TRINITY COUNTY REGIONAL TRANSPORTATION PLAN

October 2011

TABLE OF CONTENTS

APPENDICES

Appendix 1A	Glossary of Terms
Appendix 1B	Trinity County Transportation Commission (TCTC) Public Involvement Procedures
Appendix 1C	Memorandum of Agreement North State Super Region
Appendix 1D	Update to the Trinity County 2010 Regional Transportation Plan Memorandum and Trinity County Contact List
Appendix 1E	Steering Committee Meeting Summary Memorandum (Meeting #1, #2 and #3)
Appendix 1F	Public Workshop Summaries
Appendix 2A	US Census Data
Appendix 2B	Caltrans Structure Maintenance & Investigations – Trinity County
Appendix 2C	Trinity County Travel Demand Forecasting Model Development Report
Appendix 2D	Intersection Level of Service Technical Calculations
Appendix 2E	Weaverville Traffic Signalization Study
	Attachment A – Signal Warrant Analysis
	Attachment B – Scenario 1: Unsignalized Intersections
	Attachment C – Scenario 2: Signalized Intersections
	Attachment D – Scenario 3: Signalized and Roundabout Intersections
	Attachment E – Traffic Vibration Assessment: Trinity County Intersection Improvements
Appendix 3A	California Transportation Plan (CTP) 2030 Executive Summary
Appendix 3B	California Strategic Highway Safety Plan – Fact Sheet
Appendix 3C	Shasta-Trinity National Forest Motorized Travel Management Plan Consistency
Appendix 4A	2010 RTP Capital Improvements State Highway Projects (SHOPP)
Appendix 4B	RTIP for Trinity County – 2010 State Transportation Improvement Program (STIP)
Appendix 4C	2010 RTP Capital Improvements County Road and Bridge Projects
Appendix 4D	2010 RTP Capital Improvements Transit Projects
Appendix 4E	2010 RTP Capital Improvements Non-Motorized Projects
Appendix 4F	2010 RTP Capital Improvements Aviation Projects
Appendix 4G	Future RTP Capital Improvements Unconstrained Projects
Appendix 5A	Revenue Estimates
Appendix 6A	Environmental Documentation

LIST OF FIGURES

LIST OF TABLES

EXECUTIVE SUMMARY

REGIONAL TRANSPORTATION SYSTEM

Regional Setting

Trinity County is located in the northwestern portion of California (**Figure 1**). The geography of the County is defined by the Trinity Alps, South Fork Mountain and other ridges of the Klamath Mountains and Coastal Range, carved by the deep canyons and valleys of the Trinity, Van Duzen, and Eel Rivers. There is an extensive wild and scenic river system, and the terrain is rugged and forested, with the highest points at around 9,000 feet. According to the 2000 Census, the county has a total area of 3,208 square miles, of which 3,179 square miles is land and 29 square miles is water. There are no incorporated cities or towns in Trinity County. Trinity County's Census Designated Places (CDPs) include Hayfork, Lewiston, and Weaverville. Smaller communities include Big Bar, Burnt Ranch, Douglas City, Junction City, Salyer, Trinity Center, Hyampom, Mad River, Ruth and Coffee Creek. Trinity County is bounded by five counties:

1. Mendocino County on the south
2. Humboldt County on the west
3. Siskiyou County on the north
4. Shasta County on the east
5. Tehama County on the southeast

The county seat and largest town is Weaverville, with approximately 3,500 people. The major highways in the County include State Route 3, State Route 36, and State Route 299. Four national protected areas are found in Trinity County including part of the Mendocino National Forest, part of the Shasta-Trinity National Forest, part of the Six Rivers National Forest, and part of the Whiskeytown-Shasta-Trinity National Recreation Area.

Population

The U.S. Census Bureau reported Trinity County's population to be 13,063 in 1990 and 13,022 in 2000. In January 2008 the population increased slightly to 13,935 and in January 2009, the population is reported at 13,959 (reported by the California Department of Finance (DOF)). The 2010 U.S. Census Report revealed a total county population of 13,786. This represents a 5.5 percent increase over 1990 or slightly less than 0.28 percent annual growth since 1990. The distribution of population for 1990, 2000, 2008, 2009, and 2010 is shown in **Table E-1.1**.

TABLE E-1.1
TRINITY COUNTY TOTAL POPULATION

Population in Year					Percent Change 1990 - 2010	Annual % Change
1990	2000	2008	2009	2010		
13,063	13,022	13,935	13,959	13,786	5.5%	0.28%

Sources: U.S. Census Bureau, State of California, Department of Finance, Table E-4 City/County Population Estimates; DOF Research Unit; Trinity County 2008-09 Economic and Demographic Profile, Center for Economic Development, California State University, Chico

Employment

Trinity County's total average 2009 employment through October was 3,970 workers out of a total labor force of 4,880. This represents an 18.6% unemployment rate. Over the past ten years the unemployment rate has fluctuated from a low of approximately 9% in 2001 to a high of 18.6% in 2009 with the unemployment rate at approximately 10% for much of the decade. The Trinity County unemployment rate is higher than the California unemployment rate of 12.9% (in October 2009). Trinity County's unemployment rate has historically been 4% to 5% higher than the California rate. **Table E-1.2** shows total employment for the County and employment for major industries within the county.

TABLE E-1.2
TRINITY COUNTY JOB GROWTH

Employment by Year				
Industry		**2000**	**2005**	**2009**
Total Employed Population		***4,630***	***4,670***	***3,970***
Employment in Major Industries	Natural Resources, Mining, & Construction	150	160	70
	Manufacturing	200	210	220
	Trade, Transportation, & Utilities	380	380	300
	Educational & Health Services	200	310	170
	Leisure & Hospitality	330	400	290
	Government/Public Administration	1,510	1,440	1,350

Source: California Employment Development Department, Labor Market Information

Existing and Future Traffic Conditions

Traffic volumes on the roadways throughout Trinity County have grown slowly, and in some cases have decreased over the last several years. Traffic volume fluctuations on state highways are primarily due to increases/decreases in traffic through the county and recreational traffic. Caltrans District 2 collects traffic volume data on state highways in Trinity County. Traffic counting is generally performed by Caltrans using electronic counting instruments at consistent locations throughout the State in a program of continuous traffic count sampling. The resulting counts are adjusted to reflect an estimate of annual average daily traffic by compensating for seasonal fluctuation, weekly variation and other variables that may be present. Annual Average Daily Traffic (AADT) volume is defined as the total two-way traffic volume on a roadway over the year divided by 365 days. The recordation of AADT is necessary for presenting a statewide picture of traffic flow, evaluating traffic trends, computing accident rates, planning and designing highways, and other purposes.

In addition to AADT, Caltrans provides a summary of the peak month Average Daily Traffic (ADT), which is the highest monthly traffic volume divided by the number of days in the month. Caltrans Data indicates that the peak traffic season in Trinity County is in summertime, with the peak month fluctuating between May, June, July, August, and September depending on the roadway segment.

Trinity County collects daily traffic volumes on county roads. Volumes on segments throughout the county are collected every 3-6 years depending on the segment.

The roadway segments presented in **Table E-1.3** operate within the policy level of service under existing conditions.

TABLE E-1.3
EXISTING LEVEL OF SERVICE ON COUNTY AND CALTRANS ROADWAYS

Trinity County Facilities			Caltrans Facilities		
Route and Location	**Existing Volume[1]**	**LOS**	**Route and Location**	**Existing Volume[1]**	**LOS**
Mill St: South of SR 299	699	A	SR 3: Junction of SR 36, north	210	A
Oregon St: SR 299 to Miner St.	2,727	C	SR 3: Morgan Hill Rd., south	670	A
Oregon St: Miner Street to Odd Fellow Ave.	1,171	B	SR 3: Morgan Hill Rd., north	660	A
Washington St: North of SR 299	3,179	C	SR 3: Hayfork	2,050	C
Washington St: South of SR 3	3,216	C	SR 3: Douglas City, South Jct.	1,450	B
Washington St: South of SR 299	867	A	SR 3: Weaverville, North Jct.	4,000	C
S. Miner St: South of Forest Ave.	2,050	C	SR 3: Rush Creek Rd., south	1,300	B
S. Miner St: North of Oregon St.	2,045	C	SR 3: Rush Creek Rd., north	590	A
Bremer St: South of SR 299	526	A	SR 3: Trinity Center Maintenance Station	660	A
Martin Rd: East of SR 299	1,853	B	SR 3: Siskiyou County Line	190	A
Rush Creek Rd: South of SR 3	685	A	SR 36: Lower Mad River Rd., west	680	A
Airport Rd: East of SR 3	645	A	SR 36: Lower Mad River Rd., east	340	A
Mary Ave: South of Airport Rd.	593	A	SR 36: Forest Glen Maintenance Station	330	A
Trinity Dam Blvd: North of SR 299	903	B	SR 36: Jct. of Route 3, north	400	A
Brady Rd: North of SR 3	620	A	SR 299: East Limits Salyer, west	3,400	C
Morgan Hill Rd: East of SR 3	787	A	SR 299: East Limits Salyer, east	3,150	C
Hyampom Rd: West of SR 3	1,114	B	SR 299: Burnt Ranch Rd., west	3,150	C
Oak Ave: South of SR 3	1,704	B	SR 299: Del Loma, east	1,600	B
Mulligan St (East): North of SR 3	200	A	SR 299: Weaverville, West City Limits	2,950	C
Mulligan St (West): North of SR 3	516	A	SR 299: Weaverville, Washington St., east	11,600	D
Glen Rd: West of Nugget Ln.	1,502	B	SR 299: Martin/Nugget Roads, west	7,100	D
Center St: East of SR 299	504	A	SR 299: Martin/Nugget Roads, east	6,400	C
Center St: South of SR 3	827	A	SR 299: East Jct. SR 3, west	4,350	C
Weaver St: East of SR 299	850	A	SR 299: East Jct. SR 3, east	3,850	C
Masonic Ln: South of SR 299	769	A	SR 299: Lewiston Rd., east	3,400	C
Mountain View St: South of SR 299	738	A	SR 299: Trinity Dam Rd., east	3,750	C
N. Miner St: South of SR 299	184	A			
Mad River Rd: South of SR 36	388	A			
Van Duzen Rd: South of SR 36	581	A			

Notes: [1] Annual Average Daily Traffic volumes. Level of service results may differ by one level of service during the peak month. Shading indicates deficient operations.

Source: Caltrans Traffic and Vehicle Data Systems Unit, 2008; Trinity County, 2009; Fehr & Peers, 2011

2040 Conditions

Table E-1.4 provides 2040 level of service information for County and Caltrans roadways based on the forecasted traffic volumes from the Trinity County Travel Demand Model (Fehr & Peers, 2011) using a 0.28% per year population growth.

The Trinity County Travel Demand Model Development Report is provided in Appendix 2B.

TABLE E-1.4
2040 LEVEL OF SERVICE ON COUNTY AND CALTRANS ROADWAYS

Trinity County Facilities			Caltrans Facilities		
Route and Location	**2040 Volume[1]**	**LOS**	**Route and Location**	**2040 Volume[1]**	**LOS**
Mill St.: South of SR 299	700	A	SR 3: Hayfork	2,200	C
Oregon St.: SR 299 to Miner St.	3,170	C	SR 3: Douglas City, South Jct.	1,570	B
Oregon St.: Miner Street to Odd Fellow Ave.	1,700	B	SR 3: Weaverville, North Jct.	4,590	C
Washington St.: North of SR 299	1,480	B	SR 3: Rush Creek Rd., south	1,540	B
Washington St.: South of SR 3	1,550	B	SR 3: Trinity Center Maintenance Station	800	A
Washington St.: South of SR 299	960	B	SR 3: Siskiyou County Line	260	A
S. Miner St.: South of Forest Ave.	2,340	C	SR 36: Lower Mad River Rd., west	930	B
S. Miner St.: North of Oregon St.	2,270	C	SR 36: Forest Glen Maintenance Station	520	A
Bremer St.: South of SR 299	540	A	SR 36: Jct. of Route 3, north	480	A
Martin Rd.: East of SR 299	1,560	B	SR 299: East Limits Salyer, west	4,400	C
Rush Creek Rd.: South of SR 3	800	A	SR 299: Burnt Ranch Rd., west	4,130	C
Airport Rd.: East of SR 3	760	A	SR 299: Del Loma, east	2,570	B
Mary Ave.: South of Airport Rd.	670	A	SR 299: Weaverville, West City Limits	4,910	C
Trinity Dam Blvd.: North of SR 299	960	B	SR 299: Weaverville, Washington St., east	10,980	D
Brady Rd.: North of SR 3	780	A	SR 299: Martin/Nugget Roads, west	8,440	D
Morgan Hill Rd.: East of SR 3	860	A	SR 299: Martin/Nugget Roads, east	7,870	D
Hyampom Rd.: West of SR 3	1,120	B	SR 299: East Jct. SR 3, west	5,420	C
Oak Ave.: South of SR 3	1,840	B	SR 299: East Jct. SR 3, east	4,950	C
Mulligan St. (East): North of SR 3	210	A	SR 299: Lewiston Rd., east	4,230	C
Mulligan St. (West): North of SR 3	500	A	SR 299: Trinity Dam Blvd., east	5,450	C
Glen Rd.: West of Nugget Ln.	1,510	B			
Center St.: East of SR 299	490	A			
Center St.: South of SR 3	830	A			
Weaver St.: East of SR 299	840	A			
Masonic Ln.: South of SR 299	770	A			
Mountain View St.: South of SR 299	890	A			

TABLE E-1.4
2040 LEVEL OF SERVICE ON COUNTY AND CALTRANS ROADWAYS

Trinity County Facilities			Caltrans Facilities		
Route and Location	**2040 Volume[1]**	**LOS**	**Route and Location**	**2040 Volume[1]**	**LOS**
N. Miner St.: South of SR 299	190	A			
Mad River Rd.: South of SR 36	420	A			
Van Duzen Rd.: South of SR 36	590	A			
East Connector: SR 299 to Pioneer Ln.	2,690	C			
East Connector: Pioneer Ln. to Browns Ranch Rd.	2,550	C			
East Connector: Browns Ranch Rd. to SR 3	1,780	B			

Notes: [1] Annual Average Daily Traffic volumes. Level of service results may differ by one level of service during the peak month. The information assumes that the East Connector is in place.
Shading indicates deficient operations.
Source: Caltrans Traffic and Vehicle Data Systems Unit, 2008; Fehr & Peers, 2011

The level of service analysis presented in **Table E-1.4** includes the East Connector. The East Connector project has been approved and is assumed to be in place in 2040. Note that without the East Connector, SR 299 in Weaverville would operate at LOS E in 2040 and Washington Street would operate at LOS D.

POLICY ELEMENT

Regional Goals

Goal 0: Overall Regional Transportation

To provide a safe, reliable, accessible, cost-effective and efficient transportation system consistent with socioeconomic and environmental needs within Trinity County. Updates to the county's Regional Transportation Plan should include an assessment of changes in population, travel patterns, completed improvement projects, and the impacts to the transportation system.

Specific modal goals include:

Goal 1: Streets and Highways

Develop and maintain an efficient and safe system of streets, highways, and bridges that is sensitive to existing and future needs and promotes preservation of the environment, reliable access to communities and enhancement of the economy.

Goal 2: Public Transportation

Provide affordable, reliable, and efficient public transportation options that are consistent with demand and available resources.

Goal 3: Bicycle, Pedestrian, and Other Alternative Modes

Promote alternative mode travel by developing a safe and convenient system of bicycle routes, pedestrian facilities, and trails to connect Trinity County's activity centers and communities consistent with demand and resources.

Goal 4: Aviation

Provide a safe aviation system that meets the community's needs and values through effective use of financial resources.

Goal 5: Goods Movement

Support and promote economic development through the efficient movement of freight to, and through Trinity County.

Goal 6: Tourism

Support tourism throughout the County by developing and maintaining a safe and efficient transportation system.

Goal 7: Environment

Consider the environmental impacts of transportation projects and reduce, minimize or mitigate all impacts to the maximum extent feasible without sacrificing public safety.

Regional and Local Issues

Trinity County is large and sparsely populated with the roadway system consisting of a vast array of aging, narrow roads and bridges. Most of the roads are dead-end, and many isolated communities have only one access route, particularly during the winter season, which brings heavy snowfall in some parts of the county. Unstable geology and steep terrain cause maintenance problems such as erosion, landslides, and rockfall on the roads. Many of these remote roads have no shoulders and minimum travel lane widths. In addition, travel lane widths are continuously lost to erosion on steep terrain, and many roads now have less than two lanes. The roads and bridges are aging and in need of major rehabilitation.

The large geographical area and sparse population of the county presents a problem for the Transit Program as well. It is very difficult to serve such a sparse population with transit services in a cost-effective manner. The Mills-Deddeh-Alquist Act was passed in 1971 (Transportation Development Act). The TDA requires revenues generated by bus fares to equal at least 10 percent of operating costs. Meeting the state required fare-box requirements for Article 4 transit service has become a significant challenge, particularly in very rural, frontier counties such as Trinity County. Performance measures based solely on operating costs do not consider dispersed populations, topography or long distances between communities.

An issue somewhat unique to Trinity County is that over 70% of the land in the County is Federal land, which is not subject to property taxes. These lands include vast areas of National Forest, National Wilderness and Bureau of Land Management land, as well as lands flooded by the Trinity and Lewiston dams. To make up for the loss of property tax revenues, the Forest Service historically paid the County a share of all revenue generated by timber sales on National Forest land to supplement local funding for education services and roads. However, environmental restrictions have reduced timber revenues substantially since the mid 1980's.

Additional Issues

- Bicycle and pedestrian facilities need to be upgraded and expanded to provide a safe environment for non-motorized modes of transportation and to assist in attracting visitors.

- While transit service continues to be an increasingly important component of the county's regional transportation system and an important service to county residents, it is difficult to provide these services in a cost-effective manner.

- Factors in adjacent counties may very well impact the county's regional transportation system in the future as well. Specifically, the population of Shasta County is projected to increase by 36.7 percent over the next 20 years, and increase by 8.6 percent in Humboldt County. In addition, there are proposals to develop a deep-water port in Humboldt County, and proposed/recently constructed improvements to SR 299 over Buckhorn Grade in Shasta County make the drive easier and safer between the Central Valley and the Coast, while also allowing for larger trucks to utilize SR 299. These factors will likely increase future tourism traffic and truck traffic on the Trinity County regional transportation system.

- These problems are exacerbated by the limited funds available for transportation programs and projects on the federal, state and local levels. There are limited local funds available to carry out adequate roadway maintenance programs. At the same time, there is a shortage of state and federal grant funding for roadway and bridge rehabilitation and replacement, as well as other improvements on local roads and state highways.

ACTION ELEMENT

The regional action program for the Trinity County RTP is a compilation of projects already proposed and/or planned for Trinity County, as well as new projects deemed necessary to provide adequate operation of the various transportation systems consistent with the County's transportation goals and policies. To provide acceptable operations along the regional road system, Trinity County proposes a series of improvements to be sponsored by the State, the County, and/or the Federal government. The highest priority improvements to the regional road system are linked to the roadway needs identified in Chapter 2 and the Goals and Objectives from Chapter 3. The type of improvement, implementation cost, proposed construction year, priority and potential sources of funding are identified in the project tables by mode in Appendix 4A through 4G.

When transportation alternatives are being considered, interregional highway corridors such as SR 299, SR 36 and SR 3 remain primary candidates because Trinity County is extremely rural, and nearly all people and commodities leave and enter the county, and travel from one community to another, via the state highway system. Alternatives involving rail are quite limited because of prohibitive development costs, steep grades and environmental concerns. Other non-auto alternatives are encouraged as funding and demand allow. Examples are public transit, bicycle and pedestrian, and air travel to and from the more populated areas. Trinity County contains no commercially viable navigable waterways.

Noteworthy Changes to Project Lists: 2005 vs 2010 RTP

New projects have been added to the lists of short, medium and long-range projects proposed in the 2010 RTP. Projects have been suggested by Caltrans and Transportation Commission staff and by members of the Board of Supervisors/ Transportation Commission, or requested by the public. Some long-range or Unconstrained projects included in the 2005 RTP have been deleted due to lack of support or loss of the proposed funding source.

The Highway Bridge Program (HBP) of replacing or rehabilitating bridges would continue routinely, prioritized based on the Caltrans bi-annual bridge inspections. Safety projects under the Highway Safety

Improvement Program (HSIP) are competitively awarded based on accident records. Programs such as the State Transportation Improvement Program (STIP) and Transportation Enhancement (TE) provide the opportunity for Regional Transportation Planning Agencies to develop eligible projects based on transportation needs identified by the traffic studies in this, and previous, RTPs, or desires expressed by the community.

A summary of the more noteworthy new projects that have been proposed in this RTP follows:

- Traffic Signal on Highway 299 in Weaverville at Washington Street; mid-term
- Traffic Signal or Roundabout at Forest Avenue/ Garden Gulch Street; long-term
- Traffic Calming on Highway 299 at Big Flat; mid-term
- Two-way Center Street in Weaverville from Court Street to Highway 3; near-term
- Local Road rehabilitation on residential streets in Trinity Center and Lewiston
- Turnouts and/or passing lanes on Highway 3, Weaverville to Coffee Creek
- Class I bicycle/pedestrian path on Highway 3, Trinity Center to Trinity Lake KOA
- Curve realignment and/or passing lanes on Highway 3 at Hayfork Summit
- Cooperative projects with adjacent Counties to rehabilitate East Side/Trinity Mountain Road (Shasta County) and Peak Road (Humboldt County)
- Realign Fountain Ranch Road away from the Trinity River
- Lighted heliport at Weaverville Lonnie Pool Airport

Projects that have not been carried forward from the 2005 RTP include paving and chip seal projects in the Trinity Pines area. These projects were initiated with grants from the North State Unified Air Quality Management District to reduce emissions from unpaved roads. However, this grant program has been discontinued, so these projects have been dropped from the project lists. If a similar funding source becomes available, the County can again pursue these projects.

FINANCIAL ELEMENT

Fiscal constraint is one of the foundational concepts of the 2010 RTP. As such, the financial plan is a key component of the document. Given the nature of the current economy, fiscal constraint is exceptionally important. As part of the 2010 RTP effort the TCTC took a strict posture on this issue. Needs will always exceed available funding; however, it is smart planning to maximize benefit of each available dollar and to prioritize projects based on the funding availability, not strictly need. To this degree, project lists reflect fiscal constraint meaning that the projected revenues from all sources cover the total project costs for Tier 1, Tier 2, and Tier 3 projects.

Expected Revenues

Table E-1.5 summarizes the projected revenues for all sources. The revenue estimate spreadsheet which shows reasonably anticipated revenues and forecasts for each source by year is found in Appendix 5A.

TABLE E-1.5
TRINITY COUNTY PROJECTED REVENUES

Revenue Source	Short-Range	Mid-Range	Long-Range	Total
Local				
Transit Fares	$150,303	$405,352	$270,687	**$826,342**
Local Transportation Fund (LTF)	$985,000	$2,070,000	$1,050,000	**$4,105,000**
Airport Income	$311,629	$926,220	$500,240	**$1,738,089**
Subtotal	***$1,446,932***	***$3,401,572***	***$1,820,927***	***$6,669,431***
State				
State Transportation Improvement Program (STIP)	$17,728,000	$19,200,000	$6,600,000	**$41,928,000**
State and/or Federal Aviation (AIP)	$2,850,000	$4,345,000	$2,905,000	**$10,100,000**
Prop 1B / PTMISEA	$286,174	$100,000	$0	**$386,174**
Prop 1B	$1,300,000	$0	$0	**$1,300,000**
State Transit Assistance (STA)	$274,597	500,000	250,000	**$1,024,597**
Highway Users Tax (HUT)	$11,830,900	$23,661,800	$11,830,900	**$47,323,600**
BTA/SRTS	$0	$1,750,000	$0	**$1,750,000**
Subtotal	***$34,269,671***	***$49,556,800***	***$21,585,900***	***$105,412,371***
Federal				
Federal Forest Receipts	$10,701,627	$8,475,000	$375,000	**$19,551,627**
Match Exchange (STP)	$1,759,560	$3,519,120	$1,759,560	**$7,038,240**
Federal Transit (5311)	$279,611	$612,000	$360,000	**$1,251,611**
Federal Transit (5311F)	$780,000	$1,795,000	$995,000	**$3,570,000**
Forest Highways	$18,975,000	$11,100,000	$0	**$30,075,000**
Transportation Enhancement (TE)	$3,316,000	$7,040,000	$6,600,000	**$16,956,000**
Highway Bridge Program (HBP)	$13,318,000	$5,511,878	$4,080,000	**$22,909,878**
Highway Safety Improvement Program (HSIP)	$435,000	$1,349,197	$280,000	**$2,064,197**
Subtotal	***$49,564,798***	***$39,402,195***	***$14,449,560***	***$103,416,553***
Total all Sources	***$85,281,401***	***$92,360,567***	***$37,856,387***	***$215,498,354***

Source: Trinity County Transportation Department; Fehr & Peers 2010

As shown, short-range revenues from all sources are approximately $85.3 million, mid-range $92.3 million and long-range $37.8 million for a total of all sources of $215.5 million.

Cost Summary

Table E-1.6 provides a summary of all capital project costs proposed by the LTC. Projects are categorized as Roads/Bridge; Transit; Non-Motorized (bike and pedestrian); and Aviation. Tier 1 project costs for the 2010 RTP (excluding SHOPP expenditures countywide) total approximately $63.6 million; Tier 2 costs total $52.6 million; Tier 3 costs are estimated at $27.7 million**.** The total for all RTP capital projects is approximately **$143.9 million. Table E-1.6** also provides the estimated costs for O&M for

roads/bridges over the life of the RTP, approximately $71 million. The combined total (with O&M) is **$215 million** through 2030.

TABLE E-1.6
SUMMARY OF TOTAL RTP PROJECT COSTS

Costs	Short-Range (0-5 Years)	Mid-Range (6-15 Years)	Long-Range (16-20 Years)	Total	Percent of Total
Roads/Bridge	$49,983,000	$39,542,000	$13,216,000	*$102,741,000*	71%
Transit Capital/O&M	$2,622,000	$5,508,000	$3,100,000	*$11,230,000*	8%
Non-Motorized	$8,072,000	$5,360,000	$4,868,000	$18,300,000	13%
Aviation	$2,892,000	$2,240,000	$6,550,000	*$11,682,000*	8%
Total	**$63,569,000**	**$52,650,000**	**$27,734,000**	**$143,953,000**	
Total Operations & Maintenance (Road and Bridge)	**$23,329,000**	**$35,074,000**	**$12,646,000**	**$71,049,000**	
TOTAL CAPITAL PLUS O&M	**$86,898,000**	**$87,724,000**	**$40,380,000**	**$215,002,000**	

Source: Trinity County, 2010

Comparison of RTP Costs to Expected Revenues

The 2010 Trinity County RTP is fiscally constrained through 2030 based on revenue assumptions in this Chapter. **Table E-1.7** provides a comparison of total costs and revenues through 2030. Overall, the RTP shows a total project cost of $215 million for all modes and total revenues of $215.6 million to pay for those costs. The $600,000 surplus will change as projects advance to actual construction stage and actual revenue and cost sources are refined through federal and state budget allocations. The RTIP includes the projects that make up the first four years of the RTP. The shortage of funds in the Roads/Bridges category shows that some Federal funding sources require a County match. The match would be derived from the excess funds shown in Operations and Maintenance, which are discretionary Road Funds that would otherwise be used for Operations and Maintenance.

TABLE E-1.7
TOTAL COST VS. TOTAL REVENUES

Modes	Total Costs	Total Revenues	Capacity (+/-)
Roads/Bridges	$102,800,000	$99,900,000	-$2,900,000
Transit Capital/O&M	$11,200,000	$11,200,000	$0
Non-Motorized	$18,300,000	$18,700,000	+$400,000
Aviation	$11,700,000	$11,800,000	+$100,000
O&M (Road/ Bridges)	$71,000,000	$74,000,000	+$3,000,000
Total Project	**$215,000,000**	**$215,600,000**	**+$600,000**

Source: Trinity County 2011

1. INTRODUCTION

The Trinity County Transportation Commission (TCTC) is the designated Regional Transportation Planning Agency (RTPA) for Trinity County. The Trinity County Transportation Commission (TCTC) is established by Section 29535 of the Government Code and organized per Chapter 3, Title 21 of the California Administrative Code. Section 29535 of the Government Code establishes a local transportation commission that is designated as a Regional Transportation Planning Agency (RTPA) responsible for area wide transportation planning in Trinity County. These responsibilities include:

- Administration and Management
- Transportation Planning and Regional Coordination
- Transit Alternatives and Improved Air Quality
- Claimant Funding
- Grant Applications and Management

The RTP serves as the planning blueprint to guide transportation investments in the County involving local, state, and federal funding over the next thirty years. The Regional Transportation Plan (RTP) was last updated by the TCTC in 2005. The horizon year for this RTP update is 2030. Transportation improvements are categorized as short-term (0-5 years), midrange (6-15 years) or long-term (16-20 years).

The overall focus of the RTP is directed at developing a coordinated and balanced multi-modal regional transportation system that is financially constrained to the revenues anticipated over the life of the plan (2030). The coordination focus brings the County, local communities, governmental agencies, Indian Tribal Governments, and citizens into the planning process. The balance is achieved by considering investment and improvements for moving people and goods across all modes including roads, transit, bicycle, pedestrian, goods, railroad, and aviation.

A key issue for Trinity County is the deteriorating condition of the region's local streets and roads and the shortfall of funding needed to provide the level of maintenance necessary to prevent further deterioration as identified in the 2005 Regional Transportation Plan (RTP).

The 2010 RTP update is being completed in accordance with the most recent adopted Regional Transportation Plan Guidelines (April 2010). The 2010 Trinity County RTP provides consistency with the new 2010 guidelines through the inclusion of program-level outcome-based performance measures, an expanded public involvement process, the addressing of Climate Change and Green House Gas Emissions, consistency with the 2030 California Transportation Plan (CTP), consistency with the California Highway Strategic Safety Plan (2006), a financial plan that covers operating costs, maintenance of the transportation system, preservation costs, new capital investments, and close linkages to the Regional Transportation Improvement Program (RTIP), the Interregional Transportation Improvement Program (ITIP) and the Federal Transportation Improvement Program (FTIP). Opportunities and constraints for reducing and/or monitoring green house gas emissions were addressed through the RTP process.

REGIONAL SETTING

Trinity County is located in the northwestern portion of California (**Figure 1**). The geography of the County is defined by the Trinity Alps, South Fork Mountain and other ridges of the Klamath Mountains and Coastal Range, carved by the deep canyons and valleys of the Trinity, Van Duzen, and Eel Rivers. There is an extensive wild and scenic river system, and the terrain is rugged and forested, with the highest points at around 9,000 feet. According to the 2000 Census, the county has a total area of 3,208 square miles of which, 3,179 square miles is land and 29 square miles is water. There are no incorporated cities or towns in

Trinity County. Trinity County's Census Designated Places (CDPs) include Hayfork, Lewiston, and Weaverville. Smaller communities include Big Bar, Burnt Ranch, Douglas City, Junction City, Salyer, Trinity Center, Hyampom, Mad River, Ruth and Coffee Creek. Trinity County is bounded by five counties:

1. Mendocino County on the south
2. Humboldt County on the west
3. Siskiyou County on the north
4. Shasta County on the east
5. Tehama County on the southeast

The county seat and largest town is Weaverville, with approximately 3,500 people. The major highways in the County include State Route 3, State Route 36, and State Route 299. Four national protected areas are found in Trinity County including part of the Mendocino National Forest, part of the Shasta-Trinity National Forest, part of the Six Rivers National Forest, and part of the Whiskeytown-Shasta-Trinity National Recreation Area.

DEMOGRAPHIC PROFILE

The following demographic trends are used as planning indicators for updating the RTP. They are useful in updating the opportunities and needs for improving the transportation system.

Population

The U.S. Census Bureau reported Trinity County's population to be 13,063 in 1990 and 13,022 in 2000. In January 2008 the population increased slightly to 13,935 and in January 2009, the population is reported at 13,959 (reported by the California Department of Finance (DOF)). The 2010 U.S. Census Report revealed a total county population of 13,786. This represents a 5.5 percent increase over 1990 or slightly less than 0.28 percent annual growth since 1990. The distribution of population for 1990, 2000, 2008, 2009, and 2010 is shown in **Table 1.1**. US Census data for 1990, 2000, and 2010 is provided in Appendix 2A.

TABLE 1.1
TRINITY COUNTY TOTAL POPULATION

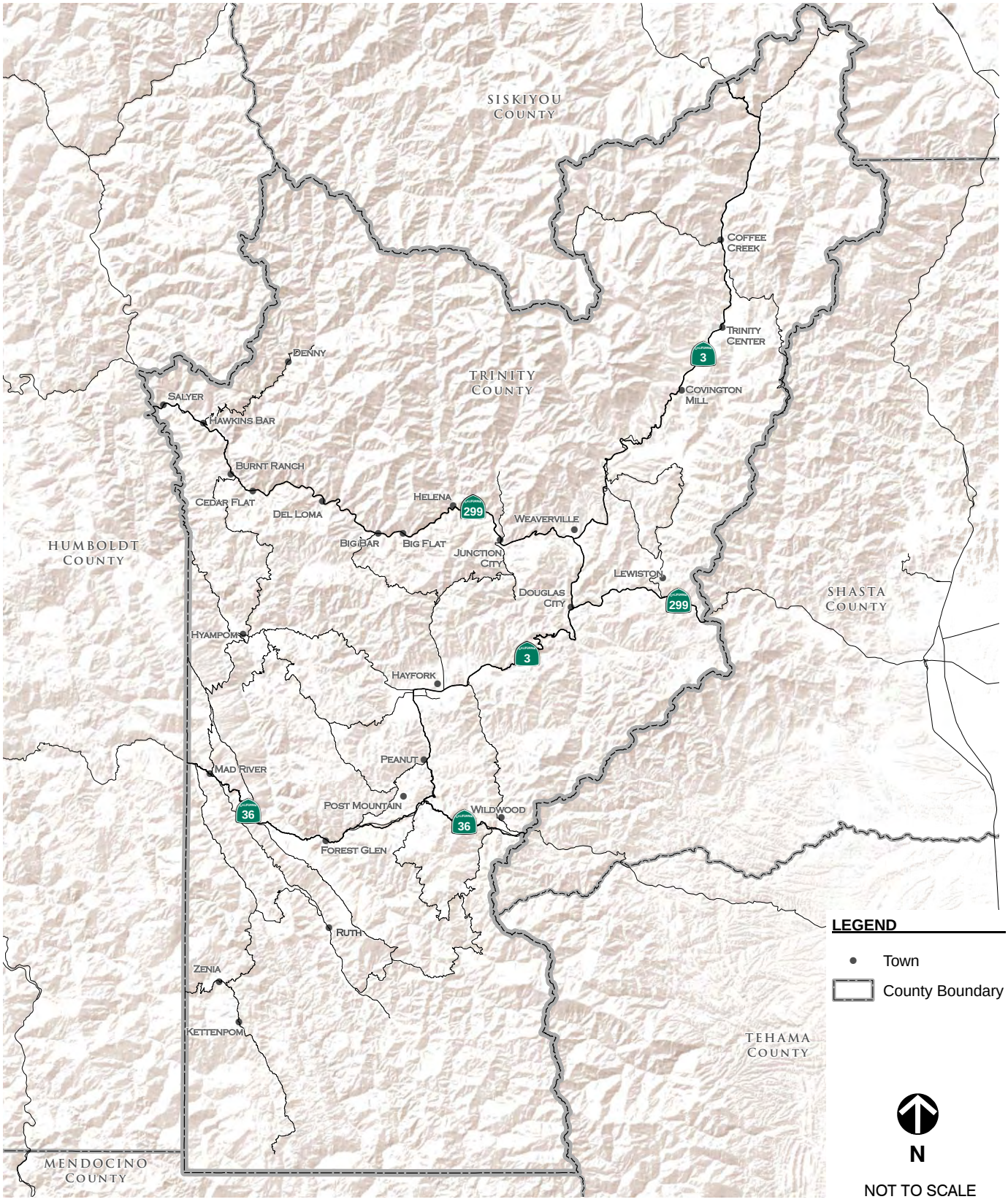
Population in Year					Percent Change 1990 - 2010	Annual % Change
1990	2000	2008	2009	2010		
13,063	13,022	13,935	13,959	13,786	5.5%	0.28%

Sources: U.S. Census Bureau, State of California, Department of Finance, Table E-4 City/County Population Estimates; DOF Research Unit; Trinity County 2008-09 Economic and Demographic Profile, Center for Economic Development, California State University, Chico

Age of Population

Population by age group is estimated by the DOF on a periodic basis. The age distribution in a given area affects the area's school system, public services, and overall economy. The largest age group in Trinity County since 2002 is 50-59, with 2,620 people within this age group in 2008. The 50-59 age group is 18 percent of the County's population, which is 6 percent higher than California's average. Approximately one third of the County's residents are over 60 years, which is also higher than the State average.

