RESOLUTION NO. 61-22

Adopted by the Santa Cruz County Regional Transportation Commission
on the date of June 16, 2022
on the motion of Commissioner Rotkin
duly seconded by Commissioner McPherson

A RESOLUTION TO ADOPT CEQA FINDINGS, A STATEMENT OF OVERRIDING CONSIDERATIONS AND A MITIGATION MONITORING AND REPORTING PROGRAM RELATED TO THE ENVIRONMENTAL IMPACT REPORT CERTIFIED BY THE ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS FOR THE 2045 SANTA CRUZ COUNTY REGIONAL TRANSPORTATION PLAN

WHEREAS the Santa Cruz County Regional Transportation Commission is the state-designated Regional Transportation Planning Agency (RTPA) for Santa Cruz County; and

WHEREAS California Government Code Section 65080(d) requires that each RTPA that does not contain an urbanized area must adopt and submit an updated Regional Transportation Plan (RTP) to the California Transportation Commission and the Department of Transportation no later than every four years; and

WHEREAS Santa Cruz County Regional Transportation Commission has prepared a Regional Transportation Plan in accordance with California Transportation Commission (CTC) 2017 Regional Transportation Plan Guidelines, prepared pursuant to Government Code Section 14522; and

WHEREAS pursuant to the California Environmental Quality Act (“CEQA”) (Public Res. Code, §21000 et seq.) and the State CEQA Guidelines (14 Cal. Code Regs. §15000 et seq.), the Association of Monterey Bay Area Governments (AMBAG) is the lead agency for the 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), which incorporates the Santa Cruz County Regional Transportation Commission RTP; and

WHEREAS AMBAG has overseen, in coordination with the Santa Cruz County Regional Transportation Commission, the Transportation Agency for Monterey County and San Benito County Council of Governments the preparation of the Environmental Impact Report (“EIR”) for each County’s Regional Transportation Plan; and

WHEREAS AMBAG was designated the Santa Cruz County RTP EIR lead agency by the Santa Cruz County Regional Transportation Commission, which is a Responsible Agency for the Santa Cruz County RTP EIR; and

WHEREAS AMBAG has prepared and certified the Final EIR (SCH#2020010204) for the 2045 MTP/SCS, which incorporates the 2045 Santa
WHEREAS the Final EIR consists of: (1) the Final EIR volume, which is a complete revision of the Draft EIR; and (2) all appendices to the Final EIR, including Appendix H, which consists of comments received on the Draft EIR, a list of persons, organizations and public agencies commenting on the Draft EIR, responses to significant environmental issues raised in the review and consultation process and other information; and

WHEREAS CEQA Findings have been prepared in compliance with Public Resources Code §§21081 and 21081.5, and CEQA Guidelines Section §15091 and 15096(h), for every significant impact of the 2045 Santa Cruz County RTP identified in the EIR and for each alternative evaluated in the EIR, including an explanation of the rationale for each finding (attached hereto as Exhibit A); and

WHEREAS the 2045 Santa Cruz County RTP will have significant unavoidable impacts that cannot be avoided or substantially lessened, and a Statement of Overriding Considerations has been prepared in compliance with Public Resources Code §21081, and CEQA Guidelines §15093 and 15096(h), (attached hereto as Exhibit A), which concludes that specific economic, legal, social, technological and other benefits of the 2045 Santa Cruz County RTP outweigh the significant and unavoidable impacts identified in the EIR; and

WHEREAS a Mitigation Monitoring and Reporting Program has been prepared in compliance with Public Resources Code §21081.6 and CEQA Guidelines §15097 (attached hereto as Exhibit B) to ensure implementation of the mitigation measures identified in the Final EIR; and

WHEREAS all other legal prerequisites to the adoption of this Resolution have occurred; and

WHEREAS prior to taking action on the Project, the Santa Cruz County Regional Transportation Commission has considered all of the information in the EIR administrative record pertaining to the Santa Cruz County Regional Transportation Commission 2045 RTP, including the Final EIR, and all oral and written evidence presented to it during all meetings and hearings.

NOW THEREFORE BE IT RESOLVED BY THE SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION THAT THE FOREGOING RECITALS ARE TRUE AND CORRECT AND INCORPORATED BY THIS REFERENCE; AND

BE IT FURTHER RESOLVED that the Santa Cruz County Regional Transportation Commission finds that the Final EIR consists of: (1) the Final EIR; and (2) all appendices to the Final EIR (Appendices A-H), including Appendix H, which consists of comments and recommendations received on the Draft EIR, a list of persons, organizations and public agencies commenting on the Draft EIR,
responses to significant environmental points raised in the review and consultation process and other information; and

BE IT FURTHER RESOLVED that the Santa Cruz County Regional Transportation Commission makes and adopts the Findings required by Public Resources Code §§21081 and 21081.5. and CEQA Guidelines §15091 and 15096(h), which are attached hereto as Exhibit A and incorporated fully by this reference; and

BE IT FURTHER RESOLVED that the Santa Cruz County Regional Transportation Commission adopts the Statement of Overriding Considerations as required by Public Resources Code §21081, and CEQA Guidelines §15093 and 15096(h), which is attached hereto as Exhibit A and incorporated fully by this reference; and

BE IT FURTHER RESOLVED that the Santa Cruz County Regional Transportation Commission adopts the Mitigation Monitoring and Reporting Program as required by Public Resources Code §21081.6 and CEQA Guidelines §15097, which is attached hereto as Exhibit B and incorporated fully by this reference.

PASSED AND ADOPTED by the Santa Cruz County Regional Transportation Commission, on this 16th day of June 2022.

AYES: COMMISSIONERS Bertrand, S.Brown, Johnson, Koenig, McPherson, Parker, Rotkin, and Commissioner Alternates Hurst, Hernandez, Schiffrin, and Quinn

NOES: COMMISSIONERS

ABSTAIN: COMMISSIONERS

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Manu Koenig, CHAIR

ATTEST:
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Guy Preston, SECRETARY

Exhibit A: CEQA Findings, Statement of Overriding Consideration
Exhibit B: Mitigation Monitoring and Reporting Program

Distribution: AMBAG, Caltrans, CTC, SCMTD, Cities, County, FHWA
CEQA FINDINGS OF FACT, STATEMENT OF OVERRIDING CONSIDERATIONS AND MITIGATION MONITORING AND REPORTING PROGRAM

I. INTRODUCTION TO CEQA FINDINGS

These Findings of Fact are made pursuant to the California Environmental Quality Act (Pub. Res. 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 Association of Monterey Bay Area Governments (AMBAG), as the lead agency for the 2045 Metropolitan Transportation Plan and Sustainable Communities Strategy (“2045 MTP/SCS,” or the “project”). These Findings of Fact pertain to the Final Environmental Impact Report (“EIR”) SCH #2020010204 prepared for the 2045 MTP/SCS.

A. PROJECT DESCRIPTION SUMMARY

The proposed project by the Association of Monterey Bay Area Governments (AMBAG) is the 2045 Metropolitan Transportation Plan and Sustainable Communities Strategy (MTP/SCS), which is a long-range planning document required by both State and Federal law and is an update of the 2040 AMBAG MTP/SCS. It contains a compilation of Regional Transportation Plans (RTPs) for Monterey, San Benito and Santa Cruz Counties and is used to achieve a coordinated and balanced regional transportation system. The plan is organized into seven chapters, plus an executive summary, as follows: Chapter 1 – Vision, Chapter 2 – Transportation Investments, Chapter 3 – Financial Plan, Chapter 4 – Sustainable Communities Strategy, Chapter 5 – Outcomes, Chapter 6 – Public Participation, Chapter 7 – Glossary. Of the seven chapters of the 2045 MTP/SCS, Chapters 1, 2, 3 and 4 are those with the potential to create physical changes to the environment.

AMBAG has prepared the Sustainable Communities Strategy (SCS) as part of the MTP, pursuant to the requirements of California Senate Bill 375 as adopted in 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 2045 MTP/SCS is based on a preferred land use scenario that consists of an intensified land use distribution approach that concentrates the forecasted population and employment growth in urban areas. The transportation network includes additional highway, local street improvements, active transportation and transit investments to serve a more concentrated urban growth pattern. Transportation system improvement projects identified in the 2045 MTP/SCS include: highway/roadway projects; bus rapid transit and rail projects; active transportation (bicycle and pedestrian projects); transportation demand management, transportation system management and intelligent transportation system (ITS) projects; and aviation projects.

The 2045 MTP/SCS would be implemented with several other existing AMBAG programs designed to reduce adverse impacts to transportation resources, air quality, GHG emissions and energy. These are described in Section 2.6, Relationship with Other Plans and Programs, of the Final EIR, and
include the AMBAG Sustainability Program, Electric Vehicle Infrastructure for the Monterey Bay Area, Complete Streets Planning and Design Guidelines, Rideshare, Bike to School Day and Bike to Work Day Program, Safe Routes to Schools Program, Regional Ecological Framework Project, Zero Emission Electric Motorcycle Pilot Project, Freeway Service Patrol and Motorist Assistance Program, and Seniors and Accessible Transportation Services.

