

TEHAMA 2015 REGIONAL TRANSPORTATION PLAN

Tehama County Transportation Commission



Administrative Draft Initial Study/Environmental Checklist

August 2015

On the Cover

Bowman Road Bridge at South Fork Cottonwood Creek

The bridge and roadway safety improvements include approximately 1,225 feet of new alignment and a 450' three span cast-in-place bridge located approximately 10 miles west of Cottonwood and Interstate 5.

To acknowledge and celebrate the culture and history of the **Nomlāqa Winthūn**, a traditional basket design was used on the concrete barrier rails along the new bridge. The design represents the local hills bordered by quail plumes and is depicted in the colors of the natural materials used in traditional Nomlaki basketry: red-brown (redbud bark) on a golden background (peeled sedge root). This public art reminds us that the Nomlaki people have lived in the region for countless generations and still call the area home today.

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Initial Study Checklist

Project Title

Tehama 2015 Regional Transportation Plan

<http://www.tehamacountypublicworks.ca.gov/transportation/rtp.html>

Lead Agency Name and Address

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Project Sponsor's Name and Address

Tehama County Transportation Commission (TCTC)
9380 San Benito Avenue
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Project Location and Setting

The project area consists of all areas of Tehama County, encompassing 2,962 square miles. Tehama County lies at the northern end of the Sacramento River Valley, and is bound on the east and west by the Sierra Nevada, Cascade, and Pacific Coast Ranges. Tehama County is approximately 130 miles north of Sacramento and is bisected by Interstate-5 (I-5) and the Sacramento River.

The three incorporated cities of Corning, Red Bluff and Tehama are adjacent to or near the Sacramento River and I-5 in the valley area. The county seat is Red Bluff. There are also numerous small communities throughout the county. Neighboring counties include Butte, Glenn, Mendocino, Plumas, Shasta and Trinity. The Paskenta Band of Nomlaki Indians maintains an office in the city of Corning and is an officially recognized tribal government. The tribe operates a casino on the west side of Interstate 5 south of Corning at the Liberal Avenue interchange.

Tehama County is rural in nature with a predominate amount of land used for agricultural use.

The primary mode of transportation in Tehama County remains the private automobile; however, the role of public transit is expected to continue increasing as the community evolves. Facilities for safe bicycle and pedestrian travel are also increasing. Interstate 5 and State Routes 36 and 99 are the major highways in Tehama County. State Routes 32, 89, and 172 also traverse portions of the county. There are 1,197.49 center-line road miles and 309 bridges in the county.

Two general aviation airports serve the county – Corning Municipal Airport and Red Bluff Municipal Airport. No commercial air service is available in the county.

Tehama County, Corning, and Red Bluff General Plans

There are a variety of general plan land use designations applicable throughout the county, which includes the entire project area. The proposed plan was designed to be consistent with the General Plans of Tehama County, Corning and Red Bluff. The Circulation Elements from each of these general plans were used as a reference during the development of the Tehama County 2015 Regional Transportation Plan (RTP). The proposed project is consistent with each of these general plans and does not include any proposed changes to the above referenced general plans.

Tehama County, Corning, and Red Bluff Zoning Code

There are a variety of zoning designations applicable throughout the entire county. The proposed plan was designed to be consistent with the zoning codes of Tehama County, Corning, and Red Bluff.

Project Description

The Tehama County Transportation Commission (TCTC) is the designated Regional Transportation Planning Agency (RTPA) for Tehama County. TCTC and Caltrans (District 2) mutually carry out the transportation planning process for Tehama County. One of the main responsibilities of TCTC is the preparation and approval of the Regional Transportation Plan (RTP). The RTP serves as the planning blueprint to guide transportation investments in Tehama County involving local, state, and federal funding over the next twenty years. The horizon year for the RTP completed in 2015 is 2035. Transportation improvements in the RTP are identified as short-term (0-5 years) or long-term (6-20 years).

The overall focus of the 2015 RTP is directed at developing a coordinated and balanced multimodal regional transportation system that is financially constrained to the revenues anticipated over the life of the plan. The coordination focus brings the county, Caltrans, cities of Corning, Red Bluff, and Tehama, Paskenta Band of Nomlaki Indians, governmental resource agencies, commercial and agricultural interests, and citizens into the planning process. The balance is achieved by considering investment and improvements for moving people and goods across all modes including automobiles, transit, bicycle, pedestrian, trucking, railroad, and aviation. The previous RTP was adopted by TCTC in 2006

Purpose of the Regional Transportation Plan

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

- Provide an assessment of the current modes of transportation and the potential of new travel options within the region.
- Identify projected growth corridors and predict the future improvements and needs for travel and goods movement.
- Identify and document specific actions necessary to address the region's mobility and accessibility needs, and establish short-term and long-term goals to facilitate these actions.
- Provide information for the RTIP, the ITIP, and the FTIP.
- Help facilitate the National Environmental Protection Act (NEPA)/404 integration process.
- Identify and integrate public policy decisions made by local, regional, State, and Federal officials regarding transportation expenditures and financing.
- Promote consistency between the California Transportation Plan (CTP), the RTP, and other plans developed by cities, counties, districts, tribal governments, and state and federal agencies in response to statewide and interregional transportation needs and issues.
- Employ performance measures that demonstrate the effectiveness of the transportation improvement projects in meeting the intended goals.

- Provide a forum for participation and cooperation transportation issues which transcend regional boundaries.
- Include federal, state and local agencies, tribal governments, the public, and elected officials in discussions and decision making early in the transportation planning process.
- Estimate the impact of the transportation system on air quality within the region and model its impacts on GHG emissions.

TCTC prepared the 2015 RTP based on these objectives consistent with the 2010 RTP Guidelines (adopted April 7, 2010).

The RTP guidelines require that an RTP provide a clearly defined justification for its transportation projects and programs. Each table of projects includes a qualitative assessment of purpose and need indicating a project's contribution to system preservation, capacity enhancement, safety, and/ or multimodal 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 the RTP 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 and stripping. In addition, because Tehama County is very rural and contains several small communities, the lack of maintenance funding has resulted in a large amount of "deferred maintenance" 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.

