho Rd		\$72,811	(2026-2040)	Bicycle	Bike Lane	Unknown
28	Airport Rd (frontage rd) (Future)	Rancho Rd	Shasta View Dr		\$51,821	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
29	Airport Rd	Shasta View Dr	Hole in One Dr		\$91,626	(2026-2040)	Bicycle	Bike Lane	Unknown
30	Akrich St	Oasis Rd/Old Oregon Trl	Northern City Limit		\$41,713	(2026-2040)	Bicycle	Bike Lane	Unknown
31	Alta Mesa Dr	Rancho Rd	Hartnell Ave		\$800,188	(2026-2040)	Bicycle	Bike Boulevard	Unknown
32	Alta Mesa Dr	Saturn Skwy	Hartnell Ave		\$599,523	(2026-2040)	Pedestrian	Sidewalk	Unknown
33	Athens Ave	South St	W Cypress Ave		\$433,975	(2026-2040)	Pedestrian	Sidewalk	Unknown
34	Bechelli Ln	Bechelli Ln (Northern End)	Sacramento River Trail		\$5,706	(2026-2040)	Bicycle	Bike Lane	Unknown
35	Beltline Rd	Oasis Rd	Caterpillar Rd		\$22,156	(2026-2040)	Bicycle	Bike Lane	Unknown
36	Beltline Rd	Caterpillar Rd	Beltline Rd (Southern End)		\$144,180	(2026-2040)	Bicycle	Bike Boulevard	Unknown
37	Benton Dr	N Court St/Riverside Dr	N Market St		\$58,027	(2026-2040)	Bicycle	Bike Lane	Unknown
38	Boulder Dr	Campers Ct	Black Marble Way		\$156,338	(2026-2040)	Bicycle	Shared Use Path--Subject to Caltrans Process	Unknown
39	Branstetter Ln	Westside Rd	Cedars Rd		\$1,655,902	(2026-2040)	Pedestrian	Sidewalk	Unknown
40	Branstetter Ln; Texas Springs Rd	Branstetter Ln/SR 273	Texas Springs Rd (Western City Limit)		\$147,670	(2026-2040)	Bicycle	Bike Lane	Unknown
41	Browning St	Hilltop Dr	Old Arturas Rd		\$65,012	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
42	Browning St	Hilltop Dr	Old Arturas Rd		\$888,432	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
43	Browning St	Canby Rd	Churn Creek Rd		\$125,969	(2026-2040)	Pedestrian	Sidewalk	Unknown
44	Browning St and Lancers Ln				\$94,927	(2026-2040)	Pedestrian	Intersection Improvement	Unknown
45	Buenaventura Blvd	SR 273	Placer St		\$143,430	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
46	Buenaventura Blvd	Placer St	Eureka Way		\$52,853	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
47	Buenaventura Blvd	SR 273	Teton Dr		\$563,629	(2026-2040)	Bicycle	Shared Use Path	Unknown
48	Buenaventura Blvd (east side)	Starlight Blvd	Placer St		\$646,001	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
49	Buenaventura Blvd (west side)	Placer St	Eureka Way		\$732,905	(2026-2040)	Pedestrian	Shared Use Path	Unknown
50	Buenaventura Blvd; Starlight Blvd	Buenaventura Blvd/Placer St	Starlight Blvd (960 ft e/o Buenaventura Blvd)		\$1,062,192	(2026-2040)	Pedestrian	Sidewalk	Unknown
51	Butte St; Liberty St	Butte St/Continental St	Liberty St/Yuba St		\$19,484	(2026-2040)	Bicycle	Separated Bike Lane	Unknown
52	California St	Yuba St	Placer St		\$10,043	(2026-2040)	Bicycle	Separated Bike Lane	Unknown
53	California St	Gold St	SR 273		\$644,657	(2026-2040)	Pedestrian	Sidewalk	Unknown
54	California St; Gold St; S Market St	California St/Placer St	S Market St/W Cypress Ave		\$38,293	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
55	Canby Rd	Browning St	Tanglewood Dr		\$370,069	(2026-2040)	Pedestrian	Sidewalk	Unknown
56	Canyon Rd	SR 273	Southwestern City Limit		\$109,990	(2026-2040)	Bicycle	Bike Lane	Unknown
57	Cascade Blvd	Northern City Limit	Oasis Rd		\$26,240	(2026-2040)	Bicycle	Bike Lane	Unknown
58	Cedars Rd	Westside Rd	El Reno Ln		\$60,577	(2026-2040)	Bicycle	Bike Lane	Unknown
59	Cedars Rd	Westside Rd	Branstetter Ln		\$226,232	(2026-2040)	Pedestrian	Sidewalk	Unknown
60	Cedars Rd	Kenyon Dr	El Reno Ln		\$432,111	(2026-2040)	Pedestrian	Sidewalk	Unknown

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61	Churn Creek Rd	Rancho Rd	Churn Creek Rd/S Bonnyview Rd		\$51,428	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
62	Churn Creek Rd	S Bonnyview Rd	Hartnell Ave		\$117,437	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
63	Churn Creek Rd	E Cypress Ave	Dana Dr		\$71,098	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
64	Churn Creek Rd	Browning St	Bodenhamer Blvd		\$33,224	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
65	Churn Creek Rd	Rancho Rd	Churn Creek Rd/S Bonnyview Rd		\$698,508	(2026-2040)	Bicycle	Shared Use Path	Unknown
66	Churn Creek Rd	Churn Creek Rd/S Bonnyview Rd	Victor Ave		\$911,059	(2026-2040)	Pedestrian	Sidewalk	Unknown
67	Churn Creek Rd	Browning St	College View Dr		\$1,829,638	(2026-2040)	Pedestrian	Sidewalk	Unknown
68	College View Dr	Old Oregon Trl	Churn Creek Rd		\$108,671	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
69	Collyer Dr	Twin Tower Dr	Hawley Rd		\$964,420	(2026-2040)	Pedestrian	Sidewalk	Unknown
70	Constitution Way; Twin View Blvd; Northpoint Dr	Constitution Way/Mountain View Dr	Northpoint Dr/Lake Blvd		\$54,597	(2026-2040)	Bicycle	Bike Lane	Unknown
71	Continental St	South St	Butte St		\$126,183	(2026-2040)	Bicycle	Bike Boulevard	Unknown
72	Continental St	SR 44	Trinity St		\$242,232	(2026-2040)	Pedestrian	Sidewalk	Unknown
73	Court St; N Court St	Court St/South St	N Court St/Benton Dr		\$32,376	(2026-2040)	Bicycle	Bike Lane	Unknown
74	Court St; Schley Ave	Court St/South St	Schley Ave/Railroad Ave		\$115,264	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
75	Dana Dr	Churn Creek Rd	Hilltop Dr		\$14,342	(2026-2040)	Bicycle	Bike Lane	Unknown
76	Dana Dr and Hilltop Dr				\$312,576	(2026-2040)	Pedestrian	Intersection Improvement--Subject to Caltrans Process	Unknown
77	Dogwood Ln; Buckeye Terrace; Clay St	Dogwood Ln (Eastern End)	Clay St/Lake Blvd		\$142,205	(2026-2040)	Bicycle	Bike Boulevard	Unknown
78	E Bonnyview Rd (Future)	Creekside St/Sacramento Dr	S Bonnyview Rd		\$43,228	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
79	E Bonnyview Rd (Future)	Creekside St/Sacramento Dr	S Bonnyview Rd		\$583,335	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
80	E Bonnyview Rd; Radio Ln	E Bonnyview Rd/S Bonnyview Rd	Radio Ln/Eastside Rd		\$62,494	(2026-2040)	Bicycle	Bike Lane	Unknown
81	E Cypress Ave	Hartnell Ave/Hemsted Dr	Churn Creek Rd		\$34,355	(2026-2040)	Bicycle	Bike Lane	Unknown
82	E Cypress Ave	Alfreda Way	Victor Ave		\$29,913	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
83	E Cypress Ave (Future)	Victor Ave	Shasta View Dr		\$623,663	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
84	E Cypress Ave	Alfreda Way	Victor Ave		\$529,884	(2026-2040)	Pedestrian	Sidewalk	Unknown
85	E Cypress Ave and Churn Creek Rd				\$94,927	(2026-2040)	Pedestrian	Intersection Improvement	Unknown
86	East St	Pine St	Locust St		\$3,576	(2026-2040)	Bicycle	Bike Lane	Unknown
87	East St	Placer St	Trinity St		\$17,989	(2026-2040)	Bicycle	Bike Lane	Unknown
88	East St	W Cypress Ave	South St		\$394,553	(2026-2040)	Pedestrian	Sidewalk	Unknown
89	Eastside Rd	N Bonnyview Rd	S Bonnyview Rd		\$901,136	(2026-2040)	Bicycle	Shared Use Path	Unknown
90	El Reno Ln	Westside Rd	Cedars Rd		\$166,055	(2026-2040)	Pedestrian	Sidewalk	Unknown
91	Eureka Way	Lower Springs Rd	Buenaventura Blvd		\$42,281	(2026-2040)	Bicycle	Bike Lane--Subject to Caltrans Process	Unknown
92	Eureka Way	Buenaventura Blvd	Court St		\$63,356	(2026-2040)	Bicycle	Bike Lane--Subject to Caltrans Process	Unknown
93	Eureka Way	Buenaventura Blvd	e/o Overhill Dr		\$698,204	(2026-2040)	Pedestrian	Sidewalk	Unknown
94	Eureka Way and Walnut Ave				\$312,576	(2026-2040)	Pedestrian	Intersection Improvement--Subject to Caltrans Process	Unknown
95	Girvan Rd	Creekside St/Island Dr	SR 273/Eastside Rd		\$30,396	(2026-2040)	Bicycle	Bike Lane	Unknown
96	Hartnell Ave	E Cypress Ave	Churn Creek Rd		\$80,612	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown

