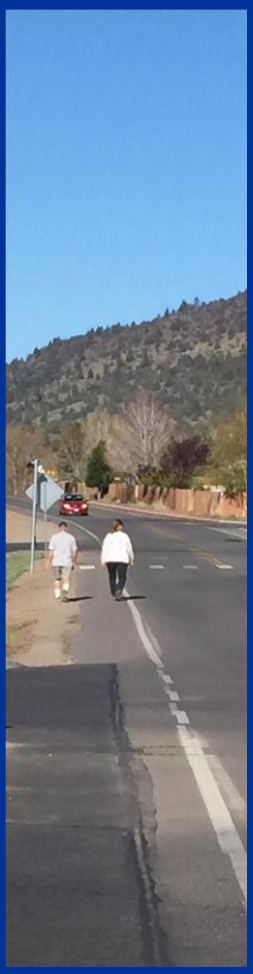
IS/ND



2017 LASSEN REGIONAL TRANSPORTATION PLAN INITIAL STUDY/NEGATIVE DECLARATION

Adopted February 9, 2018

Initial Study / Environmental Checklist

Lassen County
2017 REGIONAL TRANSPORTATION PLAN

This page left intentionally blank.

Initial Study / Proposed Negative Declaration

For the

Lassen County
2017 Regional Transportation Plan

Report Prepared for:
Lassen County Transportation Commission
2420 K Street
Sacramento, CA 95816

Report Prepared by Gallaway Enterprises and Green DOT Transportation Solutions

This page left intentionally blank.

Table of Contents

List of Figures and Tables

Introduction

Project Title

Lassen County 2017 Regional Transportation Plan

Lead Agency Name and Address

Lassen County Transportation Commission
2420 K Street
Sacramento, CA 95816

Contact Person and Phone Number
Mathew Boyer, Executive Director
530-953-8857

Project Sponsor's Name and Address
Lassen County Transportation Commission
2420 K Street
Sacramento, CA 95816

Project Location and Setting

The project area consists of the entire County of Lassen. Lassen County is located in the northeastern area of California bordering the State of Nevada. The County is bounded by Plumas and Sierra Counties to the South, Modoc County to the north, Shasta County to the West and Washoe County (Nevada) to the east (Figure 1). The County contains 4,720 square miles of land. Lassen County includes one incorporated city: Susanville. Susanville is the County Seat, and has a population of approximately 15,046 people in 2017 (US Census). There are also several unincorporated communities in the County, including Bieber, Nubieber, Little Valley, Spaulding, Clear Creek, Westwood, Johnstonville, Litchfield, Janesville, Milford, Herlong, Patton Village and Doyle. Most of Lassen County is very rural in land use and population density. Unincorporated areas of the County 2017 have an estimated population of 15,872. The County as a whole has a population of approximately 30,918 which equates to a population density of just under one person per 6.5 square miles. The automobile is the predominant mode of travel within the County. The regional movement of people within the County can be classified into three broad categories: commuter, recreational, and tourist. The County commute consists mostly of automobile traffic from Susanville and rural areas into the State Route 36 and Interstate 395 corridors. The closest commercial aviation service is in Redding or Reno, Nevada; no commercial air service is available in Lassen County. The County does not have rail service.

California Department of Finance (DOF) figures indicated that Lassen County's 2010 population was 34,895. In 2017, the population was estimated at 30,841, which calculates to approximately -0.19 percent change per year on average. The DOF population forecast reports an overall population decrease for the next 20 years. Lassen County population is expected to decrease between 0.1% and 0.2% per year on average between 2017 and 2037.

General Plan and Zoning

There are a variety of General Plan Land Use designations applicable throughout the entire County, which includes the entire project area. The proposed project was designed to be consistent with the

General Plans of Lassen County and Susanville. The Circulation Elements from each of these general

plans were used as a reference during the development of the Lassen County 2017 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.

The guiding principle in the Land Use/Circulation Element of the Lassen County General Plan is to allow the physical environment – including the transportation network – to determine the appropriate future land use patterns that will develop in Lassen County.

Lassen County's General Plan supports the development and maintenance of an efficient, safe and effective road system. The Circulation Element also supports an infrastructure plan that supports the purpose of the land use element. This concept is reinforced in the RTP, which recognizes that future development should occur in areas that will be easiest to develop. Such areas have low public service costs, will have the least negative environmental effect, and will not displace or endanger the County's critical natural resources. This approach will also result in lower improvement costs and increased operational efficiency of the existing transportation system because projects will be sized to reflect more compact growth closer to existing or planned services. This will help the County achieve any established greenhouse gas (GHG) targets.

There are a variety of zoning designations applicable throughout the entire County, which includes the entire project area. The proposed project was designed to be consistent with the zoning codes of Lassen County and each of the incorporated cities.

Project Description

The Lassen County Local Transportation Commission (LCTC) is designated the Regional Transportation Planning Agency (RTPA) for Lassen County. The LCTC last updated the Regional Transportation Plan (RTP) in 2012.

