CEQA Findings, Statement of Overriding Considerations

1 Introduction to CEQA Findings

These CEQA Findings are made pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et seq., "CEQA") and the CEQA Guidelines (Cal. Code Regs. title 14, Section 15000 et seq.) by the Board of Directors of San Joaquin Council of Governments (SJCOG) as the lead agency for the 2022 Regional Transportation Plan and Sustainable Communities Strategy ("RTP/SCS," or the "Project"). These CEQA Findings pertain to the Final Environmental Impact Report ("EIR") SCH No. 2020120482 prepared for the 2022 RTP/SCS.

1.1 Project Description Summary

The proposed project by SJCOG is the 2022 RTP/SCS, which is a long-range planning action-oriented document used to achieve a coordinated and balanced regional transportation system. The RTP/SCS document is required by both State and Federal law and is an update of the 2018 SJCOG RTP/SCS. It covers all of San Joaquin County and includes the cities of Escalon, Lathrop Lodi, Manteca, Stockton, Tracy, and Ripon, as well as unincorporated communities in the county. It contains a vision for the region for transportation-related issues and challenges, and a Sustainable Communities Strategy. The plan is organized into five chapters, as follows: Chapter A – Executive Summary, Chapter B – Policy Element, Chapter C – Sustainable Communities Strategy, Chapter D – Action Element, Chapter E – Financial Element.

SJCOG has prepared the SCS as part of the RTP, pursuant to the requirements of California Senate Bill 375 of 2008. The SCS sets forth a forecasted development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, reduces greenhouse gas (GHG) emissions from passenger vehicles and light duty trucks to achieve the regional GHG reduction targets set by the California Air Resources Board (CARB).

The 2022 RTP/SCS is based on a preferred land use and transportation scenario which lays out a pattern of future growth and transportation system investment for the region emphasizing a transit-oriented development and an urban infill approach to land use and housing, located near existing high quality transportation corridors. It identifies and prioritizes expenditures of anticipated funding for transportation projects of all transportation modes: highways, streets and roads, transit, rail, bicycle and pedestrian, as well as transportation demand management measures and transportation system management (TSM). Capital improvement transportation projects, identified in the proposed 2022 RTP/SCS, are located on State highways, County roads, and locally owned streets, as well as on transit district property and public utility lands.

The land use scenario envisioned by the proposed 2022 RTP/SCS is similar to that contained in the 2018 RTP/SCS. The principles of the preferred land use scenario, the Stay the Course/Remake Centers and Corridors hybrid, guides the allocation of future development sufficient to accommodate the forecasted growth in population, households, and employment through 2046. Most notable of these principles is an increase in average densities county-wide by generally 24% over the status quo densities. This is articulated in a growth pattern that is reflective of the preferred land use scenario's potential for increasing multi-modal travel and transit-oriented development.

The 2022 RTP/SCS establishes planning goals and objectives to guide the development of the plan and establishes the guiding principles for decision-making. Regional projects and programs are

developed, funded, and implemented based on these goals. SJCOG's general objectives for the 2022 RTP/SCS are to ensure that the SCS and the transportation system planned for the SJCOG region accomplishes the following:

- Serves regional goals, objectives, policies, and plans.
- Responds to community and regional transportation needs.
- Promotes energy efficient, environmentally sound modes of travel and facilities and services.
- Promotes equity and efficiency in the distribution of transportation projects and services.

More specific goals of the proposed 2022 RTP/SCS are listed in Section 2.2 of the Draft EIR.

1.2 Type of EIR

The 2022 RTP/SCS EIR is a Program EIR. A Program EIR is prepared for a series of actions that can be characterized as one project. An advantage of a Program EIR is that it allows the lead agency to consider broad policy alternatives and "program wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts." (CEQA Guidelines Section 15168(b)(4).) The Program EIR can serve as a first-tier document for later CEQA review of individual projects included in the program. These project-specific CEQA reviews can focus on project-specific impacts and mitigation measures and need not repeat the broad analyses contained in the Program EIR. As discussed by the California Supreme Court, "it is proper for a lead agency to use its discretion to focus a first-tier EIR on only the…program, leaving project-specific details to subsequent EIRs when specific projects are considered." (*In re Bay Delta* (2008) 43 Cal.4th 1143, 1174-1175).

1.3 Procedural Compliance with CEQA

SJCOG published a Draft EIR on June 24, 2022, and a Final EIR on August 18, 2022, in compliance with CEQA requirements. SJCOG prepared the Draft and Final EIRs in accordance with CEQA and the CEQA Guidelines. As allowed for in CEQA Guidelines Section 15084(d)(2), SJCOG retained a consultant to assist with the preparation of the environmental documents. SJCOG, acting as lead agency, has directed, independently reviewed, and edited as necessary all material prepared by the consultant, and such material reflects SJCOG's independent judgment. In general, the preparation of the EIR included the following key steps and public notification efforts:

A 30-day scoping process began with SJCOG's issuance of the Notice of Preparation (NOP) of an EIR. The NOP was filed with the State Clearinghouse on December 24, 2020, which started a 30-day comment period that ended January 27, 2021. SJCOG noticed and held one virtual scoping meeting during the 30-day NOP comment period, on Wednesday, January 13, 2021, to receive perspective and input from agencies, organizations and individuals on the scope and content of the environmental information.

SJCOG released the Draft EIR on June 24, 2022, and SJCOG initiated a 45-day public comment period by filing a Notice of Completion and Notice of Availability with the State Office of Planning and Research. The Notice of Availability for the Draft EIR was sent to all organizations and individuals who had previously requested the notice. In addition, SJCOG placed electronic copies of the Draft EIR at the offices of SJCOG and hard copies at three public libraries. The Draft EIR was also posted on SJCOG's website and available for review.

The Notice of Completion for the Draft EIR was filed with the State Clearinghouse on June 24, 2022. The Draft EIR was available for a 45-day public review period starting June 24, 2022, and ending August 8, 2022.

During this 45-day comment period for the Draft EIR, SJCOG requested comments from responsible and trustee agencies, other agencies, and the public, and received two written comment letters. The Final EIR includes the Draft EIR comments and responses to Draft EIR comments. SJCOG provided Notice of Availability of the Final EIR and made the Final EIR electronic version publicly available on its website, as well as the SJCOG office, on August 18, 2022.

The SJCOG Board of Directors will hold a public meeting on August 25, 2022, to consider certification of the Final EIR, adoption of these Findings and a statement of overriding considerations, and approval of the Project.

1.4 Incorporation of Final EIR by Reference

The Final EIR is hereby incorporated by reference into these CEQA Findings. The Final EIR consists of: (1) the Draft EIR and Draft EIR appendices; and (2) the Final EIR volume that includes revisions to the Draft EIR, and the Mitigation Monitoring and Reporting Program (MMRP).

1.5 Requirements for CEQA Findings

Pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15091, no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless the public agency makes one or more of the following Findings with respect to each significant impact:

1. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.
2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report. (The concept of infeasibility also encompasses whether a particular alternative or mitigation measure promotes the project's underlying goals and objectives, and whether an alternative or mitigation measure 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.))

SJCOG has made one or more of these specific written Findings regarding each significant impact associated with the 2022 RTP/SCS. Those Findings are presented below, along with a presentation of facts in support of the Findings. Upon Certification of this FEIR, the SJCOG Board of Directors certifies these Findings are based on full appraisal of all viewpoints, including all comments received up to the date of adoption of these Findings, concerning the environmental issues identified and discussed. These Findings are based on substantial evidence contained in the totality of the administrative record before the SJCOG Board of Directors, including but not limited to the Draft EIR "supporting evidence" cited herein.

2 Location and Custodian of the Record

The documents and other materials that constitute the Record of Proceedings, on which SJCOG's CEQA Findings are based, are located at 555 East Weber Avenue, Stockton, California 95202. The custodian of these documents is Tim Kohaya. This information is provided in compliance with Public Resources Code Section 21081.6(a)(2) and CEQA Guidelines Section 15091(e).

For purposes of CEQA and these Findings, the Record of Proceedings for the Project consists of including but not limited to, the following documents:

- The Notice of Preparation (NOP) and all other public notices issued by SJCOG in conjunction with the Project.
- The Draft and Final EIRs, including appendices and technical studies included or referenced in the Draft and Final EIRs.
- All comments and correspondence submitted to SJCOG with respect to the Project.
- The Mitigation Monitoring and Reporting Program (MMRP) for the Project.
- All Findings and Resolutions adopted by SJCOG Board of Directors in connection with the Project and all documents cited or referred to therein.
- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the Project submitted to SJCOG by Rincon Consultants, consultants to SJCOG.
- All reports, memoranda, documentation, data output files relating to the land use and transportation modeling for the Project.
- All documents and information submitted to SJCOG by responsible, trustee, or other public agencies, or by individuals or organizations, in connection with the Project, up through the date the SJCOG Board of Directors considered approving the Project.
- Minutes, meeting notes, and other available documentation of all information sessions, public meetings and public hearings held by SJCOG, in connection with the Project.
- Any documentary or other evidence submitted to SJCOG at such information sessions, public meetings, and public hearings.
- Matters of common knowledge to SJCOG, including, but not limited to Federal, State, and Local laws and regulations.
- Any documents expressly cited in these CEQA Findings, in addition to those cited above.
- Any other materials required to be in the Record of Proceedings by Public Resources Code Section 21167.6(e).

3 Findings for Impacts Identified as Less Than Significant

Public Resources Code Section 21081 and CEQA Guidelines Section 15091 do not require Findings for impacts that are less than significant. Nevertheless, for the sake of completeness, the SJCOG Board of Directors hereby finds that the following environmental impacts of the 2022 RTP/SCS either have no impact or are less than significant. Under CEQA, no mitigation measures are required for impacts that are less than significant (CEQA Guidelines Section 15126.4(a)(3)).

Section 4.17 of the EIR explains why certain impacts were not found to be significant and therefore were not discussed in detail in the EIR, pursuant to CEQA Guidelines Section 15128. In addition***, the Findings below are for impacts that were analyzed in detail in the EIR, but are less than significant. These Findings are based on the detailed discussions of impacts in Chapter 4 of the EIR.***

3.1 Agriculture and Forestry Resources

1. **Impact AG-2.** Proposed transportation improvements and land use patterns envisioned by the 2022 RTP/SCS would not conflict with existing zoning for forest land, timberland, or timberland production, nor result in the loss of forest land or convert forest land to non-forest uses. Impacts would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** The 2022 RTP/SCS would not conflict with existing zoning for forest land, timberland, or timberland production, and would not result in the loss forest land or convert forest land to non-forest use.
    c. **Supportive Evidence.** Please refer to pages 4.6-11 through 4.6-12 of the Draft EIR.

3.2 Air Quality

1. **Impact AQ-1.** The 2022 RTP/SCS would not conflict with or obstruct implementation of the (AQMP). Impacts would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** The 2022 RTP/SCS would not conflict with or obstruct implementation of the San Joaquin Valley Air Resources District's Air Quality Management Plan (AQMP).
    c. **Supportive Evidence.** Please refer to page 4.2-21 of the Draft EIR.

2. **Impact AQ-4.** Transportation improvements and land use Projects envisioned by the proposed 2022 RTP/SCS would expose sensitive receptors to substantial particulate matter pollutant concentrations. However, because the proposed 2022 RTP/SCS would reduce exposure in comparison to the baseline, impacts would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** Total particulate emissions would be lower with implementation of the proposed 2022 RTP/SCS as compared to 2021 baseline conditions. Despite an increase in VMT within the SJCOG region, particulate emissions

would be lower under proposed 2022 RTP/SCS conditions as compared to existing conditions largely due to emission control advances. Therefore, the proposed 2022 RTP/SCS would not expose sensitive receptors to substantial pollutant concentrations associated with re-entrained road dust, and impacts would be less than significant. Implementation of Mitigation Measures AQ-2(a) and AQ-2(b) (outlined under Impact AQ-2) would further reduce re-entrained road dust emissions by encouraging the use of dust suppressants, including watering or gravel, and diesel equipment meeting stricter CARB Tier 3 and Tier 4 emission standards.

c. **Supportive Evidence.** Please refer to page 4.2-28 of the Draft EIR.

3. **Impact AQ-6.** Construction of the transportation improvements and land use Projects envisioned by the proposed 2022 RTP/SCS would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant.

   a. **Mitigation**. No mitigation is required.

   b. **Findings and Rationale.** Construction would generate oil and diesel fuel odors during construction from equipment use and would be temporary, and would dissipate rapidly with distance. Development associated with the proposed 2022 RTP/SCS is related to transportation imrovements such as roadway widening, interchange improvements, and installation of bicycle lanes, and are not typical operational sources of odors. Thus, other emissions such as odors would have a less than significant impact on a substantial number of people.

   c. **Supportive Evidence.** Please refer to pages 4.2-33 through 4.2-34 of the Draft EIR.

3.3 Biological Resources

1. **Impact BIO-4.** Implementation of transportation Projects and the land use scenario envisioned by the proposed 2022 RTP/SCS would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This impact would be less than significant.

   a. **Mitigation.** No mitigation is required.

   b. **Findings and Rationale.** Most municipalities in the SJCOG region have local ordinances and policies in place that protect native habitat and/or native and non-native trees in urban landscapes, as well as in unincorporated County lands. Most of the transportation Projects in the proposed 2022 RTP/SCS are expansions or maintenance of existing roads, although some transportation Projects may result in development or infrastructure improvements in undisturbed outlying areas. Because ground disturbances would be fairly limited as a result, the removal of native trees and disturbances to other biological resources protected by local policies or ordinances would likely be minimal for most projects. The proposed 2022 RTP/SCS also contains focus on future development concentrated in existing urbanized areas, although there is potential conflict with . This would reduce impacts to biological resources that are protected by city or county ordinances. All future development projects as part of the future land use scenario as well as the transportation projects proposed for implementation under the proposed 2022 RTP/SCS would be required to follow city and county development requirements, including compliance with local policies, ordinances and applicable permitting procedures related to protection biological resources. However, there remains the

potential for conflict with local policies and ordinances from development associated with the future land use scenario. Therefore, conflict with local policies or ordinances is less than significant.

c. **Supportive Evidence**. Please refer page 4.3-37 of the Draft EIR.

3.4 Cultural Resources

1. **Impact CR-3.** Construction activity associated with transportation improvement projects and the land use scenario envisioned by the 2022 RTP/SCS could result in disturbances to human remains including those interred outside of formal cemeteries. l Impacts to human remains would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** Human burials outside of formal cemeteries are often associated with prehistoric archaeological contexts. Therefore, it is possible to encounter unknown human burials because of implementation of transportation improvement projects under the 2022 RTP/SCS. Excavation during construction activities in the SJCOG region would have the potential to disturb these resources, including Native American burials. In addition to being potential archaeological resources, human burials have specific provisions for treatment in PRC Section 5097, as listed under Section 4.5.2, *Regulatory Setting*. The California Health and Safety Code Section 7050.5 state no further disturbance may occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner where the remains are found, must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD must complete the inspection of the site within 48 hours of being granted access and provide recommendations as to the treatment of the remains to the landowner or project sponsor. With adherence to existing regulations, impacts to human remains would be less than significant.
    c. **Supportive Evidence.** Please refer to page 4.4-23 of the Draft EIR.

3.5 Energy

1. **Impact E-1**. Future transportation improvement projects and implementation of the land use scenario envisioned by the proposed 2022 RTP/SCS would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. This impact would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** The 2022 RTP/SCS would not increase overall per capita energy consumption relative to baseline conditions, or otherwise result in use of energy in an inefficient, wasteful, or unnecessary manner. Impacts would be less than significant.
    c. **Supportive Evidence.** Please refer to pages 4.5-11 through 4.5-13 of the Draft EIR.

2. **Impact E-2**. The proposed 2022 RTP/SCS would not increase reliance on fossil fuels or decrease reliance on renewable energy sources. This impact would be less than significant.

a. **Mitigation.** No mitigation is required.
b. **Findings and Rationale.** The proposed 2022 RTP/SCS would reduce energy consumption, thus it would not result in wasteful or inefficient energy consumption within the region relative to baseline conditions. Therefore, the proposed 2022 RTP/SCS impacts on energy usage would be less than significant.
c. **Supportive Evidence.** Please refer to pages 4.5-13 through 4.5-14 of the Draft EIR.

3. **Impact E-3**. The proposed 2022 RTP/SCS would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This impact would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** The proposed 2022 RTP/SCS would be consistent with the State and local plans, as the proposed 2022 RTP/SCS would implement strategies that are designed to enhance the connection between land use and transportation choices through projects supporting energy efficiency. Therefore, the proposed 2022 RTP/SCS would be consistent with State energy efficiency plans, the County's adopted energy conservation and efficiency strategies contained in its General Plan and local General Plans' efficiency policies. This impact would be less than significant.
    c. **Supportive Evidence.** Please refer to page 4.5-15 in the Draft EIR.

3.6 Geology and Soils

1. **Impact GEO-1.** The transportation improvements and land use projects envisioned by the proposed 2022 RTP/SCS would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides. Impacts would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** Compliance with existing regulations and design standards, as well as the preparation of site-specific geotechnical reports, would reduce the potential for seismic damage to occur as a result of implementation of 2022 RTP/SCS projects.
    c. **Supportive Evidence.** Please refer to pages 4.8-16 through 4.8-18 of the Draft EIR.

2. **Impact GEO-2.** The proposed transportation improvements and land use projects envisioned by the proposed 2022 RTP/SCS would not result in substantial soil erosion or the loss of topsoil. Impacts would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** Projects implementing the 2022 RTP/SCS would conform with applicable county codes related to erosion control and the NPDES Construction General Permit. Impacts related to erosion and loss of topsoil would be less than significant.
    c. **Supportive Evidence.** Please refer to page 4.8-18 of the Draft EIR.

3. **Impact GEO-3.** Implementation of transportation improvements and future projects included in the land use scenario envisioned in the proposed 2022 RTP/SCS could be located on potentially unstable soils, in areas of lateral spreading, subsidence, or high liquefaction potential, or areas of expansive soil. Impacts would be Less than significant.

a. **Mitigation.** No mitigation is required.

b. **Findings and Rationale.** Projects implementing the 2022 RTP/SCS would conform with the California Building Code, local general plans and building standards, and Caltrans design criteria for transportation projects, where applicable. Impacts would be less than significant.

c. **Supportive Evidence.** Please refer to pages 4.8-19 and 4.8-20 of the Draft EIR.

4. **Impact GEO-4.** The transportation improvements and land use projects envisioned by the proposed 2022 RTP/SCS in rural areas may have soils incapable of adequately supporting septic tanks or alternative wastewater disposal systems. Impacts would be less than significant.

    a. **Mitigation.** No mitigation is required.

    b. **Findings and Rationale.** The 2022 RTP/SCS does not include transportation projects that would require the use of septic tanks or alternative wastewater disposal systems. The few development projects in rural areas requiring septic tanks or alternative wastewater disposal systems would be required to comply with applicable County or City regulations. Impacts would be less than significant.

    c. **Supportive Evidence.** Please refer to page 4.8-20 of the Draft EIR.

3.7 Greenhouse Gas Emissions and Climate Change

a. **Impact GHG-3.** The transportation improvements and land use projects envisioned by the proposed 2022 RTP/SCS would not conflict with regional SB 375 per capita passenger vehicle CO_2 emission reduction targets of 16 percent by 2035 from 2005 levels. Impacts would be less than significant.

b. **Mitigation.** No mitigation is required.

c. **Findings and Rationale.** Implementation of the proposed 2022 RTP/SCS in the year 2035 would result in a decrease of per capita passenger vehicle CO_2 emissions by 16.2 percent compared to 2005 levels. Therefore, implementation of the proposed 2022 RTP/SCS would achieve the SB 375 GHG reduction target for SJCOG of 16 percent by 2035, and the proposed 2022 RTP/SCS would therefore be consistent with SB 375. Impacts would be less than significant.

d. **Supporting Evidence.** Please refer to pages 4.9-19 through 4.9-20 of the Draft EIR.

3.8 Hazards and Hazardous Materials

1. **Impact HAZ-1.** Transportation improvement projects and the land use scenario envisioned by the proposed 2022 RTP/SCS may facilitate the routine transport, use, or disposal of hazardous material, and may result in reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts would be less than significant.

    a. **Mitigation.** No mitigation is required.

    b. **Findings and Rationale.** Mandatory compliance with existing regulations and programs would minimize the risk associated with these the routine transport, use and disposal of hazardous materials, as well as accident conditions related to these materials. Impacts would be less than significant.

    c. **Supporting Evidence.** Please refer to pages 4.10-18 through 4.10-20 of the Draft EIR.

2. **Impact HAZ-2.** Transportation improvement projects and land use projects envisioned in the proposed 2022 RTP/SCS would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school. Existing regulations and programs would reduce the risk to schools. Impacts would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** Mandatory compliance with existing regulations and laws would minimize the potential impacts associated with hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or potential future school. Impacts would be less than significant.
    c. **Supporting Evidence.** Please refer to page 4.10-21 of the Draft EIR.

3. **Impact HAZ-4.** Transportation improvement projects and land use scenario envisioned by the 2022 RTP/SCS may be located at or near a public use airport or private airstrip. Existing regulations and regulatory oversight would reduce the inherent hazard of development near airports to safe levels, and this impact would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** Compliance with existing federal, state and local regulations and oversight in place that would effectively reduce the inherent hazard associated with development near airports to an acceptable and safe level. Impacts would be less than significant.
    c. **Supporting Evidence.** Please refer to page 4.10-24 of the Draft EIR.

4. **Impact HAZ-5** Transportation improvement projects and the land use scenario envisioned by the 2022 RTP/SCS could interfere with existing emergency response and evacuation. However, required regular updates to emergency response and evacuation plans would account for development and projects and standard notification of emergency response agencies during construction activities would ensure evacuation and response routes are modified appropriately. Impacts related to interference or impairment of an adopted emergency response plan or emergency evacuation plan would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** The proposed transportation projects would generally increase mobility and circulation capacity and, thereby, have the potential to improve response times for police, fire, and emergency service providers, especially in heavily congested areas. However, as described above, emergency and evacuation plans are regularly updated to incorporate current conditions. Therefore, potential impacts related to interference with emergency response and evacuation plans would be less than significant.
    c. **Supporting Evidence.** Please refer to page 4.11-34 through 4.11-36 of the Draft EIR.