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97	Hartnell Ave	Victor Ave	Shasta View Dr		\$47,203	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
98	Hartnell Ave	Shasta View Dr	Airport Rd/Old Oregon Trl		\$56,630	(2026-2040)	Bicycle	Bike Lane	Unknown
99	Hartnell Ave	Victor Ave	Shasta View Dr		\$836,164	(2026-2040)	Pedestrian	Sidewalk	Unknown
100	Hartnell Ave and Churn Creek Rd				\$94,927	(2026-2040)	Pedestrian	Intersection Improvement	Unknown
101	Hartnell Ave at Yana Ave				\$94,927	(2026-2040)	Pedestrian	Intersection Improvement	Unknown
102	Hawley Rd	Constitution Way	Hawley Rd (e/o Norwich Ct)		\$485,608	(2026-2040)	Pedestrian	Shared Use Path	Unknown
103	Hawley Rd	Hawley Rd (e/o Norwich Ct)	Collyer Dr		\$26,419	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
104	Hawley Rd	Hawley Rd (e/o Norwich Ct)	Collyer Dr		\$722,643	(2026-2040)	Pedestrian	Sidewalk	Unknown
105	Hemsted Dr	Bechelli Ln	E Cypress Ave/Hartnell Ave		\$18,343	(2026-2040)	Bicycle	Bike Route	Unknown
106	Hilltop Dr	Browning St	Palisades Ave		\$19,570	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
107	Hilltop Dr	Palisades Ave	Southeast of Lake Blvd/N Market St		\$74,137	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
108	Hilltop Dr	Southeast of Lake Blvd/N Market St	Lake Blvd		\$14,245	(2026-2040)	Bicycle	Bike Lane	Unknown
109	Hilltop Dr	Palisades Ave	Southeast of Lake Blvd/N Market St		\$1,039,913	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
110	Hilltop Dr (Southeast of Lake Blvd/N Market St)				\$94,927	(2026-2040)	Pedestrian	Intersection Improvement	Unknown
111	Hilltop Dr and Sandpointe Dr				\$94,927	(2026-2040)	Pedestrian	Intersection Improvement	Unknown
112	I-5 and E Cypress Ave				\$312,576	(2026-2040)	Pedestrian	Intersection Improvement--Subject to Caltrans Process	Unknown
113	I-5 and Hilltop Dr				\$312,576	(2026-2040)	Pedestrian	Intersection Improvement--Subject to Caltrans Process	Unknown
114	I-5 Crossing	Bechelli Ln	Hilltop Dr/Mistletoe Ln		\$169,314	(2026-2040)	Bicycle	Shared Use Path--Subject to Caltrans Process	Unknown
115	Kenyon Dr	Cedars Rd	Westside Rd		\$151,358	(2026-2040)	Pedestrian	Sidewalk	Unknown
116	Keswick Dam Rd	Lake Blvd	Western City Limit		\$32,642	(2026-2040)	Bicycle	Bike Lane	Unknown
117	Lake Blvd	Northern City Limit	Oasis Rd		\$21,957	(2026-2040)	Bicycle	Bike Lane	Unknown
118	Lake Blvd	Oasis Rd	100 ft w/o N Market St		\$126,958	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
119	Lake Blvd	Keswick Dam Rd	Panorama Dr		\$713,680	(2026-2040)	Pedestrian	Sidewalk	Unknown
120	Lakeside Dr	Ridge Dr	Buenaventura Blvd		\$483,519	(2026-2040)	Pedestrian	Sidewalk	Unknown
121	Locust St	Canal Dr	Athens Ave		\$148,547	(2026-2040)	Pedestrian	Sidewalk	Unknown
122	Locust St; Civic Center Dr	Locust St/East St	Civic Center Dr/W Cypress Ave		\$18,177	(2026-2040)	Bicycle	Bike Route	Unknown
123	Loma Vista Dr; Ethan Ln; Monterra Ln; Remi Ln; Loma Vista Dr	Loma Vista Dr/Churn Creek Rd	Loma Vista Dr/Roesner Ave		\$138,911	(2026-2040)	Bicycle	Bike Boulevard	Unknown
124	Loma Vista Dr	Loma Vista Dr/Roesner Ave	Victor Ave		\$519,953	(2026-2040)	Pedestrian	Shared Use Path	Unknown
125	Loma Vista Dr	Victor Ave (450 ft n/o Shelby Rd)	Shasta View Dr (167 ft n/o Castlewood Dr)		\$672,074	(2026-2040)	Pedestrian	Shared Use Path	Unknown
126	Madison River Dr; Yellowstone Dr; Western Oak Dr; Saratoga Dr; El Vista St	Banjo Ln/Goodwater Ave	El Vista St/Victor Ave		\$638,045	(2026-2040)	Bicycle	Bike Boulevard	Unknown
127	Mary St; Overhill Dr	Mary St/8th St	Overhill Dr/Eureka Way		\$301,754	(2026-2040)	Bicycle	Bike Boulevard	Unknown
128	Mission De Oro Dr; Mill Valley Pkwy	Mill Valley Pkwy (Northern End)	Mission De Oro Dr/Tanglewood Dr		\$282,627	(2026-2040)	Bicycle	Bike Boulevard	Unknown
129	Mistletoe Ln	Victor Ave	Shady Ln		\$11,469	(2026-2040)	Bicycle	Bike Lane	Unknown