By 2015, all age groups, with the exception of the 30-39 and the 60-69 groups, are expected to decrease. The 30-39 age group is projected to increase approximately 36% and the 60-69 groups is projected to increase by 21%. However, by 2030, some declines are projected in the 20-29 age group, 30-39 groups, 40-49 groups and 50-59 groups. Persons over 70 are projected to increase significantly during the life of the RTP.



FEHR & PEERS
TRANSPORTATION CONSULTANTS

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TRINITY COUNTY MAP

FIGURE 1

Per Capita Income

Per Capita income is one of the primary measures of economic well-being in a community. Changes in per capita income tend to show trends in a county's standard of living, or the availability and distribution of economic resources. Average per capita income in 2000 (adjusted for inflation) in Trinity County was $21,850. In 2005, average per capita income was reported at $22,723. By 2015, average per capita income is projected to be $26,500 and by 2030 it is projected to increase to approximately $40,000 (2008 Trinity County Economic & Demographic Profile, Center for Economic Development, California State University, Chico). The trend shows an average annual increase of 1.7% between 2000 and 2030.

Median Household Income

Median household income is the income level at which half of the county's households earn more and the other half earn less. It is considered a better measure of average income than per capita income when evaluating income growth among all economic classes. In 2000, the median household income in Trinity County was $28,752 compared to the state average of $46,836. In 2007, the median household income in the County increased 23% to $35,439 while the state's average increased 28% to $59,928.

Trinity County's total average 2009 employment through October was 3,970 workers out of a total labor force of 4,880. This represents an 18.6% unemployment rate. Over the past ten years the unemployment rate has fluctuated from a low of approximately 9% in 2001 to a high of 18.6% in 2009 with the unemployment rate at approximately 10% for much of the decade. The Trinity County unemployment rate is higher than the California unemployment rate of 12.9% (in October 2009). Trinity County's unemployment rate has historically been 4% to 5% higher than the California rate. **Table 1.2** shows total employment for the County and employment for major industries within the county.

TABLE 1.2
TRINITY COUNTY JOB GROWTH

Employment by Year				
Industry		**2000**	**2005**	**2009**
Total Employed Population		***4,630***	***4,670***	***3,970***
Employment in Major Industries	Natural Resources, Mining, & Construction	150	160	70
	Manufacturing	200	210	220
	Trade, Transportation, & Utilities	380	380	300
	Educational & Health Services	200	310	170
	Leisure & Hospitality	330	400	290
	Government/Public Administration	1,510	1,440	1,350

Source: California Employment Development Department, Labor Market Information

Housing Stock

In 2000, Trinity County reported 7,980 housing units with an average occupancy rate of 2.29 persons per household (California Department of Finance). This number is slightly below the State average of 2.95 persons per household. In 2007, housing units grew slightly to 8,416 reflecting a 5.5% increase since 2000 (California Department of Finance). Housing units are projected to continue to grow at a modest rate through 2030. The small increases reflect the relative slow growth in population and employment throughout the County. **Table 1.3** displays the number of building permits issued for residential uses (single family, multi-family, and mobile homes) over the last ten years for communities in Trinity County.

TABLE 1.3
TRINITY COUNTY BUILDING PERMITS PER YEAR FOR RESIDENTIAL USES

Location	Building Permits Issued by Year										Total Issued 2000-2009*
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009*	
Big Bar	0	0	0	0	0	0	1	0	0	0	1
Big Flat	0	0	0	0	0	0	0	0	0	0	0
Burnt Ranch	1	0	0	1	0	2	1	1	3	3	12
Coffee Creek	4	1	4	3	1	3	3	3	0	1	23
Covington Mill	0	1	0	0	0	0	4	1	2	0	8
Denny	0	0	0	0	0	0	0	0	0	0	0
Douglas City	6	7	3	10	16	11	10	10	0	2	75
Hawkins Bar	1	1	1	0	5	4	2	0	1	1	16
Hayfork	5	8	6	18	13	26	17	16	7	6	122
Helena	0	0	0	0	0	0	0	0	0	0	0
Hyampom	1	1	1	2	3	0	6	0	1	2	17
Junction City	6	4	5	3	10	7	6	4	2	0	47
Kettenpom	0	0	0	0	0	0	0	0	0	0	0
Lewiston	5	6	4	16	12	27	17	7	6	2	102
Mad River	2	1	5	1	1	3	6	5	3	0	27
Peanut	0	0	0	0	0	0	0	0	0	0	0
Ruth	5	0	1	1	4	6	6	6	1	3	33
Salyer	2	6	6	1	0	6	4	2	2	0	29
Trinity Center	7	6	6	4	13	15	2	6	2	2	63
Trinity Pines	0	0	0	0	0	2	0	0	0	2	4
Trinity Village	0	0	0	1	1	0	0	0	0	1	3
Weaverville	8	15	17	19	29	26	24	13	7	10	168
Wildwood	0	0	0	2	0	0	2	0	0	0	4
Zenia	0	0	0	1	3	2	1	1	0	1	9
TOTAL	**53**	**57**	**59**	**83**	**111**	**140**	**112**	**75**	**37**	**36**	**873**

Notes: * Total residential building permits issued through October 2009 excluding permits for replacement of structures lost to fire
Source: Trinity County Building Department

Travel Patterns

The regional movement of people within Trinity County can be classified into three broad categories: commute, recreational, and tourism. The County commute traffic consists mostly of automobile traffic from the smaller communities and rural areas to Weaverville. **Table 1.4** provides the inter-county commute patterns identified in the 2000 Census for Journey-to-Work data.

TABLE 1.4
TRINITY COUNTY INTER-COUNTY COMMUTE PATTERNS

County/Location	County of Employment for Trinity County Residents	County of Residence for Trinity County Workers
Humboldt	7.7%	2.0%
Mendocino	0%	0%
Shasta	4.3%	3.7%
Siskiyou	0.2%	0.7%
Tehama	0.2%	0.4%
Trinity	83.3%	91.0%
Other locations (within California)	3.8%	1.2%
Other locations (outside of California)	0.5%	0.9%

Source: U.S. Census 2000

PURPOSE OF THE PLAN

As defined by the 2010 RTP Guidelines, the purpose of the regional transportation plan is to accomplish the following objectives:

1. Provide an assessment of the current modes of transportation and the potential of new travel options within the region
2. Predict the future needs for travel and goods movement
3. Identify and document specific actions necessary to address the region's mobility and accessibility needs
4. Identify guidance and documentation of public policy decisions by local, regional, state and federal officials regarding transportation expenditures and financing
5. Provide information for the development of the Federal Transportation Improvement Program (FTIP), the Regional Transportation Improvement Program (RTIP), and the Interregional Transportation Improvement Program (ITIP)
6. Help identify project purpose and needs
7. Provide estimates of emissions impacts for demonstrating conformity with the air quality standards identified in the State Implementation Plan (SIP)
8. Promote consistency between the California Transportation Plan, the regional transportation plan and other transportation plans developed by cities, counties, districts, private organizations, tribal governments, and state and federal agencies in responding to statewide and interregional transportation issues and needs

9. Involve the public, federal, State and local agencies, as well as local elected officials, early in the transportation planning process so as to include them in discussions and decisions on the social, economic, air quality and environmental issues related to transportation

The TCTC has prepared this 2010 RTP update based on these objectives consistent with the 2010 RTP Guidelines (adopted April 7, 2010).

REPORT ORGANIZATION

The RTP is divided into the following seven sections:

1. Introduction – Describes demographic changes that have occurred in the County since the 2005 RTP Update, and sets the stage for consistency with the 2010 RTP guidelines, the RTIP, FTIP and the ITIP.

2. Assessment of Needs – Identifies the existing and future deficiencies of the Trinity County transportation system by mode. It includes a description of the methodology used to develop future traffic projections and to analyze traffic operations and level of service (LOS) under existing and future conditions
.
3. Policy Element – Establishes the goals, objectives, and policies that address transportation issues by mode. In addition, Statewide and regional issues are discussed based on the financial constraints facing the County. The policy element addresses short-term (0-15-years) and long-term (16-40 years) objectives and includes a summary of key performance measures to evaluate RTP funding alternatives.

4. Action Element – Describes the State and regional transportation planning processes, as well as the process undertaken to evaluate various improvement options. The Action Element summarizes plan assumptions, past accomplishments, modal alternatives, and the purpose, need, and scope of recommended projects. Specific improvements are identified by mode for short-range and long-range capital programs designed to meet the anticipated needs of the County's regional circulation system. Implementation cost estimates, construction dates and sponsoring agencies are also identified.

5. Financial Element – Lists the costs, revenues, deficits/surpluses for each transportation mode. The 2010 Guidelines require that the RTP be fiscally constrained to the projected revenues. In the cases where a funding deficit does exists, a discussion of those improvements that are financially feasible is presented along with an assessment of the resulting impacts of the funding shortfall and projects that must be removed.

The Financial Element must show consistency with the four-year STIP fund estimate adopted by the California Transportation Commission (CTC), the RTP goals, policies, and objectives, and the projects included in the RTIP, the ITIP and FTIP.

6. Environmental Review – Describes the environmental review processes and procedures, and consultation process to be followed by the County in evaluating the program level impacts of the RTP.

7. Appendices – Provide supplemental information including Level of Service, Project Lists, California Transportation Plan themes, California Strategic Highway Safety Plan, Public Involvement Procedures, and the new RTP Checklist indicating where specific elements of the RTP are located.

A glossary of terms and acronyms used throughout the RTP is provided in Appendix 1A.

TRANSPORTATION/LAND USE INTEGRATION

Transportation System Goal 1 in the Trinity County General Plan Circulation Element is to *"Provide for the long-range development of the county's roadway system that is consistent with adopted land use patterns, ensure the safe and efficient movement of the people and goods, minimizes impacts on the attractiveness of the community, meets environmental and circulation objectives, and implements funding strategies for*

construction, improvement, and maintenance of existing and new roadways." These desired outcomes are consistent with the County's overall mission to serve the public with integrity in an effective and efficient manner in order to create and sustain a safe, healthy, and productive environment. These transportation/land use principles are reinforced in the General Plan Circulation Element through the following objectives and policies:

Objective 1.1 – Establish consistency and/or linkages between transportation programs and land use plans

> Policy 1.1.A – Update the Trinity County General Plan, Regional Transportation Plan, and/or Community Plans to provide consistency with the findings and/or recommendation of traffic studies, as appropriate.
>
> Policy 1.1.B – Consider the Trinity County General Plan, Regional Transportation Plan, and/or Community Plans when assessing potential transportation projects.

Objective 1.2 – Determine and, as appropriate, address the probable land use impacts of transportation projects prior to approving or funding the projects.

> Policy 1.2.A – Location, design and development of transportation projects shall be consistent with the adopted land use policies of the county.
>
> Policy 1.2.B – Identify potential impacts and/or conflicts between potential growth-inducing transportation projects and the adopted land-use policies of the county.
>
> Policy 1.2.C – Require mitigation for transportation projects with potentially significant impacts to existing or planned land uses in the county.

The RTP promotes the transportation/land use integration and recognizes that future development in Trinity County should occur in areas that will be easiest to develop without high public costs, have the least negative environmental effect, and that will not displace or endanger the county's critical natural resources and agricultural and forest activities. This approach is consistent with the California Wildlife Plan (2006), results in lower cost for improvements and increased operational efficiency of the transportation system because the system will be sized appropriately to reflect more compact growth in near proximity to existing or planned services. The advantages of compact growth extend to higher levels of mobility, connectivity, and accessibility for the elderly and disabled, and to helping manage the growth in vehicle miles traveled (VMT) and its subsequent direct relationship to trip length and air quality.

COORDINATION

The RTP Guidelines place an emphasis of coordinating with citizens, stakeholders, and government entities. As part of this RTP update numerous community members were contacted and a variety of meetings and public workshops were held. This section provides a summary of the coordination efforts that took place during this RTP update process. Appendix 1B provides information related to coordination that took place during this RTP update.

Document Review

The following documents were reviewed in conjunction with the RTP update.

1. Trinity County Transit Development Plan – Draft Final Report February 2009 (Nelson/Nygaard)
2. Trinity County Coordinated Public Transit – Human Services Transportation Plan – Final Plan October 2008 (Nelson/Nygaard)
3. Trinity County Bikeways Master Plan – April 2004 (Alta Planning & Design)
4. Trinity County 2005 Regional Transportation Plan Final Report – October 2005 (LSC)

5. Trinity County 2005 Regional Transportation Plan – Technical Memorandum One – March 2005 (LSC)
6. Trinity County 2005 Regional Transportation Plan – Technical memorandum Two – May 2005 (LSC)
7. 2010 Regional Transportation Improvement Program – February 2010
8. Trinity County Economic & Demographic Profile – 2008 (Center for Economic Development at Chico State)
9. Airport Layout Plan & Report – Hayfork – September 2008 (Coffman Associates, Inc)
10. Weaverville Airport Master Plan/New Site Feasibility Study – 2008 (Coffman Associates, Inc)
11. Trinity County General Plan Circulation Element – May 1, 2002 (LSC)
12. Negative Declaration – Initial Study and Environmental Checklist for the Trinity County General Plan Circulation Element Update – November 2001 – LSC
13. State Route 299 Transportation Concept Report – September 2009 (Caltrans District 2)
14. Trinity County General Plan Noise Element – October 21, 2003 (Brown-Buntin Associates, Inc.)
15. Trinity Center Airport Layout Plan Report – July 2008 (Coffman Associates, Inc.)
16. Ruth Airport Layout Plan and Report – July 2008 (Coffman Associates, Inc.)
17. Weaverville Basin Traffic Circulation Study Final Report – October 1998 (LSC)
18. Trinity County General Plan Safety Element – March 2002 (Trinity County Planning Department)
19. Weaverville Community Plan – September 1990 (adopted as part of Trinity County General Plan)
20. California Aviation System Plan (2006)
21. Shasta-Trinity National Forest Motorized Travel Management Plan – Record of Decision (March 2010).
22. Water Quality and Habitat Protection Manual for County Road Maintenance – Chapter 3 (Maintaining the Roads – 2002)
23. Caltrans Interregional Transportation Strategic Plan - 1998
24. Goods Movement Action Plan – 2007 (California Business, Transportation and Housing Agency and California Environmental Protection Agency)

Public Participation

The 2010 RTP Guidelines place a special emphasis on public participation and input during the RTP development process. The TCTC makes a concerted effort to solicit public input in the planning process within the County.

During the RTP development process the RTP Steering Committee Meetings were open to the public. Three meetings were held in Weaverville. Public input meetings were also held during August and September 2011 in Trinity Center, Mad River, Weaverville, and Hayfork to solicit input on the Draft RTP.

In addition, the following are ongoing efforts in the County:

- Citizens are encouraged to attend and speak at TCTC and SSTAC meetings on any matter included for discussion at that meeting, or any other matter of public interest

- The public is notified and encouraged to participate in the Unmet Transit Needs process and hearings are held by the TCTC on transit related matters

- All studies conducted by the TCTC are either adopted or accepted following an advertised public review period and a public hearing. This process will continue by the TCTC during the RTP update process.

Coordination with Trinity County Government

The update to the RTP will continue the coordination efforts between the following governmental agencies, advisory committees, and the public:

- The Trinity County Transportation Commission (TCTC) will oversee the update to the RTP. The TCTC consists of five Trinity County Supervisors and is supported by a technical staff from the County Department of Transportation.

- The RTP Technical Advisory Committee (TAC) is responsible for reviewing RTP related work products and providing input to technical documents and processes. The TAC consists of County Engineering and Planning Department technical staff, and the Caltrans District 2 Planning Division Chief.

- The Social Service Transportation Advisory Council (SSTAC) is responsible for completing the "unmet transit needs" assessment and providing the results with recommendations to the TCTC. The SSTAC is required by the section 99238 of the Public Utilities Code and the Transportation Development ACT (TDA). Members consist of appointed citizens representing transit passengers, elderly, people with disabilities, and others with limited mobility.

- The RTP Steering Committee consists of a variety of stakeholders including the Trinity County Sheriff's Department, the TCTC, the SSTAC, Resource Conservation District, Trinity County Chamber, Sierra Pacific Industries, Caltrans District 2, and the Trinity County Department of Transportation.

- California Department of Transportation (Caltrans) is responsible for the design, construction, maintenance and operation of the State Highway System. Assembly Bill 69 (1972) established the basic framework for Caltrans, which has 12 district offices in California. Trinity County is located in Caltrans District 2, with offices in Redding. Various District 2 staff members serve as liaisons to the TCTC, depending upon the activity or project being considered.

Coordination with Other Counties

On August 17, 2010 the TCTC signed the Memorandum of Agreement North State Super Region provided in Appendix 1C. The Agreement was made between the sixteen California counties of Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Nevada, Plumas, Sierra, Siskiyou, Shasta, Tehama, and Trinity that share similar planning issues of a rural nature which include: a shortfall in transportation infrastructure funding, hard hit economies, and population growth. The *North State Super Region* establishes a partnership of the Regional Transportation Planning Agencies (RTPAs) for coordinated planning, to influence state and federal policy, and to support funding and grants for partner transportation agencies.

Coordination with Community Partners and Stakeholders

Caltrans District 2

The RTP was coordinated with Caltrans District 2 during its preparation. Potential projects from the SHOPP program and well as other planning efforts (Caltrans Interregional Transportation Strategic Plan and the Goods Movement Action Plan) were reviewed. Appendix 4A contains the State Highway Projects included in this plan.

US Forest Service

The Forest Service operates vast areas of National Forest in Trinity County, with an extensive network of roads. The County contains parts of the Shasta-Trinity National Forest, Six Rivers National Forest and the Shasta-Whiskeytown National Recreation Area. The Trinity County Department of Transportation attends quarterly meetings with representatives of the road network from each of these Forests, as well as adjacent Counties with lands in these Forests. Outside of the formal meetings, communication continues as needed throughout the year.

Indian Tribal Governments

The 2010 RTP Guidelines and SAFETEA-LU require the RTP process to meet the federal and state requirement to consult with and consider the interests of Indian Tribal Governments in the development of transportation plans and programs, including funding of transportation projects accessing tribal lands through state and local transportation programs.

This RTP update actively encouraged the Native American tribal governments in Trinity County to participate in the planning process through written communication and personal telephone contacts. Each tribal government in the County was notified of and invited to participate in the planning process through an introductory letter sent by the County. Follow-up telephone calls were made to solicit transportation issues and projects. Tribal members were encouraged to express their concerns and recommendations on transportation issues during the process. In addition, copies of the draft RTP were sent to each tribal government for their review and comment prior to adoption by the TCTC.

For the 2010 RTP update, responses have been provided by two tribes to date – The Wintu Educational and Cultural Council (Marilyn Delgado, Chair); and the Tsnungwe Council (Dena Magdalena, Elder). The Tsnungwe Tribe likes the recent change in the downriver Transit route to three days per week, and would welcome additional service during the week.

The contact information for each tribal government is listed in **Table 1.5.**

TABLE 1.5
FEDERALLY RECOGNIZED TRINITY COUNTY INDIAN TRIBAL GOVERNMENTS
REGIONAL TRANSPORTATION PLAN CONTACTS

Tribal Government	Telephone	Address	Contact Person
Nor Rel Muk Nation	530.623.4940	P.O. Box 1967 Weaverville, CA 96093	Marilyn Delgado (Chair)
Wintu Educational and Cultural Council	530.628.5930	P.O. Box 483 Hayfork, CA 96041	Robert Burns
The Tsnungwe Council	530.629.4758	P.O. Box 373 Salyer, CA 95563	Dena Magdaleno, Elder
Round Valley Indian Tribe	707.983.6126	P.O. Box 448 Covelo, CA 95128	
Hoopa Valley Indian Tribe	530.625.4211	P.O. Box 1348 Hoopa, CA 95546	

Notes: Each Tribal Government was contacted in May/June 2009 via telephone or letter.
Source: Native American Heritage Commission, Trinity County Planning/Transportation Department

Steering Committee Meetings

A summary of the agency and steering committee meetings held as part of the RTP update process are described as follows:

April 29, 2009: A project kick-off meeting was held with Fehr & Peers (Consultant) and Trinity County Staff in Weaverville at the Trinity County Transportation Department to discuss the process for updating the RTP. During the meeting, the roles and responsibilities and lines of communication for the update process were finalized. The following agenda topics were discussed:

- Information needs and list of relevant planning documents to be reviewed
- Land use growth assumptions
- Geographic Information System data files and mapping
- Existing data on roadway segments and planned roadway improvements
- Traffic counts to update existing traffic volume information
- Existing airport planning documents
- Relevant contacts for the RTP update process
- Composition of the Steering Committee

It was agreed that a special effort will be made by the Consultant and County to include the tribal governments, trucking community, agricultural community, law enforcement, and Trinity County resource agencies in the planning process. A list of contacts and interested parties was provided by the County. An introductory memorandum and/or personal telephone call were made to individuals on the list. A copy of the introductory memorandum and the list of contacts are included in Appendix 1D.

July 30, 2009: Steering Committee Meeting #1 was held at the Weaverville Library. The consultant provided an overview of the RTP planning process and a summary of existing conditions. The group conducted a brainstorming session titled "What Should Our Transportation System Look Like", and discussed growth projection assumptions. A copy of the meeting materials and meeting summary is provided in Appendix 1E.

October 19, 2009: Steering Committee Meeting #2 was held at the Weaverville Library. The meeting began with a guest speaker from the US Postal Service, Mr. Gerry Heinan, Weaverville Postmaster. Mr. Heinan discussed mail delivery options in Trinity County and indicated that home delivery was not an option at this time due to economic conditions. The consultant then led a discussion on the updated RTP goals and polices including level of service policies. Next, the consultant discussed the travel demand model update and information related to population growth in Trinity County. Overall, the committee agreed that 0.8% per year population growth was reasonable and appropriate. (*Note that the 2010 Census data was released in 2011, after the Project Steering Committee meetings. Since the 2010 population data became available, the Transportation Commission decided to use the population growth rate between 1990 and 2010 Census data (0.28% per year).)*

The committee also participated in an activity to identify areas that will experience growth over the next 30 years. A copy of the meeting materials and meeting summary is provided in Appendix 1E.

March 10, 2010: Steering Committee Meeting #3 was held at the Weaverville Library. The consultant presented an overview and the results of the travel demand model update. The existing and 2040 roadway segment level of service and intersection level of service was presented. The committee then discussed potential projects and transportation needs. A copy of the meeting materials and meeting summary is provided in Appendix 1E.

Public Workshops

Public meetings were held in Trinity Center, Mad River, Hayfork, Burnt Ranch and Weaverville to solicit input on the Draft RTP as follows:

- Trinity Center: Tuesday August 23 at 6:30 PM
- Weaverville: Wednesday, August 31 at 6:30 PM
- Hayfork: Tuesday, September 13 at 7:00 PM
- Mad River: Friday, September 16 at 2:00 PM
- Burnt Ranch: Tuesday, September 27 at 6:30 PM

The project lists from Appendices 4A, 4C, 4D, 4E and 4F were posted at the meetings. At the conclusion of each workshop, attendees were given a set of four "happy face ☺" stickers and four "sad face ☹" stickers, to indicate their approval or disapproval of the listed projects.

The posters indicate strong support (at least 4 in favor and none opposed) for the following projects:

- Replacement of Halls Gulch Bridge on East Fork Road
- Federal Highway road rehabilitation and bridge replacement projects on Mad River, Ruth Zenia and Van Duzen Roads
- Coffee Creek Road rehabilitation
- Making Center Street 2-way

- Turnouts and passing lanes on Highway 3 (listed as Trinity Center to Covington Mill but desired from Weaverville to Coffee Creek)
- Bicycle lane on Highway 3 from Trinity Center to Trinity Center KOA
- Bicycle lanes on Highway 3 in Hayfork from Oak Street to Forest Avenue;
- Acquiring the expansion and safety area around Trinity Center Airport from the Forest Service
- Slurry sealing the Trinity Center Airport

Strong opposition was expressed (at least 4 opposed and none in favor) for:

- Billborad VASI, re-grading the Road to the Point and Extending the Runway to relocate the threshold at Trinity Center Airport
- Replacing county-wide road signs with high-visibility signs
- Van Duzen Road bicycle path from Highway 36 to Dorothy Way

There were mixed reactions to:

- Expanding the transit system
- Adding bicycle racks
- Intersection improvements on Highway 299 in Weaverville at Forest Avenue/ Garden Gulch and at Washington Street. The Forest Avenue intersection improvement could be either a traffic signal or a roundabout. Five were in favor and three opposed. Comments at the meeting indicated some people favored a roundabout over a signal, and some did not. Two stickers were placed in opposition to the traffic signal at Washington Street, but comments made at the Weaverville meeting showed some people favored the idea (see attached meeting summary).

Other verbal comments at the community workshops included requests for:

- A bicycle facility on East Fork Road to the Alpen Cellars Winery
- Adding dust palliatives to dirt roads
- Move the two-way Center Street Project to a higher priority
- Consider plans to improve Buckhorn Summit and the Humboldt Bay Port when considering long-range projects on Highway 299
- Extend the right turn pocket on Highway 299 turning onto Highway 3 at Douglas City
- Fix potholes on Sky Ranch Road
- Provide bus service once a week from Hayfork to Hyampom (refer to SSTAC)
- Clear trees and remove parking spaces and signs to provide better sight distance at intersections with Highway 299 in Weaverville
- Add more crosswalks on Highway 299 in Weaverville, especially near the Tops shopping center and paint them white to improve visibility, or provide warning lights

- Improve North Miner Street safety or reduce speeding
- Add bike lanes along Brady Road in Hayfork
- Install hitching posts with bike racks in Hayfork, for equestrian use
- Install more guardrails on Highway 3 between Hayfork and Douglas City
- Place signs at the Mad River Volunteer Fire Department indicating its location

Summaries of the public workshops are provided in Appendix 1F

2. ASSESSMENT OF NEEDS

The assessment of needs identifies the existing and future deficiencies of the Trinity County transportation system that have both regional and State significance. The information presented in this section provides the basis for improvements proposed in the Action Element (Chapter 4).

SOCIO ECONOMIC CONDITIONS

Transportation needs stem from travel demand, which is influenced by current socioeconomic conditions including population, number of households, employment, the intensity and location of development and employment centers, and tourists/pass-through traffic. Sources reviewed for this section included the 2000 Census Data, 2009 population data from the U.S. Census Bureau, the California Department of Finance (DOF), employment data from the Employment Development Department, the 2002 Trinity County General Plan Circulation Element, and the 2005 Regional Transportation Plan (RTP) for Trinity County.

Population Growth

Historically, Trinity County has experienced a slow rate of population growth. **Table 2.1** shows the historical population growth from 1990 through 2010. Between 2002 and 2006 Trinity County grew at over one percent per year. Between 2007 and 2009, DOF data shows that the population remained virtually unchanged from the previous year. Overall, the population has grown approximately 0.28% per year between 1990 and 2010. The 2010 Census data was released in 2011, after the Project Steering Committee meetings. Since the 2010 population data became available, the Transportation Commission decided to use the population growth rate between 1990 and 2010 Census data (0.28% per year).

TABLE 2.1
HISTORICAL POPULATION GROWTH ESTIMATES IN TRINITY COUNTY

Year	Population	Growth from Previous Year
1990	13,063	NA
2000	13,022	NA
2001	12,991	-0.24%
2002	13,105	0.88%
2003	13,326	1.69%
2004	13,514	1.41%
2005	13,738	1.66%
2006	13,913	1.27%
2007	13,935	0.16%
2008	13,932	-0.02%
2009	13,959	0.19%
2010	13,786	-1.24%

Source: California State Department of Finance (DOF) E-4 Population Estimates 2001-2009 and U.S. Census Bureau 2010 Report

In addition to County residents, the roadway network provides access for tourists visiting the many recreation areas in the County and to traffic that is passing through Trinity County on the way to other destinations outside of Trinity County.

Employment

Trinity County's total average 2009 employment through October was 3,970 workers out of a total labor force of 4,880. This represents an 18.6% unemployment rate. Over the last ten years the unemployment rate has fluctuated from a low of approximately 9% in 2001 to a high of 18.6% in 2009 with the unemployment rate at approximately 10% for much of the last ten years. As mentioned previously, the Trinity County unemployment rate is higher than the California unemployment rate of 12.9% (in October 2009). Trinity County's unemployment rate has historically been 4% to 5% higher than the California rate. **Table 2.2** shows total employment for the County and employment for major industries within the county.

TABLE 2.2
TRINITY COUNTY JOB GROWTH

Employment by Year				
Industry		**2000**	**2005**	**2009**
Total Employed Population		***4,630***	***4,670***	***3,970***
Employment in Major Industries	Natural Resources, Mining, & Construction	150	160	70
	Manufacturing	200	210	220
	Trade, Transportation, & Utilities	380	380	300
	Educational & Health Services	200	310	170
	Leisure & Hospitality	330	400	290
	Government/Public Administration	1,510	1,440	1,350

Source: California Employment Development Department, Labor Market Information

Largest Employers

The following employers are the largest in Trinity County

- Trinity County Schools (384 employees)
- County of Trinity (325 employees)
- Trinity River Lumber Company (145 employees)
- Trinity Hospital (145 employees)
- Tops Super Foods (70 employees)
- Hayfork Ranger District USFS (70 employees)
- Weaverville Ranger District USFS (50 employees)
- Trinity County Sheriff's Department (40 employees)
- J&A Food Services (Burger King) (33 employees)
- CalFire (25 permanent employees, 19 seasonal employees)
- Human Response Network (22 employees)
- Watershed Research Center-Hayfork (14 employees)

ROADWAY SYSTEM

The roadway system in Trinity County totals approximately 2,190 centerline miles. In addition to private roadways, the public roadway system consists of 202 miles in the State highway system, 700 miles in the County roadway system, and 1,288 owned and operated by the Federal government (largely in the National Forest).

One notable characteristic of Trinity County's roadway system is the lack of any existing traffic signals. Traffic control is generally provided by Stop Signs on the side-street approaches.

Road Classification

Figure 2 depicts Trinity County's main roadway system, along with the functional classification. The following provides the definition of each functional classification found in the county.

Major arterials constitute routes of interregional significance whose design provides for relatively high overall travel speeds, with minimum interference to through movement. These routes provide for travel in, out of, and through the county. In Trinity County, the major arterial is SR 299.

Minor arterials are similar to major arterials, in that they are important routes for regional circulation. While major arterials serve more interregional travel, minor arterials also help to serve the majority of intra-county regional travel. In Trinity County, the minor arterial road system consists of SR 3, SR 36, Rush Creek Road, and the southerly 5.4 miles of Trinity Dam Boulevard (SR 299 to Rush Creek Road).

Major Collectors provide greater access to more localized destinations for regional traffic. These roads are designed to provide access for regional traffic between state routes. Narrow lanes and shoulders limit the carrying capacity of some collectors. Major collectors are "on-system" facilities that are eligible for federal aid.

Minor Collectors are similar is character to major collectors, but are generally more rural with less traffic. Minor collectors are not eligible for federal aid, but the Highway Bridge Program will replace or repair bridges, and rehabilitation can be funded through the State Transportation Improvement Program.

Local roads classification consists of all roads not designated otherwise.

Forest Highways Forest Highways are federally owned roads serving Federal Lands, such as Forest Service, Bureau of Land Management and National Parks. Though federally owned, these roads also serve as public highways and are often operated and maintained by a local agency, Caltrans or the Forest Service. One Forest Highway in Trinity County, FH 160 or Corral Bottom Road, is operated by the Shasta-Trinity National Forest. SR 36 is a Forest Highway operated by Caltrans. There are several Forest Highways operated by Trinity County Department of Transportation:

• CR#106	FH#116	East Side Road
• CR#402	FH#147	Denny Road
• CR#417	FH#160	Underwood Mountain Road
• CR#447	FH#146	South Fork Road
• CR#301	FH#114	Hyampom Road
• CR#501	FH#149	Mad River Road
• CR#511	FH#148	Van Duzen Road
• CR#502	FH#150	Ruth-Zenia Road
• CR#524	FH#154	Barry Creek Road
• CR#503	FH#151	Zenia Lake Mountain Road
• CR#519	FH#152	Peak Road
• CR#520	FH#153	Long Ridge Road

- CR#327 FH#160 Corral Bottom Road
- CR#516 FH#150 Zenia Bluffs Road

Maintenance is performed by the local operating agencies at their expense. However, these roads are eligible for Federal Highway Administration assistance for major rehabilitation and emergency repairs, funded from the Federal Highway Trust Fund. When the local agency requests assistance, the Federal Highway Administration, Federal Lands Highway Division will usually implement the entire project from design through construction contracting.