3.9 Hydrology and Water Quality

1. **Impact HYD-1.** Implementation of proposed transportation projects and future projects included in the land use scenario envisioned in the proposed 2022 RTP/SCS would not violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality. Impacts would be less than significant.

a. **Mitigation.** No mitigation is required.

b. **Findings and Rationale.** Construction of projects included in the 2022 RTP/SCS would be required to comply with the federal Clean Water Act, which requires that coverage under a National Pollutant Discharge Elimination System (NPDES) stormwater permit be obtained for construction. Mandatory implementation of the SWPPP would prevent substantial erosion or pollutants from degrading water quality or violating wastewater discharge requirements during project construction. Mandatory compliance with existing stormwater regulations and permit programs would prevent discharge of pollutants from operation of projects. Also, implementation of the 2022 RTP/SCS would increase the volume of point-source wastewater discharges in the SJCOG region, but regulatory compliance and monitoring of effluent prior to discharge from treatment facilities would ensure water quality standards would be met. Impacts would be less than significant.

c. **Supporting Evidence.** Please refer to pages 4.11-24 through 4.11-26 of the Draft EIR.

2. **Impact HYD-3.** Transportation and future land use projects implementing the proposed 2022 RTP/SCS would not substantially alter the existing drainage pattern of a site or area through alteration of the course of a stream or river or through the addition of impervious surfaces in a manner where drainage changes would result in flooding on- or off-site, redirect or impede flood flows, exceed the capacity of stormwater systems, or provide additional polluted runoff. Impacts would be less than significant.

   a. **Mitigation.** No mitigation is required.

   b. **Findings and Rationale.** Existing regulatory requirements at the local, State, and Federal level include measures to minimize impacts from any increases in drainage changes that alter the existing drainage pattern. Transportation improvements and future projects included in the land use scenario envisioned in the 2022 RTP/SCS would not substantially alter existing drainage patterns such that they would substantially increase the rate or amount of surface runoff or create or contribute runoff water which would exceed the capacity of stormwater drainage systems. Land use projects under proposed 2022 RTP/SCS would require drainage control and hydromodification measures required either under an individual MS4 NPDES Permit or under the Region-Wide MS4 Permit and would include adherence to the Region-Wide MS4 Permit's hydromodification requirements and implementation of LID drainage control features if required under Program Requirement Part F. Impacts would be less than significant. Compliance with the existing suite of applicable policies and regulations minimize impacts related to on- or off-site flooding, stormwater drainage capacity, polluted runoff, and redirection or impedance of flood, and such impacts would therefore be less than significant.

   c. **Supporting Evidence.** Please refer to pages 4.11-31 through 4.11-32 of the Draft EIR.

3. **Impact HYD-4.** Transportation and land use projects implementing the proposed 2022 RTP/SCS would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. Impacts would be less than significant.

   a. **Mitigation.** No mitigation is required.

   b. **Findings and Rationale.** Compliance with existing regulations and programs would prevent placement of structures within 100-year floodplain that could redirect flood flows, would prevent development in 100-year floodplains, and would prevent

significant risks of loss, injury or death resulting from flooding or inundation. Impacts would be less than significant.

c. **Supporting Evidence.** Please refer to pages 4.11-32 through 4.11-33 of the Draft EIR.

4. **Impact HYD-5.** Transportation and land use projects implementing the proposed 2022 RTP/SCS would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plans. Impacts would be less than significant.
    d. **Mitigation.** No mitigation is required.
    e. **Findings and Rationale.** Compliance with existing regulations and programs would prevent placement of structures within 100-year floodplain that could redirect flood flows, would prevent development in 100-year floodplains, and would prevent significant risks of loss, injury or death resulting from flooding or inundation. Impacts would be less than significant.
    f. **Supporting Evidence.** Please refer to pages 4.11-34 through 4.11-36 of the Draft EIR.

3.10 Land Use

1. **Impact LU-1**. Implementation of proposed transportation improvements and the land use scenario envisioned by the proposed 2022 RTP/SCS would not physically divide an established community. This impact would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** The transportation projects included in the 2022 RTP/SCS generally include improvements to existing roads and transportation facilities, rather than new roads or rail lines through existing or established communities. The land use scenario envisioned in the 2022 RTP/SCS encourages infill development in existing communities, rather than new communities in rural areas where new roads would be required. Therefore, the 2022 RTP/SCS would not physically divide established communities, and impacts would be less than significant.
    c. **Supportive Evidence.** Please refer to pages 4.12-8 and 4.12-9 of the Draft EIR.

2. **Impact LU-2.** The proposed 2022 RTP/SCS Project implementation would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation (including, but not limited to, the General Plan or Zoning Ordinance) and result in a physical change to the environment not already addressed in the other resource chapters of the EIR. This impact would be less than significant.
    a. **Mitigation.** Mitigation measures are provided for applicable resources throughout their respective environmental issue area sections of the EIR to reduce impacts. No additional mitigation is required for this impact.
    b. **Findings and Rationale.** The SCS land use and transportation Projects envisioned within the 2022 RTP/SCS may result in conflicts with land use plans, policies, or regulations. However, the 2022 RTP/SCS would not result in a physical change to the environment that has not already been addressed in the other resource chapters of the EIR. The impacts of any such conflicts are described throughout Chapter 4 of the EIR.
    c. **Supportive Evidence.** Please refer to pages 4.12-9 through 4.12-10 of the Draft EIR.

3. **Impact POP-2.** Transportation and land use projects implementing the proposed 2022 RTP/SCS would temporarily displace existing housing and people but would not necessitate the construction of replacement housing elsewhere. Impacts would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** Land use development included in the 2022 RTP/SCS would temporarily displace existing housing and people as individual housing development sites are redeveloped. However, displacement would not be substantial, and would be minimized through existing housing programs within the SJCOG region. In the long term, the 2022 RTP/SCS would result in a net increase in housing units in the SJCOG region. Impacts would be less than significant.
    c. **Supportive Evidence.** Please refer to pages 4.17-2 of the Draft EIR.

3.11 Transportation

1. **Impact T-1.** Transportation projects and land use projects envisioned by the proposed 2022 RTP/SCS would not conflict with any program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. This impact would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** Implementation of the 2022 RTP/SCS would improve transit ridership and circulation while also improving active transportation modes and facilities, such as constructing new pedestrian and bicycle facilities. The 2022 RTP/SCS also includes roadway projects that would improve circulation. The proposed 2022 RTP/SCS would be consistent with the California Transportation Plan and individual jurisdiction General Plans. The 2022 RTP would not conflict with a program, plan, ordinance, or policy addressing the circulation system.
    c. **Supporting Evidence.** Please refer to pages 4.14-18 through 4.14-19 of the Draft EIR.
2. **Impact T-3.** Proposed transportation and land use projects implementing the proposed 2022 RTP/SCS would not substantially increase hazards due to geometric design features or incompatible uses. This impact would be less than significant.
    a. **Mitigation.** No mitigation is required**.**
    b. **Findings and Rationale.** While the proposed 2022 RTP/SCS expands development and increases density in growth geographies, this growth would not impact geometric design features or roadway uses in a consistent way, as those design standards and uses are established and enforced at the local jurisdictional level. Future transportation projects would also be subject to design guidelines established by the State or the local jurisdiction with authority over the project, including curve radii on curving road segments, maximum road grade/slope, and minimum separating distance between intersections and driveways. The proposed SJCOG 2022 RTP/SCS would not adversely impact the compatible use of transportation facilities. Rather, investments would incentivize design improvements to make roadways safer. Therefore, the proposed 2022 RTP/SCS would not substantially increase hazards due to incompatible uses would be less than significant.
    c. **Supporting Evidence.** Please refer to pages 4.14-24 through 4.14-25 of the Draft EIR.

3. **Impact T-4.** Proposed transportation and land use projects implementing the proposed 2022 RTP/SCS would not result in inadequate emergency vehicle access or interfere with an adopted emergency response plan or emergency evacuation plan. This impact would be less than significant.
    a. **Mitigation.** No mitigation is required.
    b. **Findings and Rationale.** Standard construction procedures for development of a construction management plan prevent 2022 RTP/SCS construction activities from having significant emergency access impacts. Projects included in the 2022 RTP/SCS would be subject to the design standards of local jurisdictions for new and existing development and roadways to ensure adequate emergency access and to ensure no interference with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.
    c. **Supporting Evidence.** Please refer to pages 4.14-25 and 4.14-26 of the Draft EIR.

4 Findings for Impacts Identified as Significant but Mitigated to a Less Than Significant Level

The SJCOG Board of Directors, having reviewed and considered the information contained in the Final EIR and the record of proceedings, and pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15126.4, makes the following Findings with respect to impacts of the Project that are identified as significant but with mitigation measures, as identified in the EIR and required in, or incorporated into the Project, have been mitigated to a less than significant level. The SJCOG Board of Directors hereby finds that mitigation measures identified in the EIR that have been required in or incorporated into the Project would lessen the following significant environmental impacts to a less than significant level. These Findings are based on the discussion of impacts in the detailed impact analyses in Chapter 4 of the EIR. **The Findings below are for impacts where implementation of the Project may result in less than significant environmental impacts with the implementation of mitigation measures.**

4.1 Biological Resources

1. **Impact BIO-1.** Implementation of transportation improvements and the land use scenario envisioned by 2022 RTP/SCS may result in impacts to special-status plant and animal species, either directly or through habitat modifications. This impact would be significant but mitigable.
    a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2022 RTP/SCS program for applicable transportation projects that would result in biological resource impacts, and where feasible and necessary based on site-specific considerations. San Joaquin County and incorporated cities in the County can and should implement these measures where relevant to land use projects implementing 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

    BIO-1(a) **Biological Resources Screening and Assessment.** On a project-by-project basis, 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) to document the existing biological resources within the project footprint plus a buffer and to determine the potential impacts to those resources. The biological resources assessment shall evaluate the potential for impacts to all biological resources including, but not limited to: special-status species, nesting birds, wildlife movement, sensitive plant communities, critical habitat, Essential Fish Habitat, and other resources judged to be sensitive by local, state, and/or federal agencies. In addition, the assessment shall document

potential modifications to existing infrastructure suitable for wildlife movement (e.g., culvert, underpass, etc.) 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. If the project cannot be designed without complete avoidance, the sponsor agency shall coordinate with the appropriate regulatory agency (i.e., USFWS, NMFS, CDFW, USACE) to obtain regulatory permits and implement project - specific mitigation prior to any construction activities. The following mitigation measures [BIO-1(b) through BIO-1(j)] 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 biological resources assessment where suitable habitat is present. The results of the biological resources screening and assessment shall be provided to the implementing agency for review and approval.

BIO-1(b) **Special-status Plant Species Surveys.** If completion of the project-specific biological resources assessment determines that special-status plant species have potential to occur on-site, surveys for special-status plants shall be completed prior to any vegetation removal, grubbing, or other construction activity of each project (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 prior to project implementation. All special-status plant species identified on-site shall be mapped onto a site-specific aerial photograph or topographic map. Surveys shall be conducted in accordance with the most current protocols established by the CNPS, CDFW and/or USFWS. A report of the survey results shall be submitted to the implementing agency for review. If special-status plant species are identified, mitigation measure BIO-1(c) shall apply.

BIO-1 (c) **Special-status Plant Species Avoidance, Minimization, and Mitigation**. If state or federally listed and/or CRPR 1 and 2 species are found during special-status plant surveys [pursuant to mitigation measure BIO-1(b)], then the project shall be re-designed to avoid impacting these plant species to the maximum extent feasible. Occurrences of these species 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 CRPR 3 and 4 species are found, the biologist shall evaluate to determine if they meet criteria to be considered special-status, and if so, the same process as identified for CRPR 1 and 2 species shall apply.

If special-status plants species cannot be avoided and would be impacted by a project implemented under the 2022 RTP/SCS, all impacts shall be mitigated at a minimum ratio of 1:1 (number of acres or individuals restored to number of acres or individuals impacted) for each species as a component of habitat restoration. A restoration plan shall be prepared and submitted to SJCOG,

and/or the local jurisdiction overseeing the project 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) of habitat to be established, restored, enhanced, and/or preserved; specific functions and values of habitat type(s) to be established, restored, enhanced, and/or preserved];
- 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 include numeric criteria to be selected based on the scale of the restoration effort and the restoration technique used:
    - At least 80 percent survival of container plants, and/or
    - Successful establishment the required number of individuals planted from seed to meet required replacement ratios; and/or
    - Sampling-based recruitment/survival criteria to achieve vegetative cover or total number of surviving individuals equal to at least 70 percent of the equivalent metric in reference sites for the same habitat type; sampling-based criteria must use a scientifically valid vegetation sampling method;
- An adaptive management program and remedial measures to address any shortcomings in meeting success criteria;
- Notification of completion of compensatory mitigation and agency confirmation; and
- Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism).

BIO-1 (d) Endangered/ Threatened Species Habitat Assessment and Protocol Surveys. Specific habitat assessment and survey protocol surveys are established for several federally and/or state endangered or threatened species. If the results of the biological resources assessment 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/NMFS protocols prior to issuance of any construction permits/project approvals.

Alternatively, in lieu of conducting protocol surveys, the implementing agency may choose to assume presence within the project footprint and proceed with development of appropriate avoidance measures, consultation, and permitting, as applicable.

If the target species is detected during protocol surveys, or protocol surveys are not conducted and presence assumed based on suitable habitat, mitigation measure BIO-1(e) shall apply.

BIO-1 (e) **Endangered/ Threatened Species Avoidance and Compensatory Mitigation**. If habitat is occupied or presumed occupied by federal and/or state listed species and would be impacted by the project, the implementing agency shall re-design the project in coordination with a qualified biologist to avoid impacting occupied/presumed occupied habitat to the maximum extent feasible. Disturbance limits shall have bright orange protective fencing installed at least 50 feet beyond their extent, or other distance as approved by a qualified biologist, to protect the habitat. If occupied or presumed occupied habitat cannot be avoided, the implementing agency shall provide the total acreages for habitat that would be impacted prior to the issuance of construction permits/approvals. The implementing agency shall purchase credits at a USFWS, and/or CDFW approved conservation bank and/or establish conservation easements or funds for acquisition of conservation easements as compensatory mitigation to offset impacts to federal and/or state listed species habitat. Compensatory mitigation shall be provided at the following ratios for permanent impacts in accordance with the *San Joaquin County Multi-Species Habitat Conservation and Open Space Plan* (SJMSCP 2000) of not less than 1:1 (area mitigated: area impacted) for agricultural habitat lands and 3:1 for natural lands (non-wetland). Compensatory mitigation may be combined/nested with special-status plant species and sensitive community restoration where applicable. Temporary impact areas shall be restored to pre-project conditions. If the implementing agency establishes conservation easement(s) (on- and/or off-site) to serve as compensatory mitigation for federal and/or state listed species habitat impacts, compensatory mitigation areas shall have a restrictive covenant prohibiting future development/disturbance and shall be managed in perpetuity to encourage persistence and enhancement of the preserved target species. Compensatory mitigation lands cannot be located on land that is currently held publicly for resource protection. The compensatory mitigation areas shall be managed by a conservation lands management entity or other qualified easement holder. In addition, the implementing agency shall retain a qualified biologist to prepare a Habitat Mitigation and Monitoring Plan (HMMP) to ensure the success of compensatory mitigation sites that are to be conserved for compensation of permanent impacts to federal and/or state listed species. The HMMP shall identify long term site management needs, routine monitoring techniques, techniques, and success criteria, and shall determine if the conservation site requires restoration to function as a suitable mitigation site. If restoration is required on the conservation site, the HMMP shall contain the restoration components outlined under the Restoration Plan listed in measure BIO-1(c). The HMMP shall be submitted to the implementing agency for approval.

BIO-1 (f) **Endangered/ Threatened Species Avoidance and Minimization.** The following measures shall be applied to aquatic and terrestrial species, where appropriate. Project sponsors shall select from these measures as appropriate depending on site conditions, the species with potential for occurrence, and the results of the biological resources screening and assessment (measure BIO-1[a]).

- Preconstruction surveys for federal and/or state listed species with potential to occur shall be conducted where suitable habitat is present by a qualified biologist not more than 48 hours prior to the start of construction activities. The survey area shall include the proposed disturbance area and all proposed ingress/egress routes, plus a 100-foot buffer. If any life stage of federal and/or state listed species is found within the survey area, the appropriate measures in the BO or Habitat Conservation Plan(HCP)/Incidental Take Permit (ITP) issued by the USFWS/NMFS (relevant to federal listed species) and/or the ITP issued by the CDFW (relevant to state listed species) shall be implemented; or if such guidance is not in place for the activity, the USFWS, NMFS and/or CDFW shall be consulted to determine the appropriate course of action. The results of the pre-construction surveys shall be submitted to the implementing agency for review and approval prior to start of construction.
- 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 shall have highly visible orange construction fencing.
- All projects occurring within/adjacent to aquatic habitats (including riparian habitats and wetlands) shall be completed between April 1 and October 31, to avoid impacts to sensitive aquatic species.
- All projects occurring within or adjacent to sensitive habitats that may support federally and/or state endangered/threatened species shall have a qualified 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 or as outlined in project permits, said biologist may conduct site inspections at a minimum of once per week to ensure all prescribed avoidance and minimization measures are begin fully implemented.
- No endangered/threatened species shall be captured and relocated without authorization from the CDFW and/or USFWS.
- If pumps are used for dewatering activities, all intakes shall be completely screened with wire mesh not larger than five millimeters to prevent animals from entering the pump system.
- 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. At that point the USFWS, NMFS and/or CDFW shall be consulted

to determine the appropriate course of action, or the appropriate measures implemented in accordance with the BO or HCP/ITP issued by the USFWS (relevant to federal listed species) and/or the ITP issued by the CDFW (relevant to state listed species) and work can then continue as guided by those documents and the agencies as appropriate.

- 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.
- No equipment shall be permitted to enter wetted portions of any affected drainage channel.
- All equipment operating within streambeds (restricted to conditions in which water is not present) 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.
- At the end of each workday, excavations shall be secured with cover, or a ramp shall be provided to prevent wildlife entrapment.
- All trenches, pipes, culverts, or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.

BIO-1 (g) Non-Listed Special Status Animal Species Avoidance and Minimization. Depending on the species identified in the BRA, measures shall be selected from among the following to reduce the potential for impacts to non-listed special-status animal species:

- Preconstruction clearance surveys shall be conducted within 14 days prior to the start of construction (including staging and mobilization). The surveys shall cover the entire disturbance footprint plus a minimum 100-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. A report of the preconstruction survey shall be submitted to the implementing agency for their review and approval prior to the start of construction.
- 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.
- If special-status bat species may be present and impacted by the project, within 30 days of the start of construction a qualified biologist shall conduct 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

bat roosts or colonies are present, the biologist shall evaluate the type of roost to determine the next step.

- If a maternity colony is present, all construction activities shall be postponed within a 250-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed or as recommended by CDFW through consultation. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately.
- If a roost is determined by a qualified biologist to be used by a large number of bats (large hibernaculum), alternative roosts, such as bat boxes if appropriate for the species, shall be designed and installed near the project site. The number and size of alternative roosts installed will depend on the size of the hibernaculum and shall be determined through consultations with the CDFW.
- If other active roosts are located, exclusion devices such as valves, sheeting or flap-style one-way devices that allow bats to exit but not re-enter roosts discourage bats from occupying the site.

BIO-1 (h) **Preconstruction Surveys for Nesting Birds.** For construction activities occurring during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the CFGC, the MBTA, and Bald and Golden Eagle Protection Act shall be conducted by a qualified biologist no more than 14 days prior to vegetation removal activities.

A qualified biologist shall conduct preconstruction surveys for raptors. The survey for the presence of bald and golden eagles, shall cover all areas within of the disturbance footprint plus a one-mile buffer where access can be secured. The survey area for all other nesting bird and raptor species shall include the disturbance footprint plus a 300-foot and 500-foot buffer, respectively.

If active nests (nests with eggs or chicks) are located, the qualified biologist shall establish an appropriate avoidance buffer ranging from 50 to 300 feet based on the species biology and the current and anticipated disturbance levels occurring in vicinity of the nest. The objective of the buffer shall be to reduce disturbance of nesting birds. All buffers shall be marked using high-visibility flagging or fencing, and, unless approved by the qualified biologist, no construction activities shall be allowed within the buffers until the young have fledged from the nest or the nest fails.

For bald or golden eagle nests identified during the preconstruction surveys, an avoidance buffer of up to one mile shall be established on a case-by-case basis in consultation with the USFWS and CDFW. The size of the buffer may be influenced by the existing conditions and disturbance regime, relevant landscape characteristics, and the nature, timing, and duration of the expected disturbance. The buffer shall be established between February 1 and September 15; however, buffers may be relaxed earlier than September 15 if a qualified ornithologist determines that a given nest has failed or that all surviving chicks have fledged, and the nest is no longer in use.

A report of these preconstruction nesting bird surveys and nest monitoring (if applicable) shall be submitted to the implementing agency for review and approval prior to the start of construction.

BIO-1 (i) **Fence and Signpost Restriction.** Any fencing posts or signs installed temporarily or permanently throughout the course of the project shall have the top three post holes covered or filled with screws or bolts to prevent the entrapment of wildlife, specifically the talons of birds of prey. Also, fencing shall incorporate wildlife friendly design elements, such as smooth wires and having a 6-inch or greater gap above grade. Fencing shall also be designed to be wildlife friendly (e.g., smooth top wire, smooth bottom wire at 6 inches above grade, etc.).

BIO-1 (j) **Worker Environmental Awareness Program (WEAP).** Prior to initiation of construction activities (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 that they have attended the WEAP and understand the information presented to them

b. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of SJCOG, and that these mitigation measures have been incorporated into the 2022 RTP/SCS.. The SJCOG Board of Directors further finds that these mitigation measures are partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt them. Compliance with the above mitigation measures would reduce impacts to special-status species and their habitat because the mitigation measures require pre-project surveys and biological monitoring, focused biological surveys, avoidance or minimization of project related disturbance or loss of special-status species, compensation for disturbed or loss of special-status species habitat and coordination with permitting agencies, as required prior to project implementation. However, it cannot be guaranteed that all future project level impacts to special-status species can be mitigated to a less than significant level for all species. Additionally, complete avoidance is the only mitigation for fully protected species, which may not be feasible under some circumstances. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.3-25 through 4.3-29 of the Draft EIR.