The primary objective of the 2045 MTP/SCS is to comply with applicable regulatory requirements, including California Transportation Commission Guidelines and SB 375 regional GHG reduction targets. AMBAG’s specific objectives for the 2045 MTP/SCS are to additionally ensure that the transportation system planned for the AMBAG 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.

B. TYPE OF EIR

The 2045 MTP/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).

C. PROCEDURAL COMPLIANCE WITH CEQA

AMBAG published a Draft EIR on November 22, 2021, and a Final EIR on May 19, 2022, in compliance with CEQA requirements. AMBAG prepared the Draft and Final EIRs in accordance with CEQA and the CEQA Guidelines. As allowed for in CEQA Guidelines Section 15084(d)(2), AMBAG retained a consultant to assist with the preparation of the environmental documents. AMBAG, acting as lead agency, has directed, reviewed and edited as necessary all material prepared by the consultant, and such material reflects AMBAG’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 AMBAG’s issuance of the Notice of Preparation (NOP) of an EIR. The NOP was filed with the State Clearinghouse on January 15, 2020, which started a 30-day comment period that ended February 14, 2020. AMBAG noticed and held three EIR scoping meetings during the 30-day NOP comment period to receive perspective and input from agencies, organizations and individuals on the scope and content of the environmental information to be addressed in the EIR. EIR scoping meetings were held on January 22, 2020 in Santa Cruz; January 23,
2020 in Hollister; and on January 29, 2020 in Monterey.

AMBAG issued the Draft EIR on November 22, 2021. The Notice of Availability for the Draft EIR was published in local newspapers (listed below) and distributed to a variety of government agencies, organizations and interested parties, including: local jurisdictions, tribal governments, state and federal agencies, resource agencies, water districts and boards, transportation agencies, community groups and organizations, business organizations, chambers of commerce, universities and school districts, senior/aging organizations, interested parties and members of the public. The Draft EIR was also posted on AMBAG’s website and available for review at the AMBAG Office, the Transportation Agency for Monterey County office, and several libraries throughout the AMBAG region.

Notice of Availability Published in Local Papers

- AMBAG, 24580 Silver Cloud Court, Monterey, CA 93940
- Transportation Agency for Monterey County, 55B Plaza Circle, Salinas, CA 93901
- Marina Branch Library, 190 Seaside Circle, Marina, CA 93933
- Greenfield Branch Library, 315 El Camino Real, Greenfield, CA 93927
- Watsonville Public Library, 275 Main Street, Suite 100, Watsonville, CA 95076
- Downtown Santa Cruz Public Library, 224 Church St, Santa Cruz, CA 95060
- Felton Branch Library, 6121 Gushee Street, Felton, CA 95018
- Capitola Branch Library, 2005 Wharf Road, Capitola, CA 95010
- La Selva Beach Branch Library, 316 Estrella Avenue, La Selva Beach, CA 95076
- Council of San Benito County of Governments, 330 Tres Pinos Road, Suite C7, Hollister CA 95023

The Notice of Completion for the Draft EIR was filed with the State Clearinghouse on November 22, 2021. The Draft EIR was available for a 70-day public review period starting November 22, 2021 and ending January 31, 2022. AMBAG hosted online public hearings on the Draft EIR and the Draft 2045 MTP/SCS on January 12, January 19, January 24, and January 27, 2022. These meetings were online due to health concerns of the ongoing COVID-19 pandemic.

After the close of the first comment period on the Draft EIR, AMBAG decided to recirculate a part of Section 6, Other Statutory Considerations, of the Draft EIR, specifically Section 6.4.2(h) (Greenhouse Gas Emissions), Impact GHG-C-1. This decision was made based on the fact that, after completion of the Draft EIR, AMBAG identified a clerical error indicating that the 2045 MTP/SCS would not have a cumulatively considerable contribution to a significant cumulative greenhouse gas (GHG) impact related to exceeding state GHG reduction targets, when in actuality it would. No other sections of the Draft EIR were revised. The Notice of Availability and Notice of Completion for the partially recirculated Draft EIR were made available on April 15, 2022. The partially recirculated Draft EIR was circulated for a comment period extending from April 15, 2022 to May 31, 2022.

Following the close of the second public review period, AMBAG revised the Draft EIR in response to comments received during the public review period on the Draft EIR and the public review period for the partially recirculated Draft EIR and provided written responses addressing all significant
environmental issues raised. Revisions made to the Draft EIR are shown throughout the Final EIR in strikethrough and underline text.

AMBAG published the Final EIR on June 3, 2022. AMBAG provided written responses to all public agencies that commented on the Draft EIR on June 3, 2022, which is at least 10 days prior to certifying the EIR. The AMBAG Board of Directors held a public hearing on June 15, 2022, to consider certification of the Final EIR and approval of the project.

D. INCORPORATION OF FINAL EIR BY REFERENCE

The Final EIR is hereby incorporated by reference into these Findings of Fact. The Final EIR consists of: (1) the Final EIR volume, which is a complete text of the Draft EIR with revisions; and (2) all appendices to the Final EIR, including Appendix H which contains comments on the Draft EIR. Appendix H includes a list of persons, organizations and public agencies commenting on the Draft EIR; and AMBAG’s responses to environmental issues raised in Draft EIR comments.

E. 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.))

AMBAG has made one or more of these specific written findings regarding each significant impact associated with the 2045 MTP/SCS. Those findings are presented below, along with a presentation of facts in support of the findings. The AMBAG 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
AMBAG Board of Directors, including but not limited to the Final EIR “supporting evidence” cited herein.

II. LOCATION AND CUSTODIAN OF THE RECORD

The documents and other materials that constitute the record of proceedings on which AMBAG’s Findings of Fact are based are located at 24580 Silver Cloud Court, Monterey, California. The custodian of these documents is Heather Adamson. This information is provided in compliance with Public Resources Code Section 21081.6(a)(2) and 14 Cal. Code Regs. Section 15091(e).

For purposes of CEQA and these Findings of Fact, the Record of Proceedings for the project consists of the following documents and other evidence, at a minimum:

The Notice of Preparation (NOP) and all other public notices issued by AMBAG 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 submitted by agencies or members of the public during the public comment period on the Draft EIR.

All responses to the written comments included in the Final EIR.

All comments and correspondence submitted to AMBAG with respect to the project.

The Mitigation Monitoring and Reporting Program (MMRP) for the project.

All Findings and resolutions adopted by AMBAG decision makers 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 prepared by Rincon Consultants, consultants to AMBAG.

All reports, memoranda, documentation, data output files relating to the land use and transportation modeling for the project.

All documents and information submitted to AMBAG by responsible, trustee, or other public agencies, or by individuals or organizations, in connection with the project, up through the date the AMBAG Board of Directors approved the project.

Minutes and/or verbatim transcripts of all information sessions, public meetings and public hearings held by AMBAG, in connection with the project.

Any documentary or other evidence submitted to AMBAG at such information sessions, public meetings, and public hearings.

Matters of common knowledge to AMBAG, including, but not limited to federal, State, and local laws and regulations.

Any documents expressly cited in these Findings of Fact, 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).
III. FINDINGS FOR IMPACTS IDENTIFIED AS INSIGNIFICANT

Public Resources Code Section 21081 and CEQA Guidelines Section 15091 do not require findings of fact for impacts that are less than significant. Nevertheless, for the sake of completeness, the AMBAG Board of Directors hereby finds that the following environmental impacts of the 2045 MTP/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)). 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.

A. AGRICULTURAL AND FORESTRY RESOURCES

1. Impact AG-2. Proposed transportation improvements and land use projects envisioned by the 2045 MTP/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 2045 MTP/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 page 4.2-18 of the Final EIR.

B. AIR QUALITY AND HEALTH IMPACTS/RISKS

1. Impact AQ-1. The 2045 MTP/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 2045 MTP/SCS would not conflict with or obstruct implementation of the Monterey Bay Air Resources District’s Air Quality Management Plan.

   c. Supportive Evidence - Please refer to pages 4.3-27 and 4.3-28 of the Final EIR.

2. Impact AQ-6. Implementation of the 2045 MTP/SCS would not result in other emissions (such as those leading to odors) adversely impacting a substantial number of people. Impacts would be less than significant.

   a. Mitigation – No mitigation is required.
b. **Findings and Rationale** – Objectionable odors associated with the construction and operation of the projects from the 2045 MTP/SCS would be temporary and regulated by local governing bodies (i.e., MBARD, counties, and cities). Implementation of the 2045 MTP/SCS would not result in odors or emissions adversely affecting a substantial number of people.

c. **Supportive Evidence** - Please refer to pages 4.3-44 and 4.3-45 of the Final EIR.

B. BIOLOGICAL RESOURCES

1. **Impact BIO-4.** Implementation of transportation improvements and the land use scenario envisioned by the 2045 MTP/SCS would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy. This impact would be less than significant.

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

   b. **Findings and Rationale** – Projects included in the 2045 MTP/SCS would impact biological resources such as trees but must comply with city and county development requirements, including compliance with local policies, ordinances and applicable permitting procedures related to protection biological resources, including trees. Impacts would be less than significant.

   c. **Supportive Evidence** - Please refer to pages 4.4-48 and 4.4-49 of the Final EIR.