The RTP serves as the planning blueprint to guide transportation investments in the County involving local, State, and Federal funding over the next 20 years. The State and the County are at a pivotal moment in creating a new transportation pattern integrated with land use planning. Regions across California have been asked to develop plans for more efficient land use and development to reduce vehicles miles traveled (VMT). This focus is making its way into rural areas as well. Planners generally agree that reducing congestion, commute times, and VMT will lead to reduced carbon emissions while improving the quality of life.

Although Lassen County is considered a slow growth County, the LCTC sees an opportunity in this and future RTP updates to more wisely invest available funding in the transportation system. The County can become an even better place to live and work by integrating transportation improvements with land use planning.

Transportation improvements proposed in the 2017 RTP are categorized as short range (0-10 years) or long range (11-20 years). This RTP focuses on developing a coordinated and balanced multimodal regional transportation system that is financially constrained to the revenues anticipated over the life of the plan (2037). This update must be consistent with the 2017 Regional Transportation Plan Guidelines, which requires inclusion of program-level outcome- based performance measures and close ties to the Regional

Transportation Improvement Program (RTIP) and the Interregional Transportation Improvement Program (ITIP).

Purpose of the Plan

As defined by the 2017 RTP Guidelines, the purpose of the regional transportation plan is to accomplish the following objectives:

- Providing an assessment of the current modes of transportation and the potential of new travel options within the region;

- Projecting/estimating the future needs for travel and goods movement;

- Identification and documentation of specific actions necessary to address regional mobility and accessibility needs;

- Identification of guidance and documentation of public policy decisions by local, regional, state and federal officials regarding transportation expenditures and financing;

- Identification of needed transportation improvements, in sufficient detail, to serve as a foundation for the: (a) Development of the Federal State Transportation Improvement Program (FSTIP, which includes the STIP), (b) Facilitation of the National Environmental Policy Act (NEPA)/404 integration process and (c) Identification of project purpose and need;

- Employing performance measures that demonstrate the effectiveness of the system of transportation improvement projects in meeting the intended goals;

- Promotion of consistency between the CTP, the RTP and other plans developed by cities, counties, districts, California Tribal Governments, and state and federal agencies in responding to statewide and interregional transportation issues and needs;

- Providing a forum for: (1) participation and cooperation and (2) facilitation of partnerships that reconcile transportation issues which transcend regional boundaries; and,

- Involving community-based organizations as part of the public, Federal, State and local agencies, California Tribal Governments, as well as local elected officials, early in the transportation planning process so as to include them in discussions and decisions on the social, economic, air quality and environmental issues related to transportation. The LCTC prepared this 2017 RTP based on these objectives consistent with the 2017 RTP Guidelines (adopted January 18, 2017).

Project Purpose and Need

The RTP guidelines require that an RTP "provide a clearly defined justification for its transportation projects and programs." This requirement is often referred to as The Project Purpose and Need Statement. 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 Lassen County, each project by mode in Appendix D of the 2017 RTP 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 Lassen 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, and/or adding a turn-out for slow-moving vehicles. Because Lassen 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 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 County facilities and the societal costs in terms of injury, death or property damage.

Multi-modal Enhancement – These type of improvements focus on non-auto modes of travel such as 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 nonauto 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 Action Element and Appendix D of the RTP fall into one of the following designations. It should be noted that projects within each grouping are for the most part in random order. Consequently, the LCTC, County, and/or Caltrans may change the priority ranking or project scope during the RTP approval process.

- Short Range: RTP improvements represent short-range projects that are fully fundable from anticipated revenue sources, referred to as "constrained", and will normally be programmed during the first 10 years (0-10 years) of the RTP.
- Long Range: RTP improvements represent long-range projects that are included on the unconstrained or "unfunded" list of projects in Appendix G of the RTP and are planned for programming in the 11-20 year time frame (by the RTP horizon year, 2037).

There are no new roadways proposed as part of the proposed project. The RTP 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. Such future 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 Lassen County or Caltrans, 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 County transportation goals addressed above as well as the new proposed goals contained in the Lassen County General Plan.

- Goal 1: Develop and maintain a comprehensive, efficient, and safe transportation system to serve the needs of County residents and to stimulate the economic progress of the County.
- Goal 2: To provide adequate cost-effective public transit services, especially to accommodate the needs of the elderly and handicapped.
- Goal 3: Promote the continuous flow of goods in and out of the County in a safe and economically efficient manner.
- Goal 4.a: Provide an adequate number of safe, efficient airports and airfields.
- Goal 4.b: Support the expansion of economical, efficient air services.
- Goal 5: Provide a safe and efficient bicycle and pedestrian circulation system that takes advantage of the natural scenery and physical characteristics of Lassen County.
- Goal 6.a: Minimize traffic congestion by increasing the efficiency of the existing transportation system through Transportation System Management (TSM) techniques.
- Goal 6.b: Where feasible, reduce the demand for travel by Single Occupant Vehicles (SOVs) through Transportation Demand Management (TDM) techniques.
- Goal 7: Reduce GHG emissions from transportation related activities within the Lassen County boundaries to support the state's efforts under AB-32 and to mitigate the impact of climate change.