2. **Impact BIO-2** Implementation of transportation improvements and the land use scenario envisioned by 2022 RTP/SCS may result in impacts to sensitive habitats, including State or federally protected wetlands. this impact would be significant but mitigable. For agencies utilizing the SJMSCP, this impact would be less than significant.

   a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures for applicable transportation projects that would result in biological resource impacts, and where feasible and necessary based on site-specific considerations. San Joaquin County and incorporated cities in the County should implement these measures, where relevant to land use projects implementing 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

      BIO-2(a) Aquatic Resources Delineation and Impact Avoidance. The implementing agencies shall, or can and should, implement the following measures during CEQA review of projects implementing the proposed 2022 RTP/SCS. If the results of measure BIO-1(a) indicates projects implemented under the proposed 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 an aquatic resources delineation in accordance with the requirement set forth by each agency. The result shall be submitted to the implementing agency, USACE, RWQCB, and/or CDFW, as appropriate, for review and approval, and the project shall be designed to avoid and minimize impacts to jurisdictional areas to the extent feasible. The delineation shall serve as the basis to identify potentially jurisdictional areas to be protected during construction, through implementation of the avoidance and minimization identified in measure BIO-2(f).

      BIO-2(b) Wetlands, Drainages, and Riparian Habitat Restoration. The implementing agencies shall, or can and should, implement the following measures during CEQA review of projects implementing the proposed 2022 RTP/SCS. Unavoidable impacts to jurisdictional wetlands, drainages, and riparian habitat shall be mitigated at an appropriate ratio to fully offset project impacts, as determined by a qualified biologist retained by the implementing agency and shall occur on-site or as close to the impacted habitat as possible. A mitigation and monitoring plan consistent with regulatory agency requirements shall be developed by a qualified biologist and submittal to the regulatory agency overseeing the project for approval. Alternatively, mitigation shall be accomplished through purchase of credits from an approved wetlands mitigation bank.

      BIO-2(c) Landscaping Plan. If landscaping is proposed for a specific project, a qualified biologist/landscape architect retained by the implementing agency shall prepare a landscape plan. 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 Inventory shall not be permitted. Species selected for planting shall be regionally appropriate native species that are known to occur in the adjacent native habitat types.

      BIO-2(d) Sensitive Natural Community Avoidance and Mitigation. If the results of measure BIO-1(a) indicates projects implemented under the proposed 2022 RTP/SCS

would impact sensitive natural communities, the implementing agency shall avoid impacts to sensitive natural communities through final project design modifications if feasible.

If the implementing agency determines that sensitive natural communities cannot be avoided, impacts shall be mitigated on-site or offsite at an appropriate ratio to fully offset project impacts, as determined by a qualified biologist based on any applicable resource agency guidelines. Temporarily impacted areas shall be restored to pre-project conditions. A Restoration Plan shall be developed by a qualified biologist and submitted to the implementing agency.

BIO-2(e) Invasive Weed Prevention and Management Program. Prior to start of construction for each project that occurs within or adjacent to native habitats, an Invasive Weed Prevention and Management Program shall be developed by a qualified biologist retained by the implementing agency to prevent invasion of native habitat by non-native plant species. The plan shall be submitted to the implementing agency for review and approval. A list of target species shall be included, along with measures for early detection and eradication.

The plan, which shall be implemented by the implementing agency, shall also include, but not be limited to, the following measures to prevent the introduction of invasive weed species:

- During construction, limit the use of imported soils for fill. If the use of imported fill material is necessary, the imported material must be obtained from a source that is known to be free of invasive plant species.
- To minimize colonization of disturbed areas and the spread of invasive species, the contractor shall stockpile topsoil and redeposit the stockpiled soil after construction or transport the topsoil to a permitted landfill for disposal.
- All erosion control materials, including straw bales, straw wattles, or mulch used on-site must be free of invasive species seed.
- Exotic and invasive plant species shall be excluded from any erosion control seed mixes and/or landscaping plant palettes associated with the proposed project.
- All disturbed areas shall be hydroseeded with a mix of locally native species upon completion of work in those areas.

BIO-2(f) Wetlands, Drainages, and Riparian Habitat Best Management Practices During Construction. The following best management practices shall be required by the implementing agency for development within or adjacent to wetlands, drainages, or riparian habitat:

- Access routes, staging and construction areas shall be limited to the minimum area necessary to achieve the project goal and minimize impacts to other waters including locating access routes and ancillary construction areas outside of jurisdictional areas.
- To control sedimentation during and after project implementation, appropriate erosion control materials shall be deployed to minimize adverse effects on jurisdictional areas in the vicinity of the project.

- Project activities within the jurisdictional areas should occur during the dry season (typically between June 1 and November 1) in any given year, or as otherwise directed by the regulatory agencies.
- During construction, no litter or construction debris shall be placed within jurisdictional areas. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site.
- Raw cement, concrete, or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic species resulting from project related activities, shall be prevented from contaminating the soil and/or entering wetlands, drainages, or riparian habitat.
- All refueling, maintenance and staging of equipment and vehicles shall occur at least 100 feet from bodies of water and in a location where a potential spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water source). Prior to the onset of work activities, a plan must be in place for prompt and effective response to any accidental spills.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of SJCOG, and that these mitigation measures have been incorporated into the 2022 RTP/SCS.The SJCOG Board of Directors further finds that these mitigation measures are partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt them. Compliance with the above mitigation measures would reduce impacts to sensitive habitats, including sensitive natural communities and wetlands, because the mitigation measures require focused biological surveys, best management practices for avoidance or minimization impacts, compensation for disturbed or loss of sensitive habitats, including sensitive natural communities and wetlands, and coordination with permitting agencies, as required prior to project implementation. However, it cannot be guaranteed that all future project level impacts can be mitigated to a less than significant level for all sensitive habitats. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.3-29 through 4.3-33 of the Draft EIR.

2. Impact BIO-5. Implementation of transportation projects and the land use scenario envisioned by the proposed 2022 RTP/SCS would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Impacts would be significant but mitigable.

a. **Mitigation.** Implementation of Mitigation Measures BIO-1(a) through BIO-3(c) are required.

b. **Findings and Rationale.** The small quantity of low–quality habitat loss associated with implementation of the 2022 RTP/SCS would be considered a less than significant effect

because of the amount of similar and higher value vegetation communities and land cover types within the SJCOG region that are already held in conservation or designated as open space. However, due to the programmatic nature of this analysis, the extent and severity of potential conflicts with the SJMSCP is not known at this time. Therefore, implementation of Mitigation Measures BIO-1(a) through BIO-3(c) should be applied to each future project, as appropriate, that is tiering off from this Program EIR. Adherence to Mitigation Measure BIO-1(a) through BIO-3(c) in addition to individual 2022 RTP/SCS project review by lead agencies would ensure that impacts related to compliance with the SJMSCP remain less than significant and would ensure that projects as they are designed do not result in conflict with the SJMSCP. For agencies utilizing the SJMSCP, this impact would be less than significant through adherence to the regulations incorporated into the Habitat Conservation Plan.

c. **Supportive Evidence.** Please refer to pages 4.3-38 of the Draft EIR.

4.2 Hazards and Hazardous Materials

1. **Impact HAZ-3.** Implementation The 2022 RTP/SCS includes land use patterns and transportation projects that could occur on previously unknown hazardous material sites or sites on the list compiled by Government Code Section 65962.5, and therefore create a significant hazard to the public or environment. This impact would be significant but mitigable.

   a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2022 RTP/SCS program for applicable transportation projects that would result in biological resource impacts, and where feasible and necessary based on site-specific considerations. San Joaquin County and incorporated cities in the County can and should implement these measures where relevant to land use projects implementing 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

      HAZ-3 **Site Remediation.** If an individual project included in the 2022 RTP/SCS is located on or near hazardous materials and/or waste site pursuant to Government Code Section 65962.5, or has the potential for residual hazardous materials and/or waste as a result of location and/or prior uses, the project sponsor shall prepare a Phase I ESA in accordance with the American Society for Testing and Materials' E-1527-05 standard. For work requiring any demolition or renovation, the Phase I ESA shall make recommendations for any hazardous building materials survey work that shall be done. All recommendations included in a Phase I ESA prepared for a site shall be implemented. If a Phase I ESA indicates the presence or likely presence of contamination, the implementing agency shall require a Phase II ESA, and recommendations of the Phase II ESA shall be fully implemented. Examples of typical recommendations provided in Phase I/II ESAs include removal of contaminated soil in accordance with a soil management plan approved by the local environmental health department; covering stockpiles of contaminated soil to prevent fugitive dust emissions; capturing groundwater encountered during construction in a holding tank for additional testing and characterization and disposal based on its

characterization; and development of a health and safety plan for construction workers.
For any project located on or near sites that are not listed and do not have the potential for residual hazardous materials as a result of historic land uses, no action is required unless unknown hazards are discovered during development. In that case, the implementing agency shall discontinue development until DTSC, RWQCB, SJVAPCD, and/or other responsible agency issues a determination, which would likely require a Phase I ESA as part of the assessment.

4.3 Wildfire

1. **Impact W-1.** Proposed transportation improvements and land use projects envisioned by the 2022 RTP/SCS would be located in or near an SRA or very high fire hazard severity zone, and significant risks of loss, injury, or death from wildfires or downstream flooding or landslides would occur. Impacts would be less than significant with mitigation incorporated.
    a. **Mitigation.** Transportation project sponsor agencies can and should implement, the following mitigation measures for applicable transportation projects that would result in wildfire impacts. The County and cities in the SJCOG 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.

        W-1(a) **Wildfire Risk Reduction.** If an individual transportation or land use project included in proposed 2022 RTP/SCS is located within or less than two miles from an SRA or very high fire hazard severity zones, the implementing agency shall, or can and should, 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 the use of fire-resistant vegetation native to Tulare County and/or the local microclimate of the project site and discourage the use of fire-prone species especially nonnative, invasive species.
        - Enforce defensible space regulations to keep overgrown and unmanaged vegetation, accumulations of trash and other flammable material away from structures.
        - Provide public education about wildfire risk, fire prevention measures, and safety procedures and practices to allow for safe evacuation and/or options to shelter-in-place.
        - Require adherence to the local hazard mitigation plan, as well as the local general plan policies and programs aimed at reducing the risk of wildfires through land use compatibility, training, sustainable development, brush management, public outreach, and service standards for fire departments.
        - Ensure sufficient emergency water supply.
        - Encourage the use of fire-resistant vegetation native to Tulare County and/or the local microclimate of the project site and discourage the use of fire-prone species especially non-native, invasive species.

- 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 wildfires during red-flag warnings issued by the National Weather Service for the project site location. Example activities that shall 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.
- Smoking and open fires shall be prohibited at individual transportation or land use projects sites included in proposed 2022 RTP/SCS during construction and operations. A copy of the notification to all contractors regarding prohibiting smoking and burning shall be provided to the County.

W-1(b) **Fire Protection Plan.** Implementing agencies for individual transportation or land use projects included in proposed 2022 RTP/SCS located within or less than two miles from an SRA or very high fire hazard severity zone shall, or can and should, prepare a Fire Protection Plan that meets TCFD requirements. The plan shall contain (but not be limited to) the following provisions:

- All construction equipment shall be equipped with appropriate spark arrestors and carry fire extinguishers.
- A fire watch with appropriate firefighting equipment shall be available at the Project site at all times when welding activities are taking place. Welding shall not occur when sustained winds exceed that set forth by the TCFD unless a TCFD-approved windshield is on site.
- A vegetation management plan shall be prepared to address vegetation clearance around all WTGs and a regularly scheduled brush clearance of vegetation on and adjacent to all access roads, power lines, and other facilities.
- Operational fire water tanks shall be installed prior to construction.
- Provisions for fire/emergency services access if roadway blockage occurs due to large loads during construction and operation
- Cleared, maintained parking areas shall be designated; no parking shall be allowed in non-designated areas.
- The need for and/or use of dedicated repeaters for emergency services.
- Appropriate Hot Work permits (such as cutting and welding permits) shall be obtained from the jurisdictional fire agency.
- Individual transportation or land use projects included in proposed 2022 RTP/SCS shall participate in the Red Flag Warning program with local fire

agencies and the National Weather Service. The Applicant shall stop work during Red Flag conditions to reduce the risk of wildlife ignition.

- Compliance with California PRC sections 4291, 4442, and 4443.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of SJCOGand that these mitigation measures have been incorporated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that these mitigation measures are partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt them. With implementation of mitigation measure WF-1(a) and WF-1(b), the risk of loss of structures and transportation infrastructure and the risk of injury or death due to wildfires would be reduced. These measures would make structures and transportation infrastructure more fire resistant and less vulnerable to loss in the event of a wildfire. These measures would also reduce the potential for construction of proposed 2022 RTP/SCS projects to inadvertently ignite a wildfire.

   However, it is not possible to prevent a significant risk of wildfires or fully protect people and structures from the risks of wildfires in all cases, and it may not be feasible to mitigate impacts of all individual projects envisioned by the 2022 RTP/SCS to less than significant levels. Therefore, this impact would remain significant and unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.16-10 through 4.16-14 of the Draft EIR.

5 Findings for Impacts that are Significant and Unavoidable

The SJCOG Board of Directors, having reviewed and considered the information contained in the Final EIR and the record of proceedings, and pursuant to Public Resources Code Section 21081(a)(3) and CEQA Guidelines Section 15091(a)(3), makes the following Findings with respect to impacts of the project that are significant and unavoidable. The SJCOG Board of Directors finds that the mitigation measures identified in the EIR, that have been required or incorporated into the project, would lessen the following environmental impacts but not to a less than significant level. These Findings are based on the discussion of impacts in the detailed impact analyses in Chapter 4 of the DEIR. **The Findings below are for impacts where implementation of the project may result in the following significant, unavoidable environmental impacts, even with the implementation of mitigation measures.**

5.1 Aesthetics

2. **Impact AES-1.** Proposed transportation improvement projects and land use projects envisioned by the 2022 RTP/SCS would have a substantial adverse effect on scenic vistas and substantially damage scenic resources within a state scenic highway. This would be a significant and unavoidable impact.
    d. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures where applicable for transportation projects implementing the proposed 2022 RTP/SCS that would result in impacts to scenic vistas or scenic resources within highways identified to have high scenic qualities or designated by the State as eligible scenic highways. Cities and the County can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

        AES-1(a) **Tree Protection and Replacement.** The implementing agency for new roadways, extensions and widenings of existing roadways, trails and facility improvement projects shall, or can and should, avoid the removal of existing mature trees to the extent possible consistent with adopted local City and County policies as applicable. The implementing agency of a particular proposed 2022 RTP/SCS project shall replace any trees lost at a minimum 2:1 basis and incorporate them into the landscaping design for the roadway when feasible, or as required by local or County requirements. The implementing agency also shall ensure the continued vitality of replaced trees through periodic maintenance.

        AES-1(b) **Discouragement of Architectural Features that Block Scenic Views.** The implementing agency shall, or can and should, design projects to minimize contrasts in scale and massing between the project and surrounding natural forms and development. Setbacks and acoustical design of adjacent structures shall be preferentially used as mitigation for potential noise impacts arising from increased traffic volumes associated with adjacent land development. 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 shall be complementary in color and texture to surrounding natural features.

e. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of SJCOG, and that this mitigation measure has been incorporated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that these mitigation measures are partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt them. Although identified mitigation would help reduce impacts related to state-designated scenic highway corridors and scenic resources, individual transportation infrastructure projects as well as land use development included in the proposed 2022 RTP/SCS could still result in impacts to scenic vistas and resources. And because the EIR evaluates impacts at the programmatic level, all project circumstances are not foreseeable, and these mitigation measures may not be feasible or effective for some projects. Therefore, given the extent of planned land use development and transportation projects, and the potential for site-specific impacts from those projects, impacts related to the obstruction of scenic vistas and resources, including scenic highways, would be significant and unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

f. **Supportive Evidence** – Please refer to pages 4.1-10 through 4.1-12 of the Draft EIR.

3. **Impact AES-2.** The proposed transportation projects and land use patterns envisioned by the proposed 2022 RTP/SCS would in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site or its surroundings, and in an urbanized area, would conflict with applicable zoning and other regulations governing scenic quality. Impacts would be significant and unavoidable.

   a. **Mitigation** – For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures where applicable for transportation projects implementing the proposed 2022 RTP/SCS that would result in impacts to visual character. Cities and the County can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

      AES-2 **Design Measures for Visual Compatibility.** The implementing agency shall, or can and should, require measures that minimize contrasts in scale and massing between the project and surrounding natural forms and developments. Strategies to achieve this include:

- Siting or designing projects to minimize their intrusion into important viewsheds;
- Avoiding large cuts and fills when the visual environment (natural or urban) would be substantially disrupted;
- Ensuring that re-contouring provides a smooth and gradual transition between modified landforms and existing grade;
- Developing transportation systems to be compatible with the surrounding environments (e.g., colors and materials of construction material; scale of improvements);
- Designing and installing landscaping to add natural elements and visual interest to soften hard edges, as well as to restore natural features along corridors where possible after widening, interchange modifications, re-alignment, or construction of ancillary facilities.; and
- Designing new structures to be compatible in scale, mass, character and architecture with existing structures.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of SJCOG, and that this mitigation measure has been incorporated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that this mitigation measure is partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt it. Implementation of mitigation measures AES-2 would reduce project-specific impacts to the extent feasible. Mitigation Measures AES-1(a) and AES-1(b), discussed above for Impact AES-1, would also reduce impacts associated with visual character. Nevertheless, the alteration of current rural or semi-rural character to a more suburban environment is considered a significant and unavoidable impact because mitigation measures may not be feasible for all projects. Additionally, while these mitigation measures may reduce impacts from urban and infill development, some project-specific impacts may be unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.1-12 through 4.1-14 of the Draft EIR.

4. **Impact AES-3.** Proposed transportation improvement projects and land use projects envisioned by the 2022 RTP/SCS would create new sources of substantial light or glare that would adversely affect day or nighttime views in the area. This would be a significant and unavoidable impact.

   a. **Mitigation** – For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures where applicable for transportation projects implementing the proposed 2022 RTP/SCS that would result in impacts to daytime and nighttime views. Cities and the County can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project specific environmental

documents may adjust these mitigation measures as necessary to respond to site specific conditions.

AES-3(a) **Roadway Lighting.** The implementing shall, or can and should, minimize roadway lighting to the extent possible, consistent with safety and security objectives, 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 back shields, hoods, low intensity lighting, and using as few lights as necessary to achieve the goals of the project.

AES-3(b) **Lighting Design Measures.** As part of planning, design, and engineering for transportation and land use projects, implementing agencies shall, or can and should, ensure that projects proposed near light-sensitive uses avoid substantial spillover lighting. Potential design measures include, but are not limited to, the following:

- Lighting shall consist of cutoff-type fixtures that cast low-angle illumination to minimize incidental spillover of light into adjacent properties and undeveloped open space. Fixtures that project light upward or horizontally shall not be used.
- Lighting shall be directed away from habitat and open space areas adjacent to the project site.
- Light mountings shall be downcast, and the height of the poles minimized to reduce potential for backscatter into the nighttime sky and incidental spillover of light onto adjacent private properties and undeveloped open space. Light poles will be 20 feet high or shorter. Luminary mountings shall have non-glare finishes.
- Exterior lighting features shall be directed downward and shielded in order to confine light to the boundaries of the subject project. Where more intense lighting is necessary for safety purposes, the design shall include landscaping to block light from sensitive land uses, such as residences.

AES-3(c) **Glare Reduction Measures.** Implementing agencies shall, or can and should, minimize and control glare from transportation and land use projects near glare-sensitive uses through the adoption of project design features such as:

- Planting trees along transportation corridors to reduce glare from the sun;
- Creating tree wells in existing sidewalks;
- Adding trees in new curb extensions and traffic circles;
- Adding trees to public parks and greenways;
- Landscaping off-street parking areas, loading areas, and service areas;
- Limiting the use of reflective materials, such as metal;
- Using non-reflective material, such as paint, vegetative screening, matte finish coatings, and masonry;
- Screening parking areas by using vegetation or trees;
- Using low-reflective glass;
- Complying with applicable general plan policies, municipal code regulations, city or local controls related to glare; and

- Tree species planted to comply with this measure shall provide substantial shade cover when mature. Utilities shall be installed underground along these routes wherever feasible to allow trees to grow and provide shade without need for severe pruning.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility of SJCOG, and that these mitigation measures have been incorporated into the 2022 RTP/SCS . The SJCOG Board of Directors further finds that these mitigation measures are partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt them. In the absence of regulations specifically addressing light and glare impacts, the aforementioned mitigation measures would limit the use of reflective building materials and the potential spillage of light both upward and onto adjacent properties from exterior lighting fixtures. However, mitigation measures maybe not be feasible for all projects. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable

c. **Supportive Evidence.** Please refer to pages 4.1-14 through 4.1-16 of the Draft EIR.

5.2 Agriculture and Forestry Resources

1. **Impact AG-1.** Proposed transportation improvements and land use patterns envisioned by the 2022 RTP/SCS could result in the conversion of important farmland to nonagricultural use, and/or conflict with existing zoning for agriculture. This would be a significant and unavoidable impact.

   a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures for applicable transportation projects that would result in impacts to Important Farmland, and where feasible and necessary based on site-specific considerations. San Joaquin County and incorporated cities in the County 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.

      AG-1 **Agricultural Land Impact Avoidance and Minimization.** Project sponsors shall implement measures, where feasible and necessary based on project-and site-specific considerations that include but are not limited to those identified below.

      - Require project relocation or corridor realignment, where feasible, to avoid Important Farmland;
      - Manage project construction to minimize the introduction of invasive species or weeds that may affect agricultural production on agricultural land adjacent to project sites. Managing project construction may include

washing construction equipment before bringing equipment on-site, using certified weed-free straw bales for construction Best Management Practices (BMPs), and other similar measures.