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130	Mistletoe Ln	Carpenter Ln/Shasta Pines Way	Churn Creek Rd		\$5,404	(2026-2040)	Bicycle	Bike Lane	Unknown
131	N Market St	Sulphur Creek Rd	Benton Dr		\$3,687	(2026-2040)	Bicycle	Bike Lane	Unknown
132	Oasis Rd	Lake Blvd	Oasis Rd/Old Oregon Trail		\$265,888	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
133	Off-street	Oasis Rd	Eastern City Limit		\$95,200	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
134	Off-street	Hilltop Dr	Peppertree Park		\$524,229	(2026-2040)	Bicycle	Shared Use Path	Unknown
135	Off-street	Canyon Creek Rd	w/o Canyon Creek Rd		\$267,326	(2026-2040)	Bicycle	Shared Use Path	Unknown
136	Off-street	Riverside Dr	Bonnyview Boat Ramp		\$492,957	(2026-2040)	Bicycle	Shared Use Path	Unknown
137	Off-street (ACID Canal Trail)	Park Marina Dr	Parkview Ave		\$163,282	(2026-2040)	Bicycle	Shared Use Path	Unknown
138	Off-street (ACID Canal Trail)	Parkview Ave	N Bonnyview Rd/Eastside Rd		\$1,986,569	(2026-2040)	Bicycle	Shared Use Path	Unknown
139	Off-street (Boulder Creek)	I-5 /SR 299 (SE QUAD)	Churn Creek Rd		\$1,254,274	(2026-2040)	Bicycle	Shared Use Path	Unknown
140	Off-street (Boulder Creek/Churn Creek)	Churn Creek Rd	Old Alturas Rd		\$1,441,149	(2026-2040)	Bicycle	Shared Use Path	Unknown
141	Off-street (Churn Creek)	Oasis Rd	Pine Grove Ave		\$587,064	(2026-2040)	Bicycle	Shared Use Path	Unknown
142	Off-street (Churn Creek)	Crooked Oak Ln	Hawley Rd		\$2,262,573	(2026-2040)	Bicycle	Shared Use Path	Unknown
143	Off-street (Churn Creek)	Old Alturas Rd	E Cypress Ave		\$1,507,493	(2026-2040)	Bicycle	Shared Use Path	Unknown
144	Off-street (Churn Creek)	E Cypress Ave	Churn Creek Rd/Hartmeyer Ln		\$3,090,274	(2026-2040)	Bicycle	Shared Use Path	Unknown
145	Off-street (Clover Creek)	Clover Creek Preserve	Hartnell Ave		\$482,281	(2026-2040)	Bicycle	Shared Use Path	Unknown
146	Off-street (Linden Creek)	Buenaventura Blvd	West St		\$810,952	(2026-2040)	Bicycle	Shared Use Path	Unknown
147	Off-street (Little Churn Creek)	Churn Creek	Lawrence Rd		\$680,406	(2026-2040)	Bicycle	Shared Use Path	Unknown
148	Off-street (Loma Vista Trail)	Saffron Way	Ethan Ln/Loma Vista Dr		\$1,545,700	(2026-2040)	Bicycle	Shared Use Path	Unknown
149	Off-street (Sulphur Creek Rd)	Dogwood Ln	Sulphur Creek Rd/Lost Rd		\$1,299,051	(2026-2040)	Bicycle	Shared Use Path	Unknown
150	Off-street (Sulphur Creek)	N Market St	Arboretum Perimeter Trail		\$295,578	(2026-2040)	Bicycle	Shared Use Path	Unknown
151	Off-street (View Trail)	Mission Del Oro Dr	Browning St/View Ave		\$373,848	(2026-2040)	Bicycle	Shared Use Path	Unknown
152	Off-street (Wright Dr)	Beltline Rd (Southern End)	Wright Dr/Big Eagle Ln		\$86,914	(2026-2040)	Bicycle	Shared Use Path	Unknown
153	Old Alturas Rd (north side)	Browning St	Victor Ave		\$131,169	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
154	Old Alturas Rd (north side)	Victor Ave	Eastern City Limit		\$1,178,829	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
155	Old Oregon Trail	Oasis Rd/Old Oregon Trl	Northeastern City Limit		\$147,858	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
156	Oregon St	Shasta St	Yuba St		\$244,853	(2026-2040)	Pedestrian	Sidewalk	Unknown
157	Palacio Dr	Churn Creek Rd	Franciscan Trail/Vintage Path		\$511,691	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
158	Palisades Ave	Palisades Ave (Southern End)	Hilltop Dr		\$375,361	(2026-2040)	Bicycle	Shared Use Path	Unknown
159	Pine St	S Market St	Trinity St		\$64,625	(2026-2040)	Bicycle	Buffered Bike Lane--Subject to Caltrans Process	Unknown
160	Placer St	Pleasant St	Court St		\$60,579	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
161	Placer St	Continental St	Placer St (Eastern End)		\$124,498	(2026-2040)	Bicycle	Bike Boulevard	Unknown
162	Quartz Hill Rd	Western City Limit	Terra Nova Dr		\$57,009	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
163	Quartz Hill Rd	(1,485 ft e/o) River Ridge Dr	Terra Nova Dr		\$533,207	(2026-2040)	Pedestrian	Sidewalk	Unknown
164	Radio Ln; E Bonnyview Rd	Radio Ln/Veterans Ln	E Bonnyview Rd/S Bonnyview Rd		\$1,581,920	(2026-2040)	Pedestrian	Sidewalk	Unknown
165	Rancho Rd	Churn Creek Rd	Airport Rd		\$110,747	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
166	Rancho Rd	Churn Creek Rd	Airport Rd		\$1,544,802	(2026-2040)	Bicycle	Shared Use Path	Unknown

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167	Redwood Blvd	Northpoint Dr	(n/o) Hardwood Blvd		\$82,059	(2026-2040)	Pedestrian	Sidewalk	Unknown
168	Redwood Blvd	Butternut Trail	Caterpillar Rd		\$475,569	(2026-2040)	Pedestrian	Sidewalk	Unknown
169	S Bonnyview Rd	Bechelli Ln	Churn Creek Rd		\$274,127	(2026-2040)	Bicycle	Shared Use Path--Subject to Caltrans Process	Unknown
170	S Bonnyview Rd; Churn Creek Rd	S Bonnyveiw Rd/Bechelli Ln	Churn Creek Rd/Victor Ave		\$934,524	(2026-2040)	Pedestrian	Shared Use Path	Unknown
171	S Market St	Trinity St	Quartz Hill Rd		\$18,425	(2026-2040)	Bicycle	Bike Lane	Unknown
172	S Market St	South St	Placer St		\$4,442	(2026-2040)	Bicycle	Bike Route	Unknown
173	S Market St	Buenaventura Blvd	Angelo Ave/California St		\$66,780	(2026-2040)	Bicycle	Bike Lane--Subject to Caltrans Process	Unknown
174	Shasta View Dr	Collyer Dr	Hollow Ln		\$25,238	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
175	Shasta View Dr (east side)	Collyer Dr	Hollow Ln		\$349,988	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
176	Shasta View Dr	Hemingway St	College View Dr		\$66,737	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
177	Shasta View Dr (east side)	Hemingway St	College View Dr		\$941,169	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
178	Shasta View Dr	Goodwater Ave	Old Alturas Rd		\$74,407	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
179	Shasta View Dr (east side)	Goodwater Ave	Old Alturas Rd		\$1,029,552	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
180	Shasta View Dr	Rancho Rd	Galaxy Way		\$75,657	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
181	Shasta View Dr (east side)	Rancho Rd	Galaxy Way		\$1,048,589	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
182	Shasta View Dr (Future)	Shasta View Dr/Bolam Creek Rd	Rancho Rd		\$89,811	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
183	Shasta View Dr (Future) (east side)	Shasta View Dr/Bolam Creek Rd	Rancho Rd		\$1,290,562	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
184	Shasta View Dr	Goodwater Ave	Old Alturas Rd		\$615,932	(2026-2040)	Pedestrian	Sidewalk	Unknown
185	South St	Court St	East St		\$16,301	(2026-2040)	Bicycle	Bike Lane	Unknown
186	South St	West St	Court St		\$33,134	(2026-2040)	Bicycle	Bike Boulevard	Unknown
187	SR 273 and Breslauer Way				\$312,576	(2026-2040)	Pedestrian	Intersection Improvement--Subject to Caltrans Process	Unknown
188	Star Dr; Sacramento Dr; Creekside St	Creekside St/Island Dr	Star Dr/Eastside Rd		\$696,263	(2026-2040)	Bicycle	Bike Boulevard	Unknown
189	Sundial Bridge Dr and SR 44				\$312,576	(2026-2040)	Pedestrian	Intersection Improvement--Subject to Caltrans Process	Unknown
190	Tehama St	West St	California St		\$10,942	(2026-2040)	Bicycle	Bike Route	Unknown
191	Tidmore Ln	Collyer Dr	College View Dr		\$209,891	(2026-2040)	Bicycle	Shared Use Path	Unknown
192	Twin View Blvd; Mountain View Dr; Collyer Dr	Twin View Blvd/Oasis Rd	Collyer Dr/Hawley Rd		\$987,045	(2026-2040)	Bicycle	Bike Boulevard	Unknown
193	Venture Pkwy/Rancho Rd	Rancho Rd/Airport Rd	Airport Rd/Fig Tree Ln		\$169,740	(2026-2040)	Bicycle	Bike Lane	Unknown
194	Venus Way; Mercury Dr; Vega St	Venus Way/Shasta View Dr	Vega St/Victor Ave		\$334,446	(2026-2040)	Bicycle	Bike Boulevard	Unknown
195	Victor Ave	Churn Creek Rd	El Vista St		\$45,110	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
196	Victor Ave (west side)	Churn Creek Rd	El Vista St		\$623,352	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
197	W Cypress Ave	Pine St	Grape Ave		\$11,767	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown

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198	W Cypress Ave and Pine St				\$312,576	(2026-2040)	Pedestrian	Intersection Improvement--Subject to Caltrans Process	Unknown
199	Walnut Ave	Eureka Way	Shasta St		\$90,401	(2026-2040)	Bicycle	Bike Boulevard	Unknown
200	Waverly Ave; Eastside Rd	Waverly Ave/Beretta Ln	Eastside Rd/Girvan Rd		\$608,021	(2026-2040)	Pedestrian	Sidewalk	Unknown
201	West St; Gold St; Airpark Dr	West St/Eureka Way	Airpark Dr/Placer St		\$490,624	(2026-2040)	Bicycle	Bike Boulevard	Unknown
202	West St; Logan St	West St/Linden Ave	Logan St/Railroad Ave		\$7,400	(2026-2040)	Bicycle	Bike Route	Unknown
203	Westside Rd	Buenaventura Blvd	Canyon Rd		\$3,152,908	(2026-2040)	Bicycle; Pedestrian	Shared Use Path	Unknown
204	Westside Rd	El Reno Ln	Cedars Rd		\$652,204	(2026-2040)	Pedestrian	Sidewalk	Unknown
205	Westwood Ave; Paso Dr	Westwood Ave/Westside Rd	Paso Dr/Sycamore Dr		\$406,597	(2026-2040)	Pedestrian	Sidewalk	Unknown
206	Wright Dr; Alder St; Mountain Shadows Blvd	Wright Dr/Big Eagle Ln	Mountain Shadows Blvd/Lake Blvd		\$180,666	(2026-2040)	Bicycle	Bike Boulevard	Unknown
207	Yuba St	California St	Liberty St		\$50,462	(2026-2040)	Bicycle	Separated Bike Lane	Unknown
208	Yuba St	Court St	California St		\$7,706	(2026-2040)	Bicycle	Bike Route	Unknown
209	Avalon Trail, From Shasta View Dr (Future), To Old Oregon Trail				\$3,189,600	(2026-2040)	Recreational	Dirt Trail	Unknown
210	Buenaventura Trail, from Sunflower Dr to Sacramento River Trail				\$239,220	(2026-2040)	Recreational	Granite Trail (Widening)	Unknown
211	Canyon Creek Trail, From Placer St, To Blazingwood Dr				\$1,594,800	(2026-2040)	Recreational	Multi-use Trail	Unknown
212	China Dam Trail, From Placer Rd, To Texas Springs Rd				\$1,063,200	(2026-2040)	Recreational	Dirt Trail	Unknown
213	Clear Creek Trail, Lower Clear Creek Greenway, To Cascade Park				\$691,080	(2026-2040)	Recreational	Multi-use Trail	Unknown
214	Clover Creek Trail, From Sports Park, To Sacramento River				\$3,189,600	(2026-2040)	Recreational	Multi-use Trail	Unknown
215	Greenwood Trail, From Almond Ave/ Airpark Dr, To Sonoma St				\$2,126,400	(2026-2040)	Recreational	Dirt Trail	Unknown
216	Jenny Creek Trail, From Eureka Way, To Mary Lake				\$132,900	(2026-2040)	Recreational	Multi-use Trail	Unknown
217	Kapusta				\$132,900	(2026-2040)	Recreational	Multi-use Trail	Unknown
218	Lema - Nash Trail, From Shasta View Dr, To Old Oregon Trail				\$1,594,800	(2026-2040)	Recreational	Multi-use Trail	Unknown
219	Manzanita Trail, From Manzanita Hills Ave, To Almond Ave				\$159,480	(2026-2040)	Recreational	Multi-use Trail	Unknown
220	Olney Creek Trail, From Texas Springs Rd, To Cascade Park				\$2,126,400	(2026-2040)	Recreational	Dirt Trail	Unknown
221	Ridgeview Trail, From Ridgeview Park, To Blue Gravel Trail				\$1,594,800	(2026-2040)	Recreational	Dirt Trail	Unknown
222	Sacramento River Trail, From Cypress Ave, To Anderson River Park				\$15,948,000	(2026-2040)	Recreational	Multi-use Trail	Unknown

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223	Sacramento River Trail (Hatchcover Spur), From Hemstead Dr, To Cypress Ave				\$1,275,840	(2026-2040)	Recreational	Multi-use Trail	Unknown
224	Sacramento River Trail (Park Marina Trail), From SR 44, To Cypress Ave				\$3,189,600	(2026-2040)	Recreational	Multi-use Trail	Unknown
225	Salt Creek Trail, From SR 299 West, To Sacramento River Trail				\$372,120	(2026-2040)	Recreational	Dirt Trail	Unknown
226	Stillwater Creek Trail, From Old Oregon Trail, To Sacramento River				\$2,126,400	(2026-2040)	Recreational	Multi-use Trail	Unknown
227	Stillwater Plant Trail, From SR 44, To Dersch Rd				\$4,252,800	(2026-2040)	Recreational	Multi-use Trail	Unknown
228	Wentz Creek Trail, From Mistletoe Elementary School, To Cypress Ave				\$1,275,840	(2026-2040)	Recreational	Multi-use Trail	Unknown
229	Off-street (Sulphur Creek)	Keswick Dam Rd	N. Market St.		\$2,521,014	(2026-2040)	Bicycle	Shared Use Path	Unknown
230	Lakeside Dr; Foothill Blvd; Las Animas Dr; Monte Bello Dr; Manzanita Hills Ave	Manzanita Hills Ave/Shasta St	Lakeside Dr/Buenaventura Blvd		\$376,995	(2026-2040)	Bicycle	Bike Boulevard	Unknown
231	S Bonneyview Rd	SR 273	Bechelli Ln		\$108,585	(2026-2040)	Bicycle	Buffered Bike Lane	Unknown
232	Sundial Bridge Dr	Park Marina Dr	WB SR 44 Off-and-On Ramps		\$72,044	(2026-2040)	Bicycle	Shared Use Path--Subject to Caltrans Process	Unknown
233	Off-street (Placer St)	Placer St (Eastern End)	Park Marina Dr		\$74,096	(2026-2040)	Bicycle	Shared Use Path	Unknown
Total Long Term Needs =					\$122,713,231				

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$50,468,738	\$122,713,231	\$173,181,969
Recap of Expected/Estimated/Unknown Resources			
State Transportation Improvement Program (STIP) =	\$728,000	\$1,352,000	\$2,080,000
Active Transportation Program (ATP) =	\$3,458,000	\$6,422,000	\$9,880,000
Local/Other =	\$6,916,000	\$12,844,000	\$19,760,000
2% LTF =	\$1,456,000	\$2,704,000	\$4,160,000
Highway Safety Improvement Program (HSIP) =	\$5,642,000	\$10,478,000	\$11,934,000
Total Funding Reasonably Available =	\$18,200,000	\$33,800,000	\$52,000,000
Total Unfunded Needs (or Short Term Carryover) =	\$(32,268,738)	\$(88,913,231)	\$(121,181,969)

Note 1 : Green highlighted projects above can be funded in the constrained funding analysis

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Table 51 - Summary of Projects: Anderson Active Transportation