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

Lassen County 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 proposed project. Future permit 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.

2017 Lassen County Regional Transportation Plan
Figure 1: Regional Location Map


Modoc
BIEBER
NUBIEBER
LITTLE VALLEY
Shasta
Lassen
SPAULDING
NEVADA
SUSANVILLE
LITCHFIELD
JOHNSTONVILLE
JANESVILLE
WESTWOOD
CLEAR CREEK
MILFORD
HERLONG
PATTON VILLAGE
DOYLE
Plumas
Butte
Sierra
Sources: Esri, USGS, NOAA

Environmental Factors Potentially Affected

None of the environmental factors listed below would be potentially affected by this project, 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		Tribal Cultural Resources
	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
	prepar I find th e a d. t 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.

_____ _____

Mathew Boyer, Executive Director 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. 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:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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	

SETTING

Lassen County is characterized by forested mountains and plateaus, which cover the western third of the county, and sagebrush and juniper rangeland, interspersed with valleys on the eastern two-thirds. Elevations range from 3,300 feet (Fall River Valley) to approximately 8,374 feet (Red Cinder Mountain). The climate is variable, but characterized by warm, dry summers and cold, moist winters. Most of the precipitation (ranging from 4 inches near the Nevada border in the east to 48 inches in the Lassen Volcanic National Park in the west) falls between October and May.

In 1993, the Lassen Scenic Byway was recognized as part of the National Scenic Byway System. This route encompasses a series of highways that form a loop through the central portion of the Lassen National Forest. It includes portions of Highway 36, Highway 44, Highway 89 (including the segment of the highway through Lassen Volcanic National Park), and Highway 147. In Lassen County, the Lassen
Scenic Byway includes the section of State Route (SR) 44 between the Shasta County line and SR 36, State Route 36 between its intersection with SR 44 and the Plumas County line near Westwood, and, as part of an alternate loop around Lake Almanor, a short portion of SR 147 from SR 36 through Clear Creek to the Plumas County line.

There are no officially state designated scenic highways in the county. SR 299 in the northwest part of the county is considered an "eligible state scenic highway" but is not officially designated by the California Department of Transportation (Caltrans).

RESPONSES TO CHECKLIST QUESTIONS

Response a-d): Less than Significant. The proposed project does not entitle, propose, or otherwise require the construction of new roadways. The proposed project 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 2017 RTP update, and as such, the proposed project would not lead to indirect population growth as a result of access improvements into areas that are currently undeveloped.

The proposed project identifies roadway and multimodal transportation improvement funding priorities that will be implemented over the next 20 years. Implementation of the proposed project 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. AGRICULTURAL RESOURCES --WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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

SETTING

According to the 2015 Lassen County Annual Crop and Livestock Report, the 2014 gross production of agricultural commodities was valued at $126,725,643. This is an increase of $1% from the 2014 gross production value. Major agricultural commodities in Lassen County include field crops, seed/fruit/vegetable & nursery, livestock/poultry and timber harvest products.

RESPONSES TO CHECKLIST QUESTIONS

Response a): No Impact. Implementation of the proposed project would allow for roadway and multimodal transportation improvements throughout the County over the next 20 years. The proposed project 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 project 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 project 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 project 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 project will have no impact on agricultural lands or operations.

III. AIR QUALITY -- WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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	

SETTING

Lassen County is located in the Northeast Plateau Air Basin. The Lassen County Air Pollution Control District (LCAPCD) is the primary agency responsible for meeting state and federal ambient air quality standards for all criteria pollutants in the Lassen County area. The LCAPCD's jurisdiction covers all of Lassen County. The LCAPCD works with other Northeast Plateau districts to maintain the region's portion of the State Implementation Plan, which is an air quality control plan containing regional emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies.

In general, air emission sources in Lassen County are associated with motor vehicles, lumber mills, wood-burning stoves, wildfires, prescribed fires, and fugitive dust from unimproved roads and sparsely vegetated or un-vegetated lands, including dry lakebeds. Periodic emissions occur from agricultural activities, such as disking and agricultural waste burning (Lassen County 1999, p. 3- 55). Currently, the LCAPCD is designated as in nonattainment for the state PM10 (coarse particulate matter) standard (CARB 20154). The district is either in attainment or unclassified for state and federal standards on all other monitored air pollutants. The presence of inversion layers can augment the ambient air concentrations of pollutants such as carbon monoxide, ozone, and PM10. Pollutants directly emitted have the ability to stay in an inversion profile without mixing or diluting, which causes an increase in pollutant concentration.

The California Clean Air Act (CCAA) of 1988 requires air districts to endeavor to achieve and maintain the state ambient air quality standards by the earliest practicable date and to develop plans for attaining the state ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide standards.