2. **Impact BIO-5.** Implementation of transportation improvements and the land use scenario envisioned by the 2045 MTP/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. There would be no impact.

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

   b. **Findings and Rationale** – There are no adopted regional Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or State habitat conservation plans within Monterey, San Benito, and Santa Cruz counties at the time of Draft EIR preparation and therefore no conflict with the 2045 MTP/SCS would occur.

   c. **Supportive Evidence** - Please refer to page 4.4-49 of the Final EIR.

C. CULTURAL RESOURCES

1. **Impact CR-3.** Implementation of proposed transportation improvements and the land use scenario envisioned by the 2045 MTP/SCS could disturb human remains. Impacts would be less than significant.
a. Mitigation – No mitigation is required.

b. Findings and Rationale – Impacts would be less than significant with mandatory compliance with existing State regulations and laws pertaining to human burials and remains.

c. Supportive Evidence – Please refer to pages 4.5-23 and 4.5-24 of the Final EIR.

D. ENERGY

1. Impact E-1. Future transportation improvement projects and implementation of the land use scenario envisioned by the 2045 MTP/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 2045 MTP/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 4.6-15 through 4.6-17 of the Final EIR.

2. Impact E-2. the 2045 MTP/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 2045 MTP/SCS includes projects that support alternative energy use and multi-modal transportation. The 2045 MTP/SCS would result in an approximately 13 percent reduction in total energy usage compared to 2020 baseline conditions.
   c. Supportive Evidence – Please refer to pages 4.6-17 through 4.6-18 of the Final EIR.

3. Impact E-3. The 2045 MTP/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 2045 MTP/SCS would result in an approximately 13 percent reduction in total energy usage compared to 2020 baseline conditions and is consistent with State and local plans for renewable energy or energy efficiency.
   c. Supportive Evidence – Please refer to pages 4.6-19 through 4.6-20 of the Final EIR.
E. GEOLOGY AND SOILS

1. **Impact GEO-1.** Implementation of proposed transportation improvements and future projects included in land use scenario envisioned in the 2045 MTP/SCS would not directly or indirectly cause potential substantial adverse effects involving rupture of a known earthquake fault, ground shaking, or seismic-related ground failure. 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 2045 MTP/SCS projects.

   c. **Supportive Evidence** - Please refer to pages 4.7-20 through 4.7-22 of the Final EIR.

2. **Impact GEO-2.** Transportation improvements and future projects included in the land use scenario envisioned in the 2045 MTP/SCS would not cause substantial soil erosion or loss of topsoil. Impacts would be less than significant.

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

   b. **Findings and Rationale** – Projects implementing the 2045 MTP/SCS would conform with applicable county codes related to erosion control and the Construction General Permit. Impacts related to erosion and loss of topsoil would be less than significant.

   c. **Supportive Evidence** - Please refer to page 4.7-22 of the Final EIR.

3. **Impact GEO-3.** Implementation of proposed transportation improvements and future projects included in the land use scenario in the 2045 MTP/SCS would be located on potentially unstable soils or in areas of lateral spreading, subsidence, or high liquefaction potential, or areas of expansive soil. Compliance with applicable regulations would reduce impacts to less than significant.

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

   b. **Findings and Rationale** – Projects implementing the 2045 MTP/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 4.7-23 and 4.7-24 of the Final EIR.

4. **Impact GEO-4.** Implementation of proposed transportation improvements and future projects included in the land use scenario envisioned in the 2045 MTP/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 2045 MTP/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 4.7-25 of the Final EIR.

5. **Impact GEO-6.** Implementation of proposed transportation improvements and future projects included in the land use scenario envisioned in the 2045 MTP/SCS would not result in the loss of availability of known mineral resources of value or locally-important mineral resource recovery sites. This impact would be less than significant.

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

b. **Findings and Rationale** – The 2045 MTP/SCS primarily involves transportation improvements infill and transit-oriented development. Development would not be located on sites with known mineral resources. Impacts would be less than significant.

c. **Supportive Evidence** - Please refer to page 4.7-29 of the Final EIR.

F. GREENHOUSE GAS EMISSIONS/CLIMATE CHANGE

1. **Impact GHG-2.** Operation of the 2045 MTP/SCS would not generate a net increase in GHG emissions by 2045 compared to baseline 2020 conditions. Impacts would be less than significant.

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

b. **Findings and Rationale** – The 2045 MTP/SCS would result in decreased operational regional GHG emissions compared to 2020 baseline conditions in 2045. Therefore, impacts would be less than significant.

c. **Supporting Evidence** – Please refer to pages 4.8-21 through 4.8-23 of the Final EIR.

2. **Impact GHG-3.** Implementation of the 2045 MTP/SCS would not conflict with regional SB 375 per capita passenger vehicle CO₂ emission reduction targets of 6 percent by 2035 from 2005 levels. Impacts would be less than significant.

a. **Mitigation** – No mitigation is required.
b. **Findings and Rationale** – Implementation of the 2045 MTP/SCS would achieve the region’s SB 375 emissions reduction targets. Therefore, impacts would be less than significant.

c. **Supporting Evidence** – Please refer to pages 4.8-23 and 4.8-24 of the Final EIR.

G. **HAZARDS AND HAZARDOUS MATERIALS**

1. **Impact HAZ-1.** Proposed transportation improvement projects and land use projects included in the 2045 MTP/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 4.9-21 through 4.9-23 of the Final EIR.

2. **Impact HAZ-2.** Proposed transportation improvement projects and land use projects included in the 2045 MTP/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. 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 4.9-24 of the Final EIR.

3. **Impact HAZ-4.** Transportation improvement projects and land use development included in the proposed 2045 MTP/SCS located within an airport land use plan or within two miles of a public or public use airport would not result in a safety hazard or excessive noise for people residing or working in the project area. Impacts 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 4.9-27 of the Final EIR.

4. **Impact HAZ-5.** Land use development and transportation projects included in the 2045 MTP/SCS would not impair implementation or physically interfere with adopted emergency response or evacuation plans. Impacts would be less than significant.

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

   b. **Findings and Rationale** – Required regular updates to emergency response and evacuation plans would account for development and projects included in the 2045 MTP/SCS, and transportation projects have the potential to improve circulation, including during emergency response. Impacts would be less than significant.

   c. **Supporting Evidence** – Please refer to page 4.9-28 of the Final EIR.

**H. HYDROLOGY AND WATER QUALITY**

1. **Impact HWQ-1.** Transportation improvements and future projects included in the land use scenario envisioned in the 2045 MTP/SCS would not violate water quality standards or waste discharge requirements, and would not substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation. Impacts would be less than significant.

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

   b. **Findings and Rationale** – Construction of projects included in the 2045 MTP/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. Impacts would be less than significant.

   c. **Supporting Evidence** – Please refer to pages 4.10-19 through 4.10-21 of the Final EIR.

2. **Impact HWQ-2.** Transportation improvements and future projects included in the land use scenario envisioned in the 2045 MTP/SCS would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that sustainable groundwater management of the basin would be impeded or conflicts with sustainable groundwater management plans would result. 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 any increases in off-site stormwater runoff by encouraging on-site infiltration, which would effectively minimize the potential reduction in groundwater recharge to an acceptable level. In addition, implementation of projects under the 2045 MTP/SCS would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin would be impeded. Therefore, impacts of the proposed 2045 MTP/SCS to groundwater supply and recharge, as well as sustainable groundwater management and sustainable groundwater management plans, would be less than significant.

c. Supporting Evidence – Please refer to page 4.10-21 through 4.10-23 of the Final EIR.

3. Impact HWQ-3. Transportation improvements and future projects included in the land use scenario envisioned in the 2045 MTP/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. Impacts would be less than significant.

a. Mitigation – No mitigation is required.

b. Findings and Rationale – Compliance with existing regulations related to stormwater management and nonpoint source pollution control would ensure that alterations of drainage patterns caused by 2045 MTP/SCS transportation and land use projects would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding; contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems; or provide substantial additional sources of polluted runoff. Impacts would be less than significant.

c. Supporting Evidence – Please refer to pages 4.10-24 and 4.10-25 of the Final EIR.

4. Impact HWQ-4. Transportation improvements and future projects included in the land use scenario envisioned in the 2045 MTP/SCS would not substantially alter drainage patterns in a manner which would impede or redirect floor flows, or risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. This impact 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 4.10-25 through 4.10-27 of the Final EIR.

5. **Impact HWQ-5.** Transportation improvements and future projects included in the land use scenario envisioned in the 2045 MTP/SCS would not conflict with or obstruct implementation of a water quality control plan. Impacts would be less than significant.

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

   b. **Findings and Rationale** – Development under the 2045 MTP/SCS would not substantially degrade water quality or violate water quality standards because compliance with state regulation such as NPDES and MS4 permits would require implementation of BMPs and development to reduce discharge of runoff and maintain water quality. In addition, local ordinances require measures such as erosion control reduce the discharge of pollutants into storm drain systems. Although individual projects included in the 2045 MTP/SCS have the potential to adversely affect water quality at a project specific level, projects would adhere to existing regulations related to water quality. Therefore, impacts related to conflicts with a water quality control plan (the Central Coast RWQCB Basin Plan) would be less than significant.