Major Roadway Network

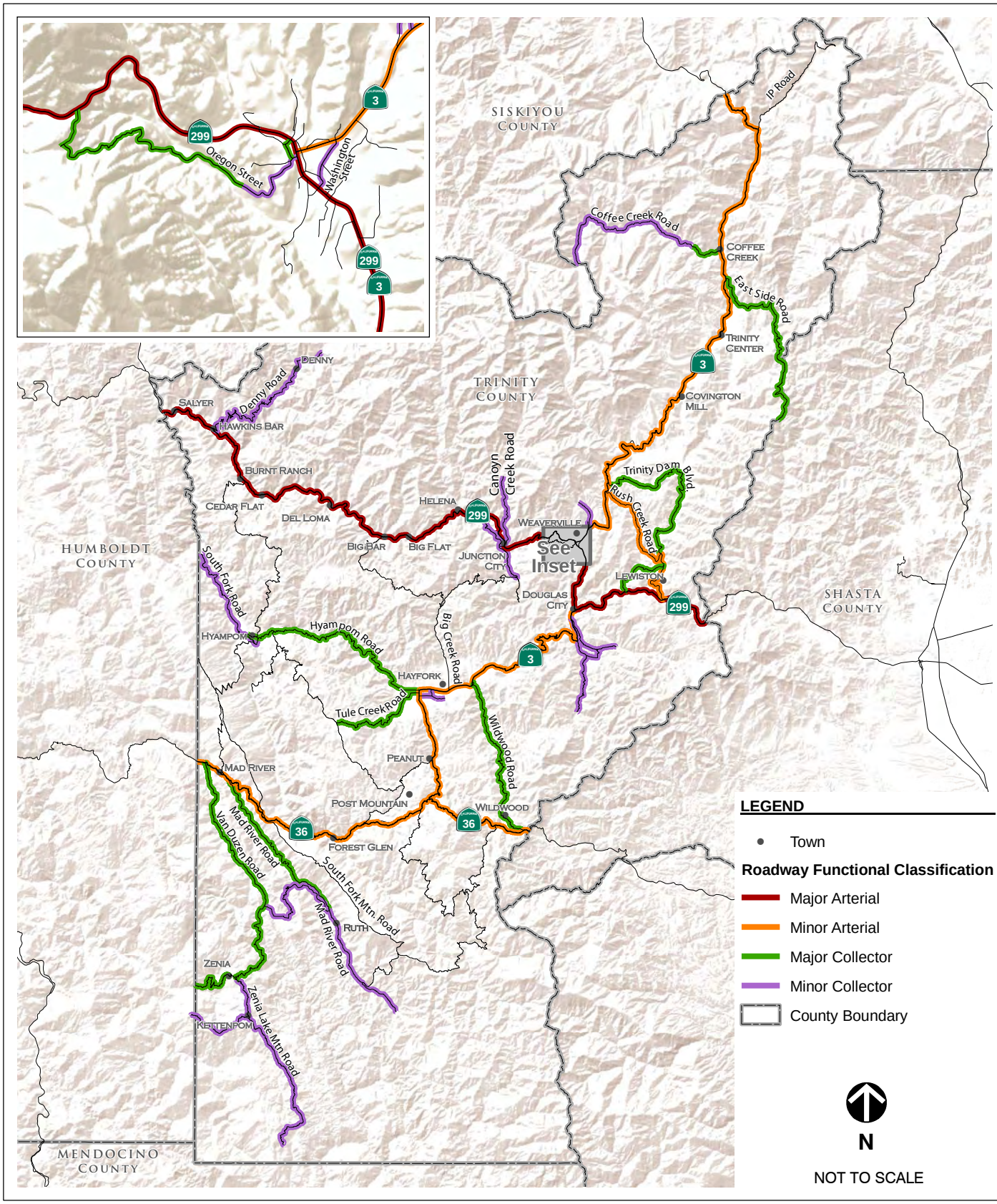
Trinity County is served by three State highways: 3, 36, and 299. Routes 3 and 36 are lower volume highways, while Route 299 is the primary east-west highway link in Northern California between the Northern Sacramento Valley and the Northern Coast. The following describes each highway in more detail.

State Route 3

State Route 3 runs north-south through Trinity County, beginning at SR 36 just south of Peanut and passing out of Trinity County over Scott's Mountain north of Trinity Lake. SR 3 passes through Hayfork, Douglas City, Weaverville, Trinity Center, and Coffee Creek as well as several smaller communities. It serves as the primary north-south roadway in the county, connecting central and northern Trinity County with the county seat of Weaverville. Between Douglas City and Weaverville, Routes 3 and 299 are the same route (by statute, SR 299 is the assigned route number). SR 3 carries local (intra-county) traffic as well as recreational and commercial (primarily natural resource) traffic. SR 3 has sharp curves, limited passing opportunities between Douglas City and Hayfork as well as between Slate Creek and Trinity Center, and is not maintained during winter months over Scott's Mountain. Within Weaverville, SR 3 provides access between the central commercial district and Weaverville Elementary School, residential areas, and the Weaverville Airport.

State Route 36

State Route 36 runs east-west through the southern portion of the county, entering Trinity County near Wildwood from the east and crossing into Humboldt County west of Mad River. Other than passing through the communities of Forest Glen and Mad River, SR 36 mostly passes through undeveloped forest land. SR 36 provides access to Fortuna in Humboldt County to the west and Red Bluff in Tehama County to the east, as well as Hayfork and Weaverville (via Route 3), to Wildwood and Post Mountain, and to Southern Trinity County, including Ruth, Zenia and Kettenpom via County collector roads. SR 36 provides access for residents of Southern Trinity County who travel to Eureka for shopping opportunities. The capacity of SR 36 is limited by horizontal and vertical curves, narrow lane and shoulder widths, and by the limited passing opportunities.



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ROADWAY FUNCTIONAL CLASSIFICATION

FIGURE 2

State Route 299

State Route 299 runs east-west through Trinity County, entering over Buckhorn Summit from Redding to the east and crossing into Humboldt County near Salyer to the west. SR 299 links the communities of Lewiston, Douglas City, Weaverville, Junction City, Big Flat, Big Bar, Burnt Ranch, and Salyer, as well as several smaller communities. SR 299 carries a variety of traffic including local (intra-regional), recreational, commuter, and commercial. SR 299 has been classified as a National Forest scenic byway and is heavily utilized for access to and along the Trinity River. It is also classified as a Focus Route by Caltrans because of its importance as an inter-regional route (for both auto and truck traffic) between the Northern Sacramento Valley and the North Coast.

SR 299 also serves as the major roadway within Weaverville, connecting the more established commercial and government center on the northwest with newer commercial and employment centers to the southeast. Due to the limited roadway network, virtually all trips in Weaverville use SR 299, which (in combination with through traffic) results in 299 carrying the highest traffic volumes within the County, particularly during peak summer travel periods.

SR 299 has limited passing opportunities, particularly west of Weaverville. Implementation of federally mandated barrier striping on state highways in 1988 resulted in severely restricted passing opportunities. Only six passing lanes exist (four eastbound, two westbound) on SR 299 between Willow Creek and Douglas City, a stretch of 65 miles. The distance between passing lanes for eastbound traffic is 26 miles (Hawkins Bar to Big Flat), while the distance for westbound traffic is a 52-mile gap between passing lanes (Oregon Mountain to Willow Creek).

Caltrans' 1998 *Interregional Transportation Strategic Plan* (ITSP) identifies 34 High Emphasis Routes throughout California which are key to the State's goods movement transportation system. SR 299 is considered a High Emphasis Route and is a Focus Route in the Caltrans *Interregional Transportation Strategic Plan* (1998). Focus Routes are a sub-set of the High Emphasis Routes and are the "highest priority for completion to minimum facility standards" by approximately 2020. The Interregional Transportation Improvement Program (ITIP), as established by Senate Bill 45, funds projects identified in the ITSP. To meet the goal of minimum facility standards requires joint planning and programming based upon a regional agency's ability to participate as determined by its transportation commission. The Strategic Plan identifies a long term improvement for "passing lanes/various" on SR 299 in Trinity County from post-mile 11.1 to 57.7 (Salyer to SR 3 east junction), which will be included in the "2006 and Future STIPs" (Statewide Transportation Improvement Program). Several curve realignment and shoulder improvements on SR 299 are included in Appendix 4A.

While not located within Trinity County, the Buckhorn Grade segment of SR 299 immediately to the east in Shasta County is a significant constraint to interregional truck traffic. This approximately seven mile stretch of highway from Clear Creek in Shasta County to the Shasta/Trinity County line climbs approximately 1,600 feet in elevation, and does not meet current design standards. Buckhorn is a barrier to STAA (Surface Transportation Assistance Act) Trucks, which are longer than California legal trucks. These trucks are prohibited due to numerous STAA barrier curves and their loads must be repackaged into smaller trucks to travel over Buckhorn Grade. In addition, other commercial trucks have difficulty negotiating the roadway due to steep grades, narrow lane widths, and tight curves. Caltrans has also expressed ongoing concern with high operation and maintenance costs in this area. There are also two STAA barriers on SR 299 in western Trinity County.

Caltrans and the Shasta, Trinity, and Humboldt Regional Transportation Planning Agencies are coordinating on improvements to Buckhorn Grade (District Agreement No. 02-0032). Improvements to Buckhorn Grade could reduce shipping times and costs between the Northern Sacramento Valley and the North Coast. These improvements could also have impacts on the economy, environment, roads and community infrastructure in Trinity County. Caltrans, in partnership with the counties, is currently constructing a series of safety improvements on SR 299. The improvements in Trinity County for SR 299 are listed in Appendix 4A.

Scenic Highways and Roadways

Although Trinity County has several eligible State Scenic Highways (SR 299, SR 3 and SR 36), none are officially designated at this time.

Transportation Systems Maintenance

Caltrans is responsible for the maintenance and rehabilitation of approximately 49,560 lane miles of state highways. The number of distressed lane miles (those with poor structural condition or with poor ride quality) is an important indicator of the State Highway System's pavement condition. This indicator is used by Caltrans to prioritize road maintenance and repairs. For the state, there are approximately 13,000 distressed lane miles (26 percent) based on a *2007 State of the Pavement* (Caltrans, 2007).

This same survey showed that District 2 (Trinity, Siskiyou, Shasta, Tehama, Modoc, Lassen, and Plumas counties) has approximately 967 distressed lane miles of its 3,995 total lanes miles (24%). The goal for Caltrans is to reduce the overall state backlog of distressed lane miles to 5,500 by 2015. This represents a reduction from 25 percent of the network needing rehabilitation to no more than 10 percent. Each Caltrans District in turn has developed a Ten-Year Plan to identify project needs and priorities to achieve its portion of the statewide goal.

In January 2005, Caltrans published a five-year maintenance plan which showed that maintenance expenditures on roadways, drainage, and bridges in the State Highway System (SHS) would have to increase by $105 million each year to stop growth in the State's maintenance backlog. Furthermore, to address a long list of deferred maintenance projects within five years, annual expenditures for roadway, drainage, and bridges would have to increase by $250 million annually. In 2006/07 funding for all aspects of highway maintenance increased by $8 million to a total of $882 million for the entire SHS.

The Governor's 2007 Strategic Growth Plan proposes to divert a quarter of excise tax and weight fee revenues to debt service on revenue bonds to support non-maintenance and non-rehabilitation activities for 30 years beginning in 2015. Because these revenues represent the primary funding source for highway maintenance and rehabilitation, the plan would result in the State falling further behind in the maintenance and rehabilitation of the SHS.

Without the identification of a stable funding source, the maintenance backlog and funding gap will continue to widen. **Table 2.3** provides historical data for the percent of distressed lane miles for the State and Caltrans District 2.

TABLE 2.3
DISTRESSED LANE MILES BY SURVEY YEAR

Location	2002	2003	2004	2005	2007
Caltrans District 2	22%	24%	26%	25%	24%
California	23%	24%	26%	28%	26%

Source: Caltrans 2007 State of the Pavement Report

Local Street and Roads Maintenance Needs

$51.7 billion of additional funding is needed to bring the pavement condition in the State to an acceptable PCI

In 2007-08, the League of Cities in conjunction with Caltrans conducted a comprehensive statewide study of California's local street and road system. The study's objective was to fully assess the condition of the local system to determine: (1) what are the pavement conditions of local streets and roads? (2) what will it cost to bring pavements to a "Best Management Practices (BMP) or most cost-effective condition? (3) what are the needs for the essential components to a functioning system? and (4) is there a funding shortfall?

The study surveyed all 58 California counties and 478 cities. The response rate was 93 percent and because the majority of the data came from recognized pavement management systems, the accuracy of the data was considered very high. The results showed that California's local streets and roads are in critical condition. On a scale of zero (failed) to 100 (excellent) the statewide average pavement conditions index (PCI) is 68 which is considered "at risk category." Without additional funding, the PCI is projected to decrease to 58 within 10 years.

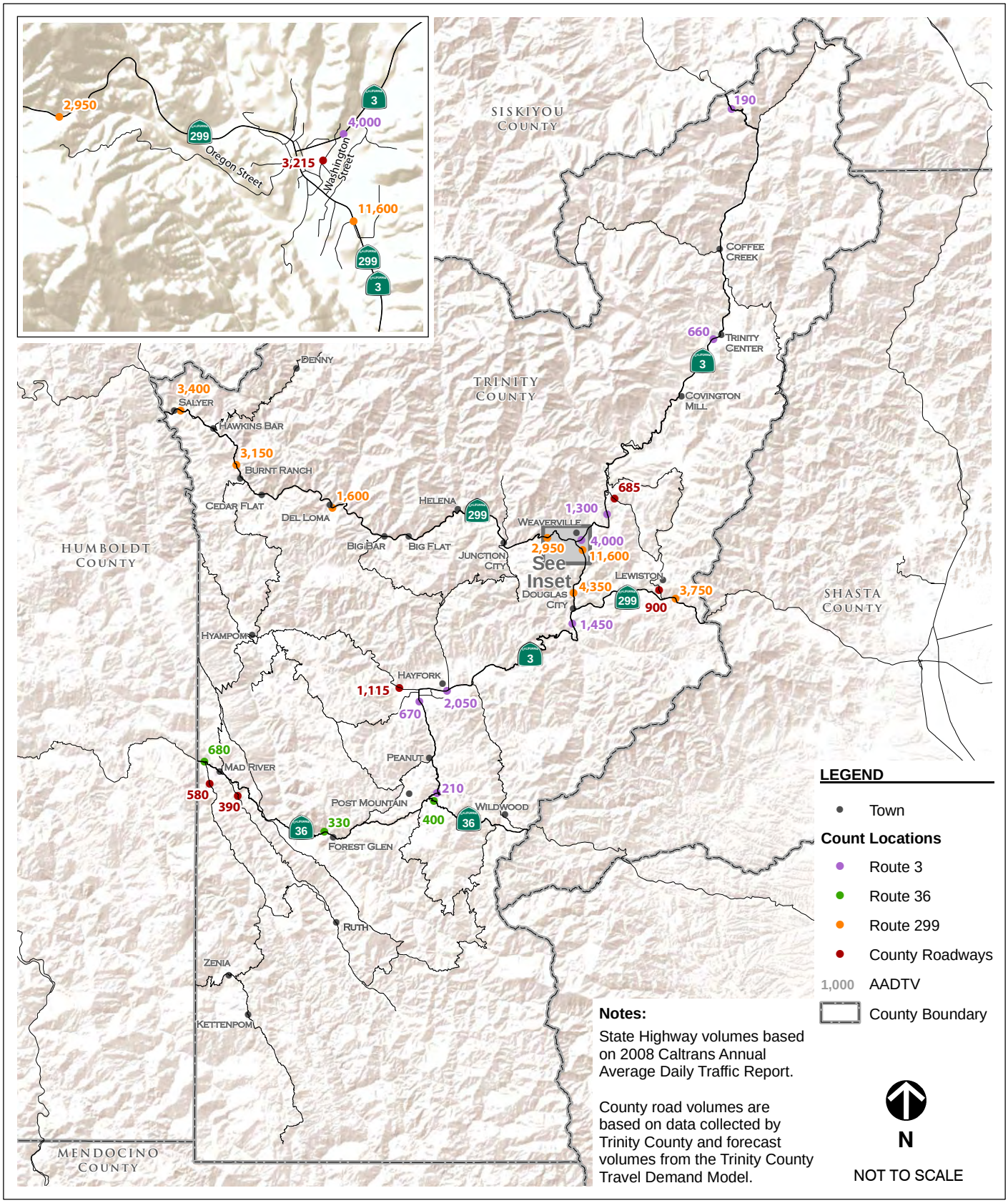
The funding need for local streets and roads within Trinity County based on the study findings is approximately **$366 million** over 10 years.

Bridge Maintenance Needs

Appendix 2B provides the Caltrans Structure Maintenance and Investigations for Trinity County. The Appendix provides the Sufficiency Rating, which is a measure that indicates whether a bridge requires maintenance. If a bridge's Sufficiency Rating is less than 50 rehabilitation or replacement is needed.

EXISTING TRAFFIC VOLUMES

Figure 3 displays existing state highway and county roadway daily traffic volumes throughout Trinity County.



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TRINITY COUNTY EXISTING DAILY VOLUMES

FIGURE 3

State Highway Historical Traffic Volumes

Traffic volumes on the roadways throughout Trinity County have grown relatively slowly, and in some cases have decreased over the last several years. Traffic volume fluctuations on state highways are primarily due to increases/decreases in traffic through the county and recreational traffic. Caltrans District 2 collects traffic volume data on state highways in Trinity County. Traffic counting is generally performed by Caltrans using electronic counting instruments at consistent locations throughout the State in a program of continuous traffic count sampling. The resulting counts are adjusted to reflect an estimate of annual average daily traffic by compensating for seasonal fluctuation, weekly variation and other variables that may be present. Annual average daily traffic (AADT) volumes are defined as the total two-way traffic volume on a roadway over the year divided by 365 days. The recordation of AADT is necessary for presenting a statewide picture of traffic flow, evaluating traffic trends, computing accident rates, planning and designing highways and other purposes.

In addition to AADT, Caltrans provides a summary of the peak month average daily traffic (ADT), which is the highest monthly traffic volume divided by the number of days in the month. Caltrans Data indicates that the peak traffic season in Trinity County is in summertime, with the peak month fluctuating between May, June, July, August, and September depending on the roadway segment.

Historical annual average daily traffic (AADT) volumes on state maintained facilities are shown in **Table 2.4**. **Table 2.5** displays peak month average daily traffic volumes on state facilities within Trinity County.

TABLE 2.4
HISTORICAL ANNUAL AVERAGE DAILY TRAFFIC VOLUMES ON STATE FACILITIES

Route and Location		Annual Average Daily Traffic Volumes by Year											Annual % Change
		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
SR 3	Junction of Route 36, north	330	220	220	220	220	220	210	210	210	210	320	-0.3%
	Morgan Hill Road, south	890	700	700	700	680	680	670	670	670	670	670	-2.5%
	Morgan Hill Road, north	730	670	670	670	670	670	660	660	660	660	660	-1.0%
	Hayfork	2,150	1,950	1,950	1,950	2,050	2,050	2,050	2,050	2,050	2,050	2,050	-0.5%
	Douglas City, South Junction	2,000	1,400	1,400	1,400	1,500	1,500	1,450	1,450	1,450	1,450	1,450	-2.8%
	Weaverville, North Junction	4,250	4,100	4,100	4,100	4,300	4,350	4,250	4,000	4,000	4,000	3,500	-1.8%
	Rush Creek Road, south	2,000	1,300	1,300	1,300	1,300	1,350	1,300	1,300	1,300	1,300	1,250	-3.8%
	Rush Creek Road, north	760	920	920	920	590	600	590	590	590	590	1,100	4.5%
	Trinity Center Maintenance Station	790	670	670	670	680	690	680	660	660	660	630	-2.0%
	Siskiyou County Line	170	170	170	65	65	65	65	190	190	190	190	1.2%
SR 36	Lower Mad River Road, west	700	530	530	530	600	600	680	680	680	680	1,100	5.7%
	Lower Mad River Road, east	370	280	280	280	340	340	360	340	340	340	750	10.3%
	Forest Glen Maintenance Station	450	200	200	200	250	250	260	330	330	330	600	3.3%
	Jct. of Route 3, east	170	220	220	220	250	250	240	400	400	400	300	7.7%
SR 299	East Limits Salyer, west	3,450	3,000	3,000	3,000	3,000	3,400	3,400	3,400	3,400	3,400	3,800	1.0%
	East Limits Salyer, east	3,150	2,750	2,750	2,750	2,750	3,150	3,150	3,150	3,150	3,150	3,400	0.8%
	Burnt Ranch Road, west	3,150	2,750	2,750	2,750	2,750	3,150	3,150	3,150	3,150	3,150	3,400	0.8%
	Del Loma, east	1,900	1,350	1,350	1,350	1,400	1,600	1,600	1,600	1,600	1,600	3,100	6.3%
	Weaverville, West City Limits, west	2,800	2,600	2,650	2,650	3,000	3,400	3,400	2,950	2,950	2,950	3,250	1.6%
	Weaverville, Washington Street, east	11,600	11,100	11,300	11,300	12,000	12,200	12,200	11,800	11,800	11,600	11,600	0%
	Martin/Nugget Roads, west	7,300	6,800	6,900	7,000	7,300	7,300	7,300	7,300	7,300	7,100	6,800	-0.7%
	Martin/Nugget Roads, east	6,900	6,400	6,500	6,700	6,800	6,800	6,800	6,600	6,600	6,400	6,300	-0.9%
	East Junction SR 3, west	4,750	4,550	4,650	4,800	4,750	4,750	4,600	4,450	4,550	4,350	4,450	-0.6%
	East Junction SR 3, east	3,300	3,650	3,750	3,900	3,950	3,950	3,950	3,950	3,950	3,850	4,050	2.3%
	Lewiston Road, east	3,300	3,250	3,300	3,400	3,500	3,500	3,500	3,500	3,500	3,400	3,500	0.6%
	Trinity Dam Road, east	3,800	3,750	3,850	3,850	4,000	4,000	4,000	3,850	3,850	3,750	3,800	0%

Source: Caltrans Traffic and Vehicle Data Systems Unit, 2008; Fehr & Peers, 2011

TABLE 2.5
HISTORICAL PEAK MONTH AVERAGE DAILY TRAFFIC VOLUMES ON STATE FACILITIES

Route and Location		Peak Month Average Daily Traffic Volumes by Year											Annual % Change
		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
SR 3	Junction of Route 36, north	570	330	330	330	330	330	320	330	330	330	440	-2.3%
	Morgan Hill Road, south	1,300	950	950	950	850	850	840	840	840	840	840	-3.5%
	Morgan Hill Road, north	1,150	1,000	1,000	1,000	800	800	790	790	790	790	790	-3.1%
	Hayfork	2,300	2,150	2,150	2,150	2,200	2,200	2,200	2,200	2,200	2,200	2,200	-0.4%
	Douglas City, South Junction	2,200	1,550	1,550	1,550	1,650	1,650	1,600	1,650	1,650	1,650	1,600	-2.7%
	Weaverville, North Junction	4,450	4,550	4,550	4,550	4,600	4,650	4,550	4,350	4,350	4,350	3,500	-2.1%
	Rush Creek Road, south	3,150	1,900	1,900	1,900	2,000	2,100	2,000	1,950	1,950	1,950	1,700	-4.6%
	Rush Creek Road, north	1,450	1,600	1,600	1,600	1,050	1,050	1,050	1,050	1,050	1,050	1,350	-0.7%
	Trinity Center Maintenance Station	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,300	1,300	1,300	900	-2.5%
	Siskiyou County Line	250	250	250	250	250	290	280	280	280	280	280	1.2%
SR 36	Lower Mad River Road, west	930	700	700	700	800	800	900	900	900	900	1,250	3.4%
	Lower Mad River Road, east	490	370	370	370	450	450	480	450	450	450	930	9.0%
	Forest Glen Maintenance Station	600	290	290	290	360	360	380	480	480	480	840	4.0%
	Jct. of Route 3, north	260	340	340	340	400	400	380	630	630	630	430	6.5%
SR 299	East Limits Salyer, west	4,500	3,900	3,900	3,900	3,900	4,400	4,400	4,400	4,400	4,400	4,600	0.2%
	East Limits Salyer, east	4,100	3,600	3,600	3,600	3,600	4,100	4,100	4,100	4,100	4,100	3,800	-0.7%
	Burnt Ranch Road, west	4,100	3,600	3,600	3,600	3,600	4,100	4,100	4,100	4,100	4,100	3,800	-0.7%
	Del Loma, east	2,450	1,750	1,750	1,750	1,800	2,100	2,100	2,100	2,100	2,100	3,800	5.5%
	Weaverville, West City Limits, west	2,600	3,200	3,250	3,250	4,100	4,650	4,650	4,050	4,050	4,050	5,100	9.6%
	Weaverville, Washington Street, east	12,200	12,900	13,100	13,100	13,500	13,700	13,700	13,300	13,300	13,100	12,500	0.3%
	Martin/Nugget Roads, west	8,500	7,900	8,000	8,100	8,500	8,500	8,500	8,500	8,500	8,300	8,100	-0.5%
	Martin/Nugget Roads, east	8,400	7,800	7,900	8,100	8,300	8,300	8,300	8,000	8,000	7,800	6,700	-2.0%
	East Junction SR 3, west	5,600	5,600	5,800	5,900	5,800	6,100	5,900	5,700	5,600	5,400	5,300	-0.5%
	East Junction SR 3, east	4,650	4,750	4,900	5,100	5,100	5,100	5,100	5,100	5,100	4,950	4,300	-0.8%
	Lewiston Road, east	4,000	3,950	4,000	4,150	4,500	4,500	4,500	4,500	4,500	4,350	4,050	0.1%
	Trinity Dam Road, east	5,000	5,100	5,200	5,200	5,400	5,400	5,400	5,200	5,200	5,100	4,650	-0.7%

Source: Caltrans Traffic and Vehicle Data Systems Unit, 2008; Fehr & Peers, 2011

The data suggests that in most cases traffic volumes on state facilities throughout Trinity County have remained constant, without significant growth or decline. The highest daily traffic volume in Trinity County for the last 10 years was observed on SR 299 in Weaverville near Washington Street. Other relatively high daily traffic volumes were observed on SR 299 at Martin/Nugget Roads, on SR 299 at the east junction with SR 3 near Douglas City, and on SR 3 at the north junction in Weaverville. The pattern of traffic volumes reflect the fact that much of the inter-regional traffic in the western portion of the county travels to and from Humboldt County, while much of the inter-regional traffic from the Lewiston area travels to and from Shasta County. The high ADT on SR 299 in Weaverville reflects the fact that local traffic in Weaverville relies extensively on SR 299, since most side-streets are dead-end.

Existing Truck Traffic Volumes/Goods Movement

A combination of Federal roads (primarily Forest Service), State highways and County roads serve as the primary network for goods movement in Trinity County. Adequate maintenance and operation of this system is critical to the continued economic vitality of the county.

State Route 299 serves as the primary east-west route for goods movement within Trinity County. It also serves as a primary east-west route for goods movement in northern California, connecting the Pacific Coast (Route 101) to the northern portion of the Sacramento Valley (Interstate 5 in Redding). Most of the 137 miles between Redding and Arcata consists of two-lane conventional highway with limited passing lanes. The Buckhorn Grade segment of SR 299 immediately to the east in Shasta County is a significant constraint to interregional truck traffic. Buckhorn is a barrier to STAA (Surface Transportation Assistance Act) Trucks, which are longer than California legal trucks. These trucks are prohibited due to numerous STAA barrier curves and their loads must be repackaged into smaller trucks to travel over Buckhorn Grade. In addition, other commercial trucks have difficulty negotiating the roadway due to steep grades, narrow lane widths, and tight curves. Caltrans, in coordination with County RTPA's, is improving SR 299 in several locations to remove STAA barrier curves and improve passing lanes. Caltrans estimates that all STAA barriers on SR 299 over Buckhorn Grade, as well as two remaining barriers in western Trinity County, will be removed by 2020.

Roads managed by the Federal and County governments are generally utilized to move resource products (timber, gravel, sand) to the State highways in the county. Reductions in timber harvests on Federal lands coupled with reduced maintenance budgets have led to deterioration and/or closure of some Federal roads. The combination of heavy truck traffic and limited maintenance funding has also adversely impacted roads in the County system.

Table 2.6 presents the most recent available data (2007) regarding truck activity on the state highways (Truck Traffic on State Highways, Caltrans 2008).

TABLE 2.6
TRUCK TRAFFIC VOLUMES ON STATE FACILITIES

Route and Location		Average Annual Daily Truck Traffic						Annual % Change	2007	
		1998	2000	2003	2005	2007	2009		AADT	Percent Trucks
SR 3	Junction of Route 36, north	36	26	26	25	25	18	-4.6%	320	5.6%
	Morgan Hill Road, south	36	61	59	58	58	38	0.5%	670	5.7%
	Morgan Hill Road, north	126	95	95	94	94	37	-6.4%	660	5.6%
	Hayfork	137	108	114	114	114	89	-3.2%	2,050	4.3%
	Douglas City, South Junction	172	132	141	137	137	102	-3.7%	1,450	7.0%
	Weaverville, North Junction	125	144	151	149	140	187	4.5%	3,500	5.3%
	Rush Creek Road, south	146	109	109	109	109	112	-2.1%	1,250	9.0%
	Rush Creek Road, north	190	100	64	64	64	101	-4.3%	1,100	9.2%
	Trinity Center Maintenance Station	204	77	78	78	76	58	-6.5%	630	9.2%
	Siskiyou County Line	108	27	50	56	56	24	-7.1%	190	12.6%
SR 36	Jct. of Route 3, south	70	42	41	39	35	30	-5.2%	520	5.8%
	Shasta County Line, south	70	25	28	25	27	22	-6.2%	300	7.3%
SR 299	Humboldt/Trinity County Line, west	620	544	505	544	692	730	1.6%	3,800	19.2%
	Weaverville, West City Limits, west	478	346	399	429	372	410	-1.3%	3,250	12.6%
	Weaverville, West City Limits, east	516	346	382	413	338	273	-4.3%	3,250	8.4%
	Weaverville, Washington Street, east	482	364	394	378	366	360	-2.3%	11,600	3.1%
	Martin/Nugget Roads, west	583	385	396	375	375	350	-3.6%	6,800	5.2%
	Martin/Nugget Roads, east	511	385	381	360	394	376	-2.4%	6,300	6.0%
	East Junction SR 3, west	616	407	346	312	409	239	-5.6%	4,450	5.4%
	East Junction SR 3, east	630	463	456	431	431	442	-2.7%	4,050	10.9%
	Lewiston Road, east	645	479	503	476	476	521	-1.8%	3,500	14.9%
	Trinity Dam Road, east	644	492	495	497	479	472	-2.4%	3,800	12.4%
	Trinity/Shasta County Line, east	636	525	528	500	481	318	-4.6%	3,800	8.4%

Notes: Truck traffic includes all vehicles in the two-axle class and above (including 1½ ton trucks with dual rear tire and excludes pickups and vans with only four wheels)

Source: Caltrans Traffic and Vehicle Data Systems Unit, 2008; Fehr & Peers, 2011

The highest truck traffic AADT volumes were observed on SR 299 at the Humboldt/Trinity County Line (730 trucks) and at Lewiston Road (521 trucks). While the level of truck activity on SR 299 through the county is relatively consistent (239 to 730 trucks per day), the higher overall (non-truck) traffic levels in Weaverville cause the proportion of trucks to vary from a high of 19.2% at the Humboldt/Trinity County Line to a low of 3.1% in Weaverville.

Overall State highway truck traffic declined between 1998 and 2009 on most segments of the State highway system. Exceptions were the growth in truck activity along SR 3 near Morgan Hill Road and near the north junction in Weaverville. It is speculated that one reason for the change in truck traffic is due to changes in the timber industry. Another reason for decline in truck traffic could be the fact that much of the national trucking fleet now uses trucks that are longer than the maximum length allowed on State Route 299.

The Goods Movement Action Plan (California Business, Transportation and Housing Agency and California Environmental Protection Agency) "provides a statewide action plan for goods movement capacity expansion, goods movement-related public health and environmental impact mitigation and community impact mitigation, and goods movement-related security and public safety enhancements." SR 299 is not specifically discussed in the plan; however, it does connect to Interstate 5 in Redding, CA, which is considered a Major International Trade Highway Route. The plan emphasizes the need to improve freight mobility throughout the state. Caltrans is working on the *Freight Mobility Plan* and the California Regional Blueprint, which will be referenced in the next Trinity County RTP update.

ROADWAY OPERATIONS

Level of Service Methodology

Roadway operations are measured in terms of Level of Service (LOS). Level of Service is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. LOS is defined for each type of facility that has analysis procedures available in the Highway Capacity Manual (HCM) 2000. Letters designate each LOS from A to F, with LOS A representing the best operating conditions and LOS F representing the worst. Safety is addressed through other measures.

- **Level of Service A** represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent.

- **Level of Service B** is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.

- **Level of Service C** is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.

- **Level of Service D** represents high-density, but stable, flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.

- **Level of Service E** represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to "give way" to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.

- **Level of Service F** is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion. Level of Service F is used to describe the operating conditions within the queue, as well as the point of the breakdown. It should be noted, however, that in many cases operating conditions of vehicles or pedestrians discharged from the queue may be quite good. Nevertheless, it is the point at which arrival flow exceeds discharge flow which causes the queue to form, and Level of Service F is an appropriate designation for such points.

The following tables define LOS for roadway segments including segments of two lane highways and intersections, which are typical of the facilities within Trinity County.

The Highway Capacity Manual categorizes two-lane highways as either Class I or Class II. The definitions are as follows:

- Class I – Two-lane highways with relatively high speeds and that are major intercity routes, primary arterials connecting major traffic generators, daily commuter routes, or primary links in state or national highway networks. They often serve long-distance trips or provide connecting links between facilities that serve long-distance trips.

- Class II – Two-lane highways with lower expected travel speeds that function as access routes to Class I facilities, serve as scenic or recreational routes that are not primary arterials, or pass through rugged terrain. They most often serve relatively short trips, the beginning and ending portions of longer trips, or trips for which sightseeing plays a significant role.

The level of service measures for Class I and Class II two-lane highways are as follows:

> *On Class I highways…LOS is defined in terms of both percent time-spent-following and average travel speed. On Class II highways…LOS is defined only in terms of percent time-spent-following, without consideration of average travel speed* (*HCM* 2000, Page 20-3)*.*

Table 2.7 displays the LOS criteria thresholds developed using the HCM 2000 methodology for typical two-lane highway and county roadway segments. These tables provide daily volume thresholds for each level of service and provide ease in estimating level of service. Since the thresholds are based on typical conditions, they should be used cautiously for a roadway segment that has extreme characteristics.

TABLE 2.7
ROADWAY SEGMENT LEVEL OF SERVICE THRESHOLDS

Facility Type	Upper Limit Daily Traffic Volume Threshold				
	LOS A	LOS B	LOS C	LOS D	LOS E
Class I Two Lane Highway (SR 299 except in Weaverville)	1,200	2,900	7,900	16,000	20,500
Class II Two Lane Highway (SR 3, SR 36, SR 299 in Weaverville)	900	2,000	6,800	14,100	17,400
County Roadways (Two Lane) (County Minor Arterials and Collectors)	900	2,000	4,000	7,000	10,000

Notes: LOS F applies whenever the flow rate exceeds the segment capacity.
Source: HCM 2000, Chapter 20, Two-Lane Highways; Fehr & Peers, 2010

Intersections are analyzed using the methodology contained in Highway Capacity Manual (HCM) 2000 (Transportation Research Board, 2000). For signalized intersections, this methodology determines the level of service by comparing the average control delay for all vehicles approaching the intersection to the delay thresholds shown in **Table 2.8**. Unsignalized (side-street stop-controlled) intersection level of service calculations were conducted using the method in Chapter 17 of the 2000 Highway Capacity Manual. The LOS rating is based on the average control delay expressed in seconds per vehicle. At side-street stop-controlled intersections, the control delay (and LOS) is calculated for each controlled movement, the left-turn movement from the major street, and for the entire intersection. For controlled approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. Trinity County analyzes level of service at unsignalized intersections based on the average delay (in seconds/vehicle) of the worst movement. **Table 2.8** also presents the thresholds for unsignalized intersections.

TABLE 2.8
INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description	Signalized Intersections	Unsignalized Intersections
A	Represents free flow. Individual users are virtually unaffected by others in the traffic stream.	≤ 10	≤10
B	Stable flow, but the presence of other users in the traffic stream begins to be noticeable.	> 10 to 20	> 10 to 15
C	Stable flow, but the operation of individual users becomes significantly affected by interactions with others in the traffic stream.	> 20 to 35	> 15 to 25
D	Represents high-density, but stable flow.	> 35 to 55	> 25 to 35
E	Represents operating conditions at or near the capacity level.	> 55 to 80	> 35 to 50
F	Represents forced or breakdown flow.	> 80	> 50

Notes: Values are shown for average control delay in seconds/vehicle.
Sources: HCM 2000, Chapter 16, Signalized Intersections and HCM 2000, Chapter 17, Unsignalized Intersections.

Roadway Segment Level of Service

LOS for rural highways is largely determined by roadway geometry factors, such as grades, vertical and horizontal curves, and the presence of passing opportunities. In mountainous topography and particularly through canyons, roadway LOS can be relatively poor, even absent substantial traffic volumes. Roadway LOS can also be impacted in developed areas by pedestrian, bicycle and parking activity.

Existing Conditions

Caltrans District 2 provided an estimate of 2009 level of service on state facilities within Trinity County. In addition, **Table 2.9** provides additional level of service information, based on average annual daily traffic, for Caltrans and County roadways based on the Analysis Methodology described above.

