

STAFF REPORT



MEETING DATE:	December 14, 2023
SUBJECT:	Conduct a Public Hearing on the 2022 Sustainable Communities Strategy (SCS); Certify Supplemental Environmental Impact Report (SEIR) for the 2022 Regional Transportation Plan (RTP); Adopt the 2022 RTP; and Adopt the Regional Travel Demand Model (ShastaSIM v2.0)
AGENDA ITEM:	10
STAFF CONTACT:	Jennifer Pollom, AICP, Senior Transportation Planner

SUMMARY:

The Regional Transportation Plan (RTP) is a 20-year plan for the region's transportation system. It includes a Sustainable Communities Strategy (SCS) for the reduction of per capita greenhouse gas emissions. The Draft 2022 RTP/SCS for the Shasta Region and accompanying Supplemental Environmental Impact Report (SEIR) were prepared and made available for public review and comment from August 17 through October 11, 2023. Changes have been made based on comments received to certify the environmental document and adoption of the 2022 RTP/SCS.

STAFF RECOMMENDATIONS:

It is recommended that the board of directors:

1. Conduct a public hearing to receive public comments on the 2022 SCS portion of the 2022 RTP;
2. Adopt Resolution 23-15, certifying the Final SEIR for the 2022 RTP, accepting the statements of overriding consideration, adopting a mitigation, monitoring, and reporting program, and approving the 2022 RTP and SCS;
3. Adopt Resolution 23-16, adopting ShastaSIM v2.0 as the travel demand model for the Shasta Region; and
4. Authorize the executive director to make any minor modifications to the documents in response to federal or state agency review.

DISCUSSION:

Background – SRTA is required by federal and state law to develop a long-range (minimum 20-year) RTP. The purpose of an RTP is "to encourage and promote the safe and efficient management, operation, and development of a regional intermodal transportation system that, when linked with appropriate land use planning, will serve the mobility needs of goods and people."¹ Key elements of the 2022 RTP for Shasta County include:

- A regional vision supported by a program of short- and long-range strategies in the Regional Transportation Policy and Action Plan section;
- An evaluation of regional mobility needs in light of population, housing, and job forecasts Modal Assessment section;

¹ California Transportation Commission, 2017 California Regional Transportation Plan Guidelines

- A coordinated transportation and land use strategy for the reduction of per capita vehicle miles traveled and associated greenhouse gas emissions in Sustainable Communities Strategy section; and
- A list of transportation improvements with anticipated construction timeline and funding plan in Financial Element section.

The RTP is updated every four years in collaboration with local, state, federal, and tribal partners. Transportation improvement projects must be listed in the RTP to be eligible for federal and state funding.

New for 2022 – The 2022 RTP is largely a carry-over of the 2015 and 2018 RTPs. There are numerous minor updates to address new state and federal requirements, as well as inclusion of the Interstate 5 truck-only lanes known as Fix 5 Cascade Gateway. Noteworthy additions include recent accomplishments (2018-2022) and short-term goals (2022-2026) provided after each modal discussion. Progress toward the short-term goals will be evaluated in advance of the 2026 RTP as part of SRTA’s next ‘Ways and Means’ report.

Also new for the 2022 RTP/SCS is the inclusion of travel model outputs to assist local agencies in determining local transportation “thresholds of significance” under CEQA for compliance with Senate Bill 743. SRTA will provide summarized outputs by regional residential and employment land use type for the entire region and by each individual jurisdiction. Local agencies can use these outputs to assist them in determining appropriate CEQA “thresholds of significance” for projects.

Sustainable Communities Strategy (SCS) – An SCS is a coordinated set of transportation and land use strategies aimed at reducing per capita vehicle miles traveled (VMT) and associated carbon dioxide (CO₂) emissions. Each metropolitan region in California has performance targets for the years 2020 and 2035 that are assigned by the California Air Resources Board (CARB). The Shasta Region’s target for both years is a four percent reduction in per capita CO₂ emissions when compared to 2005 levels.

Results of the 2022 SCS are summarized in Table 1 below. As shown, the region’s 2022 RTP/SCS shows that we met the 2020 target based on actual observed (not modeled) data and that if the 2022 RTP/SCS was implemented the region is projected to meet the 2035 target, based on modeled data and assumptions. The change in the CO₂ emission estimate for 2035 was updated, compared to the draft 2022 RTP/SCS SEIR, based on CARB comments on Auto Operating Costs and induced travel effects.

TABLE 1: IMPACT OF 2022 RTP/SCS ON VEHICLE MILES TRAVELED AND PER CAPITA CO₂ EMISSIONS

YEAR	VEHICLE MILES TRAVELED ¹ /CAPITA	PERCENT CHANGE FROM 2005	SB 375 EMISSIONS LBS CO ₂ /CAPITA	PERCENT CHANGE FROM 2005	MEETS TARGET
2005 (Baseline)	26.81	N/A	21.31	N/A	
2020 ²	25.16	-6.15%	N/A	-4.3%	Yes
2035	25.01	-6.71%	19.19 ³	-12.94% ⁴	Yes

¹ Generated by draft ShastaSIM v2.0 regional travel demand model (excluding through trips that do not originate or terminate in Shasta County).

² Based on actual observed data, rather than modeled and estimations, SRTA utilized multiple sources, including StreetLight, HPMS, and SB 150 data. An estimation derived from the SB 150 data revealed a 4.3% reduction in total GHG emissions per capita in 2020 when compared to the levels in 2005.

- ³ *Generated by Emissions FACTors (EMFAC) 2014 model including a CARB-directed adjustment for long term induced travel.*
- ⁴ *Percent reduction in emissions for 2035 includes a –0.28% off-model strategies effect and a 2.71% CARB-directed straight adjustment factor for an apples-to-apples comparison to baseline data generated by the prior version (2011) of EMFAC.*

Regional Travel Demand Model – The agency’s activity-based travel demand model (ShastaSIM) is used to forecast growth and development and to measure subsequent impacts on the transportation system. A new model (ShastaSIM version 2.0) was created for the 2022 RTP. The population forecast was extended to 2045 and all transportation infrastructure and services were brought up to date. Compared to the current model (version 1.2), the new version produces better modeled resident and non-resident trips, resulting in a seven percent projected reduction in the number of trips. Once adopted by the board of directors, local agencies and developers may use ShastaSIM v2.0 to assess the transportation impacts of proposed projects in compliance with the California Environmental Quality Act (CEQA). Technical documentation of all model inputs, assumptions, and methodology has been documented and will be posted online at: <http://www.srta.ca.gov/174/Travel-Demand-Modeling>.

RTP and Regional Housing Needs Allocation Alignment – Beginning with the 2018 RTP cycle, updates to the RTP and Regional Housing Needs Assessment will be on a coordinated four- and eight-year cycle, respectively. Local jurisdictions, in consultation with the California Department of Housing and Community Development, will have 18 months from adoption of the 2026 RTP to update their general plan housing elements. SRTA will rely on the development policies and assumptions in the updated housing elements for the 2030 and 2034 RTP update cycles.

Environmental Impact Report and Public Comments – With minimal changes from the 2018 RTP, the 2022 RTP only required a supplement to the 2015 EIR and 2018 SEIR in accordance with the California Environmental Quality Act (CEQA). The Final SEIR is available online at <https://srta.ca.gov/355/2022-RTP>. The SRTA Board of Directors is responsible for certifying that the SEIR meets CEQA requirements. Whereas the SEIR has identified significant and unavoidable impacts, the board of directors must also weigh the benefits of the RTP against its unavoidable environmental risks. If specific economic, legal, social, technological, or other benefits outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered acceptable. To assist the board of directors in making this determination, significant and unavoidable impacts, and statements of overriding consideration are summarized below with references to appropriate portions of the findings.

**TABLE 2: SUMMARY OF ENVIRONMENTAL IMPACTS AS A RESULT OF THE 2022 RTP AND SCS
AND STATEMENTS OF OVERRIDING CONSIDERATION**

Significant and Unavoidable Impacts	Reference
Air quality: Construction and/or operation of the transportation improvements proposed, and the land use scenario envisioned by the 2022 RTP/SCS could expose sensitive receptors to substantial pollutant concentrations.	See Attachment to Resolution 23-15, pages 7-16
Biological Resources: Transportation improvements proposed, and the land use scenario envisioned by the 2022 RTP/SCS may impact wildlife	

movement, including fish migration, and/or impede the use of a native wildlife nursery.	
Cultural Resources: Transportation improvements proposed, and the land use scenario envisioned by the 2022 RTP/SCS could disturb known and unknown cultural resources.	
Land Use and Planning: Transportation improvements and the land use scenario envisioned by the 2022 RTP/SCS could result in the conversion of agricultural and forestry resources including Prime Farmland and lands under Williamson Act contract to non-agricultural uses.	
Transportation and Circulation: Vehicle Miles Traveled (VMT), which is the metric used to evaluate the performance of the circulation system, would increase under implementation of the 2022 RTP/SCS compared to conditions in 2042 without its implementation.	
Wildland Fire: Transportation improvements proposed, and the land use scenario envisioned by the 2022 RTP/SCS could expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death from wildland fires given the fire hazard across Shasta County.	
Statements of Overriding Consideration	Reference
The implementation of 2022 RTP/SCS transportation projects will provide for a comprehensive transportation system of facilities and services that meets the public's need for the movement of people and goods, and that is consistent with the social, economic, and environmental goals and policies of the region.	See attachment to Resolution 23-15, pages 21-22
The Project will improve transportation mobility and accessibility in the County.	
The Project will improve air quality by reducing emissions of ozone precursors compared to future No Project conditions.	
The Project will contribute to a reduction in greenhouse gas (GHG) emissions from passenger vehicles and light trucks, helping the Shasta County area to achieve the regional GHG reduction targets set by the California Air Resources Board (CARB).	
The Project will promote consistency between the California Transportation Plan 2025, the regional transportation plan, and other plans developed by cities, counties, districts, Native American Tribal Governments, and State and Federal agencies in responding to Statewide and interregional transportation issues and needs.	
The construction of transportation projects included in the 2022 RTP/SCS will result in both short-term and long-term economic benefits to the Shasta County area and its residents. Transportation projects will indirectly provide for a number of jobs relating to construction and maintenance. The RTP program includes \$3.69 billion of transportation investments in the SRTA region. Other California MPO studies have shown that investments in regional transportation projects and programs provide numerous jobs locally.	

The Draft 2022 RTP and SEIR were circulated to interested parties on August 17, 2023, and posted on the agency's website for a public review and comment period (45-day for SEIR and 55-day for RTP/SCS). The final RTP/SCS document includes more graphics, updated demographic information, and addresses formal comments received from CARB (received October 11, 2023, attachment D) and Caltrans (received November 16, 2023, attachment E). The final SEIR document addresses comments from the California Department of Fish and Wildlife, the mitigation monitoring program, and statements of overriding consideration (Attachment C).

ALTERNATIVES:

The board of directors may request specific edits to any of the documents. This may delay adoption of and having an updated and approved RTP/SCS, SEIR, and travel model until February 2024, for review by Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Caltrans, and CARB. This may impact receiving of certain federal or state program funding until state and federal agency review is completed.

OTHER AGENCY INVOLVEMENT:

The 2022 RTP and SEIR were carried out in accordance with SRTA's adopted Public Participation Plan and state and federal law. SRTA consulted with federal partners (i.e., Federal Highway Administration, Federal Transit Administration), state partners (Caltrans and CARB), and local partners (i.e., Redding Area Bus Authority, local jurisdictions, and community stakeholders). Comments and feedback have been addressed to the extent feasible in the final documents. The Technical Advisory Committee (TAC) met on November 30, 2023, to review and discuss the 2022 RTP/SCS, the SEIR, and ShastaSIM travel model.

FISCAL IMPACT:

Adoption of the 2022 RTP ensures that the region will continue to be eligible for state and federal transportation funds. The 2022 RTP is constrained by reasonably anticipated revenue during the plan period (2022-2042). Over the 20-year planning horizon, approximately \$3.7 billion in revenue is anticipated for the Shasta Region for the funding of transportation infrastructure (highways, streets and roads, interchanges, bridges, public transit, rail, bike and pedestrian, recreation, and aviation), as well travel demand management (TDM) and transportation system management (TSM).



Sean Tiedgen, AICP, Executive Director

Attachments:

- A:** Resolution 23-15: To Certify the Final Supplemental EIR for the 2022 RTP and SCS with attached Findings and Statement of Overriding Considerations and Mitigation Monitoring and Reporting Program
- B:** Resolution 23-16: Adopt Shasta County Regional Activity-Based Travel Demand Model, ShastaSIM v2.0
- C:** 2022 RTP and EIR documents are available online at <https://srta.ca.gov/355/2022-RTP>
- D:** CARB Comment Letter on Review of Shasta Regional Transportation Agency Draft 2022 RTP/SCS
- E:** Caltrans November 16, 2023, Comment Letter on SRTA's Draft 2022 RTP

RESOLUTION 23-15



A RESOLUTION OF THE SHASTA REGIONAL TRANSPORTATION AGENCY TO CERTIFY THE FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR THE 2022 REGIONAL TRANSPORTATION PLAN AND SUSTAINABLE COMMUNITIES STRATEGY FOR THE SHASTA REGION WITH ATTACHED FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS AND MITIGATING MONITORING AND REPORTING PROGRAM

WHEREAS, the Shasta Regional Transportation Agency (SRTA) is the designated Metropolitan Planning Organization (MPO) for the Shasta Region and is comprised of five-member agencies: Shasta County, the cities of Anderson, Redding, and Shasta Lake, and the Redding Area Bus Authority; and

WHEREAS, SRTA is the agency responsible for maintaining a continuing, cooperative, and comprehensive transportation planning process which will result in a Regional Transportation Plan and Sustainable Communities Strategy pursuant to 23 U.S.C. §134(a) and (g), 49 U.S.C. §5303(f); 23 C.F.R. §450, and 49 C.F.R. §613; and

WHEREAS, SRTA is the Lead Agency in preparing the 2022 Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region and is required to comply with the California Environmental Quality Act (CEQA) [Cal. Pub. Res. Code § 21000 et seq.]; and

WHEREAS, pursuant to CEQA Guidelines Section 15002(f), an Environmental Impact Report (EIR) is the public document used by a governmental agency to analyze the significant environmental effects of a proposed project, to identify alternatives, and to disclose possible ways to reduce or avoid the potential environmental damage; and

WHEREAS, CEQA Guidelines Section 15168(a) specifies that a Program EIR be prepared on a series of actions that can be characterized as one large project and are related either: (1) geographically; (2) as logical parts in a chain of contemplated actions; (3) in connection with issuance of rules, regulations, plans, or other general criteria, to govern the conduct of a continuing program; or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways; and

WHEREAS, SRTA completed and certified an EIR for the 2015 RTP in June 2015; and

WHEREAS, CEQA Guidelines Section 15163 provides the conditions for which a supplement to an existing EIR can be used instead of a new EIR to determine the potential environmental impacts of a revised project; and

WHEREAS, the 2022 RTP/SCS meets those conditions of CEQA Section 15163; and

WHEREAS, SRTA has determined that a Supplemental EIR (SEIR) is appropriate to assess the environmental impact of the 2022 Regional Transportation Plan (RTP) and Sustainable

Communities Strategy (SCS) for the Shasta Region given no major new projects and policies since the 2018 RTP and SCS; and

WHEREAS, the SEIR is a regional planning level analysis which analyzes environmental impacts of the 2022 RTP on a broad planning level, while presenting as much detailed information about the individual RTP projects that is available at this time; and

WHEREAS, project-specific impacts of the individual RTP project should be analyzed in detail by the implementing agencies as the individual projects are designed, engineered, and considered for approval at a later date; and

WHEREAS, pursuant to CEQA Guidelines Section 15086, SRTA consulted with and requested comments on the Draft SEIR from responsible agencies, trustee agencies with resources affected by the project; and other state, federal, and local agencies which exercise authority over resources which may be affected by the RTP; and

WHEREAS, SRTA circulated a Notice of Preparation (NOP) of an EIR for the proposed project on October 11, 2022, to trustee and responsible agencies, the State Clearinghouse, and the public; and

WHEREAS, a virtual scoping meeting via ZOOM was held on October 25, 2022, at 3:30 PM to solicit concerns and issues relative to the RTP; and

WHEREAS, concerns raised in response to the NOP were considered during preparation of the Draft SEIR; and

WHEREAS, SRTA published a public notice of availability (NOA) for the Draft SEIR on August 17, 2023, inviting comments from the general public, agencies, organizations, and other interested parties; and

WHEREAS, the Draft SEIR was available for public review from August 17 through October 2, 2023; and

WHEREAS, pursuant to CEQA Guidelines Section 15088(a), SRTA, as the Lead Agency, must evaluate comments on significant environmental issues received from persons who review the Draft SEIR and must prepare a written response thereto; and

WHEREAS, SRTA received one comment letter from public agencies, regarding the Draft SEIR; and

WHEREAS, in accordance with CEQA Guidelines Section 15088, the Final SEIR responds to the written comments received; and

WHEREAS, the Final SEIR document and the Draft SEIR, as amended by the Final SEIR, constitute the Final SEIR; and

WHEREAS, when making the findings pursuant to CEQA Guidelines Section 15091(a)(1), the agency must also adopt a program for reporting on or monitoring the changes which have been either required in the project or made a condition of approval to avoid or substantially lessen significant effects, and which are fully enforceable through permit conditions, agreements, or other measures, as required by CEQA Guidelines Section 15091(d); and

WHEREAS, consistent with the requirements of the CEQA Guidelines, a Mitigation Monitoring and Reporting Program (MMRP) has been prepared to outline the procedures for implementing all mitigation measures identified in the SEIR; and

WHEREAS, according to CEQA Guidelines Section 15093(b), where the decision of the public agency allows the occurrence of significant effects which are identified in the Final SEIR but are not avoided or substantially lessened, the agency must issue a Statement of Overriding Considerations setting forth the specific reasons to support its actions based on the Final SEIR or other information in the record; and

WHEREAS, CEQA Guidelines Section 15093(c) provides that if an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the Notice of Determination.