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS			SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
	Pedestrian Projects							
	Street Name	From Street	To Street					
1	NORTH ST	I-5 NB ON-RAMP/McMURRAY DR	DOUGLAS ST	\$966,500		2018-2025	Commercial/Civic Corridor	ATP, local, LTF, HSIP
2	STINGY LN	BAY ST/RUPERT RD	NORTH ST	\$725,500		2018-2025	Community Walking Connection	unknown
3	NORTH ST	DOWNING LN/RIVERSIDE AVE	I-5 NB ON-RAMP/McMURRAY DR	\$1,402,000		2018-2025	Commercial/Civic Corridor	unknown
Total Short Term Needs =				\$3,094,000				
	Bicycle Projects							
	Street Name	From Street	To Street					
3	SOUTH ST/FREEMAN ST	NORTH ST	STATE HWY 273		\$48,893	2026-2040	Bike Lane	unknown
4	FERRY ST	CENTER ST	VERNON ST		\$47,865	2026-2040	Bike Lane	unknown
5	CHURCH ST	NORTH ST	SOUTH ST		\$155,875	2026-2040	Bike Boulevard	unknown
6	SILVER ST/FIRST ST/BRIGGS ST	FAIRGROUNDS DR	SOUTH ST		\$533,769	2026-2040	Bike Boulevard	unknown
7	FERRY ST	VENTURA ST	CENTER ST		\$60,512	2026-2040	Bike Lane	unknown
8	BALLS FERRY RD/VENTURA ST/McMURRAY DR	NORTH ST	GANYON DR		\$104,762	2026-2040	Bike Lane	unknown
9	NORTH ST	I 5 NB ON/R/McMURRAY DR	STATE HWY 273		\$131,051	2026-2040	Separated Bike lane	unknown
10	NORTH ST	SILVER ST	VERNON ST		\$131,051	2026-2040	Bike Boulevard	unknown
11	STINGY LN	BAY ST/RUPERT RD	BAY ST/RUPERT RD		\$128,395	2026-2040	Bike Lane	unknown
12	McMURRAY DR	I-5 NB ON-RAMP/NORTH ST	GANYON DR		\$31,052	2026-2040	Bike Lane	unknown
13	EAST ST	PORTOLA WAY	BALLS FERRY RD		\$189,785	2026-2040	Bike Lane	unknown
14	STINGY LN/GANYON DR/SANDSTONE DR/BAY ST	RUPERT RD	McMURRAY DR		\$342,576	2026-2040	Bike Boulevard	unknown
15	BALLS FERRY RD	RED BUD DR	DESCHUTES RD		\$254,944	2026-2040	Bike Lane	unknown
16	RIVERSIDE AVE/DONALD LN	ALEXANDER AVE	I-5 NB ON-RAMP/McMURRAY DR/NORTH ST		\$902,636	2026-2040	Shared-Use Path	unknown
17	FARIGROUNDS DR	FIRST ST	THIRD ST		\$85,720	2026-2040	Bike Lane	unknown
18	THIRD ST	ALEXANDER AVE/STATE HWY 273	MISSOURI LN		\$60,628	2026-2040	Bike Lane	unknown
19	RIVERSIDE AVE	AIRPORT RD	NORTH ST		\$126,423	2026-2040	Bike Lane	unknown
20	OFF-STREET	RUPERT RD	NA		\$78,134	2026-2040	Shared-Use Path	unknown
21	DODSON LN	RUPERT RD	BALLS FERRY RD		\$113,649	2026-2040	Bike Lane	unknown
22	RIVERSIDE AVE	DONALD LN	ALEXANDER AVE		\$1,439	2026-2040	Bike Lane	unknown
23	ALEXANDER AVE/LITTLE ST	RIVERSIDE AVE	STATE HWY 273		\$93,001	2026-2040	Bike Route	unknown
24	MARMAC RD	RIVERSIDE DR	STINGY LN		\$327,134	2026-2040	Bike Boulevard	unknown
	Pedestrian Projects							
	Street Name	From Street	To Street					
25	SOUTH ST/CENTER ST	NORTH ST	DOUGLAS ST		\$526,675	2026-2040	Commercial/Civic Corridor	unknown
26	PONDEROSA DR/PINON AVE/ PONDEROSA WAY	SPRUCE ST	SPRUCE ST		\$180,235	2026-2040	Community Walking Connection	unknown

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27	VENTURA ST	FERRY ST	BALLS FERRY RD/I 5 SB ON/R		\$229,306	2026-2040	Community Walking Connection	unknown
28	PLEASANT HILLS DR/RHONDA RD/ FACTORY OUTLETS DR/FACTORY OUTLET DR/ARBY WAY	STATE HWY 273	I 5 SB OFF/R		\$964,488	2026-2040	Commercial/Civic Corridor	unknown
29	BRUCE ST/EMILY DR	STATE HWY 273	SOUTH ST		\$797,510	2026-2040	Safe Routes to School	unknown
30	OLINDA RD/SOUTH ST	WEST ST	NORTH VALLEY CONTINUATION HIGH		\$1,260,327	2026-2040	Safe Routes to School	unknown
31	FERRY ST	VERNON ST	ANDERSON HIGH		\$350,602	2026-2040	Safe Routes to School	unknown
32	VENTURA ST	NORTH ST	FERRY ST		\$79,340	2026-2040	Community Walking Connection	unknown
33	McMURRAY DR	I 5 NB ON/R/NORTH ST	BALLS FERRY RD/I 5 NB OFF/R		\$577,657	2026-2040	Commercial/Civic Corridor	unknown
34	FIRST ST/FAIRGROUNDS DR	100FT SOUTH OF LASSEN WAY	BRIGGS ST/CHURCH ST		\$281,702	2026-2040	Community Walking Connection	unknown
35	RIVERSIDE AVE	I 5 NB ON/R	DOWNING LN/NORTH ST		\$562,468	2026-2040	Community Walking Connection	unknown
	Spot Treatments							
	Location							
36	State Highway 273 and South St	Intersection Improvement, subject to Caltrans process			\$94,927	2026-2040		unknown
37	Balls Ferry Rd and I-5 On-Ramp	Interchange Improvement , subject to Caltrans process			\$312,576	2026-2040		unknown
38	SR 273 and Factory Outlet Dr	Intersection Improvement, subject to Caltrans process			\$94,927	2026-2040		unknown
39	SR 273 and North St	Intersection Improvement, subject to Caltrans process			\$94,927	2026-2040		unknown
40	Balls Ferry Rd and I-5 Off-Ramp	Interchange Improvement , subject to Caltrans process			\$312,576	2026-2040		unknown
41	North St and I-5 Off-Ramp	Interchange Improvement , subject to Caltrans process			\$312,576	2026-2040		unknown
42	North St and I-5 On-Ramp	Interchange Improvement , subject to Caltrans process			\$312,576	2026-2040		unknown
		Total Long Term Needs =			\$11,294,689			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$3,094,000	\$11,294,689	\$14,388,689
Recap of Expected/Estimated/Unknown Resources			
Active Transportation Program (ATP) =	67,752	\$16,770	\$84,522
Local/Other =	67,752	\$16,770	\$84,522
2% LTF =	11,292	\$2,795	\$14,087
Highway Safety Improvement Program (HSIP) =	\$79,044	\$19,565	\$98,609
Total Funding Reasonably Available =	\$225,841	\$55,900	\$281,741
Total Unfunded Need =	\$(2,868,159)	\$(11,238,789)	\$(14,106,948)

Note 1 : Green highlighted projects above can be funded in the constrained funding analysis

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Table 52 - Summary of Projects: City of Shasta Lake Active Transportation

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS			SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
	Bicycle Projects							
	Street Name	From Street	To Street					
1	SHASTA DAM RD	ASHBY RD	LAKE BLVD	\$203,000		2018-2025	Buffered Bike Lane, Subject to Caltrans Process	ATP, local, LTF, HSIP
2	CHURN CREEK TRAIL - CONNECTION	OASIS RD	PINE GROVE AVE	\$1,407,500		2018-2025	Shared-Use Path	ATP, local, LTF, HSIP
	Pedestrian Projects							
	Street Name	From Street	To Street					
3	MCCONNELL AVE	SHASTA DAM BLVD	MAIN ST	\$170,546		2018-2025	Commercial/Civic Corridor	ATP, local, LTF, HSIP
4	DEER CREEK RD/VALLECITO ST	CABELLO ST	SHASTA DAM BLVD	\$906,389		2018-2025	Safe Routes to School	ATP, local, LTF, HSIP
5	ASHBY RD	LOS GATOS AVE	FRONT ST/SHASTA DAM BLVD	\$495,275		2018-2025	Safe Routes to School	ATP, local, LTF, HSIP
6	CASCADE BLVD	GRAND COULEE BLVD	I 5 NBOFF/R/I 5 SBON/R/SHASTA DAM BLVD	\$512,834		2018-2025	Community Walking Connection	ATP, local, LTF, HSIP
7	ASHBY RD	PINE GROVE AVE	LA MESA AVE	\$2,049,542		2018-2025	Safe Routes to School	ATP, local, LTF, HSIP
8	CASCADE BLVD	PINE GROVE AVE	GRAND COULEE BLVD	\$609,157		2018-2025	Community Walking Connection	ATP, local, LTF, HSIP
9	PINE GROVE AVE	JORZACK WAY	ASHBY RD	\$1,267,255		2018-2025	Community Walking Connection	ATP, local, LTF, HSIP
Total Short Term Needs =				\$7,621,498				
	Bicycle Projects							
	Street Name	From Street	To Street					
10	SHASTA DAM BLVD	ASHBY RD	CASCADE BLVD		\$980,057	2026- 2040	Separated Bike Lane, Subject to Caltrans Process	ATP, local, LTF, HSIP
11	FRONT ST	SHASTA DAM BLVD (ASHBY RD)	SHASTA DAM BLVD		\$306,170	2026- 2040	Separated Bike Lane, Subject to Caltrans Process	unknown
12	CABELLO ST	MEADE ST	SHASTA DAM BLVD		\$11,363	2026- 2040	Bike Lane	unknown
13	ASHBY RD	FRONT ST/SHASTA DAM BLVD	WOODLEY AVE		\$1,232,232	2026- 2040	Shared-Use Path	unknown
14	MCCONNELL AVE	SHASTA DAM BLVD	FRONT ST		\$5,747	2026- 2040	Bike Lane	unknown
15	CABELLO ST	FORT PECK ST	MEADE ST		\$11,083	2026- 2040	Bike Lane	unknown
16	SHASTA ST/WASHINGTON AVE	GRAND COULEE BLVD	KENNETT ST/SHASTA DAM BLVD/SHASTA WAY		\$335,056	2026- 2040	Bike Boulevard	unknown
17	MCCONNELL AVE	FRONT ST	MAIN ST		\$11,312	2026- 2040	Bike Lane	unknown
18	OFF-STREET	CABELLO ST/FORT PECK ST	FORT PECK ST/STANTON AVE/STANTON DR		\$77,354	2026- 2040	Shared-Use Path	unknown
19	MONTANA AVE	VALLECITO ST	RED BLUFF ST		\$430,255	2026- 2040	Bike Boulevard	unknown