Capacity Enhancement – A capacity enhancement indicates a project that serves to increase traffic flows and to help alleviate congestion and improve LOS. This result may be achieved by adding a lane of traffic, adding a passing lane, using ITS elements to improve traffic flow, and/or adding a turn-out for slow-moving vehicles. Because Tehama County experiences large volumes of truck and recreational traffic on many of its roadways, the ability of vehicles to travel at desired speeds is sometimes 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 LOS on state and regionally significant roads, and adequate capacity at the county's two airports to meet existing and future demand.

Safety Projects – Safety improvements are intended to reduce the chance of conflicts between modes, 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, pavement or runway resurfacing to provide for a smooth travel surface, signage to clarify traffic and aviation operations, congestion relief, obstacle removal so that traffic flows are not hindered, and improvements to pedestrian and bicycle facilities to promote safe travel to desired destinations. In addition, bridge repairs and reinforcement serve to improve safety. The desired outcome is to reduce the incident of collisions on transportation facilities and the societal costs in terms of injury, death or property damage.

Multimodal Enhancement – These types of improvements focus on all modes of travel such as

automobiles, bicycling, walking and transit. Projects that are designated as multimodal are designed to enhance travel by one or more of these modes, provide for better connectivity between modes, and to improve non-auto access to major destinations and activity centers. Typical projects include separated bike lanes, shared bike routes, sidewalks, transit amenities, street furniture, and signage.

All projects listed in the RTP fall into one of the following tier designations. It should be noted that projects within each tier are for the most part in random order. Consequently, TCTC, the county, cities, and/or Caltrans may change the priority ranking or project scope during the RTP approval process.

- Tier 1: RTP improvements represent short-range projects that are fully fundable from anticipated revenue sources and will normally be programmed during the first 5 years (0-5 years) of the RTP.
- Tier 2: RTP improvements represent long-range projects that are included on the “unfunded” list of projects in Appendix 5G of the RTP and are planned for programming in the 6-20 year time frame (by the RTP horizon year, 2035).

There are no new roadways/alignments proposed as part of the RTP. The plan does not directly provide for the implementation of transportation projects and/or facilities. Rather, it identifies necessary improvements in order to provide the best possible transportation/circulation system to meet the mobility and access needs of the entire county.

Due to the regional nature of the RTP, the analysis in this Initial Study focuses on those impacts that are anticipated to be potentially significant on a regional system-wide level. As individual projects near implementation, it will be necessary to undertake project-specific environmental assessments before each project is approved and implemented. At that time, environmental review will be required in accordance with CEQA and, if federally funded, NEPA. Adoption of this Initial Study/Negative Declaration and approval of the RTP does not authorize Tehama County, Caltrans, or the cities of Corning, Red Bluff, and Tehama to undertake construction of specific improvement projects identified in the RTP without further environmental review and consideration.

Regional Goals

The following RTP goals, policies, and objectives have been retained and updated from the 2010 RTP. These goals, policies, and implementation measures have been modified to provide consistency with the overall TCTC transportation goals addressed above as well.

Goal #1: Preserve the existing transportation system with a pavement condition index (PCI) of 70 or better.

Goal #2: Optimize the use of existing interregional and regionally significant roadways to improve safety, prolong functionality, and maximize return-on-investment.

Goal #3: Strategically improve the interregional and regionally significant roadways to keep people and freight moving safely, effectively, and efficiently.

Goal #4: Align financial resources to meet the highest priority transportation needs.

Goal #5: Promote transportation improvements that preserve agricultural lands and engage land use coordination that discourages sprawl and leap-frog development, and/or increases in the transportation-system life-cycle costs.

Goal #6: Create vibrant, people-centered communities.

Goal #7: Provide an integrated, multimodal range of practical transportation choices.

Goal #8: Strengthen regional economic competitiveness for long-term prosperity.

Goal #9: Promote public access, awareness, and action in planning and decision-making processes.

Goal #10: Practice and embrace agricultural, environmental, and resource stewardship consistent with the RTP Guidelines.

Other Public Agencies Whose Approval Is Required (e.g., Permits, etc.)

The Tehama County Transportation Commission will be the Lead Agency for the proposed project pursuant to the California Environmental Quality Act (CEQA), Section 15050. No specific permits are required to approve the RTP. Future permits and other approvals vary among projects and may include, but are not necessarily limited to: Caltrans, CA Department of Fish and Wildlife, Regional Water Quality Control Board, Bureau of Reclamation, Bureau of Land Management, US Army Corps of Engineers, US Fish and Wildlife Service, Federal Highway Administration, Federal Aviation Administration, and the California Transportation Commission.

Environmental Factors Potentially Affected

None of the environmental factors listed below would be significantly affected by the plan, as described on the following pages.

	Aesthetics		Agriculture Resources		Air Quality
	Biological Resources		Cultural Resources		Geology /Soils
	Greenhouse Gas Emissions		Hazards & Hazardous Materials		Hydrology / Water Quality
	Land Use / Planning		Mineral Resources		Noise
	Population / Housing		Public Services		Recreation
	Transportation/Traffic		Utilities / Service Systems		Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

X	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Lisa Little, Senior Transportation Planner, TCTC

Date

Evaluation of Environmental Impacts

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.

Less than Significant With Mitigation Incorporated. This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.

Less than Significant Impact. A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.

No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the project.

Environmental Checklist

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form, contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 17 environmental topic areas.

I. AESTHETICS

WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a-d): Less than Significant. Views of scenic resources, including the Mount Lassen, Coastal Range, Sierra Nevada, Sacramento River, scenic water resources, and other scenic resources in the county are available from highways and roadways throughout the county. The proposed plan does not entitle, propose, or otherwise require the construction of new roadways. The proposed plan includes a variety of roadway improvement projects, which consist primarily of roadway rehabilitation efforts and roadway safety improvements. There are no new roadways proposed as part of the 2015 RTP update, and as such, the RTP would not lead to indirect population growth as a result of access improvements into areas that are currently undeveloped. The proposed plan identifies roadway and multimodal transportation improvement funding priorities that will be implemented over the next 20 years. Implementation of the RTP would not result in significant or adverse changes to the visual quality of the county, and would not result in the introduction of increased nighttime lighting or daytime glare. This is a less than significant impact and no mitigation is required.