The following are Caltrans District 2 estimates of LOS on primary roadway segments during peak traffic conditions:

State Route 3

SR 36 to Mile Post 15.0 – LOS B
Mile Post 15.0 to Rush Creek Road – LOS C
Rush Creek Road to Mile Post 67.7 – LOS B
Mile Post 67.7 to Mile Post 79.5 – LOS A
Mile Post 79.5 to Scott Summit – LOS B

State Route 36

Trinity/Humboldt County Line to Junction of SR 3 – LOS B
SR 3 to the Trinity/Shasta County Line – LOS B

State Route 299

The Caltrans District 1 & 2 Boundary to Limestone Point – LOS B
Lime Point to Oregon Mountain – LOS B
Oregon Mountain to Memorial Drive – LOS B
Memorial Drive to Industrial Park Way – LOS D
Industrial Park Way to Douglas City – LOS B
Douglas City to Buckhorn Summit – LOS B

Note that general LOS information for Downtown Weaverville was not provided by Caltrans District 2 because more detailed intersection analysis is provided in the following sections, which provides a better representation of traffic conditions in this area of SR 299 given the close intersection spacing and higher vehicle volumes.

TABLE 2.9
EXISTING LEVEL OF SERVICE ON COUNTY AND CALTRANS ROADWAYS

Trinity County Facilities			Caltrans Facilities		
Route and Location	**Existing Volume[1]**	**LOS**	**Route and Location**	**Existing Volume[1]**	**LOS**
Mill St: South of SR 299	699	A	SR 3: Junction of SR 36, north	210	A
Oregon St: SR 299 to Miner St.	2,727	C	SR 3: Morgan Hill Rd., south	670	A
Oregon St: Miner Street to Odd Fellow Ave.	1,171	B	SR 3: Morgan Hill Rd., north	660	A
Washington St: North of SR 299	3,179	C	SR 3: Hayfork	2,050	C
Washington St: South of SR 3	3,216	C	SR 3: Douglas City, South Jct.	1,450	B
Washington St: South of SR 299	867	A	SR 3: Weaverville, North Jct.	4,000	C
S. Miner St: South of Forest Ave.	2,050	C	SR 3: Rush Creek Rd., south	1,300	B
S. Miner St: North of Oregon St.	2,045	C	SR 3: Rush Creek Rd., north	590	A
Bremer St: South of SR 299	526	A	SR 3: Trinity Center Maintenance Station	660	A
Martin Rd: East of SR 299	1,853	B	SR 3: Siskiyou County Line	190	A
Rush Creek Rd: South of SR 3	685	A	SR 36: Lower Mad River Rd., west	680	A
Airport Rd: East of SR 3	645	A	SR 36: Lower Mad River Rd., east	340	A
Mary Ave: South of Airport Rd.	593	A	SR 36: Forest Glen Maintenance Station	330	A
Trinity Dam Blvd: North of SR 299	903	B	SR 36: Jct. of Route 3, north	400	A
Brady Rd: North of SR 3	620	A	SR 299: East Limits Salyer, west	3,400	C
Morgan Hill Rd: East of SR 3	787	A	SR 299: East Limits Salyer, east	3,150	C
Hyampom Rd: West of SR 3	1,114	B	SR 299: Burnt Ranch Rd., west	3,150	C
Oak Ave: South of SR 3	1,704	B	SR 299: Del Loma, east	1,600	B
Mulligan St (East): North of SR 3	200	A	SR 299: Weaverville, West City Limits	2,950	C
Mulligan St (West): North of SR 3	516	A	SR 299: Weaverville, Washington St., east	11,600	D
Glen Rd: West of Nugget Ln.	1,502	B	SR 299: Martin/Nugget Roads, west	7,100	D
Center St: East of SR 299	504	A	SR 299: Martin/Nugget Roads, east	6,400	C
Center St: South of SR 3	827	A	SR 299: East Jct. SR 3, west	4,350	C
Weaver St: East of SR 299	850	A	SR 299: East Jct. SR 3, east	3,850	C
Masonic Ln: South of SR 299	769	A	SR 299: Lewiston Rd., east	3,400	C
Mountain View St: South of SR 299	738	A	SR 299: Trinity Dam Rd., east	3,750	C
N. Miner St: South of SR 299	184	A			
Mad River Rd: South of SR 36	388	A			
Van Duzen Rd: South of SR 36	581	A			

Notes: [1] Annual Average Daily Traffic volumes. Level of service results may differ by one level of service during the peak month.
Shading indicates deficient operations.
Source: Caltrans Traffic and Vehicle Data Systems Unit, 2008; Fehr & Peers, 2010

The roadway segments presented in **Table 2.9** operate within the policy level of service under existing conditions, with the exception of SR 299 in Weaverville between Washington Street and Martin Road.

2040 Conditions

Table 2.10 provides 2040 level of service information for County and Caltrans roadways based on the forecasted traffic volumes from the Trinity County Travel Demand Model (Fehr & Peers, 2011) using a 0.28% per year population growth.

The Trinity County Travel Demand Model Development report is provided in Appendix 2B.

Figure 4 displays 2040 state highway and county roadway daily traffic volumes throughout Trinity County.

TABLE 2.10
2040 LEVEL OF SERVICE ON COUNTY AND CALTRANS ROADWAYS

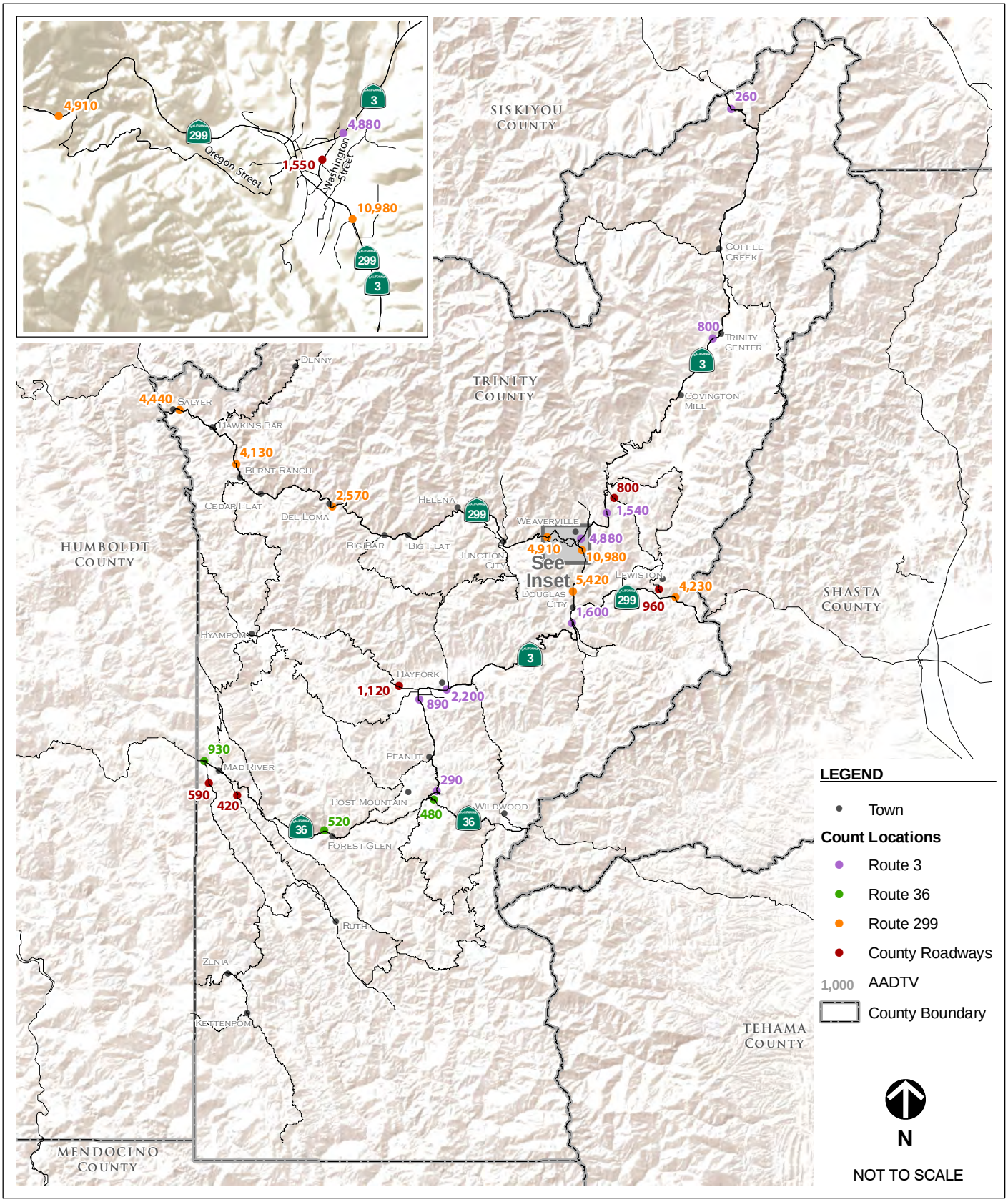
Trinity County Facilities			Caltrans Facilities		
Route and Location	**2040 Volume[1]**	**LOS**	**Route and Location**	**2040 Volume[1]**	**LOS**
Mill St.: South of SR 299	700	A	SR 3: Hayfork	2,200	C
Oregon St.: SR 299 to Miner St.	3,170	C	SR 3: Douglas City, South Jct.	1,600	B
Oregon St.: Miner Street to Odd Fellow Ave.	1,700	B	SR 3: Weaverville, North Jct.	4,590	C
Washington St.: North of SR 299	1,480	B	SR 3: Rush Creek Rd., south	1,540	B
Washington St.: South of SR 3	1,550	B	SR 3: Trinity Center Maintenance Station	800	A
Washington St.: South of SR 299	960	B	SR 3: Siskiyou County Line	260	A
S. Miner St.: South of Forest Ave.	2,340	C	SR 36: Lower Mad River Rd., west	930	B
S. Miner St.: North of Oregon St.	2,270	C	SR 36: Forest Glen Maintenance Station	520	A
Bremer St.: South of SR 299	540	A	SR 36: Jct. of Route 3, north	480	A
Martin Rd.: East of SR 299	1,560	B	SR 299: East Limits Salyer, west	4,440	C
Rush Creek Rd.: South of SR 3	800	A	SR 299: Burnt Ranch Rd., west	4,130	C
Airport Rd.: East of SR 3	760	A	SR 299: Del Loma, east	2,570	B
Mary Ave.: South of Airport Rd.	670	A	SR 299: Weaverville, West City Limits	4,910	C
Trinity Dam Blvd.: North of SR 299	960	B	SR 299: Weaverville, Washington St., east	10,980	D
Brady Rd.: North of SR 3	780	A	SR 299: Martin/Nugget Roads, west	8,440	D
Morgan Hill Rd.: East of SR 3	860	A	SR 299: Martin/Nugget Roads, east	7,870	D
Hyampom Rd.: West of SR 3	1,120	B	SR 299: East Jct. SR 3, west	5,420	C
Oak Ave.: South of SR 3	1,840	B	SR 299: East Jct. SR 3, east	4,950	C
Mulligan St. (East): North of SR 3	210	A	SR 299: Lewiston Rd., east	4,230	C
Mulligan St. (West): North of SR 3	500	A	SR 299: Trinity Dam Blvd., east	4,880	C
Glen Rd.: West of Nugget Ln.	1,510	B			
Center St.: East of SR 299	490	A			
Center St.: South of SR 3	830	A			
Weaver St.: East of SR 299	840	A			

TABLE 2.10
2040 LEVEL OF SERVICE ON COUNTY AND CALTRANS ROADWAYS

Trinity County Facilities			Caltrans Facilities		
Route and Location	**2040 Volume[1]**	**LOS**	**Route and Location**	**2040 Volume[1]**	**LOS**
Masonic Ln.: South of SR 299	770	A			
Mountain View St.: South of SR 299	890	A			
N. Miner St.: South of SR 299	190	A			
Mad River Rd.: South of SR 36	420	A			
Van Duzen Rd.: South of SR 36	590	A			
East Connector: SR 299 to Pioneer Ln.	2,690	C			
East Connector: Pioneer Ln. to Browns Ranch Rd.	2,550	C			
East Connector: Browns Ranch Rd. to SR 3	1,780	B			

Notes: [1] Annual Average Daily Traffic volumes. Level of service results may differ by one level of service during the peak month.
The information assumes that the East Connector is in place.
Shading indicates deficient operations.
Source: Caltrans Traffic and Vehicle Data Systems Unit, 2008; Fehr & Peers, 2010

In 2040, SR 299 in Weaverville will continue to operate below Caltrans Standards, and the deficiency will extend east of Martin Road. The level of service analysis presented in **Table 2.10** assumes construction of the East Connector. The East Connector project has been approved and is assumed to be in place in 2040. Note that without the East Connector, SR 299 in Weaverville would operate at LOS E in 2040 and Washington Street would operate at LOS D.



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TRINITY COUNTY 2040 DAILY TRAFFIC VOLUMES

FIGURE 4

Intersection Level of Service

Level of service was evaluated during the PM peak hour at the following intersections:

- SR 299/Trinity Dam Road
- SR 299/SR 3 (in Douglas City)
- SR 299/Garden Gulch-Forest Avenue
- SR 299/SR 3 (in Weaverville)
- SR 299/Washington Street
- SR 299/Glen Road
- SR 299/Martin Lane
- SR 3/Washington Street
- SR 3/Browns Ranch Road
- SR 3/Rush Creek Road
- SR 3/Brady Road
- SR 3/Hyampom Road
- SR 36/Mad River Road
- SR 36/Van Duzen Road

Intersection LOS for these intersections was evaluated using the Synchro Software (Version 6.0), which applies the HCM 2000 methodologies. Note that when a separate left- or right-turn lane is provided, the worst movement LOS (usually the left turn out of a minor road) may be calculated using HCM methodologies. However, if a minor street approach contains only one shared lane, the HCM methodologies can only calculate the worst approach LOS. It should be noted that although at the SR 299/SR 3 intersection in Weaverville, SR 299 has a short two-way left-turn lane, it was not assumed in the analysis. Trinity County and Caltrans staff have observed that drivers turning left from SR 3 onto SR 299 do not use the two-way left-turn lane as a waiting point in the middle of SR 299; therefore, it has little effect on the intersection level of service. The intersection level of service technical calculations are provided in Appendix 2D.

Existing Conditions

Table 2.11 displays the intersection level of service results.

TABLE 2.11
2009 PM PEAK HOUR INTERSECTION LEVEL OF SERVICE

Intersection	Control Type	PM Peak Hour	
		Delay[1]	LOS
SR 299/Garden Gulch-Forest Avenue	Stop Controlled	20.9	C
SR 299/SR 3 (in Weaverville)	Stop Controlled	16.7	C
SR 299/Washington Street	Stop Controlled	44.0	E
SR 299/Glen Road	Stop Controlled	24.7	C
SR 299/Martin Lane	Stop Controlled	14.4	B
SR 299/Trinity Dam Road	Stop Controlled	10.9	B
SR 299/SR 3 (east)	Stop Controlled	11.8	B
SR 3/Washington Street	Stop Controlled	17.7	C
SR 3/Browns Ranch Road	Stop Controlled	11.7	B
SR 3/Rush Creek Road	Stop Controlled	8.9	A
SR 3/Brady Road	Stop Controlled	9.9	A
SR 3/Hyampom Road	Stop Controlled	9.2	A
SR 36/Mad River Road	Stop Controlled	8.9	A
SR 36/Van Duzen Road	Stop Controlled	8.9	A

Notes: [1] Delay is reported in seconds per vehicle. For unsignalized intersections the highest approach delay is reported. When minor street approach contains one shared lane, the delay of the individual worst movement cannot be calculated using HCM methodologies. The worst movement is typically the higher-volume left-turn movement from the minor street stop-control.

Shading indicates deficient operations.

Source: Fehr & Peers, 2009

Results are for the worst case turning movement or worst approach for each intersection. All intersections meet policy standards except the SR 299/Washington Street intersection.

2040 Conditions

Intersection LOS for these intersections was evaluated using the Synchro Software (Version 6.0), which applies the HCM 2000 methodologies. **Table 2.12** displays the intersection level of service results.

TABLE 2.12
2040 PM PEAK HOUR INTERSECTION LEVEL OF SERVICE

Intersection	Control Type	Existing PM		2040 PM	
		Delay[1]	LOS	Delay[1]	LOS
SR 299/Garden Gulch-Forest Avenue	Stop Controlled	20.9	C	29.7	D
SR 299/SR 3 (in Weaverville)	Stop Controlled	16.7	C	15.5	C
SR 299/Washington Street	Stop Controlled	44.0	E	128.1	F
SR 299/Glen Road-East Connector [2]	Stop Controlled	42.8	E	80.3	F
SR 299/Martin Lane	Stop Controlled	14.4	B	17.2	C
SR 299/Trinity Dam Blvd	Stop Controlled	10.9	B	11.4	B
SR 299/SR 3 (east)	Stop Controlled	11.8	B	20.9	C
SR 3/Washington Street	Stop Controlled	17.7	C	17.9	C
SR 3/East Connector [2]	Stop Controlled	10.8	B	12.7	B
SR 3/Browns Ranch Road	Stop Controlled	11.7	B	11.7	B
SR 3/Rush Creek Road	Stop Controlled	8.9	A	9.0	A
SR 3/Brady Road	Stop Controlled	9.9	A	9.9	B
SR 3/Hyampom Road	Stop Controlled	9.2	A	9.4	A
SR 36/Mad River Road	Stop Controlled	8.9	A	9.1	A
SR 36/Van Duzen Road	Stop Controlled	8.9	A	8.9	A

Notes: [1] Delay is reported in seconds per vehicle. For unsignalized intersections the highest approach delay is reported. When minor street approach contains one shared lane, the delay of the individual worst movement cannot be calculated using HCM methodologies. The worst movement is typically the higher-volume left-turn movement from the minor street stop-control.

[2] The SR 299/East Connector/Glen Road and SR 3/East Connector intersections were assumed to be unsignalized intersections in the Synchro analysis in order to determine if different traffic controls such as traffic signals or roundabouts are necessary to provide acceptable levels of service. The Existing PM level of service analysis at the SR 299/East Connector/Glen Road and SR 3/East Connector intersections assumes that the East Connector is constructed.

Shading indicates deficient operations.

Source: Fehr & Peers, 2011

In 2040, the SR 299/Washington Street intersection will function below both County and State LOS standards, as will the SR 299/Glen Road-East Connector intersection, if it is not signalized or roundabout-controlled.

The *Weaverville Traffic Signalization Study* (Fehr & Peers, 2011), provides additional detailed operations analysis for the SR 299 Corridor in Weaverville. The SR 299/Glen Road, SR 299/Washington Street, SR 299/SR 3, and SR 299/Garden Gulch-Forest Avenue intersections were analyzed under three scenarios:

- Unsignalized Intersections – The study intersections were analyzed under existing conditions based on intersection turning movement counts collected in July 2009.
- Signalized Intersections – The SR 299 corridor was analyzed assuming the four study intersections are signalized under 2009 conditions (with East Connector) and 2040 conditions (with East Connector).
- Signalized and Roundabout Intersections - The SR 299 corridor was analyzed assuming the SR 299/Glen Road-East Connector and SR 299/Garden Gulch Street-Forest Avenue intersections are

roundabouts, and the SR 299/Washington Street and SR 299/SR 3 intersections are signalized. 2009 conditions (with East Connector) and 2040 conditions (with East Connector) were analyzed.

In addition, the Weaverville Traffic Signalization Study includes analysis of the effects of converting Center Street between Court Street and SR 3 from a one-way section to a two-way section.

Table 2.13 shows the level of service results for each scenario and timeframe.

TABLE 2.13
LEVEL OF SERVICE SUMMARY

Intersection	Control Type[1]	Existing Conditions		2009 Conditions (with East Connector)		2040 Conditions (with East Connector)	
		Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
SR 299/Glen Road-East Connector	SSSC	24.7	C	42.8	E	80.3	F
	Signal	--	--	13.7	B	13.9	B
	Roundabout			9.1	A	9.5	A
SR 299/Washington Street	SSSC	44.0	E	27.8	D	128.1	F
	Signal	--	--	10.3	B	11.9	B
SR 299/SR 3	SSSC	16.7	C	17.2	C	15.5	C
	Signal	--	--	10.4	B	11.6	B
SR 299/Garden Gulch Street	SSSC	20.9	C	22.9	C	29.7	D
	Signal	--	--	11.8	B	15.3	B
	Roundabout			7.6	A	7.9	A

Notes: [1] SSSC = Side Street Stop Control
[2] Delay is reported in seconds per vehicle for the overall intersection for signalized and roundabout intersections and the worst movement for unsignalized intersections.

Shading indicates deficient operations.

Source: Fehr & Peers, 2010

The 2009 Conditions with the East Connector were analyzed to determine if a signal will be required at the SR 299/Glen Road-East Connector intersection when the East Connector is constructed. The analysis indicates that if the East Connector is constructed without a traffic signal at SR 299, the intersection will not meet the LOS standard stated in Policy 1.1.A. In 2040, the SR 299/Washington Street intersection will also fail to meet the policy standard unless enhanced traffic control is implemented.

The results of the Center Street analysis are:

- Center Street currently carries 700-800 daily trips and is a one way street. Converting Center Street to two-way operations will shift approximately 500-600 daily trips from State Route 299 (between SR 3 and Court Street in Downtown Weaverville) to Center Street.
- The daily LOS on SR 299 between SR 3 and Court Street in Downtown Weaverville would remain at the current level.
- The delay at the SR 299/SR 3 intersection is expected to decrease or stay the same if Center Street is converted from a one-way section to a two-way section (under existing and 2040 conditions).
- The Center Street roadway segment between Court Street and SR 3 is expected to operate at LOS B as a two-way section (it currently operates at LOS B as a one-way segment).

The *Weaverville Traffic Signalization Study* is provided in Appendix 2E.

SAFETY

In order to assess safety needs in Trinity County, collision data was collected for State highways as well as county roads. Sources included the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS), Caltrans, and the County. This information, in conjunction with operations analysis presented in the previous section for roads and intersections, will be used to determine what type of projects are needed in the RTP.

Collisions on State Highways

Table 2.14 below compares the 2007 accident rates (accidents per 1,000,000 miles of vehicle travel) on Trinity County State Routes with Caltrans District 2 average for similar facilities, and the statewide average for similar facilities in all rural areas. The first number represents total collision rate (total collisions per 1,000,000 vehicle miles (MVM)); the second number combines fatalities and injuries per MVM; the last number represents the fatality rate (fatal collisions per MVM). As the table shows, Trinity County's rate was above the District 2 average and overall California rate for rural state facilities. The fatality rate for Trinity County is also above both the District average and the Statewide average for all rural State facilities.

TABLE 2.14
TRAFFIC COLLISION RATE (COLLISION / 1,000,000 MILES OF TRAVEL)
STATE HIGHWAYS

Rate Type	Total Collision Rate per Million Vehicle Miles	Injury + Fatality Rate per Million Vehicle Miles	Fatality Rate per Million Vehicle Miles
Trinity County State Highway Rates	1.21	0.64	0.066
Caltrans District 2 Overall Rates (Similar Facilities to Trinity County)	0.72	0.31	0.017
Caltrans State Rural Highway Overall Rates	0.67	0.27	0.018

Notes: NA = Not Available
Source: 2007 Accident Data on State Highway, Caltrans

Collisions on County Roads

Table 2.15 provides a five year summary of the number of collisions, injuries and fatalities that occurred on Trinity County roads from 2004 through 2008. As **Table 2.15** shows, total collisions have declined overall since 2004, with the exception of 2007. There were no fatalities reported in 2006 or 2008 compared to five that were reported in 2004, three in 2005, and seven in 2007. All 15 of the collisions resulting in fatalities over the last five years are reported to be a single vehicle collision that ran off the road and/or struck an object. In addition seven of the collisions resulting in fatalities were listed as driving while intoxicated.

The cause of the majority of collisions is reported to be single vehicle collisions that ran off the road and/or hit an object. This trend is similar to other rural areas where roads tend to be two-lane and are bordered by trees and other stationary obstacles.

TABLE 2.15
COLLISIONS ON TRINITY COUNTY ROADS

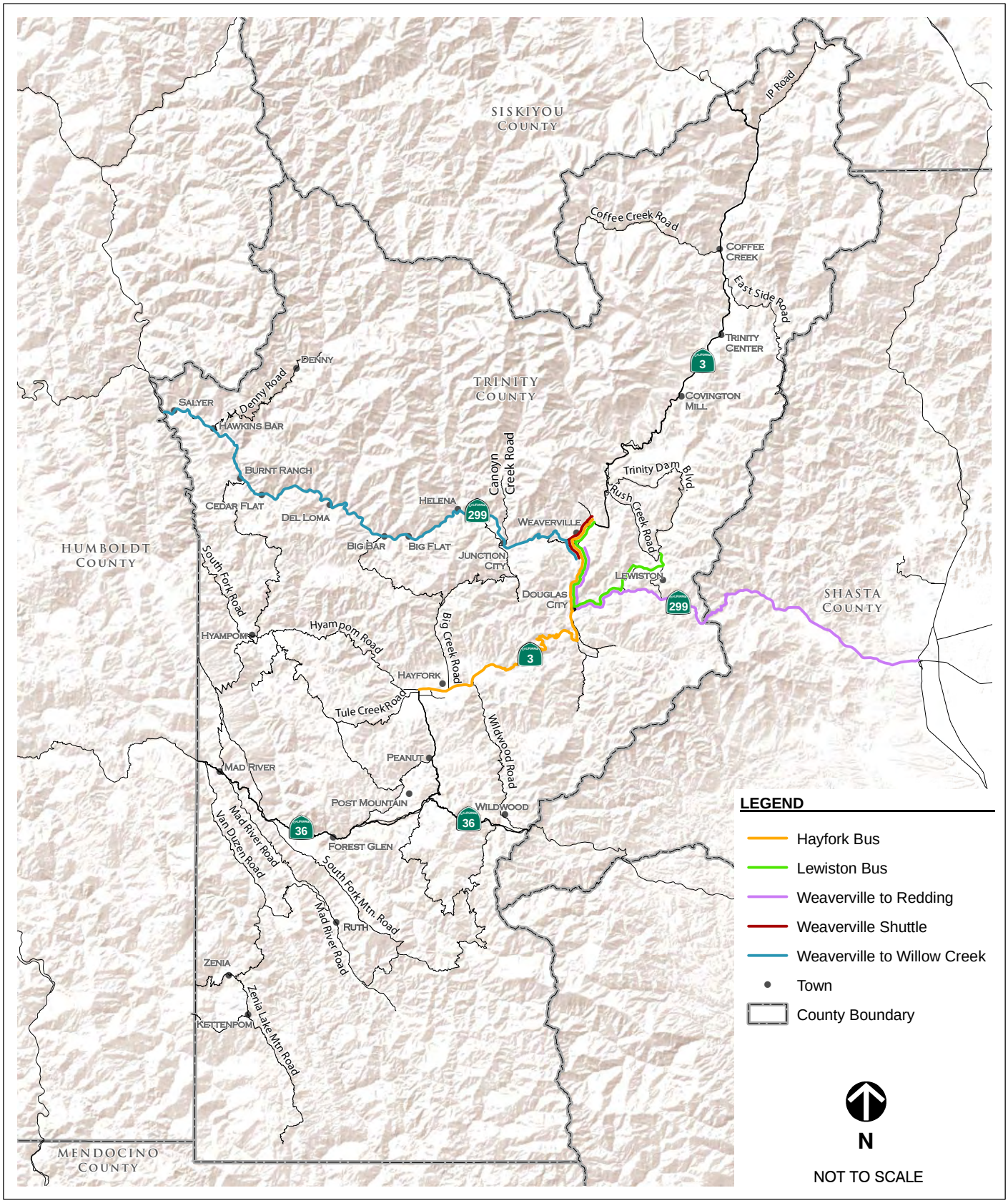
Year	Total Collisions	Total Injuries	Total Fatalities
2004	64	43	5
2005	49	33	3
2006	52	56	0
2007	66	54	7
2008	36	17	0

Source: Trinity County Department of Transportation 2009

TRANSIT

Trinity Transit

Trinity Transit is the public transit operator for Trinity County. Trinity Transit commenced operations in 1988 with service to Hayfork, Douglas City, Weaverville, Lewiston and Junction City. The service was originally operated by the Human Response Network under contract with Trinity County. In 1997 the employees of Trinity Transit became Trinity County employees. The principal sources of revenue for the county's transit system are: Local Transportation Fund, State Transit Assistance Fund, Federal Transit Administration 5311 and 5311F grants; passenger fares and package delivery. In an effort to serve more people and enhance public transit service between Willow Creek in Humboldt County and Redding in Shasta County, Intercity bus Service began in January of 2010. With the intercity service, Trinity Transit currently operates five fixed-route services (Weaverville Shuttle, Lewiston to Weaverville, Hayfork to Weaverville, and the two intercity routes between Weaverville and Redding and Weaverville and Willow Creek). The Hayfork route operates Monday through Friday and the remaining routes operate on Monday, Wednesday, and Friday. **Table 2.16** provides schedules and other transit service characteristics. **Figure 5** provides a map of the routes and service areas.



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TRINITY TRANSIT

FIGURE 5

TABLE 2.16
TRINITY TRANSIT SERVICE CHARACTERISTICS

Service Route	Service Area	Service Days	Hours of Operation
Hayfork – Weaverville	Hayfork, Douglas City , Weaverville, , via SR3/SR299	Monday – Friday	6:45 AM – 6:00 PM (two round trips)
Weaverville Shuttle	Weaverville	Monday, Wednesday, Friday	11:00 AM – 3:00 PM
Lewiston – Weaverville (PR*)	SR 299 Corridor: Lewiston, Douglas City, Weaverville	Monday, Wednesday Friday	Lewiston to Weaverville: 6:55 AM – 7:25 AM Weaverville – Lewiston: 6:00 PM – 6:40 PM
Weaverville – Willow Creek (Down River)	SR 299 Corridor: Weaverville, Junction City, Helena, Big Bar, Del Loma, Burnt Ranch, Trinity Village, Sayler, Willow Creek	Monday, Wednesday, Friday	8:00 AM – 6:00 PM (two round trips)
Weaverville-Redding	SR 299 Corridor: Weaverville, Douglas City, Redding	Monday, Wednesday, Friday	7:30 AM -4:30 PM (two roundtrips)

Source: TCTC staff

Administration and Staffing

The TCTC administers Trinity Transit and provides coordination among other transportation functions in the County. The TCTC approves grant applications for transportation needs within the County while approval for annual department budgets and capital spending for transit is the responsibility of the Trinity County Board of Supervisors. Trinity Transit is managed by a Transit Coordinator who supervises one full-time driver and five part-time drivers. The Coordinator reports directly to the County Director of Transportation. The Coordinator completes scheduling for the drivers, manages bus maintenance, drug testing and also serves as one of the part-time drivers. The Social Services Transportation Advisory Council (SSTAC) provides advisory oversight of Trinity Transit and provides support for paratransit and other public transportation service providers in the County.

Trinity Transit Fleet

Trinity Transit operates a fleet of seven lift-equipped vehicles. Four vehicles are in operation at one time. The remaining three vehicles serve as spares for emergencies and/or special service needs. Transit vehicles are stored in Weaverville, Lewiston, and Hayfork. Minor and/or routine transit maintenance is provided by the County Department of Transportation or local service stations in Weaverville and Hayfork. Major repairs or warranty work is performed at a dealer located outside of the County. The effective service life span of a transit vehicle is estimated at 3 to 5 years. The lowest mileage bus, as of June 2010, has approximately 25,000 miles. The highest mileage bus has approximately 271,000 miles.

Trinity Transit Fare Structure

The Trinity County Board of Supervisors adopted an ordinance adjusting Trinity Transit Fares in December, 2009, which was put into effect in February, 2010. Trinity Transit fares are charged for passengers 5 years and older and are generally based on distance traveled. All rides on the Weaverville Shuttle are $1.50 regardless of destination. The Weaverville — Lewiston service varies from $1.50 within Weaverville to $4.00 to Lewiston.

Intercity Fares: The Weaverville to Willow Creek bus fare charge is $1.50 within a community (Zone) to a maximum of $10.00 between Weaverville and Willow Creek. The Weaverville to Redding bus fare charge is $1.50 within a community (Zone) to a maximum of $10.00 between Weaverville and Redding. Discounts are available for frequent users, seniors and others.

Trinity Transit Performance Summary for FY 05/06 through FY 08/09

Table 2.17 shows a summary for the Weaverville and Hayfork routes performance data updated from Fiscal Year 05/06 through May of Fiscal Year 08/09. The data is also broken down between two fixed-route portions. As noted, the performance indicators for Weaverville – Hayfork and the Weaverville Shuttle are complete for most categories.

The performance indicators in **Table 2.17** are comprised of cost efficiency measures, cost effectiveness measures and service effectiveness measures.

Cost efficiency – These measures compare service inputs to service outputs, and measure the efficiency of resource allocation with Trinity Transit. Examples are operating cost per revenue hour and per revenue mile.

Cost Effectiveness – These measures compare service inputs to service consumption to show how well the service is being utilized. Examples are operating cost per passenger and fare box ratio.

Service Effectiveness – These measures compare service consumption to service outputs and measures how well the capacity of the service is being utilized. Examples are passengers per revenue hour and passengers per revenue mile.

TABLE 2.17
TRINITY TRANSIT PERFORMANCE MEASURES
FY 05/06 THROUGH FY 09/10

Operating Category	Trinity Transit				
	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10
Ridership	10,152	9,456	9,300	6,166	8,535
Operating Cost	$162,835	$207,398	$238,425	$264,818	$305,848
Revenue Hours	2,427	2,674	2,817	$3,550	3,322
Cost per Revenue Hour	$67.09	$77.56	$84.64	$74.60	$92.08
Revenue Miles	54,446	56,487	63,535	81,993	93,657
Cost per Revenue Mile	$2.99	$3.67	$3.75	$3.23	$3.26
Operating Cost per Passenger	$16.04	$21.93	$25.64	$30.10	$35.83
Farebox Revenue	$12,278	$11,623	$15,184	$19,982	$26,899
Farebox Recovery Ratio	7.5%	5.6%	6.37%	7.54%	8.8%
Average Fare per Passenger	$1.21	$1.23	$1.63	$2.27	$3.15
Average Subsidy per Passenger	$14.83	$20.70	$25.64	$27.83	$32.68
Passenger per Revenue Hour	4.2	3.5	3.3	4.48	2.6
Passenger per Revenue Mile	0.2	0.2	0.15	0.11	0.09

Source: Trinity County 2010

The general transit trends for Trinity Transit are described below:

Farebox Ratio – The overall farebox ratio is below the Transit Development Act (TDA) mandated 10 percent. The Redding and Hayfork routes are achieving the 10 percent goal.

Operating Cost per Passenger – This indicator has increased for both fixed-route services. The increase has been attributed to overall operating cost increases in salaries and benefits, insurance costs, and fuel.

Operating Cost per Revenue Hour – This indicator has increased although revenue hours have remained fairly constant. Again, increases in salaries and benefits, insurance, and fuel contributed the most to the increase and not service expansion.

Passengers per Revenue Hour – This indicator has shown minor decreases since FY 05/06. Strategies to improve service frequencies and coverage, improve marketing, or modify schedules to better meet passenger needs will have a positive effect on the measure.

Social Service Transportation Providers

The following information summarizes transportation services offered by social service providers in the County to complement the fixed-route service provided by Trinity Transit. Most of the services have eligibility requirements and focus more on older adults, disabled, or low-income individuals. A detailed description of each service is provided in the Trinity County Coordinated Public Transit – Human Services Transportation Plan prepared by Nelson/Nygaard in October 2008.