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20	FORT PECK ST	SHASTA ST	GRAND COULEE BLVD		\$174,814	2026- 2040	Bike Boulevard	unknown
21	CABELLO ST	LA MESA AVE	FORT PECK ST		\$10,889	2026- 2040	Bike Lane	unknown
22	HILL BLVD	ROSE AVE	PARK PL		\$30,684	2026- 2040	Bike Boulevard	unknown
23	CABELLO ST	BONNEVILLE ST	LA MESA AVE		\$4,467	2026- 2040	Bike Lane	unknown
24	HILL BLVD	LAKE BLVD	ROSE AVE		\$16,089	2026- 2040	Bike Boulevard	unknown
25	FORT PECK ST	CABELLO ST	MONTANA AVE		\$208,954	2026- 2040	Bike Boulevard	unknown
26	FORT PECK ST	DEER CREEK RD	STANTON AVE/STANTON DR		\$56,090	2026- 2040	Bike Boulevard	unknown
27	SACRAMENTO ST/TOYON AVE	SHASTA DAM BLVD	LAKE BLVD		\$392,231	2026- 2040	Bike Boulevard	unknown
28	SHASTA DAM RD	ASHBY RD	LAKE BLVD		\$203,161	2026- 2040	Buffered Bike Lane, Subject to Caltrans Process	unknown
29	CASCADE BLVD	GRAND COULEE BLVD	UNION SCHOOL RD		\$137,682	2026- 2040	Bike Lane	unknown
30	CABELLO ST	VALLECITO ST	BONNEVILLE ST		\$28,840	2026- 2040	Bike Lane	unknown
31	HILL BLVD/PARK PL/ROSE AVE	SACRAMENTO ST	LAKE BLVD		\$638,683	2026- 2040	Bike Boulevard	unknown
32	OFF-STREET	SACRAMENTO ST/SHASTA DAM BLVD	PINE GROVE AVE		\$2,101,828	2026- 2040	Shared-Use Path	unknown
33	OFF-STREET	DEAD END	SACRAMENTO ST/SHASTA DAM BLVD		\$1,090,454	2026- 2040	Shared-Use Path	unknown
34	MUSSEL SHOALS AVE	GRAND COULEE BLVD/SHASTA DAM BLVD	DEAD END		\$590,059	2026- 2040	Bike Boulevard	unknown
35	VALLECITO ST	MONTANA AVE	WASHINGTON AVE		\$484,966	2026- 2040	Bike Boulevard	unknown
36	PINE GROVE AVE/WALKER MINE RD	CASCADE BLVD	BELT LINE RD		\$1,851,453	2026- 2040	Shared-Use Path	unknown
37	TWIN VIEW BLVD	OASIS RD	PINE GROVE AVE		\$209,627	2026- 2040	Bike Route	unknown
38	RED BLUFF ST	MUSSEL SHOALS AVE	MONTANA AVE		\$439,258	2026- 2040	Bike Boulevard	unknown
39	LAKE BLVD	SHASTA DAM ACCESS RD/SR 151	SHASTA DAM BLVD		\$279,891	2026- 2040	Bike Route	unknown
40	OFF-STREET	CABELLO ST/VALLECITO ST	PINE GROVE AVE		\$644,033	2026- 2040	Seprated Bike lane	unknown
41	CASCADE BLVD/PINE GROVE AVE	GRAND COULEE BLVD	ARROWHEAD AVE		\$283,779	2026- 2040	Bike Lane	unknown
42	FLANAGAN RD	LAKE BLVD	1500FT NW OF BELT LINE RD		\$75,041	2026- 2040	Bike Route	unknown
43	BLACK CANYON RD	RED BLUFF ST	DED END		\$147,640	2026- 2040	Bike Lane	unknown
44	CASCADE BLVD	ARROWHEAD AVE	OASIS RD/OLD OASIS RD		\$109,832	2026- 2040	Bike Lane	unknown
45	AVINGTON WAY/STAFFORD DR	PINE GROVE AVE	PROPOSED OFF-STREET ROUTE		\$896,696	2026- 2040	Seprated Bike lane	unknown
46	OFF-STREET	DEAD END	CASCADE BLVD		\$1,500,258	2026- 2040	Seprated Bike lane	unknown
47	CHURN CREEK TRAIL - CONNECTION	OASIS RD	PINE GROVE AVE		\$1,407,338	2026- 2040	Shared-Use Path	unknown
48	PINE GROVE AVE/VIRGINIA AVE/ AKRICH ST	REDWING LN	CASCADE BLVD		\$298,588	2026- 2040	Bike Lane	unknown
49	TENNESSEE DR	DEAD END	OASIS RD		\$32,585	2026- 2040	Bike Lane	unknown
50	SHASTA GATEWAY DR	DEAD END	ASHBY RD		\$50,479	2026- 2040	Bike Lane	unknown
	Pedestrian Projects							
	Street Name	From Street	To Street					
51	FRONT ST	SHASTA DAM BLVD	ASHBY RD		\$588,124	2026- 2040	Commercial/Civic Corridor, Subject to Caltrans Process	unknown
52	MONTANA AVE	SHASTA DAM BLVD	FRONT ST		\$31,318	2026- 2040	Commercial/Civic Corridor, Subject to Caltrans Process	unknown
53	SHASTA DAM BLVD	GRAND COULEE BLVD/MUSSEL SHOALS AVE	ASHBY RD/FRONT ST		\$1,211,724	2026- 2040	Commercial/Civic Corridor, Subject to Caltrans Process	unknown

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54	LOCUST AVE	SHASTA DAM BLVD	FRONT ST/LOCUST		\$49,293	2026- 2040	Commercial/Civic Corridor	unknown
55	FRONT ST	WASHINGTON AVE	SHASTA DAM BLVD		\$705,411	2026- 2040	Commercial/Civic Corridor	unknown
56	MEDIAN AVE	SHASTA DAM BLVD	MAIN ST		\$95,939	2026- 2040	Community Walking Connection	unknown
57	GRAND RIVER AVE	SHASTA DAM BLVD	MAIN ST		\$183,562	2026- 2040	Commercial/Civic Corridor	unknown
58	WASHINGTON AVE	SHASTA DAM BLVD	FRONT ST		\$85,076	2026- 2040	Commercial/Civic Corridor	unknown
59	SHASTA DAM BLVD	ASHBY RD/FRONT ST	ROUGE RD		\$560,887	2026- 2040	Community Walking Connection, Subject to Caltrans Process	unknown
60	MAIN ST	GRAN RIVER AVE	MCCONELL AVE		\$159,983	2026- 2040	Community Walking Connection	unknown
61	SHASTA DAM BLVD	CASCADE BLVD/I-5 NB OFF-RAMP/I-5 SB ON-RAMP	GRAND COULEE BLVD/MUSSEL SHOALS AVE		\$670,878	2026- 2040	Commercial/Civic Corridor, Subject to Caltrans Process	unknown
62	HILL BLVD/LAKE BLVD	SHASTA DAM BLVD	TOYON AVE		\$644,760	2026- 2040	Rural Community Main Street	unknown
63	LA MESA AVE	MONTANA AVE	ASHBY RD		\$399,718	2026- 2040	Safe Routes to School	unknown
64	SHASTA WAY	KENNETT ST/SHASTA DAM BLVD/SHASTA ST	MOON SHADOW CT		\$481,701	2026- 2040	Safe Routes to School	unknown
65	TWIN VIEW BLVD	CROOKED OAK LN	POPPY LN		\$671,883	2026- 2040	Community Walking Connection	unknown
66	PINE GROVE AVE	CASCADE BLVD	JORZACK WAY		\$238,590	2026- 2040	Community Walking Connection	unknown
67	TRINITY ST	CASCADE BLVD	BUTTERFLY LN		\$364,906	2026- 2040	Community Walking Connection	unknown
68	CASCADE BLVD	TRINITY ST	ARROWHEAD AVE		\$616,913	2026- 2040	Community Walking Connection	unknown
69	SMITH AVE/JORZACK WAY	TRINITY ST	PINE GROVE AVE		\$374,810	2026- 2040	Community Walking Connection	unknown
	Spot Treatments							
	Location							
70	Shasta Dam Blvd and Montana Ave				\$94,927	2026- 2040	Intersection Improvement, Subject to Caltrans Process	unknown
71	Front Ave and Montana Ave				\$94,927	2026- 2040	Intersection Improvement, Subject to Caltrans Process	unknown
72	Shasta Dam Blvd and Cascade Blvd				\$312,576	2026- 2040	Interchange Improvement, Subject to Caltrans Process	unknown
73	Shasta Dam Blvd between North Blvd and Lassen Ave				\$94,927	2026- 2040	Intersection Improvement, Subject to Caltrans Process	unknown
74	Shasta Dam Blvd and Shasta Way				\$94,927	2026- 2040	Intersection Improvement, Subject to Caltrans Process	unknown
75	Shasta Damn Blvd and Lake Blvd				\$94,927	2026- 2040	Intersection Improvement, Subject to Caltrans Process	unknown
			Total Long Term Fundable Needs =		\$980,057			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$7,621,498	\$26,719,705	\$34,341,203
Recap of Expected/Estimated/Unknown Resources			
Active Transportation Program (ATP) =	\$5,335,049	\$343,020	\$5,678,069
Local/Other =	\$762,150	\$147,009	\$909,158
2% LTF =	381,075	\$98,006	\$479,081
Highway Safety Improvement Program (HSIP) =	\$1,143,225	\$392,023	\$1,535,248
			\$-
Total Funding Reasonably Available =	\$7,621,498	\$980,057	\$8,601,555
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$(25,739,648)	\$(25,739,648)