I. **LAND USE**

1. **Impact LU-1.** Implementation of proposed transportation improvements and the land use scenario envisioned by the 2045 MTP/SCS would not physically divide an established community. This is impact would be less than significant.

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

   b. **Findings and Rationale** – The transportation projects included in the 2045 MTP/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 2045 MTP/SCS encourages infill development in existing communities, rather than new communities in rural areas where new roads would be required. Therefore, the 2045 MTP/SCS would not physically divide established communities, and impacts would be less than significant.

   c. **Supportive Evidence** – Please refer to pages 4.11-18 and 4.11-19 of the Final EIR.

2. **Impact LU-2.** The 2045 MTP/SCS would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation and result in a physical change to the environment not already addressed in other resource chapters. 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 2045 MTP/SCS would result in conflicts with land use plans, policies, or regulations. However, the 2045 MTP/SCS would not result in a physical change to the environment that has not already been addressed in the other resource chapters of this EIR. The impacts of any such conflicts are described throughout this section of the EIR.

c. **Supportive Evidence** – Please refer to pages 4.11-19 through 4.11-21 of the Final EIR.

J. POPULATION AND HOUSING

1. **Impact PH-1.** The 2045 MTP/SCS would not induce substantial unplanned population growth, either directly or indirectly. This impact would be less than significant.

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

   b. **Findings and Rationale** – The 2045 MTP/SCS would accommodate forecasted growth through implementation of the envisioned 2045 MTP/SCS land use strategies to intensify density in developed areas, rather than induce unplanned growth. Transportation projects included in the 2045 MTP/SCS would not induce population growth as these projects would be growth accommodating and are generally intended to improve existing transportation networks. The land use and transportation projects in the 2045 MTP/SCS would therefore not result in substantial unplanned population growth. Impacts from implementation of the 2045 MTP/SCS would be less than significant.

   c. **Supportive Evidence** – Please refer to pages 4.13-11 through 4.13-14 of the Final EIR.

2. **Impact PH-2.** Land use and transportation projects included in the 2045 MTP/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 2045 MTP/SCS would temporarily displace existing housing and people as individual housing development sites are redeveloped. However, in the long term, the 2045 MTP/SCS would result in a net increase in housing units in the AMBAG region. Impacts would be less than significant.

   c. **Supportive Evidence** – Please refer to pages 4.13-15 and 4.13-16 of the Final EIR.

K. PUBLIC SERVICES, RECREATION, AND UTILITIES

1. **Impact PSU-2.** The 2045 MTP/SCS would require the provision of new schools, the construction of which would result in substantial physical impacts. Impacts would be less than significant because of state regulations mandating development impact fees.
a. **Mitigation** – No mitigation is required.

b. **Findings and Rationale** – The 2045 MTP/SCS would accommodate the growth of population, households, and jobs in the AMBAG region, which would result in increased demand for school services. Future project sponsors would be required by law to pay development impact fees at the time building permits are issued. These fees are used by the applicable school district to mitigate impacts associated with long-term operation and maintenance of school facilities. The fees would be determined at the time of the building permit issuance and would reflect the most current fee amount requested by the school district. Pursuant to Section 65996(3)(h) of the California Government Code (SB 50), payment of these fees “is deemed to be full and complete mitigation of impacts of any legislative or adjudicative act, or both, involving but not limited to, the planning, use, or development of real property, or any change in government organization or reorganization.” Impacts of the 2045 MTP/SCS on schools would therefore be less than significant.

c. **Supporting Evidence** – Please refer to page 4.14-38 of the Final EIR.

2. **Impact PSU-6.** Proposed transportation improvements and land use development projects envisioned by the 2045 MTP/SCS would be required to comply with all relevant statues and regulations related to solid waste. This impact would be less than significant.

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

   b. **Findings and Rationale** – Projects envisioned by the 2045 MTP/SCS would comply with the California Green Building Code, SB 1016, and existing applicable federal, State, and local statutes, regulations and policies related to solid waste. Compliance with these relevant statutes, regulations, and policies would result in less than significant impacts.

   c. **Supporting Evidence** – Please refer to page 4.14-48 of the Final EIR.

L. **TRANSPORTATION**

1. **Impact T-1.** The 2045 MTP/SCS would not result in a significant impact due to conflicts with any programs addressing the circulation system. This impact would be less than significant.

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

   b. **Findings and Rationale** – Implementation of the 2045 MTP/SCS would improve transit ridership and circulation while also improving active transportation modes and facilities, such as constructing new pedestrian and bicycle facilities. The 2045 MTP/SCS also includes roadway projects that would improve circulation. The 2045 MTP would not conflict with programs addressing the circulation system.

   c. **Supporting Evidence** – Please refer to pages 4.15-23 through 4.15-26 of the Final EIR.
2. **Impact T-3.** The 2045 MTP/SCS would not substantially increase hazards due to geometric design features or incompatible uses. Impacts would be less than significant.

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

   b. **Findings and Rationale** – The regional growth pattern of the 2045 MTP/SCS does not define design level features of roadways. Specific transportation projects under the 2045 MTP/SCS would be subject to and expected to follow the 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.

   c. **Supporting Evidence** – Please refer to pages 4.15-30 and 4.15-31 of the Final EIR.

3. **Impact T-4.** The 2045 MTP/SCS would not result in inadequate emergency vehicle access. Impacts 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 would address 2045 MTP/SCS construction activities that could temporarily impair emergency access points. Projects included in the 2045 MTP/SCS would be subject to the design standards of local jurisdictions for new and existing development and roadways to ensure adequate emergency access. Impacts would be less than significant.

   c. **Supporting Evidence** – Please refer to pages 4.15-32 and 4.15-33 of the Final EIR.
IV. FINDINGS FOR IMPACTS IDENTIFIED AS SIGNIFICANT BUT MITIGATED TO A LESS THAN SIGNIFICANT LEVEL

There are no impacts identified in the Final EIR as significant that could be mitigated to a less than significant level. Remaining findings for significant impacts are discussed in Section V, Findings for Impacts that are Significant and Unavoidable.
V. FINDINGS FOR IMPACTS THAT ARE SIGNIFICANT AND UNAVOIDABLE

The AMBAG 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 State CEQA Guidelines Section 15091(a)(3), makes the following findings with respect to impacts of the project that are significant and unavoidable. The AMBAG 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 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 EIR as well as relevant responses to comments in the Final EIR. 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:

A. AESTHETICS AND VISUAL RESOURCES

1. Impact AES-1. Proposed transportation improvement projects and land use projects envisioned by the 2045 MTP/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.

   a. Mitigation – For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that would degrade scenic vistas or scenic resources within a state scenic highway, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

AES-1(a) Discouragement of Architectural Features that Block Scenic Views. Implementing agencies 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.
AES-1(b) **Tree Protection and Replacement.** New roadways and extensions and widenings of existing roadways shall avoid the removal of existing mature trees to the extent possible. The implementing agency of a particular 2045 MTP/SCS project shall, or can and should, replace any trees lost at a minimum 2:1 basis and incorporate them into the landscaping design for the roadway when feasible. The implementing agency also shall ensure the continued vitality of replaced trees through periodic maintenance.

b. **Findings and Rationale** – The AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs, which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt them. The AMBAG 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 counties, which can and should adopt them. Although the 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 2045 MTP/SCS would still result in obstructions to panoramic views and views of important landscape features or landforms (mountains, oceans, rivers, bays, or important man-made structures) as seen from public viewing areas. Given the extent of planned land use development and the potential for site specific visual obstructions from future land use and transportation projects, impacts related to the obstruction of scenic vistas from public viewing areas and impacts to state-designated scenic highway corridors and scenic resources would be significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.1-11 through 4.1-13 of the Final EIR.

2. **Impact AES-2.** Proposed transportation improvement projects and land use projects envisioned by the 2045 MTP/SCS would substantially degrade existing visual character in the AMBAG region. This would be a significant and unavoidable impact.

a. **Mitigation** – For transportation projects under their jurisdiction, TAMC, SBTsCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measure developed for the 2045 MTP/SCS program where applicable for transportation projects that would substantially degrade visual character, and where feasible and necessary based on project and site-specific considerations. Cities and counties in the AMBAG region can and should implement this
measure, where relevant to land use projects implementing the 2045 MTP/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);
- Protecting or replacing trees in the project area;
- 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. The implementing agency shall provide a performance security equal to the value of the landscaping/irrigation installation to ensure compliance with landscaping plans; and
- Designing new structures to be compatible in scale, mass, character and architecture with existing structures.

b. **Findings and Rationale** – The AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs, which as CEQA responsible agencies for the 2045 MTP/SCS will adopt it. The AMBAG 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 counties, which can and should adopt it. Implementation of Mitigation Measure AES-2 would reduce project-specific impacts to the extent feasible, but the incremental 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. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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
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 Final EIR.