If a pollutant concentration is lower than the state or federal standard, the area is classified as being in attainment for that pollutant. If a pollutant violates the standard, the area is considered a nonattainment area. If data are insufficient to determine whether a pollutant is violating the standard, the area is designated unclassified. Based on the 2015 Air Resources Board Area Designation Maps the

county is in attainment or unclassified for all state and federal air standards with the exception of state PM10.

RESPONSES TO CHECKLIST QUESTIONS

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 project would not result in any indirect or cumulatively adverse impacts on air quality, as the project 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 2017 RTP Guidelines provides several recommendations for consideration by rural RTPAs to address GHG. The following strategies from the 2017 RTP guidelines have specific application to Lassen County.

- Implement operational efficiencies that reduce congestion in vehicle throughput on roadways or improve transit access or other alternative access without physical expansion of the roadways.
- For purposes of allocating transportation investments, recognize the rural contribution towards GHG reduction for counties that have policies that support development within their cities, and protect agriculture and resource lands. Consideration should be given to jurisdictions that contribute towards these goals for projects that reduce GHG or are GHG neutral, such as safety, rehabilitation, connectivity and for alternative modes.
- In setting priorities, consider transportation projects that increase efficiency, connectivity and/or accessibility or provide other means to reduce GHG.

- In setting priorities, consider transportation projects that provide public health co-benefits.
- 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.

- Employ "Fix It First" policies to ensure that preventive maintenance and repair of existing transit and roads are the highest priority for spending, to reduce overall maintenance costs, and to support development in existing centers and corridors.

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 Lassen County to lessen dependence on the automobile and to promote mode shifting to other forms of transportation.

- Goal 1: Develop and maintain a comprehensive, efficient, and safe transportation system to serve the needs of County residents and to stimulate the economic progress of the County.
- Goal 2: To provide adequate cost-effective public transit services, especially to accommodate the needs of the elderly and handicapped.
- Goal 3: Promote the continuous flow of goods in and out of the County in a safe and economically efficient manner.
- Goal 5: Provide a safe and efficient bicycle and pedestrian circulation system that takes advantage of the natural scenery and physical characteristics of Lassen County.
- Goal 6.a: Minimize traffic congestion by increasing the efficiency of the existing transportation system through Transportation System Management (TSM) techniques.
- Goal 6.b: Where feasible, reduce the demand for travel by Single Occupant Vehicles (SOVs) through Transportation Demand Management (TDM) techniques.
- Goal 7: Reduce GHG emissions from transportation related activities within the Lassen County boundaries to support the state's efforts under AB-32 and to mitigate the impact of climate change.

The effectiveness of efforts by the RTPA to provide transportation alternatives and to implement TDM and TSM policies and strategies can be measured in terms of reductions in VMT or the expected growth in VMT. VMT reductions and speed correlate directly with reductions in GHG emissions.

Caltrans reports VMT by County on an annual basis. The daily vehicle miles travelled exceeds the total mileage of roadway in the case of the State Highway System, meaning some vehicles may be making more

than one trip per day. In all other cases, daily vehicle miles traveled is significantly lower than total roadway mileage.

Figure 2: Roadway and Daily Vehicle Miles Traveled 2010 and 2013

Lassen County Baseline Daily Vehicle Miles Traveled			
Jurisdiction	**2010 VMT**	**2013 VMT**	**Average Annual Change (%)**
Susanville City	77.65	84.39	2.9%
Lassen County	534.84	534.75	0.0%
State Highway System	760.14	693.11	-2.9%
State/Federal/Indian	122.7	27.15	-26.0%
Total	1,495.33	1,285.40	-4.7%
Source: 2010 Public Road Data by Caltrans , 2013 Public Road Data by Caltrans			

The California Department of Finance (DOF) reported the January 2010 population for Lassen County at approximately 34,895. In January 2016 the population declined to 30,841, and in January 2017 the County population was estimated at 30,918. Based on this trend and the guidelines established in the 2017 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 higherMPG 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 Lassen County [1] RTP recognizes that 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 City of Susanville General Plan and the County's General Plan to provide a balanced multi-modal transportation system that includes non-auto choices for access and mobility.

[1] Lassen County Regional Transportation Plan

The County is 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:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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	

SETTING

The elevation of Lassen County ranges from 3,757 feet in the valley floors to 8,747 feet atop Hat Mountain. As a result of such major changes in elevation, Lassen 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 2017 RTP includes a review and comparison with the California State Wildlife Action Plan (SWAP). Lassen County spans two of the ecological provinces of the SWAP; the Cascades & Modoc Plateau Province and the Central Valley & Sierra Nevada Province.

A review of county-wide species list using the United States Fish and Wildlife Service (USFWS), Sacramento Office Information, Planning, and Conservation System (IPaC), California Department of Fish and Wildlife's (CDFW) Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) list of rare and endangered plants was performed. The information in the species lists includes known occurrences and

historical occurrences of species listed as threatened, endangered or otherwise protected under policies or ordinances at the local or regional level as required by the California Environmental Quality Act (CEQA, §15380). The species lists indicate that there are twenty-two endangered or threatened animal species and one hundred twenty two plants species that are either endangered, threatened or protected under CEQA. There is also USFWS designated critical habitat for three species.