II. AGRICULTURE RESOURCES
WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X

RESPONSES TO CHECKLIST QUESTIONS

With approximately 1,750 farms covering over 600,000 acres, agriculture remains the primary source of Tehama County's economy. Major commodities include walnuts, almonds, olives, cattle, dairies, and prunes. In 2012 approximately 32 percent of the land within the county was used for agricultural production, including croplands and pastures. According to the 2014 Tehama County Annual Crop and Livestock Report, the 2014 gross production of agricultural commodities was valued at \$380,340,300. This represents an increase of 26 percent from the 2013 gross production value of \$302,007,400.

Response a): No Impact. Implementation of the proposed plan would allow for roadway and multimodal transportation improvements throughout the county over the next 20 years. The proposed plan would not result in the conversion of any agricultural lands to non-agricultural uses, and as such, would have no impact on any Prime Farmland, Unique Farmland or Farmland of Statewide importance. There is no impact and no mitigation is required.

Response b): No Impact. The proposed plan does not propose any changes to general plan land use designations or zoning districts, and would have no impact on zoning for agricultural use. The proposed plan would not result in conflicts with any Williamson Act contracts, nor would it result in the cancellation of any Williamson Act contracts. Implementation of the proposed plan will have no impact on a Williamson Act contract, and no mitigation is required.

Response c): No Impact. See responses a) and b) above. The proposed plan will have no impact on agricultural lands or operations.

III. AIR QUALITY
WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	

RESPONSES TO CHECKLIST QUESTIONS

Tehama County is located within the Sacramento Valley Air Basin (SVAB). The SVAB is the northern half of California’s Great Valley and is bordered on three sides (west, north, and east) by mountain ranges, with peaks in the eastern range above 9,000 feet. SVAB is approximately 13,700 square miles and essentially a smooth valley floor with elevations ranging from 40 to 500 feet. The rolling valley is interrupted by the Sutter Buttes, an area of 80 square miles in northern Sutter County, which rise abruptly to more than 2,100 feet above the valley floor.

The SVAB consists of nine counties and is split into two planning sections based on the degree of pollutant transport from one area to the other and the level of emissions within each area. The Tehama County area belongs to the Northern Sacramento Valley Air Basin (NSVAB), which is composed of the seven northern-most counties of the SVAB. These counties include Butte, Colusa, Tehama, Shasta, Sutter, Glenn, and Yuba. The air basin of the Sacramento Valley is about 200 miles long in a north-south direction, and has a maximum width of about 150 miles, although the width of the valley floor only averages about 50 miles.

Tehama County has a designated partial-county non-attainment area for the 8-hour federal ozone standard which is defined as those portions of the immediate Tuscan Buttes area, located within Township 28N, Range 2W, Mount Diablo Base and Meridian, at or above an elevation of 1,800 feet. Tehama County is currently designated as nonattainment for both state PM₁₀ and ozone standards. Primary sources of PM₁₀ pollution include wood stoves, open and prescribed burning, wind-blown dust generated from unpaved roads and agriculture.

Ozone violations are caused in part, by combustion sources, and are occasionally influenced by smoke impacts due to nearby wildfires. The primary emission source is the internal combustion engine. The ozone problem is further aggravated by transport from the Broader Sacramento Area (BSA), which is comprised of all of the Sacramento Metropolitan AQMD, Yolo-Solano AQMD and a portion of El Dorado, Placer and Sutter counties. Ozone is formed by a photochemical reaction of nitrogen oxides and reactive organic gases. These ozone precursors are emitted as part of the exhaust of internal combustion engines in the NSVAB and BSA and transported northward via prevailing winds. Due to the regional nature of the ozone problem and the fact that the NSVAB counties share the same air basin with BSA, the Attainment Plan is prepared in conjunction with the Sacramento Valley Air Basin Control Council's Technical Advisory Committee (TAC).

Tehama County Air Pollution Control District

The administration of air quality regulations in Tehama County is handled by the Tehama County Air Pollution Control District (APCD). The APCD is responsible for the preparation of plans for the attainment and maintenance of Ambient Air Quality Standards (AAQS), adoption and enforcement of rules and regulations for sources of air pollution, and issuance of permits for stationary sources of air pollution.

The APCD also inspects stationary sources of air pollution, regulates agricultural burning, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by federal and state air quality regulations.

The APCD works to ensure a coordinated approach in the development and implementation of transportation plans throughout the County. This coordination ensures compliance with pertinent provisions of the federal and state Clean Air Acts, as well as related transportation legislation (such as the Intermodal Surface Transportation Efficiency Act, Transportation Conformity, and Transportation Improvement Plans).

Northern Sacramento Valley Air Quality Attainment Plan

As specified in the California Clean Air Act of 1988 (CCAA), Chapters 1568-1588, it is the responsibility of each air pollution control district and air quality management district within the state to attain and maintain California's ambient air quality standards. The CCAA requires that an Attainment Plan (Plan) be developed by all non-attainment districts for ozone (O₃), carbon monoxide (CO), sulfur oxides (SO_x), and nitrogen oxides (NO_x) that are either receptors or contributors of transported air pollutants. The purpose of the plan is to comply with the requirements of the CCAA as implemented through the California Health and Safety Code (HSC). Districts are required to update the plan every three years.

The Northern Sacramento Valley (NSV) is classified as a moderate nonattainment area for state ozone standard. The NSV comprises the northern portion of the Sacramento Valley Air Basin and includes the counties of Butte, Colusa, Glenn, Tehama, Shasta and the northern portions of Yuba & Sutter (Feather River Air Quality Management District). The NSV is generally rural in nature, with a low population density and a predominately agricultural economy. Its industrial base is dominated by agricultural/construction support operations, although small scale manufacturing is also found throughout the region.

Health and Safety Code (HSC) section 41503(b) requires that control measures for the same emission sources be uniform throughout the air basin. To meet this requirement the NSV has coordinated the

development of the plan and established specific rule adoption protocols through the Technical Advisory Committee (TAC) of the Sacramento Basin-wide Control Council.