3. **Impact AES-3.** Proposed transportation improvement projects and land use projects envisioned by the 2045 MTP/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, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures for transportation projects that would result in light and glare impacts, and where feasible and necessary based on project and site-specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

AES-3(a) **Roadway Lighting.** Roadway lighting shall be minimized 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 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 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 infill development 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 where feasible;
- Complying with applicable general plan policies 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 AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs, which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt them. The AMBAG 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 counties, which can and should adopt it. 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 due to the variety of project-specific circumstances, mitigation measures may not be feasible for all projects. Therefore, this impact would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.1-16 through 4.1-19 of the Final EIR.

**B. AGRICULTURE AND FORESTRY RESOURCES**

1. **Impact AG-1.** Proposed transportation improvements and land use projects envisioned by the 2045 MTP/SCS would result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use, or conflict with existing zoning for agriculture or a Williamson Act contract. This would be a significant and unavoidable impact.

   a. **Mitigation** – For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that would result in impacts to Important Farmland, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/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.** Implementing agencies shall implement measures, where feasible 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, agriculturally zoned land and/or land under Williamson Act contract;

   ▪ 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 MTP/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 AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs, which, as CEQA responsible agencies for the 2045 MTP/SCS, will adopt it. The AMBAG 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 counties, which can and should adopt it. Implementation of Mitigation Measure AG-1 would require avoidance or compensation for Important Farmland impacts by specific projects included in the 2045 MTP/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 the future land use development pattern and transportation projects could feasibly relocate or realign to avoid conversion of Farmland, lands zoned for agriculture, and lands under Williamson Act contract to a less than significant level. As a result, the aforementioned mitigation measure would reduce impacts, but impacts would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.2-15 through 4.2-17 of the Final EIR.

C. **AIR QUALITY AND HEALTH IMPACTS/RISKS**

1. **Impact AQ-2.** Construction of proposed transportation improvements and land use projects envisioned by the 2045 MTP/SCS would result in a cumulatively considerable net increase in PM$_{10}$ or ozone precursor emissions. Impacts would be significant and unavoidable.

a. **Mitigation** – For transportation projects under their jurisdiction, TAMC, SBtCOG, and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that result in fugitive dust and ozone precursor emissions, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.
AQ-2(a)  **Application of MBARD Feasible Mitigation Measures.** For all projects, the implementing agency shall incorporate the most recent MBARD feasible mitigation measures and/or technologies for reducing inhalable particles based on analysis of individual sites and project circumstances. Current MBARD feasible mitigation measures include the following measures. Additional and/or modified measures may be adopted by MBARD prior to implementation of individual projects under the 2045 MTP/SCS. The most current list of feasible mitigation measures at the time of project implementation shall be used.

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 miles per hour).
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydro seed area.
- Haul trucks shall maintain at least 2’0” of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.
- Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Pave all roads on construction sites.
- Sweep streets if visible soil material is carried out from the construction site.
- Limit the area under construction at any one time.
- Post a publicly visible sign which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Air Resources District shall be visible to ensure compliance with Rule 402 (Nuisance).

AQ-2(b)  **Diesel Equipment Emissions Standards.** The implementing agency shall ensure, to the 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, and engines shall be retrofitted with CARB Level 3 Verified Diesel
Emissions Control Strategy (VDECS) if available for the equipment. 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 possible, construction equipment utilizes electricity from power poles rather than temporary diesel power generators and/or gasoline power generators.

b. **Findings and Rationale** – The AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt them. The AMBAG 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 counties, which can and should adopt them. 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. However, these mitigation measure may not be feasible or effective for all projects. Therefore, this impact would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.3-28 through 4.3-31 of the Final EIR.

2. **Impact AQ-3.** Proposed transportation improvements and land use projects envisioned by the 2045 MTP/SCS would result in a cumulatively considerable net increase of PM$_{10}$. Long-term operational impacts related to PM$_{10}$ emissions would be significant and unavoidable.

a. **Mitigation** – AMBAG, in partnership with MBARD and implementing agencies, shall implement Mitigation Measure AQ-3(a) to reduce PM$_{10}$ emissions. For land use projects under their jurisdiction, the cities and counties in the AMBAG region can and should implement Mitigation Measure AQ-3(b) to reduce PM$_{10}$ emissions, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental
documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**AQ-3(a) PM₁₀ Emissions Reduction.** To help reduce regional PM₁₀ emissions, AMBAG and the RTPAs, in partnership with MBARD and implementing agencies, shall:

- Support the use of existing air quality and transportation funds and seek additional funds to continue the implementation of the CARB Carl Moyer Program, which is intended to retrofit and replace trucks and locomotives to reduce particulate matter.
- Incentivize the reduction of mobile PM emissions from mobile exhaust and entrained PM sources such as tire wear, brake wear, and roadway dust through funding.
- Hold forums and workshops to encourage land use projects to incorporate transportation demand management (TDM) strategies as part of the project design to reduce the number of vehicular trips across the transportation network. Potential strategies could include ridesharing, carpooling, subsidized public transit, flexible work hours, and parking management measures.

**AQ-3(b) Long-term Regional Operational Emissions.** Implementing agencies including transportation project sponsors, counties, and cities shall, or 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 MBARD Rule 426, 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 reduce indoor pollution exposure for residents and other sensitive populations in buildings that are close to transportation network improvement projects.
  - Use air filtration devices rated 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 AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt it. The AMBAG 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 counties, which can and should adopt it. If implementing agencies adopt and require the mitigation described above, transportation related PM$_{10}$ emission impacts would be reduced because said measures encourage the use of cleaner vehicles and reduce vehicle trips. However, since the implementation is not project or site specific, reductions cannot be estimated and cannot be guaranteed on a project-by-project basis. Additionally, it is unlikely that an increase in daily PM$_{10}$ emissions above baseline conditions could be fully avoided in 2045, due to factors unrelated to discretionary approvals, such as population growth in the region. Therefore, this impact would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 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 4.3-31 through 4.3-36 of the Final EIR.

3. **Impact AQ-4.** Implementation of the 2045 MTP/SCS would expose sensitive receptors to substantial pollutant concentrations. Impacts would be significant and unavoidable.

   a. **Mitigation** – RTPAs shall, and other transportation project sponsor agencies can and should, implement Mitigation Measure AQ-3(b) to reduce long-term regional operational emissions. For land use projects under their jurisdiction, the cities and counties in the AMBAG region can and should implement Mitigation Measure AQ-3(b) to reduce pollutant emissions, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

   AQ-3(b)  **Long-term Regional Operational Emissions** (see mitigation measure above).

   b. **Findings and Rationale** – The AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs, which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt it. The AMBAG 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 counties, which can and should adopt it. Implementation of Measures AQ-3(b) would reduce fugitive dust emissions from individual projects and thus reduce the severity of impacts by requiring best practices for dust and emissions via watering, vegetative covers, reducing travel speed, and covering exposed areas. To the extent that an implementing agency requires an individual project to implement all feasible mitigation measures described above, individual project impact would be reduced to a less than significant level. However, these mitigation measure may not be feasible or effective for all projects. Therefore, this impact would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.3-37 and 4.3-38 of the Final EIR.

4. **Impact AQ-5.** Future growth and development facilitated by the 2045 MTP/SCS land use scenario would expose sensitive receptors to substantial hazardous air pollutant concentrations. Impacts would be significant and unavoidable.
a. **Mitigation** – The AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies will adopt it, and partially within the responsibility and jurisdiction of transportation project sponsors and, for land use projects, cities and counties, which can and should adopt it. For transportation projects under their jurisdiction, TAMC, SBtCOG, and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/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 implementing agencies shall, or can and should, implement the following measures:

- 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 sensitive receptors to TAC concentrations.
- If impacts result in increased risks to sensitive receptors above the MBARD significance thresholds, then design features or control measures must be included that will reduce the health risks at the location of the off-site sensitive receptors to a level below the MBARD significance threshold. For example, plant trees and/or vegetation suited to trapping TACs and/or sound walls between sensitive receptors and the pollution source would be recommended. This measure would trap TACs emitted from pollution sources such as highways, reducing the amount of TACs to which residents and other sensitive populations would be exposed.
- AMBAG will partner with MBARD and other implementing agencies to explore a program to retrofit existing residential buildings and other sensitive land uses near freeways or roadways where health risk impacts would exceed MBARD significance thresholds with air filtration devices rated minimum efficiency report value (MERV) 13.
- Implement air pollution reduction strategies as described in Table 1 from the CARB Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways technical advisory (2017) when reasonable and feasible for transportation system projects associated with the 2045 MTP/SCS.

In addition, consistent with the general guidance contained in CARB’s Air Quality and Land Use Handbook (April 2005) and Technical Advisory on Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways (April 2017). Appropriate measures shall include one or more of the following methods, as determined by a qualified professional, as applicable. The implementing agency shall incorporate health risk reduction measures based on analysis of individual land use 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 the freeway 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, that meets or exceeds 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. Either HEPA filters or ASHRAE 85 percent supply filters should be used. Ongoing maintenance should occur.

Retain a qualified HV consultant or Home Energy Rating Systems (HERS) 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 in 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 exhaust emissions.

Implement feasible attenuation measures needed to reduce potential air quality impacts to sensitive receptors such as air filtration systems.

b. Findings and Rationale – The AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs, which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt it. The AMBAG 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
counties, which can and should adopt it. Although implementation of the above mitigation would reduce health risks, based on project-specific circumstances, individual sensitive receptors may still be exposed to substantial hazardous air pollutant concentrations that would have significant health risk effects. Therefore, this impact remains significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.3-39 through 4.3-43 of the Final EIR.