RESPONSES TO CHECKLIST QUESTIONS

Response a-f): Less than Significant. The proposed project does not propose the construction of new roadways in areas of the County that have previously been undisturbed. Nearly all of the roadway projects identified in the RTP 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 project 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:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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	

SETTING

Lassen County was formed on April 1, 1864, from parts of Plumas and Shasta counties following the twoday conflict known as the "Sagebrush War," also called the Roop County War, that started on February 15, 1863. Due to uncertainties over the California border, the area that is now Lassen County was part of the unofficial Nataqua Territory and Roop County, Nevada, during the late 1850s and early 1860s. The county was named after Peter Lassen, as is Lassen Peak, which is in adjoining Shasta County. Lassen was one of General John C. Fremont's guides, and a famous trapper, frontiersman, and Indian fighter (CaGenWeb 2014).

Prehistoric and historic resources are valuable to the people of Lassen County in many different ways: recreation opportunities, community identity, aesthetic beauty, spiritual importance, and historic interest. Prehistoric, historic, and contemporary cultural resources could be located anywhere within the County. No comprehensive inventory of cultural resource sites within Lassen County exists.

RESPONSES TO CHECKLIST QUESTIONS

Response a-d): Less than Significant. The proposed project does not entitle, propose, or otherwise require the construction of new roadways. The proposed project includes a variety of roadway improvement projects, which consist primarily of roadway rehabilitation efforts and roadway safety improvements. The proposed project identifies roadway and multimodal transportation improvement funding priorities that will be implemented over the next 20 years. Nearly all of the roadway projects identified in the RTP 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 or 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 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:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
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	

SETTING

According to the California Department of Conservation, Lassen County is affected by a number of earthquake fault zones. The majority of these fault zones ore located on the borders of the county; however, a number ore located in the Honey Lake volley. The Lassen County General Plan lists a number of earthquake events that have been felt in Lassen County (Lassen County 1999, p. 112).

Expansive soils hove the potential to significantly shrink or swell with changes in moisture content. The type and amount of the silt and cloy content in the soil will determine the amount of shrink or swell associated with the various levels of water content. Soils comprising sand and grovel ore not expansive soils. Expansive soils ore most likely to be found in basins and basin rims, and any structure located on expansive soils can be significantly damaged should the soil suddenly shrink or swell.

A number of areas in Lassen County are located within an Alquist-Priolo Earthquake Fault Zone. The Standish, Stony Ridge, Milford, Herlong, Calneva Lake, Doyle, McKessick Peak, and Constantia quadrangles area located in the southeastern portion of the county. The Day, Pittsville, Coble Mtn., Jellico, and Swans Hole quadrangles are located on the western border of the county, while the Sanke Lake quadrangle is located in the northeastern corner. Earthquakes of magnitude 5.0 or greater have occurred on fault systems in the region.

The General Plan includes measures that reduce the hazards related to seismic disturbances to the extent possible. For instance, Safety and Seismic Safety Element Implementation Measure 7 requires all public and private structures to strictly adhere to the Uniform Building Code regarding earthquake-safe standards for Seismic Zone 2. Open Space Element Policy OS 19 requires the County to consider geologic hazards, including but not limited to Alquist-Priolo Earthquake Fault Zones, in review of proposed development projects or proposed land use designations and zoning which would facilitate residential and community development. Implementation Measure OS-J requires the review proposed projects with respect to location in or near areas having documented significant geologic hazards.

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 Lassen 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 project 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. Most areas of Lassen County are 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 project 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. 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 project 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 RTP would not result in the use or expansion of any septic systems. Implementation of the proposed project would have a less than significant impact on this environmental topic, and no mitigation is required.

VII. GREENHOUSE GAS EMISSIONS -- *WOULD THE PROJECT:*

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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	

SETTING

Lassen County has experienced a reduction in growth (approximately -0.19 percent per year between 2010 and 2017) in population and is forecast to generally continue this trend through 2037. Based on this trend and the guidelines established in the 2017 RTP guidelines, the County is not required to run a network travel demand model to estimate Vehicle Miles Traveled (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.

RESPONSES TO CHECKLIST QUESTIONS

Response a) and b): Less than Significant. As described above, population growth in Lassen County has been extremely low over the past decade, and this trend is anticipated to continue through 2030. As a result of the County's low historic and projected population growth, increases in VMT are anticipated to remain low as well. The RTP includes numerous goals related to the increase in multi-modal transportation options, which reduce dependence on the automobile, and may subsequently result in decreases in total VMT throughout the County.