NOW, THEREFORE, BE IT RESOLVED by the Board of the Directors of the Shasta Regional Transportation Agency that:

1. The Final Supplemental Environmental Impact Report (SEIR) prepared for the 2022 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) for the Shasta Region was completed in compliance with the California Environmental Quality Act; and
2. The Final SEIR was presented to SRTA's decision-making body, the SRTA Board of Directors; and
3. The SRTA Board of Directors has reviewed and considered information contained in the Final SEIR; and
4. The Final SEIR reflects SRTA's independent judgment and analysis; and
5. The Final SEIR consists of the Draft SEIR and the Final SEIR, which includes a Mitigation Monitoring and Reporting Program; and
6. Based on and incorporating all the foregoing recitals and findings supported by substantial evidence in the record and set forth in the Findings and Statement of Overriding Considerations, attached hereto and incorporated by reference, SRTA hereby certifies the Final SEIR for the 2022 RTP/SCS and adopts the Mitigation Monitoring and Reporting Program; and
7. SRTA hereby approves the 2022 Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region

PASSED AND ADOPTED this 14th day of December 2023, by the Board of Directors of the Shasta Regional Transportation Agency.

Mark Mezzano, Chair

Shasta Regional Transportation Agency

ATTEST:

Sean Tiedgen, Executive Director

Shasta Regional Transportation Agency

Resolution 23-15 Attachment: CEQA Findings of Fact, Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program for the Supplemental Environmental Impact Report (SEIR) for the 2022 Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region; State Clearinghouse No. 2014022018

Resolution 23-15 Attachment
CEQA Findings of Fact, Statement of Overriding Considerations, and Mitigation Monitoring and
Reporting Program for the
Supplemental Environmental Impact Report (SEIR) for the 2022 Regional Transportation Plan and
Sustainable Communities Strategy for the Shasta Region; State Clearinghouse No. 2014022018

1. FINDINGS FOR IMPACTS IDENTIFIED AS INSIGNIFICANT

Public Resources Code § 21081 and CEQA Guidelines § 15091 do not require findings of fact for impacts that are less than significant. Under CEQA, no mitigation measures are required for impacts that are less than significant (CEQA Guidelines§ 15126.4(a)(3)).

Section 1.0 of the Supplemental EIR explain why certain impacts (Less than Significant Environmental Factors) of the 2022 RTP/SCS were not found to be significant. These impacts are not discussed further in this Findings of Fact document, per CEQA Guidelines§ 15091.

2. FINDINGS FOR IMPACTS IDENTIFIED AS SIGNIFICANT BUT MITIGABLE

SRTA hereby finds that mitigation measures have been identified in the Supplemental EIR that will avoid or substantially lessen the following environmental impacts to a less than significant level. These findings are based on the discussion of impacts in the detailed issue area analyses in Section 3.0 of the Supplemental EIR and the Initial Study that is included as Appendix A to the Supplemental EIR, as well as relevant responses to comments in the Final Supplemental EIR. The significant impacts and the mitigation measures that will reduce them to a less than significant level are as follows.

A. Air Quality

- 1. Impact AIR-2.** Project implementation could result in a cumulatively considerable net increase of any criteria air pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. However, with mitigation, impacts would remain less than significant.

- a. Mitigation** - SRTA recommends that individual project lead agencies implement the following mitigation measures for applicable transportation projects, including but not limited to projects listed in Appendix B of the Draft Supplemental EIR. These measures can and should be implemented for future land development pursuant to the 2022 RTP/SCS that would involve construction activities.

AQ-1 The individual project lead agency shall ensure that all feasible and appropriate SCAQMD Standard Mitigation Measures (SMMS) and Best Available Mitigation Measures (BAMMs) are implemented. The measures shall be noted on all construction plans and the lead agency shall perform

periodic site inspections. SCAQMD SMMs and BAMMs include, but are not limited to, the following:

Fugitive dust emissions:

- Implement all adequate dust control measures in a timely and effective manner during all phases of project development and construction;
- Water all excavated, stockpiled, or graded material to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering shall occur at least twice daily with complete site coverage, preferably in the mid-morning and after work is completed each day;
- During initial grading, earth moving, or site preparation, construct a paved (or dust palliative treated) apron, at least 100 feet in length, onto the project site from the adjacent paved road(s);
- Sweep adjacent paved streets (recommend water sweeper with reclaimed water) at the end of each day if substantial volumes of soil materials have been carried onto adjacent public paved roads from the project site;
- Install sandbags or other erosion control measures to prevent silt runoff to roadways;
- Apply Department of Public Works approved non-toxic soil stabilizers (according to manufacturer's specifications) to all inactive construction areas (previously graded areas which remain inactive for 96 hours);
- Replant vegetation in disturbed areas as quickly as possible;
- Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard;
- Use wheel washers or wash off tires of all trucks exiting the construction site; and
- Mitigate fugitive dust emissions from wind erosion of areas disturbed from construction activities (including storage piles) by application of either water or chemical dust suppressant.

Exhaust emissions from diesel heavy equipment:

- Shut down equipment when not in use to limit engine idling time. Idling time shall be limited to no more than 3 minutes. This idling limit does not apply to circumstances as stated in the California Environmental Protection Agency Air Resources Board Advisory Number 377 (2008);
- Provide regular preventive equipment maintenance to prevent emission increases due to engine problems;
- Use low sulfur and low aromatic fuels meeting California standards for motor vehicle diesel fuel; and
- Use low-emitting gas and diesel engines meeting state and federal emissions standards (Tier I, 11, 111) for construction equipment.

Other emissions:

- Use low VOC coatings for the architectural coating phase of construction. All coatings must meet the VOC limits per SCAQMD Rule 3-31;
 - Use asphalt mixtures appropriate for the time of year of application, while maintaining compliance with the lead agency's road design and construction standards;
 - Use alternatives to open burning of vegetative material on the project site, unless otherwise deemed infeasible by the SCAQMD. Among suitable alternatives are chipping, mulching, or conversion to biomass fuel;
 - Provide for temporary traffic control as appropriate during all phases of construction to improve traffic flow as deemed appropriate by the Department of Public Works and/or Caltrans; and
 - Schedule construction activities that direct traffic flow to off-peak hours as much as practicable.
- b. Findings** -With the implementation of the above mitigation, impacts related to short-term construction emissions would be less than significant.
- c. Supportive Evidence**- Please refer to pages 3.2-17 through 3.2-21 of the 2023 Draft Supplemental EIR.

B. Greenhouse Gas Emissions

- 1. Impact GHG-1.** Project implementation could, either directly or indirectly, generate greenhouse gas emissions that may have a significant impact on the environment. However, with mitigation, impacts would remain less than significant.

- a. Mitigation** - SRTA recommends that individual project lead agencies implement the following mitigation measures for applicable transportation projects, including but not limited to projects listed in Appendix B of the Draft Supplemental EIR. These measures can and should be implemented for future land development pursuant to the 2022 RTP/SCS that would involve construction activities.

GHG-1 The individual project lead agency shall ensure that applicable GHG-reducing diesel particulate and NOx emissions measures for off-road construction vehicles are implemented during construction. The measures shall be noted on all construction plans and the lead agency shall perform periodic site inspections. Applicable GHG-reducing measures include the following.

- Use of diesel construction equipment meeting CARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation;
- Use of on-road heavy-duty trucks that meet the CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and

or job sites to remind drivers and operators of the 5-minute idling limit;

- Use of electric equipment in place of diesel-powered equipment, where feasible;
- Substitute gasoline-powered in place of diesel-powered equipment, where feasible;
- Use of alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, in place of diesel-powered equipment for 15 percent of the fleet;
- Use of materials sourced from local suppliers;
- Recycling of at least 65 percent of construction waste materials.

b. Findings - With the implementation of the above mitigation, impacts related to short-term GHG emissions would be less than significant.

c. Supportive Evidence - Please refer to pages 3.3-6 through 3.3-8 of the 2022 Draft Supplemental EIR.

C. Tribal Cultural Resources

1. Impact TCR-1. Project implementation could cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074. Impacts would be less than significant with mitigation incorporated.

a. Mitigation - SRTA recommends that individual project lead agencies implement the following mitigation measures for applicable transportation projects, including but not limited to projects included in Appendix B of the Draft Supplemental EIR. These measures can and should be implemented for future land development pursuant to the 2022 RTP/SCS that would result in impacts to tribal cultural resources.

TCR-I(a) Identified Tribal Cultural Resources Impact Minimization.

Implementing agencies shall comply with AB 52, which may require formal tribal consultation. If the implementing agency determines that a project may cause a substantial adverse change to a tribal cultural resource, they shall implement mitigation measures identified in the consultation process required under PRC Section 21080.3.2, or shall implement the following measures where feasible to avoid or minimize the project-specific significant adverse impacts:

- Avoidance and preservation of the resources in place, including, but not limited to: designing and building the project to avoid the resources and protect the cultural and natural context, or planning green space, parks, or other open space to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - o Protecting the cultural character and integrity of the resource
 - o Protecting the traditional use of the resource

- o Protecting the confidentiality of the resource
- Establishment of permanent conservation easements or other culturally appropriate property management criteria for the purposes of preserving or utilizing the resources or places.
- Native American monitoring by the appropriate tribe during soil disturbance for all projects in areas identified as sensitive for potential tribal cultural resources and/or in the vicinity (within 100 feet) of known tribal cultural resources.

TCR-I(b) Unanticipated Tribal Cultural Resources Impact Minimization. If potential tribal cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and the appropriate tribal representative(s), the implementing agency, and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service [NPS] 1983) shall be contacted immediately to evaluate the find. If in consultation with the implementing agency, the archaeologist and/or tribal representative determines the discovery to be a tribal cultural resource and thus, significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with tribal representatives. If the resource cannot be avoided, a mitigation plan shall be developed to address tribal concerns.

- b. **Findings-** Mitigation Measure TCR-I(a) would require implementation of mitigation identified through tribal consultation or other feasible mitigation to avoid impacts to identified tribal cultural resources. These measures would protect the resource's character, traditional use, and confidentiality. Mitigation Measure TCR-I(b) would ensure that impacts to unanticipated tribal cultural resources activities would be mitigated in consultation with tribal representatives. Implementation of the above measures would reduce impacts to tribal cultural resources to a less than significant level.
- c. **Supportive Evidence** - Please refer to Section 3.5, *Tribal Cultural Resources*, on pages 3.5-6 through 3.5-8 of the 2023 Draft Supplemental EIR.

D. Wildland Fires

1. **Impact WILD-2, WILD-3, WILD 4, and WILD 5.** Project implementation could: substantially impair an adopted emergency response plan or emergency evacuation plan; exacerbate wildfire risks, exposing project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; and could expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage change.
- a. **Mitigation** - SRTA recommends that individual project lead agencies implement the following mitigation measures for applicable transportation projects, including but not limited to projects included in Appendix B of the

2023 Draft Supplemental EIR. These measures can and should be implemented for future land development pursuant to the 2022 RTP/SCS that would result in impacts from wildland fires.

HAZ-1: Wildland Fire Risk Reduction. SRTA shall implement the following mitigation measure developed for the 2018 RTP/SCS where applicable for transportation projects that result in impacts related to wildland fire. Cities and counties in the SRTA region can and should implement these measures, where relevant to land use projects implementing the 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

If an individual transportation or land use project included in the 2022 RTP/SCS is located within the wildland-urban interface or areas favorable for wildland fires such that project-specific CEQA analysis finds a significant risk of loss, injury or death from fire, the implementing agency shall require appropriate mitigation to reduce the risk.

Examples of mitigation to reduce risk of loss, injury or death from wildlife include, but are not limited to:

- Require adherence to the local hazards mitigation plan, as well as the local general plan policies and programs aimed at reducing the risk of wildland fires through land use compatibility, training, sustainable development, brush management, public outreach, and service standards for fire departments.
- Encourage the use of fire-resistant vegetation native to the SRTA region and/or the local microclimate of the project site and discourage the use of fire-prone species especially nonnative, invasive species such as pampas grass or giant reed.
- Require a fire safety plan be submitted to and approved by the local fire protection agency. The fire safety plan shall include all of the fire safety features incorporated into the project and the schedule for implementation of the features. The local fire protection agency may require changes to the plan or may reject the plan if it does not adequately address fire hazards associated with the project as a whole or the individual phase of the project.
- Prohibit certain project construction activities with potential to ignite wildland fires during red flag warnings issued by the National Weather Service for the project site location. Example activities that should be prohibited during red-flag warnings include welding and grinding outside of enclosed buildings.
- Require fire extinguishers to be onsite during construction of projects. Fire extinguishers shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher.

- b. **Findings-** Mitigation Measure HAZ-1 would require implementation of mitigation to reduce the potential for wildland fires. This mitigation would reduce the potential for construction of the 2022 RTP/SCS projects to

inadvertently ignite a wildland fire; reduce the potential to, expose persons to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; reduce the potential to exacerbate wildfire risks or temporary or ongoing impacts to the environment due to required installation or maintenance of associated infrastructure, and reduce the potential to expose persons to significant risks as a result of runoff, post-fire slope instability, or drainage changes from wildfires. The above mitigation measures would reduce impacts from wildland fires with implementation of the project to a less than significant level.

- c. **Supportive Evidence** - Please refer to Section 3.6, *Wildland Fire*, on pages 3.6-15 through 3.6-19 of the 2023 Draft Supplemental EIR.

3. FINDINGS FOR IMPACTS IDENTIFIED AS SIGNIFICANT AND UNAVOIDABLE

SRTA hereby finds that mitigation measures that have been identified in the Supplemental EIR will lessen the following significant environmental impacts but not to a less than significant level. These findings are based on the discussion of impacts in the detailed issue area analyses in Section 3.0 of the Supplemental EIR, and relevant responses to comments in the Final Supplemental EIR.

The findings below are for impacts, where implementation of the Project may result in the following significant, unavoidable environmental impacts:

A. Agriculture and Forestry Resources

- 1. **Impacts.** Implementation of proposed transportation improvements and the land use scenario envisioned by the 2018 RTP/SCS could result in the conversion of agricultural lands including Prime Farmland and lands under Williamson Act contract to non-agricultural uses. This is considered a significant and unavoidable impact.

- a. **Mitigation** - SRTA recommends that individual project lead agencies implement the following mitigation measures for applicable transportation projects that may result in impacts to agricultural lands. Project-specific environmental impacts conducted by a lead agency for an applicable transportation project may require these mitigation measures be revised or expanded in response to site-specific conditions:

LU-S(a) When new roadway extensions or widenings are planned, the individual project lead agency should assure that project-specific environmental reviews consider alternative alignments that reduce or avoid impacts to Prime Farmlands.

LU-S(b) Rural roadway alignments shall follow property lines to the extent feasible, to minimize impacts to the agricultural production value of any specific property. Farmers should be compensated for the loss of agricultural production at the margins of lost property, based on the

amount of land deeded as road right-of-way, as a function of the total amount of production on the property.

LU-S(c) Individual project lead agencies should consider corridor realignment, buffer zones, setbacks, and fencing to reduce conflict between agricultural lands and neighboring uses.

LU-S(d) Quantify the potential for direct conversion of Important Farmland using the Land Evaluation and Site Assessment (LESA) model or a similar quantitative tool.

LU-S(e) Compensate for conversion impacts to Prime Farmland by purchasing agricultural conservation easements (ACE) or funding the acquisition of agricultural mitigation lands through an appropriate land trust.

LU-S(f) Individual project lead agencies should conduct an analysis of potential conflicts with Williamson Act contracts at the project level, consistent with the State CEQA Guidelines. If the impacts of the proposed roadway projects on Williamson Act contract lands are determined to be significant, implement the following measures to reduce the impacts to a less-than-significant level:

- Design the proposed roadway projects to avoid or minimize the displacement of current and reasonably foreseeable agricultural operations from affected Williamson Act contract lands.
- Where it has been determined that cancellation of a Williamson Act contract for a parcel, or a portion of a parcel, may result in impacts to Prime or Important Farmland, Mitigation Measure LU-S(a) shall be implemented.

b. Findings -Although the above measures would reduce impacts to Prime Farmland and lands under Williamson contract to the degree feasible, such impacts cannot be fully mitigated due to the potential conversion to non-agricultural use. Impacts from individual projects will need to be addressed on a case-by-case basis; however, because impacts to individual Prime Farmland and lands under Williamson contract cannot be assumed to be less than significant, agricultural impacts are considered significant and unavoidable.

c. Supportive Evidence – This area of impact was thoroughly discussed in the 2018 Supplemental EIR. Please refer to pages 4 through 6 of the Initial Study included in the 2018 Supplemental EIR as Appendix A and incorporated by reference in the 2022 Supplemental EIR.

B. Air Quality

1. Impact AIR-3. The transportation improvement projects and the land use scenario envisioned by the 2022 RTP/SCS may facilitate increased exposure of sensitive receptors to hazardous air pollutants that may cause health risks and odors that may be a nuisance. However, implementation of the 2022 RTP/SCS would not result in a regional increase in toxic air emissions when compared to the baseline or 2042 No Project Scenarios and would have similar localized

impacts as those described in the 2018 RTP/SCS EIR. Impacts would remain significant but mitigable.

a. Mitigation - SRTA recommends that individual project lead agencies implement the following mitigation measure AQ-3 for future land development pursuant to the 2022 RTP/SCS that would be located in proximity to major transportation corridors:

Consistent with the provisions contained in the CARB Air Quality and Land Use Handbook (June 2005), lead agencies shall identify appropriate and feasible measures to be incorporated into project building design for residential, school and other sensitive uses located within 500 feet of freeways, heavily travelled arterials, railways and other sources of DPM and other known carcinogens. The appropriate measures shall include one or more of the following methods as applicable:

- The lead agency shall retain a qualified air quality consultant to prepare a health risk assessment in accordance with CARB and the Office of Environmental Health and Hazard Assessment requirements to determine the exposure of project residents/occupants/users to stationary air quality pollutants prior to issuance of a demolition, grading, or building permit. The health risk assessment shall be submitted to the lead agency for review and approval. The lead agency shall implement any approved health risk assessment recommendations to a level which would not result in exposure of sensitive receptors to substantial pollutant concentrations. Such measures may include:
 - o Do not locate sensitive receptors near the entry and exit points of a distribution center.
 - o Do not locate sensitive receptors in the same building as a perchloroethylene dry cleaning facility.
 - o Maintain a 50-foot buffer from a typical gas dispensing facility (under 3.6 million gallons of gas per year).
 - o Install, operate, and maintain in good working order a central heating and ventilation system or other air take system in the building, or in each individual residential unit, that meets the efficiency standard of the minimum efficiency reporting value 13. The heating and ventilation system should include the following features: Installation of a high efficiency filter and/or carbon filter-to-filter particulates and other chemical matter from entering the building. Either high efficiency particulate absorption filters or American Society of Heating, Refrigeration, and Air-Conditioning Engineers 85% supply filters should be used.
 - o Retain a qualified heating and ventilation consultant or high efficiency particulate absorption rate during the design phase of the project to locate the heating and ventilation system based on exposure modeling from the mobile and/or stationary pollutant sources.
 - o Maintain positive pressure within the building.