American Cancer Society

The American Cancer Society's Shasta County Chapter offers transportation to cancer patients in Trinity County as part of their Road to Recovery program. Approximately 90 percent of the medical trips are to and from Redding and is provided by volunteer drivers. Patients and/or drivers can be reimbursed $0.14 per mile for making the trip.

Far Northern Regional Center (FNRC)

The FNRC provides services for persons with developmental disabilities in nine northern California counties including Shasta, Siskiyou, Tehama and Trinity. The services range from education, health, welfare and recreation. The day program in Weaverville has approximately 8-10 participants. Funding is provided primarily from the State of California Department of Developmental Services.

Human Response Network (HRN)

The HRN has over 25 programs ranging from personal empowerment to transportation assistance. The transportation function subsidizes non-emergency medical and social service trips for qualified persons living in northern Trinity County who cannot drive by providing Trinity Transit bus passes and gas vouchers. Drivers in the program are reimbursed on a mileage basis at $0.25 per mile. Trinity County is responsible for distributing transportation funding for the program.

Golden Age Center (GAC)

The GAC (senior center in Weaverville) provides demand responsive service Monday through Friday to eligible clients (55 years or older or disabled) to participate in the lunch program or for any other trip purpose within Weaverville. The GAC has one full-time paid driver.

Platinum Care

Platinum Care is a private for-profit company based in Redding that offers non-emergency medical transportation in northern California. Service is provided from Weaverville to Redding on a space available basis. The one-way passenger fare is approximately $137 (based on a rate of $2.50 per mile). Service on weekends or after 7:00 PM requires an additional $30.00.

Roderick Senior Center (RSC)

The RSC is located in Hayfork and provides services to seniors 60 or older. Services include home delivered meals, , meals in house, and Health Insurance Counseling Advocacy Program (HICAP) to assist the elderly with health insurance questions. Transportation services include home-delivered meals, shopping, and banking and hair appointments. Demand-responsive service is available for medical appointments locally and to Weaverville or Redding when absolutely necessary. Transportation is free of charge but the RSC does have a suggested donation of $0.50 each way for service within Hayfork, $25.00 for a roundtrip to Weaverville, and $35.00 for a roundtrip to Redding. The center operates in-house with one vehicle and relies on volunteer drivers and vehicles to provide service to Weaverville and Redding. Funding comes from several sources including federal AAA, State of California AAA, and fundraisers and donations.

Southern Trinity Health Services (STHS)

The STHS is a medical facility in the southern Trinity County community of Mad River. Trips for all purposes (medical, shopping, social) are provided on Wednesdays between Mad River and Fortuna/Eureka. Service is also provided between Mad River and Hayfork on Tuesday's. The medical clinic in Mad River operates Monday through Friday and has one eight-person vehicle devoted to regularly schedule Mad River to Fortuna/Eureka service for persons who have no other means of transportation. STHS was successful with a Federal Transit Authority 5311 application and will be procuring a new 17 passenger bus in 2010. The facility operates the program using funds from its general budget. Trinity County continues to support the STHS transportation service by providing as much as $20,000 to the service each year.

Trinity Cab Service

Trinity Cab offers general public taxi service in Weaverville and the surrounding areas 24 hours a day seven days a week. The regular fare within a five-mile radius of Weaverville is $7.00. Fares to other portions of the County are based on $2.50 per mile. Trinity Cab also has several contracts within the County including Behavioral Health, Trinity County Hospital, and AFDC/Social Security and Mountain Care.

Trinity County Behavioral Health (TCBH)

The TCBH provides mental health and substance abuse programs within the County. Services are provided by appointment to Medi-Cal eligible clients and mothers with substance abuse issues. Funding comes from Mental Health Realignment dollars, which are allocated by the State of California. Services are provided directly using nine vehicles (one wheelchair-accessible vans and jeeps), one full-time driver, and three part-time drivers, one emergency extra help driver. On occasion gas vouchers are available to clients who have their own vehicle. Vouchers range from approximately $250.00 per month to $400.00 per month.

Trinity County Health and Human Services (HHS)

The HHS provides services to qualified members of the community for health, employment, public assistance and social services. The primary location of clients is Weaverville and Hayfork. Transportation assistance is provided in the form of transportation directly, transit tickets, or transportation reimbursement. Direct transportation services are provided through a fleet of 16 cars ranging in size from sub-compacts to large SUVs. Most trips are on an “as needed” basis except for the CalWORKS program, where a transportation

aid transports three to five clients a day to various job functions. The Child and Adult Protective Services (CPS) program within HHS provides two to three rides per day and monthly trips to destinations outside of Trinity County.

Regional Transportation Connections

Opportunities for regional transportation services and connections are discussed below.

Greyhound

There are Greyhound bus connections in Redding and Arcata, CA. The Trinity Transit intercity bus schedule to Redding was coordinated with the existing Greyhound schedule to provide reasonable transfers for riders traveling north and south on I-5. The bus schedule to Willow Creek was coordinated to connect with the Redwood Transit Service (RTS) in Willow Creek. RTS departs Willow Creek within a 1/2 hour to Arcata where passengers have an opportunity to go north or south on SR-101. Greyhound departs Arcata daily to the Bay Area and Redwood Coast Transit departs daily to destinations north on SR-101.

Amtrak

There is no Amtrak service to or within Trinity County. The closest stations are located in Redding and Eureka.

TRANSIT NEEDS ASSESSMENT

The discussion of transportation needs and service gaps is based on information developed in the Coordinated Public Transit – Human Services Transportation Plan (October 2008), the Trinity County Transit Development Plan (February 2009), and the "Unmet Transit Needs" process and hearing (April 20, 2010). The transit needs from these documents were identified from a series of in-person interviews, telephone interviews, on-board surveys, and input from stakeholders and the SSTAC.

Definitions

Unmet Transit Needs

In Trinity County, unmet transit needs are defined as:

1. Those public transportation or specialized transportation services that are identified in the Regional Transportation Plan and that have not been implemented or funded;
2. Those public transportation service needs that have been identified in a Transit Development Plan (TDP) identifying and assessing the needs of the general public and other groups; or as identified by the Social Services Transportation Advisory Council (SSTAC); or as identified during a public hearing on unmet needs, which will be referred to SSTAC for review and future recommendation.

Reasonable to Meet

The reasonable to meet criteria is defined as those unmet transit needs that the TCTC finds are within the ability of the claimant to satisfy or reduce based on: a Commission authorized assessment of alternative methods of meeting said unmet transit needs (this may be included in the TDP or through an advisory assessment of the SSTAC); and the ability of the claimant to provide for identified unmet transit needs. The Commission shall consider such factors as equity, cost effectiveness, community acceptance, financial and operational feasibility, coordination efforts and other factors related to transit services in evaluating proposals. The following are definitions used for each term.

Equity:	The proposed transit service is designed to serve the public. Transit service will not be provided favoring one group at the exclusion of any other.
Cost Effectiveness:	Supporting data demonstrates sufficient ridership and revenue potential exists for the new, expanded or revised transit service to meet or exceed the required farebox revenue to operating cost ratios on a stand-alone basis. Furthermore, cost per passenger is reasonable when compared to the level of service provided; benefit accrued to the community and to existing service cost per passenger.
Community Acceptance:	There is public support for the proposed transit service.
Feasibility, Financial:	1) The proposed transit service, if implemented or funded, would not cause the responsible operator or service claimant to incur expenses in excess of the maximum allocation of Transportation Development Act funds, State Transit Assistance, FTA Section 5311 funds, and other transit-specific grants as may become available. 2) The proposed transit service, if implemented or funded, would allow the responsible operator or service claimant to meet the required farebox revenue to operating cost ratio of 10%. 3) Proposed transit system expansion must be monitored and evaluated after 6 months of operation (or other approved period of review) by the Transportation Commission. *(Note: The fact that an identified transit need cannot be fully met based on available financial resources shall not be the sole reason for finding that a need is not reasonable to meet. [PUC, Sec 99401.5(c)] For example: alternatives such as volunteers or funding from sources not dedicated to transit could be used to close the financial gap.)*
Feasibility, Operational:	There are adequate roadways and turnouts to safely accommodate transit vehicles.
Coordination Efforts:	Transit services designed or intended to address an unmet transit need shall in all cases make efforts to coordinate with transit services currently provided by other public or private organizations.

The finding from the April 20, 2010 Public Hearing was there are no "unmet transit needs" that are "reasonable to meet" at the present time. However, there is a general consensus of patrons that Trinity County has significant transportation needs, but because the County is sparsely populated, with a density of five people per square mile and mountainous terrain, the provision of effective public transportation is difficult. The following socio-economic findings contribute to the continued demand for improved transit service.

- Transit ridership is less than optimal because of the large percentage of people that have access to personal vehicle transportation. The transit dependent population is small compared to the availability of vehicles for transportation purposes.
- The rural nature of Trinity County and the dispersed population require many residents to travel long distances for services. The 2000 Census showed the poverty rate in Trinity County (19%) to be higher than the State (14%) meaning that more of the people without access to a vehicle reside in the outlying areas which are hardest to serve by transit.
- Transit travel demand for employment is less than significant for Trinity County due to the fact that 60 percent of the population in the County is not in the labor force, unemployment is at approximately 10 percent, and there are a large number of retirees living in the County.

- Adults 60 or older currently comprise approximately 18% of the population and this percentage is anticipated to increase in the future. The older population generally has greater need for transit or specialized services which increase transit demand throughout the County.

- Many residents in the County are not aware of the transit services provided so they do not avail themselves of transit opportunities.

AVIATION FACILITIES

The isolated, rural nature of Trinity County has contributed to a strong commitment by local aircraft owners, and the County for maintaining and improving its airport facilities. The County believes that efficient functioning airports are critical for the safety, security, and economic vitality of the northern region. The five publicly-owned airports in Trinity County are shown in **Figure 6**. These airports provide significant contributions to the County's economy by attracting tourists, businesses and seasonal residents, and commuters who live in Trinity County and work elsewhere. Aviation as a mode allows remote communities quick access to medical and business centers, and is an important resource in managing emergencies such as fire, flood or medical rescue. The closest commercial air services for Trinity residents are located in Redding and McKinleyville.

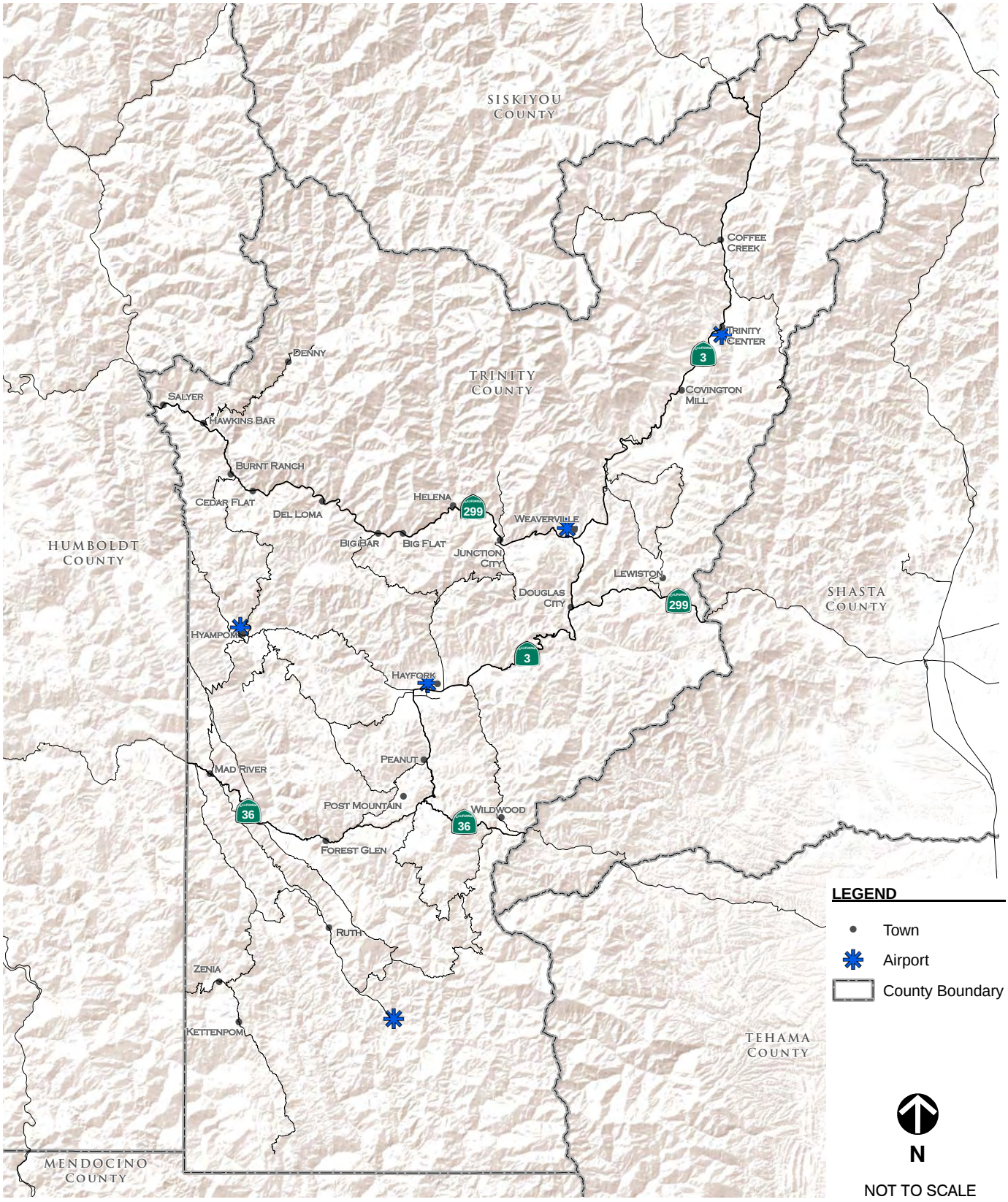
The following summarizes information about each airport. The information was compiled from the 2005 Trinity RTP, the Airport Layout Plans prepared for four of the airports by Coffman and Associates in 2007/2008 and the most recent Airport Master Records (July 2009) compiled by the Federal Aviation Administration and Caltrans.

Hayfork Airport

The following information was compiled from the 2005 RTP and the Hayfork Airport Layout Plan (ALP) prepared by Coffman Associates, Inc. in 2007. The Hayfork Airport is located in central Hayfork and is classified as a Community Airport. The airport is rated for visual flight rules only. The airport is unattended and there is currently no fixed-based operator. Security fencing was installed in 2009. Hayfork has a single, two-way asphalt runway measuring 4,115 feet long by 60 feet wide. The runway is equipped with a pilot-keyed, medium intensity lighting system on Runway 7-25. There are 18 chained tie-downs for the based and transient aircraft on the apron. Aircraft storage facilities include two box hangars located on the west ends of the apron. There are no fueling facilities at the airport and there are no aircraft rescue and firefighting services. Emergency services are provided by the Hayfork Volunteer Fire Department. Hayfork can serve aircraft with up to a 49-foot wing span (Design Group 1). The latest ALP estimates approximately 1,500 annual flight operations at the facility, calculated based on Order 5090.3c from the "Field Formulation of the national Plan of Integrated Airport Systems".

The capacity of the airport is considered adequate for immediate needs; however, the airports' capacity is limited by airspace encroachments, hangar and tie down facilities, and lack of fueling infrastructure. Current needs include:

- Install Precision Approach Path Indicator (PAPI).
- Extend parallel taxiway for full length of runway.
- Continue efforts for removal of trees to reduce obstructions in airspace.
- Provide additional hangars and shade hangers (these will be developed as the need and funding allow.
- Provide for additional vehicle parking near the pilot's lounge (the Airport Layout Plan projects a need of seven spaces short-term and 10 spaces long-term).



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TRINITY COUNTY AIRPORTS

FIGURE 6

Hyampom Airport

The Hyampom Airport is located within the community of Hyampom in the western portion of the County. The airport is classified as a Community airport and meets the FAA requirements for Aircraft Design Group 1. Hyampom Airport is not included in the National Plan of Integrated Airport Systmes (NPIAS) and is therefore not eligible for Federal funding. An Airport Layout Plan was prepared by engineer Reinard Brandley in 2004. A single, two-way runway exists, consisting of a 2,280 foot by 60 foot asphalt surface. Approximately 17 tie-downs are available. The Airport Master Record (July 2009) shows one single engine based aircraft and approximately 2,000 annual flight operations. The airport is expected to continue to meet existing and future demand. Existing needs include:

- Extend current runway to ensure future safety requirements.
- Continue routine maintenance of the facility.
- Provide additional hangars and shade hangars (these will be developed as need and funding allows).
- Accomplish land acquisition to develop a taxiway and extend the apron area.

Ruth Airport

Ruth airport is located in the southern portion of the County near Ruth Lake. The airport is classified as a Community – Recreation Airport. The airport is unattended and there is no fixed-based operator. An Airport Layout Plan was prepared by Coffman & Associates in 2007. Ruth airport has a single two-way asphalt runway measuring 3,500 feet long and 50 feet wide. No lighting is available for the runway. There are 10 tie-down spaces. The Airport Layout Plan estimates approximately 750 annual flight operations calculated based on Order 5090.3c from the "Field Formulation of the national Plan of Integrated Airport Systems".

The airport meets current demand but will need some improvements to meet future demand. These improvements include:

- Widen the runway to 60 feet to meet current standards.
- Provide routine maintenance of the facility including clearing vegetation from safety zones.
- Provide additional hangars and shade hangars (these will be developed as need and funding allows).

Trinity Center Airport

The Trinity Center airport is located in Trinity Center off of SR 3 in the northern portion of the County. The airport is classified as a Community – Recreation airport and is visual flight rules rated. The airport is unattended and there is no fixed-based operator. An Airport Layout Plan was prepared by Coffman & Associates in 2008. Security fencing was completed in 2009. The runway is a single, two-way asphalt runway approximately 3,215 feet long. The surface includes relocated thresholds of 200 feet on each end. The runway width varies between 50 and 60 feet throughout its length and is not lighted. There are approximately 50 tie-downs for based and transient aircraft on the apron. There is additional aircraft parking available along the west side of the runway, north of the apron. There are 35 owner built hangars currently. The airport has no fueling service or repair facilities on site. There are currently 17 vehicle parking spaces adjacent to the airport vehicle entrance. The long-term need is for 60 vehicle spaces by 2030. The Airport Layout Plan estimates approximately 5,500 annual flight operations calculated based on Order 5090.3c from the "Field Formulation of the national Plan of Integrated Airport Systems". This represents a significant increase from the 3,600 operations reported in the 2005 RTP.

Trinity Center Airport does not meet the FAA design standards for Aircraft Design Group 1. The following improvements are needed to meet minimum standards for the FAA designation:

- Acquire the Federally-owned, special-use-permitted lands that are improved and slated for continuing airport development.
- Extend runway 14 to offset relocation of the threshold to provide the required runway and safety areas for Runways 14 and 32 without extending the total length of the runways.
- Widen a portion of the runway surface from 50 to 60 feet.
- Relocate the service road located at the north end of the airport.

The following additional needs have been identified:

- Continue to remove obstructions within airspace encroachment areas.
- Add an Automated Weather Observation System (AWOS) and a Precision Approach Path Indicator (PAPI)
- Provide additional hangars and tie-down areas.
- Provide drainage improvements.
- Provide a fueling system.
- Add runway lighting.
- Resurface runways and taxiway as funding allows.
- Add a helipad at the south end.

Weaverville – Lonnie Pool Airport

The following information was compiled from the 2005 RTP and the Weaverville Airport Master Plan/new site feasibility study prepared by Coffman Associates, Inc. in 2007. The Weaverville – Lonnie Pool Airport is located in Weaverville, the county seat, business center, and population center for Trinity County. The facility is classified as a Community – Recreation Airport. The airport has no fixed-based operator. The airport runway is a single directional, consisting of a 3,380 foot by 50 foot asphalt surface. All planes must take off to the south and land from the south due to the surrounding terrain. The terrain to the north and east of the airport penetrates the horizontal and conical surfaces of the runway. The runway is further constrained by gradient and obstructions in the approach and departure zones. Runway operations are supplemented by a wind indicator and an automated weather observation system (AWOS).

The airport has 16 marked tie-downs and nine hangars. An aircraft parking apron is located on both sides of the runway, at midfield. There are currently no fueling facilities on the site. The airport serves Aircraft Design Group 1. The Airport Layout Plan estimates approximately 3,800 annual flight operations calculated based on Order 5090.3c from the "Field Formulation of the national Plan of Integrated Airport Systems". This is below the 2005 RTP data that showed approximately 15 based aircraft and 4,700 annual flight operations.

The existing airport is constrained by non-aviation uses and lacks expansion area. Improvements to the facility to allow two-way or night operations are not considered feasible.

The 2007 Airport Master Plan/Site Analysis study identified several options for a replacement airport site for Weaverville. However, the study found that there are no sites near Weaverville that offer clear advantages

from an engineering or environmental perspective, and most will require extensive mitigation. The Trinity County Board of Supervisors has decided not to relocate the airport. Instead, they will continue operation of the existing Weaverville Airport without any additional improvements other than:

- Security fencing (installed in 2009)
- Addition of an Automated Weather Observation System (AWOS) (installed in 2010)
- Routine pavement maintenance and tree removal
- Addition of hangers and shade structures as need and as funding becomes available

RAIL SERVICE

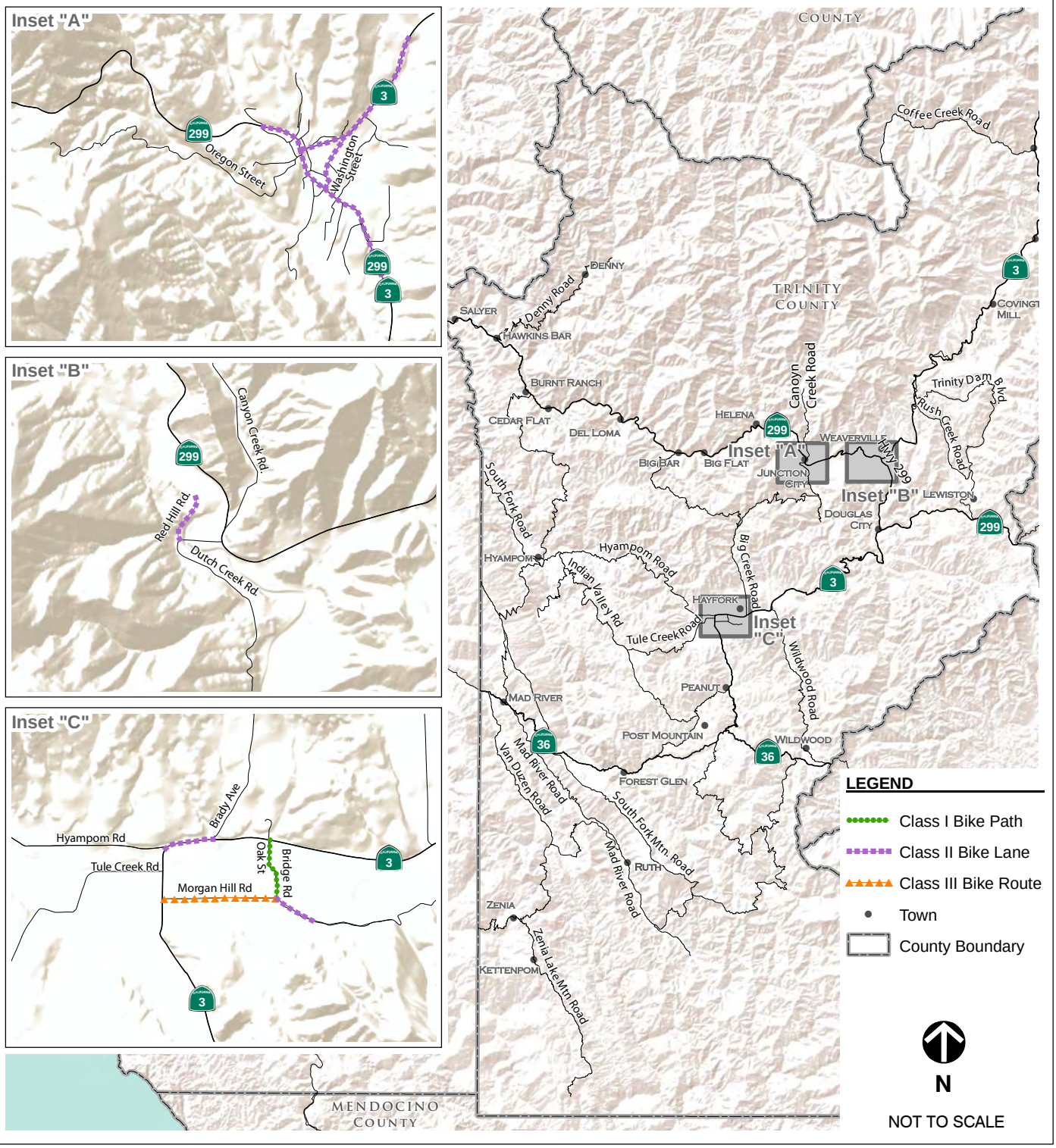
There is no east-west rail service available in California north of San Francisco. The North Coast Railroad Authority operates a shortline freight rail service from Eureka/Arcata to south of Willits. A small portion of this rail line crosses the southwestern-most portion of Trinity County. Operation of the rail line has been unreliable due to unstable geological conditions in the Eel River valley and it is currently closed. If the railroad were to reopen, there would be a potential for export of quarried rock from Trinity County via rail.

NON-MOTORIZED FACILITIES

Non-motorized facilities include locally or regionally significant bike lanes/trails, sidewalks, hiking trails, equestrian trails, and other related improvements. The Pacific Crest Trail (which follows a portion of the northern Trinity County line) and the National Recreation Trail along the South Fork of the Trinity River are identified as being of regional and national significance. Other bike lanes, hiking trails, and riding trails in the county are important for local use as well as to tourists and recreational riders. The La Grange Classic mountain bike race utilizes local roads and trails in the Weaverville area and draws hundreds of riders from outside of Trinity County annually. Trails within and around the various communities are used by local residents and visitors for both bicycling and hiking. The multimodal trailhead facility for the Weaverville Basin Trail System at Lee Fong Park in Weaverville provides a connection point for pedestrian, bicycle, transit and automobile users as well as parking, restrooms and information regarding the trail system.

The 2004 Bikeways Master Plan indicates there are over six miles of existing bikeways in Trinity County. Weaverville has a good spine bikeway network with bike lanes on SR 3 and SR 299 through town and on Washington Street. The County also has numerous recreational trails that are not designed or expected to meet Caltrans Class I standards consistent with the Highway Design Manual, Chapter 20.

Existing and proposed bikeway and pedestrian trails are located in Hayfork, Junction City, Lewiston, Douglas City, and Weaverville. **Table 2.18** lists the existing bikeway facilities by classification and length. **Figure 7** displays the existing bikeways.



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TRINITY COUNTY BIKEWAYS

FIGURE 7

TABLE 2.18
EXISTING BIKEWAYS IN TRINITY COUNTY

Community	Location	From	To	Class	Length (Miles)
Hayfork	Oak Street/Bridge	SR 3	Morgan Hill Rd.	I	0.5
Hayfork	Morgan Hill Rd.	Oak Street	Kyler Avenue	II	0.4
Hayfork	SR 3	Hyampom Road	Brady Rd.	II	0.5
Hayfork	Morgan Hill Rd.	SR 3	Oak Street	III	1.0
Junction City	Red Hill Rd.	Junction City Elementary School	Dutch Creek Rd.	II	0.5
Weaverville	SR 299	N. Miner St.	Cox Rd.	II	1.8
Weaverville	SR 3	Airport	Elementary School	II	1.4
Weaverville	Washington St.	SR 3	SR 299	II	0.5
				Total Miles	**6.6**

Source: Trinity County Bikeways Master Plan – Alta 2004

Adopted community plans aid the Trinity County Transportation Commission when considering non-motorized improvement priorities and guide the Board of Supervisors in reviewing land divisions and other county-issued entitlements to determine the extent of right-of-way necessary to provide bicycle routes and preserve important recreational trails. Cooperation with the U.S. Forest Service, other public agencies, private landowners and civic groups can contribute to the necessary maintenance of regional trails.

The 2004 Bikeways Plan addressed the need for future bikeways within the County. Improvements for three Class I facilities were identified for Weaverville. Other Class III improvements were recommended for various Caltrans, County, and community facilities. These improvements are listed in the Action Element, Chapter 4. Additional bikeway needs are described below:

- "Share the Road" signs are needed on SR 3, SR 36, and SR 299 to alert motorists that bicycles may be on the roadway. These signs should be installed every two to three miles and at the County boundaries.

- "Share the Road" signs and the Trinity County bike route logo should be posted on County roads that serve as spur bikeways from the State route network. These spur routes are used by bicyclists to reach remote communities, campgrounds, and other places of interest. The list of County roads needing signs are included in the Action Element Chapter 4 and also listed in the 2004 Bikeways Master Plan

AIR QUALITY

Under State Law, local and regional air pollution control districts have the primary responsibility for controlling air pollutant emissions from all sources other than vehicular emissions. Control of vehicular air pollution is the responsibility of the California Air Resources Board (CARB). In California, State standards are more stringent than Federal standards. The three primary pollutants prevalent within the County are listed below:

- *Ozone* (O_3) – smog formed through a chemical reaction of volatile organic compounds, nitrogen oxides and sunlight;

- *Carbon Monoxide* (*CO*) – a colorless, odorless gas that is considered toxic because of its tendency to reduce the carrying capacity of oxygen in the blood; and,

- *Suspended Particulate Matter less than 10 microns (PM_{10})* – solid or liquid matter that can penetrate into the lungs and affect sensitive population groups such as children, the elderly, and people with respiratory diseases.

These pollutants are all emitted by motor vehicles. Motor vehicles also release fugitive PM10 dust that is re-entrained from road surfaces. Fugitive PM10 dust release is substantially higher on unpaved roads compared to paved roads.

Air quality is a significant consideration in planning for and evaluating the transportation system. The CARB divides the State into air basins and adopts standards of quality for each air basin. Trinity County is part of the North Coast Air Basin, with air quality managed by the North Coast Unified Air Quality Management Distirct (NCUAQMD).

The NCUAQMD has a monitoring station located in Trinity County on the roof of the Courthouse in Weaverville. The only pollutant monitored at this site is Particulate Matter 10 (particulate matter ten microns in diameter or less) or PM10. Airborne Particulate Matter is caused by a combination of sources including fine fugitive dust, combustion from automobiles and heating, road salt, conifer pollen, and others. Constituents that comprise suspended particulates include organic, sulfate, and nitrate aerosols which are formed in the air from emitted hydrocarbons, and chloride, sulfur oxides, and oxides of nitrogen. The 24-hour Federal PM10 Standard is 150 µg/m3, while the State Standard is 50 µg/m3. The low population density, limited number of industrial and agricultural installations, and minimal problems with traffic congestion all contribute to Trinity County's generally good air quality. In 2003 (the most recent year for which data is available), Trinity County was in attainment with the Federal PM10 standard, but was in non-attainment (in Weaverville) for the State PM10 standard. Specifically, Trinity County slightly exceeded the State PM10 Standard only one day in 2003 (on 11/18/03) by 3.9 µg/m3. This is generally not of great concern as the measures are within reason, and given that nearly all counties in California are in non-attainment for State PM10. In Trinity County, the primary sources of pollutants contributing to the non-attainment designation for PM10 are wood stoves, wind-blown dust from dirt roads and agriculture, and open burning such as backyard burns, prescribed burning and wildfire.

An air quality conformity determination is not required for adoption of this RTP, as Trinity County is not within a designated Federal non-attainment or maintenance area for air quality and is therefore exempt. However, since the County, and other areas in the North Coast District exceed the State PM10 standard, The North Coast Unified Air Quality Management District has established a PM10 Attainment Plan, which includes Transportation Control Measures (TCMs) and land use measures affecting motor vehicles. Some of the project alternatives proposed in this RTP would lead to reduced traffic congestion, resulting in slightly lower emissions. In addition, some projects to surface unpaved roads are in compliance with the PM10 Attainment Plan being implemented by the NCUAQMD. Therefore, this RTP is consistent with the District's PM10 Attainment Plan.

CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

In 2006, the California State Legislature adopted Assembly Bill (AB) 32 known as the California Global Warming Solutions Act (Section 38560.5 of the Health and Safety Code). The bill establishes a cap on statewide green house gas emissions and sets forth the regulatory framework to achieve the corresponding reduction in statewide emissions levels back to 1990 levels.

In January 2007, the Legislature asked the CTC to review the RTP guidelines to incorporate climate change emission reduction measures. The request emphasized that RTPs should utilize models that accurately measure the benefits of land use strategies aimed at reducing vehicle trips and/or trip length. The CTC staff established an RTP guidelines work group to assist in the development of "best practices" for inclusion in the

RTP Guidelines. The Addendum to the 2007 RTP Guidelines (May 29, 2008) provides several recommendations for consideration by rural RTPAs to address GHG. The following strategies from the guidelines have specific application to Trinity County.

- Emphasize transportation investments in areas where desired land uses as indicated in a general plan may result in vehicle miles traveled (VMT) reduction or other lower impact use.
- Recognize the rural contribution towards GHG reduction for counties that have policies that support development within their cities, and protect agricultural, forest and resource lands.
- Consider transportation projects that increase connectivity, emphasize non-auto modes or provide other means to reduce VMT.

The transportation planning literature recognizes three interrelated components that contribute to transportation emissions reductions. Those components include changes in vehicle technology (cleaner burning engines), alternative fuel sources, and vehicle use. The first two components are typically the responsibility of industry and national governmental interests. RTPAs and local governments have the ability to affect *vehicle use* by promoting transportation alternatives to the automobile, and by managing the demand for transportation. These efforts typically involve goals and policies and/or projects and programs focused on getting people out of their cars and into non-auto modes of travel (mode shifting). The following RTP goals and objectives are established for Trinity County to lessen dependence on the automobile and to promote mode shifting to other forms of transportation.

- Goal 2: Provide affordable, reliable, and efficient public transportation options that are consistent with demand and available resources.
  - support public transit determined to be “reasonable to meet”
  - maximize county-wide transit service and inter-county connections
- Goal 3: Promote non-auto modes by developing a safe and convenient system of bicycle and pedestrian facilities to connect activity centers and communities
  - increase the total mileage of safe bike routes, lanes and trails
  - increase the total mileage of safe pedestrian walkways and sidewalks
  - provide safe equestrian facilities
- Goal 5: Support and promote economic development through the efficient movement of freight to, and through Trinity County
  - Support efforts to improve State Route 299 to allow passage of STAA standard trucks (which could reduce the number of truck trips between Interstate 5 and US 101).
  - Encourage use of county airports by commercial freight delivery services
  - Develop aviation related freight delivery services at airports as funding allows

A 2008 report by the Victoria Transport Policy Institute “Smart Transportation Emission Reductions – Identifying Truly Optimal Energy Conservation and Emission Reduction Strategies” – Todd Lippman, August 2008, states that most current transportation emission reduction programs focus on changing vehicle and fuel type rather than the amount people drive. Mileage reduction strategies tend to be ignored because many people assume that they are difficult to implement and may harm the economic well being of consumers. However, the report also states that many high-mileage motorists would prefer to drive less and have greater

travel choices, provided those choices are convenient, comfortable and affordable. As with most rural counties, non-auto modes are limited and are not generally seen as a viable alternative to the automobile for economic and geographic reasons.