The RTP includes goals, policies, and strategies aimed at reducing greenhouse gas emissions in Lassen 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 or County roads. 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 VMT. The RTP also includes 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. By expanding alternative forms of transportation, Lassen County is in-line with statewide climate change goals. The RTP is a programmatic document and the proposed 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:*

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

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	

SETTING

The State of California has adopted U.S. DOT regulations for the intrastate movement of hazardous materials; State regulations are contained in 26 CCR. In addition, the State of California regulates the transportation of hazardous waste originating in the state and passing through the state (26 CCR). Both regulatory programs apply in California. The two State agencies with primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies are the CHP and Caltrans. The CHP enforces hazardous material and hazardous waste labeling and packing regulations to prevent leakage and spills of material in transit. Caltrans has emergency chemical spill identification teams at as many as 72 locations throughout the State that can respond quickly in the event of a spill. Additionally, the Lassen County Public Health Department serves the public in an effort to protect the health and welfare of the general public and environment through prevention and control of disease and pollutants.

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 project does not propose new development or any use that would result in the transport, use, or disposal of hazardous materials. Furthermore, the proposed project would not result in a foreseeable upset, accident, or emission of hazardous materials. Implementation of the proposed project would have a less than significant impact on this environmental topic and no mitigation is required.

Responses d): Less than Significant. There are two locations in Lassen County that are registered with the Department of Toxic Substances Control and included on the Cortese List. Both sites are listed as "Sierra Army Depot" which is located in the vicinity of Herlong. None of the proposed improvements in the RTP would occur within the vicinity of these sites. Implementation of the proposed project would have a less than significant impact on this environmental topic and no mitigation is required.

Response e-f): Less than Significant. The Action Element of 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 project would have a less than significant impact on this environmental topic and no mitigation is required.

Response g): Less than Significant. The proposed project 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 Lassen 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 project 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 wild fires 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 project 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 project 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:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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	

SETTING

According to the Lassen County General Plan, much of the county is arid with some areas receiving an average of less than 5 inches of rain annually. Adequate water supplies are essential for the future of Lassen County. Water is a key element to agricultural production and economic development and is vitally

important to maintaining many of the county's wildlife resources and recreation attractions (Lassen County 1999, p. 3-15). Lassen County has two large water bodies, Eagle Lake and Honey Lake.
Eagle Lake, which covers approximately 34 square miles, is the second largest natural lake lying entirely within California (second only to Clear Lake). Honey Lake covers an area of over 90 square miles. However, Honey Lake is, on the average, little more than 5 feet deep when full and can be virtually dry after one or two years of below-average precipitation. Due to its high mineral content, it has been subject to only minor use for agricultural irrigation and offers marginal fishery resources. The county's surface water resources also include a number of reservoirs that were primarily developed for agricultural use or production of hydroelectric energy, but which also provide some recreational opportunities as well as wildlife habitat. Included in this group are such water bodies as McCoy and Hog Flat reservoirs and Leavitt Lake, which were developed by the Lassen Irrigation Company, and Mountain Meadows Reservoir, which was developed by PG&E for the generation of electric power.

Lassen County is located in the North Lahontan Hydrologic Region and the Sacramento River Hydrologic Region. The county has a number of groundwater basins, including Big Valley, Madeline Plains, Secret Valley, and Honey Lake Valley (Lassen County 2007, Figure 1-1). The major sources of groundwater in Lassen County include rainfall, infiltration from nearby rivers and streams, and the percolation of applied irrigation water in agricultural areas. The average precipitation in Lassen County ranges between 11 and 17 inches annually depending on location (Lassen County 2007, p. 2-5); however, there is no estimate of what percentage of rainfall reaches the groundwater supply.

Despite its generally dry conditions, Lassen County experiences periodic winter storms and thunderstorms that often result in flash floods. Under storm conditions, the region's stream systems pose a significant threat. The Susan River crosses the southern portion of Lassen County and drains into Honey
Lake. Based on historical records, the Susan River is the primary source of flooding in Lassen County (Risk Management Professionals 2010, p. 3-40). Lassen County does not have a well-developed flood protection system. As a result, flooding often occurs along streams, damaging agricultural and urban properties causing channel and bank erosion. Flooding and erosion are particularly serious along the Susan River.

RESPONSES TO CHECKLIST QUESTIONS

Response a-j): Less than Significant. Implementation of the proposed project would result in the improvement and rehabilitation of roadways and transportation infrastructure throughout Lassen County. The project 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 project 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 project 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:*

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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

SETTING

Lassen County is characterized by a wide range of existing land uses. Much of the residential development in the county is low-density single-family housing.

RESPONSES TO CHECKLIST QUESTIONS

Responses a-c): No Impact. Implementation of the proposed project 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 was reviewed during preparation of the RTP, and the RTP is consistent with these documents. No housing would be removed as part of the proposed project, 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 project and no mitigation is required.

XI. MINERAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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

SETTING

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. The current AB 3098 list (October 31, 2017) indicates that there are twenty-six mines regulated under SMARA.

RESPONSES TO CHECKLIST QUESTIONS

Response a-b): No Impact. The proposed project would not result in the loss of availability of a known mineral resource or mineral resource recovery site. Implementation of the proposed project would have a less than significant impact on this environmental topic.