- o Achieve a performance standard of at least one air exchange per hour of fresh outside filtered air.
 - o Achieve a performance standard of at least 4 air exchanges per hour of recirculation.
 - o Achieve a performance standard of 0.25 air exchanges per hour in unfiltered infiltration if the building is not positively pressurized.
- b. Findings** – Construction related impacts associated with of the 2022 RTP/SCS to sensitive receptors would be less than significant after mitigation. Additionally, with the application of existing mitigation measure AQ-3, the implementation of the 2022 RTP/SCS would not introduce any new regional or localized diesel toxic-related impacts than those described in the 2018 RTP/SCS EIR. However, the impacts to sensitive receptors associated with the operation and use of the transportation projects and the re-entrainment of roadway sediments as a result of the 2022 RTP/SCS would remain significant and unavoidable, as it was for the 2018 RTP/SCS, because implementation of the 2022 RTP/SCS includes and expands the transportation projects identified in the 2018 RTP/SCS. As such, this impact remains significant and unavoidable.
- c. Supportive Evidence** - Please refer to pages 3.2-21 through 3.2-25 of the 2023 Draft Supplemental EIR.

C. Biological Resources

- 1. Impacts.** Implementation of transportation improvements proposed, and the land use scenario envisioned by the 2022 RTP/SCS may interfere with the movement of a native resident or migratory fish or wildlife species or with an established native resident or migratory wildlife corridors. This impact would be significant and unavoidable.
- a. Mitigation** - SRTA recommends that individual project lead agencies implement the following mitigation measures for applicable transportation projects, including but not limited to those projects identified under the 2022 RTP/SCS. These measures can and should be implemented for future land development pursuant to the 2022 RTP/SCS that would result in impacts to wildlife movement or migratory wildlife corridors.
- B-3(a)** All projects including long segments of fencing and lighting shall be designed to minimize impacts to wildlife. Fencing shall not block wildlife movement through riparian or other natural habitat. Where fencing is required for public safety concerns, the fence shall be designed in consultation with CDFW and to permit wildlife movement by incorporating design features such as:
- A minimum of 16 inches between the ground and the bottom of the fence to provide clearance for small animals;
 - A minimum 12 inches between the top two wires, or top the fence with a wooden rail, mesh, or chain link instead of wire to prevent animals from becoming entangled; and

- If privacy fencing is required near open space areas, openings at the bottom of the fence measure at least 16 inches in diameter shall be installed at reasonable intervals to allow wildlife movement. If fencing must be designed in such a manner that wildlife passage would not be permitted, wildlife crossing structures shall be incorporated into the project design as appropriate and in consultation with CDFW. Similarly, lighting installed as part of any project shall be designed to be minimally disruptive to wildlife. This may be accomplished through the use of hoods to direct light away from natural habitat, using low-intensity lighting, and using as few lights as necessary to achieve the goals of the project. Lighting for trails and bridges that would overspill onto rivers and/or streams that are known to support anadromous fish shall be approved by CDFW.

B-3(b) The following construction Best Management Practices (BMPs) shall be incorporated into all grading and construction plans:

- Designation of a 20 mile-per-hour speed limit in all construction areas.
- All vehicles and equipment shall be parked on the pavement, existing roads, and previously disturbed areas, and clearing of vegetation for vehicle access shall be avoided.
- The number of access routes, number, and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the goal of the project.
- Designation of equipment washout and fueling areas to be located within the limits of grading at a minimum of 100 feet from waters, wetlands, or other sensitive resources as identified by a qualified biologist. Washout areas shall be designed to fully contain polluted water and materials for subsequent removal from the site.
- Daily construction work schedules should be limited to daylight hours only, to the extent feasible.
- Mufflers shall be used on all construction equipment and vehicles shall be in good operating condition.
- Drip pans shall be placed under all stationary vehicles and mechanical equipment.
- All trash shall be placed in sealed containers and shall be removed from the project site a minimum of once per week.
- No pets are permitted on the project site during construction.

b. Findings - With the implementation of the above mitigation measures, the potential for the Project to impede wildlife movement, including fish migration, would be reduced. These measures would require project fencing that is conducive to wildlife passage and lighting that minimize intrusion on wildlife behavior and habitat. These measures also require habitat disturbance to be minimized and anthropogenic disturbances to wildlife, such as construction noise and pets, to be avoided. However, it is not possible to prevent disruption to wildlife movement completely, despite

implementation of mitigation. Thus, this impact would remain significant and unavoidable. No additional mitigation measures to reduce this impact to less- than-significant levels are feasible.

- c. **Supportive Evidence** - Please refer to pages 18 through 19 of the Initial Study included in the 2018 Supplemental EIR as Appendix A and incorporated by reference in the 2022 Supplemental EIR.

D. Cultural Resources

1. **Impacts.** Implementation of proposed 2022 RTP/SCS could disturb known and unknown cultural resources, including historical, archaeological, and paleontological resources. Impacts to archaeological and paleontological resources would be reduced to less than significant with mitigation but impacts to historical resources would be significant and unavoidable.

- a. **Mitigation** - In order to provide protection of cultural resources, SRTA recommends that individual project lead agencies implement the following mitigation measures for applicable transportation projects, including but not limited to those projects identified under the 2022 RTP/SCS:

CR-I(a) The project lead agency of a 2022 RTP/SCS project involving earth disturbance, the installation of pole signage or lighting, or construction of permanent above-ground structures or roadways shall ensure that the following elements are included in the project's individual environmental review:

- Prior to construction, a map defining the Area of Potential Effects (APE) shall be prepared on a project by project basis for 2022 RTP/SCS improvements which involve earth disturbance, the installation of pole signage or lighting, or construction of permanent above ground structures. This map will indicate the areas of primary and secondary disturbance associated with construction and operation of the facility and will help in determining whether known archaeological, paleontological or historical resources are located within the impact zone.
- A preliminary study of each project area, as defined in the APE, shall be completed to determine whether or not the project area has been studied under an earlier investigation, and to determine the impacts of the previous project.
- If the results of the preliminary studies indicate additional studies are necessary; development of field studies and/or other documentary research shall be developed and completed (Phase I studies). Negative results would result in no additional studies for the project area.
- Based on the positive results of the Phase I studies, an evaluation of identified resources shall be completed to determine the potential eligibility/ significance of the resources (Phase II studies).
- Based on the evaluations of the Phase II studies, if necessary Phase II mitigation studies shall be coordinated with the Office of Historic Preservation, as the research design will require review and

approval from the OHP. In the case of prehistoric or Native American related resources, the Native American Heritage Commission and/or local representatives of the Native American population shall be contacted and permitted to respond to the testing/mitigation programs.

CR-I(b) If development of the proposed improvement requires the presence of an archaeological, Native American, or paleontological monitor, the individual project lead agency shall ensure that a Native American monitor, certified archaeologist, and/or certified paleontologist, as applicable, monitor the grading and/or other initial ground altering activities. The schedule and extent of the monitoring will depend on the grading schedule and/or extent of the ground alterations. This requirement can be accomplished through placement of conditions on the project by the local jurisdiction during the individual environmental review.

CR-I(c) The individual project lead agency shall ensure that materials recovered over the course of any given improvement are adequately cleaned, labeled, and curated at a recognized repository. This requirement can be accomplished through placement of conditions on the project by the local jurisdiction during the individual environmental review. **CR-I(d)** The individual project lead agency shall ensure that mitigation for potential impacts to significant cultural resources includes one or more of the following:

- Realign the project right-of-way (avoidance; the most preferable method).
- Cap the site and leave it undisturbed.
- Address structural remains with respect to NRHP guidelines (Phase III studies).
- Relocate structures per NRHP guidelines.
- Create interpretative facilities at the site.
- Develop measures to prevent vandalism.

These measures can be accomplished through placement of conditions on the project by the local Jurisdiction during the individual environmental review.

- b. Findings** - Implementation of the above measures would reduce potential impacts to archaeological and paleontological resources to a less than significant level. Implementation of the above measures would reduce potential impacts to historic structures. However, because redevelopment or demolition that may be required to implement transportation improvements may result in the permanent loss of historic structures, impacts would be significant and unavoidable. No additional mitigation measures to reduce this impact to historical resources to less-than-significant levels are feasible.
- c. Supportive Evidence** - Please refer to page 20 to 22 of the Initial Study included in the 2018 Supplemental EIR as Appendix A and incorporated by reference in the 2022 Supplemental EIR.

E. Transportation and Circulation

- 1. Impact TR-2.** VMT, which is the metric used to evaluate the performance of the circulation system, would increase under implementation of the 2022 RTP/SCS compared to conditions in 2042 without its implementation. Therefore, the 2022 RTP/SCS could conflict with applicable plans, policies, and congestion management programs. Impacts would be significant and unavoidable.
 - a. Mitigation-**The 2022 RTP/SCS includes policies, alternative transportation projects, and transportation demand management projects that would encourage the use of transportation modes other than passenger vehicles. Nonetheless, implementation of the 2022 RTP/SCS would result in greater total VMT when compared to 2042 conditions without the 2022 RTP/SCS. No feasible additional mitigation measures have been identified that would further reduce total VMT. Refer to Section 5.0, *Alternatives* of the 2022 Supplemental EIR for a discussion of 2022 RTP/SCS alternatives that examine land use and transportation scenarios that incorporate different assumptions regarding the combinations of future land uses and transportation system improvements.
 - b. Findings-** This impact would remain significant and unavoidable. No additional mitigation measures to reduce this impact to less-than-significant levels are feasible.
 - c. Supportive Evidence** - Please refer to Section 3.4, *Transportation*, on pages 3.4-11 through 3.4-21 of the 2023 Draft Supplemental EIR.

F. Wildland Fire

- 1. Impact HAZ-1.** The 2022 RTP/SCS includes land development and transportation projects within areas of moderate, high, and very high fire hazard severity zones. Infill development emphasized in the 2022 RTP/SCS and existing regulations and programs would reduce the vulnerability of people and structures to wildland fires. However, a significant risk of loss, injury, or death from wildland fires would be possible given the fire hazard across Shasta County. Impacts would be significant and unavoidable.
 - a. Mitigation** - SRTA shall implement the following mitigation measure developed for the 2022 RTP/SCS where applicable for transportation projects that result in impacts related to wildland fire. Cities and counties in the SRTA region can and should implement these measures, where relevant to land use projects implementing the 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.
HAZ-1 Wildland Fire Risk Reduction. If an individual transportation or land use project included in the 2022 RTP/SCS is located within the wildland-urban interface or areas favorable for wildland fires such that project-specific CEQA analysis finds a significant risk of loss, injury or death from fire, the implementing agency shall require appropriate mitigation to reduce the risk. Examples of mitigation to reduce the risk of loss, injury or death from wildlife include, but are not limited to:

- Require adherence to the local hazards mitigation plan, as well as the local general plan policies and programs aimed at reducing the risk of wildland fires through land use compatibility, training, sustainable development, brush management, public outreach and service standards for fire departments.
 - Encourage the use of fire-resistant vegetation native to the SRTA region and/or the local microclimate of the project site and discourage the use of fire-prone species especially non-native, invasive species such as pampas grass or giant reed.
 - Require a fire safety plan be submitted to and approved by the local fire protection agency. The fire safety plan shall include all of the fire safety features incorporated into the project and the schedule for implementation of the features. The local fire protection agency may require changes to the plan or may reject the plan if it does not adequately address fire hazards associated with the project as a whole or the individual phase of the project.
 - Prohibit certain project construction activities with the potential to ignite wildland fires during red-flag warnings issued by the National Weather Service for the project site location. Example activities that should be prohibited during red-flag warnings include welding and grinding outside of enclosed buildings.
 - Require fire extinguishers to be onsite during construction of projects. Fire extinguishers shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher.
- b. Findings** -With the implementation of this mitigation, the risk of loss of structures and transportation infrastructure and the risk of injury or death due to wildland fire would be reduced. These measures would make structures more fire resistant and less vulnerable to loss in the event of a wildland fire. These measures would also reduce the potential for construction of the 2022 RTP/SCS projects to inadvertently ignite a wildland fire. However, it is not possible to prevent a significant risk of wildland fires or fully protect people and structures from the risks of wildland fires, despite the implementation of mitigation. Thus, this impact would remain significant and unavoidable. No additional mitigation measures to reduce this impact to less-than-significant levels are feasible.
- c. Supportive Evidence** - Please refer to Section 3.6, *Wildland Fire*, on pages 3.6-13 through 3.6-15 of the 2023 Draft Supplemental EIR.

4. FINDINGS ON CUMULATIVE IMPACTS

This Supplemental EIR is a Program EIR that analyzes the effects of the cumulative buildout of the 2022 RTP/SCS. The proposed 2022 RTP/SCS considers probable future projects included in

the range of transportation projects designed to meet the plan goals and current and projected future needs, and the 2023 Draft Supplemental EIR analyzes the cumulative impacts of these projects in Chapter 3.0. The cumulative effects of all probable future circulation system improvements are included in the analysis of the proposed Project's impacts. In Chapter 3.0 of the 2022 Supplemental EIR, thresholds of significance for cumulative impacts are the same as those for direct, specific impacts of the 2022 RTP/SCS, as authorized by CEQA case law. (*See Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059.) When specific impacts of the 2022 RTP/SCS are judged to be significant, they also by definition are considered "cumulatively considerable" incremental contributions to significant cumulative impacts. (See CEQA Guidelines Section 15130(a).) Mitigation measures adopted for specific 2022 RTP/SCS impacts in Sections IV and V of these findings also are feasible options for mitigating the proposed Project's incremental contribution to significant cumulative effects. (See CEQA Guidelines Section 15130(b)(5).)

A. Findings for Significant Cumulative Impacts for Which Project's Incremental Contribution has Not Been Mitigated to Less than Significant Levels

For the following impacts, SRTA hereby finds that in Section V of these findings, mitigation measures have been identified in the Supplemental EIR that will reduce the proposed Project's incremental contribution to the following significant cumulative impacts, but not to a less than significant (i.e., less than cumulatively considerable) level. The significant impacts and the mitigation are as follows:

- Agriculture; the Project would have cumulatively significant impacts on agricultural uses and farmland; no feasible mitigation to reduce the impact.
- Impact AQ-3; No feasible mitigation to reduce the impact.
- Biological Resources; Mitigation Measures B-3(a) and B-3(b).
- Cultural Resources (for historic structures); Mitigations Measures CR-I(a)-(d).
- Impact TR-2; No feasible mitigation to reduce the impact.
- Impact WILD-1; Mitigation Measure HAZ-1.

5. FINDINGS REGARDING ALTERNATIVES

A. Legal Requirements for Alternatives

Public Resources Code§ 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives...which would substantially lessen the significant environmental effects of such projects." "Feasible" means "capable of being accomplished in a reasonable period of time taking into account economic, environmental, legal, social, and technological factors" (CEQA Guidelines§ 15364). The concept of feasibility also encompasses whether a particular alternative promotes the Project's underlying goals and objectives and whether an alternative is impractical or undesirable from a policy standpoint. (*See City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957.).

The issue of alternatives feasibility arises twice in the CEQA process, once when the EIR is prepared, and again when CEQA findings are adopted. When assessing feasibility in an EIR, the EIR preparer evaluates whether an alternative is "potentially" feasible. Potentially feasible

alternatives are suggestions by the EIR preparers which may or may not be adopted by lead agency decisionmakers. When CEQA findings are made after EIR certification, the lead agency decision making body independently evaluates whether the alternatives are actually feasible, including whether an alternative is impractical or undesirable from a policy standpoint. (See *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957.)

If a significant impact can be substantially lessened (i.e., mitigated to a less than significant level) by the adoption of mitigation measures, lead agency findings need not consider the feasibility of alternatives to reduce that impact. (See *Laurel Hills Homeowners Association v. City Council* (1978) 83 Cal.App.3d 515.) Nevertheless, Chapter 5.0, *Alternatives*, of the 2022 Supplemental EIR and these Findings of Fact do consider the ability of potentially feasible alternatives to substantially reduce all of the Project's significant impacts, even those impacts reduced to less-than-significant levels through the adoption of mitigation measures.

An EIR must only evaluate reasonable alternatives to a project that could feasibly attain most of the project objectives and evaluate the comparative merits of the alternatives (CEQA Guidelines § 15126.6(a)). In all cases, the consideration of alternatives is to be judged against a rule of reason. The lead agency is not required to choose the environmentally superior alternative identified in the EIR if the alternative does not provide substantial advantages over the proposed project; and (1) through the imposition of mitigation measures the environmental effects of a project can be reduced to an acceptable level, or (2) there are social, economic, technological, or other considerations that make the alternative infeasible. (Pub. Res. Code §§21002, 21002.1; CEQA Guidelines §15092.)

The proposed 2022 RTP/SCS alternatives were selected for review in the 2022 Supplemental EIR because of their potential to avoid or substantially lessen project impacts, or because they were required under CEQA Guidelines (e.g., the No Project alternative). Three alternatives are considered for the proposed 2022 RTP/SCS: Alternative 1: 2022 RTP/SCS With No New Transportation Projects Alternative; Alternative 2: Increased Infill Alternative; and Alternative 3: No Project Alternative. These alternatives are briefly described below, and each alternative is described in more detail in the 2022 Draft Supplemental EIR and appendices thereto.

Alternative 1 represents the continued implementation of the current 2018 RTP/SCS simply updated to reflect current conditions and forecasts. Transportation improvements included under Alternative 1 would be similar to the 2022 RTP/SCS. However, the 72 net new projects that would be added to the transportation project list under the 2022 RTP/SCS would not be added to the list or constructed under Alternative 1. Alternative 2 provides for more compact development, more infill development, and less city expansion compared to the proposed 2022 RTP/SCS. With regard to the transportation network, Alternative 2 would prioritize investments on transit and active transportation, such as bicycle facilities, sidewalks, traffic calming measures, and intersection safety improvements. Alternative 3 includes a land use pattern comprised of existing land use trends dictated by the current land use plans of the applicable jurisdictions within the region, such as the Shasta County General Plan and City of Redding General Plan. Under Alternative 3 the transportation network would be comprised of committed transportation projects included in the SRTA Regional Transportation Improvement Program and the Federal Transportation Improvement Program. Alternative 2 was determined to be environmentally superior to the proposed 2022 RTP/SCS. However, all of the alternatives are rejected for the reasons stated below in Section VII.B.