- Provide buffers, berms, setbacks, fencing, or other project design measures to protect surrounding agriculture, and to reduce conflict with farming that could result from implementation of transportation improvements and/or development included as a part of the RTP/SCS;
- Achieve compensatory mitigation in advance of impacts through purchase or creation of mitigation credits or the implementation of mitigation projects through Regional Advance Mitigation Planning, as deemed appropriate by permitting agencies; and/or
- Require acquisition of conservation easements on land in the same jurisdiction, if feasible, and at least equal in quality and size to converted Important Farmland, to offset the loss of Important Farmland.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of SJCOG, and that this mitigation measure has been incorporated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that this mitigation measure is partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt it. Implementation of Mitigation Measure AG-1 would require avoidance, minimization, or compensation for Important Farmland impacts by specific projects included in the proposed 2022 RTP/SCS, thereby reducing the impact of conversion of Important Farmland to non-agriculture use and conflicts with agricultural zoning and Williamson Act contracts. However, the mitigation would not ensure that all future land use and transportation projects could reduce impacts on Important Farmland, lands zoned for agriculture, and lands under Williamson Act contract to a less than significant level. As a result, the aforementioned mitigation would reduce impacts, but impacts would remain significant and unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable

c. **Supportive Evidence.** Please refer to pages 4.6-9 through 4.6-11 of the Draft EIR.

5.3 Air Quality

1. **Impact AQ-2.** Construction of proposed transportation improvements and land use projects envisioned by the 2022 RTP/SCS would result in a cumulatively considerable net increase in criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Impacts would be significant and unavoidable.
   a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation

measures developed for the proposed 2022 RTP/SCS program where applicable for transportation projects that would result in fugitive dust and ozone precursor emissions. Cities and the County can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

AQ-2(a) **Application of SJVAPCD Feasible Mitigation Measures.** For all projects, the implementing agency shall incorporate the most recent SJVAPCD feasible construction mitigation measures and/or technologies for reducing inhalable particles based on analysis of individual sites and project circumstances. Additional and/or modified measures may be adopted by SJVAPCD prior to implementation of individual projects under the proposed 2022 RTP/SCS; therefore, the most current list of feasible mitigation measures at the time of project implementation shall be used. The current SJVAPCD feasible mitigation measures include the following (SJVAPCD 2015b):

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- An owner/operator of any site with 150 or more vehicle trips per day, or 20 or more vehicle trips per day by vehicles with three or more axles shall implement measures to prevent carryout and trackout.
- Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use.

AQ-2(b) **Diesel Equipment Emissions Standards.** The implementing agency shall ensure, to the maximum extent feasible, that diesel construction equipment meeting CARB Tier 4 emission standards for off-road heavy-duty diesel engines is used. If use of Tier 4 equipment is not feasible, diesel construction equipment meeting Tier 3 (or if infeasible, Tier 2) emission standards shall be used. These measures shall be noted on all construction plans, and the implementing agency shall perform periodic site inspections.

AQ-2(c) **Electric Construction Equipment.** The implementing agency shall ensure that to the extent feasible, construction equipment utilizes electricity from power poles rather than temporary diesel power generators and/or gasoline power generators.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of SJCOG, and that these mitigation measures have been incorporated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that these mitigation measures are partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt them. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate. Implementation of Measures AQ-2(a) through AQ-2(c) would reduce short-term construction emissions from individual projects and thus reduce the severity of impacts by requiring best practices for dust and exhaust emissions via readily available, lower-emitting diesel equipment, and/or equipment powered by alternative cleaner fuels (e.g., propane) or electricity, as well as on-road trucks using particulate exhaust filters. To the extent that an implementing agency requires an individual project to implement all feasible mitigation measures described above, individual project impacts may be reduced to a less than significant level. Implementation of Mitigation Measure GHG-1 below would also reduce construction emissions from the proposed 2022 RTP/SCS. However, these mitigation measures may not be feasible or effective for all projects. Therefore, this impact would remain significant and unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable

c. **Supportive Evidence.** Please refer to pages 4.2-21 through 4.2-24 of the Draft EIR.

2. Impact AQ-3. Operation of the proposed transportation improvements and land use projects envisioned by the proposed 2022 RTP/SCS would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Impacts would be significant and unavoidable.

a. **Mitigation.** For land use projects under their jurisdiction,cities and the should implement the following mitigation measure, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

AQ-3 **Long-term Regional Operational Emissions.** Implementing agencies can and should implement long-term operational emissions reduction measures. Such reduction measures include the following:

- Require that all interior and exterior architectural coatings for all developments utilize coatings following SJVAPCD Rule 4601, *Architectural Coatings*.
- Increase building envelope energy efficiency standards in excess of applicable building standards and encourage new development to achieve zero net energy use.

- Install energy-efficient appliances, interior lighting, and building mechanical systems. Encourage installation of solar panels for new residential and commercial development.
- Locate sensitive receptors more than 500 feet of a freeway, 500 feet of urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
- Locate sensitive receptors more than 1,000 feet of a major diesel rail service or railyards. Where adequate buffer cannot be implemented, implement the following:
  - Install air filtration (as part of mechanical ventilation systems or stand-alone air cleaners) to indoor reduce pollution exposure for residents and other sensitive populations in buildings that are close to transportation network improvement projects.
  - Use air filtration devices rates MERV-13 or higher.
- Plant trees and/or vegetation suited to trapping roadway air pollution and/or sound walls between sensitive receptors and the pollution source. The vegetation buffer should be thick, with full coverage from the ground to the top of the canopy Install higher efficacy public street and exterior lighting.
- Use daylight as an integral part of lighting systems in buildings.
- Use passive solar designs to take advantage of solar heating and natural cooling.
- Install light colored “cool” roofs, cool pavements.
- Install solar and tankless hot water heaters.
- Exclude wood-burning fireplaces and stoves.
- Incorporate design measures and infrastructure that promotes safe and efficient use of alternative modes of transportation (e.g., neighborhood electric vehicles, bicycles) pedestrian access, and public transportation use. Such measures may include incorporation of electric vehicle charging stations, bike lanes, bicycle-friendly intersections, and bicycle parking and storage facilities.
- Incorporate design measures that promote ride sharing programs (e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides).

b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of SJCOG, and that this mitigation measure has been incorporated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that this mitigation measure is partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt it. If implementing agencies adopt and require the mitigation described above, emission impacts would be reduced because said measures described above encourage operational energy efficiency in buildings, reduce vehicle trips by promoting alternative modes of transportation, and other emissions reducing

strategies such as incorporating design measures that promote ride sharing programs. Implementation of Mitigation Measures GHG-4(a) and GHG-4(b) below would also reduce operational emissions from the proposed 2022 RTP/SCS. However, since the implementation is not project- or site- specific, reductions cannot be estimated and cannot be guaranteed on a project-by-project basis. Therefore, this impact would remain significant and unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.2-24 through 4.2-27 of the Draft EIR.

3. Impact AQ-5. The transportation improvements and land use projects envisioned by the proposed 2022 RTP/SCS would expose sensitive receptors to substantial TAC concentrations. Impacts would be significant and unavoidable**.**

a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the proposed 2022 RTP/SCS program where applicable for transportation projects that would result in fugitive dust and ozone precursor emissions. Cities and the County can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

AQ-5 **Health Risk Reduction Measures.** Transportation project sponsor agencies shall implement the following measures for projects that could facilitate an increase in vehicle trips:

- During project-specific design and CEQA review, the potential localized particulate (PM_{10} and $PM_{2.5}$) impacts and their health risks shall be evaluated for individual projects. Localized particulate matter concentrations shall be estimated using procedures and guidelines consistent with U.S. EPA 2015's *Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas*. If required based on the project-level hotspot analysis, project-specific mitigation shall be added to the project design concept or scope to ensure that local particulate (PM_{10} and $PM_{2.5}$) emissions would not reach a concentration at any location that would cause estimated cancer risk to exceed the SJVAPCD threshold of 20 in one million. Per the U.S. EPA guidance (2015), potential mitigation measures to be considered may include but shall not be limited to: providing a retrofit program for older higher emitting vehicles, anti-idling requirements or policies, controlling fugitive dust, routing traffic away from populated zones and replacing older buses with cleaner buses. These measures can and should be implemented to reduce localized particulate impacts as needed.

- For projects that do not meet screening criteria, retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with CARB and OEHHA requirements to determine the exposure of nearby residents to TAC concentrations.
- If impacts result in increased risks to sensitive receptors above significance thresholds, plant trees and/or vegetation suited to trapping TACs and/or sound walls between sensitive receptors and the pollution source.

In addition, consistent with the general guidance contained in CARB's *Air Quality and Land Use Handbook* (2005) and Technical Advisory *on Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways* (2017), cities and counties shall incorporate appropriate and feasible measures into project building design for land use projects, including residential, school and other sensitive uses located within 500 feet (or other appropriate distance as determined by the lead agency) of freeways, heavily travelled arterials, railways and other sources of diesel particulate matter, including roadways experiencing significant vehicle delays. The appropriate measures shall include one or more of the following methods, as appliable and as determined by a qualified professional. The implementing agency shall incorporate health risk reduction measures based on an analysis of individual sites and project circumstances. These measures may include:

- Avoid siting new sensitive land uses within 500 feet of a freeway or railway.
- Require development projects for new sensitive land uses to be designed to minimize exposure to roadway-related pollutants to the maximum extent feasible through inclusion of design components including air filtration and physical barriers.
- Do not locate sensitive receptors near the entry and exit points of a distribution center.
- Locate structures and outdoor living areas for sensitive uses as far as possible from the source of emissions. As feasible, locate doors, outdoor living areas and air intake vents primarily on the side of the building away from nearby high-volume roadways or other pollution source. As feasible, incorporate dense, tiered vegetation that regains foliage year-round and has a long life span between the pollution source and the project.
- 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 (HV) system or other air take system in the building, or in each individual residential unit, which meets the efficiency standard of the MERV 13. The HV 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.
  - Use of either HEPA filters or ASHRAE 85 percent supply filters.
  - Completion of ongoing maintenance.

- Retain a qualified HV consultant or Home Energy Rating Systems rater during the design phase of the project to locate the HV 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 four air exchanges per hour of recirculation. Achieve a performance standard of 0.25 air exchanges per hour of unfiltered infiltration if the building is not positively pressurized.
- Require project owners to provide a disclosure statement to occupants and buyers summarizing technical studies that reflect health concerns about exposure to highway/freeway exhaust emissions.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of SJCOG, and that this mitigation measure has been incorporated into the 2022 RTP/SCS.The SJCOG Board of Directors further finds that this mitigation measure is partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt it. Although implementation of the above mitigation would reduce health risks associated with TAC emissions, individual receptors may still be exposed to substantial TAC concentrations that would have significant health risk effects. Because implementation of these mitigation measures is not project- or site- specific, reductions cannot be estimated and cannot be guaranteed on a project-by-project basis Therefore, this impact remains significant and unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.3-30 and 4.3-34 of the Draft EIR.

5.4 Biological Resources

Although, implementation of transportation improvements, and the land use scenario envisioned by the 2022 RTP/SCS may result in impacts to sensitive habitats, including State or federally protected wetlands; this impact is mitigable for agencies utilizing the SJMSCP. For projects that do not or cannot utilize the SJMSCP, implementation of transportation improvements, and the land use scenario envisioned by the 2022 RTP/SCS may result in impacts to sensitive habitats, including State or federally protected wetlands that remain significant unavoidable.

1. **Impact BIO-1.** Implementation of transportation projects and the land use scenario envisioned by the proposed 2022 RTP/SCS would have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status

species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Impacts would be significant and unavoidable.

a. **Mitigation.** For transportation projects under SJCOG jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures for applicable transportation projects that would result in biological impacts. The County and cities in the SJCOG region can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

BIO-1(a) **Biological Resources Screening and Assessment.** The implementing agencies shall, or can and should, implement the following measures during CEQA review of projects implementing the proposed 2022 RTP/SCS. On a project-by-project basis, a preliminary biological resource screening shall be performed 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 an appropriate buffer determined by a qualified biologist and to determine the potential impacts to those resources. The BRA shall evaluate the potential for impacts to all sensitive biological resources including, but not limited to special-status species, nesting birds, wildlife movement, 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 [BIO-1(b) through BIO-1(i)] shall be incorporated, only as applicable, into the BRA and/or the project CEQA document for projects where specific resources are present, or may be present, and may be 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.

BIO-1(b) **Special-Status Plant Species Surveys.** If completion of the project-specific BRA determines that special-status plant species have potential to occur on-site, the implementing agency shall contract a qualified biologist to complete surveys for special-status plants prior to any vegetation removal, grubbing, or other construction activity of each project (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. Whenever practicable, 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 for review. If special-status plant species are identified, mitigation measure BIO-1(c) shall apply.

BIO-1(c) **Special-Status Plant Species Avoidance, Minimization and Mitigation.** If state or federally listed and/or CRPR 1 and 2 species are found during special-status plant surveys [pursuant to mitigation measure BIO-1(b)], then the implementing agency shall redesign the project to avoid impacting these plant species to the maximum extent feasible. Occurrences of these species 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 CRPR 3 and 4 species are found, the qualified biologist contracted to conduct the plant surveys [pursuant to mitigation measure BIO-1(b)] shall evaluate to determine if they meet criteria to be considered special-status, and if so, the same process as identified for CRPR 1 and 2 species shall apply.

If special-status plants species cannot be avoided and would be impacted by a project implemented under the proposed 2022 RTP/SCS, the implementing agency shall require all impacts shall be mitigated at an appropriate ratio to fully offset project impacts, as determined by a qualified biologist for each species as a component of habitat restoration. A restoration plan shall be prepared and submitted to the implementing agency.

BIO-1(d) **Endangered/Threatened Animal Species Habitat Assessment and Protocol Surveys.** If the results of the BRA determine that suitable habitat may be present for federally and/or state endangered or threatened animal species, the implementing agency shall require habitat assessments/surveys. Whenever practicable the surveys shall be completed in accordance with CDFW and/or USFWS/NMFS protocols prior to issuance of any construction permits/project approvals.

Alternatively, in lieu of conducting protocol surveys, the implementing agency may choose to assume presence within the project footprint and proceed with development of appropriate avoidance measures, consultation, and permitting, as applicable.

If the target species is detected during protocol surveys, or protocol surveys are not conducted and presence assumed based on suitable habitat, mitigation measure BIO-1(e) shall apply.

BIO-1(e) **Endangered/Threatened Animal Species Avoidance and Compensatory Mitigation.** If habitat is occupied or presumed occupied by federal and/or state listed species and would be impacted by the project, the implementing agency shall redesign the project in coordination with a qualified biologist to avoid impacting occupied/presumed occupied habitat to the extent feasible. If occupied or presumed occupied habitat cannot be avoided, the implementing agency shall estimate the total acreages for habitat that would be impacted prior to the issuance of construction permits/approvals.

Compensatory mitigation shall be achieved through purchase of credits at a USFWS, NMFS and/or CDFW approved conservation bank if available for the affected species, and/or through providing compensatory mitigation to offset impacts to federal and/or state listed species habitat. Compensatory mitigation shall be provided at an appropriate ratio to fully offset project impacts, as

determined by a qualified biologist for permanent impacts. Compensatory mitigation may be combined/nested with special-status plant species and sensitive community restoration where applicable. Temporary impact areas shall be restored to pre-project conditions.

If on and/or off-site compensatory mitigation sites are identified, the implementing agency shall retain a qualified biologist to prepare a Habitat Mitigation and Monitoring Plan (HMMP) to ensure the success of compensatory mitigation sites that are to be conserved for compensation of permanent impacts to federal and/or state listed species. The HMMP shall identify long term site management needs, routine monitoring techniques, techniques, and success criteria, and shall determine if the conservation site has restoration needs to function as a suitable mitigation site. If restoration is required on the conservation site, the HMMP shall contain the restoration components outlined under the Restoration Plan listed in measure BIO-1(c). The HMMP shall be submitted to the implementing agency.

BIO-1(f) **Endangered/Threatened Animal Species Avoidance and Minimization During Construction.** The implementing agency shall apply the following measures to aquatic and terrestrial species, where appropriate. Implementing agencies shall select from these measures as appropriate depending on site conditions, the species with potential for occurrence and the results of the biological resources screening and assessment (measure BIO-1[a]).

- Preconstruction surveys for federal and/or state listed species with potential to occur shall be conducted where suitable habitat is present by a qualified biologist not more than 48 hours prior to the start of construction activities. The survey area shall include the proposed disturbance area and all proposed ingress/egress routes, plus a 100-foot buffer. If any life stage of federal and/or state listed species is found within the survey area, the qualified biologist shall recommend an appropriate course of action, which may include consultation with USFWS, NMFS and/or CDFW. The results of the pre-construction surveys shall be submitted to the implementing agency for review and approval prior to start of construction.
- 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 shall have highly visible orange construction fencing.
- All projects occurring within/adjacent to aquatic habitats (including riparian habitats and wetlands) shall be completed between April 1 and October 31, to avoid impacts to sensitive aquatic species.
- All projects occurring within or adjacent to sensitive habitats that may support federally and/or state endangered/threatened species shall have a qualified 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/NMFS or as outlined in project permits, said biologist may conduct site inspections at a minimum of once

per week to ensure all prescribed avoidance and minimization measures are begin fully implemented.

- No endangered/threatened species shall be captured and relocated without authorization from the CDFW and/or USFWS.
- If pumps are used for dewatering activities, all intakes shall be completely screened with wire mesh not larger than five millimeters to prevent animals from entering the pump system.
- 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. At that point, a qualified biologist shall recommend an appropriate course of action, which may include consultation with USFWS, NMFS and/or CDFW.
- 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.
- No equipment shall be permitted to enter wetted portions of any affected drainage channel.
- All equipment operating within streambeds (restricted to conditions in which water is not present) 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.
- At the end of each workday, excavations shall be secured with cover or a ramp shall be provided to prevent wildlife entrapment.
- All trenches, pipes, culverts, or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.

BIO-1(g) Non-Listed Special-Status Animal Species Avoidance and Minimization. Depending on the species identified in the BRA, the implementing agency shall select from among the following to reduce the potential for impacts to non-listed special-status animal species:

- Preconstruction clearance surveys shall be conducted within 14 days prior to the start of construction (including staging and mobilization). The surveys shall cover the entire disturbance footprint plus a minimum 100-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. A report of the preconstruction survey shall be submitted to the implementing agency for their review and approval prior to the start of construction.
- 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.

- If special-status bat species may be present and impacted by the project, within 30 days of the start of construction a qualified biologist shall conduct 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 bat roosts or colonies are present, the biologist shall evaluate the type of roost to determine the next step.
  - If a maternity colony is present, all construction activities shall be postponed within a 250-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed or as recommended by CDFW through consultation. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately.
  - If a roost is determined by a qualified biologist to be used by a large number of bats (large hibernaculum), alternative roosts, such as bat boxes if appropriate for the species, shall be designed and installed near the project site. The number and size of alternative roosts installed will depend on the size of the hibernaculum and shall be determined through consultations with the CDFW.
  - If other active roosts are located, exclusion devices such as valves, sheeting or flap-style one-way devices that allow bats to exit but not re-enter roosts discourage bats from occupying the site.

BIO-1(h) **Pre-Construction Surveys for Nesting Birds.** The implementing agencies shall, or can and should, implement the following measures during CEQA review of projects implementing the proposed 2022 RTP/SCS. For construction activities occurring during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the CFGC, the MBTA, and Bald and Golden Eagle Protection Act shall be conducted by a qualified biologist no more than 10 days prior to vegetation removal activities.

A qualified biologist shall conduct preconstruction surveys for raptors. The survey for the presence of bald and golden eagles shall cover all areas within of the disturbance footprint plus a one-mile buffer where access can be secured. The survey area for all other nesting bird and raptor species shall include the disturbance footprint plus a 300-foot and 500-foot buffer, respectively.

If active nests (nests with eggs or chicks) are located, the qualified biologist shall establish an appropriate avoidance buffer based on the species biology and the current and anticipated disturbance levels occurring in vicinity of the nest. All buffers shall be marked using high visibility flagging or fencing, and, unless approved by the qualified biologist, no construction activities shall be allowed within the buffers until the qualified biologist has verified that young have fledged from the nest, or the nest fails.

For bald or golden eagle nests identified during the preconstruction surveys, an avoidance buffer of up to one mile shall be established on a case-by-case basis in consultation with the USFWS and CDFW. The size of the buffer may be influenced by the existing conditions and disturbance regime, relevant landscape characteristics, and the nature, timing, and duration of the expected

disturbance. The buffer shall be established between February 1 and September 15; however, buffers may be relaxed earlier than September 15 if a qualified ornithologist determines that a given nest has failed or that all surviving chicks have fledged, and the nest is no longer in use.

A report of these preconstruction nesting bird surveys and nest monitoring (if applicable) shall be submitted to the implementing agency for review and approval prior to the start of construction.

BIO-1(i) **Fence and Signpost Restriction.** Any fencing posts or signs installed temporarily or permanently throughout the course of the project shall have the top three post holes covered or filled with screws or bolts to prevent the entrapment of wildlife, specifically the talons of birds of prey. Also, fencing shall incorporate wildlife friendly design elements, such as smooth wires and having a 6-inch or greater gap above grade. Fencing shall also be designed to be wildlife friendly (e.g., smooth top wire, smooth bottom wire at 6 inches above grade, etc.).

BIO-1(i) **Worker Environmental Awareness Program (WEAP).** The implementing agencies shall, or can and should, implement the following measures during CEQA review of projects implementing the proposed 2022 RTP/SCS. Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend WEAP training, conducted by a qualified biologist retained by the implementing agency, to aid workers in recognizing special-status resources and review of the limits of construction and mitigation measures required. 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 that they have attended the WEAP and understand the information presented to them.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of SJCOG, and that these mitigation measures have been incorporated into the 2022 RTP/SCS.. The SJCOG Board of Directors further finds that these mitigation measures are partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt them. Compliance with the above mitigation measures would reduce impacts to special-status species and their habitat because the mitigation measures require pre-project surveys and biological monitoring, focused biological surveys, avoidance or minimization of project related disturbance or loss of special-status species, compensation for disturbed or loss of special-status species habitat and coordination with permitting agencies, as required prior to project implementation. However, it cannot be guaranteed that all future project level impacts to special-status species can be mitigated to a less than significant level for all species. Additionally, complete avoidance is the only mitigation for fully protected species, which may not be feasible under some circumstances. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR

infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.4-25 through 4.4-32 of the Draft EIR.