In recent years, Trinity County has experienced relative slow growth (less than 1.0 percent per year) in population and employment and is forecast to continue this trend through 2030. Based on this trend and the guidelines established in the 2010 RTP guidelines, the County is not required to run a network travel demand model to estimate VMT. However, the County is committed to implementing policies and strategies that reduce reliance on the automobile and contribute to the reduction of GHG. The effectiveness of efforts by the RTPA to provide transportation alternatives and to implement Transportation Demand Management (TDM) and Transportation System Management (TDM) policies and strategies can be measured in terms of reductions in VMT or the expected growth in VMT. VMT reductions and speed correlate directly with reductions in GHG emissions. In the past, the County has relied on Caltrans to provide VMT estimates through their count program on state highways. The results of this approach are summarized below.

Caltrans Annual VMT Report

Caltrans reports VMT by County on an annual basis. Their summary report "Vehicle Miles of Travel on State Highway System" for Trinity County covering the years 1999 through 2007 shows that between 1999 and 2004 VMT increased approximately 2.1 percent (compounded) per year on State highways in the County. However, since 2004, VMT in the County has declined by approximately 0.4 percent per year through 2007. This reduction is attributed to a reduction in resource employment, higher fuel costs, and the State's declining economy.

Table 2.19 displays historical annual and average daily vehicle miles of travel (VMT) on state highways in Trinity County.

TABLE 2.19
VMT ON STATE HIGHWAYS IN TRINITY COUNTY

Year	Annual VMT (in millions)	Average Daily VMT[1]
1995	112.8	309,041
1996	113.3	310,411
1997	119.2	326,575
1998	119.6	327,671
1999	126	345,205
2000	111	304,110
2001	111	304,110
2002	111	304,110
2003	115	315,068
2004	121.3	332,329
2005	120.7	330,685
2006	120.3	329,589
2007	120.4	329,863
2008	119.4	327,123

Notes: [1] Average Daily VMT equals annual VMT divided by 365 days per year.
Source: Caltrans Traffic and Vehicle Data Systems Unit

Trinity County Travel Demand Model (TDM)

Although not required by the RTP Guidelines, Trinity County developed a TDM in 2004 to assist the county in refining its forecasting of traffic levels and patterns on its transportation system. This proactive approach will position the County to report progress in complying with any future CARB targest established for the County in AB 32 or SB 375.

A travel demand model (TDM) is a computer based tool that estimates traffic levels and patterns for a specific geographic area. TDM's are compiled using a computer program consisting of input files that summarize the area's land uses, street network, travel characteristics, and other key factors. Using this data, the model performs a series of calculations to determine the amount of trips generated by land uses, where each trip begins and ends, and the route taken by the trip. The model's output includes estimates of traffic on major roadways.

The Trinity County TDM is viewed as a valuable tool for the preparation of the Trinity County 2010 Regional Transportation Plan and other long-range transportation planning studies including compliance with GHG legislation such as AB 32 and SB 375 if such compliance is mandated for Trinity County. The model can be used to estimate the average daily and peak hour traffic volumes on major roadways in the future under certain growth assumptions. Using these traffic projections, transportation improvements can be identified to accommodate traffic growth, as well as forecasting future VMT and GHS emissions from the transportation sector. The Trinity County Travel Demand Model Development Report is provided in Appendix 2C.

Model Details

The TDM encompasses all of Trinity County. Although there are no incorporated cities in Trinity County, the model includes significant detail in the communities of Weaverville, Hayfork, and Trinity Center. The

roadway network includes all state highways (State Routes 299, 3, and 36) and several major County roadways.

The model produces traffic estimates of daily, AM peak hour, and PM peak hour conditions. The model is calibrated to traffic counts for what is conventionally termed a "typical weekday", which is defined as a Tuesday, Wednesday, or Thursday during a week with no holidays when local schools are in session. Because little growth has occurred in the County since 2004, the model was developed based on the same land use as the previous 2004 model. However, land use in several areas has been updated based on aerial surveys and building permit counts. The model's roadway network represents Trinity County's 2009 roadways. Traffic counts were provided by the County and were collected in 2007, 2008, and 2009. Two model years were developed: 2009 and 2040.

Table 2.20 displays 2009 and future year 2040 daily VMT estimates on state facilities and county roadways produced by the Trinity County Travel Demand Model (Fehr & Peers 2010). The VMT estimates are displayed for each 5 mile per hour speed increment. With this type of information, emission levels for GHG can be estimated once targets are established. Note that the travel demand model results do show an increase in Daily VMT for Trinity County.

TABLE 2.20
2009 AND 2040 FORECASED VMT ON TRINITY COUNTY ROADWAYS (INCLUDING STATE HIGHWAYS)

Speed Increment	2009 Daily VMT	2040 Daily VMT
20-25 mph	19,459	21,863
26-30 mph	11,503	11,270
31-35 mph	26,212	32,208
36-40 mph	6,285	6,671
41-45 mph	4,368	5,340
46-50 mph	3,401	4,046
51-55 mph	360,629	449,854
Grand Total	**431,859**	**531,254**

Source: Fehr & Peers, 2011

3. POLICY ELEMENT

The purpose of the Policy element is to identify legislative, planning, financial and institutional issues and requirements within Trinity County. Consistent with the 2010 RTP Guidelines, this Policy Element is intended to:

- Describe the transportation issues in the region
- Identify regional needs for both short-term (0-10 years) and long-term (11-20 years) planning horizons (Government code Section 65080 (B) (1)
- Maintain internal consistency with the Financial Element and STIP fund estimates
- Address consistency with the 2007 California Transportation Plan policies and the Interregional Blue Print (2009)
- Address consistency with the 2008 California Strategic Highway Safety Plan (SHSP) challenge issues and policies
- Consider the Trinity County General Plan Circulation Element (2002)
- Include "unmet transit needs" procedures and policies for public transportation

In addition this RTP also addresses consistency with the Trinity County General Plan Circulation Element (2002); Shasta-Trinity National Forest Motorized Travel management Plan (March 2010); Water Quality and Habitat Protection Manual for County Road Maintenance (2002) (beyond what is required by the guidelines).

STATEWIDE ISSUES

The 2009 CTC report to the legislature cites six issues that are at the forefront of transportation planning and delivery in California for 2010 and beyond. These issues are relevant to Trinity County and future updates to the RTP.

Impact of State Budget on Transportation Resources

Ongoing state budget challenges, combined with reduced revenues from transportation taxes and fees, are jeopardizing the delivery of existing transportation capital programs. In December 2008, California projected a General Fund shortfall of $42 billion for the remainder of 2008-09 and 2009-10. Revisions to the 2008-09 Budget Act and the amended 2009-10 Budget Act resulted in diversions of transportation funding and loans to the General Fund. While the Administration and the Legislature have spared Proposition 42 funding, transit capital and operating funds have been decimated to provide budget deficit relief. Proposition 42 funding is critical due to the interrelated nature of STIP funding to Proposition 1B programs.

Programming and Funding the 2010 STIP

The STIP is a five-year planning document adopted every two years that commits transportation funds for improving operations for rail, mass transportation, local roads, and the state highway system. The 2010 STIP program capacity is derived primarily from Proposition 42 revenues transferred to the Public Transportation Account (PTA) and the Transportation Investment Fund (TIF). Section 14524(c) of the Government Code requires the fund estimate to base revenue assumptions on existing law; however, existing law cannot guarantee that revenues will be realized over the fund estimate period. In addition, the 2010 STIP fund estimate faces major revenue risks that could substantially impact the actual program capacity. These risk items include:

- Transfers of Proposition 42 gasoline sales tax revenues - Transfers to the TIF have been delayed or suspended in the past due to budget shortfalls. There is a chance that these transfers could again be suspended during the fund estimate period because of continuing state budget shortfalls.

- PTA Diversions – The 2009-10 Budget Act and subsequent trailer bills reduced PTA funding by diverting up to $363 million and all the spillover revenue to the Motor Vehicle Fund (MVF) with future spillover diversions continuing through 2012–13 (Chapter 14, Statutes of 2009).

- State General Fund Assistance – In December 2008, the state projected a General Fund shortfall for the remainder of 2008-09 and 2009-10. This shortfall required diversions of transportation funding and loans to the General Fund. If revenue shortfalls are again experienced, available cash for programming new capacity will be reduced.

- Federal Highway Funding – The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) expired on September 30, 2009. In addition, the Federal Highway Trust Fund required cash transfers from the U.S. General Fund in federal fiscal years 2008 and 2009 in order to meet its funding levels in the current Federal Highway Act. This makes future levels of federal funding uncertain.

- Bond Market – Proposition 1B, approved by voters in November 2006, authorized the issuance of general obligation bonds. The last sale of these bonds was October 8, 2009, providing funds for Proposition 1B transportation projects currently under construction. It is estimated that the amount provided will fund these projects through June 30, 2010. Due to a struggling economy and credit market, any future bond sale date, and any proceeds apportioned to Proposition 1B projects, is unknown. However, the final allocation for the 2009-10 appropriation has been announced, providing Trinity County with $1.3 million for eligible projects to be completed by June 30, 2013. Trinity County has submitted a list of projects to be completed with these funds. Actual distribution of funds is contingent on sale of the remaining bonds, anticipated in fall 2010 or spring 2011.

Transportation and Climate Action: Implementation of SB 375

As California is leading the nation in addressing the issues of climate change, the California Transportation Commission (CTC) is closely working with other state agencies and the Legislature to promote a coordinated approach to strategic infrastructure decisions. The CTC supports the Strategic Growth Council created by Senate Bill (SB) 732 (Chapter 729)

Recognizing that the transportation sector is the largest contributor to GHG the Commission has moved quickly to develop early action and long term strategies to reduce GHG emissions in transportation decisions. In 2008, subsequent to the passage of the Global Warming Solutions Act of 2006 (Chapter 488, Statutes of 2006), the Commission adopted an addendum to the 2007 Regional Transportation Plan (RTP) Guidelines to address climate change and GHG emissions during the RTP process by promoting smart growth/ land use and modeling strategies to be considered in the preparation of RTPs. Separate approaches are outlined for MPOs and RTPAs, depending on their population and growth patterns.

Preservation of the State's Transportation System

California's current transportation system is deteriorating while demand is increasing, adversely affecting the operational efficiency of key transportation assets, hindering mobility, commerce, quality of life and the environment. California lacks sufficient funding to preserve and maintain this asset, and the cost of maintaining and preserving this asset is increasing due to the cumulative effects of an aging system, growing traffic demands, and rising costs. The state's existing transportation system, consisting of state highways, local streets and roads, aeronautics, and public transit and rail, is critical to the safety, mobility and economic vitality of California, yet without sufficient funding, these assets are currently deteriorating.

On the state highway system, more than 26 percent of the pavement is distressed and needs rehabilitation or reconstruction. Over the next 10 years, the level of distressed pavement on the state highway system is expected to increase to 60 percent. Caltrans estimates that the cost of rehabilitating the state highway system is more than $6 billion annually but less than $2 billion is available. Without sufficient funding, the condition of the state highway system will continue to deteriorate and the costs to maintain and rehabilitate will increase.

As vital links in the state's transportation network, local streets and roads represent approximately 81 percent of California's roads. A March 2009 report prepared for a broad coalition of local and regional agencies, "Statewide Local Streets & Roads Needs Assessment" (www.savecaliforniastreets.org), rated the pavement condition of the majority of the state's local streets and roads as "at risk" and likely to deteriorate to "poor" in the next 25 years, assuming current levels of funding. The report estimated the unfunded backlog of maintenance and rehabilitation work at $37 billion today and $79 billion in 2033, without significant funding increases. *The same report indicates that Trinity County needs approximately $363 million over ten years to bring the transportation system to an acceptable maintenance level.*

Federal Re-Authorization in California

SAFETEA-LU lapsed on September 30, 2009. In 2010, Congress will have the opportunity to pass re-authorization legislation that can affect much of what Americans care about most: economy and jobs, national security, energy policy, gas prices, environmental stewardship, and climate change. Under the leadership of Governor Arnold Schwarzenegger, the Business, Transportation and Housing Agency, Caltrans, and transportation officials from across California reached consensus on a basic set of principles that were given to the California Congressional Delegation in Washington, D.C. to consider in the upcoming debate on the future of this nation's transportation policies. The CTC has embraced these principles and has asked the Legislature to refer to these principles as opportunities to enhance transportation funding:

- Ensure the financial integrity of the Highway and Transit Trust Funds
- Rebuild and maintain transportation infrastructure in a good state of repair
- Establish goods movement as a national economic priority
- Enhance mobility through congestion relief within and between metropolitan areas
- Strengthen the federal commitment to safety and security, particularly with respect to rural roads
- Strengthen comprehensive environmental stewardship
- Streamline project delivery

Reliable Transportation Funding

California's current transportation funding system is based primarily on user fees such as fuel excise tax, sales tax on fuel, weight fees, bridge tolls and transit fares. For many years, the motor vehicle fuel excise tax was an adequate user fee proxy for a driver's road usage. However, increased automobile fuel efficiency, the emergence of alternate technologies, and fixed taxation rates have eroded the fuel excise tax's ability to approximate road usage and fund critical improvements and rehabilitation. In addition, the state's repeated diversions of transportation funds to meet General Fund shortfalls create even greater funding gaps and chronic instability.

REGIONAL AND LOCAL ISSUES

Trinity County is large and sparsely populated with the roadway system consisting of a vast array of aging, narrow roads and bridges. Most of the roads are dead-end, and many isolated communities have only one access route, particularly during the winter season, which brings heavy snowfall in some parts of the county. Unstable geology and steep terrain cause maintenance problems such as erosion, landslides, and rockfall on the roads. Many of these remote roads have no shoulders and minimum travel lane widths. In addition, travel lane widths are continuously lost to erosion on steep terrain, and many roads now have less than two lanes. The roads and bridges are aging and in need of major rehabilitation.

Many roads are built on old logging roads, stagecoach routes, and on solid rock or uncompacted earth without the benefit of engineered structural sections and adequate subsurface drainage. Similarly, many bridges along these routes are single-lane, resting on deteriorating abutments of wood or steel I-beams. Nearly one-third of the County-maintained bridges are currently rated Functionally Obsolete and/or Structurally Deficient (Functionally Obsolete" refers to bridges with access limits such as the presence of only one travel lane, the lack of proper bridge rails, or lack of appropriate clearances. "Structurally Deficient" indicates that a bridge has a loading limit and a permit is required prior to crossing with loads exceeding the limit). Maintaining these roads and bridges requires constant work, and several crews and maintenance stations are needed to adequately cover maintenance needs and emergency response throughout this large geographical area.

The large geographical area and sparse population of the county presents a problem for the Transit Program as well. It is very difficult to serve such a sparse population with transit services in a cost-effective manner. The Mills-Deddeh-Alquist Act was passed in 1971 (Transportation Development Act). The TDA requires revenues generated by bus fares to equal at least 10 percent of operating costs. Meeting the state required fare-box requirements for Article 4 transit service has become a significant challenge, particularly in very rural, frontier counties such as Trinity County. Performance measures based solely on operating costs do not consider dispersed populations, topography or long distances between communities.

An issue somewhat unique to Trinity County is that over 70% of the land in the County is Federal land, which is not subject to property taxes. These lands include vast areas of National Forest, National Wilderness and Bureau of Land Management land, as well as lands flooded by the Trinity and Lewiston dams. To mitigate for the loss of property tax revenues, the Forest Service historically paid the County a share of all revenue generated by timber sales on National Forest land to supplement local funding for education services and roads. However, environmental restrictions have reduced timber revenues substantially since the mid 1980's.

The Secure Rural Schools and Community Self-Determination Act (SRSCA) was passed in 2000 to provide a steady source of revenue to rural schools and roads, based on the historic levels received during the 1980's. A portion of the funds could be used by the County Department of Transportation for road-related costs, including operations and maintenance. The Act sunset in 2006, but was extended for five additional years in 2008, with annual receipts declining by 10% each year and ending in 2012. Reauthorization of the bill is critically important to rural forest communities in the US that are affected by the decline of timber harvests on federal forest lands. If the "safety net" payments are discontinued, annual operating revenues from Forest Receipts will return to the previous formula, resulting in a loss of approximately 60% of the County Department of Transportation's recurring revenues. In addition, Title II of the SRSCA provides funding for projects that "improve the maintenance of existing infrastructure" including roads and trails on Federal land or where projects would benefit resources on Federal land.

Additional Issues

- Bicycle and pedestrian facilities need to be upgraded and expanded to provide a safe environment for non-motorized modes of transportation and to assist in attracting visitors.

- While transit service continues to be an increasingly important component of the north state's regional transportation system and an important service to county residents, it is difficult to provide these services in a cost-effective manner.

- Factors in adjacent counties may very well impact the county's regional transportation system in the future as well. Specifically, the population of Shasta County is projected to increase by 36.7 percent over the next 20 years, and increase by 8.6 percent in Humboldt County. In addition, there are proposals to develop a deep-water port in Humboldt County, and proposed improvements to SR 299 over Buckhorn Grade in Shasta County would make the drive easier and safer between the Central Valley and the Coast, while also allowing for larger trucks to utilize SR 299. These factors will likely increase future tourism traffic and truck traffic on the Trinity County regional transportation system.

- These problems are exacerbated by the limited funds available for transportation programs and projects on the federal, state and local levels. There are limited local funds available to carry out adequate roadway maintenance programs. At the same time, there is a shortage of state and federal grant funding for roadway and bridge rehabilitation, replacement and other improvements on local roads and state highways.

GOALS, OBJECTIVES, AND POLICIES

An important element of the regional transportation planning process is the development of valid and appropriate goals, objectives, and policies. The RTP guidelines define goals, objectives, and policies as follows:

- A goal is general in nature and characterized by a sense of timelessness. It is something desirable to work toward, the end result which effort is directed.

- An objective is a measurable point to be attained. They are capable of being quantified and realistically attained considering probable funding and political constraints. Objectives represent levels of achievement in movement toward a goal.

- A policy is a direction statement that guides decisions with specific actions.

This RTP sets forth policies that provide the framework to guide decision makers so that short-range actions and decisions are made toward implementation of the long-range plan. Some policies are specific by their very nature, while others provide guidance that is more general. The TCTC established policies in this RTP that support implementation of its goals and objectives. These policies support each transportation mode to ensure the effectiveness of a comprehensive regional transportation system. The following goals, objectives and policies are consistent with the transportation goals and policies presented in the adopted Trinity County General Plan. They are also consistent with the financial resources available to the region, as presented in the Financial Element.

Trinity County is typical of many rural counties in California in that the county's existing transportation system and widely scattered population limit alternative solutions to transportation-related problems. The automobile is the primary mode of moving people in the county, and the truck is the primary mode of moving goods and commodities. The use of other modes of transportation has been limited because of lack of facilities, distance between communities, and lack of an economic base to provide support.

A transportation system provides mobility to sustain social, economic, and recreational activities. An improperly developed transportation system can result in ineffective mobility, and cause adverse and undesirable conditions, such as safety hazards, long delays, air pollution, and unnecessary energy consumption. The goals, objectives, policies, and implementation measures of this RTP are intended to guide the development of a transportation system that will maintain and improve the quality of life in Trinity County.

The goals, objectives, and policies for each component of the Trinity County transportation system are provided below. They cover both short range and long range desired outcomes. They are consistent with the policy direction of the Trinity County General Plan (GP) Circulation Element (May 2002), the 2005 Trinity County Regional Transportation Plan (October 2005), the updated California Transportation Plan (CTP 2030) addressing the new requirements for statewide planning established by the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for users (SAFETEA-LU), and the financial realities facing the State and Trinity County.

The goals, objectives, and policies by transportation element reflect a balanced approach and focus on the most feasible desired outcome given the limited transportation dollars available. The core set of goals, objectives and policies were developed as part of the 2005 RTP and the collaborative planning process for this RTP update.

Goals and Policies

Goal 0: Overall Regional Transportation

To provide a safe, reliable, accessible, cost-effective and efficient transportation system consistent with socioeconomic and environmental needs within Trinity County. Updates to the county's Regional Transportation Plan should include an assessment of changes in population, travel patterns, completed improvement projects, and the impacts to the transportation system.

Goal 1: Streets and Highways

Develop and maintain an efficient and safe system of streets, highways, and bridges that is sensitive to existing and future needs and promotes preservation of the environment, reliable access to communities and enhancement of the economy.

Objective 1.1 - Identify anticipated roadway and intersection congestion/capacity problems before they become critical in order to allow time to plan, program, and design preventative or corrective measures.

Policy 1.1.A – The minimum acceptable Level of Service (LOS) standard for county roadway and intersection operation in the Weaverville Community Plan Area is "D". For unsignalized intersections, LOS is calculated based upon the average peak hour delay for the worst movement (using the current version of the Highway Capacity Manual). No public highway or roadway within the Weaverville Community Plan Area should be allowed to fall to or below LOS "E".

Policy 1.1.B – The minimum acceptable Level of Service (LOS) standard for county roadway and intersection operation in all other parts of Trinity County is "C". For unsignalized intersections, LOS is calculated based upon the average delay for the worst approach (using the current version of the Highway Capacity Manual). No public highway or roadway outside of the Weaverville Community Plan Area should be allowed to fall to or below LOS "D".

Policy 1.1.C – The Level of Service (LOS) standard for state highway roadway segments and intersections is defined in the Caltrans Transportation Concept Report (TCR) for the facility.

Policy 1.1.D – Traffic analysis, engineering judgment and/or special studies should be utilized to assess whether roadways or intersections are operating near, at or below the applicable LOS standard. If a roadway or intersection is near, at or below the applicable LOS standard, improvements or other strategies to remedy the condition should be considered a priority.

Objective 1.2 – Rehabilitate and/or reconstruct existing road and bridge facilities where necessary, and continue to maintain existing facilities.

Policy 1.2.A – Pursue Federal and State grant funding for major rehabilitation and reconstruction of County roads and bridges.

Policy 1.2.B – Maintenance of existing facilities should be one of the primary uses of discretionary Road Funds.

Policy 1.2.C – Utilize a Pavement Management System to track maintenance needs of roads.

Policy 1.2.D – Use sound engineering judgment in determining road design and construction in order to reduce long term maintenance costs.

Policy 1.2.E – Pursue legislation that will strengthen and solidify discretionary funding sources for transportation system maintenance as well as additional funding for transportation improvements.

Objective 1.3 – Enhance operation and safety of existing county roads and State Highways by providing adequate width and safe passing zones where necessary and feasible.

Policy 1.3.A – Strive to provide two safe travel lanes on county roadways.

Policy 1.3.B – Construct turnouts and passing lanes on county roads where feasible and necessary and as transportation funding allows.

Policy 1.3.C – Support Caltrans' efforts to install turnouts and passing lanes on state highways in Trinity County.

Objective 1.4 – Maintain a uniform road classification system throughout the county to assure consistency in the application of development and road standards.

Policy 1.4.A – Apply the American Association of State Highway and Transportation Officials classification system of arterials, collectors, and locals to county roads, as identified in Trinity County Code Section 12.10.010.

Policy 1.4.B – Periodically review and update individual road classifications based on current land use and population projections.

Objective 1.5 – Provide reliable all-weather access to all developed communities of the county.

Policy 1.5.A – Identify communities with a history of access problems of isolation due to roadway failures and facilitate efforts to eliminate those conditions.

Policy 1.5.B – When feasible, provide more than one access route into residential areas.

Policy 1.5.C – Motorist safety, emergency vehicle access, roadway use/purpose and climate/weather conditions are all factors that should be considered when existing roads are improved or new roads are developed.

Objective 1.6 – Maximize motorists' access to telephone services to aid in response to accidents and vehicle breakdowns.

Policy 1.6.A – Support efforts to expand cell phone coverage of the regional major roadway system.

Objective 1.7 – Establish consistency and/or linkages between transportation needs and land use plans.

Policy 1.7.A – Consider the Trinity County General Plan and/or Community Plans when assessing potential transportation projects. Location, design and development of transportation projects should be compatible with the adopted land use policies of the county.

Policy 1.7.B – Determine and, as appropriate, address the probable land use impacts of transportation projects prior to constructing the projects.

Policy 1.7.C – Perform traffic studies and community informational meetings prior to determining the need for new roads or significant expansion of existing roads.

Policy 1.7.D – New roads and reconstruction of existing roads should be designed for anticipated traffic volumes and weight loads.

Policy 1.7.E – Identify road segments where existing right-of-way is inadequate to accommodate road width needed at projected community build-out and take steps to obtain necessary right-of-way. The county road and state highway right-of-way needs should be met in conjunction with development project approvals.

Policy 1.7.F – Determine and, as appropriate, address the probable transportation impacts of proposed land use projects.

Policy 1.7.G – The costs of street and highway improvements necessitated by new development should be borne by the responsible developers.

Objective 1.8 – Coordinate plans, programs and projects for the county, state and federal transportation systems.

Policy 1.8.A – Provide state and federal agencies the opportunity to comment on transportation plans and projects proposed by the County, as appropriate.

Policy 1.8.B – Seek opportunities to review and comment on transportation plans and projects proposed by state and federal agencies.

Policy 1.8.C – Attempt to develop partnerships with Caltrans and other Regional Transportation Planning Agencies when considering large transportation projects with multi-jurisdictional benefits and/or impacts.

Goal 2: Public Transportation

Provide affordable, reliable, and efficient public transportation options that are consistent with demand and available resources.

Objective 2.1 – Support public transit programs that are determined to be "reasonable to meet" as determined by the unmet transit needs process.

Policy 2.1.A – Continue to aggressively pursue federal, state, local and private funds for transit capital and operational expenses.

Policy 2.1.B – Continue to update the Transit Development Plan to identify transit needs and opportunities to better serve transit users of all ages.

Policy 2.1.C – Continue to meet with the Social Service Transportation Advisory Council to receive input on potential unmet transit needs and ways to meet unmet transit needs that are reasonable to

meet, particularly for residents who have limited mobility for their basic travel necessities and social wellbeing.

Policy 2.1.D – Conform to the recommendations made in the Triennial Performance Audits and annual Fiscal Audits, which includes considering operating transit under Article 8.

Objective 2.2 – Maximize county-wide transportation service and inter-county connections.

Policy 2.2.A – Consider bus service in areas of the county where ridership can support adopted farebox recovery ratios.

Policy 2.2.B – Support volunteer driver reimbursement programs or other innovative services that effectively meet the needs of transportation dependent persons residing beyond the Trinity Transit service area.

Policy 2.2.C – Encourage development of a multimodal transportation network (taxi services, transit) between airports and communities that would provide for better connectivity to community services (such as: restaurants, hotels/motels, community events, points of interest).

Policy 2.2D – Support transit services that provide connections to regional services outside of the County.

Goal 3: Bicycle, Pedestrian, and Other Alternative Modes

Promote alternative mode travel by developing a safe and convenient system of bicycle routes, pedestrian facilities, and trails to connect Trinity County's activity centers and communities consistent with demand and resources.

Objective 3.1 – Increase the total mileage of safe bike routes and trails.

Policy 3.1.A – A minimum of four foot-paved shoulders should be provided when any new state highway lane miles are added in Trinity County. Four foot-paved shoulders should also be provided when any new county road classified as an arterial is constructed. Four-foot paved shoulders should be considered as part of rehabilitation projects where feasible, fundable, and consistent with adopted non-motorized plans.

Policy 3.1.B – Strive for a well connected bicycle system with complete bicycle "loop" routes.

Policy 3.1.C – Bicycle facilities shall be developed in accordance with applicable county and state regulations.

Policy 3.1.D – Pursue available funding sources for bicycle facilities when feasible. Possible sources of funding that should be considered include the STIP, TE, BTA, Safe Routes to Schools (SRTS) and other grant programs.

Policy 3.1.E – Keep the Bikeway Master Plan updated with existing facilities and future needs, as resources allow, to qualify for Bicycle Transportation Account (BTA) funds.

Policy 3.1.F – When proposing bikeway facilities along roadways, consideration should be given to separating the bikeway from the vehicle travel way.

Objective 3.2 – Increase the total mileage of safe pedestrian walkways and sidewalks

Policy 3.2.A – Pedestrian facilities shall be developed in accordance with applicable county and state regulations.

Policy 3.2.B – Pursue available funding sources for pedestrian facilities wherever feasible. Possible sources of funding that should be considered include the STIP, TE, Parks and Recreation funds, Title II of the SRSCA, , SRTS, and other grant programs.

Policy 3.2.C – Evaluate needs and opportunities to improve pedestrian connections within one-mile of all schools. Improvements could include but are not limited to widened shoulders, sidewalks, crosswalks, signage, pedestrian signals, and warning lights.

Objective 3.3 – Provide safe equestrian facilities consistent with demand and funding.

Policy 3.3.A – Consider equestrian interests as part of the RTP and other transportation development planning processes.

Goal 4: Aviation

Provide a safe aviation system that meets the community's needs and values through effective use of financial resources.

Objective 4.1 – Ensure that existing or proposed airports and heliports are safe for aircraft to use.

Policy 4.1.A – Support efforts of the county to evaluate and implement security and safety measures, such as perimeter fencing, at airports.

Policy 4.1.B – Support efforts of the county or special districts to develop heliports for emergency medical transportation.

Policy 4.1.C – Support county proposals to install runway lighting and navigational aids, and other airport safety improvements as needed at qualifying airports.

Objective 4.2 – Improve public safety through compatible development surrounding airports.

Policy 4.2.A – Support the county Airport Land Use Commission and its activities, including efforts to prepare and maintain Airport Land Use Compatibility Plans and making safety recommendations on proposed development activities within Airport Influence Areas.

Policy 4.2.B – Support Trinity County's efforts to reduce safety conflicts, such as removal of obstructions that are in conflict with Federal Aviation Regulation (FAR) Part 77 (including, but not limited to, lands managed by federal agencies for uses that may conflict with aviation safety).

Objective 4.3 – Employ strategies to develop a collaborative planning approach to identify existing and future aviation needs in a comprehensive manner.

Policy 4.3.A – Coordinate with the Federal Aviation Administration, State Division of Aeronautics, Trinity County, and other local and regional planning agencies which influence aviation related decisions.

Policy 4.3.B – Support county efforts to develop additional funding sources that would improve the county and regional role in developing and maintaining an efficient and effective aviation system.

Policy 4.3.C – Support efforts to develop or enhance air service between county airports and larger airports in the region or state consistent with community needs.

Policy 4.3.D – Conduct, participate in or comment on aviation related studies that could influence this plan's aviation goals (e.g. ICASP).

Objective 4.4 – Effectively use financial resources to preserve airport infrastructure and expand capacity to stimulate economic growth.

Policy 4.4.A – Coordinate with Trinity County to efficiently and effectively manage grant and loan programs available for county airports.

Policy 4.4.B – Support and participate in efforts to provide/allow appropriate compatible on-site land uses at airport facilities, including aviation services such as fuel and maintenance as well as cottage industries that use air service for deliveries; ground delivery services; and airport compatible light industrial uses at airports.

Objective 4.5 – Integrate community values into airport land use decisions.

Policy 4.5.A – Encourage early and ongoing public participation in the planning and decision making process for airport projects, in order to identify problems and explore solutions.

Goal 5: Goods Movement

Support and promote economic development through the efficient movement of freight to, and through Trinity County.

Objective 5.1 – Support efforts to maintain and improve Trinity County's highway system as important inter-regional trucking routes, as well as connecting highways in adjacent counties.

Policy 5.1.A – Support completion of improvements to Buckhorn Grade on State Route 299 in order to realize benefits to interregional commerce that will result from the project. Consideration should also be given to potential impacts to other parts of the goods movement system in Trinity County – particularly county roads and State Route 299 in Weaverville.

Policy 5.1.B – Support efforts to improve State Route 299 from Interstate 5 (in Redding) to US 101 (in Eureka) to allow passage of STAA standard trucks.

Policy 5.1.C – Support federal, state and local policies that enhance facilities involved in the transportation of commodities.

Objective 5.2 – Coordinate the development and use of the goods movement system with other infrastructure and community service needs in the county.

Policy 5.2.A – Solicit review and comment on goods movement proposals by businesses, citizens, agencies, and special districts that may be affected by the proposal.

Policy 5.2.B – Review land use and transportation projects for potential impacts to goods movement facilities.

Policy 5.2.C – Encourage use of county airports by commercial freight delivery services, including development of air freight service facilities at the airports.

Policy 5.2.D – Improve ground access between airports and community business districts, such as through provision of shuttle and delivery services.

Goal 6: Tourism

Support tourism throughout the County by developing and maintaining a safe and efficient transportation system.

Objective 6.1 – Provide efficient and safe transportation systems with clear signage.

Policy 6.1.A – Provide transportation related information to the Chamber of Commerce, when necessary, to keep tourist and marketing material updated.

Policy 6.1.B – Maintain transportation connections to tourist attractions in a safe and efficient condition.

Policy 6.1.C – Provide safe, convenient, and well marked parking areas for tourists, including parking for recreational vehicles and vehicles pulling trailers.

Goal 7: Environment

Consider the environmental impacts of transportation projects including green house gas (GHG) emissions and reduce, minimize or mitigate all impacts to the maximum extent feasible without sacrificing public safety.

Objective 7.1 – Work with local, state and federal agencies and committees responsible for setting environmental policies and procedures, to provide the county's experience and perspective.

Policy 7.1.A – Consider environmental issues early in the planning and design of transportation facilities.

Policy 7.1.B – Minimize environmental impacts, project delays and added costs or procedures for transportation projects through early and continued resource agency consultation and public involvement.

Policy 7.1.C – Participate in efforts to streamline the environmental process and reduce conflicts between environmental policies and the practicalities of construction, operation and maintenance of transportation facilities.

Policy 7.1.D – Encourage inclusion of mixed land uses, transit, and bicycle/pedestrian improvements in development proposals (and/or public projects) whenever practical to reduce vehicle miles traveled and GHG emissions.

Objective 7.2 – Support and participate in local efforts to protect and maintain the county's natural resources, such as fish and wildlife habitat and water quality.

Policy 7.2.A – Continue to take advantage of training programs and funding for sediment reduction and fish barrier removal projects.

Objective 7.3 – Perform road maintenance practices in a way that minimizes and/or mitigates degradation of environmental quality.

Policy 7.3.A – Continue to educate county road maintenance crews in best management practices and perform such practices to minimize erosion, sedimentation, water pollution, unnecessary vegetation removal and other adverse environmental effects.

Policy 7.3.B – Discourage the use of herbicides along state highways and prohibit County road crews and contractors from using herbicides along county roads.

Policy 7.3.C – Surface unpaved (dirt) roadways, improve drainage systems, and correct stream diversions on roadway sthat are adjacent to waterways that are habitat to aquatic species as funding allows.

RTP CONSISTENCY EVALUATION

The following section describes the 2010 RTP update's consistency with the *2030 California Transportation Plan and Interregional Blueprint* and the *California Strategic Highway Safety Plan*. In addition a consistency evaluation is provided between the Trinity County 2010 Regional Transportation Plan (RTP); Trinity County General Plan Circulation Element (2002); Shasta-Trinity National Forest Motorized Travel Management Plan – Record of Decision (March 2010); the Water Quality and Habitat Protection Manual for County Road Maintenance – Chapter 3 (Maintaining the Roads - 2002), and the Community plans for Weaverville, Hayfork, Mad River, Lewiston, and Ruth. In addition, consistency with the California Regional Water Quality Control Board requirements for Storm Water and Low Impact Development are provided.

Three E's of Sustainability:

- *Environmental Quality*
- *Economic Vitality*
- *Social Equity*

2030 California Transportation Plan (CTP) and Interregional Blueprint

The CTP provides a "vision", goals and strategies for improving transportation in California. The vision is to provide a transportation system that is safe, effective, reliable, interconnected and equitable for all users. The plan focuses on safety and increased travel choices for California residents and embodies the 3 Es for a sustainable statewide transportation system. The implementation strategies involve education, collaboration, incentives and promotion, use of advanced technologies, a reexamination of design standards and integration of all modes, and a political presence. An executive summary of the 2030 CTP is provided in Appendix 3A.