B. Findings on Alternatives

1. 2022 RTP/SCS With No New Transportation Projects Alternative (Alternative 1)

- a. Description** - The No New Transportation Projects 2022 RTP/SCS Alternative, represents the continued implementation of the current 2018 RTP/SCS, updated to reflect current conditions and forecasts. Because Alternative 1 updates the 2018 RTP/SCS with current conditions and forecasts, the land use scenario under this alternative would be similar to the land use scenario envisioned by the 2022 RTP/SCS. Briefly, this land use scenario concentrates the forecasted growth in population and employment in the region in urban areas and corridors of the County while preserving the distinct identity of existing cities and towns. The existing 2018 RTP/SCS transportation improvements included under Alternative 1 also would be similar to the 2022 RTP/SCS. However, the 72 new transportation improvement projects (listed in Appendix B of the 2023 Draft SEIR) that would be added to the project list under the 2022 RTP/SCS would not be added to the list or constructed under this alternative. Please refer to pages 5-7 of the 2023 Draft Supplemental EIR.
- b. Findings** - The 2022 RTP/SCS With No New Transportation Projects Alternative would result in slightly less impacts on biological resources (i.e., wildlife movement) and tribal cultural resources as compared to the 2022 RTP/SCS. This is because Alternative 2 would result in the construction of 72 fewer transportation projects than the 2022 RTP/SCS. Impacts of Alternative 1 would be similar to the 2022 RTP/SCS for the other issues and impacts studied, with the exception of GHG emissions. The GHG emissions under Alternative 1 would be slightly higher than GHG emissions under the 2018 RTP/SCS. Please refer to pages 5-7 through 5-10 of the 2023 Draft Supplemental EIR.

SRTA is required to update its RTP every four years pursuant to federal regulations (23 C.F.R. §450.322(c) and State regulations (Gov. Code §65080(d)). The 2015 RTP/SCS was adopted in June 2015. Therefore, continued implementation of the 2015 RTP/SCS beyond 2022 would not comply with federal or State laws. The primary objective of the 2022 RTP/SCS is to comply with applicable regulatory requirements. Because Alternative 1 would not comply with regulatory requirements, it would not achieve the primary objective of the project. It may also not be a feasible alternative due to inconsistencies with federal and State regulatory requirements requiring period updates of RTPs. Please refer to page 5-15 of the 2023 Draft Supplemental EIR.

2. Increased Infill Alternative (Alternative 2)

- a. Description** - The Increased Infill Alternative, provides for more compact development, more infill development, and less city expansion than the proposed 2022 RTP/SCS. Alternative 2 would result in higher average residential density, a greater percentage of multi-family housing, and a greater percentage of housing within and near downtown areas and job centers relative to the proposed 2022 RTP/SCS. The transportation network in this alternative includes additional transit investments in alternative modes intended to serve shorter, local trips given the more concentrated growth pattern. Specifically, active transportation investments such as bicycle facilities, sidewalks, traffic calming measures and intersection safety

improvements would be prioritized. Under Alternative 2, investment would be focused on closing transit gaps by enhancing local transit bus service rather than interregional or long-distance services. In addition, active transportation projects such as bicycle facilities, trails and pedestrian improvements would be programmed throughout the region under this alternative. Please refer to page 5-7 of the 2023 Draft Supplemental EIR.

- b. Findings** - The Increased Infill Alternative is the environmentally superior alternative, assuming all environmental issue areas are weighted equally. Under Alternative 2, land use patterns would further concentrate forecasted population and employment growth in urban areas with a focus on infill in and around commercial corridors. Alternative 2 could be considered environmentally superior to the 2022 RTP/SCS primarily because it would result in less overall impacts to each issue area than the 2022 RTP/SCS would have potentially significant impacts, with the exception of cultural resources. Potentially significant cultural resource impacts are associated with historical resources, which are typically located in urbanized areas. Please refer to pages 5-10 through 5-13 of the 2023 Draft Supplemental EIR.

Because Alternative 2 would include regionally identified transportation projects and an SCS component that would further concentrate development in urban areas, it would continue to meet the objectives of the 2022 RTP/SCS, including: complying with applicable regulatory requirements; serving regional goals, objectives, policies and plans; and responding to community and regional transportation needs. In addition, because Alternative 2 would increase investments in alternative and active transportation modes, it would promote energy efficient, environmentally sound modes of travel to a greater extent than the 2022 RTP/SCS. However, Alternative 2 may not be feasible in that SRTA does not have land use authority and cannot require local agencies to change their land use designations that are required for Alternative 2 to be considered environmentally superior. Also, the proposed land use changes required to implement Alternative 2 may not be acceptable to the local jurisdictions as to their development goals and objectives. Please refer to pages 5-10 through 5-13 of the 2023 Draft Supplemental EIR.

3. No Project Alternative (Alternative 3)

- a. Description** - The No Project Alternative, includes a land use pattern comprised of existing land use trends dictated by the current land use plans of the applicable jurisdictions within the region, such as the Shasta County General Plan (2004), City of Anderson General Plan (2007), City of Lake Shasta General Plan (1999), and City of Redding General Plan (2000). In other words, it assumes that current regional growth trends would continue, but it updates the total growth to be consistent with the updated Regional Growth Forecast, as population growth in the region would occur regardless of the 2022 RTP/SCS. Rather than focusing on coordinating transportation projects that serve infill and transit-oriented development, the transportation network would be comprised of committed transportation

projects included in the Regional Transportation Improvement Program (RTIP) and Federal Transportation Improvement Program (FTIP). Please refer to page 5-7 of the 2023 Draft Supplemental EIR.

- b. Findings** - The No Project Alternative would result in a less dense development pattern compared to the 2022 RTP/SCS, with a continuation of existing land use trends. Because of the increased land development outside of existing urbanized areas, Alternative 3 would result in more ground disturbance than the 2022 RTP/SCS. Consequently, compared to the 2022 RTP/SCS, the potentially significant impacts of the 2022 RTP/SCS would be even greater under Alternative 3. This alternative would also result in higher GHG emissions compared to the 2022 RTP/SCS. As shown in Table 5-1 of the 2023 Draft Supplemental EIR, the total overall impact of Alternative 3 would be greater than the 2022 RTP/SCS. Please refer to pages 5-13 through 5-15 of the 2023 Draft Supplemental EIR.

Alternative 3 would implement committed transportation projects in the Regional Transportation Improvement Program and Federal Transportation Improvement Program but would not include other transportation infrastructure projects identified in the 2022 RTP/SCS. This alternative would not meet the SB 375 requirement for preparation of an SCS, or other applicable regulations pertaining to RTPs. Therefore, this alternative would not meet the basic objectives of the 2022 RTP/SCS. Please refer to page 5-16 of the 2023 Draft Supplemental EIR.

6. STATEMENT OF OVERRIDING CONSIDERATIONS

SRTA adopts and makes this Statement of Overriding Considerations concerning the unavoidable significant impacts of the 2022 RTP/SCS (Project) to explain why the Project's benefits override and outweigh its unavoidable impacts.

The 2023 Supplemental Environmental Impact Report identified and discussed significant effects that may occur as a result of the Project. As set forth in these CEQA Findings, SRTA has made a reasonable and good faith effort to eliminate or substantially mitigate the impacts resulting from the Project and has made specific findings on each of the project's significant impacts and on mitigation measures and alternatives. With the implementation of the mitigation measures discussed in the Supplemental EIR, most of the Project's effects can be mitigated to a level of less than significant. However, even with the implementation of all feasible mitigation, the Project will result in significant and unavoidable impacts as follows:

1. Implementation of the 2022 RTP/SCS could result in the conversion of agricultural lands including Prime Farmland and lands under Williamson Act contract to non-agricultural uses. (Impact discussion provided Agricultural Resources section in the Initial Study, which is Appendix A of the 2018 Supplemental EIR and included by reference in the 2022 Supplemental EIR).
2. Implementation of the 2022 RTP/SCS could to greater levels of hazardous air pollutants from additional VMT and roadway activity. (Impact AIR-3).
3. Implementation of the 2022 RTP/SCS could impede wildlife movement, including fish migration (Impact discussion provided in the Biological Resources section of the Initial Study included in the 2018 Supplemental EIR as Appendix A and incorporated by reference in the 2022 Supplemental EIR).
4. Implementation of the 2022 RTP/SCS could require demolition or otherwise impact historical structures (Impact discussion provided in the Biological Resources section of the Initial Study included in the 2018 Supplemental EIR as Appendix A and incorporated by reference in the 2022 Supplemental EIR).
5. Implementation of the 2022 RTP/SCS could result in a significant risk of loss, injury or death from wildland fires given the fire hazard across Shasta County. (Impact WILD-1).
6. Implementation of the 2022 RTP/SCS could conflict with applicable plans, policies, and congestion management programs that would affect the performance of the circulation system. (Impact TR-2).

In accordance with Section 15093 of the CEQA Guidelines, and having reduced the adverse significant environmental effects of the Project to the extent feasible, having considered the entire administrative record on the Project, and having weighed the benefits of the Project against its unavoidable adverse impacts after mitigation, SRTA hereby finds that the following legal, economic, social, and environmental benefits of the Project outweigh its unavoidable adverse impacts and render them acceptable based upon the following considerations. Each benefit set forth below constitutes an overriding consideration warranting approval of the Project, independent of the other benefits, despite each and every unavoidable impact.

1. The implementation of 2022 RTP/SCS transportation projects will provide for a comprehensive transportation system of facilities and services that meets the

public's need for the movement of people and goods, and that is consistent with the social, economic, and environmental goals and policies of the region.

2. The Project will improve transportation mobility and accessibility in the County.
 3. The Project will improve air quality by reducing emissions of ozone precursors compared to future No Project conditions.
 4. The Project will contribute to a reduction in greenhouse gas (GHG) emissions from passenger vehicles and light trucks, helping the Shasta County area to achieve the regional GHG reduction targets set by the California Air Resources Board (CARB).
 5. The Project will promote consistency between the California Transportation Plan 2025, the regional transportation plan and other plans developed by cities, counties, districts, Native American Tribal Governments, and State and Federal agencies in responding to Statewide and interregional transportation issues and needs.
 6. The construction of transportation projects included in the 2022 RTP/SCS will result in both short-term and long-term economic benefits to the Shasta County area and its residents. Transportation projects will indirectly provide for a number of jobs relating to construction and maintenance. The RTP program includes \$3.69 billion of transportation investments in the SRTA region. Other California MPO studies have shown that investments in regional transportation projects and programs provide numerous jobs locally.
-

MITIGATION MONITORING AND REPORTING PROGRAM

2022 Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region October 2023



SHASTA
Regional Transportation Agency

PREFACE

Section 21081.6 of the California Environmental Quality Act (CEQA) requires a Lead Agency to adopt a Mitigation Monitoring and Reporting Program whenever it approves a project for which measures have been required to mitigate or avoid significant effects on the environment. The purpose of the monitoring and reporting program is to ensure compliance with the mitigation measures during project implementation.

The Supplemental Environmental Impact Report Declaration prepared for the 2022 Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region Project concluded that the implementation of the project could result in significant effects on the environment and mitigation measures were incorporated into the proposed project or are required as a condition of project approval. This Mitigation Monitoring and Reporting Program addresses those measures in terms of how and when they will be implemented.

This document does *not* discuss those subjects for which the Supplemental Environmental Impact Report concluded that the impacts from implementation of the project would be less than significant.

I, Sean Tiedgen, Executive Director, the applicant, on the behalf of the Shasta Regional Transportation Agency, hereby agree to fully implement the Mitigation Measures described below which have been developed in conjunction with the preparation of an Supplemental Environmental Impact Report for my proposed project. I understand that these mitigation measures or substantially similar measures will be adopted as conditions of approval with my development permit request to avoid or significantly reduce potential environmental impacts to a less than significant level.

Project Applicant’s Signature _____

Date_____



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
Aesthetics/Visual Resources							
Impact AES-1							
AES-1(a) Where a particular 2022 RTP/SCS transportation improvement project affects adjacent landforms, the project sponsor shall ensure that recontouring provides a smooth and gradual transition between modified landforms and existing grade.	Place conditions of approval on the project to ensure that recontouring provides a smooth and gradual transition between modified landforms and existing grade.	During environmental review	The individual project lead agency	Prior to project approval			
AES-1(b) The project sponsor shall ensure that landscaping is installed to restore natural features along corridors after widening, interchange modifications, realignment, or construction of ancillary facilities. Associated landscape materials and design shall enhance landform variation, provide erosion control, and blend with the natural setting. To ensure compliance with approved landscape plans, the implementing agency shall provide a performance security equal to the value of the landscaping/irrigation installation.	Place conditions of approval on the project to ensure that associated landscape materials enhance landform variation, provide erosion control and blend with the natural setting; provide a performance security equal to the value of the landscaping/ irrigation installation.	During environmental review	The individual project lead agency	Prior to project approval			
AES-1(c) The project sponsor shall ensure that a project in a scenic view corridor will have the minimum possible impact upon foliage, existing landscape architecture and natural scenic views, consistent with project goals.	Place conditions of approval on the project to ensure that minimizes impact upon foliage, existing landscape architecture and natural scenic views, consistent with project goals.	During environmental review	The individual project lead agency	Prior to project approval			
AES-1(d) Potential noise impacts arising from increased traffic volumes associated with adjacent land development shall be preferentially mitigated through the use of setbacks and the acoustical design of adjacent proposed structures. The use of sound walls, or any other architectural features that could block views from the scenic highways or other view corridors, shall be discouraged to the extent possible. Where use of sound walls is found to be necessary, walls shall incorporate offsets, accents, and landscaping to prevent monotony. In addition, sound walls should be complementary in color and texture to surrounding natural features.	Development plans shall avoid the removal of existing mature trees to the extent possible; replace lost trees at a minimum 2:1 ratio; periodic maintenance shall occur to ensure vitality of replaced trees.	During environmental review	The individual project lead agency	Prior to project approval			
Impact AES-2							



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
AES-2(a) Roadway extensions and widenings shall avoid the removal of existing mature trees to the extent possible. The loss of trees that are protected by local agencies shall be replaced at a minimum 2:1 basis and incorporated into the landscaping design for the roadway. The project sponsor of a particular 2022 RTP/SCS project shall ensure the continued vitality of replaced trees through periodic maintenance (see Mitigation Measure B-1(j)).	Development plans shall avoid the removal of existing mature trees to the extent possible; replace lost trees at a minimum 2:1 ratio; periodic maintenance shall occur to ensure vitality of replaced trees.	During environmental review	The individual project lead agency	Prior to project approval			
AES-2(b) Roadway lighting shall be minimized to the extent possible and shall not exceed the minimum height requirements of the local jurisdiction in which the project is proposed. This may be accomplished through the use of hoods, low intensity lighting, and using as few lights as necessary to achieve the goals of the project.	Development plans shall minimize lighting and not exceed local minimum height requirements.	During environmental review	The individual project lead agency	Prior to project approval			
AES-2(c) Bus shelters and other ancillary facilities constructed as part of roadway improvements under the 2022 RTP/SCS shall be designed in accordance with the architectural review requirements of the local jurisdiction in which the project is proposed.	Developmental plans for bus shelters and other facilities shall be consistent with architectural review requirements of the local jurisdiction.	During environmental review	The individual project lead agency	Prior to project approval			
Air Quality							
Impact AIR-2							
AQ-1: Control Measures for Construction Air Pollutant Emissions The individual project lead agency shall ensure that all feasible and appropriate Shasta County AQMD Standard Mitigation Measures (SMMs) and Best Available Mitigation Measures (BAMMs) are implemented. The measures shall be noted on all construction plans and the lead agency shall perform periodic site inspections. Shasta County AQMD SMMs and BAMMs include, but are not limited to, the following: - Fugitive Dust Emissions - Implement all adequate dust control measures in a timely and effective manner during all phases of project development and construction. - Water all excavated, stockpiled, or graded material to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of an ambient	Implement SCAQMD Standard Mitigation Measures and Best Available Mitigation Measures.	Prior to issuance of grading permits; periodically during construction	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
air standard. Watering shall occur at least twice daily with complete site coverage, preferably in the midmorning and after work is completed each day. - o During initial grading, earth moving, or site preparation, construct a paved (or dust palliative treated) apron, at least 100 feet in length, onto the project site from the adjacent paved road(s). - Sweep adjacent paved streets (recommend water sweeper with reclaimed water) at the end of each day if substantial volumes of soil materials have been carried onto adjacent public paved roads from the project site. - o Install sandbags or other erosion control measures to prevent silt runoff to roadways. - o Apply Department of Public Works approved non-toxic soil stabilizers in accordance with manufacturer’s specifications to all inactive construction areas (i.e., previously graded areas which remain inactive for 96 hours). - o Replant vegetation in disturbed areas as quickly as possible. - o Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard. - o Use wheel washers or wash off tires of all trucks exiting the construction site. - o Mitigate fugitive dust emissions from wind erosion in areas disturbed by construction activities (including storage piles) by application of either water or chemical dust suppressant. • Exhaust emissions from diesel heavy equipment - o Shut down equipment when not in use to limit engine idling time. Idling time shall be limited to no more than 3 minutes. This idling limit does not apply to circumstances as stated in the California Environmental Protection Agency Air Resources Board Advisory Number 377 (2008). - o Provide regular equipment maintenance to prevent emission increases due to engine problems.							