Note 1 : Green highlighted projects above can be funded in the constrained funding analysis

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

Table 53 - Summary of Projects: Regional Active Transportation/Recreation

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Great Shasta Rail Trail Association - Black Ranch Road in Burney, Stage 2 buildout of primary trailhead	\$100,000		(2018-2025)		
2	Great Shasta Rail Trail Association - Clark Creek Road (north of Lake Britton), Stage 2 buildout of primary trailhead	\$100,000		(2018-2025)		
3	Great Shasta Rail Trail Association - Rail banked right-of-way between Burney and McCloud, tread improvement	\$300,000		(2018-2025)		
4	Great Shasta Rail Trail Association - Highway 89 just north of SR 299 intersection, improve crossing	\$50,000		(2018-2025)		
5	Great Shasta Rail Trail Association - North of Clark Creek Road on rail-banked right-of-way, culvert replacement	\$225,000		(2018-2025)		
6	Great Shasta Rail Trail Association - Lake Britton Trestle Rehabilitation (Hwy 89 overpass)	\$500,000		(2018-2025)		
7	Great Shatsa Rail Trail Association - Just south of Lake Britton, establish pedestrian access between GSRT and McAurther Burney Falls State Park	\$110,000		(2018-2025)		
8	Great Shasta Rail Trail Association - Black Ranch Road, just north of Burney, Stage 2 buildout of primary trailhead at Berry Way	\$100,000		(2018-2025)		
9	Great Shasta Rail Trail Association - Re-decking of Lake Britton Bridge	\$1,400,000		(2018-2025)		
10	Great Shasta Rail Trail Association - Abatement of red lead paint on Lake Britton Bridge	\$220,000		(2018-2025)		
11	National Park Service - Whiskeytown Recreation Area, new entrance stations on Kennedy Memorial Drive on Oak Bottom Drive	\$10,000,000		(2018-2025)		
12	National Park Service - Whiskeytown Recreation Area, up to four designated parking areas to allow entry and exit lanes	\$200,000		(2018-2025)		

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13	California State Parks - Shasta State Historical Park, construct parking lot for day-use visitors and school busses to alleviate SR 299 parking	\$200,000		(2018-2025)		
14	Bureau of Land Management - Redding Field Office, improve vehicle access to Chappie-Shasta-Off-Highway Vehicle Area, Copley Mt. Staging Area to Chappie OHVS Area	\$1,000,000		(2018-2025)		
16	National Park Service - Whiskeytown Recreation Area, West Boundary entrance pull-out at SR 299	\$250,000		(2018-2025)		
17	Shasta County - Road segment abandoned McCloud Railway Company railbed from Burney to SR 89 into park perimeter road	\$250,000		(2018-2025)		
	Total Short Term Needs =	\$15,005,000				
18	National Park Service - Whiskeytown Recreation Area, Multi-use trail, Tower House Historic District to Lewiston Turnpike		\$5,000,000	(2026-2040)		
19	California State Parks - McArthur-Burney Falls Memorial State Park, new park entrance road, entrance kiosk and parking lot for day use vehicles and buses. Redesign abandoned section of SR 89 into park perimeter road		\$200,000	(2026-2040)		
	Total Long Term Fundable Needs =		\$5,200,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$15,005,000	\$5,200,000	\$20,205,000
Recap of Expected/Estimated/Unknown Resources			
Active Transportation Program (ATP) =	1,500,500	\$520,000	\$2,020,500
State Highway Operations and Protection Program (SHOPP) =	13,504,500	\$4,680,000	\$18,184,500
Total Funding Reasonably Available =	\$15,005,000	\$5,200,000	\$20,205,000
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$-	\$-

Note 1: Green highlighted projects above can be funded in the constrained funding analysis

Note 2: Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3: Long term projects are escalated by 2.5%

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Table 54 - Summary of Projects: Regional Transit

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	RABA - Replacemet Buses, purchase 7 replacemet buses	\$5,484,000		(2018-2025)	Transit	FTA
2	RABA - Passenger Loading Improvements	\$1,435,423		(2018-2025)	Transit	FTA
3	RABA - Replacement Vans, purchase 15 replacements vans	\$1,351,941		(2018-2025)	Transit	FTA
4	RABA - Replacement Vans, purchase 2 replacements vans (Burney)	\$200,000		(2018-2025)	Transit	FTA
5	RABA - Maintenance Facility/Equipment	\$250,000		(2018-2025)	Transit	Prop 1B Funds
6	RABA - Radio/ITS Communication Equipment	\$255,000		(2018-2025)	Transit	Prop 1B Funds
7	RABA - Fare Equipment, fare equipment	\$450,000		(2018-2025)	Transit	FTA
8	RABA - Computer Equipment	\$107,000		(2018-2025)	Transit	FTA
9	RABA - Security Upgrades	\$200,000		(2018-2025)	Tranist/Safety	Prop 1B Safety Security
10	RABA - Transfer Facilities	\$200,000		(2018-2025)	Transit	Prop 1B Funds
11	RABA - Support Vehicles	\$76,000		(2018-2025)	Transit	FTA
12	RABA - Miscellaneous Capital Projects	\$75,000		(2018-2025)	Transit	FTA
13	RABA - Grant Administration	\$100,000		(2018-2025)	Transit	FTA
14	CTSA - Vehicle Replacement, Update Fleet/Passenger Safety	\$140,000		(2018-2025)	Transit	FTA
15	CTSA - Dispatch System, Efficiency of routing/dispatching	\$40,000		(2018-2025)	Transit	FTA
16	Private or Non-Profit - Grant Vans, Acquisition of 4 vans through grant	\$280,000		(2018-2025)	Tranist/Fills a gap	FTA
	Total Short Term Needs =	\$10,644,364				
17	Private or Non-Profit - Grant Vans, Acquisition of 2 vans through grant		\$180,000	(2026-2040)	Tranist/Fills a gap	FTA
	Total Long Term Fundable Needs =		\$180,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$10,644,364	\$180,000	\$10,824,364
Recap of Expected/Estimated/Unknown Resources			
Federal Transit Administratio (FTA) Grants =	9,739,364	\$180,000	\$9,919,364
Proposition 1B Funds =	705,000	-	\$705,000
Proposition 1B Funds - Safety Security =	200,000		\$200,000
Total Funding Reasonably Available =	\$10,644,364	\$180,000	\$10,824,364
Total Unfunded Needs (or Short Term Carryover) =	\$-	\$-	\$-

Note 1 : Green highlighted projects above can be funded in the constrained funding analysis

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Table 55 - Summary of Projects: Native American Roads

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE / PROJECT INTENT	EXPECTED FUNDING SOURCES
1	Wamari Way, New road with two bridges (Burney Creek and Burney Creek Overflow)	unknown		(2016-2025)	New Facility	IRR
	Total Short Term Needs =	\$-				
	Total Long Term Fundable Needs =		\$-			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$-	\$-	\$-
Recap of Expected/Estimated/Unknown Resources			
	\$-	\$-	\$-
Total Funding Reasonably Available =	\$-	\$-	\$-
Total Unfunded Needs =	\$-	\$-	\$-
Note 1 : Green highlighted projects above can be funded in the constrained funding analysis			