Responses a-e): Less Than Significant. It is the intention of the RTP to rehabilitate the current road base and improve existing and future circulation within the county wherever possible. With this focus, improvements in the RTP may benefit regional air quality by reducing congestion on major roads within the county. Some of the route improvements contemplated in the RTP could have direct impacts on air quality, sensitive receptors, or create objectionable odors on a project-specific basis during construction. The Clean Air Act sets national ambient air quality standards for various air pollutants, including carbon monoxide, ozone, oxides of nitrogen, sulfur dioxide and particulate matter.

Individual projects contemplated in the RTP will be subject to project-level environmental review prior to approval and construction. Measures, such as construction best management practices (BMPS), may be required for individual projects to reduce temporary short-term construction related impacts to air quality.

The plan would not result in any indirect or cumulatively adverse impacts on air quality, as the RTP would not result in increased vehicle trips within the county or an overall increase in vehicle miles travelled as a result of implementation of the RTP. The proposed project would not conflict with or obstruct the implementation of the air quality plan, or violate any air quality standard.

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 greenhouse gas emissions and sets forth the regulatory framework to achieve the corresponding reduction in statewide emissions 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 Tehama County.

- Emphasize transportation investments in areas where desired land uses as indicated in a city or county 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 and resource lands.
- Consider transportation projects that increase connectivity 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 are established for Tehama County to lessen dependence on the automobile and to promote mode shifting to other forms of transportation.

Goal #3: Strategically improve the interregional and regionally significant roadways to keep people and freight moving safely, effectively and efficiently.

Goal #5: Promote transportation improvements that preserve agricultural lands and engage land use coordination that discourages sprawl and/or increases in the transportation-system life-cycle costs.

Goal #6: Create vibrant, people-centered communities.

Goal #7: Provide an integrated, multimodal range of practical transportation choices.

Goal #10: Practice and promote environmental and natural resource stewardship consistent with federal and state guidelines.

In recent years, Tehama County has experienced relatively slow growth (less than 1.0 percent per year) in population, and is forecasted to continue this trend through 2035. 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. The guidelines cite the lack of road congestion and the fact that emission changes from higher-MPG vehicles will continue to help the county comply with future emission caps established by the California Air Resources Board as part of AB 32.

The Tehama County 2015 RTP recognizes that travel demand management (TDM) and other non-auto 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 RTP Guidelines and CTC STIP Guidelines to provide a balanced multimodal transportation system that includes non-auto choices for access and mobility.

The county and cities are committed to implementing these types of policies and strategies that reduce reliance on the automobile and contribute to the reduction of GHG. As such, the proposed project would result in less than significant impacts to air quality and global climate change, and no mitigation is required.

IV. BIOLOGICAL RESOURCES
WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or US Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

Tehama County extends from high elevations (+8,200 feet) in the Sierras to the low elevations in the broad flat alluvial plain of the Sacramento Valley. The county spans three regions of California’s Wildlife Action Plan: the North Coast and Klamath Region; the Central Valley and Bay-Delta Region; and the Sierra Nevada and Cascades Region. As a result, Tehama County includes a great variety of climatic, soils and geographic conditions which, in turn, influence the distribution, variety, and abundance of the plant and animal species within the county. The variety of vegetative cover types in the county provide habitat for many different types of wildlife.

U.S. Fish and Wildlife Service (USFWS and California Department Fish and Wildlife (CDFW) manages several dedicated to the preservation of wildlife and natural habitat in Tehama County including:

- Tehama Wildlife Area is located about three miles south of the town of Paynes Creek

encompassing approximately 44,500 acres of grassland, oak woodland, and chaparral. There are also rugged canyons throughout the area. This area is a winter range for black-tailed deer. Wild pigs and turkeys are also found here. Among the birds that may be seen are bald and golden eagles, prairie and peregrine falcons, and other birds of prey.

- The Dales Lake Ecological Reserve, approximately 11 miles northeast of Red Bluff, is 367 acres of open grasslands and foothill pine woodland. The vernal pools of the area support a unique flora and fauna, including dozens of plant species that do not occur in any other type of habitat, as well as tadpole and fairy shrimp that are only found in vernal pools. Migrating waterfowl stop here to feast on the seasonal invertebrates. Deer and other grassland grazers can also be spotted.
- The Battle Creek Wildlife Area is 582 acres of riparian forests, marshes, and oak woodland that support a diverse variety of migratory and resident bird species, as well as aquatic and terrestrial mammals. Bald eagles and osprey nest here in spring. California quail, wood ducks, beaver, river otter, bobcat, and coyote may also be viewed.
- The Butler Slough Ecological Reserve, located 6 miles southeast of Red Bluff, is 54 acres of riparian and wetland habitat, some of which is reclaimed prune orchard. Antelope Creek borders the property to the east, and Butler Slough borders on the west. Remnants of once extensive valley oak riparian forest are found on the Reserve, surrounded by open grasslands. Natural restoration of the valley oak forest is evident. Species dependent upon riparian forests, and which may be seen here include valley elderberry longhorn beetles, bald eagles, peregrine falcon, Cooper's hawk, osprey, flycatchers, river otters, foxes, bobcats, ringtails, and brush rabbits.
- Merrill's Landing Wildlife Area, just south of South Avenue and east of Corning, is 296 acres of high terrace riparian habitat that contains a large river island, and supports a heron rookery as well as a diversity of bird and mammal species.

Portions of Tehama County lie in several U.S. National Forests including Lassen National Forest, Mendocino National Forest, and Shasta-Trinity National Forest encompassing approximately 400,000 acres. The U.S. Forest Service maintains a habitat management program, the main objective of which is to maintain or enhance viable populations of fish and wildlife species.

The Tehama East Watershed includes the following nine individual drainages that lie south of the Battle Creek Watershed in eastern Tehama County: Antelope Creek; Dye Creek; Hoag Slough; Inks Creek; Paynes Creek; Pine Creek; Salt Creek; Seven Mile Creek; Toomes Creek.