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
- o Use low sulfur and low aromatic fuels meeting California standards for motor vehicle diesel fuel. - o Use low-emitting gas and diesel engines meeting state and federal emissions standards (Tier II, III, IV) for construction equipment. • Other emissions - o Use low VOC coatings for the architectural coating phase of construction. All coatings must meet the VOC limits per Shasta County AQMD Rule 3-31. Use asphalt mixtures appropriate for the time of year of application, while maintaining compliance with the lead agency's road design and construction standards. - o Use alternatives to open burning of vegetative material on the project site, unless otherwise deemed infeasible by the Shasta County AQMD. Suitable alternatives include chipping, mulching, or conversion to biomass fuel. - o Provide for temporary traffic control as appropriate during all phases of construction to improve traffic flow as deemed appropriate by the Department of Public Works and/or Caltrans. - o Schedule construction activities that redirect traffic flow during off-peak hours as much as practicable.							
Impact AIR-3							
AQ-3: Air Toxics Health Risk Reduction Measures Consistent with the provisions contained in the CARB Air Quality and Land Use Handbook (June 2005), lead agencies shall identify appropriate and feasible measures to be incorporated into project building design for residential, school and other sensitive uses located within 500 feet of freeways, heavily travelled arterials, railways and other sources of diesel particulate matter (DPM) and other known carcinogens. The appropriate measures shall include one or more of the following methods as applicable: • The lead agency shall retain a qualified air quality consultant to prepare a health risk assessment in accordance with CARB and the Office of Environmental Health and Hazard Assessment requirements to determine the exposure of project residents/occupants/users to stationary air quality pollutants prior to issuance of a demolition, grading, or	If applicable, incorporate CARB Air Quality and Land Use Handbook measures into project design for projects near sensitive receptors.	During individual environmental review	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
building permit. The health risk assessment shall be submitted to the lead agency for review and approval. The lead agency shall implement any approved health risk assessment recommendations to a level which would not result in exposure of sensitive receptors to substantial pollutant concentrations. Such measures may include: - Do not locate sensitive receptors near the entry and exit points of a distribution center. - Do not locate sensitive receptors in the same building as a perchloroethylene dry cleaning facility. - Maintain a 50-foot buffer from a typical gas dispensing facility (under 3.6 million gallons of gas per year). - Install, operate, and maintain in good working order a central heating and ventilation system or other air take system in the building, or in each individual residential unit, that meets the efficiency standard of the minimum efficiency reporting value 13. The heating and ventilation system should include the following features: Installation of a high efficiency filter and/or carbon filter-to-filter particulates and other chemical matter from entering the building. Either high efficiency particulate absorption filters or American Society of Heating, Refrigeration, and Air-Conditioning Engineers 85% supply filters should be used. - Retain a qualified heating and ventilation consultant or high efficiency particulate absorption rate during the design phase of the project to locate the heating and ventilation system based on exposure modeling from the mobile and/or stationary pollutant sources. - Maintain positive pressure within the building. - Achieve a performance standard of at least one air exchange per hour of fresh outside filtered air. - Achieve a performance standard of at least 4 air exchanges per hour of recirculation. - Achieve a performance standard of 0.25 air exchanges per hour in unfiltered infiltration if the building is not positively pressurized.							



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
BIOLOGICAL RESOURCES							
Impact B-1							
B-1(a): Biological Screening and Assessment Because of the programmatic nature of the 2022 RTP/SCS and specific impacts for a given project are unknown at this time, on a project-by project basis upon completion of final design, a preliminary biological resource screening shall be performed as part of the environmental review process to determine whether the project has any potential to given project are unknown at this time, on a project-by project basis upon completion of final design, a preliminary biological resource screening shall be performed as part of the environmental review process to determine whether the project has any potential to impact biological resources. If it is determined that the project has no potential to impact biological resources, no further action is required. If the project would have the potential to impact biological resources, prior to construction, a qualified biologist shall conduct a biological resources assessment (BRA) or similar type of study to document the existing biological resources within the project footprint plus a buffer and to determine the potential impacts to those resources. The BRA shall evaluate the potential for impacts to all biological resources including, but not limited to special-status species, nesting birds, wildlife movement corridors, potential for installation or retrofitting of existing structures for wildlife movement corridors, evaluation of culverts or other watercourse structures to remove barriers to fish passage, sensitive plant communities/critical habitat, and other resources judged to be sensitive by local, state, and/or federal agencies. Pending the results of the BRA, design alterations, further technical studies (i.e. protocol surveys) and/or consultations with the USFWS, CDFW and/or other local, state, and federal agencies may be required. The following mitigation measures [B- 1(b) through B-1(k)] shall be incorporated, only as applicable, into the BRA for projects where specific resources are present or may be present and impacted by the project. Note that specific surveys described in the mitigation measures below may be completed as part of the BRA where suitable habitat is present.	Projects shall conduct a preliminary biological resource screening; if determined the project has potential to impact biological resources, a biological resources assessment or similar shall be conducted.	Prior to construction	The individual project lead agency	Prior to project approval			
B-1(b): Special-Status Plant Species Surveys If completion of the project-specific BRA determines that special-status plant species may occur on-site, surveys for special-status plants shall be completed prior to any vegetation removal, grubbing, or other	If applicable, surveys for special-status plants shall be completed.	During environmental review	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
construction activity of each segment (including staging and mobilization). The surveys shall be floristic in nature and shall be seasonally timed to coincide with the target species identified in the project specific BRA. All plant surveys shall be conducted by a qualified biologist approved by the implementing agency no more than two years before initial ground disturbance. All special-status plant species identified on-site shall be mapped onto a site-specific aerial photograph and topographic map. Surveys shall be conducted in accordance with the most current protocols established by the CDFW, USFWS, and the local jurisdictions if said protocols exist. A report of the survey results shall be submitted to the implementing agency, and the CDFW and/or USFWS, as appropriate, for review and approval.							
B-1(c): Special-Status Plant Species Avoidance , Minimization, and Mitigation If state listed or California Rare Plant List 1B species are found during special-status plant surveys [pursuant to mitigation measure B-1(b)], then the project shall be re-designed to avoid impacting these plant species. Rare plant occurrences that are not within the immediate disturbance footprint, but are located within 50 feet of disturbance limits shall have bright orange protective fencing installed at least 30 feet beyond their extent, or other distance as approved by a qualified biologist, to protect them from harm.	If applicable, project shall be redesigned to avoid impacting rare plant species.	During environmental review	The individual project lead agency	Prior to project approval			
B-1(d): Restoration Monitoring If special-status plants species cannot be avoided and will be impacted by a project implemented under the 2022 RTP/SCS, all impacts shall be mitigated at a minimum ratio of 2:1 (number of acres/individuals restored to number of acres/individuals impacted) for each species as a component of habitat restoration. A restoration plan shall be prepared and submitted to the jurisdiction overseeing the project for approval. (Note: if a state listed plant species will be impacted, the restoration plan shall be submitted to the CDFW for approval). The restoration plan shall include, at a minimum, the following components: - Description of the project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type). - Goal(s) of the compensatory mitigation project [type(s) and area(s) enhanced, and/or preserved; specific functions and values of habitat type(s) to be established, restored, enhanced, and/or preserved].	If applicable, project plans shall include project-specific mitigation measures to mitigate impacts at a minimum ratio of 2:1 and a restoration plan shall be prepared meeting all requirements.	During environmental review	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
• Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions and values). • Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan). • Maintenance activities during the monitoring period, including weed removal as appropriate (activities, responsible parties, schedule). • Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards, target functions and values, target acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports). • Success criteria based on the goals and measurable objectives; said criteria to be, at a minimum, at least 80 percent survival of container plants and 30 percent relative cover by vegetation type. • An adaptive management program and remedial measures to address any shortcomings in meeting success criteria. • Notification of completion of compensatory mitigation and agency confirmation. • Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism).							
B-1(e): Endangered/Threatened Species Habitat Assessment and Protocol Surveys Specific habitat assessment and survey protocol surveys are established for several federally and state endangered or threatened species. If the results of the BRA determine that suitable habitat may be present for any such species, protocol habitat assessments/surveys shall be completed in accordance with CDFW and/or USFWS protocols prior to issuance of any construction permits. If through consultation with the CDFW and/or USFWS it is determined that protocol habitat assessments/surveys are not required, said consultation shall be documented prior to issuance of any construction permits. Each protocol has different survey and timing requirements. The applicants for each project shall be responsible for ensuring they understand the protocol requirements.	If applicable, protocol habitat assessments/ surveys shall be completed in accordance with protocols.	During environmental review	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
B-1(f): Endangered/Threatened Species Avoidance and Minimization The habitat requirements of endangered and threatened species throughout Shasta County are highly variable. The potential impacts from any given project implemented under the 2022 RTP/SCS are likewise highly variable. However, there are several avoidance and minimization measures that can be applied for a variety of species to reduce the potential for impact, with the final goal of no net loss of the species. The following measures may be applied to aquatic and/or terrestrial species. Project lead agencies shall select from these measures as appropriate. Additionally, projects with the potential to affect endangered or threatened state and federal species may require take authorization from CDFW and/or USFWS. • Ground disturbance shall be limited to the minimum necessary to complete the project. The project limits of disturbance shall be flagged. Areas of special biological concern within or adjacent to the limits of disturbance shall have highly visible orange construction fencing installed between said area and the limits of disturbance. • All projects occurring within/adjacent to aquatic habitats (including riparian habitats and wetlands) shall be completed during the typical low flow period or when water is unlikely to be present (generally between June 1 and October 31), to avoid impacts to sensitive aquatic species. Additional timing restrictions shall be incorporated into the project schedule on a species by species basis in coordination with the resource agencies (e.g. National Marine Fisheries Service, CDFW, USFWS). • All projects occurring within or adjacent to sensitive habitats that may support federally and/or state endangered/threatened species shall have a CDFW and/or USFWS approved biologist present during all initial ground disturbing/vegetation clearing activities. Once initial ground disturbing/vegetation clearing activities have been completed, said biologist shall conduct daily pre-activity clearance surveys for endangered/threatened species. Alternatively, and upon approval of the CDFW and/or USFWS, said biologist may conduct site inspections at a minimum of once per week to ensure all prescribed avoidance and minimization measures are being fully implemented.	If applicable, project plans shall include project-specific mitigation measures to avoid and minimize impacts to endangered or threatened species.	During environmental review	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
- No endangered/threatened species shall be captured and relocated without expressed permission from the CDFW and/or USFWS. - If at any time during construction of the project an endangered/threatened species enters the construction site or otherwise may be impacted by the project, all project activities shall cease. A CDFW/USFWS-approved biologist shall document the occurrence and consult with the CDFW and/or USFWS as appropriate. - For all projects occurring in areas where endangered/threatened species may be present and are at risk of entering the project site during construction, exclusion fencing shall be placed along the project boundaries prior to start of construction (including staging and mobilization). The placement of the fence shall be at the discretion of the CDFW/USFWS-approved biologist. This fence shall consist of solid silt fencing placed at a minimum of 3 feet above grade and 2 feet below grade and shall be attached to wooden stakes placed at intervals of not more than 5 feet. The fence shall be inspected daily and following rain events and high wind events and shall be maintained in good working condition until all construction activities are complete. - All vehicle maintenance/fueling/staging shall occur not less than 100 feet from any riparian habitat or water body. Suitable containment procedures shall be implemented to prevent spills. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies. - No equipment shall be permitted to enter wetted portions of any affected drainage channel. - All equipment operating within streams shall be in good conditions and free of leaks. Spill containment shall be installed under all equipment staged within stream areas and extra spill containment and clean up materials shall be located in close proximity for easy access. - If project activities could degrade water quality, water quality sampling shall be implemented to identify the pre-project baseline, and to monitor during construction for comparison to the baseline. - If water is to be diverted around work sites, a diversion plan shall be submitted (depending upon the species that may							



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
be present) to the CDFW, RWQCB, USFWS, and/or NMFS for their review and approval prior to the start of any construction activities (including staging and mobilization). If pumps are used, all intakes shall be completely screened with wire mesh not larger than five millimeters to prevent animals from entering the pump system. - At the end of each workday, excavations shall be secured with cover or a ramp provided to prevent wildlife entrapment. - All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling. - The CDFW/USFWS-approved biologist shall remove invasive aquatic species such as bullfrogs and crayfish from suitable aquatic habitat whenever observed and shall dispatch them in a humane manner and dispose of properly. - If any federally and/or state protected species are harmed, the CDFW/USFWS-approved biologist shall document the circumstances that led to harm and shall determine if project activities should cease or be altered in an effort to avoid additional harm to these species. Dead or injured special-status species shall be disposed of at the discretion of the CDFW and USFWS. All incidences of harm shall be reported to the CDFW and USFWS within 48 hours. - Considering the potential for projects to impact federal and state listed species and their habitat, SRTA and lead agencies shall contact the CDFW and USFWS to identify mitigation banks within Shasta County during development of the 2022 RTP/ SCS. Upon implementation of projects included in the RTP/ SCS, but on a project-by-project basis, if the results of the BRA determines that impacts to federal and state threatened or endangered species habitat are expected, lead agencies shall explore species appropriate mitigation bank(s) servicing the county for purchase of mitigation credits. If mitigation banks or credits are not available, mitigation options may include, but are not limited to, onsite or offsite habitat creation and restoration, land acquisitions, and conservation easements.							



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
B-1(g): Non-listed Special-Status Animal Species Avoidance and Minimization Several State Species of Special Concern may be impacted by projects implemented under the 2022 RTP/SCS. The ecological requirements and potential for impacts are highly variable among these species. Depending on the species identified in the BRA, several of the measures identified under B-1(f) shall be applicable to the project. In addition, measures shall be selected from among the following to reduce the potential for impacts to non-listed special-status animal species: - For non-listed special-status terrestrial amphibians and reptiles, coverboard surveys shall be completed within three months of the start of construction. The coverboards shall be at least four feet by four feet and constructed of untreated plywood placed flat on the ground. The coverboards shall be checked by a qualified biologist once per week for each week after placement up until the start of vegetation removal. All non-listed special-status and common animals found under the coverboards shall be captured and placed in five gallon buckets for transportation to relocation sites. All relocation sites shall be reviewed by the project lead agency and shall consist of suitable habitat. Relocation sites shall be as close to the capture site as possible but far enough away to ensure the animal(s) is not harmed by construction of the project. Relocation shall occur on the same day as capture. If a relocation site immediately adjacent to the project site is unavailable, the CDFW shall be consulted to determine an appropriate relocation site. CNDDDB Field Survey Forms shall be submitted to the CFDW for all special-status animal species observed. - Pre-construction clearance surveys shall be conducted within 14 days of the start of construction (including staging and mobilization). The surveys shall cover the entire disturbance footprint plus a minimum 200-foot buffer and shall identify all special-status animal species that may occur on-site. All non-listed special-status species shall be relocated from the site either through direct capture or through passive exclusion (e.g., American badger). A report of the pre-construction survey shall be submitted to the lead agency for their review and approval prior to the start of construction.	If applicable, project plans shall include project-specific mitigation measures to reduce impacts to non-listed special-status species.	During environmental review	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
- A qualified biologist shall be present during all initial ground disturbing activities, including vegetation removal to recover special-status animal species unearthed by construction activities. - Upon completion of the project, a qualified biologist shall prepare a Final Compliance report documenting all compliance activities implemented for the project, including the preconstruction survey results. The report shall be submitted within 30 days of completion of the project to the project lead agency and CDFW. - If special-status bat species may be present and impacted by the project, a qualified bat biologist shall conduct within 30 days of the start of construction presence/absence surveys for special-status bats in consultation with the CDFW where suitable roosting habitat is present. Surveys shall be conducted using acoustic detectors and by searching tree cavities, crevices, and other areas where bats may roost. If active roosts are located, exclusion devices such as netting shall be installed to discourage bats from occupying the site. If a roost is determined by a qualified bat biologist to be used by a large number of bats (large hibernaculum), bat boxes shall be installed near the project site. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultations with the CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified bat biologist that the young have dispersed. If it is determined that a maternity colony would be removed, it would be done only if the roost is clear of bats. The decision on whether or not the maternity roost would be removed shall be made in consultation with CDFW.							
B-1(h): Preconstruction Surveys for Nesting Birds for Construction Occurring within Nesting Season For projects that may result in tree felling or removal of trees or vegetation that may contain a nesting bird construction activities should occur generally between September 16 to January 31 (thus outside of the nesting season). However, if construction activities must occur during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the California Fish and Game Code and the	If applicable, a survey for nesting birds shall be completed; if necessary, a buffer shall be created.	Prior to construction activities; during construction activities if required	The individual project lead agency	Prior to construction activities; during construction activities if required			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
Migratory Bird Treaty Act shall be conducted by a qualified biologist no more than 7 days prior to vegetation removal. The surveys shall include the entire segment disturbance area plus a 200-foot buffer around the site. If active nests are located, all construction work shall be conducted outside a buffer zone from the nest to be determined by the qualified biologist. The buffer shall be a minimum of 50 feet for non-raptor bird species and at least 150 feet for raptor species or as determined in consultation with CDFW and/or USFWS. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to all construction personnel and equipment until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed and young have fledged the nest prior to removal of the buffer. A report of these preconstruction nesting bird surveys shall be submitted to the lead agency to document compliance and to the CDFW.							
B-1(i): Worker Environmental Awareness Program (WEAP) Prior to initiation of construction activities for applicable projects (including staging and mobilization), all personnel associated with project construction shall attend WEAP training, conducted by a qualified biologist, to aid workers in recognizing special-status resources that may occur in the project area. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction of the project. All employees shall sign a form documenting provided by the trainer indicating they have attended the WEAP and understand the information presented to them. The form shall be submitted to the lead agency to document compliance.	If applicable, construction personnel shall attend WEAP training.	Prior to construction activities	The individual project lead agency	Prior to construction activities			
B-1(j): Tree Protection If it is determined that construction may impact trees protected by local agencies, the project lead agency shall procure all necessary tree removal permits. A certified arborist shall develop a tree protection and replacement plan as appropriate. The plan shall include, but would not be limited to, an inventory of trees to within the construction site, setbacks from trees and	If applicable, tree removal permits shall be acquired and a tree protection and replacement plan shall be developed with requirements. Replacement	Review plan prior to construction activities. Review restoration annually for minimum of	The individual project lead agency	Prior to construction activities			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
protective fencing, restrictions regarding grading and paving near trees, direction regarding pruning and digging within root zone of trees, and requirements for replacement and maintenance of trees. If protected trees will be removed, replacement tree plantings of like species in accordance with local agency standards, but at a minimum ratio of 2:1 (trees planted to trees impacted), shall be installed onsite or at an approved off-site location and a restoration and monitoring program shall be developed in accordance with B-1(d) and shall be implemented for a minimum of seven years or until stasis has been determined by certified arborist. If a protected tree shall be encroached upon but not removed, a certified arborist shall be present to oversee all trimming of roots and branches.	planting/restoration shall be monitored until stasis is achieved	seven years or until stasis is achieved					
Impact B-2							
B-2(a): Jurisdictional Delineation If projects implemented under the 2022 RTP/SCS occur within or adjacent to wetland, drainages, riparian habitats, or other areas that may fall under the jurisdiction of the CDFW, USACE, and/or RWQCB, a qualified biologist shall complete a jurisdictional delineation. The jurisdictional delineation shall determine the extent of the jurisdiction for each of these agencies and shall be conducted in accordance with the requirement set forth by each agency. The result shall be a preliminary jurisdictional delineation report that shall be submitted to the implementing agency, USACE, RWQCB, and CDFW, as appropriate, for review and approval. If jurisdictional areas are expected to be impacted, then the RWQCB would require a Waste Discharge Requirements (WDR) permit and/or Section 401 Water Quality Certification (depending upon whether or not the feature falls under federal jurisdiction). If CDFW asserts its jurisdictional authority, then a Streambed Alteration Agreement pursuant to Section 1600 et seq. of the California Fish and Game Code would also be required prior to construction within the areas of CDFW jurisdiction. If the USACE asserts its authority, then a permit pursuant to Section 404 of the Clean Water Act would likely be required.	If applicable, a jurisdictional delineation shall be completed. Receipt of regulatory agency permits, if necessary, shall be verified.	During individual environmental review; verify permit acquisition prior to issuance of grading permits	The individual project lead agency	Prior to project approval			
B-2(b): Wetland and Riparian Habitat Restored Impacts to jurisdictional wetland and riparian habitat shall be mitigated at a minimum ratio of 2:1 (acres of habitat restored to acres impacted) and shall occur on-site or as close to the impacted habitat as possible. A mitigation and monitoring plan shall be developed by a qualified biologist in accordance with mitigation measure B-1(d)	If applicable, project plans shall mitigate impacts to jurisdictional wetlands and riparian habitats at a ratio of 2:1 and a MMRP shall be developed. Compliance with permit conditions shall be verified	During environmental review. Verify compliance with permit conditions as	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
above and shall be implemented for no less than five years after construction of the segment, or until the lead agency and/or the permitting authority (e.g., CDFW or USACE) has determined that restoration has been successful. Alternatively, mitigation may occur through the purchase of credits at a USACE approved mitigation bank or contribution to the USACE in-lieu fee program within the USACE Sacramento District. If mitigation is required through a Lake or Streambed Alteration Agreement, the mitigation bank or purchase of credits in an in-lieu fee program shall be approved by CDFW.		necessary during following construction					
B-2(c): Landscaping Plan If landscaping is proposed for projects occurring within or adjacent to sensitive habitats, a qualified biologist/landscape architect shall prepare a landscape plan for that project. This plan shall indicate the locations and species of plants to be installed. Drought tolerant, locally native plant species shall be used. Noxious, invasive, and/or non-native plant species that are recognized on the Federal Noxious Weed List, California Noxious Weeds List, and/or California Invasive Plant Council Lists 1, 2, and 4 shall not be permitted. Species selected for planting shall be similar to those species found in adjacent native habitats and locally collected seeds and plants shall be used.	If applicable, a landscaping plan shall be prepared and include all requirements; species shall be similar to those in adjacent native habitats.	During environmental review	The individual project lead agency	Prior to project approval			
B-2(d): Invasive Weed Prevention and Management Program Prior to start of construction for projects occurring within or adjacent to sensitive habitats, an Invasive Weed Prevention and Management Program shall be developed by a qualified biologist to prevent invasion of native habitat by non-native plant species. A list of target species shall be included, along with measures for early detection and eradication. All disturbed areas shall be hydroseeded with a mix of locally native species upon completion of work in those areas. In areas where construction is ongoing, hydroseeding shall occur where no construction activities have occurred within six (6) weeks since ground disturbing activities ceased. If exotic species invade these areas prior to hydroseeding, weed removal shall occur in consultation with a qualified biologist and in accordance with the restoration plan.	If applicable, an Invasive Weed Prevention and Management Program shall be developed for the project	Prior to project construction	The individual project lead agency	Prior to project approval			
Impact B-3							