2. **Impact BIO-2.** Implementation of transportation improvements and the land use scenario envisioned by the 2022 RTP/SCS would result in substantial adverse impacts on sensitive habitats, including sensitive natural communities, and state and federally protected wetlands. This impact would be significant and unavoidable.

   d. **Mitigation.** For transportation projects under SJCOG jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures for applicable transportation projects identified in Table 4.4-2. The County and cities in the SJCOG region can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

      BIO-2(a) **Aquatic Resources Delineation and Impact Avoidance.** The implementing agencies shall, or can and should, implement the following measures during CEQA review of projects implementing the proposed 2022 RTP/SCS. If the results of measure BIO-1(a) indicates projects implemented under the proposed 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 an aquatic resources delineation in accordance with the requirement set forth by each agency. The result shall be submitted to the implementing agency, USACE, RWQCB, and/or CDFW, as appropriate, for review and approval, and the project shall be designed to avoid and minimize impacts to jurisdictional areas to the extent feasible. The delineation shall serve as the basis to identify potentially jurisdictional areas to be protected during construction, through implementation of the avoidance and minimization identified in measure BIO-2(f).

      BIO-2(b) **Wetlands, Drainages, and Riparian Habitat Restoration.** The implementing agencies shall, or can and should, implement the following measures during CEQA review of projects implementing the proposed 2022 RTP/SCS. Unavoidable impacts to jurisdictional wetlands, drainages, and riparian habitat shall be mitigated at an appropriate ratio to fully offset project impacts, as determined by a qualified biologist retained by the implementing agency and shall occur on-site or as close to the impacted habitat as possible. A mitigation and monitoring plan consistent with regulatory agency requirements shall be developed by a qualified biologist and submittal to the regulatory agency overseeing the project for approval. Alternatively, mitigation shall be accomplished through purchase of credits from an approved wetlands mitigation bank.

      BIO-2(c) **Landscaping Plan.** If landscaping is proposed for a specific project, a qualified biologist/landscape architect retained by the implementing agency shall prepare a landscape plan. 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 Inventory shall not be permitted. Species selected for planting shall be regionally appropriate native species that are known to occur in the adjacent native habitat types.

BIO-2(d) **Sensitive Natural Community Avoidance and Mitigation.** If the results of measure BIO-1(a) indicates projects implemented under the proposed 2022 RTP/SCS would impact sensitive natural communities, the implementing agency shall avoid impacts to sensitive natural communities through final project design modifications if feasible.

If the implementing agency determines that sensitive natural communities cannot be avoided, impacts shall be mitigated on-site or offsite at an appropriate ratio to fully offset project impacts, as determined by a qualified biologist based on any applicable resource agency guidelines. Temporarily impacted areas shall be restored to pre-project conditions. A Restoration Plan shall be developed by a qualified biologist and submitted to the implementing agency.

BIO-2(e) **Invasive Weed Prevention and Management Program.** Prior to start of construction for each project that occurs within or adjacent to native habitats, an Invasive Weed Prevention and Management Program shall be developed by a qualified biologist retained by the implementing agency to prevent invasion of native habitat by non-native plant species. The plan shall be submitted to the implementing agency for review and approval. A list of target species shall be included, along with measures for early detection and eradication.

The plan, which shall be implemented by the implementing agency, shall also include, but not be limited to, the following measures to prevent the introduction of invasive weed species:

- During construction, limit the use of imported soils for fill. If the use of imported fill material is necessary, the imported material must be obtained from a source that is known to be free of invasive plant species.
- To minimize colonization of disturbed areas and the spread of invasive species, the contractor shall stockpile topsoil and redeposit the stockpiled soil after construction or transport the topsoil to a permitted landfill for disposal.
- All erosion control materials, including straw bales, straw wattles, or mulch used on-site must be free of invasive species seed.
- Exotic and invasive plant species shall be excluded from any erosion control seed mixes and/or landscaping plant palettes associated with the proposed project
- All disturbed areas shall be hydroseeded with a mix of locally native species upon completion of work in those areas.

BIO-2(f) **Wetlands, Drainages, and Riparian Habitat Best Management Practices During Construction.** The following best management practices shall be required by the implementing agency for development within or adjacent to wetlands, drainages, or riparian habitat:

- Access routes, staging and construction areas shall be limited to the minimum area necessary to achieve the project goal and minimize impacts

to other waters including locating access routes and ancillary construction areas outside of jurisdictional areas.

- To control sedimentation during and after project implementation, appropriate erosion control materials shall be deployed to minimize adverse effects on jurisdictional areas in the vicinity of the project.
- Project activities within the jurisdictional areas should occur during the dry season (typically between June 1 and November 1) in any given year, or as otherwise directed by the regulatory agencies.
- During construction, no litter or construction debris shall be placed within jurisdictional areas. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site.
- Raw cement, concrete, or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic species resulting from project related activities, shall be prevented from contaminating the soil and/or entering wetlands, drainages, or riparian habitat.
- All refueling, maintenance and staging of equipment and vehicles shall occur at least 100 feet from bodies of water and in a location where a potential spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water source). Prior to the onset of work activities, a plan must be in place for prompt and effective response to any accidental spills.

e. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of SJCOG, and that these mitigation measures have been incorporated into the 2022 RTP/SCS.The SJCOG Board of Directors further finds that these mitigation measures are partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt them. Compliance with the above mitigation measures would reduce impacts to sensitive habitats, including sensitive natural communities and wetlands, because the mitigation measures require focused biological surveys, best management practices for avoidance or minimization impacts, compensation for disturbed or loss of sensitive habitats, including sensitive natural communities and wetlands, and coordination with permitting agencies, as required prior to project implementation. However, it cannot be guaranteed that all future project level impacts can be mitigated to a less than significant level for all sensitive habitats. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

f. **Supportive Evidence.** Please refer to pages 4.3-29 through 4.3-33 of the Draft EIR.

3. **Impact BIO-3.** Implementation of transportation improvements and the land use scenario envisioned by 2022 RTP/SCS may substantially interfere with wildlife movement, including fish migration, and/or impede the use of native wildlife nursery sites. This impact would be Significant and Unavoidable.
   a. **Mitigation** – For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures for applicable transportation projects that would result in biological resource impacts, and where feasible and necessary based on site-specific considerations. These measures in addition to Mitigation Measure BIO-1(i) under Impact BIO-1 to incorporate wildlife friendly design elements, would apply to any transportation projects under the 2022 RTP/SCS that would result in impacts to wildlife movement. San Joaquin County and incorporated cities in the County should implement these measures where relevant to land use projects implementing 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

      BIO-3(a) **Project Design for Wildlife Connectivity**. All projects including long segments of fencing and lighting shall be designed to minimize impacts to wildlife. Fencing or other project components shall not block wildlife movement through riparian or other natural habitat. Where fencing or other project components is required for public safety concerns, these project components shall be designed 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;
      - 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, or the fence may be installed with the bottom at least 16 inches above the ground level;
      - If fencing or other project components 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
      - Lighting installed as part of any project shall be designed to be minimally disruptive to wildlife (see mitigation measure AES-3(a) Roadway Lighting for lighting requirements).

      BIO-3(b) **Maintain Connectivity in Drainages.** No permanent structures shall be placed within any drainage or river that would impede wildlife movement (i.e., no hardened caps or other structures in the stream channel perpendicular to stream flow be left exposed or at depth with moderate to high risk for exposure as a result of natural bed scour during high flow events and thereby potentially create impediments to passage).

      In addition, upon completion of construction within any drainage, areas of stream channel and banks that are temporarily impacted shall be returned to

pre-construction contours and in a condition that allows for unimpeded passage through the area once the work has been complete.

If water is to be diverted around work sites, a diversion plan shall be submitted to the implementing agency for review and approval prior to issuance of project construction permits/approvals. The diversion shall be designed in a way as to not impede movement while the diversion is in place.

BIO-3(c) Construction Best Management Practices to Minimize Disruption to Wildlife. The following construction best management practices shall be incorporated by the implementing agency into all grading and construction plans to minimize temporary disruption of wildlife, which could hinder wildlife movement:

- Designation of a 20 mile per hour speed limit in all construction areas.
- Daily construction work schedules shall be limited to daylight hours only.
- Mufflers shall be used on all construction equipment and vehicles shall be in good operating condition.
- 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.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of SJCOG, and that these mitigation measures have been incorporated into the 2022 RTP/SCS.The SJCOG Board of Directors further finds that these mitigation measures are partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt them. Compliance with the above mitigation measures would reduce impacts to wildlife movement by requiring projects to be designed in a way that maintains connectivity, and by requiring construction best management practices. However, it cannot be guaranteed that movement of terrestrial species will not be impeded due to the large scale of the proposed 2022 RTP/SCS and the multiple projects that would implement it. Itcannot be guaranteed that all future project level wildlife movement impacts can be mitigated to a less than significant level. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.4-33 through 4.3-36 of the Draft EIR.

5.5 Cultural Resources

1. **Impact CR-1.** Transportation improvement projects and the land use scenario envisioned by the proposed 2022 RTP/SCS would cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5. This impact would be significant and unavoidable.
   a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measure for applicable transportation projects that would result in cultural resource impacts, and where feasible and necessary based on site-specific considerations. San Joaquin County and incorporated cities in the County 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.

      CR-1 **Built Environment Historical Resources.** Prior to individual project permit issuance, the implementing agency of a 2022 RTP/SCS project involving a building or structure over 45 years of age shall prepare a map defining the project area. This map shall indicate the areas of disturbance associated with construction and operation of the facility and will help in determining whether known and potential historical resources are located within the project area. If a structure greater than 45 years in age is within the identified impact zone, a survey and evaluation of the structure(s) to determine their eligibility for recognition under State, federal, or local historic resource designation criteria shall be conducted. The evaluation shall be prepared by an architectural historian or historical architect meeting the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, Professional Qualification Standards (PQS) as defined in 36 CFR Part 61. All buildings and structures 45 years of age or older within the project area shall be evaluated in their historic context and documented in a report meeting the State Office of Historic Preservation guidelines. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. The report shall be submitted to the implementing agency for review and concurrence.

      If historical resources are identified within the project area of a proposed development, efforts shall be made to the extent feasible to ensure that impacts are mitigated. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place). In conjunction with any development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the implementing agency for review.

      To the greatest extent possible the relocation, rehabilitation, or alteration of the resource shall be consistent with the *Secretary of the Interior's Standards for the Treatments of Historic Properties* (Standards). In accordance with CEQA, a project that has been determined to conform with the Standards generally would not cause a significant adverse direct or indirect impact to historical resources (14 CCR § 15126.4(b)(1)). Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the

PQS. In conjunction with any development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the implementing agency for review and concurrence.

If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. Mitigation measures may include documentation of the historical resource in the form of a Historic American Building Survey-Like report. The report shall comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation and shall generally follow the HABS Level III requirements, including digital photographic recordation, detailed historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the PQS and submitted to the implementing agency prior to issuance of any permits for demolition or alteration of the historical resource. Copies of the report shall be provided to a local library and/or other appropriate repositories.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of SJCOG which as CEQA responsible agencies for the 2022 RTP/SCS, will adopt it. The SJCOG Board of Directors further find that this mitigation measure is partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt it. Redevelopment or demolition that may be required to implement transportation improvements or land use projects may result in the permanent loss or damage to historic structures. While implementation of Mitigation Measure CR-1 would reduce impacts to the extent feasible, some project-specific impacts may be unavoidable. Therefore, this impact is significant and unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.4-19 through 4.4-21 of the Draft EIR.

2. **Impact CR-2.** Construction activity associated with transportation improvement projects and the land use scenario envisioned by the proposed 2022 RTP/SCS may cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. Impacts to archaeological resources would be significant and unavoidable.

   a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures for applicable transportation projects that would result in cultural resource impacts, and where feasible and necessary based on site-specific considerations. San Joaquin County and incorporated cities in the County 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.

CR-2(a) **Archaeological Resources Impact Minimization.** Before construction activities, implementing agencies shall retain a qualified archaeologist to conduct a record search at the Central California Information Center to determine whether the project area has been previously surveyed and whether resources were identified. When recommended by the Information Center, implementing agencies shall retain a qualified archaeologist to conduct archaeological surveys before construction activities. Implementing agencies shall, or can and should, follow recommendations identified in the survey, which may include, but would not be limited to: subsurface testing, designing and implementing a Worker Environmental Awareness Program (WEAP), construction monitoring by a qualified archaeologist, or avoidance of sites and preservation in place, and/or data recovery if avoidance is not feasible. Recommended mitigation measures shall be consistent with CEQA Guidelines Section 15126.4(b)(3) recommendations and may include but not be limited to preservation in place and/or data recovery. All cultural resources work shall follow accepted professional standards in recording any find including submittal of standard DPR Primary Record forms (Form DPR 523) and location information to the appropriate California Historical Resources Information System office for the project area.

CR-2(b) **Unanticipated Discoveries During Construction.** During construction activities, implementing agencies shall, or can and should, implement the following measures. If evidence of any prehistoric or historic-era subsurface archaeological features, deposits or tribal cultural resources are discovered during construction-related earthmoving activities (e.g., ceramic shard, trash scatters, lithic scatters), all ground-disturbing activity proximate to the discovery shall be halted until a qualified archaeologist (36 CFR Section 61) can assess the significance of the find. If the find is a prehistoric archaeological site, the appropriate Native American group shall be notified. If the archaeologist determines that the find does not meet the CRHR standards of significance for cultural resources, construction may proceed. If the archaeologist determines that further information is needed to evaluate significance, a testing plan shall be prepared and implemented. If the find is determined to be significant by the qualified archaeologist (i.e., because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist shall work with the implementing agency to avoid disturbance to the resources, and if complete avoidance is not feasible in light of project design, economics, logistics and other factors, shall recommend additional measures such as the preparation and implementation of a data recovery plan. All cultural resources work shall follow accepted professional standards in recording any find including submittal of standard DPR Primary Record forms (Form DPR 523) and location information to the appropriate California Historical Resources Information System office for the project area. If the find is a prehistoric archaeological site, the culturally affiliated California Native American tribe shall be notified and afforded the opportunity to monitor mitigative treatment.

During evaluation or mitigative treatment, ground disturbance and construction work could continue in other parts of the project area that are distant enough from the find not to impact it, as determined by the qualified archaeologist.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of SJCOG, and that these mitigation measures have been incorporated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that these mitigation measuresare partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt them. Implementation of Mitigation Measures CR-2(a) and CR-2(b) would reduce potential impacts to archaeological resources to the extent feasible, but due to project-specific circumstances, some project-specific impacts may be unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.4-21 through 4.4-23 of the Draft EIR.

5.6 Geology and Soils

1. Impact GEO-5. Implementation of proposed transportation improvements and the land use scenario envisioned by the proposed 2022 RTP/SCS would directly or indirectly destroy a unique paleontological resource or site or unique geological feature. Impacts to paleontological resources would be significant and unavoidable.

a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the proposed 2022 RTP/SCS where applicable for transportation projects that would result in impacts to paleontological resources. Cities and the County can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

GEO-5 **Paleontological Resources Impact Minimization.** The implementing agency of a proposed 2022 RTP/SCS project involving ground disturbing activities (including grading, trenching, foundation work and other excavations) shall, or can and should, retain a qualified paleontologist, defined as a paleontologist who meets the Society of Vertebrate Paleontology (SVP) standards for Qualified Professional Paleontologist (SVP 2010), to conduct a Paleontological Resources Assessment (PRA). The PRA shall determine the age and paleontological sensitivity of geologic formations underlying the proposed disturbance area, consistent with SVP Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP 2010) guidelines for categorizing paleontological sensitivity of geologic units within a project area. If underlying formations are found to have a high potential (sensitivity) for

paleontological resources and/or could be considered a unique geologic feature, the following measures shall apply:

- **Avoidance.** Avoid routes and project designs that would permanently alter unique paleontological and unique geological features. If avoidance practices cannot be implemented, the following measures shall apply.
- **Retention of a Qualified Paleontologist.** A Qualified Paleontologist shall be retained to create a Paleontological Resources Monitoring and Mitigation Program (PRMMP) to direct all mitigation measures related to paleontological resources. The Qualified Paleontologist shall meet the qualifications for a Qualified Professional Paleontologist, which is defined by the SVP as an individual, preferably with an M.S. or Ph.D. in paleontology or geology, who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for a least two years (SVP 2010).
- **Paleontological Worker Environmental Awareness Program (WEAP).** Prior to the start of ground disturbance activity, construction personnel shall be informed on the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff.
- **Paleontological Monitoring.** Paleontological monitoring shall be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources and meets the minimum standards of the SVP (2010) for a Paleontological Resources Monitor. The duration and timing of the monitoring will be determined by the Qualified Paleontologist based on the observation of the geologic setting from initial ground disturbance. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions once the full depth of excavations has been reached, they may recommend that monitoring be reduced to periodic spot-checking or ceased entirely. Monitoring shall be reinstated if any new ground disturbances are required, and reduction or suspension shall be reconsidered by the Qualified Paleontologist at that time. In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Paleontologist shall complete the following measures to mitigate impacts to significant fossil resources:
  - **Fossil Salvage**. If significant fossils are discovered, the implementing agency shall be notified immediately, and the qualified paleontologist (or paleontological monitor) shall recover them. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case, the paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner.

- **Preparation and Curation of Recovered Fossils**. Once salvaged, fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection, such as the Natural History Museum of Los Angeles County, along with all pertinent field notes, photos, data, and maps.

- **Final Paleontological Resources Mitigation and Monitoring Report**. Upon completion of ground disturbing activity (and curation of fossils, if necessary) the Qualified Paleontologist shall prepare a final mitigation and monitoring report outlining the results of the PRMMP. The report shall include discussion of the location, duration and methods of the monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils, and where fossils were curated. The report shall be submitted to the implementing agency. If the monitoring efforts recovered fossils, then a copy of the report shall also be submitted to the designated museum repository, such as the Natural History Museum of Los Angeles County.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of SJCOG, and that this mitigation measure has been incorporated into the 2022 RTP/SCSThe SJCOG Board of Directors further finds that this mitigation measure is within the responsibility and jurisdiction of cities and the County, which can and should adopt it. Implementation of the above mitigation measure would reduce impacts to paleontological resources and unique geologic features by requiring a Paleontological Resources Assessment for any projects under the proposed 2022 RTP/SCS that may impact sensitive paleontological resources, paleontological monitoring, and mitigation measures if significant fossil resources are discovered. While implementation of Mitigation Measure GEO-5 would reduce impacts to the extent feasible, some project-specific impacts may be unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.8-21 through 4.8-24 of the Draft EIR.

5.7 Greenhouse Gas Emissions and Climate Change

1. Impact GHG-1. Construction of the transportation improvements and land use projects envisioned by the proposed 2022 RTP/SCS would generate GHG emissions that may have a significant impact on the environment. Impacts would be significant and unavoidable.

a. **Mitigation.** For all transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the proposed 2022 RTP/SCS where applicable for transportation projects generating construction-related GHG emissions. Cities and the

County can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

GHG-1 **Construction GHG Reduction Measures.** The project sponsor shall incorporate the most recent GHG emission reduction measures for off-road construction vehicles during construction. The measures shall be noted on all construction plans, and the implementing agency shall perform periodic site inspections. Current GHG-reducing measures include the following:

- Use of diesel construction equipment meeting CARB's Tier 4 certified engines wherever feasible for off-road heavy-duty diesel engines and comply with the State Off-Road Regulation. Where the use of Tier 4 engines is not feasible, Tier 3 certified engines shall be used; where the use of Tier 3 engines are not feasible, Tier 2 certified engines shall be used;
- Use of on-road heavy-duty trucks that meet CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
- Minimizing idling time (e.g., five-minute maximum). Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the five-minute idling limit;
- Use of electric-powered equipment in place of diesel-powered equipment when feasible;
- Use of alternatively fueled or catalyst-equipped diesel construction equipment when feasible, to the extent electric powered equipment is not feasible;
- Substitute gasoline-powered in place of diesel-powered equipment, when neither electric-powered equipment or alternatively fueled or catalyst-equipped diesel equipment is feasible; and
- Incentives that construction workers carpool, and/or use electric vehicles to commute to and from the project site.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of SJCOG, and that this mitigation measure has been incorporated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that this mitigation measure is partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt it. Implementation of Mitigation Measure GHG-1 would reduce short-term construction emissions from individual projects and thus reduce the severity of impacts by requiring best practices for exhaust emissions via readily available, lower-emitting diesel equipment, and/or equipment powered by alternative cleaner fuels (e.g., propane) or electricity, as well as on-road trucks using particulate exhaust filters. Implementation of Mitigation Measure GHG-1 would reduce short-term construction emissions from individual projects and thus reduce the severity of impacts by requiring best practices for exhaust emissions via readily available, lower-emitting diesel equipment, and/or equipment powered by alternative cleaner fuels (e.g., propane) or electricity, as well as on-road trucks using particulate exhaust filters. Implementation of Mitigation Measures AQ-2(b) and AQ-2(c) above would also reduce

GHG emissions from the proposed 2022 RTP/SCS. However, this mitigation measure may not be feasible or effective for all projects. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable. .

c. **Supportive Evidence.** Please refer to pages 4.9-15 and 4.9-17 of the Draft EIR.