D. **BIOLOGICAL RESOURCES**

1. **Impact BIO-1.** Implementation of transportation improvements and the land use scenario envisioned by the 2045 MTP/SCS would have substantial adverse impacts on special-status plant and animal species, either directly or through habitat modifications. Impacts would be significant and unavoidable.

   a. **Mitigation** – For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall, and transportation project sponsor agencies can and should, implement the following mitigation measures for applicable transportation projects identified in Appendix B, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/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, or can and should, 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, the implementing agency shall retain a qualified biologist to conduct a biological resources assessment (BRA) to document the existing biological resources and to determine the potential impacts to those resources. Depending on 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(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.

**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 require surveys for special-status plants to 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. 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 require the project to be re-designed to avoid impacting these plant species to the extent feasible. 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 2045 MTP/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 implementing agency overseeing the project for approval.

**BIO-1(d) Endangered/Threatened Animal Species Habitat Assessment and Protocol Surveys.** If the BRA determines that suitable habitat may be present for federally and/or state endangered or threatened animal species, the implementing agency shall require protocol habitat assessments/surveys to 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 require re-design of 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 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, NMFS and/or CDFW approved conservation bank if available for the affected species and/or provide 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 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. The HMMP shall be submitted to the agency overseeing the project for approval.

**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]).

- Pre-construction 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/NMFS.

- 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:
Pre-construction clearance surveys shall be conducted within 14 days prior to the start of construction (including staging and mobilization) to identify all special-status animal species that may occur on-site. All non-listed special-status species shall be relocated from the site. A report of the pre-construction 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 pre-construction 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. 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 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.** For construction activities occurring during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the CFGC, the Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act shall be conducted by a qualified biologist retained by the implementing agency 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 ranging from 250 to 500 feet based on the species biology and the current and anticipated disturbance levels occurring in vicinity of the nest. 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 August 31; however, buffers may be relaxed earlier than August 31 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) Worker Environmental Awareness Program (WEAP). Prior to initiation of construction activities, 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.

b. Findings and Rationale – The AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS will adopt them. The AMBAG 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 counties, which can and should adopt them. Compliance with the above mitigation measures would reduce impacts to special-status species and their habitat to less than significant levels 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. Therefore, impacts would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.4-32 through 4.4-40 of the Final EIR.

2. **Impact BIO-2.** Implementation of transportation improvements and the land use scenario envisioned by the 2045 MTP/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.

a. **Mitigation** – For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall, and transportation project sponsor agencies can and should, implement the following mitigation measures for applicable transportation projects identified in Appendix B, where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/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.** If the results of measure BIO-1(a) indicates projects implemented under the 2045 MTP/SCS occur within or adjacent to wetland, drainages, riparian habitats, or other areas that may fall under the jurisdiction of the CDFW, USACE, RWQCB and/or CCC, 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, CDFW and/or CCC, as appropriate, for review and approval, and the project shall be designed to 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 B-2(f).

**BIO-2(b) Wetlands, Drainages, and Riparian Habitat Restoration.** 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 onsite or as close to the impacted habitat as possible. A mitigation and monitoring plan 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 2045 MTP/SCS would impact sensitive natural communities in addition to riparian habitat which is addressed by Measure BIO-2(b), 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 AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs which act as CEQA responsible agencies for the 2045 MTP/SCS, will adopt them. The AMBAG 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 counties, which can and should adopt them. Compliance with the above mitigation measures would reduce impacts to sensitive communities and wetlands to less than significant levels because the mitigation measures require focused biological
surveys, best management practices to avoidance or minimization impacts, compensation for disturbed or loss of sensitive 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. As such, impacts would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.4-40 through 4.4-45 of the Final EIR.

3. Impact BIO-3. Implementation of transportation improvements and the land use scenario envisioned by the 2045 MTP/SCS would substantially interfere with wildlife movement, including fish migration, and/or impede the use of a native wildlife nursery. This impact would be significant and unavoidable.

a. Mitigation – For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall, and transportation project sponsor agencies can and should, implement the following mitigation measures for applicable transportation projects identified in Appendix B, where feasible and necessary based on project and site-specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/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. The implementing agency shall implement the following measures. All projects including long segments of fencing, long linear projects, and lighting shall be designed to minimize impacts to wildlife. 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 such as overpasses, underpasses, culverts, etc., 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.** The implementing agency shall implement the following measures. Permanent structures shall be avoided to the extent feasible within any drainage or river that serves as a wildlife migration corridor that would impede wildlife movement. 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 AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt them. The AMBAG 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 counties, 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. However, it cannot be guaranteed that movement of terrestrial species will not be impeded at the regional
scale due to the large scale of the 2045 MTP/SCS. Therefore, impacts would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.4-45 through 4.4-48 of the Final EIR.

**E. CULTURAL RESOURCES**

1. **Impact CR-1.** Implementation of proposed transportation improvements and the land use scenario envisioned by the 2045 MTP/SCS would cause a substantial adverse change in built environment cultural resources that are historical resources as defined in State CEQA Guidelines Section 15064.5. Impacts would be significant and unavoidable.

   a. **Mitigation** – To minimize impacts to historical resources for transportation projects under AMBAG jurisdiction, working with TAMC, SBtCOG, and SCCRTC shall, and transportation project sponsor agencies can and should, implement the following mitigation developed for the 2045 MTP/SCS program where applicable for transportation projects that result in impacts to historic resources, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG planning region can and should implement these measures, where relevant to land use projects implementing under the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

   **CR-1 Historical Resources Impact Minimization.** Prior to individual project permit issuance, the implementing agency of a 2045 MTP/SCS project involving earth disturbance or construction of permanent above ground structures or roadways shall, or can and should, prepare a map defining the Area of Potential Effects (APE). This map shall indicate the areas of primary and secondary disturbance associated with construction and operation of the facility and will help in determining whether known historical resources are located within the impact zone. If a structure greater than 45 years in age is within the identified APE, a survey and evaluation of the structure(s) to determine their eligibility for recognition under State, federal, or local historic preservation 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. The evaluation shall comply with State CEQA Guidelines section 15064.5(b). Study recommendations shall be implemented, which may include, but would not be limited to, the following:
- Realign or redesign projects to avoid impacts on known historic resources where possible
- If avoidance of a significant architectural/built environment resource is not feasible, additional mitigation options include, but are not limited to, specific design plans for historic districts, or plans for alteration or adaptive re-use of a historical resource that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitation, Restoring, and Reconstructing Historic Buildings
- Comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect historic resources

b. Findings and Rationale – The AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt it. The AMBAG 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 counties, which can and should adopt it. Redevelopment or demolition that may be required to implement transportation improvements and/or infill development 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 would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.5-19 through 4.5-21 of the Final EIR.

2. Impact CR-2. Implementation of proposed transportation improvements and the land use scenario envisioned by the 2045 MTP/SCS would cause a substantial adverse change in the significance of archaeological resources as defined in State CEQA Guidelines Section 15064.5. Impacts would be significant and unavoidable.

a. Mitigation – To minimize impacts to cultural resources for transportation projects under AMBAG jurisdiction, working with TAMC, SBtCOG, and SCCRTC shall, and transportation project sponsor agencies can and should, implement the following mitigation developed for the 2045 MTP/SCS program where applicable for transportation projects that result in impacts to archaeological resources, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG planning region can and should implement these measures, where relevant to land use projects.
implementing the 2045 MTP/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, or can and should, retain a qualified archaeologist to conduct a record search at the Northwest 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, or can and should, 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. Recommended mitigation measures will be consistent with State 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. If evidence of any prehistoric or historic-era subsurface archaeological features or deposits are discovered during construction-related earthmoving activities (e.g., ceramic shard, trash scatters, lithic scatters), implementing agencies shall, or can and should, halt all ground-disturbing activity proximate to the discovery until a qualified archaeologist (36 CFR Section 61) can assess the significance of the find. If the find is a prehistoric archaeological site, the culturally affiliated California Native American tribe 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. Recommended mitigation measures will be consistent with State 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. 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 may 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 AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt it. The AMBAG 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 counties, which can and should adopt it. Implementation of the above measure would reduce impacts to archaeological resources by requiring cultural resource searches and surveys of project areas and providing a procedure for discovered cultural archaeological resources. While implementation of Mitigation Measure CR-2 would reduce impacts to the extent feasible, some project specific impacts may be unavoidable. Therefore, this impact remains significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.5-21 through 4.5-23 of the Final EIR.