Most of these drainages are relatively low in elevation (less than 4,000 feet at their highest points) and therefore receive little precipitation in the form of snowfall. This creates hydrology that is flashy and surface flows that tend to cease during the summer dry season. The watershed is approximately 76% private and 24% public (state land, USFS, and BLM). Timber production, ranching, and farming are the primary resource activities. The largest community is the eastern portion of Red Bluff. Because of their hydrology, none of these drainages support large populations of anadromous fish; however, they do have spawning and rearing habitat (particularly near the Sacramento River) that warrant protection and, where needed, restoration.

The Tehama West Watershed includes four principal streams (Reeds, Red Bank, Thomes, and Elder Creeks) and several minor tributaries that drain from the west side of Tehama County to the Sacramento River. In their upper elevations, these watercourses have year-round flow and support a variety of aquatic life. The lower reaches become mostly dry in the summer season. Because of the hydrology, this watershed is not considered significant habitat for anadromous species. The land area is predominantly privately owned timber- and rangeland. The major watershed management issues for this area involve

accelerated erosion, improving aquatic and streamside habitat, fire and fuels loads, and preserving the rural open space and agricultural character of the area.

High elevation streams along the east slope of the North Coast Range are occupied by species adapted to the cool, swift-moving, highly oxygenated waters. Such species include rainbow trout, brook trout, riffle sculpin, and speckled dace. Foothill streams generally flow in winter, but are intermittent in the summer. California roach are the typical native species of these streams due to their tolerance of low oxygen and high water temperatures; however, green sunfish and fathead minnows can also be found and, in winter, Sacramento suckers, squawfish, and other minnows may spawn and over summer in pools. The rivers and sloughs contain the widest variety of species, including resident and anadromous species.

Typical native anadromous species include Pacific lamprey, white sturgeon, chinook salmon, and steelhead trout. Resident native species include Sacramento blackfish, hardhead, hitch, pikeminnow, California roach, Sacramento sucker, and Sacramento perch. Significant introduced species include threadfin and American shad, brown trout, carp, golden shiner, fathead minnow, channel catfish, black bullhead, mosquitofish, striped bass, black crappie, white crappie, green sunfish, bluegill, smallmouth bass, and largemouth bass. The principal reservoir in the county is Black Butte Lake which provides a typical warm water fishery including largemouth bass, smallmouth bass, white crappie, black crappie, channel catfish, striped bass, bluegill, carp, and pikeminnow.

RESPONSES TO CHECKLIST QUESTIONS

Response a-f): Less than Significant. The Plan does not propose the construction of new roadways in areas of the county that have previously been undisturbed. Roadway projects identified in the RTP predominately consist of rehabilitation efforts, which would occur within the roadbeds of the existing roadways, and would not have the potential to impact any special status species or habitat. Individual projects identified in the RTP that may include the widening of a particular roadway would be subject to project-level environmental review prior to approval and construction of the improvements. This future project-level environmental review of individual projects would identify the potential for impacts to any special status species, habitat, or wetlands. As such, implementation of the proposed Plan would not directly or indirectly impact any biological resources, wetland resources, or conflict with any habitat conservation plan or local ordinance protecting natural and biological resources. This is a less than significant impact and no mitigation is required.

V. CULTURAL RESOURCES
WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			X	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
d) Disturb any human remains, including those interred outside of formal cemeteries?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a-d): Less than Significant. The proposed plan does not entitle, propose, or otherwise require the construction of new roadways. The proposed plan includes a variety of roadway improvement projects, which consist primarily of roadway rehabilitation efforts and roadway safety improvements. The proposed plan identifies roadway and multimodal transportation improvement funding priorities that will be implemented over the next 20 years. Roadway projects identified in the RTP predominately consist of rehabilitation efforts, which would occur within the roadbeds of the existing roadways, and would not have the potential to impact any known or previously undiscovered cultural resources. Individual projects identified in the RTP that may include the widening of a particular roadway would be subject to project-level environmental review prior to approval and construction of the improvements. This future environmental review of individual projects would identify the potential for impacts to any cultural, historical, paleontological or archaeological resources. This is a less than significant impact and no mitigation is required.

VI. GEOLOGY AND SOILS
WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off- site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			X	

Tehama County topography is typified by steeper terrain on the eastern and western portions of the county trending down to relatively flat features in the center along Interstate 5 and the Sacramento River. Four geologic provinces exist within the county and have an influence on the county's topography. They are the Sacramento Valley which generally characterizes the center of the county, the Sierra Nevada along the eastern area, the Cascade Range to the north of the Sierra Nevada, and the Coast Range which dominates the western area.

The Sacramento Valley Province consists of nearly level terraces, smooth alluvial fans, narrow flood plains and water filled basins. Elevation ranges from approximately 100 feet above mean sea level (MSL)

at the Sacramento River. Foothills become more common from just south of Corning to Shasta Lake City. These are known as the Valley Hills and begin south of the Tehama-Glenn County line near Corning. There are also a few hills in Red Bluff and Corning. There is one major range of foothills between Cottonwood and Red Bluff known as the Cottonwood Hills (a.k.a. 9-mile Hill). In the Sacramento Valley, the Sutter Buttes, the remnants of an isolated Pliocene volcano, rise above the valley floor.

East of the Valley Province is the Sierra Nevada Province rising up from the valley to an elevation of approximately 8,200 feet above MSL (within Tehama County). More than 100 million years ago, granite formed deep underground. The range started to uplift 4 million years ago, and erosion by glaciers exposed the granite and formed the light-colored mountains and cliffs that make up the range. The uplift caused a wide range of elevations and climates in the Sierra Nevada.

The Cascade Range lies immediately east of the Valley Province and north of the Sierra Nevada Province and encompasses the northeast corner of Tehama County. The province is composed of a chain of volcanic cones, dominated in Tehama County by Mt. Lassen. Mt. Lassen last erupted in the early 1900s.

West of the Valley Province is the Coast Range Province, which can be further subdivided into the rolling terrain of the Coast Range foothills which increase in elevation from the easterly edge of the Valley to approximately 2,000 feet, and the mountainous Coast Range which rises to an elevation of almost 7,500 feet above MSL. The foothills consist of smooth, rolling to steep hills and narrow valleys with distinct areas of south to north drainage.