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
B-3(a): Fence and Lighting Design All projects including long segments of fencing and lighting shall be designed to minimize impacts to wildlife. Fencing shall not block wildlife movement through riparian or other natural habitat. Where fencing is required for public safety concerns, the fence shall be designed in consultation with CDFW and to permit wildlife movement by incorporating design features such as: - A minimum 16 inches between the ground and the bottom of the fence to provide clearance for small animals; - A minimum 12 inches between the top two wires, or top the fence with a wooden rail, mesh, or chain link instead of wire to prevent animals from becoming entangled; and If privacy fencing is required near open space areas, openings at the bottom of the fence measure at least 16 inches in diameter shall be installed at reasonable intervals to allow wildlife movement. If fencing must be designed in such a manner that wildlife passage would not be permitted, wildlife crossing structures shall be incorporated into the project design as appropriate and in consultation with CDFW. Similarly, lighting installed as part of any project shall be designed to be minimally disruptive to wildlife. This may be accomplished through the use of hoods to direct light away from natural habitat, using low intensity lighting, and using as few lights as necessary to achieve the goals of the project. Lighting for trails and bridges that would overspill onto rivers and/or streams that are known to support anadromous fish shall be approved by CDFW.	Project plans for projects with fencing and lighting shall be designed to minimize impacts to wildlife.	During environmental review	The individual project lead agency	Prior to project approval			
B-3(b) Construction Best Management Practices The following construction Best Management Practices (BMPs) shall be incorporated into all grading and construction plans: - Designation of a 20-mile-per-hour speed limit in all construction areas. - All vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas, and clearing of vegetation for vehicle access shall be avoided. - The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the goal of the project. - Designation of equipment washout and fueling areas to be located within the limits of grading at a minimum of 100 feet from waters, wetlands, or other sensitive resources as identified by a qualified biologist. Washout areas shall be	Construction plans shall incorporate best management practices to minimize impacts to biological resources.	Prior to issuance of grading permits	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
designed to fully contain polluted water and materials for subsequent removal from the site. - Daily construction work schedules should be limited to daylight hours only, to the extent feasible. - Mufflers shall be used on all construction equipment and vehicles shall be in good operating condition. - Drip pans shall be placed under all stationary vehicles and mechanical equipment. - All trash shall be placed in sealed containers and shall be removed from the project site a minimum of once per week. - No pets are permitted on project site during construction.							
CULTURAL RESOURCES							
Impact CR-1							
CR-1(a) The individual project lead agency of a 2022 RTP/SCS project involving earth disturbance, the installation of pole signage or lighting, or construction of permanent above ground structures or roadways shall ensure that the following elements are included in the project’s individual environmental review: 1. Prior to construction, a map defining the Area of Potential Effects (APE) shall be prepared on a project by project basis for 2022 RTP/SCS improvements which involve earth disturbance, the installation of pole signage or lighting, or construction of permanent above ground structures. This map will indicate the areas of primary and secondary disturbance associated with construction and operation of the facility and will help in determining whether known archaeological, paleontological or historical resources are located within the impact zone. 2. A preliminary study of each project area, as defined in the APE, shall be completed to determine whether or not the project area has been studied under an earlier investigation, and to determine the impacts of the previous project. 3. If the results of the preliminary studies indicate additional studies are necessary; development of field studies and/or other documentary research shall be developed and completed (Phase I studies). Negative results would result in no additional studies for the project area.	Project plans shall include required components to limit impacts to cultural resources.	During individual environmental review	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
4. Based on positive results of the Phase I studies, an evaluation of identified resources shall be completed to determine the potential eligibility/ significance of the resources (Phase II studies). 5. Based on the evaluations of the Phase II studies, if necessary, Phase III mitigation studies shall be coordinated with the Office of Historic Preservation, as the research design will require review and approval from the OHP. In the case of prehistoric or Native American related resources, the Native American Heritage Commission and/or local representatives of the Native American population shall be contacted and permitted to respond to the testing/mitigation programs.							
CR-1(b) If development of the proposed improvement requires the presence of an archaeological, Native American, or paleontological monitor, the individual project lead agency shall ensure that a Native American monitor, certified archaeologist, and/or certified paleontologist, as applicable, monitors the grading and/or other initial ground altering activities. The schedule and extent of the monitoring will depend on the grading schedule and/or extent of the ground alterations. This requirement can be accomplished through placement of conditions on the project by the local jurisdiction during individual environmental review.	Place conditions of approval on the project to ensure that a Native American monitor or certified archaeologist/ paleontologist monitors the grading and/or other ground altering activities if required	Apply conditions during individual project permitting; monitoring will depend on the schedule and extent of the monitoring will depend on the grading schedule and/or extent of the ground alterations	The individual project lead agency	Prior to project approval			
CR-1(c) The individual project lead agency shall ensure that materials recovered over the course of any given improvement are adequately cleaned, labeled, and curated at a recognized repository. This requirement can be accomplished through placement of conditions on the project by the local jurisdiction during individual environmental review.	Place conditions of approval on project to ensure that materials recovered are adequately cleaned, labeled, and curated at a recognized repository.	During individual project permitting	The individual project lead agency	Prior to project approval			
CR-1(d) The individual project lead agency shall ensure that mitigation for potential impacts to significant cultural resources includes one or more of the following: • Realign the project right-of-way (avoidance; the most preferable method). • Cap the site and leave it undisturbed. • Address structural remains with respect to NRHP guidelines (Phase III studies). • Relocate structures per NRHP guidelines.	Place applicable conditions of approval on project to ensure mitigation for potential impacts includes requirements.	During individual project permitting	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
- Create interpretative facilities at the site. - Develop measures to prevent vandalism. These measures can be accomplished through placement of conditions on the project by the local jurisdiction during individual environmental review.							
ENERGY							
Impact E-1							
E-1(a) New facilities should be designed with energy efficient equipment and passive solar design (e.g., orientation of building to maximize natural heating and cooling, solar water heating, use of daylighting, and placement of trees to aid passive cooling, protection from prevailing winds, and maximum year-round solar access), provided that additional capital costs are offset by estimated energy savings during the first 5 years of operation. Additional improvements with longer payback periods, such as photovoltaic solar electric systems, should be considered where applicable.	Development plans shall be designed with energy-efficient equipment provided that additional capital costs are offset by estimated energy savings during the first 5 years of operation.	During individual environmental review	The individual project lead agency	Prior to project approval			
E-1(b) All lighting should be energy efficient and designed to use the least amount of energy to serve the purpose of the lighting. Lighting should utilize solar energy wherever feasible.	Development plans shall be designed with energy-efficient lighting equipment and should utilize solar energy wherever feasible.	During individual environmental review	The individual project lead agency	Prior to project approval			
E-1(c) New landscaping design and irrigation systems should be water efficient. To the extent possible, reclaimed water should be used for roadside landscape irrigation.	Development plans shall be designed with water efficient irrigation systems.	During individual environmental review	The individual project lead agency	Prior to project approval			
GEOLOGY and SOILS							
Impact G-1							
G-1 The lead agency in which a particular 2022 RTP/SCS bridge project is located shall ensure that the structure is designed and constructed to the latest geotechnical standards. In most cases, this will necessitate site-specific geologic and soils engineering investigations to exceed the code for high groundshaking zones. This can be accomplished through the placement of conditions on the project by the lead agency during individual environmental review.	Place conditions of approval on projects to ensure the structure is designed and constructed to the latest geotechnical standard.	During individual environmental review	The individual project lead agency	Prior to project approval			
Impact G-2							
G-2 If a 2022 RTP/SCS project involves cut slopes over 15 feet in height, the lead agency in which the project is located shall ensure	Place conditions of approval on the project, when applicable, to	During individual environmental	The individual project lead	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
that specific slope stabilization studies are conducted. Possible stabilization methods include buttresses, retaining walls and soldier piles.	ensure that a site-specific geotechnical investigation is conducted.	review	agency				
GREENHOUSE GAS EMISSIONS							
Impact GHG-1							
GHG-1: Control Measures for Construction GHG Emissions. The individual project lead agency shall ensure that applicable GHG-reducing emissions measures for off-road construction vehicles are implemented during construction. The measures shall be noted on all construction plans and the lead agency shall perform periodic site inspections. Applicable GHG-reducing measures include the following: • Use of diesel construction equipment meeting CARB's Tier 2 standards or cleaner (i.e., Tier 3 or 4) off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation. • Use of on-road heavy-duty trucks that meet the CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines and comply with the State On-Road Regulation. • All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5-minute idling limit. • Use of electric equipment in place of diesel-powered equipment, where feasible. • Substitute gasoline-powered in place of diesel-powered equipment, where feasible. • Use of alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, in place of diesel-powered equipment for 15 percent of the fleet. • Use of materials sources from local suppliers • Recycling or reuse of at least 65 percent of construction waste materials.	Incorporate GHG-reducing control measures on construction plans.	Prior to issuance of grading permits; periodically during construction	The individual project lead agency	Prior to project approval			
HYDROLOGY AND WATER QUALITY							
Impact W-1							
W-1(a) The individual agency of a 2022 RTP/SCS project shall ensure that, where economically feasible, reclaimed water is used for	Where economically feasible,	Prior to issuance of	The individual project lead	Prior to issuance of grading permit			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
dust suppression during construction activities. This measure shall be noted on construction plans and shall be spot checked by the lead agency.	reclaimed shall be used for dust suppression during construction activities.	grading permit	agency				
W-1(b) The individual lead agency of a 2022 RTP/SCS project shall ensure that low water use landscaping (i.e., drought tolerant plants and drip irrigation) is installed. When feasible, native plant species shall be used.	Low water use landscaping (i.e., drought tolerant plants and drip irrigation) shall be installed.	During individual environmental review	The individual project lead agency	Prior to project approval			
W-1(c) The individual lead agency of a 2022 RTP/SCS project shall ensure that, if feasible, landscaping associated with proposed improvements is maintained using reclaimed water.	If feasible, landscaping associated with proposed improvements is maintained using reclaimed water.	During individual environmental review	The individual project lead agency	Prior to project approval			
W-1(d) The individual lead agency of a 2022 RTP/SCS project shall ensure that porous pavement materials are utilized, where feasible, to allow for groundwater percolation.	Use porous pavement materials where feasible.	During individual environmental review	The individual project lead agency	Prior to project approval			
W-1(e) The individual lead agency of a 2022 RTP/SCS project that requires potable water service should coordinate with water supply system operators to ensure that the existing water supply systems have the capacity to handle the increase. If the current infrastructure servicing the project site is found to be inadequate, infrastructure improvements for the appropriate public service or utility should be provided by the individual project lead agency. In addition, wherever feasible, reclaimed water should be used for landscaping purposes instead of potable water.	Provide infrastructure improvements for the appropriate public service or utility as needed.	During individual environmental review	The individual project lead agency	Prior to project approval			
Impact W-2							
W-2(a) The individual lead agency of a 2022 RTP/SCS project shall ensure that fertilizer/pesticide application plans for any new right-of-way landscaping are prepared to minimize deep percolation of contaminants. The plans shall specify the use of products that are safe for use in and around aquatic environments.	Fertilizer/pesticide application plans for any new right-of-way landscaping shall be prepared to minimize deep percolation of contaminants.	During individual environmental review	The individual project lead agency	Prior to project approval			
W-2(b) The individual lead agency of a 2022 RTP/SCS widening or roadway extension project shall ensure that the improvement directs runoff into subsurface percolation basins and traps which would allow for the removal of urban pollutants, fertilizers, pesticides, and other chemicals.	Improvements shall direct runoff into subsurface percolation basins and traps.	During individual environmental review	The individual project lead agency	Prior to project approval			
W-2(c) For a 2022 RTP/SCS project that would disturb at least one acre, a Storm Water Prevention Plan (SWPPP) shall be developed prior to the initiation of grading and implemented for all construction activity on the project site. The SWPPP shall include specific BMPs to control the discharge of material from the site and into the creeks and local storm drains. BMP methods may include,	Construction plans shall include a Storm Water Pollution Prevention Plan (SWPPP) for roadway projects that would disturb at least one acre and shall implement it for all	Prior to issuance of grading permit	The individual project lead agency	Prior to issuance of grading permit			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
but would not be limited to, the use of temporary retention basins, straw bales, sand bagging, mulching, erosion control blankets and soil stabilizers.	construction activity on the project site; SWPPP shall include specific BMPs to control the discharge of material from the site and into the creeks and local storm drains.						
Impact W-3							
W-3(a) If a 2022 RTP/SCS project is located in an area with high flooding potential due a storm event or dam inundation, the individual project lead agency shall ensure that the structure is elevated at least one foot above the 100-year flood zone elevation and that bank stabilization and erosion control measures are implemented along creek crossings.	Project design shall ensure that all structures are located at least one foot above the 100-year flood zone elevation and that bank stabilization and erosion control measures are implemented.	During individual environmental review	The individual project lead agency	Prior to project approval			
W-3(b) For 2022 RTP/SCS projects within a dam failure inundation hazard zone, the project’s lead agency shall ensure that a comprehensive flood risk communication strategy is developed, which would include an evacuation plan and/or an Emergency Action Plan and promote dam failure risk awareness and safety.	Project design shall ensure that a flood risk communication strategy is developed including an evacuation plan and/or an Emergency Action Plan and promote dam failure risk awareness and safety prior to construction and during operation of the project.	During individual environmental review	The individual project lead agency	Prior to project approval			
LAND USE AND PLANNING							
Impact LU-2							
LU-2(a) The individual project lead agency of 2022 RTP/SCS projects with the potential to displace residences or businesses should assure that project-specific environmental reviews consider alternative alignments and developments that avoid or minimize impacts to nearby residences and businesses.	Assure that project-specific environmental reviews consider alternative alignments that avoid or minimize impacts to nearby residences and businesses.	During individual environmental review	The individual project lead agency	Prior to project approval			
LU-2(b) Where project-specific reviews identify displacement or relocation impacts that are unavoidable, the individual project lead agency should ensure that all applicable local, state, and federal relocation programs are used to assist eligible persons to relocate. In addition, the lead agency shall review the proposed construction	Ensure that all applicable local, state, and federal relocation programs are used to assist eligible persons to relocate; review the proposed construction	Prior to issuance of grading permit	The individual project lead agency	Prior to issuance of grading permit			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
schedules to ensure that adequate time is provided to allow affected businesses to find and relocate to other sites.	schedules to ensure that adequate relocation time is provided.						
LU-2(c) For all 2022 RTP/SCS projects that could result in temporary lane closures or access blockage during construction, a temporary access plan should be implemented by the lead agency to ensure continued access to affected cyclists, businesses, and homes. Appropriate signs and safe access shall be guaranteed during project construction to ensure that businesses remain open.	Construction plans for projects that could result in temporary lane closures or access blockage during construction shall contain a temporary access plan that shall be implemented to ensure continued access to affected cyclists, businesses, and homes; construction plans shall guarantee appropriate signs and safe access during project construction.	Prior to issuance of grading permit	The individual project lead agency	Prior to issuance of grading permit			
LU-5(a) When new roadway extensions or widenings are planned, the individual project lead agency should assure that project-specific environmental reviews consider alternative alignments that reduce or avoid impacts to Prime Farmlands.	Ensure that environmental reviews consider alternative alignments that reduce or avoid impacts to Prime Farmlands.	During individual environmental review	The individual project lead agency	Prior to project approval			
LU-5(b) Rural roadway alignments shall follow property lines to the extent feasible, to minimize impacts to the agricultural production value of any specific property. Farmers should be compensated for the loss of agricultural production at the margins of lost property, based on the amount of land deeded as road right-of-way, as a function of the total amount of production on the property.	Ensure that rural roadway alignments follow property lines. Compensate farmers for the loss of agricultural production at the margin of lost property.	Prior to issuance of grading permit	The individual project lead agency	Prior to project approval			
LU-5(c) Individual project lead agencies should consider corridor realignment, buffer zones, setbacks, and fencing to reduce conflict between agricultural lands and neighboring uses.	Ensure that project-specific environmental reviews consider the use of agricultural conservation easements.	During individual environmental review	The individual project lead agency	Prior to project approval			
LU-5(d) Quantify potential for direct conversion of Important Farmland using the Land Evaluation and Site Assessment (LESA) model or a similar quantitative tool.	Ensure that the LESA model or a similar quantitative tool is run if conversion of Important Farmland would occur.	During individual environmental review	The individual project lead agency	Prior to project approval			
LU-5(f) Individual project lead agencies should conduct an analysis of potential conflicts with Williamson Act contracts at the project level, consistent with the State CEQA Guidelines. If the impacts of the proposed roadway projects on Williamson Act contract lands are determined to be significant, implement the following measures to reduce the impacts to a less-than-significant level:	Ensure review of conflicts of the project with Williamson Act contracts is administered and if necessary project design shall	During individual environmental review	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
- Design the proposed roadway projects to avoid or minimize the displacement of current and reasonably foreseeable agricultural operations from affected Williamson Act contract lands. - Where it has been determined that cancellation of a Williamson Act contract for a parcel, or a portion of a parcel, may result in impacts to Prime or Important Farmland, Mitigation Measure LU-5(a) shall be implemented.	avoid or minimize displacement of agricultural operations.						
NOISE							
Impact N-1							
N-1(a) Lead agencies of 2022 RTP/SCS projects shall ensure that, where residences or other noise sensitive uses are located within 800 feet of construction sites, appropriate measures shall be implemented to ensure consistency with local noise ordinance requirements relating to construction. Specific techniques may include, but are not limited to, restrictions on construction timing, use of sound blankets on construction equipment, and the use of temporary walls and noise barriers to block and deflect noise.	Ensure consistency with local noise ordinance requirements relating to construction for sensitive uses.	Prior to issuance of grading permit	The individual project lead agency	Prior to issuance of grading permit			
N-1(b) For any project that requires pilings and is located within 800 feet of sensitive, lead agencies shall require caisson drilling or sonic pile driving as opposed to impact pile driving, where feasible. This shall be accomplished through the placement of conditions on the project during its individual environmental review.	Place mitigation measures or conditions of approval on project to require the use of pile drilling techniques when applicable and feasible.	During individual environmental review	The individual project lead agency	Prior to project approval			
N-1(c) Lead agencies shall ensure that equipment and trucks used for project construction utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).	Ensure that equipment and trucks use best available noise control techniques.	During individual environmental review	The individual project lead agency	Prior to project approval			
N-1(d) Lead agencies shall ensure that impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction be hydraulically or electrically powered, wherever feasible, to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where the use of pneumatically powered tools is unavoidable, use of an exhaust muffler (reduces noise by up to 10 dBA) or external jackets (reduces noise by up to 5 dBA.) is encouraged. Whenever feasible, use of quieter procedures, such as drilling is encouraged.	Ensure that equipment is hydraulically or electrically powered; that an exhaust muffler is used; that external jackets on impact equipment is used; or quitter procedures are used, when feasible and applicable.	During individual environmental review	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
N-1(e) Locate stationary noise sources as far from sensitive receptors as possible. Stationary noise sources that must be located near existing receptors will be adequately muffled.	Ensure that stationary noise sources are located away from sensitive receptors or muffled.	During individual environmental review	The individual project lead agency	Prior to project approval			
Impact N-2							
N-2(a) Lead agencies of 2022 RTP/SCS projects that would result in noise exceeding normally acceptable levels shall complete detailed noise assessments using applicable guidelines (e.g., FTA Transit Noise and Vibration Impact Assessment for rail and bus projects and the Caltrans Traffic Noise Analysis Protocol for roadway projects). The project lead agency shall ensure that a noise survey is conducted to determine potential alternate alignments which allow greater distance from, or greater buffering of, noise-sensitive areas. The noise survey shall be sufficient to indicate existing and projected noise levels, to determine the amount of attenuation needed to reduce potential noise impacts to applicable state and local standards. This shall be accomplished during the project's individual environmental review as necessary.	A noise survey shall be conducted to determine alternate alignments which allow greater distance from, or greater buffering of, noise-sensitive areas; noise survey shall be sufficient to indicate existing and projected noise levels, to determine the amount of attenuation needed to reduce potential noise impacts to applicable State and local standards.	During individual environmental review	The individual project lead agency	Prior to project approval			
N-2(b) Where new or expanded roadways or transit are found to expose receptors to noise exceeding normally acceptable levels, the individual project lead agency shall consider various sound attenuation techniques. The preferred methods for mitigating noise impacts will be the use of appropriate setbacks and sound attenuating building design, including retrofit of existing structures with sound attenuating building materials where feasible. In instances where use of these techniques is not feasible, the use of sound barriers (earthen berms, sound walls, or some combination of the two) will be considered. Long expanses of walls or fences should be interrupted with offsets and provided with accents to prevent monotony. Landscape pockets and pedestrian access through walls should be provided. Whenever possible, a combination of elements should be used, including open grade paving, solid fences, walls, and, landscaped berms. Determination of appropriate noise attenuation measures will be assessed on a case-by-case basis during a project's individual environmental review pursuant to the regulations of the applicable lead agency.	Development plans shall consider various sound attenuation techniques where new or expanded roadways are found to expose receptors to noise exceeding normally acceptable levels; applicable agency shall assess and determine appropriate noise attenuation barriers on a case-by-case basis.	During individual environmental review	The individual project lead agency	Prior to project approval			
Impact N-3							
N-3 If a 2022 RTP/SCS project is located in an area with exterior ambient noise levels above local noise standards or in an area with	A noise study shall be conducted to determine existing and	During individual environmental review	The individual project lead agency	Prior to project approval			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
potential cumulative noise levels above local noise standards (based on traffic volumes from regionally adopted travel demand model), the project lead agency shall ensure that a noise study is conducted to determine existing and projected noise levels and feasible attenuation measures needed to reduce potential noise impacts to such uses to an exterior and interior noise level below local standards. Such measures may include, but are not limited to: dual-paned windows, solid core exterior doors away from roads. This shall be accomplished during the project’s individual environmental review.	projected noise levels and feasible attenuation measures needed to reduce potential noise impacts to such uses to an exterior and interior noise level below local standards.						
TRIBAL CULTURAL RESOURCES							
TCR-1							
TCR-1a: Identified Tribal Cultural Resources Impact Minimization. Implementing agencies shall comply with AB 52, which may require formal tribal consultation. If the implementing agency determines that a project may cause a substantial adverse change to a tribal cultural resource, they shall implement mitigation measures identified in the consultation process required under PRC Section 21080.3.2, or shall implement the following measures where feasible to avoid or minimize the project-specific significant adverse impacts: - Avoidance and preservation of the resources in place, including, but not limited to: designing and building the project to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space to incorporate the resources with culturally appropriate protection and management criteria. - Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following: - Protecting the cultural character and integrity of the resource - Protecting the traditional use of the resource - Protecting the confidentiality of the resource - Establishment of permanent conservation easements or other culturally appropriate property management criteria for the purposes of preserving or utilizing the resources or places.	In the event that archaeological resources of Native American origin are identified during project construction the qualified archaeologist performing the cultural resources study will consult with the project proponent to begin or continue Native American consultation procedures.	During project construction	The individual project lead agency	During project construction			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
Native American monitoring by the appropriate tribe during soil disturbance for all projects in areas identified as sensitive for potential tribal cultural resources and/or in the vicinity (within 100 feet) of known tribal cultural resources.							
TCR-1b: Unanticipated Tribal Cultural Resources Impact Minimization. If potential tribal cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and the appropriate tribal representative(s), the implementing agency, and an archaeologist meeting the Secretary of the Interior’s Professional Qualifications Standards for archaeology (National Park Service [NPS] 1983) shall be contacted immediately to evaluate the find. If, in consultation with the implementing agency, the archaeologist and/or tribal representative determines the discovery to be a tribal cultural resource and thus, significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with tribal representatives. If the resource cannot be avoided, a mitigation plan shall be developed to address tribal concerns.	In the event that archaeological resources of Native American origin are identified during project construction the qualified archaeologist performing the cultural resources study will consult with the project proponent to begin or continue Native American consultation procedures.	During project construction	The individual project lead agency	During project construction			
WILDLAND FIRE							
Impact HAZ-1							
HAZ-1 Wildland Fire Risk Reduction If an individual transportation or land use project included in the 2022 RTP/SCS is located within the wildland-urban interface or areas favorable for wildland fires such that project specific CEQA analysis finds a significant risk of loss, injury or death from fire, the implementing agency shall require appropriate mitigation to reduce the risk. Examples of mitigation to reduce risk of loss, injury or death from wildlife include, but are not limited to: - Require adherence to the local hazards mitigation plan, as well as the local general plan policies and programs aimed at reducing the risk of wildland fires through land use compatibility, training, sustainable development, brush management, public outreach and service standards for fire departments. - Encourage the use of fire-resistant vegetation native to the SRTA region and/or the local microclimate of the project site,	If applicable, apply measures reduce risk from wildfires on individual projects.	During individual project permitting	The individual project lead agency	During project permitting			