2. **Impact GHG-2.** Proposed transportation improvements and land use projects envisioned by the proposed 2022 RTP/SCS would result in a net increase in GHG emissions by 2046 compared to the existing baseline conditions and would therefore have a significant impact on the environment. Impacts would be significant and unavoidable.

   a. **Mitigation.** Cities and the County can and should implement the following mitigation measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

      GHG-2 Land Use Project Energy Consumption and Water Use Reduction Measures. For land use projects under their jurisdiction, cities and the County can and should implement measures to reduce energy consumption, water use, solid waste generation, and VMT, all of which contribute to GHG emissions. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions. These measures include, but are not limited to:

      - Require new residential and commercial construction to install solar energy systems or be solar-ready
      - Require new residential and commercial development to install low flow water fixtures
      - Require new residential and commercial development to install water-efficient drought-tolerant landscaping, including the use of compost and mulch
      - Require new development to exceed the applicable Title 24 energy-efficiency requirements
      - Require new development to be fully electric
      - Require new residential and commercial development to offer information on recycling, composting, and disposal of household hazardous waste and e-waste
      - Require new development to implement circulation design elements in parking lots for no-residential uses to reduce vehicle queuing and improve the pedestrian environment

   b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt it. If

implementing agencies adopt and require the mitigation described above, impacts would be reduced because energy, water use, solid waste generation, and VMT related GHG emissions from land use projects would be reduced. However, implementation of project-level GHG-reducing measures may not be feasible and cannot be guaranteed on a project-by-project basis. Therefore, this impact would remain significant and unavoidable. No additional feasible mitigation measures are available that would ensure no net increase in GHG emissions compared to existing baseline conditions. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.9-17 through 4.9-19 of the Draft EIR.

3. **Impact GHG-4.** Implementation of the proposed 2022 RTP/SCS would conflict with the State's ability to achieve SB 32, EOs S-3-05 and B-55-18, and applicable local GHG reduction plan targets and goals. Impacts would be significant and unavoidable.

   a. **Mitigation.** For all transportation projects under their jurisdiction, implementing agencies shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the proposed 2022 RTP/SCS where applicable for transportation projects generating construction GHG emissions. The County of San Joaquin and cities in the SJCOG region can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

   Implementation of Mitigation Measure GHG-2 would also reduce GHG emission from land use projects. Implementation of Mitigation Measures T-1(a) and T-1(b) in Section 4.14, *Transportation*, would further reduce GHG emissions from the proposed 2022 RTP/SCS.

   GHG-4 **Transportation-Related GHG Reduction Measures.** The implementing agency shall incorporate the most recent GHG emission reduction measures and/or technologies for reducing VMT and associated transportation related GHG emissions. Current GHG-reducing measures include the following:

   - Installation of electric vehicle charging stations beyond those required by State and local codes
   - Utilization of electric vehicles and/or alternatively fueled vehicles in company fleet
   - Provision of dedicated parking for carpools, vanpool, and clean air vehicles
   - Provision of vanpool and/or shuttle service for employees
   - Implementation of reduced parking minimum requirements
   - Implementation of maximum parking limits
   - Provision of bicycle parking facilities beyond those required by State and local codes

- Provision of a bicycle-share program
- Expansion of bicycle routes/lanes along the project site frontage
- Provision of new or improved transit amenities (e.g., covered turnouts, bicycle racks, covered benches, signage, lighting) if project site is located along an existing transit route
- Expansion of existing transit routes
- Provision of transit subsidies
- Expansion of sidewalk infrastructure along the project site frontage
- Provision of safe, pedestrian-friendly, and interconnected sidewalks and streetscapes
- Provision of employee lockers and showers
- Provision of on-site services that reduce the need for off-site travel (e.g., childcare facilities, automatic teller machines, postal machines, food services)
- Provision of alternative work schedule options, such as telework or reduced schedule (e.g., 9/80 or 10/40 schedules), for employees
- Implementation of transportation demand management programs to educate and incentivize residents and/or employees to use transit, smart commute, and alternative transportation options

b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of SJCOG, and that this measure has been incorproated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that this mitigation measure is partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt it. If implementing agencies adopt and require the mitigation described above, impacts would be reduced because transportation related GHG emissions from transportation and land use projects would be reduced. However, implementation of project-level GHG-reducing measures may not be feasible and cannot be guaranteed on a project-by-project basis. Additionally, even with implementation of the additional Mitigation Meaures GHG-, T-2(a) and T-2(b), it is speculative at this time to forecast whether project-level GHG emission reductions would be sufficient to achieve a countywide reduction in GHG emissions of 40 percent below 1990 levels by 2030..No additional feasible mitigation measures are available that would reduce emissions to trajectories consistent with SB 32, EO S-3-05, and EO B-55-18 GHG reduction targets and goals. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.9-21 through 4.9-24 of the Draft EIR.

5.8 Hazards and Hazardous Materials

1. **Impact HAZ-3.** The proposed 2022 RTP/SCS includes transportation improvement projects and land use scenario projects that could be located on sites on the list of hazardous material sites compiled by Government Code Section 65962.5, and therefore create a significant hazard to the public or environment. This impact would be significant and unavoidable.
   a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures where applicable for transportation projects that would result in impacts that would potentially be located in areas with existing contamination. The County and cities in the SJCOG region can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

      HAZ-3 **Site Remediation.** If an individual project included in the proposed 2022 RTP/SCS is located on or near a hazardous materials and/or waste site compiled by Government Code Section 65962.5, the implementing agency shall prepare a Phase I ESA in accordance with the American Society for Testing and Materials' E-1527-05 standard. For work requiring any demolition or renovation, the Phase I ESA shall make recommendations for any hazardous building materials survey work that shall be done. All recommendations included in a Phase I ESA prepared for a site shall be implemented. If a Phase I ESA indicates the presence or likely presence of contamination, the implementing agency shall require a Phase II ESA, and recommendations of the Phase II ESA shall be fully implemented. Examples of typical recommendations provided in Phase I/II ESAs include removal of contaminated soil in accordance with a soil management plan approved by the local environmental health department; covering stockpiles of contaminated soil to prevent fugitive dust emissions; capturing groundwater encountered during construction in a holding tank for additional testing and characterization and disposal based on its characterization; and development of a health and safety plan for construction workers.

   b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of SJCOG, and that this mitigation measure has been incorporated into the 2022 RTP/SCS. which as CEQA responsible agencies for the 2022 RTP/SCS, will adopt it. The SJCOG Board of Directors further finds that this mitigation measure is partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt it. Implementation of Mitigation Measure HAZ-3 would reduce site-related hazardous materials impacts because project sites with hazardous material contamination on the list compiled by Government Code Section 65962.5 would be identified prior to commencement of project construction. Additionally, prior to commencement of construction, measures to remediate contamination, such as containment and disposal of contaminated soil pursuant to federal and state regulations would be required. However, it cannot be guaranteed that all future project-level impacts can be mitigated to a less than significant level. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce

this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.10-22 through 4.10-23 of the Draft EIR.

5.9 Hydrology and Water Quality

1. **Impact HYD-2.** Implementation of proposed transportation and land use projects envisioned in the proposed 2022 RTP/SCS would substantially decrease groundwater supplies. and interfere with groundwater recharge such that it may impede sustainable groundwater management of the basins. Impacts would be significant and unavoidable.

   a. **Mitigation.** Transportation project sponsor agencies can and should implement the following mitigation measures for applicable transportation projects. The County and cities in the SJCOG region can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

      HYD-2(a) **Construction Dust Suppression Water Supply.** For all proposed 2022 RTP/SCS projects, where feasible, implementing agencies shall use reclaimed and/or recycled water for dust suppression during construction activities. This includes use of such reclaimed water in water trucks utilized for project construction occurring outside developed areas and away from water infrastructure which would otherwise provide such reclaimed water. This measure shall be noted on construction plans and shall be spot checked by the local jurisdiction.

      HYD-2(b) **Landscape Watering.** In jurisdictions that do not already have an appropriate local regulatory program related to landscape watering, implementing agencies shall design proposed 2022 RTP/SCS projects that include landscaping shall be designed with drought tolerant plants and drip irrigation. When feasible, native plant species shall be used. In addition, landscaping associated with proposed improvements shall be maintained using reclaimed water when feasible. If reclaimed water could feasibly be utilized for project landscape watering due to proximity of reclaimed water sources but is unavailable due to lack of connecting infrastructure, implementing agencies shall conduct an analysis of the upgrades needed to provide such infrastructure, which will include the potential for new connections to existing reclaimed water systems to provide reclaimed water to other nearby sources besides the proposed project in the analysis, and shall perform such steps as necessary to utilize available reclaimed water if feasible.

   b. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of SJCOG, and that these mitigation measures have been incorporated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that these mitigation measures are partially within the responsibility and jurisdiction of transportation project sponsors and, for land use

projects, cities and the County, which can and should adopt them. Implementation of the above measures would reduce proposed Project impacts on water supply and groundwater overdraft in the SJCOG region. However, due to the programmatic nature of this proposed 2022 RTP/SCS EIR, a precise, project-level analysis of specific groundwater supply impacts associated with individual transportation and land use projects is not possible. The land use scenario envisioned by the proposed 2022 RTP/SCS along with transportation projects would result in the need for additional groundwatersupply, even with the implementation of mitigation measures listed above. Given the severe overdraft conditions of area groundwater basins, impacts would remain significant and unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.11-27 through 4.11-31 of the Draft EIR.

5.10 Noise

1. **Impact N-1.** Construction activity associated with transportation improvements and land use projects envisioned by the proposed 2022 RTP/SCS would generate a substantial temporary increase in ambient noise levels in excess of standards established in local general plans or noise ordinances and would generate a substantial absolute noise increase over existing noise levels. This impact would be significant and unavoidable.

   a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measure developed for the 2022 RTP/SCS program where applicable for transportation projects that would result in noise impacts, and where feasible and necessary based on project and site-specific considerations. San Joaquin County and incorporated cities in the County can and should implement this measure where relevant to land use projects implementing 2022 RTP/SCS. Project-specific environmental documents may adjust this measure as necessary to respond to site-specific conditions.

      N-1 **Construction Noise Reduction.** To reduce construction noise levels to achieve applicable standards, implementing agencies for transportation and land use projects shall implement the measures identified below where feasible and necessary.

      - **Compliance with local Construction Noise Regulations.** Implementing agencies shall ensure that, where residences or other noise sensitive uses are located within 800 feet of construction sites without pile driving, 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.

- **Noise Complaint and Enforcement Manager.** Designate an on-site construction complaint and enforcement manager for projects within 800 feet of sensitive receivers. Implementing agencies shall post phone numbers for the on-site enforcement manager at construction sites along with complaint procedures and who to notify in the event of a problem.
- **Pile Driving**. For any project within 3,200 feet of sensitive receptors that requires pilings, the implementing agency shall require caisson drilling or sonic pile driving as opposed to pile driving, where feasible. This shall be accomplished through the placement of conditions on the project during its individual environmental review.
- **Construction Equipment Noise Control**. Implementing 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).
- **Impact Equipment Noise Control.** Implementing 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 use of pneumatically powered tools is unavoidable, use of an exhaust muffler on the compressed air exhaust can lower noise levels from the exhaust by up to about 10 dBA. When feasible, external jackets on the impact equipment can achieve a reduction of 5 dBA. Whenever feasible, use quieter procedures, such as drilling rather than impact equipment operation.
- **Construction Activity Timing Restrictions.** Except where timing restrictions are already established in local codes or policies, construction activities shall be limited to:
  - Monday through Friday: 7 a.m. to 6 p.m.
  - Saturday: 9 a.m. to 5 p.m.
- **Placement of Stationary Noise Sources.** Locate stationary noise sources as far from noise-sensitive receptors as possible. Stationary noise sources that must be located near existing receptors will be equipped with the best available mufflers.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of SJCOG, and that these mitigation measures have been incporated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that these mitigation measures are partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt them. Implementation of Mitigation Measure N-1 would reduce construction noise impacts by ensuring adherence to local regulations in addition to the application of timing restrictions, locating stationary noise sources far from sensitive receptors, and equipment noise controls. However, even with implementation of Mitigation Measure N-1, construction noise from all 2022 RTP/SCS projects may not be reduced below applicable thresholds and impacts would remain significant and unavoidable. The SJCOG Board of Directors

finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.13-12 through 4.13-15 of the Draft EIR.

2. **Impact N-2.** Transportation improvements envisioned by the proposed 2022 RTP/SCS would generate a substantial permanent increase in ambient noise levels in excess of standards or over existing noise levels and generate a substantial absolute noise increase over existing noise levels. This impact would be significant and unavoidable.

   a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measure developed for the proposed 2022 RTP/SCS program where applicable for transportation projects that would result in traffic noise impacts, and where feasible and necessary based on project and site-specific considerations. Project-specific environmental documents may adjust this measure as necessary to respond to site-specific conditions.

      N-2 **Noise Assessment and Control for Mobile and Point Source Reduction.** Implementing agencies shall complete detailed noise assessments using applicable guidelines (e.g., Caltrans Traffic Noise Analysis Protocol) for roadway and rail projects that may impact noise sensitive receptors. The implementing agency shall ensure that a noise survey is conducted that, at minimum:

      - Determines existing and projected noise levels
      - Determines the amount of attenuation needed to reduce potential noise impacts to applicable State and local standards
      - Identifies potential alternate alignments that allow greater distance from, or greater buffering of, noise-sensitive areas
      - If warranted, recommends methods for mitigating noise impacts, including:
        - Appropriate setbacks
        - Sound attenuating building design, including retrofit of existing structures with sound attenuating building materials
        - Use of sound barriers (earthen berms, sound walls, or some combination of the two)
        - Locate transit-related passenger stations, central maintenance facilities, decentralized maintenance facilities, and electric substations away from sensitive receptors to the maximum extent feasible.

      Where new or expanded roadways or transit are found to expose receptors to noise exceeding normally acceptable levels, the individual project lead agency shall implement techniques as recommended in the project-specific noise assessments. 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 shall be used, including open grade paving, solid fences, walls, and landscaped berms. Other techniques such as rubberized asphalt or "quiet pavement" can be used where feasible to reduce road noise for new roadway segments or modifications requiring repaving. The effectiveness of noise reduction measures shall be monitored by taking noise measurements and installing adaptive mitigation measures to achieve applicable standards.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of SJCOG, and that this mitigation measure has been incorporated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that this mitigation measure is partially within the responsibility and jurisdiction of transportation project sponsors, which can and should adopt it. Implementation of Mitigation Measure N-2 would reduce noise from mobile sources by ensuring projects follow applicable guidelines and implementing sound reduction methods by design such as use of sound barriers. However, even with implementation of Mitigation Measure N-2, mobile source noise from individual projects envisioned by the proposed 2022 RTP/SCS may continue to impact nearby noise sensitive receivers and exceed acceptable standards. Impacts would remain significant and unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.13-12 through 4.13-15 of the Draft EIR.

3. Impact N-3. Construction activities associated with transportation projects under the proposed 2022 RTP/SCS would generate excessive groundborne vibration levels. New truck, bus, and train traffic resulting from the proposed 2022 RTP/SCS would generate excessive vibration levels. These impacts would be significant and unavoidable.

a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the proposed 2022 RTP/SCS program where applicable for transportation projects that would result in vibration impacts, and where feasible and necessary based on project and site-specific considerations. Project-specific environmental documents may adjust these measures as necessary to respond to site-specific conditions.

N-3(a) **Vibration Mitigation for Construction of Transportation Projects.** Where local vibration and groundborne noise standards do not apply, implementing agencies of 2022 RTP/SCS projects utilizing heavy construction equipment shall estimate vibration levels generated by construction activities and use the

Caltrans vibration damage potential threshold criteria to screen for and screen out projects as to their potential to damage buildings on site or near a project.

If construction equipment would generate vibration levels exceeding acceptable levels as established by Caltrans, implementing agencies shall, or can and should, complete the following tasks:

- Prior to construction, survey the project site for vulnerable buildings, and complete geotechnical testing (preconstruction assessment of the existing subsurface conditions and structural integrity), for any older or historic buildings within 50 feet of pile driving. The testing shall be completed by a qualified geotechnical engineer and qualified historic preservation professional and/or structural engineer.
- Prepare and submit a report to the lead agency that contains the results of the geological testing. If recommended by the preconstruction report implementing agencies shall require ground vibration monitoring of nearby historic structures. Methods and technologies shall be based on the specific conditions at the construction site. The preconstruction assessment shall include a monitoring program to detect ground settlement or lateral movement of structures in the vicinity of pile-driving activities and identify corrective measures to be taken should monitored vibration levels indicate the potential for building damage. In the event of unacceptable ground movement with the potential to cause structural damage, all impact work shall cease, and corrective measures shall be implemented to minimize the risk to the subject, or adjacent, historic structure.
- To minimize disturbance withing 550 feet of pile-driving activities, implement “quiet” pile-driving technology, such as predrilling of piles and the use of more than one pile driver to shorten the duration of pile driving), where feasible, in consideration of geotechnical and structural requirements and conditions as defined as part of the geotechnical testing, if testing was feasible.
- Use cushion blocks to dampen noise from pile driving.
- Phase operations of construction equipment to avoid simultaneous vibration sources

N-3(b) **Vibration Mitigation for Operation of Transportation Projects.** Where local vibration and groundborne noise standards do not apply, implementing agencies of 2022 RTP/SCS projects shall comply with all applicable local vibration and groundborne noise standards, or in the absence of such local standards, comply with guidance provided by the FTA in Transit Noise and Vibration Impact Assessment (FTA 2018) to assess impacts to buildings and sensitive receptors and reduce vibration and groundborne noise. FTA recommended thresholds shall be used except in areas where local standards for groundborne noise and vibration have been established. Methods that can be implemented to reduce vibration and groundborne noise impacts include, but are not limited to:

- Bus and Truck Traffic
  - Constructing of noise barriers
  - Use noise reducing tires and wheel construction on bus wheels

- Use vehicle skirts (i.e., a partial enclosure around each wheel with absorptive treatment) on freight vehicle wheels

b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiciton of SJCOG, and that this mitgation measure has been incorproated into the 2022 RTP/SCS. The SJCOG Board of Directors further finds that this mitigation measure is within the responsibility and jurisdiction of transportation project sponsors in the SJCOG region, which can and should adopt it. This measure would reduce vibration impacts through mitigating construction impacts by adopting Caltrans vibration damge potential threshold criteria where vibration and groundborn noise standards do not apply. In addition, where vibration and groundborne noise standards do not apply for operational projects, implementing agencies should comply with guidance provided by the FTA to assess impacts and reduce vibration and groundborne noise such as constructing noise barriers. Implementing agencies for transportation projects are SJCOG and transportation project sponsor agencies. This mitigation measure shall, or can and should, be applied during project permitting and environmental review and implemented during construction, as applicable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.13-19 through 4.13-22 of the Draft EIR.

4. Impact N-4. Land use projects envisioned by the proposed 2022 RTP/SCS may place sensitive receptors in areas with noise levels in excess of standards established in the local general plan or noise ordinance. This impact would be significant and unavoidable.

a. **Mitigation.** San Joaquin County and incorporated cities in the County can and should implement the following mitigation measure where relevant to land use projects implementing 2022 RTP/SCS, and where feasible and necessary based on project and site-specific considerations. Project-specific environmental documents may adjust this measure as necessary to respond to site-specific conditions.

N-4 **Noise Mitigation for Land Uses.** If a land use project is located in an area with exterior ambient noise levels above local noise standards, the implementing agency shall ensure that a noise study is conducted to determine the existing exterior noise levels in the vicinity of the project. If the project would be impacted by ambient noise levels, feasible attenuation measures shall be used to reduce operational noise to meet acceptable standards. In addition, noise insulation techniques shall be utilized to reduce indoor noise levels to thresholds set in applicable State and/or local standards. Such measures may include but are not limited to dual-paned windows, solid core exterior doors with perimeter weather stripping, air conditioning system so that windows and doors may remain closed, and situating exterior doors away from roads. The noise study and determination of appropriate mitigation measures shall be completed during the project's individual environmental review.

b. **Findings and Rationale.** The SJCOG Board of Directors finds that this mitigation measure is within the responsibility and jurisdiction of cities and the County, which can and should adopt it. Implementation of Mitigation Measure N-4 would reduce noise for sensitive land uses in areas that exceed noise standards by ensuring attenuation measures will be used to reduce noise to meet acceptable standards, where necessary based on noise studies conducted. However, even with implementation of Mitigation Measure N-4, noise from individual projects envisioned by the 2022 RTP/SCS may continue to impact nearby noise sensitive receptors and exceed acceptable standards. This impact would remain significant and unavoidable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.13-22 and 4.13-24 of the Draft EIR.

5.11 Transportation

1. Impact T-2. The proposed 2022 RTP/SCS would result in an overall increase in regional VMT above baseline (2021) conditions. The proposed 2022 RTP/SCS would result in a small decrease in VMT per capita below baseline (2021) conditions. Regional VMT and VMT per capita impacts from implementation of the proposed 2022 RTP/SCS would be significant and unavoidable.

a. **Mitigation.** For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the proposed 2022 RTP/SCS where applicable for transportation projects. For land use projects under their jurisdiction, the County and incorporated cities in the SJCOG region can and should implement the following mitigation measures. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

T-2(a) **Regional VMT Reduction Programs.** Implementing agencies shall require implementation of VMT reduction strategies through TDM programs, impact fee programs, mitigation banks or exchange programs, in-lieu fee programs, and other land use project conditions that reduce VMT. Programs shall be designed to reduce VMT from existing land uses, where feasible, and from new discretionary residential or employment land use projects. The design of programs and project specific mitigation shall focus on VMT reduction strategies that increase travel choices and improve the comfort and convenience of sharing rides in private vehicles, using public transit, biking, or walking. Modifications may include but are not limited to:

- Provide car-sharing, vanpool, bike sharing, and ride-sharing programs
- Implement or provide access to commute reduction programs
- Provide a bus rapid transit system
- Improve pedestrian or bicycle networks, or transit service
- Provide transit passes

- Encourage telecommute programs
- Incorporate affordable housing into the project
- Increase density
- Increase mixed uses within the project area
- Incorporate improved pedestrian connections within the project/neighborhood
- Incentivize development in low VMT communities
- Incentivize housing near commercial and offices
- Increase access to goods and services, such as groceries, schools, and daycare
- Incorporate neighborhood electric vehicle network
- Orient the project toward transit, bicycle, and pedestrian facilities
- Provide traffic calming
- Provide bicycle parking
- Limit parking
- Separate out parking costs
- Provide parking cash-out programs

b. **Findings and Rationale.** The SJCOG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of SJCOG, and that these mitigation measures have been incorporated into the 2022 RTP/SCS.. The SJCOG Board of Directors further finds that these mitigation measures are partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and the County, which can and should adopt them. If implementing agencies adopt and require the mitigation measures outlined above, impacts would be reduced because less VMT would be added to the SJCOG region. However, the implementation of project-level VMT-reducing measures, such as mixed uses and TOD, may not be feasible and cannot be guaranteed on a project-by-project basis. Regional VMT-reduction programs, such as VMT banks, may also not be feasible as there are currently no procedures or policies in place to establish such programs. Therefore, this impact would remain significant and unavoidable The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce the impact to a less than significant level, this impact remains significant and unavoidable.

c. **Supportive Evidence.** Please refer to pages 4.14-21 through 4.14-25 of the Draft EIR.