F. GEOLOGY AND SOILS

1. **Impact GEO-5.** Implementation of proposed transportation improvements and the land use scenario envisioned by the 2045 MTP/SCS would directly or indirectly destroy a unique paleontological resource or site or unique geological feature. Impacts would be significant and unavoidable.

a. **Mitigation** – For transportation projects under their jurisdiction, TARC, SBtCOG and SCCRTC shall, and transportation project sponsor agencies can and should, implement the following mitigation developed for the 2045 MTP/SCS program where applicable for transportation projects that result in impacts to paleontological resources, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement this mitigation measure where relevant to land use projects implementing the 2045 MTP/SCS. Project specific
environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**GEO-5 Paleontological and Geologic Resources Impact Minimization.** The implementing agency of a 2045 MTP/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 geological features. If avoidance practices cannot be implemented, the following measures shall apply.
- **Paleontological Mitigation and Monitoring Program.** A qualified paleontologist shall prepare a Paleontological Mitigation and Monitoring Program to be implemented during ground disturbance activity. This program shall outline the procedures for construction staff training, paleontological monitoring extent and duration (i.e., in what locations and at what depths paleontological monitoring shall be required), salvage and preparation of fossils, the final mitigation and monitoring report and paleontological staff qualifications.
- **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.** Ground disturbing activity with the potential to disturbed geologic units with high paleontological sensitivity shall be monitored on a full-time basis by a qualified paleontological monitor. Should no fossils be observed during the first 50 percent of such excavations, paleontological monitoring could be reduced to weekly spot-checking under the discretion of the qualified paleontologist. 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.
- **Salvage of Fossils.** If 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 should 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, along with all pertinent field notes, photos, data and maps.

- **Final Paleontological 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 mitigation and monitoring program. 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.

b. **Findings and Rationale** – The AMBAG Board of Directors finds that this mitigation measure is within the responsibility and jurisdiction of cities and counties, 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 PRA and mitigation measures for any projects under the 2045 MTP/SCS that may impact such resources. While implementation of Mitigation Measure GEO-4 would reduce impacts to the extent feasible, some project specific impacts may be unavoidable. Therefore, this impact is significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.7-26 through 4.7-28 of the Final EIR.

G. **GREENHOUSE GAS EMISSIONS/CLIMATE CHANGE**

1. **Impact GHG-1.** Construction of the transportation improvement projects and development within future land use patterns envisioned by the 2045 MTP/SCS would generate a net increase GHG emissions by 2045 compared to baseline 2020 conditions. Impacts would be significant and unavoidable.
a. **Mitigation** – For all transportation projects under their jurisdiction, TAMC, SBtCOG, and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects generating construction GHG emissions, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Implementation of Mitigation Measures AQ-2(b) and AQ-2(c) in Section 4.3, *Air Quality*, of the Final EIR would also reduce GHG emissions from the 2045 MTP/SCS.

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

- Use of on-road heavy-duty trucks that meet the CARB’s 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the five-minute idling limit;
- Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and
- Use of alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, in place of diesel-powered equipment for 15 percent of the fleet, to the extent electric powered equipment is not feasible;
- Use of materials sourced from local suppliers;
- Recycling of at least 75 percent of construction waste materials; and
- Project proponents shall incentivize that construction workers carpool, and/or use electric vehicles to commute to and from the project site.

b. **Findings and Rationale** – The AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt it. The AMBAG 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 counties, 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 Measures AQ-2(b) and AQ-2(c)
would also reduce GHG emissions from the 2045 MTP/SCS. However, these mitigation measure may not be feasible or effective for all projects. Therefore, this impact would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.8-20 and 4.8-21 of the Final EIR.

2. **Impact GHG-4.** Implementation of the 2045 MTP/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, SBtCOG, SCCRTC, and TAMC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects generating construction GHG emissions, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions. Implementation of Mitigation Measures T-2(a) and T-2(b) in Section 4.15, *Transportation*, of the Final EIR would also reduce GHG emissions from the 2045 MTP/SCS.

**GHG-4(a) Transportation-Related GHG Reduction Measures.** The implementing agency shall incorporate the most recent GHG reduction measures and/or technologies for reducing VMT and associated transportation related GHG emissions. GHG-reducing mitigation 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 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 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

**GHG-4(b) Land Use Project Energy Consumption and Water Use Reduction Measures.**

For land use projects under their jurisdiction, the cities and counties in the AMBAG region 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.

- 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

**b. Findings and Rationale** – The AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt it. The AMBAG 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 counties, which can and should adopt it. Implementation of project level GHG-reducing measures would reduce GHG emissions, but may not be feasible and cannot be guaranteed on a project by project basis. Additionally, it is speculative at this time to forecast whether project level GHG emission reductions would be sufficient to achieve regionwide reduction in GHG emissions of 40 percent below 1990 levels by 2030. Therefore, this impact would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.8-25 through 4.8-29 of the Final EIR.

H. HAZARDS AND HAZARDOUS MATERIALS

1. Impact HAZ-3. The 2045 MTP/SCS includes land use projects and transportation projects that could occur on sites on the list of hazardous material sites compiled by Government Code Section 65962.5. Impacts would be significant and unavoidable.

   a. Mitigation – For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that result in hazardous materials impacts, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/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 2045 MTP/SCS is located on or near a hazardous materials and/or waste site pursuant to 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 AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt it. The AMBAG 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 counties, which can and should adopt it. With implementation of this mitigation, impacts would be reduced.
to less than significant because project sites with hazardous material contamination that are on the list compiled by the 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. Therefore, impacts would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.9-25 through 4.9-27 of the Final EIR.

I. NOISE

1. **Impact N-1.** Construction activities associated with transportation projects and land use projects under the 2045 MTP/SCS would generate a substantial temporary increase in ambient noise levels in excess of standards or over existing noise levels, and would generate a substantial absolute noise increase over existing noise levels. Impacts would be significant and unavoidable.

a. **Mitigation** – For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that result in construction noise impacts, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures 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.

   - Implementing agencies of 2045 MTP/SCS projects shall ensure that, where residences or other noise sensitive uses are located within 750 feet of construction sites, appropriate measures shall be implemented to ensure compliance with local ordinance requirements relating to construction noise. 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.

- Designate an on-site construction complaint and enforcement manager for projects within 750 feet of sensitive receivers.
- Implementing agencies of the 2045 MTP/SCS 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.
- For any project within 6,000 feet of sensitive receptors that requires pilings, the implementing agencies shall require caisson drilling or sonic pile driving as opposed to impact pile driving, where feasible. This shall be accomplished through the placement of conditions on the project during its individual environmental review.
- Implementing agencies of 2045 MTP/SCS projects shall ensure that equipment and trucks used for project construction utilize the best available noise and vibration control techniques, including mufflers, intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds.
- Implementing agencies of 2045 MTP/SCS projects 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.
- The following timing restrictions shall apply to MTP/SCS project construction activities located within 2,500 feet of a dwelling unit, 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.
- Implementing agencies of 2045 MTP/SCS projects shall locate stationary noise and vibration sources as far from sensitive receptors as feasible. Stationary noise sources that must be located near existing receptors will be adequately muffled.

b. Findings and Rationale – The AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt them. The AMBAG 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 counties, which can and should adopt them. Implementation of
required mitigation would reduce impacts from construction noise. However, even with application of Mitigation Measures N-1 construction noise from all 2045 MTP/SCS projects may not be reduced below applicable thresholds and impacts would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.12-13 through 4.12-16 of the Final EIR.

2. **Impact N-2.** Construction activities associated with transportation projects and land use projects under the 2045 MTP/SCS would generate excessive groundborne vibration levels. Impacts would be significant and unavoidable.

   a. **Mitigation** – For transportation projects under their jurisdiction, TAMC, SBtCOG, and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that result in construction noise impacts, and where feasible and necessary based on project and site-specific considerations. Cities and counties in the AMBAG region can and should implement Mitigation Measure N-1, listed under Impact N-1, and Mitigation Measure N-2, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

   N-2  **Physical Impacts Due to Vibration.** If construction equipment would generate vibration levels exceeding acceptable levels as established by Caltrans (65 VdB to 80 VdB depending on frequency of the event and 0.1 to 0.6 PPV in/sec depending on building type), implementing agencies of the 2045 MTP/SCS 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 within 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

b. **Findings and Rationale** – The AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt it. The AMBAG 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 required mitigation would reduce impacts from construction vibration. However, even with application of Mitigation Measures N-1 and N-2, construction vibration from all 2045 MTP/SCS projects may not be reduced below applicable thresholds and impacts would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.12-16 through 4.12-19 of the Final EIR.

3. **Impact N-3.** Implementation of the 2045 MTP/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. Impacts would be significant and unavoidable.

a. **Mitigation** – For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measure developed for the 2045 MTP/SCS program where applicable for transportation projects that result in significant mobile source noise levels, and where feasible and necessary based on project and site specific
considerations. The measure below does not apply to land use projects. Project specific environmental documents may adjust this mitigation measure as necessary to respond to site specific conditions.