In 2009, the Department expanded the State's transportation planning process with an initiative to include the development of a state-level transportation blueprint focused on interregional travel needs while addressing the specific requirements of Senate Bill 391 (Liu). The California Interregional Blueprint (CIB) will articulate the vision for a statewide, integrated, multimodal transportation system that complements regional transportation plans and land use visions. The CIB, when fully developed, will also become the foundation for the development of the next update, the CTP 2040, that will be delivered by December 2015 to address a specific requirement of SB 391.

The following concepts and issues are important to Trinity County and are reflected in the 2010 RTP update:

- The volume of truck transport for commercial and commodity products will likely continue to grow on State highways. The County is impacted by this growth and the need for improved truck routes, truck parking facilities, and truck access to commercial land uses is an important component of goods movement.
- The cost of transportation for disabled and low income groups will likely continue to increase. The RTP recognizes that a more extensive mix of flexible transportation choices and services will improve accessibility for both groups. The transportation system in Trinity County is striving through its RTP goals and policies to be more equitable for disadvantaged groups through the unmet transit needs process, coordination with SSTAC, and promoting alternatives such as subsidized taxi service and coordination with airports.
- The CTP summarizes three land use practices that have influenced urban design and that have profound impacts on travel behavior. These practices include the lack of coordinated decision-making at the County and state level, single-use zoning, and low-density growth patterns. Trinity County is experiencing some of these effects through increased traffic congestion and delays in the SR 299 corridor, particularly in Weaverville. The RTP is proposing several projects to improve and monitor LOS to help increase the positive effects of good land use planning and decisions and to incorporate "smart growth" principles to the degree possible. These principles focus on the

appropriate sizing of transportation infrastructure. In addition, future compliance with AB 32 and SB 375 will move the County toward a smaller carbon footprint by reducing VMT through integrated land use planning and decision making.

- Trinity County RTP recognizes that TDM and alternative mobility options, including walking, biking and transit require coordinated land use decisions and improved infrastructure. To this degree, the goals and policies in the RTP are consistent with the County's general plan to provide a balanced multi-modal transportation system that includes non-auto choices for access and mobility. The County is committed to implementing policies and strategies to reduce reliance on the automobile.

The County will continue to monitor population and employment and VMT growth consistent with the RTP, RTP performance measures, and County general plan.

California Strategic Highway Safety Plan (SHSP) (April 2008)

The California Strategic Highway Safety Plan (SHSP, April 2008) requires that RTP show a strong link between the SHSP planning processes described in title 23 U.S.C. 148 and the regional planning process. The SHSP addresses sixteen challenge areas as shown in Appendix 3B. The 2010 RTP reviewed the SHSP in conjunction with the goals and policies developed in Chapter 3.

The RTP includes several goals, policies and objectives to improve the overall safety for all modes in Trinity County. Goal 1 and objectives 1.1, 1.2 and 1.3 and 1.7 provide for the development of a safe and efficient system for all modes that expands choices and strengthens the relationship between transportation and land use. Specific objectives are included to protect the region's investment by preserving the condition of the existing system, applying new technologies to make travel more reliable, convenient and accessible, and maximizing safety for all modes. Other goal categories and/or objectives that are relevant to the SHSP are:

- Provide reliable all-weather access to all developed communities
- Establish consistency and/or linkages between transportation needs and land use plans
- Promote non-auto modes of transportation by promoting development that is transit-oriented, bicycle friendly, and walkable
- Support public transit programs and maximize county-wide transportation services and inter-county connections
- Increase total mileage of safe pedestrian walkways and sidewalks
- Provide safe equestrian facilities
- Support goods movement throughout the County

Consistency of the Existing Community Plans for Weaverville, Hayfork, Mad River, Lewiston, and Ruth.

A general review of each plan shows that the goals and policies for each community are consistent with the overall direction of the 2010 RTP and include references to each mode of travel and with existing land use efforts. All plans express a desire to maintain an adequate LOS on state and county facilities in their plan area. Aviation, transit, and bicycle and pedestrian improvements are considered important for each community and many of these proposed community improvements are included in Appendix 4A – 4F of the 2010 RTP. Specific needs findings for each community are addressed:

Hayfork Community Plan – The plan identifies the need for improved bicycle and pedestrian facilities, improved maintenance facilities at the Hayfork airport, continued land use restrictions around the airport, and road and parking improvements along SR 3 in the downtown, and general improvement of roads. The established goals and policies address these issues and are consistent with the 2010 RTP focus.

Mad River Community Plan – The plan identifies the improvement and maintenance of county roads as major concerns. Improvement of Mad River Road (County Road 501), Van Duzen Road (County Road 511) and SR 36 are important to improve economic development opportunities in the southern portion of Trinity County, The plan identifies both scenic highways and county scenic roadways are these designations are consistent with the RTP discussion. The plan projects a modest increase in transit demand and identifies lighting concerns at the Ruth Airport. These needs are expressed as goals in the plan and are addressed in the RTP needs section and Action Element

Ruth Community Plan – The needs identified in the community plan parallel many of the needs identified in the Mad River plan. Specific improvements to Mad River Road, Van Duzen Road and SR 36 are called out. The lack of public transit is identified as a need, and listed as a specific goal of the community plan. The RTP does not include transit service at this time to the Ruth area and a previous local route (provided by Southern Trinity Transit) that originated at the Ruth Community Center was discontinued due to lack of ridership; however, the RTP does include goals and policies related to transit.

Lewiston Community Plan – The plan established goals to maintain the community's circulation system by improving safety, providing for bicycle and pedestrian travel, coordinating the transportation system with planned land uses and providing for specialized transit needs of the community. Access to the community is provided by three main roadways including Trinity Dam Boulevard, Lewiston Road, and Rush Creek Road. These roads provide vital connections to SR 299 and SR 3. Improvements to both roads are included in the RTP Action Element. At the time the plan was written, there was no transit service to the community. The RTP includes limited transit service provided by Trinity Transit on Monday, Wednesday, Friday in the AM and PM for commuters. Goals and Policies address all modes and are consistent with the RTP.

Weaverville Community Plan – Weaverville is the largest population center in the County. The plan includes several goals that are consistent with the RTP. The Community Plan strives to maintain an efficient and effective road system, provide a safe and adequate airport, increase non-auto travel by developing a convenient system of bicycle routes, trails, and pedestrian paths, keeping air quality at safe levels, and coordinating transportation improvements with planned land uses. To help plan for future growth, the County employed the services of a traffic consulting firm to focus their analysis on downtown circulation across SR 299 while Caltrans was looking at increased traffic flow through downtown Weaverville. The general conclusions of the Consultant study was it is possible to improve the LOS of the intersections on SR 299 by the signalization of four key locations. This recommendation was not consistent with the desires of Caltrans to improve the LOS through town. The long-term problem was to improve LOS for both SR 299 and cross town intersections

The Weaverville community plan studied these recommendations and concluded that the implementation of four traffic lanes through town to improve level of service did not meet community values. Instead the plan proposed a "west connector" around downtown. The RTP analysis of Weaverville circulation dropped the "west connector" and re-analyzed the need for traffic signals. The RTP includes enhanced traffic control (traffic signal or roundabout) on SR 299 at Washington Street and Garden Gulch. This combined with the "East Connector" provides acceptable level of service on SR 299 and other roadways in Weaverville. Therefore, while several specific recommended improvements in the community plan were not included or were modified in the RTP, the overall goal of improving circulation in the downtown is consistent with the direction of the RTP.

California Regional Water Quality Control Board LID Policy Consistency

The California Regional Water Quality Control Board North Coast Region requires the use of Low Impact Development (LID) and best management practices (BMPs) that treat and retain storm water runoff on the project site. LID is a development site design strategy with a goal of maintaining or reproducing the pre-development hydrologic system through the use of design techniques to create a functionally equivalent hydrologic setting. LID emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to reflect pre-development hydrologic functions (infiltrate, capture, evapotranspirate and store). Future development in the County will include "best practices" for maintaining water quality in accordance with LID standards for new or expanded road projects involving one acre or more.

Shasta-Trinity National Forest Motorized Travel Management Plan

See Appendix 3C for the discussion of consistency between the proposed changes to the NFTS and key Trinity County planning documents (Regional Transportation Plan and General Plan) that address non-auto and recreational travel, and maintenance needs for these facilities.

4. ACTION ELEMENT

The Action Element sets forth a plan to address issues and needs identified in accordance with the RTP goals, objectives and policies from Chapter III. It identifies short-range (0-15 years) and long-range (16-30 years) transportation improvements by mode for inclusion in the RTP. The benefits of "New Technologies" such as surveillance, data collection, advanced traveler information systems, commercial vehicle operations (CVO), and automatic vehicle location (AVL) systems are discussed under the appropriate mode. These New Technologies are consistent with the national Intelligent Transportation System (ITS) architecture and standards being employed by Caltrans at the regional level. The Action Element also includes a discussion on the State and regional planning processes, and the application of program level "performance measures."

The Action Element is consistent with the adopted RTP goals, policies and objectives and conforms to the revenues and costs identified in the Financial Element (Chapter V). In addition, the first four years of projects identified in the RTIP and Financial Element are consistent with the four-year 2010 STIP fund estimate adopted by the California Transportation Commission (CTC) in October 2009.

STATE AND REGIONAL PLANNING PROCESSES

The State and regional planning processes are defined by legislation at the Federal and State level. TEA-21, SB 45 and SAFETEA-LU have had significant effects on the RTP planning process in the past few years with new requirements for transportation planning, air quality conformity, project selection and delivery responsibility, development and implementation of transportation system performance measures, decision making, and the allocation of federal funds. In addition, the 2010 RTP Guidelines place significant emphasis on showing linkages between projects in the RTP and the RTIP/STIP process, as well as reducing green house gases (GHG) by reducing vehicles miles traveled (VMT)

ACTION ELEMENT ASSUMPTIONS

The RTP is a document that contains both policy and action direction for the future implementation of transportation system improvements. The proposed RTP actions are based on the following assumptions.

- The growth in population and employment will remain very modest and generally consistent with California Department of Finance projections.
- Any increases in population of adjacent counties (Shasta and Humboldt) will potentially affect both through and recreational traffic to Trinity County.
- Existing sources of federal, state and regional revenues will continue throughout the 30-year life of the RTP, but probably at reduced levels.
- Recreation-oriented travel will continue to affect State highways and major County roadways, particularly during peak travel months. Tourism will continue to drive the economy with the retail trade, government, and service industries creating most of the new jobs.
- Transit service demand will continue to grow, primarily due to the number of elderly and disabled persons residing in the County, and rising fuel prices causing people to consider alternate modes of transportation.
- Local road maintenance will continue to be a major issue if a new source of maintenance funding is not identified and implemented.
- The available transportation funding for projects at the local, State and Federal levels will not keep pace with the needs of the County.

- Only limited minor commercial development is anticipated within the County.
- Fuel prices will continue to have only a marginal effect on people's driving choices due to the rural nature of the County and distances traveled.
- The small population, distributed over a large land area with long distances between residences, services, and employment, will continue to make trips largely dependent on the automobile, therefore the automobile will continue to be the primary mode of travel by residents of Trinity County.
- The greatest assets of the county will continue to be its natural beauty, historical sites, and the many recreational opportunities it has to offer.

PROGRAM-LEVEL PERFORMANCE MEASURES

Consistent with the 2010 RTP Guidelines, Caltrans identified four broad goals for performance measurement.

1. To understand the role the transportation system plays in society
2. To focus on outcomes at the system level rather than projects and process
3. To build transportation system partner relationships with clearly defined roles, adequate communication channels, and accountability at all levels
4. To better illuminate and integrate transportation system impacts of non-transportation decisions

The intended application of performance measurement to RTPs is to accomplish the following outcomes.

- Performance measurement should involve the existing transportation system as well as the future transportation system.
- By examining performance of the existing system over time, the RTP can monitor regional trends and identify regional transportation needs for inclusion in future RTPs.
- Performance measurement has the potential to clarify the link between transportation decisions and eventual outcomes, thereby filling the much needed gap between purpose and need.
- Forecasting future system performance in the RTP will assist in comparing system alternatives, facilitate comparisons across modes, and facilitate assessment of priorities in the action element of the RTP. These priorities will link to plan implementation through the RTIP and the ITIP.

The program- level performance measures selected for Trinity County are shown in **Table 4.1.**

TABLE 4.1
RTP PROGRAM LEVEL PERFORMANCE MEASURES

Performance Measure*	Data Source	RTP Policy	RTP Objective/ Desired Outcome
1A. Mobility/ Accessibility on State Highways (Goals 1,5)	Caltrans' Traffic Volumes, Historical Growth Rates, Transportation Concept Reports (TCRs)	• LOS on State Highways • Number of STAA barriers on SR 299	• Work with Caltrans through the STIP and SHOPP to maintain Caltrans Concept LOS for Trinity County State highways, and to eliminate STAA barriers on SR 299.
1B. Mobility/ Accessibility on County Roads (Goals 1,5)	Trinity County Department of Transportation	• LOS on County roads and at County Road/State Highway intersections • Frequency of road and bridge failures that limit access to communities	• Monitor LOS at intersections • Program capacity enhancing projects or intersection improvements where necessary • Monitor the number, location and severity of road failures that restrict access to communities, and program projects to correct chronic problem areas
2A. Safety on State Highways (Goal 1)	Caltrans Collision Reports, CHP SWITRS	• Collision rate* on State Highways compared to similar facilities statewide	• Work with Caltrans to reduce the number of collisions on Trinity County State highways • Completion of project identified in TCRs and RTP.
2B. Safety on County and Local Roads (Goal 1)	Trinity County Department of Transportation, California Highway Patrol (SWITRS) Caltrans Average Daily Traffic Volumes (ADTs); Trinity County Department of Transportation; Caltrans Maintenance Report	• Number of Fatal Collision • Number of Injury Collisions • Number of Property Damage Only (PDOs) • Number of lane miles that need rehabilitation and/or resurfacing • Backlog of local maintenance	• Monitor the number, location and severity of collisions. Recommend improvements to reduce their incidence and severity. • Coordinate with Caltrans on State highway projects to maintain State highways at acceptable maintenance levels and reduce lane miles needing rehabilitation or resurfacing. • Recommend RTP projects to maintain the condition of roads at or above the minimum acceptable maintenance condition as set by the County.

TABLE 4.1
RTP PROGRAM LEVEL PERFORMANCE MEASURES

Performance Measure*	Data Source	RTP Policy	RTP Objective/ Desired Outcome
3. Equity (Goal 1, 2, 4, 6)	RTP Projects and Funding Allocations	• Percentage of highway funding shortfall covered by STIP and SHOPP • Geographical Equity	• Consider Environmental Justice when funding projects • Increase the distribution of transportation funding to better match transportation needs rather than strictly population. • Encourage the use of leveraged funds through MOUs between counties.
4. Cost Effectiveness and Service (Goal 2)	Monthly/Quarterly transit operations reports	• Farebox Recovery Ratio • Cost per passenger • Transit frequency	• Maintain at least a 10 percent farebox recovery ratio • Reduce the cost per passenger • Improve transit frequency when funding allows
5. Environmental Quality (Goal 6, 7)	Environmental thresholds or significance criteria adopted in General Plans and/or independently for application in CEQA documents	• Avoid or minimize significant impacts	• Analyze the potential short-term and long-term environmental impacts of transportation decisions and mitigate adverse impacts to "less than significant" wherever possible. • Comply with federal and state air quality standards including GHG emissions targets and/or strategies
6. Economic Well Being (Goal 5, 6, 7)	Caltrans traffic volumes and volumes listed per PSRs	• Minimum acceptable LOS in peak month • Connectivity and accessibility for good movement and tourism	• Provide acceptable LOS by 2030 on State highways during peak months within funding constraints. • Monitor commodity flows to maintain transport efficiency and access • Include commercial interests in RTP process

* Collisions or fatalities per 1,000,000 vehicle miles of travel; Fehr & Peers 2010

APPLICATION OF PERFORMANCE MEASURES

The program level performance measures in **Table 4.1** are used to help select RTP project priorities and to monitor how well the transportation system is functioning, both now and in the future. The intent of each performance measure and their location within the RTP are identified below:

Performance Measures 1A and 1B – Mobility/Accessibility

This performance measure monitors how well State and County Roads are functioning based on LOS and condition. The acceptable 30 year LOS for State highway segments is LOS C/D, meaning it should not be allowed to drop to LOS D. Policy 1.1B establishes an acceptable LOS threshold of LOS C or better for county facilities outside of Weaverville, while Policy 1.1.A allows LOS D to be considered acceptable for county roads and intersections within the Weaverville Community Plan Area. **Table 2.4** shows the historical daily traffic volumes for State facilities. These volumes are compared to the volume thresholds in **Table 2.7** for each facility type to determine existing and future LOS. The results for State facilities are shown in **Tables 2.9 and 2.10**. As **Tables 2.9 and 2.10** show, the existing AADT and LOS for State highways meets Caltrans' standards for all state facilities except in downtown Weaverville between Washington Street and Martin Road under existing conditions and in 2040 with the East Connector in place. All county facilities are forecast to meet LOS thresholds as based on roadway level of service. Today, all intersection meet policy level of service except for SR 299/Washington Street in Downtown Weaverville. The 2009 conditions intersection level of service will improve to an acceptable level at the SR 299/Washington Street once the East Connector is constructed. In 2040, the intersections of SR 299 with Washington Street and SR 3 will function below both County and State Standards, as will the intersection of SR 299 with the East Connector and Glen Road, if it is not signalized or roundabout-controlled.

Other mobility/accessibility limitations occur in the form of episodic closures of County roads, and occasionally State highways as a result of landslides, slipouts, flooding, bridge failures, etc. These incidents can be monitored and recorded, creating a record of chronic problem areas that need to be addressed to reduce such interruptions.

Performance Measures 2A and 2B – Safety

Safety is monitored through the number of collisions and the collision rate (collisions per 1,000,000 miles of travel) for State highways. **Table 2.14** provides a summary of collisions that occurred on State highways in 2007. This data will be updated during each update to the RTP. Specific projects that are intended to improve safety will be supported through Caltrans and the TCTC. **Table 2.15** shows the collision rate in 2007 for Trinity County and Caltrans District 2. For all highway types, Trinity County's rate is higher than the District as a whole (comparing 1.21 to 0.72). The County will continue to work with Caltrans to recommend and monitor safety improvements to reduce both its collision rate and fatality rate.

Trinity County does not track VMT on its county roads; therefore, a comparison with the collision rate (collisions per 1,000,000 VMT) for Caltrans District 2 and the State on similar facilities does not exist. However, the County does track the number of collisions on local roads and these will be monitored to identify locations that are in need of safety improvements. SWITRS data will be used to monitor the number of fatal and injury collisions by location to see if added improvements are needed. A 5-year summary of collisions on county facilities is shown in **Table 2.15**.

Performance Measure 3 – Equity

The TCTC recognizes that in rural areas, some degree of geographical equity is necessary so that issues and concerns about transportation improvements in sparsely populated areas are addressed countywide and not just in urban areas. The TCTC will work with Caltrans on the location of STIP and SHOPP projects within the County. The measure will help ensure that all roadways are considered, including the State highway system, county collectors, local streets, and Tribal roads when RTP and RTIP projects are recommended. It will also help monitor the State's policy for "Context Sensitive Solutions" that focus on projects and approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation goals and policies.

Performance Measure 4 – Cost Effectiveness and Service

Table 2.16 provides a summary of Trinity Transit services and performance measures through FY 2008/09. In 2040, the intersections of SR 299 with Washington Street and SR 3 will function below both County and State Standards, as will the intersection of SR 299 with the East Connector and Glen Road, if it is not signalized or roundabout-controlled.

The fare box recovery ratio provides one means to monitor the performance of the transit system before and after transit projects are implemented. The fare-box ratio for FY08/09 for Trinity Transit was approximately 7.55 percent. The TCTC will continue to monitor the county's transit system and provide assistance through SSTAC to modify system operations. The RTP will emphasize projects and programs that are capable of meeting the TDA required fare box ratio of 10 percent or higher. With the addition of the intercity routes to Redding and Willow Creek that began service in January, 2010, and recent fare increases, the farebox is anticipated to continue improving.

Performance Measure 5 – Environmental Quality

This measure is applied prior to actual construction of a project. Each project must comply with environmental criteria from CEQA (State) and possibly NEPA (Federal) if the funding source is a federal program. In addition, the RTP is subject to CEQA and is treated accordingly. The new 2010 RTP guidelines state that RTPAs that are not located within a boundary of an MPO are not subject to the provisions of SB 375, or the resultant requirements to address regional GHG targets in their RTPs. They are also not required to prepare a sustainable communities strategy (SCS) to meet a regional GHG emissions reduction target. However, the TCTC recognizes the benefits of reduced GHG and has added a new section to the RTP (Chpater 3) that addresses policies and measures that Trinity County either has in place or will consider in the future to help reduce VMT and GHG impacts of proposed RTP projects.

Performance Measure 6 – Economic Well Being

Trinity County experiences a significant amount of through traffic on State highways (SR 299; SR 36)). As a result, the LOS during peak periods has the potential to each unacceptable levels (LOS D or higher). This measure monitors the LOS during the peak months. In addition, good movement is very important to the County to maintain its economic status. Transportation improvements that maintain commercial access and connectivity will help maintain and/or improve the overall economic well being of Trinity county residents.

PROJECT PURPOSE AND NEED

The RTP guidelines adopted by the CTC require that an RTP "provide a clearly defined justification for its transportation projects and programs." This requirement is often referred to as the Project Intent Statement or Project Purpose and Need. Caltrans' Deputy Directive No. DD 83 describes a project's "Need" as an identified transportation deficiency or problem, and its "Purpose" is the set of objectives that will be met to address the transportation deficiency. For Trinity County each table of projects by mode includes a qualitative assessment of purpose and need indicating a projects contribution to system preservation, capacity enhancement, safety, and/or multi-modal enhancements. These broader categories capture the intended outcome for projects during the life of the RTP and serve to enhance and protect the "livability" of residents in the County. The following definitions are used in this document.

System Preservation – This category of improvement indicates a project that serves to maintain the integrity of the existing system so that access and mobility are not hindered for travelers. Improvements may include bridge repairs, upgrading of existing rail lines, airport runway repairs, and upgrades to signs and traffic control devices. In addition, because Trinity County is very rural and contains several small communities, the lack of maintenance funding has resulted in a large amount of "deferred maintenance" ($366 million) that has actually lapsed into a serious need to "rehabilitate" roadways to maintain system preservation. Rehabilitation entails primarily overlay and/or chip seal work that can also be considered a

safety improvement. The majority of road projects listed indicate either "rehabilitation" or "reconstruction" to maintain system preservation. *(Goal: 1)*

Capacity Enhancement – A capacity enhancement indicates a project that serves to increase traffic capacity and to help alleviate congestion and improve Level of Service. This result may be achieved by adding an additional lane of traffic, adding alternative routes, adding a passing lane, and/or adding a turn-out for slow moving vehicles. Because Trinity County experiences large volumes of truck and recreational traffic on many of its roadways, the ability of vehicles to travel at desired speeds is restricted. Capacity enhancement projects are designed to increase travel speeds and provide for opportunities to pass slower vehicles safely. Additional capacity can also apply to airport projects where runways are added or extended. The desired outcome is to maintain acceptable levels of LOS on State and regionally significant roads, and acceptable capacity at the County's airports. *(Goals: 1, 4)*

Safety Projects – Safety improvements are intended to reduce the chance of conflicts between vehicles, prevent injury to motorists using the transportation system, and to ensure that motorists can travel to their destination in a timely manner. Safety improvements may include roadway and intersection realignments to improve sight-distance, guardrails, rumble strips, pavement or runway resurfacing to provide for a smooth travel surface, signage to clarify traffic and aviation operations, sidewalks, crosswalks, and traffic control for pedestrian safety, and obstacle removal along streets and highways and around airports. The desired outcome is to reduce the incident of accidents on County facilities and the societal costs in terms of injury, death or property damage. *(Goals: 1, 5)*

Multi-modal Enhancement – These type of improvements focus on alternative modes of travel such as bicycling, walking, transit and air travel. Projects that are designated as multi-modal are designed to enhance travel by one or more of these alternative modes, provide for better connectivity between modes, and to improve non-auto access to major destinations and activity centers. *(Goal: 2)*

PROJECT PROGRAMMING AND SELECTION CRITERIA

In addition to general system considerations for purpose and need, RTP projects recommended in Trinity County consider the following criteria (not necessarily in order of priority).

- Safety
- Project Effectiveness
- Project Cost
- Congestion (LOS)
- Caltrans District 2 priority
- Local Agency priority
- Road Classification
- Pavement conditions (utilizing the pavement management system)
- Emergency, commercial, and recreational importance of the road
- Funding constraints
- Percent of heavy trucks

COMPLETED PROJECTS

The following projects from the 2005 RTP have been completed to date:

- Browns Creek Bridge (# 5C-130) replacement
- Dutch Creek Road @ Soldier Creek Fish Passage Project
- Evans Bar @ Soldier Creek Fish Passage Project
- East Side Road rehabilitation (PM 0-8.0)
- Hayfork Creek Bridge 5C-067 Rehab and Widening
- Hyampom Road rehabilitation Segment 1 (PM 0-3.5)
- Hyampom Road Reconstruction FHWA Partnership Segment 5 (PM 10 – 14.3)
- Kettenpom Creek Bridge (# SC-124) replacement
- Mad River Road rehabilitation
- Post Mountain Area chipseal unpaved roads
- Roundy Road @ Little Brown's Creek Fish Passage Project
- SR 299 Rocky Point Passing Lanes
- SR 299 Buckhorn Maintenance Station Passing Lane
- SR 299 Sand House Curve passing lane
- SR 299 Buckhorn Grade Environmental
- SR 299 Buckhorn - 9 STAA Barrier Removals:
    - Top of Buckhorn
    - Bottom of Buckhorn
    - Yankee Gulch
- SR 299 South of Pigeon Point curve realignment (STAA Barrier removal)
- SR 299 Horseshoe Curve Safety Project (in Construction) (STAA Barrier removal)
- SR 299 Salyer Safety Project (STAA Barrier removal)
- Poison Gulch Safety Project (STAA Barrier removal)
- SR 299 West Weaverville Traffic Calming
- Weaverville sidewalk improvements
- SR 299 at Bremer Street Flashing Fire Station Warning Signal

- SR 299 Steel Bridge Road intersection improvement
- HAR signs on SR 299 and SR 3 in Weaverville
- Trinity Dam Boulevard, Rush Creek Road and Lewiston Road signage and striping
- All Airports Update Airport Layout Plans, install security fencing, tree removal
- Weaverville Airport Automated Weather Observation System (AWOS)
- Lee Fong Trail
- West Weaver Creek Trail

NOTEWORTHY CHANGES TO PROJECT LISTS: 2005 VS. 2010 RTP

New projects have been added to the lists of short, medium and long-range projects proposed in the 2010 RTP. Projects have been suggested by Caltrans and Transportation Commission staff and by members of the Board of Supervisors/ Transportation Commission, or requested by the public. Some long-range or Unconstrained projects included in the 2005 RTP have been deleted due to lack of support or loss of the proposed funding source.

The Highway Bridge Program (HBP) of replacing or rehabilitating bridges would continue routinely, prioritized based on the Caltrans bi-annual bridge inspections. Safety projects under the Highway Safety Improvement Program (HSIP) are competitively awarded based on accident records. Programs such as the State Transportation Improvement Program (STIP) and Transportation Enhancement (TE) provide the opportunity for Regional Transportation Planning Agencies to develop eligible projects based on transportation needs identified by the traffic studies in this, and previous, RTPs, or desires expressed by the community.

A summary of the more noteworthy new projects that have been proposed in this RTP follows:

- Traffic Signal on Highway 299 in Weaverville at Washington Street; mid-term
- Traffic Signal or Roundabout at Forest Avenue/ Garden Gulch Street; long-term
- Traffic Calming on Highway 299 at Big Flat; mid-term
- Two-way Center Street in Weaverville from Court Street to Highway 3; near-term
- Local Road rehabilitation on residential streets in Trinity Center and Lewiston
- Turnouts and/or passing lanes on Highway 3, Weaverville to Coffee Creek
- Class I bicycle/pedestrian path on Highway 3, Trinity Center to Trinity Lake KOA
- Curve realignment and/or passing lanes on Highway 3 at Hayfork Summit
- Cooperative projects with adjacent Counties to rehabilitate East Side/Trinity Mountain Road (Shasta County) and Peak Road (Humboldt County)
- Realign Fountain Ranch Road away from the Trinity River
- Lighted heliport at Weaverville Lonnie Pool Airport

Projects that have not been carried forward from the 2005 RTP include paving and chip seal projects in the Trinity Pines area. These projects were initiated with grants from the North State Unified Air Quality Management District to reduce emissions from unpaved roads. However, this grant program has been discontinued, so these projects have been dropped from the project lists. If a similar funding source becomes available, the County can again pursue these projects.

REGIONAL AND LOCAL ACTION PROGRAMS

The regional action program for the Trinity County RTP is a compilation of projects already proposed and/or planned for Trinity County, as well as new projects deemed necessary to provide adequate operation of the various transportation systems consistent with the County's transportation goals and policies. To provide acceptable operations along the regional road system, Trinity County proposes a series of improvements to be sponsored by the State, the County, and/or the Federal government. The highest priority improvements to the regional road system are linked to the roadway needs identified in Chapter 2, and the Goals and Objectives from Chapter 3. The type of improvement, implementation cost, proposed construction year, priority and potential sources of funding are identified in the project tables by mode in Appendix 4A through 4G.

When transportation alternatives are being considered, interregional highway corridors such as SR 299, SR 36 and SR 3 remain primary candidates because Trinity County is extremely rural, and nearly all people and commodities leave and enter the county, and travel from one community to another, via the state highway system. Alternatives involving rail are quite limited because of prohibitive development costs, steep grades and environmental concerns. Other non-auto alternatives are encouraged as funding and demand allow. Examples are public transit, bicycle and pedestrian, and air travel to and from the more populated areas. Trinity County contains no commercially viable navigable waterways.

PROJECT PRIORITIES

All RTP projects are assigned the following Tier designation to reflect its anticipated construction and funding time frame.

Tier 1 projects represent projects that are fully fundable from anticipated revenue sources and are already programmed in the 0-5 Year (2010/11 – 2014/15) time frame.

Tier 2 projects represent projects that are short-term and would be fundable from anticipated revenue sources and are planned for programming from 2015/16 – 2024/25 of the RTP.

Tier 3 projects represent projects that are longer-term 2025/26 – 2029/30) and should have full funding during the life of the RTP (by 2030) given current revenue assumptions and projections.

Unconstrained Projects are long-term projects that do not have reasonable anticipated funding identified through the life of the RTP. However, these "unconstrained" projects do represent some high priority long-term projects for the State, County, and Federal Governments.

The recommended improvements for the transit system, aviation facilities, bikeway and pedestrian facilities, and the goods movement system will also serve to enhance the system and accommodate future travel demand. Action programs for Transportation Systems Management (TSM), Transportation Demand Management (TDM), Intelligent Transportation Systems (ITS) and air quality are addressed in this chapter.

STATE HIGHWAY PROJECTS

The list of Caltrans sponsored state highway projects (SHOPP) are shown in Appendix 4A. All of the projects are considered short-term and are programmed for construction by 2015. A total of $**28.1 million** in state highway improvements have been programmed. Of this amount, **$15.2 million** has been awarded to date.

The purpose of the SHOPP program is to maintain the integrity of the State highway system. Funding for this program is provided through gas tax revenues. Projects are nominated within each Caltrans District office and are sent to Caltrans Headquarters for programming on a competitive basis statewide. Final project determinations are subject to review by the California Transportation Commission. Individual districts are not

guaranteed any minimum level of funding; SHOPP projects are based on statewide priorities within each program category (i.e., safety, rehabilitation, operations, etc.) within each Caltrans District. SHOPP funds cannot be used for capacity-enhancing projects, nor can they be used for facilities outside off the State highway system. Although Caltrans is responsible for the SHOPP, the County is encouraged to have input in those projects through coordination and consultation.

SHOPP – NOT-PROGRAMMED

The list of "Not programmed" SHOPP projects for the mid-range and long-range are also included in Appendix 4A. Projects include drainage improvements, bridge joint replacements, pavement overlays, and water and sewer upgrades. The total for mid-range and long-range projects is **$ 56.5 million**.

2010 RTIP

The 2010 Trinity County RTIP was adopted by the TCTC in February 2010 and incorporated into the 2010 State Transportation Improvement Program (STIP) on May 20, 2010. A copy of the adopted Trinity County RTIP is shown in Appendix 4B. The following sections describe the 2010 RTIP projects that have been programmed to completion and are funded through State Fiscal Year 14/15, within the short-range (0–5 years) for this RTP. The first five years of improvements are consistent with the adopted STIP fund estimate (see Section V, Financial Element). The RTIP includes $18 million in STIP projects and $3.3 million in Federal TE. Specific improvements and/or programs include:

STIP

- Program, Planning and Monitoring (PPM) – $285,000
- East Connector; new 2 lane road in E. Weaverville – $7.6 million
- Hyampom Road Segment 3 (PM 6.8-8.3) reconstruction – $4.1 million
- Hyampom Road retaining walls – $650,000
- Halls Gulch Bridge Replacement – $207,000 (match to Highway Bridge Program construction funds)
- Hayfork Creek Bridge on Wildwood Road Replacement – $230,000 (match to Highway Bridge Program construction funds)
- Wildwood Road reconstruction, segment 1 (PM 9.6-11.6) – $4.5 million
- Lewiston Road reconstruction, segment 1 (PM 4.8-5.8) – $415,000

Federal TE

- Hayfork II Bike Lanes – $1.2 million
- Horsewater Lane pedestrian bridge – $190,000
- Lewiston Road bike/pedestrian improvements (PM 4.8-5.8)– $357,000
- TE eligible portions of East Connector – $760,000
- Lowden Park to Senior Center bike/pedestrian bridge – $770,000

COUNTY ROAD AND BRIDGE PROJECTS

A total of 75 local road and bridge capital projects are included in Appendix 4C. The projects total **$101.1 million** through 2030. In addition, $71 million is included for operations and maintenance (O&M). The capital projects by Tier are described below.

RTP Short-Range (0-5 Years) Road and Bridge Projects

The short-range roadway and bridge projects for Trinity County are shown in Appendix 4C. The construction year is coded with a 1 to reflect construction within the 5 year time frame. The total for short-term capital improvements is **$49.8 million**. Improvements include mainly road reconstruction, rehabilitation and bridge repair and replacement. Most are intended for system preservation and safety. Tier 1 O&M is $23.3 million.

RTP Mid-Range (6-15 Years) Road and Bridge Projects

The mid-range roadway and bridge projects are shown in Appendix 4C. The construction year is coded with a 2 to reflect the 6-15 year time frame. Mid-term projects total **$37.9 million** and include road reconstruction, road rehabilitation, traffic calming, and guardrails. Tier 2 O&M is $35 million.

RTP Long-Range (16-20 Years) Road and Bridge Projects

The Tier 3 long-range projects (16-20 years) are included in Appendix 4C. Funding for these projects is anticipated by 2030. Long-range projects total **$13.4. million** and include bridge replacement, road reconstruction, road extension and culvert replacement. Tier 3 O&M is $12.6 million.

TRANSIT PROJECTS

The transit improvements proposed for Trinity County include eight short-range projects, three mid-range projects and no long-range projects. The short-range capital projects total $322,000 and include bus purchases and transit passenger amenities (benches, signage, shelters). The mid-range projects focus on upgrading fareboxes, bus purchases and shelters. The total for mid-range projects is $173,000 In addition to capital improvements, $10.7 million is included for O&M. The total for all transit improvements (including O&M) is **$11.2 million)**. The transit projects are listed in Appendix 4D.