6 Findings Regarding Alternatives

6.1 Legal Requirements for Alternatives

Public Resources Code Section 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 Section 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 decision makers. 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 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, Section 7.0 of the EIR and these CEQA Findings 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 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 Section 15126.6(a)). In all cases, the consideration of alternatives is governed by the "'rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." (CEQA Guidelines Section 15126.6(f)). In accordance with Section 15126.6(f)(1) of the Guidelines, among the factors that may be taken into account when addressing the feasibility of alternatives are: (1) site suitability; (2) economic viability; (3) availability of infrastructure; (4) general plan consistency; (5) other plans or regulatory limitations; (6) jurisdictional boundaries; and (7) whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

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. (Public Resources Code Section 21002, 21002.1; CEQA Guidelines Section 15092.)

The proposed 2022 RTP/SCS alternatives were selected for review in the EIR because of their potential to avoid or substantially lessen certain project impacts, or because they were required under CEQA Guidelines (e.g., the No Project Alternative). The alternatives are described and evaluated in detail in Chapter 6 of the Draft EIR.

The four alternatives considered for the proposed 2022 RTP/SCS are:

- Alternative 1: No Project Alternative, which is comprised of a land use pattern that reflects existing land use trends and a transportation network comprised of transportation projects that are currently in construction or are funded in the short range Regional Transportation Improvement Program (RTIP);
- Alternative 2: Business as Usual Alternative, which reflects the Trend Scenario. It is like the No Project Alternative except that it includes transportation investments from the project list for the 2014 RTP/SCS. This alternative includes a slightly modified transportation network with a reduced number of transportation improvements as compared to the proposed 2022 RTP/SCS;
- Alternative 3: Blueprint (Old Plan) Alternative, which was adopted as the preferred scenario of the 2018 RTP/SCS. It is based on the application of the development principles adopted as part of the 2009 Tulare County Regional Blueprint (2022 RTP/SCS, Appendix 1-L). In general, this means a development footprint similar to the baseline but smaller in extent;
- Alternative 4: Blueprint Plus Alternative, which represents a change in future development patterns more pronounced than that envisioned by the Blueprint (Old Plan) Alternative but at the same density as the proposed 2022 RTP/SCS. Blueprint Plus has an objective of overall density of new development 5 percent higher than the Blueprint, consistent with the proposed 2022 RTP/SCS. When compared to the proposed 2022 RTP/SCS, land use density would be similar, but concentrated in different areas. This alternative excludes the Cross Valley Corridor (CVC) project; as such, new development is concentrated more in existing urban areas, rather than along the CVC route.

6.2 Project Objectives

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 Section 15126.6(a)). The 2022 RTP/SCS establishes planning goals and objectives to guide the development of the plan and establish the guiding principles for decision-making. Regional projects and programs are developed, funded, and implemented based on these goals. SJCOG's general objectives for the 2022 RTP/SCS are to ensure that the SCS and the transportation system planned for the SJCOG region accomplishes the following (more specific goals of the proposed 2022 RTP/SCS are listed in Section 2.2 of the Draft EIR):

- Serves regional goals, objectives, policies, and plans.
- Responds to community and regional transportation needs.
- Promotes energy efficient, environmentally sound modes of travel and facilities and services.
- Promotes equity and efficiency in the distribution of transportation projects and services.

6.3 Findings on Alternatives Evaluated in the EIR

1. No Project Alternative (Alternative #1) (See Draft EIR Section 6.3)

a. **Description.** The No Project Alternative represents the region moving forward only building out using funded transportation projects within the four-year period of the Federal Transportation Improvement Program (FTIP). This means, it only includes transportation projects that would be complete by the year 2026. As it relates to land use, Alternative 1 used the 2018 Preferred Scenario as the starting point and updated it to reflect more recent development trends, as discussed in interviews with local jurisdictions, but updated land use growth to better match general plans and/or area plans prepared since 2018. In this scenario, the region does not change course and makes investments based on the last regional plan. Growth occurs primarily in new growth areas identified in the region's General or Specific Plans and transportation investments are focused on managed lanes, ACE Rail, enhanced bus rapid transit.

b. **Findings and Rationale.** The No Project Alternative would result in a less dense development pattern compared to the 2022 RTP/SCS, with this alternative continuing existing land use trends. Because of the increased land development outside of existing urbanized areas, the No Project Alternative would result in more ground disturbance than the 2022 RTP/SCS. Consequently, compared to the 2022 RTP/SCS, the No Project Alternative would have greater overall impacts to biological resources, agricultural resources, geology and soils, land use, transportation, tribal cultural resources, and wildfire. Alternative 1 would result in greater impacts than the proposed 2022 RTP/SCS, although it would reduce VMT emissions compared to the proposed project, but not to the extent Alternative 2 does. Please refer to pages 6-4 through 6-12 of the Draft EIR.

The SJCOG Board of Directors finds that specific economic, financial, legal, social, technological or other considerations make the No Project Alternative infeasible and rejects this alternative for the following reasons. The No Project Alternative is legally infeasible because it would not meet federal and state legal requirements for RTPs, and would not meet the SB 375 requirement for preparation of an SCS. It would fail to meet most basic project objectives of the proposed 2022 RTP/SCS listed in Section 6.2 to promote equitable access opportunities, provide a mix of land uses and compact development patterns and encourage infill development to preserve agricultural land and natural resources, and maintain or reduce congestion as compared to current levels.

2. Alternative #2 Remake Centers and Corridors (See Draft EIR Section 6.4)

a. **Description.** Alternative 2, the Remake Centers & Corridors, would focus on growth on urban arterials, existing neighborhoods, and job centers. Traditional employment centers and aging commercial corridors are remade into residentially-focused neighborhoods. Growth is focused on urban arterials, existing neighborhoods, and job centers. Transportation focus is on investments in transit and bike/ped for infill locations along existing arterials, improvements/maintenance to local arterials to facilitate new types of development. Compared to the proposed 2022 RTP/SCS, Alternative 2 would increase gross residential density by 8.8 percent, be three percent higher for households in jobs-rich areas and include 47 percent more dwelling units at 20+ units per acre. In addition, it would consume 17,394 acres of land (a reduction of 2,932 acres) compared to the proposed 2022 RTP/SCS with 2,914 less acres of Prime Farmland impacted. Alternative 2 allocates 27

percent of its growth in new growth areas, 24 percent in established neighborhoods and job centers, 30 percent along arterials, and 20 percent in high quality transit areas.

b. **Findings and Rationale.** Under Alternative 2, land use patterns would be concentrated in infill and TOD areas. Alternative 2 would result in a higher density development pattern than the proposed 2022 RTP/SCS. This results in Alternative 2 reducing VMT to a greater extent than the proposed 2022 RTP/SCS. This VMT reduction would also result in less generation of criteria pollutants and GHG emissions compared to the project. Alternative 2 could be considered environmentally superior to the proposed 2022 RTP/SCS primarily because, as shown in Table 6 2, overall impacts to the following resources would be less: air quality , biological resources, energy, agriculture resources, environmental justice, geology and soils, greenhouse gas emissions, hazards, hydrology, transportation (VMT), tribal resources, and wildfire. The proposed project was equal to Alternative 2 regarding cultural resources and noise, and less environmental impacts regarding land use and planning.

   The SJCOG Board of Directors finds that specific economic, financial, legal, social, technological, or other considerations make Alternative 2 less feasible and rejects this alternative for the following reasons. The proposed project better serves regional goals, objectives, policies and plans of the County and the cities in the SJCOG region, better meets community and regional transportation needs while still promoting energy efficient, environmentally sound modes of travel and facilities and services, and promotes equity and efficiency in the distribution of transportation projects and services. Although Alternative 2 is identified as environmentally superior most impacts were still identified as being significant and unavoidable.

6.4 Findings on Alternatives Considered in the EIR But Rejected

Section 6.2 of the Draft EIR describes three alternatives that were considered but rejected from detailed consideration: the 20 Minute Neighborhoods Alternative, Commuter Villages Alternative and the Aggressive VMT Reduction Alternative. The SJCOG Board of Directors adopts and incorporates by reference the specific reasons for rejecting these alternatives contained in Draft EIR Section 6.2 as the grounds for rejecting these measures. In summary, 20 Minute Neighborhoods Alternative was rejected as it was not environmentally superior to the project and similar in impacts to the proposed project, for the detailed reasons explained in Section 6.2. The Commuter Villages Alternative was rejected because it was not environmentally superior to the project and similar in impacts to the proposed project. The Aggressive VMT Reduction Alternative was rejected because an aggressive VMT reduction alternative was not considered as an alternative for detailed consideration in this EIR.

7 Findings Regarding Alternatives and Mitigation Measures Proposed in Draft EIR Comments

The Draft EIR was circulated for a 45-day public review period that began June 24, 2022, and concluded August 8, 2022. SJCOG requested comments from responsible and trustee agencies and other regulatory agencies and received two comments. No comments proposed new alternatives or mitigation measures. Therefore, no revisions to the Draft EIR were necessary.

8 Findings on Cumulative Impacts

8.1 Introduction

In compliance with CEQA Guidelines Section 15130, the PEIR evaluates the cumulative impacts of the 2022 RTP/SCS. CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." (CEQA Guidelines Section 15355). Thus, if the effects of the Plan, in combination with the effects of past, present, and reasonably foreseeable future related projects within the region will be significant, the Plan's incremental effects must be analyzed to determine if the Plan's contribution to the cumulative impact is cumulatively considerable. (CEQA Guidelines Section 15065(a)(3)). Supportive evidence for the below Findings may be found in the "Cumulative Effects" sections of each resource topic analysis in Draft PEIR Chapter 4.

Thresholds of significance for cumulative impacts are the same as those for direct, project-specific impacts, as authorized by CEQA case law. (See *Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059.) When project-specific impacts are judged to be significant, the EIR considers them to be "cumulatively considerable" incremental contributions to significant cumulative impacts. (See CEQA Guidelines Section 15130(a).). Mitigation measures adopted for project-specific impacts in Sections 5 of these CEQA Findings also are feasible measures for mitigating the proposed project's incremental contribution to significant cumulative effects. (See CEQA Guidelines Section 15130(b)(5).)

The 2022 RTP/SCS addresses cumulative conditions within the SJCOG region by design. The Plan area is comprised of 3.3 million acres and includes three counties and 18 cities. It integrates transportation investments with land use strategies for an entire region of the state that shares, or is connected by, common economic, social, and environmental characteristics. As such, the regional environmental analysis of the 2022 RTP/SCS presented throughout the EIR is essentially a cumulative analysis consistent with CEQA requirements. Furthermore, the Draft EIR contains detailed analysis of regional (cumulative) impacts, which are differentiated from localized impacts that may occur at the county level.

8.2 Findings for Significant Cumulative Impacts

For the following impacts, the SJCOG Board of Directors hereby finds that in Section 5 of these CEQA Findings, mitigation measures have been identified in the EIR that will reduce the proposed project's incremental contribution to the following significant cumulative impacts, but except for hazards and hazardous materials, not to a less than significant (i.e., less than cumulatively considerable) level. The significant impacts and the mitigation measures that will reduce them are as follows:

Aesthetics

There are two types of aesthetic impacts that may be additive in nature and thus cumulative: night sky lighting and overall changes in the visual environment as the result of increasing urbanization of the larger urban areas in the SJCOG region. As development in one area, such as a relatively large city adjoining agricultural land like Stockton, could increases and possibly expand over time and meet or connect with development in an adjoining ex-urban area. This type of growth and

expansion would have the potential to affect night sky lighting experienced both within and outside of the region and lighting may increase in the form of larger and/or more intense nighttime glow in the viewshed. Regarding the visual environment experienced throughout the cumulative impact analysis areas, as planned cumulative development occurs over time the overall visual environment will change, and existing visual character could be degraded. The combination of forecasted development in the SJCOG region and planned development in neighboring counties will result in a different visual environment than currently exists. Thus, cumulative impacts to night sky lighting and changes in the visual environment are significant. Although growth envisioned in the proposed 2022 RTP/SCS is primarily focused on infill areas, development outside of those geographies with long-distance views may result in nighttime lighting becoming more visible, covering a larger area and/or appearing in new areas as a result of projected development under the proposed 2022 RTP/SCS. Additionally, planned transportation improvements and the land use scenario envisioned in the proposed 2022 RTP/SCS would alter the existing visual environment from its baseline conditions. Mitigation measures described earlier in this section would reduce impacts to aesthetics; however, even with implementation of mitigation measures, impacts would be significant and would be cumulatively considerable.

a. **Mitigation.** Mitigation Measures AES-1(a), AES-1(b), AES-2, AES-3(a), AES-3(b) and AES-3(c))
b. **Findings and Rationale.** With regard to the visual environment experienced throughout the cumulative impact analysis area, as planned cumulative development occurs over time the overall visual environment will change. The combination of forecasted development in the SJCOG region and planned development in neighboring counties would result in a different visual environment than currently exists. The cumulative impacts associated changes in the visual environment (including scenic vistas and scenic resources) and night sky lighting and are considered significant and the contribution of the proposed 2022 RTP/SCS to these impacts is cumulatively considerable. Mitigation measures described earlier in this section would reduce impacts to aesthetics; however, even with implementation of those mitigation measures, impacts of the proposed 2022 RTP/SCS would remain cumulatively considerable. The SJCOG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce these impacts to less than cumulatively considerable levels. The SJCOG Board of Directors finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make certain mitigation measures or alternatives identified in the EIR infeasible. Since no feasible mitigation measures or project alternatives have been found to reduce these impacts to a less than significant level, these impacts remains significant and unavoidable.
c. **Supportive Evidence.** Please refer to pages 4.1-21 through 4.1-22 of the Draft EIR.

Agriculture and Forestry

Future development within the cumulative impact analysis area would convert agricultural land, including Important Farmland, to non-agricultural uses and may result in conflicts with agricultural zoning and Williamson Act contracts. In addition, future development adjacent to agricultural land has the potential to result in a loss of agricultural land due to land use conflicts, which adds to the cumulative conversion of agricultural lands, including areas designated as Important Farmland by the FMMP. Cumulative impacts to agricultural resources would be significant.

a. **Mitigation.** Mitigation Measure AG-1
b. **Findings and Rationale.** Implementation of Mitigation Measure AG-1 would reduce the contribution of the proposed 2022 RTP/SCS to cumulative agricultural land impacts. However,

the mitigation would not ensure that the future land use and transportation projects could feasibly relocate or realign to avoid impacts, and impacts would remain significant and unavoidable. The contribution of the proposed 2022 RTP/SCS to cumulative impacts to agricultural and Williamson Act lands would therefore remain cumulatively considerable post-mitigation. In the cumulative impact analysis area, forestland and timber resources are primarily located in Stanislaus County, specifically the Stanislaus National Forest. National forests and national parks are protected by federal law and greatly restrict any type of urban development that can occur in these areas. Thus, future development within the cumulative impact analysis area would not convert forestland to non-forest uses and thus would not result in conflicts with forest zoning. Cumulative impacts to forestland and timber resources would therefore be less than significant. The contribution of the proposed 2022 RTP/SCS to cumulative impacts to forestland and timber resources would not be cumulatively considerable.

c. **Supportive Evidence**. Please refer to pages 4.6-14 of the Draft EIR.

Air Quality

For the purposes of evaluating cumulative impacts to air quality, the geographic scope of the cumulative impacts analysis is the SJVAB, which includes the SJCOG planning region as well as Kern, Kings, Fresno, Madera, Merced, Stanislaus, and Tulare counties. As detailed in Section 4.2.1(d), *Current Air Quality*, San Joaquin County is in nonattainment for federal ozone and $PM_{2.5}$ standards and state ozone, PM_{10}, and $PM_{2.5}$ standards. Because San Joaquin County is in nonattainment for these air quality standards, a cumulative air quality impact currently exists. Any growth within San Joaquin County would contribute to existing exceedances of ambient air quality standards. SJVAPCD has prepared air quality plans for both ozone and particulate matter to address this cumulative impact, improve conditions, and meet federal and state air quality standards. As stated in the SJVAPCD GAMAQI (2015), any proposed development project that would individually have a significant air quality impact related to criteria air pollutant emissions would also be considered have a cumulatively considerable contribution to existing significant cumulative impacts related to criteria air pollutant emissions. For TACs, the SJVAPCD GAMAQI (2015) states that because impacts from TACs are localized and the thresholds of significance for TACs have been established at such a conservative level, risks over the individual thresholds of significance are also considered cumulatively significant.

a. **Mitigation.** Mitigation Measures AQ-2(a), AQ-2(B), AQ-2(c), AQ-3, AQ-5, GHG-1, GHG-4(a), and GHG-4(b).

b. **Findings and Rationale.** As discussed under Impact AQ-3, regional ozone precursor and PM emissions from on-road mobile sources would decrease by 2046 with the proposed 2022 RTP/SCS compared to baseline 2016 conditions. As a result, the long-term operational mobile source emissions under the proposed 2022 RTP/SCS would not result in a cumulatively considerable contribution to existing significant cumulative air quality impacts. However, land use operational emissions would be cumulatively considerable before and after mitigation because land use projects under the proposed 2022 RTP/SCS may contribute to an increase in ozone precursor and PM emissions. As discussed under Impact AQ-5, impacts from TAC emissions would be cumulatively considerable despite a decrease in TAC emissions from baseline 2016 conditions because the proposed 2022 RTP/SCS may result in the siting of sensitive receptors in close proximity to existing or new sources of TACs. Mitigation Measure AQ-4 would reduce impacts from TACs; however, it cannot be guaranteed that impacts resulting

from the proposed 2022 RTP/SCS can be mitigated to a less-than-significant level. Therefore, the impact would remain cumulatively considerable.

c. **Supportive Evidence.** Please refer to pages 4.2-34 through 4.3-35 of the Draft EIR.

Biological Resources

The cumulative impact analysis area for biological resources consists of the SJCOG region and adjoining counties. Information regarding these adjoining counties can be found in Section 3.1 – *Environmental Setting,* Table 3-1. Future development in this region that could impact biological resources is considered in the analysis. This cumulative extent is used to evaluate potential direct and indirect, and permanent and temporary impacts to special-status species, sensitive habitats, wildlife movement, local policies and ordinances protecting biological resources, and approved habitat conservation plans within the context of regional diminishment of these resources.

Biological resources impacts resulting from cumulative development within the cumulative impact analysis area would include direct and indirect impacts to sensitive/special status species or their habitat; impacts to riparian, wetland, or other sensitive natural communities; or interference with wildlife movement. Similarly, development pursuant to other local and regional planning efforts within the cumulative impact analysis area would impact these resources, and as a result, cumulative impacts would be significant. Due to the potential direct and indirect impacts that may occur, the 2022 RTP/SCS would contribute considerably to this significant cumulative impact.

a. **Mitigation.** Mitigation Measures BIO-1(a) through BIO-1(i), BIO-2(a) through BIO-2(f), and BIO-3(a), through BIO-3(c)

b. **Findings and Rationale.** Mitigation Measures BIO-1(a) through BIO-3(c) presented in Section **Error! Reference source not found.**.**Error! Reference source not found.** set requirements for surveys and actions to be taken if biological resources have potential to be impacted by 2022 RTP/SCS projects as well as the future land use scenario. If implementing agencies and/or project sponsors adopt these mitigation measures and comply with existing State, local and/or federal regulations, the contribution of the proposed 2022 RTP/SCS to cumulative impacts would be reduced. However, as discussed above, the 2022 RTP/SCS contribution to significant cumulative impacts to special-status species and their habitats; riparian, wetland, or other sensitive natural communities; and wildlife movement remain cumulatively considerable post-mitigation.

   2022 RTP/SCS projects and projects within the cumulative impact analysis area would be required to comply with ordinances and requirements protecting biological resources as well as the SJMSCP. Potential effects related to the SJMSCP and compliance with the applicable ordinances and requirements would be location-specific, and therefore would not result in a cumulative impact related to conflicts with local ordinances, plans, or the SJMSCP.

c. **Supportive Evidence.** Please refer to page 4.3-43 of the Draft EIR.

Cultural Resources

The cumulative impact analysis area for cultural resources consists of the SJCOG region and adjoining counties. Information regarding these adjoining counties can be found in Section 3.1 – Environmental Setting, Table 3-1. This is appropriate because cultural resources identified in this larger region will be similar in type and style to those that are or may be present in the SJCOG region. As discussed in Section 4.5.3, the transportation projects and land use scenario envisioned in

the proposed 2022 RTP/SCS could require substantial ground disturbance in undisturbed areas or in infill areas, which could impact historic built environment resources and archaeological resources.

a. **Mitigation.** Mitigation Measures CR-1, CR-2(a), and CR-2(b)

b. **Findings and Rationale.** The increase in growth in previously undisturbed areas contributes to regional impacts on existing and previously undisturbed and undiscovered historical and archaeological resources, including CEQA-defined "historical resources." While most cultural resources are site-specific, with impacts that are project-specific, others may have regional significance; for example, an historical structure that represents the last known example of its kind would constitute a regional impact if it were affected by future 2022 RTP/SCS project implementation. In addition, there are historic districts or areas that can be affected by multiple or successive projects, over time, resulting in a cumulative impact to the historic resource. For such a resource, cumulative impacts would be significant, and the 2022 RTP/SCS contribution to them would be cumulatively considerable. Mitigation measures outlined in this section would reduce impacts associated with 2022 RTP/SCS projects through impact minimization for built environment and archaeological historical resources. However, it cannot be guaranteed that all future project-level impacts can be mitigated to a less than significant level. As such, the 2022 RTP/SCS contribution would remain cumulatively considerable after mitigation.

c. **Supportive Evidence.** Please refer to page 4.4-24 of the Draft EIR.