XII. NOISE -- WOULD THE PROJECT RESULT IN:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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	

SETTING

The major noise sources in Lassen County are related to vehicular traffic on State Routes (SR) 36, 44, 139, and 299 and US 395. Other noise sources include overflights from airports, railroad activities, and agricultural and mining operations. Although the County does not have a noise ordinance, noise issues are addresses in a number of different sections in the County Code related to land use. The Director of the Department of Planning and Building Services has the authority to make determinations as to the similarity of one use that is not listed in the County Code to another use that is listed, including the generation of or sensitivity to noise (County Code Section 18.122.020).

RESPONSES TO CHECKLIST QUESTIONS

Responses a-f): Less than Significant. Implementation of the proposed project consists primarily of improvements to the existing transportation network in Lassen 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. 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:*

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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	

SETTING

The California Department of Finance (DOF) reported the January 2010 population for Lassen County at approximately 34,895. In January 2016 the population declined to 30,841, and in January 2017 the County population was estimated at 30,918. The average household size was estimated at 2.5 persons per household in 2010 (US Census, 2010).

RESPONSES TO CHECKLIST QUESTIONS

Responses a-c): Less than Significant. The proposed project consists primarily of the rehabilitation of the existing transportation network in Lassen 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 project would not result in the direct or indirect inducement of population growth. The proposed project 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

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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	

SETTING

Fire protection in Lassen County is handled by a variety of agencies, such as the Susanville Fire Department, Peninsula Fire Department, McArthur Fire Department, Spalding Fire Department, Bieber Fire Department, Doyle Fire Department, Westwood Fire Department, and the California Department of Forestry and Fire Protection (Cal Fire). These fire departments provide fire protection and suppression and life safety services in Lassen County.

The Lassen County Sheriff's Office provides police protection in the county. The Sheriff's Office is headquartered at 1415 Sheriff Cady Lane in Susanville. The county is also served by the California Highway Patrol. Lassen County is served by five school districts. These districts operate 11 elementary schools, 4 high schools, and 6 charter schools. In addition, Lassen Community College provides posthigh school education opportunities for Lassen County residents.

The Lassen County Parks Division is responsible for the administration, maintenance, and construction of park facilities in the county. Parks include Susanville Ranch Park, Bieber Park, Little Valley Park, Lake Forest Park, Clear Creek Park, Janesville Park, Milford Park, Cowboy Joe Park, and Doyle Park. Additionally, over 1,771,000 acres of land in Lassen County is owned and managed by federal agencies. This includes over 610,000 acres in the Lassen, Modoc, Plumas, and Toiyabe National Forests, Lassen Volcanic National Park, and Caribou Wilderness Area (Lassen County 1999).

RESPONSES TO CHECKLIST QUESTIONS

Responses a-e): Less than Significant. As described throughout this initial study, the proposed project (adoption of the RTP) consists primarily of the rehabilitation and improvement of the existing transportation network in Lassen 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 project. This is a less than significant impact and no mitigation is required.

XV. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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	

SETTING

As discussed previously, the Lassen County Department of Public Works is responsible for the administration, maintenance, and construction of park facilities in the county. Parks include Susanville Ranch Park, Bieber Park, Little Valley Park, Lake Forest Park, Clear Creek Park, Janesville Park, Milford Park, Cowboy Joe Park, and Doyle Park.

RESPONSES TO CHECKLIST QUESTIONS

Responses a-b): Less than Significant. As described throughout this initial study, the proposed project (adoption of the RTP) consists primarily of the rehabilitation and improvement of the existing transportation network in Lassen 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 project. This is a less than significant impact and no mitigation is required.

XVI. TRANSPORTATION/TRAFFIC -- *WOULD THE PROJECT:*

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 management agency for designated roads or highways?			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	

SETTING

Lassen County is served by one federal highway and six state highways. These highways provide the main regional transportation routes for automobiles and trucks. The highway network includes US Highway 395 and State Routes 36, 44, 70, 139, 147, and 299.

US Highway 395: US 395 is primarily a north-south route connecting Lassen County to points north via Alturas, and points south, including the metropolitan area of Reno, Nevada.

State Route 36: SR 36 provides regional access to Lassen County from the west via the Lake Almanor Basin. This highway links to Interstate 5 at Red Bluff via State Route 32 west of Chester. It also links to Chico and other points in the Sacramento Valley.

State Route 44: SR 44, which intersects State Route 36 approximately 7 miles west of Susanville, connects the county to Redding and points north.

State Route 70: SR 70 connects with US 395 at Hallelujah Junction and links the southernmost portion of Lassen County with Plumas County.

State Route 139: SR 139 connects Susanville with Lassen Community College and the northern communities of the county via Willow Creek Valley, the north shore of Eagle Lake, and State Route 299 in Big Valley.

State Route 299: SR 299 connects the area of Big Valley with Alturas in Modoc County to the northeast and with Shasta County, Redding, and Interstate 5 to the west.

State Route 147: Less than 2 miles of SR 147 runs through Lassen County and the community of Clear Creek, connecting with State Route 36 approximately 5 miles west of Westwood.