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Table 56 - Summary of Projects: Regional Transit Operations

ENTITY	ANNUAL OPERATING COST	SHORT TERM TOTAL EST COST	LONG TERM TOTAL EST COST
RABA	\$6,091,870	\$53,219,282	\$83,155,444
County transit	\$484,188	\$4,229,922	\$6,609,279
CTSA (SSNP)	\$331,707	\$2,897,831	\$4,527,878
SSNP Service Expansion	\$10,506	\$91,782	\$143,409

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Table 57 - Summary of Projects: Regional Aviation

PROJECT NUMBER	REGIONAL TRANSPORTATION PROJECTS	SHORT TERM TOTAL EST COST OF PROJECT	LONG TERM TOTAL EST COST OF PROJECT	PROJECT BAND	PROJECT TYPE (PROJECT INTENT)	EXPECTED FUNDING SOURCES
1	Fall River Mills Airport - Runway 2-20 Rehabilitation, Runway pavement maintenance	\$680,000		(2018-2025)	pavement maintenance	FAA - AIP
2	Fall River Mills Airport - Taxiway Rehabilitation, Taxiway pavement maintenance	\$325,000		(2018-2025)	pavement maintenance	FAA - AIP
3	Fall River Mills Airport - Apron Rehabilitation, Apron pavement maintenance	\$325,000		(2018-2025)	pavement maintenance	FAA - AIP
4	Redding Municipal Airport - 16-1, Parallel runway (Environmental assessment)	\$350,000		(2018-2025)		
5	Redding Municipal Airport - 16-2, Air Shasta west apron reconstruction (400'x200') (construction)	\$1,600,000		(2018-2025)		
6	Redding Municipal Airport - 16-3, T-hangar taxilane reconstruction (construction)	\$850,000		(2018-2025)		
7	Redding Municipal Airport - 17-1, Parallel runway/taxiway (design only)	\$500,000		(2018-2025)		
8	Redding Municipal Airport - 18-1, Parallel runway, Environmental - Phase 2 (CEQA reimbursement)	\$300,000		(2018-2025)		
9	Redding Municipal Airport - 18-2, Parallel runway/taxiway (construction)	\$4,000,000		(2018-2025)		
10	Redding Municipal Airport - 19-1, Eastside cargo apron expansion (design only)	\$120,000		(2018-2025)		
11	Redding Municipal Airport - 19-2, New aircraft parking apron (design only)	\$120,000		(2018-2025)		
12	Redding Municipal Airport - 19-3, All-weather perimeter road - RSAP recommendation (design only)	\$90,000		(2018-2025)		
13	Redding Municipal Airport - 19-4, Upgrade airfield electrical system (design only)	\$150,000		(2018-2025)		
14	Redding Municipal Airport - 19-5, Security fencing (design only)	\$55,000		(2018-2025)		
15	Redding Municipal Airport - 20-1, Eastside cargo apron expansion	\$1,200,000		(2018-2025)		
16	Redding Municipal Airport - 20-2, New aircraft parking apron	\$1,200,000		(2018-2025)		
17	Redding Municipal Airport - 20-3, All-weather perimeter road - RSAP recommendation	\$600,000		(2018-2025)		
18	Redding Municipal Airport - 20-4, Upgrade airfield electrical system	\$1,250,000		(2018-2025)		
19	Redding Municipal Airport - 20-5, Security fencing	\$480,000		(2018-2025)		
20	Benton Airpark - 16-1, AWOS	\$250,000		(2018-2025)		
21	Benton Airpark - 16-2, Rehabilitate parallel taxiway "B" (design only)	\$55,000		(2018-2025)		
22	Benton Airpark - 17-1, Rehabilitate parallel taxiway "B"	\$360,000		(2018-2025)		
23	Benton Airpark - 17-2, Eastside T-hangar taxilane reconstruction (design only)	\$72,000		(2018-2025)		
24	Benton Airpark - 18-1, Eastside T-hangar taxilane reconstruction	\$820,000		(2018-2025)		
25	Benton Airpark - 18-2, Security fencing - North RPZ (design only)	\$14,000		(2018-2025)		
26	Benton Airpark - 19-1, Security fencing - North RPZ	\$90,000		(2018-2025)		
27	Benton Airpark - 19-2, Rehabilitate parallel taxiway "A" (design only)	\$55,000		(2018-2025)		
28	Benton Airpark - 20-1, Rehabilitate parallel taxiway "A"	\$420,000		(2018-2025)		
29	Benton Airpark - 20-2, Westside T-hangar taxilane reconstruction (design only)	\$80,000		(2018-2025)		

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30	Redding Municipal Airport - 21-1, Pavement preservation (East apron) - Seal coat (design only)	\$18,000		(2018-2025)		
31	Redding Municipal Airport - 21-2, Pavement preservation (Runway 12/30, apron, and taxiways) (design only)	\$120,000		(2018-2025)		
32	Redding Municipal Airport - 21-3, Install MITL (Taxiway “M”, “C”, and “H”) (design only)	\$68,000		(2018-2025)		
33	Redding Municipal Airport - 21-4, Eastside apron expansion (300’x450’) (design only)	\$165,000		(2018-2025)		
34	Redding Municipal Airport - 22-1, Pavement preservation (East apron) - Seal coat	\$120,000		(2018-2025)		
35	Redding Municipal Airport - 22-2, Pavement preservation (Runway 12/30, apron, and taxiways)	\$800,000		(2018-2025)		
36	Redding Municipal Airport - 22-3, Install MITL (Taxiway “M”, “C”, and “H”)	\$450,000		(2018-2025)		
37	Redding Municipal Airport - 22-4, Eastside apron expansion (300’x450’)	\$1,100,000		(2018-2025)		
38	Benton Airpark - 21-1, Westside T-hangar taxilane reconstruction	\$900,000		(2018-2025)		
39	Benton Airpark - 21-2, East apron pavement rehabilitation (design only)	\$95,000		(2018-2025)		
40	Benton Airpark - 22-1, East apron pavement rehabilitation	\$950,000		(2018-2025)		
41	Benton Airpark - 22-2, Construct T-hangar taxilane (design only)	\$36,000		(2018-2025)		
42	Benton Airpark - 23-1, Construct T-hangar taxilane	\$237,000		(2018-2025)		
43	Benton Airpark - 23-2, Construct 10 unit T-hangar (design only)	\$135,000		(2018-2025)		
44	Benton Airpark - 24-1, Construct 10 unit T-hangar	\$900,000		(2018-2025)		
	Total Short Term Needs =	\$22,505,000				
45	Fall River Mills Airport - PAPI, Install Precision Approach Path Indicator (PAPI) system		\$89,000	(2026-2040)	safety improvement	FAA - AIP
46	Fall River Mills Airport - IFR, Install Instrument Flight Approach (IFR) system		\$22,000	(2026-2040)	safety improvement	FAA - AIP
	Total Long Term Fundable Needs =		\$111,000			

DESCRIPTION	Short (2018-2025)	Long (2026-2040)	Total
Funding Needed By Short and Long Range Bands	\$22,505,000	\$111,000	\$22,616,000
Recap of Expected/Estimated/Unknown Resources			
Federal Aviation Administration (FAA) - Airport Improvement Program (AIP) =	\$20,358,160	\$99,900	\$20,458,060
CA State Division of Aeronautics =	\$305,955	\$4,995	\$310,950
Local Share =	\$1,840,885	\$6,105	\$1,846,990
Total Funding Reasonably Available =	\$22,505,000	\$111,000	\$22,616,000
Total Unfunded Needs =	\$-	\$-	\$-

Note 1 : Green highlighted projects above can be funded in the constrained funding analysis

Note 2 : Un-highlighted projects above cannot be funded. New funding sources will need to be identified or improvement will be developer funded.

Note 3 : Long term projects are escalated by 2.5%

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Appendices

In order to conserve resources, Appendix 1 and 2 are available electronically at SRTA's website on the Regional Transportation Plan web page: <http://www.srta.ca.gov/142/Regional-Transportation-Plan>. Direct weblinks are provided below.

- Appendix 1 - Shasta County Forecast Assumptions Memorandum (November 8, 2011): <http://www.srta.ca.gov/DocumentCenter/Home/View/1049>
- Appendix 2 - SCS Technical Methodology: <http://www.srta.ca.gov/DocumentCenter/View/43>
- Appendix 3 - Regional Transportation Plan Checklist