NON-MOTORIZED (BICYCLE AND PEDESTRIAN) PROJECTS

A total of 22 bicycle and pedestrian projects are proposed for the 2010 RTP. The projects are shown in Appendix 4E. Eight projects are coded as short-range, 10 are mid-range, and four are coded as long-range. The improvements include $3.5 million in Class I facilities; $7.2 million in Class II bike lanes, and $268,000 in Class III routes. The Class II improvements also involve some road widening and bridge improvements to accommodate the Class II striping. The improvements for bicycle amenities total $680,000 and $6.7 million is included for pedestrian facilities. Total Tier 1 improvements are $8.1 million; Tier 2 is $5.4 million and Tier 3 is $4.9 million. The total for all non-motorized improvements is **$18.3 million** through 2030.

AVIATION

The County's airport projects are shown in Appendix 4F. The projects are listed by airport. The projects involve system preservation, capacity enhancements and safety. A total of **$11.7 million** is proposed for all airports.

UNCONSTRAINED PROJECTS

The list of unconstrained (not funded) projects is shown in Appendix 4G. These are projects that are both needed and desired by the County but do not have funding identified. The list includes several projects that will contribute to system preservation, safety and multi-modal operations. The total for unconstrained projects is approximately **$46.8 million**.

TRANSPORTATION SYSTEMS MANAGEMENT

Transportation systems management (TSM) is a term used to describe low-cost actions that maximize the efficiency of existing transportation facilities and systems. In urbanized areas, strategies using various combinations of techniques can be implemented. However, in rural, less-populated areas like Trinity County, many measures that would be taken in metropolitan areas are not practical.

With limited funding, Trinity County must look for the least capital-intensive solutions. On a project basis, TSM measures are good engineering and management practices. Many are already in use to increase the efficiency of traffic flow and movement through intersections and the durability of County roads and bridges. Additional long-range TSM considerations could include:

- Signing and striping modifications
- Paving and re-striping parking areas to facilitate off-street parking
- Installing signals or roundabouts
- Providing alternate circulation routes for residents
- Re-examining speed zones on certain streets

Intelligent Transportation Systems (ITS)

ITS, as defined in law, refers to the employment of "electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system." The implementation of ITS is a priority for the U.S. Department of Transportation. A key component of that nationwide implementation is the National ITS Architecture, a framework devised to encourage functional harmony, interoperability, and integration among local, regional, State and Federal ITS applications: **Table 4.2** was obtained from Caltrans District 2 and shows the types of ITS improvements that exist or are planned for Trinity County.

TABLE 4.2
DISTRICT 2 ITS ELEMENTS

Location	Type	County	RTE	P	PM	Status EA	Notes
State Route 3 ITS Elements							
Near Peanut	HAR	TRI	3		0.00	P	Standard - low traffic volumes
Hayfork Summit	CCTV	TRI	3		8.45	P	
Hayfork Summit	RWIS	TRI	3		18.67	P	
5 Cent Gulch Road	HAR Flasher	TRI	3		31.74	E	Flasher FNBT and FSBT - Upgrade w/BBS
Weaverville	CMS	TRI	3		32.20	P	FNBT - Model 510
Coffee Creek	CCTV	TRI	3		67.82	P	
Scott Mountain Summit	RWIS	TRI	3	T	83.00	P	
Scott Mountain Summit	CCTV	TRI	3		83.00	P	
State Route 36 ITS Elements							
Mad River Area	HAR	TRI	36		2.40	P	Standard - Low Priority List
South Fork Mountain	RWIS	TRI	36		10.26	P	
South Fork Mountain	CCTV	TRI	36		10.30	P	
State Route 299 ITS Elements							
Oregon Mountain	RWIS	TRI	299		48.12	E	
Oregon Mountain	CCTV	TRI	299		48.12	E	
Oregon Mountain	HAR Flasher	TRI	299		48.10	E	
Weaverville (Maintenance Station	HAR	TRI	299		51.20	E	
East Weaverville	HAR Flasher	TRI	299		52.82	E	
Buckhorn Sandhouse	RWIS	TRI	299		69.70	E	
Buckhorn Sandhouse	CCTV	TRI	299		69.70	E	
West of Weaverville	CMS	TRI	299		51.30	P	
Little Browns Creek	CMS	TRI	299		53.62	P	
Near Douglas City	HAR	TRI	299		58.20	P	
East of SR 3	CMS	TRI	299		58.50	P	
Trinity Mountain	CCTV	TRI	299		67.50	P	

Notes:

C = Construction, D = Design, E = Existing, P = Planned, EU = Upgrade Existing Element, O = Fully Operational, T = Not Operational

CCTV = Closed Circuit Television, CMS = Changeable Message Sign, HAR = Highway Advisory Radio, EMS = Extinguishable Message Sign, LED = Light Emitting Diode, TMS = Traffic Monitoring System, RWIS=Roadside Weather Information System

All post mile locations for the proposed sites are approximate.

Data Updated 1/14/09

5. FINANCIAL PLAN

Fiscal constraint is one of the foundational concepts of the 2010 RTP. As such, the financial plan is a key component of the document. Given the nature of the current economy, fiscal constraint is exceptionally important. As part of the 2010 RTP effort the TCTC took a strict posture on this issue. Needs will always exceed available funding; however, it is smart planning to maximize benefit of each available dollar and to prioritize projects based on the funding availability, not strictly need. To this degree, project lists reflect fiscal constraint meaning that the projected revenues from all sources cover the total project costs for Tier 1, Tier 2 and Tier 3 projects. The "unconstrained" projects that are desired and needed but not funded are also included.

APPROACH

The typical RTP approach is to determine transportation improvement needs based on an analysis of travel demand, identify needed projects, and then determine available funding. This approach typically results in a fiscal deficit, as needs generally outweigh revenue. For the 2010 RTP, Trinity County Transportation staff and the TCTC has worked to estimate the available funds prior to determining the transportation related needs of the County. This process results in a more efficient RTP based on limited transportation dollars and the most pressing transportation needs.

Revenue Assumptions

Investment priorities for local, state and federal funds are embodied in the RTP. The RTP describes the short-range Tier 1 (0-5 years), the mid-range Tier 2 (6-15 years), and long-range (16-20 years) investment strategies in the County's transportation system, indicating how all funding sources are to be utilized to meet the RTP goals and objectives. This chapter further provides a summary of the projected transportation-related revenues for Trinity County over the life of the plan and an accounting of the estimated project costs necessary to implement the goals of the RTP.

As a necessary condition of fiscal constraint, the financial plan contains assumptions about the availability of future funding from existing and new sources. It is assumed that the identified federal and state funding sources will continue to be available over the life of the RTP even if funding amounts are reduced.

The barometer that the TCTC is using to identify and estimate revenues is "reasonably anticipated." In some cases, the forecasts do not contain an escalation rate but remain flat throughout the RTP process. Other sources are given a slight growth factor based on historical funding levels and recent economic trends. No new funding source or existing funding source has been included that is not "reasonably anticipated." The following is a summary of the major revenue assumptions.

- The State and federal fuel taxes are assumed to stay at today's levels through 2030.
- A specified level of State and federal discretionary funding will be available for RTP improvements. These programs include the STIP, Surface Transportation Program (STP), and Local Transportation Funds (LTF). The appropriate match requirements for each program will be available from local funds.
- Operation and maintenance funding is derived from Highway Users Tax, Match Exchange, and Forest Receipts. This funding is used for salaries, overhead, routine maintenance, snow plowing and as match for grant funds.
- Grant funds such as Highway Bridge Program and Highway Safety Improvement Program are included in the revenue estimate, projected based on current funding levels. It is important to note

that these funding sources are project and/or program-specific, and will not be available unless awarded for a specific project and/or program.

Given these assumptions, the identified revenues from federal, state and local sources are consistent with the total Tier I, Tier 2 and Tier 3 project costs, creating a fiscally constrained RTP.

Unconstrained Needs

Transportation needs will always exceed available funding; therefore, the RTP includes an "unconstrained" list which identifies the needs beyond the revenues that are available. The inclusion of these unfunded projects reflects improvements and associated operations, maintenance, and rehabilitation that are desired by the region, but require funding outside of anticipated revenues. The total estimate of "unfunded needs" is approximately **$46.3 million** as shown in Appendix 4G.

Primary funding sources:

- *Federal Programs*
- *State Programs*
- *Local Programs*

SUMMARY OF REVENUES AND COSTS

The following information summarizes revenue projections from all available sources and provides a recap of RTP project costs. A discussion of individual sources and programs is also provided in the rest of the chapter.

TOTAL REVENUE SUMMARY

The TCTC has taken a conservative approach in forecasting future revenues. The TCTC used historical revenues from the past several years to create a revenue stream for each source through 2030. The anticipated revenues for the life of the 2010 RTP are as follows: in the short-range (0-5 years) approximately $85.3 million is assumed to be available. In the midrange (6-15 years) approximately $92.3 million is assumed. In the long-range (16-20 years) approximately $37.8 million is assumed for a total of **$215.5 million** through 2030.

Table 5.1 summarizes the projected revenues for all sources. The revenue estimate spreadsheet which shows reasonably anticipated revenues and forecasts for each source by year is found in Appendix 5A.

TABLE 5.1
TRINITY COUNTY PROJECTED REVENUES

Revenue Source	Short-Range	Mid-Range	Long-Range	Total
Local				
Transit Fares	$150,303	$405,352	$270,687	**$826,342**
Local Transportation Fund (LTF)	$985,000	$2,070,000	$1,050,000	**$4,105,000**
Airport Income	$311,629	$926,220	$500,240	**$1,738,089**
Subtotal	***$1,446,932***	***$3,401,572***	***$1,820,927***	***$6,669,431***
State				
State Transportation Improvement Program (STIP)	$17,728,000	$19,200,000	$6,600,000	**$41,928,000**
State and/or Federal Aviation (AIP)	$2,850,000	$4,345,000	$2,905,000	**$10,100,000**
Prop 1B / PTMISEA	$286,174	$100,000	$0	**$386,174**
Prop 1B	$1,300,000	$0	$0	**$1,300,000**
State Transit Assistance (STA)	$274,597	500,000	250,000	**$1,024,597**
Highway Users Tax (HUT)	$11,830,900	$23,661,800	$11,830,900	**$47,323,600**
BTA/SRTS	$0	$1,750,000	$0	**$1,750,000**
Subtotal	***$34,269,671***	***$49,556,800***	***$21,585,900***	***$105,412,371***
Federal				
Federal Forest Receipts	$10,701,627	$8,475,000	$375,000	**$19,551,627**
Match Exchange (STP)	$1,759,560	$3,519,120	$1,759,560	**$7,038,240**
Federal Transit (5311)	$279,611	$612,000	$360,000	**$1,251,611**
Federal Transit (5311F)	$780,000	$1,795,000	$995,000	**$3,570,000**
Forest Highways	$18,975,000	$11,100,000	$0	**$30,075,000**
Transportation Enhancement (TE)	$3,316,000	$7,040,000	$6,600,000	**$16,956,000**
Highway Bridge Program (HBP)	$13,318,000	$5,511,878	$4,080,000	**$22,909,878**
Highway Safety Improvement Program (HSIP)	$435,000	$1,349,197	$280,000	**$2,064,197**
Subtotal	***$49,564,798***	***$39,402,195***	***$14,449,560***	***$103,416,553***
Total all Sources	***$85,281,401***	***$92,360,567***	***$37,856,387***	***$215,498,354***

Source: Trinity County Transportation Department; Fehr & Peers 2010

TOTAL COST SUMMARY

In line with Year of Expenditure (YOE) requirements, Trinity County has escalated all project costs to the year of construction. YOE ensures that 'total' project costs are assumed (including inflation). The intent of this requirement is to ensure that the RTP project list is as realistic as possible. For example, a project that costs $1M today will not cost $1M in 2030. Therefore, the RTP needs to estimate what that true project costs are likely to be in the year of construction.

Table 5.2 provides a summary of all capital project costs proposed by the County. Projects are categorized as Roads/Bridge, Transit, Non-Motorized (bike and pedestrian), and Aviation. Tier 1 project costs for the 2010 RTP (excluding SHOPP expenditures countywide) total approximately $63.6 million; Tier 2 costs total $52.6 million; Tier 3 costs are estimated at $27.7 million**.** The total for all RTP capital projects is

approximately **$143.9 million. Table 5.2** also provides the estimated costs for O&M for roads/bridges over the life of the RTP, approximately $71 million. The combined total (with O&M) is **$215 million** through 2030.

TABLE 5.2
SUMMARY OF TOTAL RTP PROJECT COSTS

Costs	Short-Range (0-5 Years)	Mid-Range (6-15 Years)	Long-Range (16-20 Years)	Total	Percent of Total
Roads/Bridge	$49,983,000	$39,542,000	$13,216,000	*$102,741,000*	71%
Transit Capital/O&M	$2,622,000	$5,508,000	$3,100,000	*$11,230,000*	8%
Non-Motorized	$8,072,000	$5,360,000	$4,868,000	$18,300,000	13%
Aviation	$2,892,000	$2,240,000	$6,550,000	*$11,682,000*	8%
Total	**$63,569,000**	**$52,650,000**	**$27,734,000**	**$143,953,000**	
Total Operations & Maintenance (Road and Bridge)	**$23,329,000**	**$35,074,000**	**$12,646,000**	**$71,049,000**	
TOTAL CAPITAL PLUS O&M	**$86,898,000**	**$87,724,000**	**$40,380,000**	**$215,002,000**	

Source: Trinity County, 2010

FEDERAL REVENUES

The TCTC anticipates approximately **$103.8 million** from all Federal programs through 2030.

Federal Transportation Authorization Bill, SAFETEA-LU (Safe, Accountable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users)

The SAFETEA-LU was signed into law on August 10, 2005. The bill authorizes $286.5 billion in spending in federal fiscal years (FFY) 2004 – 2009. The total national funding in SAFETEA-LU provides an inflation-adjusted increase of approximately 5 percent for highways and 16 percent for transit over TEA-21. The Highway Trust Fund (HTF) is the source of funding for most of the programs in SAFETEA-LU. The HTF is composed of the Highway Account, which funds highway and inter-modal programs, and the Mass Transit Account. Federal motor fuel taxes are the major source of income into the HTF. In Trinity County, federal motor fuel tax monies are exchanged with Caltrans (Match Exchange). Caltrans uses the Federal dollars primarily for state highway projects and sends state money to the County as discretionary funds for county road operation and maintenance. There are are also Federal programs that provide grant funding for specific projects, including emergency repairs (ER), Highway Safety Improvement Program (HSIP) and bridge maintenance, rehabilitation and replacement (Highway Bridge Program – HBP). Federal funds can also be used to rehabilitate or reconstruct rural major collectors and minor arterials in the county road system and rural major arterials in the state highway system. In a recent development, California has received approval to obtain toll credits from its toll revenues. Toll credits can be used as matching funds for Federal-aid projects. For example, the HBP requires a state or local match of 11.47% on ”off-system” bridges, making them 100% federally funded.

The Federal Highway Administration (FHA) administers the Highway Trust Fund. The California Department of Transportation (Caltrans) processes these funds through the State Transportation Improvement Program (STIP) as outlined by SB 45. The federal highway funds matched with state highway funds are used to pay for the Caltrans State Highway Operation and Protection Program (SHOPP).

The remaining funds are split 25% for the State Interregional Transportation Improvement Program (ITIP) and 75% for the Regional Transportation Improvement Program (RTIP).

The RTPA is responsible to program projects for the RTIP based upon the amount of funding allocated to the Trinity County Region . The RTPA will program funding for the state highway and local road system, transit and other transportation needs. All state highway and road projects are required to have a Caltrans' Project Study Report (PSR) that identifies scope, schedule and cost prior to the project being programmed in the STIP. The PSR can be prepared using Planning, Programming, and Monitoring (PPM) STIP funds.

Subject to an agreement with the Office of Local Assistance, local agencies can also have their Planning, Programming, and Monitoring (PPM) funds included in the Overall Work Program (OWP) work elements. Per AB 608, effective January 1, 2002, Section 14527(g) of the Government Code was amended to permit rural RTPAs to use up to 5 percent of their Regional Improvement Program (RIP) funds toward PPM funding.

Table 5.3 displays how the various elements of the OWP meet the SAFETEA-LU planning factors.

TABLE 5.3
EVALUATION OF WORK PROGRAM PLANNING ELEMENTS

SAFETEA-LU Planning Factors	Trinity County Overall Work Elements (OWP)						
	Transportation System Management	Public Transit	Non-Motorized	Aviation	Regional Transportation Planning	Blueprint Planning	Administration And Coordination
Economic Vitality of Region	x	x		x	x	x	x
Safety of Transportation System	x	x	x	x		x	x
Security of Transportation System	x	x	x	x			
Accessibility and Mobility	x	x	x	x	x	x	x
Environmental Compliance and Regional Goals	x		x	x	x	x	x
Integration and Connectivity of the Transportation System	x	x		x	x		x
System management and operation	x	x			x	x	x
System Preservation		x			x		x

Source: Trinity County OWP FY 2009/10

The following information summarizes each source available to Trinity County.

Match Exchange (Regional Surface Transportation Program (STP))

The RSTP guarantees counties 110 percent of their allocation under the old Federal Aid Urban/Federal Aid Secondary (FAU/FAS) program. These funds may be spent on streets and roads. Jurisdictions may also

use the funds for bikeway and pedestrian, transit, safety, ridesharing, traffic management, parking, environmental enhancements, and transportation control measures (TCMs). Trinity County has historically exchanged its STP funds for use on local facilities. The region expects to receive approximately **$7.0 million** in exchange funds through 2030.

Highway Safety Improvement Program (HSIP)

This new program, introduced in SAFETEA-LU, replaces the previous Hazard Elimination Safety Program (HES). This program allows states to target funds to their most critical safety needs. A total of $5.1 billion is provided nationally for FFY 2006 – 2009. The region estimates they will receive **$2.1million** through 2030.

Highway Bridge Program (HBP)

HBP provides for construction, replacement, rehabilitation and maintenance of local and state bridge. The County can nominate eligible projects through Caltrans Office of Local Assistance. The range of HBP funds typically awarded to the region is between $4 and $7 million annually, when funding is available. The County anticipates approximately **$22.9 million** in HBP funds over the life of the RTP.

Federal Transit Administration Section 5311 (Non-urbanized Transit)

Under this section, funds are provided to non-urbanized transit systems on a formula basis for capital and operating expenses. Twenty (20) percent of Section 5311 funds are distributed through a new tier-based formula based on land area. The remaining 80 percent of funds is allocated by the existing formula based on population. The rural transit assistance program (RTAP) is funded with a 2 percent set-aside of the Section 5311 grant funds. During the life of the RTP, it is anticipated that the region will receive approximately **$1.3 million** in formula funds through 2030.

Intercity Bus (5311(f))

The Intercity Bus program under FTA's non-urbanized Area formula grant program supports the connection between non-urbanized areas and the larger regional or national system of intercity bus service. Emphasis is placed on connectivity and mobility between non-urbanized and urbanized areas, addressing the intercity travel needs of residents in non-urbanized areas of the state. Trinity County anticipates approximately **$3.6 million** through 2030.

FTA Section 5305

FTA Section 5305 funds are available to the TCTC on a statewide competitive basis for use on a wide variety of transit planning activities.

- Statewide Transit Planning studies are aimed at reducing reliance on single occupant vehicles and/or improving transit service that leads to improved mobility. The anticipated benefits of the grant proposal must result in improvements to rural transit systems. Examples of appropriate uses for statewide transit planning funds include the identification of policies and procedures to integrate transit into the planning process, GIS development, transit planning handbook and procedures development, and transit oriented development (TOD) studies.

- Transit Technical Planning Assistance grants are aimed at helping RTPAs prepare public transit and/or intermodal transportation planning projects showing benefit to the rural transit service areas of California with populations less than 100,000. Examples of appropriate uses include short-range transit plans, transit marketing plans, site selection studies, ridership surveys, and public participation activities.

- Transit Professional Development grants are aimed at helping RTPAs train transit planning professionals through private training facilities. Examples include transit safety and management classes, transportation planning workshops, and "train the trainer" classes.

Transportation Enhancement

TE projects must have a direct relationship – by function, proximity or impact – to the surface transportation system. Activities must be over and above normal projects, including mitigation. TE projects are primarily for pedestrian and bicycles projects, scenic easements or historic sites, landscaping or beautification, rehabilitation of historic structures, preservation of abandoned railway corridors, and certain environmental mitigations Trinity County is eligible to receive TE funding in the 2010/11 fiscal year and future years as part of the STIP. The County will determine how they want to use those funds, when the funds become available. If the TE funds are exchanged and used for road purposes, then funds are used under TDA Article 19 purposes (streets and roads). The TCTC has estimated approximately **$16.9 million** in TE funding through 2030.

National Forest Land (Forest Receipts)

Forest Receipts are federal funds that come from Federal property located within the county. Twenty-five percent of all revenue generated by the use of National Forest land, such as timber sales, is returned to the county. These funds can only be used for county road and school purposes. Due to reduced timber sales on federal lands, the Secure Rural Schools and Community Self-Determination Act of 2000 (S1608/HR2389) provided federal funding to help replace lost timber revenue through 2006. This program was extended for five years under Federal stimulus funding with a sunset clause of 2012. The TCTC has anticipated that future funding will remain at a modest level but will continue to be available. With this assumption, the funding estimate through 2030 is approximately $**19.6 million** in forest receipts.

Forest Highways

The Forest Highways program provides funding for emergency repairs and to restore, resurface, rehabilitate and reconstruct designated Forest Highways within National Parks and National Forests. Trinity County has several designated Forest Highways, as listed in Chapter 2. The Federal Highway Administration Central Federal Lands Highway Division provides assistance by actually performing the work on eligible roads, from environmental and design through construction management. Trinity County has taken full advantage of this program to preserve their forest roads. The County anticipates approximately **$30.1 million** in this type of assistance through 2030.

STATE REVENUES

The TCTC anticipates approximately **$103.8 million** from all State programs (excluding SHOPP) through 2030.

State Highway Operations and Protection Program (SHOPP)

Biennially, Caltrans is required to prepare a SHOPP for expenditure of transportation funds for major capital improvements that are necessary to preserve and protect the state highway system. Projects included in the SHOPP are limited to capital improvements relative to maintenance, safety, and bridges that do not increase capacity. Projects can also include bridge replacement and seismic retrofitting. RTPAs are encouraged to coordinate with Caltrans on the SHOPP prior to its submission to the CTC. Caltrans District 2 has provided a list of programmed and non-programmed SHOPP projects for Trinity County. The list is included in Appendix 4A. SHOPP projects programmed for Trinity County in the short-range (2010 – 2014) include curve realignment, shoulder widening bridge upgrades and bridge rails and bicycle lanes and drainage improvements totaling **$28.1 million**.

Non-Programmed SHOPP projects slated for construction in the 2012 through 2020 time frame include drainage rehabilitation, water and sewer upgrades, and pavement rehabilitation. The total for "non-programmed" SHOPP is **$56.5 million**.

State Transportation Improvement Program (STIP)

The STIP is a four-year planning document adopted every two years that displays commitments of transportation funds for improving operations for local roads and the State highway system. Total STIP revenues are projected to be approximately **$43.5 million**. Seventy-five percent of STIP funding goes to the Regional Improvement Program (RIP) administered by the TCTC and twenty-five percent goes to the state discretionary account --the Interregional Improvement Program (IIP).

State Transit Assistance (STA)

State Transit Assistance (STA) funds are derived from the Public Transportation Account (PTA). Half of the funds (50%) are allocated to Caltrans, and the other half to RTPAs. The region typically receives approximately $50,000 in STA funds annually. Over the life of the RTP the County anticipates approximately **$1.0 million** in STA funding for capital and operational improvements.

Assembly Bill 86 and 89

The TCTC is aware that the Governor signed AB 86 and AB 89 that will replace the sales tax on gasoline with an excise tax. The actual ramifications for future revenues and/or transit impacts are not known at this time. When the actual effect of the two bills is known, they will be incorporated into future RTP updates and revenue estimates.

Highway User Tax (State Gasoline Tax)

Highway User Tax (HUT) are used primarily for the maintenance of county roads. The region anticipates approximately **$ 47.3 million** from the HUT through 2030.

Proposition 1B

Proposition 1B, approved by the voters in November 2006, authorized the issuance of $19.925 billion in State general obligation bonds for specific transportation programs intended to relieve congestion, facilitate goods movement, improve air quality, and enhance the safety of the state's transportation system. Consistent with the requirements of Proposition 1B, the Trinity County Board of Supervisors programs and allocates bond funds in each of the above-mentioned program areas. As of October 2009, 37 Proposition 1B projects representing more than $400 million in bond funds are ready for construction (delivered) and awaiting allocation. The final allocation of Proposition 1B funds included **$1.3 million** for Trinity County. The County Board of Supervisors has approved a program for this amount, including drainage and road rehabilitation, shoulder widening and turnouts, matches to cooperative multi-agency projects, and transit enhancements. The funding has been allocated and the projects are underway, to be completed by June 30, 2013.

Bicycle Transportation Act (BTA) and Safe Routes to School Programs (SR2S)

The BTA provides funding for projects that serve and encourage bicycle use. The account is supported by a portion of the state gasoline tax. Statewide, approximately $5 to $7 million is made available each year. Because these funds are very limited, comparatively less-costly projects, such as bike parking facilities, are more likely to receive funding than high-cost projects. Public agencies that have an approved Bicycle Transportation Plan in place are eligible to apply for funding. Local agencies must fund at least 10% of the cost of BTA projects.

The State's SR2S program is primarily a construction program. Projects funded by the program are intended to improve the safety of students who walk or bike to school. Construction improvements must be made on public property. Maximum reimbursement from State budget cannot exceed 90%. Maximum amount of SR2S funds for any single project is $900,000. Eligible projects include: pedestrian facilities, traffic calming, traffic control devices, bicycle facilities, public outreach; and enforcement.

The County anticipates receiving approximately **$1.7 million** from both programs through 2030.

Aviation Funding

Aviation funding for Trinity County is provided mainly by two sources – The Federal Aid Improvement Program (AIP and the California Aid to Airports Program (CAAP). The FAA provides 90% federal funding, with 10% local funding, for general aviation airports. FAA funds are derived from user charges, such as taxes on aviation fuels, taxes on civil aircraft, and a surcharge on air passenger fares. These funds can be used for most capital expenditures. The California Aid to Airports Program (CAAP) can be used to pay a portion of the match for the FAA grants, and also makes state-only grant funds available for airport development and operation.

Although funding for aviation comes from both State and federal sources, the State administers the distribution of funds and therefore revenue estimates are shown under the State category. The TCTC anticipates approximately **$10.1 million** from both sources through 2030.

LOCAL REVENUES

The TCTC anticipates approximately **$6.7 million** from all local sources for roads, transit and aviation through 2030.

Transit Fares

Trinity County receives revenues from various subsidies as well as transit fares on its fixed route systems. The TCTC estimates future revenues from all transit fares is approximately **$826,000** through 2030. These funds will be used for both operating and capital expenditures.

Airport Income

Trinity County receives revenues from its airport operations for rent, storage and services. During the life of the RTP, the TCTC estimates approximately $**1.7 million** in airport revenues.

Local Transportation Fund (LTF)

Existing law requires that ¼ percent of statewide sales and use tax money be transferred to the local transportation fund of the county for allocation, as directed by the RTPA, to various transit projects and programs. The LTF also provides limited funds (2 percent set aside) for the construction and maintenance of pedestrian or bicycle facilities. The TDA also allows local agencies to use LTF funds on local streets and roads, provided that all unmet transit needs that are found "reasonable to meet" are funded. Under current law, Trinity County anticipates approximately **$4.1 million** in LTF funding through 2030.

PROJECT COST SUMMARY

Funding Sources by Mode

The following revenue distributions (pie charts) are based on **Table 5.1**.

Roadway/Bridges

The funding for Tier 1, 2 and 3 roadway and bridge projects comes from several sources. Capacity enhancement projects on the regional road network are primarily funded through the State Transportation Improvement Program (STIP). Approximately 43% of road capital funding comes from the STIP by itself. Bridge projects are normally funded through the HBP with the required match funded by the STIP or Toll Credits. Approximately 23% of projects use these sources. Safety projects are funded by the HSIP, amounting to 2% of anticipated revenues. The Forest Highways program implements projects valued at almost a third of road funding in the County. Note: SHOPP projects on State Highways programmed and/or proposed by Caltrans are not included in the total.

Transit

Funding for transit and transportation planning come from six sources. The larget share comes from LTF. The federal 5311 and 5311(f) programs provide 45% of funding. LTF accounts for 38% while STA, Fares and Prop 1B provide the remaining 20%.

Non-Motorized (Bicycle and Pedestrian)

Funds for non-motorized projects are available from several state and Federal programs, as well as local sources. The majority of funding (91%) is anticipated from Transportation Enhancement (TE). The remaining funds will come from BTA and SRTS grants. On occasion, non-transportation agencies, such as the Weaverville Basin Trails Committee and the Resource Conservation District obtain grants for recreational trails from the California Department of Recreation, US Forest Service, and other sources. Matches are usually provided with volunteer labor, if allowed by the granting agency.

Aviation

The primary fund sources (83%) for Aviation projects in the 2010 RTP come from the federal Aid to Airports (AIP) program. Airport income accounts for the remaining 17% of funding.

PROJECT COSTS VS. TOTAL REVENUES

The 2010 Trinity County RTP is fiscally constrained through 2030 based on revenue assumptions in this Chapter. **Table 5.4** provides a comparison of total costs and revenues through 2030.

TABLE 5.4
TOTAL COST VS. TOTAL REVENUES

Modes	Total Costs	Total Revenues	Capacity (+/-)
Roads/Bridges	$102,800,000	$99,900,000	-$2,900,000
Transit Capital/O&M	$11,200,000	$11,200,000	$0
Non-Motorized	$18,300,000	$18,700,000	+$400,000
Aviation	$11,700,000	$11,800,000	+$100,000
O&M (Road/ Bridges)	$71,000,000	$74,000,000	+$3,000,000
Total Project	**$215,000,000**	**$215,600,000**	**+$600,000**

Source: Trinity County 2011

Overall, the RTP shows a total project cost of $215 million for all modes and total revenues of $215.6 million to pay for those costs. The $600,000 surplus will change as projects advance to actual construction stage and actual revenue and cost sources are refined through federal and state budget allocations. The shortage of funds in the Roads/Bridges category shows that some Federal funding sources require a County match. The match would be derived from the excess funds shown in Operations and Maintenance, which are discretionary Road Funds that would otherwise be used for Operations and Maintenance.

FUNDING STRATEGY

The RTP for Trinity County identifies key short-range (0-5 years), mid-range (6 - 15years) and long-term (16-20 years) road improvements for the County's transportation system. These projects are categorized as either Tier 1, Tier 2 or Tier 3. Funding sources for these projects come from various federal, state and local sources including STIP, SHOPP (Major and Minor) Program, HBP, HSIP, Forest Highways, other grants, and limited local funding from gas taxes, highway users tax and forest receipts. The RTP also identifies a series of multi-modal projects and programs such as transit improvements, bicycle improvements, and pedestrian improvements. However, in spite of the reauthorization of SAFETEA-LU, and the funding targets established by the TCTC, the following funding questions remain critical to the County's transportation system:

- How should limited transportation funds be prioritized to meet the needs of motorists, transit riders, goods movement, bicyclists, pedestrians, and visitors over the next 20 years?
- Which specific transportation improvement projects and/or programs should be funded with Federal and State dollars as opposed to local dollars?
- What type of funding strategy should Trinity County adopt to provide the needed transportation improvements to its transportation system while maintaining the existing system?

To help answer these questions, four potential funding strategies are provided, each with a different approach to maximizing the use of limited transportation funding in Trinity County. These approaches are based on the policy directions identified in Section III – Policy Element. The first three strategies focus on prioritizing projects based on projected funding revenues while the fourth strategy outlines options for increasing local revenues.

Strategy 1 –Primary Focus on State Highways

This approach would channel the majority of revenues to State highway projects and target those areas that show the greatest deficiencies. The deficiencies are identified through the analysis of LOS, truck volumes, and future LOS deficiencies. New local road projects may assume a lower priority depending on policy set by the TCTC in the development of future STIPs. The predictable outcomes from this approach are that the availability of STIP dollars for local road reconstruction may be limited, transit would not improve significantly above current service levels, and multimodal improvements would rely solely on grant funding.

Strategy 2 – Balanced Spending on State Highways and Local Roads

This approach would consider needed capacity, safety and/or reconstruction improvements on local streets and roads of regional significance, in addition to critical State highway projects. It should be noted that except for the TE program, the STIP is now entirely dependent on revenues made available through year-to-year actions taken in the state budget process. These STIP revenues include annual transfers to the Transportation Investment Fund (TIF), which remain subject to suspension under Proposition 42 (notwithstanding the repayment provisions of Proposition 1A), annual appropriations of bond proceeds under Proposition 1B, and annual transfers to the Public Transportation Account (PTA). PTA transfers include both spillover transfers from the Retail Sales and Use Tax Fund and Proposition 42 transfers from the TIF. The result is that the STIP is no longer considered a stable and reliable source of funding by the CTC.

Strategy 3 – Multimodal Emphasis

In addition to highways and roads, this approach would channel some funds into multi-modal improvements including transit, bicycle, pedestrian facilities and ITS. Opportunities for implementing congestion reducing TSM and TDM strategies are very limited in Trinity County. Although investment in multi-modal projects does provide increased air quality benefits and will help the County position itself to help reduce VMT and ultimately GHG. However, the effectiveness in reducing automobile trips through mode shifting can be somewhat limited in rural areas. The type and extent of any investment in the County for TSM and TDM and/or ITS New Technology projects would have to be weighed against funding limitations and the required trade-offs with road improvements and maintenance needs. Currently, the County relies on Caltrans ITS for the majority of its improvements. The use of grant funds such as BTA, Safe Routes to School (SR2S), etc. are recommended to continue for multi-modal projects.

Strategy 4 – Increase Local Revenues

New local revenue sources are limited in Trinity County due its rural nature and limited development. The slow growth in the County would make implementation of a Traffic Impact Fee (TIF) impractical. Also, having developers pay their “fair share” would place a burden on the small amount of rural development that does occur. Under this scenario, the County should lobby for continuation of maintenance funding sources such as forest receipts and Prop 1B to help meet local needs for road maintenance as well as reconstruction and rehabilitation.

SUPPORT ACTIONS TO MAXIMIZE LIMITED FUNDS

The following actions are recommended to help maximize the use of limited transportation funds, regardless of the specific funding strategy.

- STIP funds should be used for local road rehabilitation, reconstruction and capacity improvements in the most congested and impacted areas on county roads. The TCTC should implement the highest priority projects from the Action Element based on purpose and need, and consistent with the policy direction decided by the TCTC. The TCTC should pursue all discretionary and grant-based programs available so that non-road projects such as transit, aviation, bike and pedestrian, can be implemented.

- A new source of maintenance funding should be pursued at the State level as opportunity arises. The TCTC and County should partner with Caltrans and neighboring Regional Transportation Planning Agencies, wherever possible, to attract additional ITIP and SHOPP projects in the County. Even though the SHOPP is a Caltrans' managed program earmarked for non-capacity increasing projects on the State highway system, local agencies should be encouraged to partner with Caltrans on important SHOPP funded projects that have regional significance.

6. ENVIRONMENTAL ASSESSMENT

For the purposes of this assessment, the project is the RTP itself, not the improvements identified in Chapter IV: Action Element of this document. Each improvement listed in the Action Element will have a full environmental analysis conducted to determine potential impacts to the environment prior to implementation. The analysis and potential mitigation is consistent with the California Environmental Quality Act (CEQA).

The environmental assessment of the Trinity County RTP is based on CEQA guidelines for initial studies/negative declarations and is provided in Appendix 6A. All projects listed in this RTP that fall under CEQA's definition of a project will undergo independent environmental review prior to project construction.