Similar to the county's terrain, rock types can be broadly divided into three different units which increase in age from east to west. In the east, geologic materials consist primarily of unconsolidated Pleistocene and Recent sediments (Qal) including alluvial fan deposits, stream channel deposits of the Sacramento River and inland basin deposits. Exposed at the lower elevations of the foothills are Tertiary sediments, primarily consisting of Pliocene sediments with some continental volcanics. At the higher foothill elevations, exposed outcrops are Cretaceous and Jurassic marine and non-marine sedimentary rocks, while the western mountainous region of the County is formed mainly of deformed Jurassic marine sediments and volcanic.

RESPONSES TO CHECKLIST QUESTIONS

Responses a-e): Less than Significant. Seismicity is directly related to the distribution of fault systems within a region. Depending on activity patterns, faults and fault-related geologic features may be classified as active, potentially active, or inactive. The entire State of California is considered seismically active and is susceptible to seismic ground shaking, however, the most highly active fault zones are along the coastal areas.

Fault Rupture

A fault rupture occurs when the surface of the earth breaks as a result of an earthquake, although this does not happen with all earthquakes. These ruptures generally occur in a weak area of an existing fault. Ruptures can be sudden (i.e. earthquake) or slow (i.e. fault creep). The Alquist-Priolo Fault Zoning Act requires active earthquake fault zones to be mapped and it provides special development considerations within these zones. While it is possible for a fault rupture throughout seismically active areas of California, there are no Alquist-Priolo Fault zones within Tehama County.

Seismic Ground Shaking

The potential for seismic ground shaking in California is expected. As a result of the foreseeable

seismicity in California, the State requires special design considerations for all structural improvements in accordance with the seismic design provisions in the California Building Code. These seismic design provisions require enhanced structural integrity based on several risk parameters. Any future roadway improvements implemented as a result of adoption of the RTP would be subject to detailed engineering requirements to ensure structural integrity consistent with the requirements of state law. As such, implementation of the proposed plan would result in a less than significant impact from seismic ground shaking.

Liquefaction

Liquefaction typically requires a significant sudden decrease of shearing resistance in cohesionless soils and a sudden increase in water pressure, which is typically associated with an earthquake of high magnitude. The potential for liquefaction is highest when groundwater levels are high, and loose, fine, sandy soils occur at depths of less than 50 feet. Tehama County is considered to be at a low risk of hazards from liquefaction. Any future roadway improvements implemented as a result of adoption of the RTP would be subject to detailed engineering requirements to ensure structural integrity consistent with the requirements of state law. As such, implementation of the proposed plan would result in a less than significant impact from liquefaction.

Landslides

Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e. cut and fill). The projects identified in the RTP consist primarily of roadway maintenance and improvement projects, and would occur within the existing right of way of the county's roadway system. As such, the potential for impacts related to landslides is considered less than significant.

Lateral Spreading

Lateral spreading typically results when ground shaking moves soil toward an area where the soil integrity is weak or unsupported, and it typically occurs on the surface of a slope, although it does not occur strictly on steep slopes. Oftentimes, lateral spreading is directly associated with areas of liquefaction. Tehama County is considered to be at a low risk of hazards of lateral spreading. Any future roadway improvements implemented as a result of adoption of the RTP would be subject to detailed engineering requirements to ensure structural integrity consistent with the requirements of state law. As such, implementation of the proposed plan would result in a less than significant impact from lateral spreading.

Erosion

Erosion naturally occurs on the surface of the earth as surface materials (i.e. rock, soil, debris, etc.) is loosened, dissolved, or worn away, and transported from one place to another by gravity. Two common types of soil erosion include wind erosion and water erosion. The steepness of a slope is an important factor that affects soil erosion. Erosion potential in soils is influenced primarily by loose soil texture and steep slopes. Loose soils can be eroded by water or wind forces, whereas soils with high clay content are generally susceptible only to water erosion. The potential for erosion generally increases as a result of human activity, primarily through the development of facilities and impervious surfaces and the removal of vegetative cover. Future roadway improvement projects would be required to implement measures during construction, including various BMPs, that would reduce potential impacts related to erosion. This is considered a less than significant impact.

Expansive Soils

Expansive soils are those that shrink or swell with the change in moisture content. The volume of change is influenced by the quantity of moisture, by the kind and amount of clay in the soil, and by the original porosity of the soil. Shrinking and swelling can damage roads and structures unless special engineering design is incorporated into the project plans. Implementation of the proposed plan would have a less than significant impact on this environmental topic, and no mitigation is required.

VII. GREENHOUSE GAS EMISSIONS
WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a-b): Less than Significant.The RTP includes goals, policies, and strategies aimed at reducing greenhouse gas emissions in Tehama County. RTP projects such as roadway and bridge repairs are necessary to maintain a safe regional transportation system and to prevent deterioration of roadways and bridges which may require costlier repairs in the future. These projects will not result in greater traffic volumes along state highways, county roads or city streets. To the degree that keeping an existing travel route open avoids travel via longer alternative routes that would accompany a closure, maintaining existing roadways and bridges can help to avoid increases in Vehicle Miles Traveled (VMT). The RTP also includes both short-term and long-term bicycle and pedestrian improvement projects which will create more bicycle and pedestrian friendly communities and potentially further reduce VMT. The RTP also includes public transit elements as well as electric vehicle charging stations. By expanding alternative forms of transportation, Tehama County is in line with statewide climate change goals. The RTP is a programmatic document and the identified projects will be reviewed on a project-by-project basis, therefore there is no potential for significant impact.

VIII. HAZARDS AND HAZARDOUS MATERIALS
WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			X	
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?			X	
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a-c): No Impact. A “hazardous material” is a substance or combination of substances that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a potential hazard to human health or the environment when handled improperly. The proposed plan does not propose new development or any use that would result in the transport, use, or disposal of hazardous materials. Furthermore, the proposed plan would not result in a foreseeable upset, accident, or emission of hazardous materials. Implementation of the proposed plan would have a less than significant impact on this environmental topic and no mitigation is required.