Geology and Soils (Paleontological Resources)

The cumulative impact analysis area for geology and soils consists of the SJCOG region and adjoining counties. Information regarding these adjoining counties can be found in Section 3.0, *Environmental Setting*. Future development in this region that could impact geology and soils is considered in the analysis. This cumulative extent is used to evaluate potential direct and indirect, permanent and temporary impacts to increased exposure to seismic hazards, increased erosion and/or loss of topsoil, the presence of unstable or expansive soils, and the presence of paleontological resource or unique geologic features within the context of the cumulative impact analysis area.

a. **Mitigation.** Mitigation Measures GEO-5

b. **Findings and Rationale**. Development and construction in the cumulative impacts analysis area would require excavation and ground disturbance. Excavation and ground disturbance could encounter and damage or destroy subsurface paleontological resources, depending on underlying geologic units and soils. While most paleontological resources are typically site specific, with impacts that are project specific, others may have regional significance. For example, fossils may capture a particular type of organism that was endemic to a region and therefore have regional significance. Due to the potential for a fossil of regional significance to be uncovered during excavation and ground disturbing activities of projects in the cumulative impact analysis area, cumulative impacts would be significant.

   The 2022 RTP/SCS could cause a substantial adverse change in or disturb known and unknown paleontological resources and would therefore result in a cumulatively considerable contribution to the significant impact. Mitigation measures outlined above, would reduce paleontological resource impacts associated with 2022 RTP/SCS projects. However, as discussed in Impact GEO-5, it cannot be guaranteed that all future project-level impacts can be mitigated to a less than significant level. As such, the 2022 RTP/SCS contribution to cumulative impacts to paleontological resources would be cumulatively considerable.

c. **Supportive Evidence.** Please refer to pages 4.8-25 of the Draft EIR.

Greenhouse Gas Emissions and Climate Change

The impacts of GHG emissions are, by definition, cumulative impacts, as they add to the global accumulation of greenhouse gases in the atmosphere. The cumulative impact analysis area for GHG emissions consists of the SJCOG region, adjoining counties, and the entire State of California. The entire state is included in the analysis area because GHG emissions from the SJCOG region and adjoining counties would influence the ability for the State to achieve its GHG reduction targets. The analysis presented in Section 4.9.3, *Impact Analysis*, evaluates both plan-level impacts as well as the contribution of the proposed 2022 RTP/SCS to the existing cumulative impact related to GHG emissions, the effects of which are outlined in Section 4.9.1(c), *Potential Effects of Climate Change*.

a. **Mitigation.** Mitigation Measures AQ-2(b), AQ-2(c), GHG-1, GHG-2, GHG-4, T-2(a), and T-2(b)

b. **Findings and Rationale.** As discussed under Impact GHG-1, construction activities associated with transportation improvement projects and future land use projects envisioned by the proposed 2022 RTP/SCS would generate temporary GHG emissions. The temporary construction GHG emissions would occur concurrent with ongoing GHG emissions in the cumulative impact analysis area, such as GHG emissions ongoing agricultural activities in surrounding Valley counties such as Stanislaus County and Merced County. As described under Impact GHG-1, construction-related GHG emissions associated with buildout under the proposed 2022 RTP/SCS would be significant even after implementation of Mitigation Measure GHG-1. Therefore, the contribution of the proposed 2022 RTP/SCS construction emissions to the cumulative impact of total GHG emissions would be cumulatively considerable, pre- and post-mitigation

   As discussed under Impacts GHG-2 through GHG-4, the transportation projects and land use scenario envisioned in the proposed 2022 RTP/SCS would also generate operational GHG emissions. Overall, implementation of the proposed 2022 RTP/SCS would reduce total regionwide mobile emissions; however, land use emissions may increase compared to existing conditions. Implementation of Mitigation Measure GHG-2 would reduce GHG emissions from land use projects, but impacts would remain significant and unavoidable. Therefore, the contribution of land use project emissions to the cumulative impact of total GHG emissions would be cumulatively considerable, pre- and post-mitigation.

   The proposed 2022 RTP/SCS would not conflict with SB 375 because per capita emissions reductions would meet and exceed the regional target of a 16 percent reduction by 2035 compared to 2005 levels. However, reductions achieved by the proposed 2022 RTP/SCS would not be sufficient to achieve the 2030 target of a 40 percent reduction in overall emissions set forth by SB 32 and therefore would also be inconsistent with EO S-3-05 and B-55-18 goals. Other ongoing land uses and operation of future development in the cumulative impact analysis area would also generate GHG emissions. Implementation of Mitigation Measures GHG-2 and GHG-4 would reduce the proposed 2022 RTP/SCS impacts related to consistency with state GHG reduction targets and goals; however, emissions would remain in exceedance of applicable significance thresholds. Therefore, the proposed 2022 RTP/SCS would have a cumulatively considerable contribution to the cumulative impact of inconsistency with state GHG reduction targets and goals, both pre- and post- mitigation.

c. **Supportive Evidence.** Please refer to page 4.9-24 through 4.9-25 of the Draft EIR.

Hazardous and Hazardous Materials

The cumulative impact analysis area for hazards and hazardous materials consists of the SJCOG region and adjoining counties. Information regarding these adjoining counties can be found in Section 3.1 – Environmental Setting, Table 3-1. Future development in this region that could result

in impacts related to hazards and hazardous materials is considered in the analysis. This cumulative extent is used to evaluate potential direct and indirect, and permanent and temporary impacts to the public or the environment associated with hazardous materials, hazardous emissions, or other safety hazards within the context of the SJCOG region and adjoining counties.

a. **Mitigation.** Mitigation Measures HAZ-3

b. **Findings and Rationale.** The potential impacts related to hazards and hazardous materials are generally related to site specific and project specific characteristics and conditions; however, hazardous sites or releases can occur across multiple adjoining properties or jurisdictions. Although the transport of hazardous materials may occur on rail or on roadways, such as Interstate 5, that traverse both the SJCOG region and adjacent counties, there are existing federal, state, and local regulations and oversight in place that would effectively reduce the inherent hazard associated with routine transport of such materials. Regulations and oversight, as outlined above in Section **Error! Reference source not found.**, ***Error! Reference source not found.***, would also effectively reduce the potential for individual projects to create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions, within the SJCOG region as well as adjoining counties. Land use development envisioned as part of the proposed 2022 RTP/SCS could result in the development of sites listed in environmental databases pursuant to Government Code Section 65962.5. Although development of listed sites would be required to undergo remediation and comply with Mitigation Measure HAZ-3, cumulative impacts related to hazards and hazardous materials would be significant, and implementation of the proposed 2022 RTP/SCS would result in cumulatively considerable impacts pre-mitigation, and less-than-cumulatively considerable post-mitigation.

c. **Supportive Evidence.** Please refer to pages 4.10-25 through 4.10-26 of the Draft EIR.

Hydrology and Water Quality

The cumulative impact analysis area for hydrology and water quality encompasses the watersheds and groundwater basins affected by the transportation projects and land use pattern envisioned in the proposed 2022 RTP/SCS, including creeks and drainages, floodplains, and aquifers. Therefore, the cumulative impact assessment area consists of the SJCOG region and the adjoining counties, which encompasses the applicable watersheds and basins.

a. **Mitigation.** Mitigation Measures HYD-2(a), and HYD-2(b)

b. **Findings and Rationale.** Development Development within the cumulative impact area may occur within floodplains and floodways and may include development of projects such as industrial parks, wastewater treatment plants, hazardous materials storage, or other infrastructure which may pose a release of pollutants as a result of inundation. Implementing agencies would conduct or require project-specific hydrology studies for projects proposed to be constructed within floodplains to demonstrate compliance with Executive Order 11988 (for federally funded projects), the NFIP, the National Flood Insurance Act, and the Cobey-Alquist Floodplain Management Act, as well as any further FEMA or State requirements that are adopted at the local level. These studies would identify project design features that reduce impacts on either floodplains or flood flows that would be required through the permitting process, as well as requiring measures to reduce the risk of pollutant release from inundation. Therefore, the cumulative effects of risk of polluted runoff from flood inundation is less than significant. The land use development envisioned in the proposed 2022 RTP/SCS would not substantially increase the risk of release of pollutants into the environment as a result of inundations, as it would have to comply with the local, state, and federal requirements described above and there are no projects proposed which pose a release of pollutants as a result of

inundation. Therefore, the contribution of the proposed 2022 RTP/SCS to these impacts would not be cumulatively considerable.

All of the cumulative impact area lies within the CVRWQCB and falls under the Basin Plan. All development within the Basin Plan area must comply with the goals, beneficial uses, and 303(d) limitations outlined in the Plan, as well as falling under the authority of any Orders issued by CVRWQCB. Therefore, the cumulative impact to obstruction of the Basin Plan is less than significant, and the proposed 2022 RTP/SCS's contribution to this impact would not be cumulatively considerable. There are multiple individual GSAs within the cumulative impact area. Each development within the cumulative area would only fall under management actions required by the GSA approved within its individual area. By its nature, SGMA emphasizes local action and not regional management. Although some of the groundwater basins within the cumulative impact area are hydrologically connected, individual GSAs only have authority over their defined geographic areas, and although each basin in the SJCOG area falls generally under a single joint GSP, many other basins have multiple GSAs covering different portions of the basin. Therefore, cumulative impacts throughout the analysis area could not serve to obstruct any GSPs other than those in effect in their immediate area (for example, a project exclusively using water generated by purveyors in one GSA area with its specific available yield could not obstruct the monitoring or pumping limitations of a GSP in effect in a different area, with a different sustainable yield, even if they were both within the same groundwater basin), and cumulative impacts to obstruction of GSPs is less than significant. The proposed 2022 RTP/SCS could not obstruct or interfere with any GSP in effect outside of its own area and would be required to adhere to all requirements of the individual GSPs within its area based on individual project location, and therefore its contribution to impacts to obstruction of GSPs in the cumulative area would not be cumulatively considerable.

c. **Supportive Evidence.** Please refer to pages 4.11-36 through 4.11-39 of the Draft EIR.

Noise

Noise resulting from roadway improvement projects envisioned in the 2022 RTP/SCS could influence ambient noise levels in adjoining counties, if and where the projects are located in proximity to adjoining counties. Therefore, the cumulative impact analysis area for noise consists of the SJCOG region and adjoining counties. Information regarding these adjoining counties can be found in Section 3.1 – Environmental Setting, Table 3-1. Future development in this region that could result in noise impacts is considered in the analysis.

a. **Mitigation.** Mitigation Measures N-1, N-2, N-3(a), N-3(b), and N-4

b. **Findings and Rationale.** Construction and operation noise and vibration impacts are generally localized and not cumulative in nature. For example, the increase in noise at one location is not worsened by noise created at another location. Rather these effects are independent and the determination as to whether they are adverse is specific to the project and location where they are created. Therefore, this cumulative extent is used to evaluate increases in transportation-related noise and the potential for new sensitive receptors to be located in in areas with unacceptable noise levels within the context of regional noise impacts Operation of transportation projects would generate noise. Noise would predominantly be from vehicles, such as the noise of engines or the noise generate from the friction between tires and the roadway surface. Generally, these noises affect ambient noise levels near the roadways. However, some of the 2022 RTP/SCS transportation projects would increase inter-regional travel, because the 2022 RTP/SCS addresses accommodating projected growth and because some projects are on regional roadways, such as Interstate 5 or SR 99. Therefore, the 2022

RTP/SCS would contribute to traffic noise outside the region. The cumulative impact would be significant, and the overall contribution of the 2022 RTP/SCS to significant cumulative traffic noise impacts, despite implementation of Mitigation Measures N-2 and N-4, would be cumulatively considerable.

Future land use development within the cumulative impact analysis area would increase travel and associated cumulative transportation noise levels. Land use development in the SJCOG region combined with the growth outside of its region could potentially contribute to a cumulatively considerable increase in noise as a result of increased activity resulting from that combined growth. This activity would include primarily highway and roadway noise. As a result, 2022 RTP/SCS could result in a cumulatively considerable increase in transportation-related noise. Mitigation Measures N-2 and N-4 would reduce the 2022 RTP/SCS's contribution to these impacts, but not to a less-than-cumulatively-considerable level. Therefore, the contribution of the 2022 RTP/SCS to this significant cumulative noise impacts would be cumulatively considerable.

c. **Supportive Evidence.** Please refer to page 4.13-24 of the Draft EIR.

Transportation

The cumulative impacts analysis area for transportation consists of the SJCOG region and the seven adjoining counties. Movement within, through, and beyond the SJCOG region is necessary for commuters, personal travel, and goods movement. Thus, it is important to consider both the SJCOG region as well as the connection with the adjoining counties.

a. **Mitigation.** Mitigation Measures T-2(a), T-2(b).

b. **Findings and Rationale.** Development in the cumulative impact analysis area would result in significant and unavoidable increase in regional VMT as well as daily VMT per capita from baseline (2016) conditions, partially due to commuters travelling to and from employment in the adjoining counties. However, the 2022 RTP/SCS is designed to maintain and foster the balance between jobs and housing within the SJCOG region and provides a strategy to allocate growth in such a way as to achieve a more balanced jobs/housing ratio and to optimize transportation investments that support those land uses.

   As discussed above, implementation of the 2022 RTP/SCS would increase daily VMT in 2046 compared to the baseline 2016 conditions While the majority of the VMT would be expected to remain within the SJCOG region, some portion of the VMT would inevitably extend to areas within the adjoining counties. The most reasonable assumption is that VMT to adjoining counties would be concentrated to the most heavily traveled roadways in the counties with the highest relative employment, such as I-5 and SR-99 into Sacramento and Stanislaus counties The increased VMT in adjoining county areas would be in addition to the VMT generated from the increased population growth of such counties into the future. Per capita VMT in the cumulative impact area would be unlikely to reach 16 percent below the baseline VMT per capita by 2046 due to increased VMT in the region, both with and without implementation of the proposed 2022 RTP/SCS. The implementation of project-level VMT-reducing measures, such as mixed uses and transit-oriented development, may not be feasible and cannot be guaranteed on a project-by-project basis. Regional VMT reduction programs, such as VMT banks, may also not be feasible as there are no procedures or policies in place to establish such programs. Thus, cumulative impacts on VMT would be significant and the proposed 2022 RTP/SCS contribution to cumulative VMT impacts would be cumulatively considerable, and this contribution would remain cumulatively considerable post-mitigation.

Some types of transportation impacts are related to site- and project-specific characteristics and conditions and would not be significantly affected by other development outside of the SJCOG region. As discussed in Impacts T-3 and T-4, there are existing federal, State, and local regulations that govern transportation hazards and emergency access associated with development and infrastructure projects. Regulations and oversight, as outlined in the impact analysis above, would effectively reduce the potential for individual projects to create a transportation hazards or emergency access impact within the SJCOG region and surrounding counties. Thus, cumulative impacts related to the transportation hazards and emergency access would not be significant and the proposed 2022 RTP/SCS contribution would not be cumulatively considerable.

c. **Supportive Evidence.** Please refer to pages 4.14-27 through 4.14-28 of the Draft EIR.

Tribal Cultural Resources

The cumulative impact analysis area for tribal cultural resources consists of the SJCOG region and adjoining counties. Information regarding these adjoining counties can be found in Section 3.1 – Environmental Setting, Table 3-1. Future development in this region that could impact cultural resources is considered in the analysis. This cumulative extent is used to evaluate potential direct and indirect, and permanent and temporary impacts to tribal cultural resources within the context of regional diminishment of these resources.

a. **Mitigation.** Mitigation Measures CR-2 (a, b), TCR-1(a), and TCR-1(b)

b. **Findings and Rationale.** Development in the SJCOG area would increase under the 2022 RTP/SCS by increasing mobility and growth. The increase in growth in previously undisturbed areas contributes to regional impacts on tribal cultural resources. If there may be tribal cultural resources at the location of a project site, tribal consultation in accordance with AB 52 would help ensure protection of tribal cultural resources. However, tribal territory often crosses the boundaries of multiple jurisdictions within and outside of the SJCOG region, and there could be several minor impacts to tribal cultural resources that together would result in a significant cumulative impact. But with the potential for cumulative impacts related to tribal cultural resources under the 2022 RTP/SCS are less than significant with mitigation, its contribution would not be cumulatively considerable. Mitigation Measures CR-2 (a, b), TCR-1(a), and TCR-1(b) would reduce these impacts to a less-than-cumulatively-considerable level.

c. **Supportive Evidence.** Please refer to pages 4.15-8 through 4.15-9 of the Draft EIR.

Wildfire

The 2022 RTP/SCS is not expected to substantially increase wildfires, but the occurrence of wildfires always exists within the SJCOG region and transportation and land use projects under the proposed 2022 RTP/SCS could place people and structures within or less than two miles from an SRA or very high fire hazard severity zones. Construction and operation of projects would risk exacerbating these existing fire hazards by creating additional potential sources of fire ignition.

a. **Mitigation.** Mitigation Measures WF-1(a) and WF-1(b)

b. **Findings and Rationale.** During construction and operation of 2022 RTP/SCS projects, if one of these cumulative projects were to simultaneously result in a wildland fire ignition during construction, they could combine and increase the frequency of wildland fires beyond existing conditions. The combination of these projects being constructed concurrently could

substantially increase the frequency of fire in the area above natural conditions. Cumulative impacts would be significant.

The land use scenario envisioned by the 2022 RTP/SCS that would be located within or less than two miles from an near SRAs or lands classified as very high fire hazard severity zones, would have potentially significant wildfire impacts, as existing codes and regulations cannot fully prevent wildfires from being generated and damaging structures or populations. These projects would increase the potential to ignite fires and therefore risk exacerbating the potential for loss or damage from wildfire. This added risk could start wildfires that could spread outside the SJCOG region impacting adjacent counties and communities. As a result, the 2022 RTP/SCS could result in a cumulatively considerable increase in wildfire risk. Mitigation measures described earlier in this section would minimize the contribution to this cumulative impact to a less-than-cumulatively-considerable level.

c. **Supportive Evidence.** Please refer to pages 4.16-17 through 4.16-18 of the Draft EIR.

9 Findings on Responses to Comments on the Draft EIR, Revisions to the Final EIR, and Recirculation

9.1 Findings and Rationale

The Draft EIR was circulated for a 45-day public review period that began on June 24, 2022, and ended on August 8, 2022. SJCOG received two (2) comment letters on the Draft EIR. Letter 1 does not raise an environmental issue related to the EIR adequacy and no further response was required. Letter 2 identified text revisions. The revisions were completed and are shown in Chapter 3 of the FEIR. The revisions do not alter the analysis or conclusions in the Draft EIR.

Section 3 of the Final EIR provides text amendments to the Draft EIR. All amendments are minor revisions of typographical errors identified in the Draft EIR. None of the changes would warrant recirculation of the EIR pursuant to CEQA Guidelines Section 15088.5 due to the addition of "significant new information." The amendments serve to clarify the content of the EIR, but do not introduce any new information. The SJCOG Board of Directors finds that amendments to the Final EIR merely clarify, amplify, or make insignificant modifications to the analysis presented in the document and do not trigger the need to recirculate per CEQA Guidelines Section 15088.5.

10 FINDINGS ON THE MITIGATION MONITORING AND REPORTING PROGRAM

10.1 Findings and Rationale

SJCOG finds that a Mitigation Monitoring and Reporting Program (MMRP) for the 2022 RTP/SCS has been prepared for the project and will be adopted concurrently with these Findings (Public Resources Code, § 21081.6(a)(1)). The MMRP is described in the following sections.

A. PURPOSE AND INTENDED USE OF THE MMRP

The California Environmental Quality Act (CEQA) requires that an agency adopt a Mitigation Monitoring or Reporting Program (MMRP) prior to approving a project that includes mitigation measures. This MMRP has been prepared in compliance with the requirements of Section 21081.6 of the California Public Resources Code and Sections 15091(d) and 15097 of the CEQA Guidelines.

The purpose of this MMRP is to ensure the adopted mitigation measures adopted in the findings of fact for the RTP-SCS are implemented, in accordance with CEQA requirements. The findings adopt feasible mitigation measures to reduce the significant environmental impacts of the RTP-SCS. This MMRP clarifies the process for SJCOG and sponsor agencies to ensure these mitigation measures are implemented, and designates responsibility for implementing, monitoring, and reporting mitigation.

B. MITIGATION MEASURES ADOPTED WITH THE RTP-SCS

The mitigation measures adopted in the RTP/SCS EIR findings are listed in these findings. Each mitigation measure identifies the parties responsible for implementation.

C. ENFORCEMENT

CEQA requires mitigation measures to be "fully enforceable" through the use of permit conditions, agreements, or other measures within each Lead Agency's authority (Public Resources Code 21081.6(b)). The adopted mitigation measures are programmatic first-tier mitigation that can and should be implemented by other sponsor agencies during future project-specific design and environmental review. The Lead Agency for each future project is responsible for assuring the project-specific mitigation measures it adopts are enforceable.

D. IMPLEMENTATION AND REPORTING

SJCOG shall designate a staff person (Deputy Executive Officer of SJCOG) to serve as Coordinator for overall implementation and administration of this MMRP, and its application to future projects. The Coordinator will prepare an annual progress report on mitigation measure implementation. Mitigation measures will typically occur at, or prior to, the following milestones:

During individual environmental review. These are measures that need undertaking during individual project-level environmental review of RTP transportation projects. These measures include items such as assessment of identification of specific project level noise reduction measures, and measures to reduce impacts on biological resources.

Prior to issuance of a grading permit. These are measures that need to be undertaken before earth moving activities begin. These measures include items such as staking the limits of environmentally sensitive areas or vegetation to remain, confirming biological mitigation plans with resource agencies, and including pertinent design details in the project plans.

During project construction. These measures are those that need to occur as the project is being constructed. They include monitoring the construction site for the proper implementation of dust and emission controls, erosion controls, biological protection, and examining grading areas for the presence of cultural materials.

Following construction. These measures apply to project components that would go into effect at completion of the project construction phase, including items such as management or monitoring plans (e.g., revegetation, etc.).