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
and discourage the use of fire-prone species especially nonnative, invasive species such as pampas grass or giant reed. - Require a fire safety plan be submitted to and approved by the local fire protection agency. The fire safety plan shall include all of the fire safety features incorporated into the project and the schedule for implementation of the features. The local fire protection agency may require changes to the plan or may reject the plan if it does not adequately address fire hazards associated with the project as a whole or the individual phase of the project. - Prohibit certain project construction activities with potential to ignite wildland fires during red-flag warnings issued by the National Weather Service for the project site location. Example activities that should be prohibited during red-flag warnings include welding and grinding outside of enclosed buildings. - Require fire extinguishers to be onsite during construction of projects. Fire extinguishers shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher.							
Impact HAZ-2							
Implement mitigation measure HAZ-1	If applicable, apply measures reduce risk from wildfires on individual projects.	During individual project permitting	The individual project lead agency	During project permitting			
Impact HAZ-3							
Implement mitigation measure HAZ-1	If applicable, apply measures reduce risk from wildfires on individual projects.	During individual project permitting	The individual project lead agency	During project permitting			
Impact HAZ-4							
Implement mitigation measure HAZ-1	If applicable, apply measures reduce risk from wildfires on individual projects.	During individual project permitting	The individual project lead agency	During project permitting			
Impact HAZ-5							
Implement mitigation measure HAZ-1	If applicable, apply measures reduce risk from wildfires on individual projects.	During individual project permitting	The individual project lead agency	During project permitting			
Impact HAZ-6							



2022 Regional Transportation Plan
and Sustainable Communities
Strategy for the Shasta Region

MONITORING AND REPORTING PROGRAM							
MITIGATIONS	Mitigation Tasks				Documentation of Compliance [Lead Agency Responsibility]		
	Mitigation Action	Timing of Compliance	Oversight Responsibility	Monitoring Timing or Schedule	Verification Initials	Date	Comments
Implement mitigation measure HAZ-1	If applicable, apply measures reduce risk from wildfires on individual projects.	During individual project permitting	The individual project lead agency	During project permitting			

Source: 2022 Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region Supplemental Environmental Impact Report

RESOLUTION 23-16

A RESOLUTION OF THE SHASTA REGIONAL TRANSPORTATION AGENCY ADOPTING SHASTA COUNTY REGIONAL ACTIVITY-BASED TRAVEL DEMAND MODEL, SHASTASIM V.2.0



WHEREAS, the Shasta Regional Transportation Agency (SRTA) is the federally designated Metropolitan Planning Organization (MPO) for the Shasta County region; and

WHEREAS, SRTA is the agency responsible for maintaining a continuing, cooperative, and comprehensive transportation planning process which will result in a Regional Transportation Plan pursuant to 23 U.S.C. 134(a) and (g), 49 U.S.C. §5303(f); 23 C.F.R. §450, and 49 C.F.R. §613; and

WHEREAS, SRTA is the Lead Agency in preparing the Regional Transportation Plan and is required to comply with the California Environmental Quality Act (CEQA) [Cal. Pub. Res. Code § 21000 et seq.]; and

WHEREAS, pursuant to CEQA Guidelines Section 15002(f), an Environmental Impact Report (EIR) is the public document used by a governmental agency to analyze the significant environmental effects of a proposed project, to identify alternatives, and to disclose possible ways to reduce or avoid the potential environmental damage; and

WHEREAS, SRTA is responsible for updating and maintaining the region's travel demand model; and

WHEREAS, the Shasta County regional activity-based travel demand model (ShastaSIM v.1.2) is the technical tool used to assist in the updating of the regional transportation plan; and

WHEREAS, SRTA has completed development of the 2022 Regional Transportation Plan and Sustainable Community Strategy using ShastaSIM v.2.0; and

WHEREAS, the modeling methodology and results support SRTA's determination that the Sustainable Community Strategy, if implemented, would meet the California Air Resource Board's greenhouse gas reduction targets, as required under Senate Bill 375; and

WHEREAS, SRTA desires to provide an updated regional activity-based travel demand model for use in the Shasta County region.

NOW, THEREFORE, BE IT RESOLVED by the Board of the Directors of the Shasta Regional Transportation Agency that:

1. SRTA adopts the updated Shasta County Regional Activity-based Travel Demand Model, ShastaSIM v.2.0, for use in all travel modeling activities in the Shasta County region; and
2. SRTA authorizes the executive director to make changes to the model and related documentation, as necessary, for approved projects in the region.

PASSED AND ADOPTED this 14th day of December 2023, by the Board of Directors of the Shasta Regional Transportation Agency.

Mark Mezzano, Chair

Shasta Regional Transportation Agency

ATTEST:

Sean Tiedgen, Executive Director

Shasta Regional Transportation Agency

October 11, 2023

Sean Tiedgen, Executive Director
Shasta Regional Transportation Agency
1255 East Street, Suite 202
Redding, CA 96001
stiedgen@srta.ca.gov

RE: CARB Review of Shasta Regional Transportation Agency Draft 2022 Regional Transportation Plan/Sustainable Communities Strategy

Dear Director Tiedgen:

California Air Resources Board (CARB) staff appreciate the opportunity to review and engage with the Shasta Regional Transportation Agency (SRTA) staff on its draft 2022 Regional Transportation Plan/Sustainable Communities Strategy (draft RTP/SCS).

This work is more important than ever. CARB's second SB 150 progress report¹ shows that California as a whole, and the Shasta region, are not on track to meet the greenhouse gas (GHG) emission reductions expected under Senate Bill (SB) 375 and that vehicle miles traveled (VMT) is increasing. Governor Newsom signed Executive Order N-19-19 to redouble the State's efforts to reduce GHG emissions, explicitly focusing on lowering VMT. Because of the many benefits of VMT-reducing policies, the fact that the expected GHG and VMT benefits are not coming to pass suggests that the many community benefits projected by SCSs – such as health, equity, mobility, and lower household costs – are not being realized either. To achieve the State's climate goals, California needs significant and immediate changes to how we plan, fund, and build our communities and transportation systems. The SCS plays a critical role in supporting the State's climate efforts, as well as local objectives to create an economically vibrant region that responds to the needs of its diverse communities and provides better access to jobs and clean air for its residents.

In reviewing the draft RTP/SCS, CARB staff identified several specific questions, concerns, and requests for additional information. The information requested is ultimately needed for CARB to evaluate the final SCS. It is critical that CARB staff and SRTA staff reach an agreement on these items as soon as possible to avoid the risk of quantification issues arising during CARB's final SCS review. For CARB to accept or reject SRTA's final determination on whether the region achieves the GHG emission reduction target, CARB staff will have to be able to accurately evaluate the SCS actions planned for implementation

¹ CARB's Draft 2022 Progress Report: California's Sustainable Communities and Climate Protection Act at: <https://ww2.arb.ca.gov/resources/documents/tracking-progress>

and accept the greenhouse gas emission reductions being quantified. If CARB staff is unable to do so, CARB will not be able to accept SRTA's determination that its SCS would meet the GHG emission reduction target, which could lead to the need for SCS revisions and further board approvals, the requirement to develop an alternative planning strategy under California Government Code §65080 (b) (2) (H), and/or ineligibility for certain State transportation funds. Please follow up with CARB staff on how SRTA will address these items prior to finalizing the SCS.

Induced travel

SRTA's SCS technical methodology, dated March 29, 2023, did not include a discussion of whether and how SRTA's VMT and GHG estimations will account for the short- and long-run effects of induced travel for new roadway capacity projects. In CARB's technical methodology response letter dated July 3, 2023, CARB stated that "If there are going to be any new roadway capacity projects in SRTA's 2022 RTP/SCS, the VMT and GHG estimations must adequately account for the short- and long-term effects of induced travel."