Responses d): Less than Significant. There is one location in Tehama County that is registered with the Department of Toxic Substances Control and included on the Cortese List. The site consists of a single business at 609 Walnut Street in Red Bluff, Tehama County California. Modern Cleaners, a dry cleaning business, is the apparent source of Perchloroethene and related solvents in groundwater monitoring wells near Modern Cleaners.

This site is not proposed for disturbance or improvement as part of the RTP. Implementation of the proposed plan would have a less than significant impact on this environmental topic and no mitigation is required.

Response e-f): Less than Significant. The RTP includes a list of proposed improvement projects related to aviation facilities in the county. The proposed aviation facility improvements consist primarily of rehabilitation efforts, and the implementation of other ancillary improvements such as fencing, lighting, etc. All improvements to aviation facilities within the county identified in the RTP are consistent with the applicable airport land use plans (ALUPs) and would not result in changes to the aviation and flight patterns surrounding county aviation facilities. Implementation of the proposed plan would have a less than significant impact on this environmental topic and no mitigation is required.

Response g): Less than Significant. The proposed plan would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The improvements identified in the RTP would improve the transportation network in Tehama County, which would serve to improve emergency response times countywide. Construction activities associated with projects identified within the RTP may result in temporary lane closures that may temporarily impede emergency access to certain areas within the county during construction. However, each improvement project, when undertaken, will include measures to ensure that emergency access is not adversely impeded. Implementation of the proposed plan would have a less than significant impact on this environmental topic and no mitigation is required.

Response h): Less than Significant. Wildfires are a major hazard in the State of California. Wildfires burn natural vegetation on developed and undeveloped lands and include timber, brush, woodland, and grass fires. While low intensity wildfires have a role in the ecosystem, wildfires put human health and safety, structures (e.g., homes, schools, businesses, etc.), air quality, recreation areas, water quality, wildlife habitat and ecosystem health, and forest resources at risk.

The proposed plan consists primarily of projects that will improve and rehabilitate roadways throughout the county. There are no new homes, business or habitable structures proposed as part of the RTP. Therefore, implementation of the proposed plan would not result in increased risks associated with wild fires. This is a less than significant impact and no mitigation is required.

IX. HYDROLOGY AND WATER QUALITY
WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a-j): Less than Significant. Implementation of the proposed plan would result in the improvement and rehabilitation of roadways and transportation infrastructure throughout Tehama County. The plan would not result in the development or construction of housing or other habitable structures that

would be at risk from flooding events. There are a small number of projects identified within the RTP that may increase the area of impervious surfaces within the county. Such improvements consist primarily of roadway widening to address safety and operational concerns. The amount of impervious surfaces that may be added to the county as a result of plan implementation is negligible, and would not result in impacts to groundwater recharge rates. The improvements identified in the RTP would not result in increased uses of ground or surface water, and would not directly or indirectly lead to population growth. As such, the plan would not result in an increased demand for ground or surface water resources, and would have no impact on these environmental topics.

There is the potential for water quality impacts to occur during construction activities associated with the various projects identified in the RTP. Each project is subject to further project-level environmental review prior to approval and construction. During subsequent environmental review, potential project-specific construction impacts to water quality would be identified, and mitigation measures, in the form of BMPs would be identified and implemented to ensure that impacts to water quality are reduced or avoided. Impacts to these environmental topics are considered less than significant and no mitigation is required.

X. LAND USE AND PLANNING
WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

RESPONSES TO CHECKLIST QUESTIONS

Responses a-c): No Impact. Implementation of the proposed plan would result in improvements to the county’s transportation network. There are no changes to land uses or land use designations proposed as part of the RTP. The county general plan, in addition to the general plans of Corning and Red Bluff were reviewed during preparation of the RTP, and the RTP is consistent with these documents. No housing would be removed as part of the proposed plan, and there are no new roadways proposed that would divide an established community. Implementation of the RTP would not conflict with a habitat conservation plan. There are no impacts to land use associated with the proposed plan and no mitigation is required.

XI. MINERAL RESOURCES
WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

RESPONSES TO CHECKLIST QUESTIONS

Response a-b): No Impact. The Office of Mine Reclamation periodically publishes a list of mines regulated under SMARA that is generally referred to as the AB 3098 List. The Public Contract Code precludes mining operations that are not on the AB 3098 List from selling sand, gravel, aggregates or other mined materials to state or local agencies. There are 16 mines identified on the AB 3098 list in Tehama County. Table 1 identifies the active mines located in the county.

Table 1: AB 3098 List – Active Mines in Tehama County

<i>Mine ID</i>	<i>Mine</i>	<i>Mine Operator</i>
91-52-0002	Carmichael Rock Quarry	Nordic Industries, Inc.
91-52-0005	Dibble Creek	Brian Ramsey
91-52-0012	Eaton Pit #100	Tehama County Public Works
91-52-0013	Schmitt Pit #1	Tehama County Public Works
91-52-0014	Nicol Pit #88	Tehama County Public Works
91-52-0016	Cottonwood Creek	Lyle Tullis Cottonwood Creek Sand and
91-52-0022	Paynes Creek Cinder Pit	Tehama County Public Works
91-52-0023	Dye Creek Quarry	Nordic Industries, Inc.
91-52-0024	H.L. Rodney	Harold L. Rodney
91-52-0027	Hooker Creek	Westside Aggregates
91-52-0028	Deer Creek Rock	Franklin Construction Company, Inc.
91-52-0033	Endicott	Endicott Trucking
91-52-0034	Pine Creek	7/11 Materials, Inc.
91-52-0035	Tehama Rock Products	Tehama Rock Product
91-52-0040	Crane Mills	Crane Mills
91-52-0041	TCR-2 Mine	Thomes Creek Rock

SOURCE: DEPARTMENT OF MINING AND GEOLOGY 2015

There are no active mines located within the areas identified for improvement in the RTP. The proposed plan would not result in the loss of availability of a known mineral resource or mineral resource recovery site. Implementation of the proposed plan would have a less than significant impact on this environmental topic.

