

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)	<ul style="list-style-type: none"> • LOS on State Highways • Number of STAA barriers on SR 299 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • LOS on County roads and at County Road/State Highway intersections • Frequency of road and bridge failures that limit access to communities 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Collision rate* on State Highways compared to similar facilities statewide 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> Percentage of highway funding shortfall covered by STIP and SHOPP Geographical Equity 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Farebox Recovery Ratio Cost per passenger Transit frequency 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Avoid or minimize significant impacts 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Minimum acceptable LOS in peak month Connectivity and accessibility for good movement and tourism 	<ul style="list-style-type: none"> 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 (Chapter 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 reach 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 project's 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	
<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</p>							