The draft RTP/SCS includes several roadway expansion projects that will result in increased lane miles within the region, including 100 projects in the project list that are identified as "capacity increasing" projects and two expansion projects that are highlighted in the plan as being either future priorities for the region or notable accomplishments since 2018:

- North Redding Six-Lane Project (planned)
- I-5 Union Pacific Redding to Anderson Six Lane Project (recently completed)

In order to assess whether SRTA has adequately accounted for the short-and long-term effects of induced travel in its GHG calculations, CARB staff will need the following:

- Functional class and number of lane miles for each project for the base year, calendar year 2035, and horizon year of the plan;
- Documentation of the steps used to quantify induced VMT;
- A description of how the approach was validated; and
- A description of how the induced VMT has been factored into the GHG quantification.

Not calculating the effects of induced travel correctly leaves SRTA's SCS at risk of being found not to meet its GHG emission reduction targets. CARB can provide technical assistance with the induced travel analysis and encourages SRTA to work with CARB staff when estimating the VMT impacts of the 2022 SCS and roadway expansion projects.

These calculations are critical because research has shown that adding highways and major roadways in densely populated, suburban, and rapidly growing areas generally only alleviates congestion in the short-term, while usually increasing VMT, congestion, low-density and car-oriented development, and GHG emissions in the long-term. Furthermore, investing in highway and major roadway projects that induce VMT often takes away resources from investments in high-quality rail, transit, bicycling, and pedestrian

infrastructure in both the short- and the long-term.^{2,3} In other words, beyond the direct impact of inducing VMT, such projects can slow efforts to improve transportation options that facilitate mode shift, help reduce VMT, and provide safe and convenient ways to travel to key destinations, including for people who do not own vehicles or do not drive.

Supportive key actions for SCS strategy implementation

CARB staff appreciates SRTA's efforts to include various strategies to meet the 2035 GHG reduction target, as detailed in the list of eight VMT-reducing strategies identified on page 55 of the draft RTP/SCS. To verify that SRTA's assumptions about the future outcomes of these strategies are reasonable, per the [Final Sustainable Communities Strategy Program and Evaluation Guidelines](#) (SCS evaluation guidelines), CARB staff will conduct a series of policy analyses of the final RTP/SCS to evaluate whether the strategies, key actions, investments from the RTP/SCS, and the implementation progress support the stated GHG emission reductions to determine whether the SCS would achieve the applicable GHG emission reduction targets. As part of this analysis, CARB will need to evaluate whether the strategies are supported by actions, policies, technical assistance, or funding commitments in the plan.

Table 2 of the [SCS Evaluation Guidelines](#) provides a non-exhaustive list of example RTP/SCS strategy types and possible key actions, and is attached to this letter for reference. Therefore, CARB staff request that SRTA provide details about planned supportive key actions for each of the eight strategies in the plan. These implementation commitments could include a variety of actions, from coordination and leadership by the MPO to ongoing or planned actions by other entities. Please provide CARB with this information as part of the final SCS submission. The table should include each of the eight strategies in the SCS and include a similar level of detail regarding the key actions for each strategy. Without this information, CARB cannot evaluate and/or accept the quantification of GHG emission reduction estimates.

CARB has developed some SCS submittal package resources for MPOs and Table 2 of the [SCS Submittal Package Example Tables](#) file can be used for this purpose. To enhance transparency to the public, CARB recommends that this table be included within the final RTP/SCS document.

² California Department of Transportation. Transportation Analysis Framework, First Edition, pages 28-29. Available at: <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1st-edition-taf-fnl-a11y.pdf>

³ Handy, Susan, & Boarnet, Marlon G. 2014. "Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions." California Air Resources Board Policy Brief. Available at: https://ww2.arb.ca.gov/sites/default/files/2020-06/Impact_of_Highway_Capacity_and_Induced_Travel_on_Passenger_Vehicle_Use_and_Greenhouse_Gas_Emissions_Policy_Brief.pdf

Emissions calculations for SCS strategies

CARB staff cannot confirm that the emissions calculations in the draft RTP/SCS are accurate because, in some cases, the assumptions used in the emissions calculations are either missing or seem to be unsubstantiated. In particular, CARB needs additional data or substantiating information for the following SCS strategies.

SCS strategies with emissions calculated using an activity-based model

- Population and Employment shift to Strategic Growth Areas (SGAs). The draft RTP/SCS identifies the following percentage shift goals for SGAs in Anderson, Redding, Shasta Lake, and unincorporated Shasta County.

Table 7: Percent Shift of Future Housing & Jobs Growth from Areas Outside SGAs into SGAs by 2035 and 2042

SGAs	% Shift of Housing to SGA	% Shift of Jobs to SGA
City of Anderson	10%	10%
City of Redding	6%	6%
City of Shasta Lake	10%	10%
Shasta County (unincorporated)	10%	10%

Source: Draft RTP/SCS (Appendix 2 Technical Methodology)

To determine whether these percent shift goals are feasible, CARB would need to evaluate (and requests that SRTA provide):

- The current share of population and jobs in SGAs; and
- The rationale for choosing these percentages.

CARB staff will then assess whether these assumptions and the resulting emissions calculations are credible. If any of the factors or assumptions are found to be implausible, CARB will not be able to accept the quantification of GHG emission reduction estimates.

- Increased public transportation frequencies. The draft RTP/SCS says that, for this strategy, the 2022 model will use the “same assumptions as 2018 model.” However, the ShastaSIM 2.0 Supplemental Documentation (Appendix 1) says that “transit assumptions for the 2022 RTP/SCS have been updated based on [Redding Area Bus Authority (RABA)] route changes that occurred just prior to and during the COVID-19 pandemic.” CARB would like clarification on which of these statements is correct.

The ShastaSIM 2.0 documentation (p. 9) provides detail on transit route frequencies for the 2035/40 timeframe but without additional data (e.g., the number of days per week that the service operates, the hours per day that the service operates), CARB staff does not know the total amount of transit service provided in the base year and how much transit service is anticipated to grow in the future years. To determine this,

rather than having service frequency information, please provide data such as the *total*/existing and planned transit service hours or miles, or the percent increase in transit service between the baseline year and the horizon year. Without this information, CARB cannot evaluate and/or accept the quantification of GHG emission reduction estimates.

SCS strategies with emissions calculated off-model

- Improved bus stops. In the off-model calculations (Appendix 2 to the draft RTP/SCS), SRTA did not identify the number of transit stops that are planned to be improved by 2035 as part of this strategy, the additional number of stops that are planned to be improved by 2040, or the scale/scope of the improvements that are planned for each stop, as measured by increased units in the bus stop index. These data points are necessary for this calculation because the study cited to justify the presumed ridership increase (Brown et al., 2006) says that “a unit increase in the bus stop index is associated with a 31% increase in ridership.” SRTA appears to have applied a 31% increase to the *total*/baseline transit ridership (2,155 trips per day) for 2035 and a 62% increase to the *total*/baseline transit ridership for 2040. Unless SRTA intends to upgrade every existing transit stop in the regional transit system by one unit in the bus stop index by 2035—and has identified actions and commitments in the RTP/SCS to support that strategy—then this calculation for 2035 is incorrect. A 31% increase in ridership should be applied only to the ridership at the select bus stops (or the percentage of bus stops) that are slated for improvements by one unit in the bus stop index by 2035. Furthermore, it is unclear why SRTA is applying a 62% increase to the total ridership for 2040. In citing the source of its calculations, SRTA does not indicate that any studies support the idea that increasing the bus stop index by two units will increase the ridership at a stop by 62% (2 bus stop index units x 31% per unit) nor demonstrating how it is increasing every bus stop by two index units, but that seems to be the assumption that SRTA is making. Please address each of these quantification issues and provide CARB staff with more detail on the planned improvements related to this strategy so that staff can assess the calculation of benefits. Without this information, CARB cannot evaluate and/or accept the quantification of GHG emission reduction estimates.

Differentiating active transportation strategies

Please provide CARB staff with more detail demonstrating how the “accelerated delivery of active transportation investments” strategy, for which emissions benefits are calculated using the ShastaSIM 2.0 model, differs from the “Go Shasta Regional Active Transportation Plan” strategy, for which emissions are calculated off-model, so that CARB staff can confirm that there is not double-counting of emissions benefits. Without this information, CARB cannot evaluate and/or accept the quantification of GHG emission reduction estimates.

Activity-based model assumptions

In CARB's July 3, 2023, comment letter on the technical methodology, CARB staff expressed concerns about the following activity-based model assumptions. It is unclear whether and how SRTA's emissions calculations have incorporated this feedback.

- AOC assumptions: Please provide the auto operating cost (AOC) values that are being used as input into the activity-based model to CARB staff for our verification. CARB is not currently able to evaluate and/or accept the quantification of GHG emission reduction estimates without this information.
- Regional growth forecast and the decision to use "recession adjustment" factors: There is language in the technical methodology that suggests SRTA plans to continue to use "recession adjustment" factors in its activity-based model, as was done in the 2015 and 2018 RTP/SCSs. Please clarify the rationale for proposing not to return to "normal" development activity and land use vacancy rates until 2030 to CARB staff for our verification. Without this information, CARB cannot evaluate and/or accept the quantification of GHG emission reduction estimates.
- EMFAC adjustment factors: In SRTA's technical methodology dated March 29, 2023, SRTA committed to using the same version of EMFAC (EMFAC 2014) for the ShastaSIM 2.0 model calculations (2022 SCS) as was used for the ShastaSIM 1.2 model calculations (2018 SCS). However, SRTA did not explicitly state that it would also use the same adjustment factors, which is also required. In CARB's technical methodology response letter dated July 3, 2023, CARB asked SRTA to clarify whether the same EMFAC adjustment factors of -1.02 percent for 2020 and -2.71 percent would be used for 2035 in accordance with CARB's SCS Evaluation Guidelines. On page 57 of the draft RTP/SCS, SRTA has indicated that "Emissions for 2035 includes a CARB-directed straight adjustment factor (-2.71%) [...] to baseline data generated by the prior version (2011) of EMFAC." In order to verify that the adjustment factor was applied correctly, please clarify whether the adjustment factor was applied to EMFAC 2011 or EMFAC 2014. Please also clarify whether the adjustment factor was applied to just the ShastaSIM 2.0 model emissions results or if it was applied to the off-model emissions results as well. Without this information, CARB cannot evaluate and/or accept the quantification of GHG emission reduction estimates.
- Adjustment factors for off-model calculations: Please note that the off-model calculations must not have an adjustment factor applied because those need to be calculated using the latest available version of EMFAC.

If CARB cannot evaluate and/or accept the quantification of GHG emission reduction estimates, then CARB will not be able to accept SRTA's final GHG emission reduction determination.

Next steps

CARB staff is available to provide technical assistance and answer any questions that you may have about these comments or any other issues on which we can offer assistance in

Sean Tiedgen
October 11, 2023
Page 7

support of SRTA's 2022 SCS development process. If you have any questions, please contact me at carey.knecht@arb.ca.gov.

Sincerely,

/s/

Carey Knecht, Chief
Transportation Systems Planning Branch

Attachment

cc: (via email)

Jennifer Pollom, Senior Transportation Planner, SRTA
jpollom@srt.ca.gov

Mehdi Moeinaddini, Associate Transportation Planner, SRTA
mmoeinaddini@srt.ca.gov

Table 2. RTP/SCS Strategy and Key Action Examples

Strategy Category	Strategy Examples	Key Action Examples
Land Use and Housing	Focus housing and job growth in urban areas near existing infrastructure to support connections to transit.	• Allocate resources to update local plans and zoning to increase density in targeted areas. • Fund affordable housing near transit and jobs.
Transportation	Increase transportation access by providing additional reliable and efficient mobility options.	• Coordinate with the local public transportation providers on the unmet transit needs assessments to better identify areas that would benefit from expanded and/or more frequent service. • Partner with bike and scooter share programs to provide alternative mobility services in low-income communities. • Incentivize trip reduction programs or vanpool with subsidies. • Continue to provide employers with tools to coordinate carpool and ride matching programs.
Local/Regional Pricing	Relieve congestion and support pooling and transit usage	• Provide incentives to local governments who reduce local parking requirements with zoning updates. • Establish bike share programs close to new multi-family housing units or provide an incentive funding source to developers to purchase bicycles for renters. • Provide policy guidance for implementing local toll lanes
New Mobility	Foster new mobility within the region that provides more transportation options to support use of public transportation and alternative modes.	• Subsidize shared/pooled transportation network company (TNC) rides. • Partner with local agencies to provide electric vehicle car share programs and infrastructure to low-income communities. • Coordinate with locals on regional policies which support use of app-based active transportation programs without compromising public safety.
		•

Source: CARB Final SCS Program and Evaluation Guidelines (November 2019), Table 2 RTP/SCS Strategy and Key Action Examples

California Department of Transportation

DISTRICT 2
1657 RIVERSIDE DRIVE | REDDING, CA 96001
PHONE (530) 782-3152 | FAX (530) 225-2459 | TTY 711
www.dot.ca.gov



November 16, 2023

Mr. Sean Tiedgen
Executive Director, AICP
Shasta Regional Transportation Agency
1255 East Street, Suite 202
Redding, CA 96001

Dear Mr. Tiedgen:

Thank you for the opportunity to review the Shasta Regional Transportation Agency's (SRTA) Draft Regional Transportation Plan (RTP). The Draft was circulated to the various Department of Transportation functional units within the District and Headquarters. Based on our review, Caltrans offers the following comments, suggestions, and questions for your consideration in the attached pages.

If you have any questions or comments regarding this matter, please contact me at (530) 782-3152 or Kathy.grah@dot.ca.gov or your Regional Planning Liaison, Cherie Clark at (530) 806-5418 or cherie.clark@dot.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kathy Grah', written over a horizontal line.

KATHY GRAH, Chief
Regional Planning, District 2

Enclosure

c: Michael Casas, Caltrans, HQ Office of Regional Planning
Cherie Clark, D2 Regional Planning Liaison
Kelly Babcock, D2 Transit Liaison

D2 Regional Planning Comments:

- Page 12: Tribal Government - Add more details regarding Native American Tribes.
- Page 17: Consider adding non federally recognized Tribes.
- Page 97: Fix the table so that it is readable at 100%

Data used throughout the document appears to be outdated in the following areas, is there updated data available to be used?

- Page 22: Housing data is outdated and prior to the Carr fire.
- Page 24: Is the ACS data (2016 – 2020) the most recent data?
- Page 27-28: Information is outdated and has various projections through 2020.
- Page 31: Average trip length (2005); 2012-2016 ACS; April 2014 commute report
- Page 32: Data regarding working from home is outdated, it's prior to COVID.
- Page 36: Includes data from 2012, 2014 and 2016.
- Page 37: Includes a projection for 2020.
- Page 38: Includes project award anticipation date of 2018.
- Page 40: RABA statistics are outdated.
- Page 45: Includes services scheduled to begin March 2019.
- Page 65: Housing data is outdated and prior to the Carr fire.

Asset Management Comments:

- Page 73: Fix 5 Cascade Gateway project – revise expected funding sources as SRTA was unsuccessful for PFIP.
- Page 78: Project 5 Hilltop Drive Overcrossing – the project is no longer a capacity increasing project and should be revised to say multimodal or active transportation project or something similar.

Office of Strategic Freight Planning Comments:

Following are a few observations/comments and one recommendation:

- Identifies freight needs in the Manufacturing sector
- Identifies and describes freight movement and freight modes in the region
- Discusses freight data needs
- Recommend updating the California Freight Mobility Plan paragraph. The CFMP has recently been updated and approved. Here is the website: [California Freight Mobility Plan 2023 | Caltrans](#)
- Discusses freight corridors
- Good to see freight accomplishments since 2018
- Good information and discussion in the Freight Movement section, discusses freight needs and how they've change over time, where freight facilities are placed.
- Discusses State and Federal freight policies
- Identifies freight priorities

Division of Aeronautics Comments:

- The Division would also like to make the County aware of its Airport Land Use Compatibility training program for Airport Land Use Commissions and local planning staff. The training is intended to review the airport land use compatibility process, compatibility criteria, and any specific questions the Commissioners or planning staff may have. The Division highly encourages the review and update to the ALUCPs for Redding Regional Airport, Fall River Mills Airport, and Benton Airport to ensure proper land use compatibility surrounding the airport influence area. We are pleased to see the progress on Redding Municipal Airport Master Plan, and we are eagerly looking forward to receiving updates on the ALUCP.
- It is exciting to see that this RTP will acquire grant funding and conduct a long-range plan for enhanced intercity public transportation alternatives that better connect north state residents to general aviation airports. This initiative

aligns with the Caltrans goal of enhancing and bolstering the multimodal transportation network. We are eagerly looking forward for the ground access improvement in Shasta County.

Headquarters DOTP Office of Regional and Community Planning Comments:

Thank you for the opportunity to review and comment on the Shasta Regional Transportation Agency (SRTA) 2022 Draft Regional Transportation Plan (RTP). The Office of Regional and Community Planning (ORCP) would like to commend SRTA for providing a robust discussion of the region with a clear direction towards a sustainable future. Along with utilizing a robust public participation process that seeks input from underserved communities in the region.

RTP CHECKLIST COMMENTS

General

- The RTP Checklist states pages 12-26 of RTP for Policy Element however, it is located on pages 41-43. SRTA needs to be clear on the goals/policies and the specific strategies that will be used to implement the goals/policies in these pages.
- California statutes (Government Code Section 65080 (b)) states that RTPs shall have an Action Element. The Action Element of the RTP must describe the programs and actions necessary to implement the RTP, including the SCS, and assigns implementation responsibilities.
- The RTP Checklist states pages 27-39 of RTP for Action Element however, it is located on pages 41-43 SRTA needs to be clear on the goals/policies and the specific strategies that will be used to implement the goals/policies.
- We recommend that the agency refer to the MPO RTP Guidelines Section 6.1.

Consultation/Cooperation

- Please identify where SRTA uses visualization techniques to describe transportation plans and TIPs.
- Please provide Caltrans with a copy of the public comments when SRTA adopts the Final Regional Transportation Plan.

- Please provide a report on the disposition of significant written and oral comments received on the draft metropolitan transportation plan as part of the final metropolitan transportation plan and TIP that meets the requirements of 23 CFR 450.316(a)(2).
- Discussions describing the private sector involvement efforts that were used during the development of the plan (23 CFR 450.316(a)) are not identified on pages 7-11 as noted in the RTP Checklist. Please provide appropriate page numbers.

Financial

- Please identify where in the RTP projected revenues are reflective of Fiscal Constraint (23 CFR part 450.324(f)(11)(ii)).