XII. NOISE
WOULD THE PROJECT RESULT IN:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a-f): Less than Significant. Implementation of the proposed plan consists primarily of improvements to the existing transportation network in Tehama County. There are no new roadways proposed that would introduce new vehicle trips into areas not currently exposed to mobile noise sources from the existing transportation network. The improvements identified in the RTP would not directly result in increased vehicle trips on the county roadway network, and would therefore, not result in increased noise levels from vehicles travelling on existing roadways and transportation facilities in the county. The improvements to aviation facilities identified in the RTP would not result in increased or expanded flight operations, and would not result in increased noise from aviation sources.

Construction activities associated with the various improvements identified in the RTP could result in short-term temporary noise impacts in the immediate vicinity of the improvements. These noise increases would be temporary in nature, and construction activities in the vicinity of residences and other sensitive noise receptors would usually be limited to the daytime hours. There is the potential for nighttime construction to occur, primarily along I-5. However, as described throughout this initial study, subsequent environmental review of project-specific impacts would be required prior to approval and implementation

of future improvements. This future environmental review would identify the potential for short-term construction noise impacts to sensitive receptors, and assign mitigation measures as needed to reduce noise impacts. This is a less than significant impact and no mitigation is required.

XIII. POPULATION AND HOUSING

WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			X	
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a-c): Less than Significant. The proposed plan consists primarily of the rehabilitation of the existing transportation network in Tehama County. There are no new roadways proposed that would extend vehicular access into areas of the county that are not currently accessible by area roadways. The RTP would not result in the direct or indirect inducement of population growth. The proposed plan includes projects that would occur primarily within the right-of-way of the existing transportation network, and would not displace any persons or housing units. This is a less than significant impact and no mitigation is required.

XIV. PUBLIC SERVICES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a-e): Less than Significant. As described throughout this initial study, the proposed plan (adoption of the RTP) consists primarily of rehabilitation and improvement of the existing transportation network in Tehama County. The projects included in the RTP would not extend roadway infrastructure into areas not currently served, and would not result in the direct or indirect growth of the county's population. As such, the demand for increased public services, including police protection, fire protection, schools, parks and other public facilities would not increase as a result of implementation of the proposed plan. This is a less than significant impact and no mitigation is required.

XV. RECREATION
WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a-b): Less than Significant. As described throughout this initial study, the proposed plan (adoption of the RTP) consists primarily of the rehabilitation and improvement of the existing transportation network in Tehama County. The projects included in the RTP would not extend roadway infrastructure into areas not currently served, and would not result in the direct or indirect growth of the county’s population. As such, the demand for increased recreational facilities would not increase as a result of implementation of the proposed plan. This is a less than significant impact and no mitigation is required.

XVI. TRANSPORTATION/TRAFFIC
WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			X	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?			X	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a-b): Less than Significant. Implementation of the proposed RTP would result in improvements and rehabilitation to the existing transportation and roadway network in Tehama County.

Responses c-f): Less than Significant. As described throughout this initial study, implementation of the RTP would assist in the improvement of the county’s transportation network across all modes of transit and transportation. The improvements proposed to aviation facilities in the county would not result in an increase in flights or a change in flight patterns. There are policies and programs included in the RTP that would improve public access to transit systems and alternative modes of transit, such as bicycle use. The various roadway improvements identified in the RTP would assist in the delivery of emergency services by improving the local and regional roadway network and eliminating existing safety and design hazards. The RTP and the projects included within were developed after careful review of the general plans of the

county and the cities of Corning and Red Bluff. The RTP is consistent with the circulation elements of these general plans, and would not result in conflicts or inconsistencies with the above referenced plans. This is considered a less than significant impact and not mitigation is required.

XVII. UTILITIES AND SERVICE SYSTEMS

WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a-g): Less than Significant. Refer to Section VIII- Hydrology and Water Quality for a description of water supply and wastewater disposal.

The RTP consists of various roadway and transportation network improvement projects throughout the county. The RTP would not result in direct or indirect population growth, and as such, would not increase the demand for water supplies or the treatment and/or conveyance of wastewater. The various roadway and infrastructure improvements may require modifications or expansions to existing and future

stormwater conveyance infrastructure adjacent to roadways proposed for rehabilitation or modification. As described throughout this initial study, projects identified in the RTP would be subject to project-level environmental review to determine if potential impacts to the county’s stormwater detention and conveyance infrastructure may occur. This future project-specific environmental review may include mitigation measures, as appropriate, to avoid or lessen potential impacts to the stormwater infrastructure adjacent to roadway and other improvement projects. Implementation of the projects identified in the RTP would not generate significant amounts of solid waste, and would not result in an exceedance of any landfill’s capacity or violate any state, federal or local statues related to the disposal of solid waste. This is considered a less than significant impact and no mitigation is required.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b), c): Less than Significant. As described throughout the analysis above, the proposed RTP will not result in any changes to general plan land use designations or zoning districts, would not result in annexation of land, and would not allow development in areas that are not already planned for development in a general plan and zoning ordinance. The RTP would not result in new adverse environmental impacts. The plan would not threaten a significant biological resource, nor would it eliminate important examples of California history or prehistory. The RTP does not have impacts that are cumulatively considerable, nor would it have substantial adverse effects on human beings. Implementation of the proposed RTP would have a less than significant impact on these environmental topics.

References

Tehama County General Plan
City of Red Bluff General Plan
City of Corning General Plan
2015 Tehama Regional Transportation Plan
2013 Tehama County Annual Crop and Livestock Report (Tehama County Agricultural Commissioner, 2013)
California Important Farmlands 2012 Map (California Department of Conservation, June 2012)
Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004. (Staff Final Report), (California Energy Commission, 2006)
A Manual of California Vegetation (Sawyer, John and Todd Keeler-Wolf 1995)
Terrestrial vegetation of California (Barbour and Major 1988)
Jepson Manual: Higher Plants of California (Hickman, James C. 1993)
Cal EPA Department of Toxic Substances Control, 2015, Cortese List
Cal EPA Department of Toxic Substances Control, 2015, Cleanup Sites and Hazardous Waste Permitted Facilities
California Department of Conservation, Mine Reclamation AB 3098 List (2015)
California's Wildlife Action Plan