In 2017, the California Transportation Commission adopted guidelines for Regional Transportation Planning Agencies for RTP analysis and modeling. This was the first time separate guidelines have been developed for RTPAs and Metropolitan Planning Organizations, recognizing the inherent differences. The 2017 RTP Guidelines for RTPAs formally recognizes that RTPAs are not required to develop Sustainable Communities Strategies as MPOs are. As such, air quality conformity analysis and travel demand models are not required either. Air quality conformity analysis on regionally significant, federally funded projects is performed by the California Department of Transportation in isolated rural nonattainment and maintenance areas.

The 2017 RTP guidelines incorporate California's Senate Bill 743 (SB 743), which requires a change in transportation impact metrics used in the CEQA process from Level of Service (LOS) to Vehicle Miles Traveled (VMT).

Estimates of countywide VMT for the two most recent years available, 2010 and 2013, are provided in Table 2.11 of the RTP (Figure 2 of this document) . As shown, VMT has oscillated from year to year with no discernable growth trend during this threeyear period. Dramatic changes in VMT within the unincorporated County and on State/ Federal/Tribal owned roadways can be attributed to roadway mile inventory changes (e.g., new or abandoned roadways).

Based on demographic growth projections of 0.9% per year for population, housing and employment, countywide VMT growth is projected to increase from 535 in 2010 to approximately 654 by 2037, the horizon year of this planning document. Average growth and VMT projections can be seen in Table 2.12 of the RTP. These VMT growth projections and per capita metrics can provide a benchmark for evaluating the efficiency of future development and growth patterns in Lassen County.

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 Lassen County.

Due to the very minor predicted increase in VMT throughout the lifetime of this RTP, few changes are expected in the ratings of state routes in Lassen County. In 2037, most highway segments are expected to be operating at an acceptable congestion rating.

Implementation of the proposed project would not result in population growth within Lassen County, and would not directly result in increases of VMT. The proposed project would improve traffic flows and operations throughout the County, and would not result in VMT that exceeds applicable standards or thresholds, as described above. This is a less than significant impact and no mitigation is required.

Responses c-f): Less than Significant. As described throughout this initial study, implementation of the proposed project 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 roadways improvements identified in the RTP would assist in the delivery of emergency services by improving the local and regional roadway network and eliminating existing design and safety hazards. The RTP and the projects included within were developed after careful review of the General Plan of the County. The RTP is consistent with the circulation element of the General Plan, 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. TRIBAL CULTURAL RESOURCES – *WOULD THE PROJECT*

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in public Resources Code section 21074 as either a site, feature place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of the Historical Resources, or in a local register of historical resources as defined Public Resources Code section 5020.1(k), or			X	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.			X	

SETTING

CEQA requires lead agencies to determine if a proposed project would have a significant effect on tribal cultural resources. The CEQA Guidelines define tribal cultural resources as: (1) a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code Section 5024.1(c), and considering the significance of the resource to a California Native American tribe. The County provides notices of projects under AB52 to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice.

RESPONSES TO CHECKLIST QUESTIONS

Responses a-b): Less than Significant. The proposed project does not entitle, propose, or otherwise require the construction of new roadways. The proposed project includes a variety of roadway improvement projects, which consist primarily of roadway rehabilitation efforts and roadway safety improvements. The proposed project identifies roadway and multimodal transportation improvement funding priorities that will be implemented over the next 20 years. Nearly all of the roadway projects identified in the RTP 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 or 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 cultural resources. This is a less than significant impact and no mitigation is required.

XVIII. UTILITIES AND SERVICE SYSTEMS -- *WOULD THE PROJECT:*

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 project consists of various roadway and transportation network improvement projects throughout the County. The project 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.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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) - c): Less than Significant. As described throughout the analysis above, the proposed project 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 the General Plan and Zoning Ordinance. The proposed project would not result in new adverse environmental impacts. The project would not threaten a significant biological resource, nor would it eliminate important examples California history or prehistory. The proposed project does not have impacts that are cumulatively considerable, nor would it have substantial adverse effects on human beings. Implementation of the proposed project would have a less than significant impact on these environmental topics.

References

CAGenWeb Project, Lassen County, California GenWeb Project (2017).

California Department of Finance (2017).

California Department of Conservation, California Important Farmlands (June 2014).

California Department of Fish and Wildlife, California State Wildlife Action Plan. (2015).

California Department of Conservation, Mine Reclamation AB 3098 List (2017).

California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control, Cortese List (2017).

Cal EPA Department of Toxic Substances Control, Cleanup Sites and Hazardous Waste Permitted Facilities (2017).

California Air Resources Board (CARB), Air Quality Standards and Area Designations (2017).

California Energy Commission, Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004 (2006).

Lassen County Planning Department, Lassen County General Plan Land Use and Circulation Element- (1999).

Lassen County Agricultural Commissioner Lassen County Annual Crop and Livestock Report (2015).

Lassen County Transportation Commission, Lassen County 2017 RTP Draft (2017). U.S.

Census Bureau, US Census, (2000, 2010).