**N-3 Noise Assessment and Control for Mobile and Point Sources.** Sponsor agencies of 2045 MTP/SCS transportation projects shall complete detailed noise assessments using applicable guidelines (e.g., FTA Transit Noise and Vibration Impact Assessment for rail and bus projects and the Caltrans Traffic Noise Analysis Protocol) for roadway projects that may impact noise sensitive receivers. 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)

Where new or expanded roadways, rail, or transit projects are found to expose receivers to noise exceeding normally acceptable levels, the implementing agency shall implement techniques as recommended in the project specific noise assessment. The preferred methods for mitigating noise impacts will be the use of appropriate setbacks (design adjustments) 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) shall be considered. Long expanses of walls or fences shall 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 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 AMBAG Board of Directors finds that this mitigation measure is within the responsibility and jurisdiction of the cities and counties in the AMBAG region, which can and should adopt it. This measure would reduce noise impacts
through requiring noise studies and feasible mitigation measures for land use projects. Implementation of the above mitigation measure would reduce noise from mobile sources. However, even with implementation of Mitigation Measure N-3, mobile source noise from projects implementing the 2045 MTP/SCS may continue to impact nearby noise sensitive receivers and exceed acceptable standards, based on project-specific circumstances. Impacts would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.12-19 through 4.12-23 of the Final EIR.

4. **Impact N-4.** The proposed 2045 MTP/SCS land use scenario would encourage infill development near transit and other transportation facilities, which would generate a substantial increase in ambient noise levels in excess of standards or over existing noise levels. Impacts would be significant and unavoidable.

a. **Mitigation** – Cities and counties in the AMBAG region can and should implement the following measures, where relevant to land use projects implementing the 2045 MTP/SCS, and where feasible and necessary based on project and site specific considerations. The mitigation measure outlined below does not apply to transportation projects. Project specific environmental documents may adjust this mitigation measure as necessary to respond to site specific conditions.

**N-4 Noise Mitigation for Land Uses.** If a 2045 MTP/SCS land use project is located in an area with exterior ambient noise levels above local noise standards, the implementing agency can and should 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 inapplicable 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 AMBAG Board of Directors finds that this mitigation measure is within the responsibility and jurisdiction of cities and counties, which can and should
adopt it. Implementation of the above mitigation measure would reduce noise for sensitive land uses in areas that exceed noise standards. However, even with implementation of Mitigation Measure N-4 noise from projects implementing the 2045 MTP/SCS may continue to impact nearby noise sensitive receptors and exceed acceptable standards, based on project-specific circumstances. Impacts would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.12-23 and 4.12-24 of the Final EIR.

5. **Impact N-5.** The proposed 2045 MTP/SCS would result in new truck, bus and train traffic that would generate excessive vibration levels. Impacts would be significant and unavoidable.

a. **Mitigation** – For transportation projects under their jurisdiction, TAMC, SBTCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that could generate excessive vibration impacts, and where feasible and necessary based on project and site specific considerations. These measures can and should also be implemented for future infill projects near transit pursuant to the 2045 MTP/SCS that would result in vibration impacts. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

**N-5 Vibration Mitigation for Transportation Projects.** Where local vibration and groundborne noise standards do not apply, implementing agencies of 2045 MTP/SCS projects shall comply with guidance provided by the FTA in the most recent version of the Transit Noise and Vibration Impact Assessment 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 would be considered to reduce vibration and groundborne noise impacts include, but are not limited to:

- **Rail Traffic**
  - Maximizing the distance between tracks and sensitive uses
  - Conducting rail grinding on a regular basis to keep tracks smooth
  - Conducting wheel truing to re-contour wheels to provide a smooth-running surface and removing wheel flats
Providing special track support systems such as floating slabs, resiliently supported ties, high-resilience fasteners and ballast mats;
Implementing operational changes such as limiting train speed and reducing nighttime operations.

- 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 AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt it. The AMBAG 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 counties, which can and should adopt it. Implementation of the above mitigation measure would reduce potential impacts to a less than significant level. However, even with implementation of Mitigation Measure N-5, vibration from projects implementing the 2045 MTP/SCS may continue to be excessive, based on project-specific circumstances. Impacts would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.12-24 through 4.12-26 of the Final EIR.

6. Impact N-6. Proposed transportation improvements and future projects included in the land use scenario envisioned in the 2045 MTP/SCS would be located in close proximity to existing airports such that applicable exterior and interior noise thresholds would be exceeded. Impacts would be significant and unavoidable.

a. Mitigation – These measures can and should also be implemented for future land use development projects near existing public or public use airports. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

N-6 Noise Mitigation Near Airports. Local lead agencies for all new development proposed to be located within an existing airport influence zone, as defined by the locally adopted airport land use compatibility plan or local general plan, or within two miles of a private use airport, shall require a site specific noise
compatibility study. The study shall consider and evaluate existing aircraft noise, based on specific aircraft activity data for the airport in question, and shall include recommendations for site design and building construction. 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, such as dual paned windows. The noise study and determination of appropriate mitigation measures shall be completed during the project’s individual environmental review.

b. **Findings and Rationale** – The AMBAG Board of Directors finds that this mitigation measure is partially within the responsibility and jurisdiction of the RTPAs which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt it. The AMBAG 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 counties, which can and should adopt it. To the extent that a local agency requires an individual project to implement the feasible mitigation measure described above, the appropriate design and building construction would ensure compliance with relevant plans or codes, and this impact would be reduced to a less than significant level. However, even with implementation of Mitigation Measure N-6 noise from projects implementing the 2045 MTP/SCS may continue to impact nearby noise sensitive receptors and exceed acceptable standards. Impacts would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.12-26 through 4.12-28 of the Final EIR.

J. **PUBLIC SERVICES, RECREATION, AND UTILITIES**

1. **Impact PSU-1.** The 2045 MTP/SCS would result in new or expanded governmental facilities, the implementation of which would result in substantial physical impacts. This impact would be significant and unavoidable.

   a. **Mitigation** – Cities and counties in the AMBAG region, as well as other public service providers, can and should implement this measure, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

   **PSU-1 Increased Public Service Demand.** During the CEQA review process for individual facilities, the implementing agency with responsibility for construction of new public service facilities or the expansion of existing
facilities, including those of fire and police services, parks, and other public facilities, can and should apply necessary mitigation measures to avoid or reduce significant environmental impacts associated with the construction or expansion of such facilities. The environmental impacts associated with such construction or expansion should be avoided or reduced through the imposition of conditions required to be followed by those directly involved in the construction or expansion activities. Such conditions should include those necessary to avoid or reduce significant impacts associated with air quality, noise, transportation, biological resources, cultural resources, greenhouse gas emissions, hydrology and water quality, and others that apply to specific construction or expansion of new public or expanded public service facilities.

b. **Findings and Rationale** – The AMBAG Board of Directors finds that this mitigation measure is within the responsibility and jurisdiction of cities, counties, and other public service providers, which can and should adopt it. Population growth in the AMBAG region would occur regardless of the potential implementation of the 2045 MTP/SCS. Mitigation Measure PSU-1 would reduce impacts related to the provision of new or physically altered governmental facilities to less than significant with mitigation because it would require implementing agencies to apply necessary mitigation measures to avoid or reduce significant environmental impacts associated with the construction or expansion of such facilities. However, due to the variety of project-specific circumstances, these mitigation measures may not be feasible or effective for every project. Therefore, this impact would be significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.14-35 through 4.14-37 of the Final EIR.

2. **Impact PSU-3.** The 2045 MTP/SCS would increase the use of existing parks and recreational facilities, resulting in substantial physical deterioration, and would include recreational facilities that would have an adverse physical effect on the environment. This impact would be significant and unavoidable.

a. **Mitigation** – Cities and counties in the AMBAG region, and recreation agencies, can and should implement the following measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**PSU-3 Impact Reduction from New Recreational Facilities.** During project specific design and CEQA review, the cities and counties in the AMBAG region, and
other agencies with responsibility for the construction of new or expanded recreation facilities, can and should apply necessary mitigation measures to avoid or reduce significant environmental impacts associated with the construction of such facilities. The environmental impacts associated with such construction should be avoided or reduced through the imposition of conditions required to be followed by those directly involved in the construction or expansion activities. Such conditions should include those necessary to avoid or reduce significant impacts associated with air quality, noise, transportation, biological resources, cultural resources, greenhouse gas emissions, hydrology and water quality, and others that apply to specific construction of new or expanded recreation facilities, including recreational trails.

b. Findings and Rationale – The AMBAG 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, counties, and recreation agencies, which can and should adopt it. Implementation of Mitigation Measure PSU-3 would reduce impacts associated with the construction of additional parks and recreation facilities because it would require implementing agencies to apply necessary mitigation measures to avoid or reduce significant environmental impacts associated with the construction or expansion of such facilities. However, due to the variety of project-specific circumstances, these mitigation measures may not be feasible or effective for every project. Therefore, this impact would be significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.14-38 through 4.14-40 of the Final EIR.

3. Impact PSU-4. Proposed transportation improvements and land use projects envisioned by the 2045 MTP/SCS would require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which would cause significant environmental effects. This impact would be significant and unavoidable.

a. Mitigation – For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that require new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or
telecommunications facilities, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region, and other utility providers, can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

PSU-4(a) Water and Wastewater Treatment Facilities. During the CEQA review process for individual facilities, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies, and cities and counties in the AMBAG region and other utility providers with responsibility for the construction of new water or wastewater treatment and collection facilities or the expansion of existing facilities can and should apply necessary mitigation measures to reduce significant environmental impacts associated with the construction or expansion of such facilities. The environmental impacts associated with such construction or expansion should be avoided or reduced through the imposition of conditions required to be followed by those directly involved in the construction or expansion activities. Such conditions should include those necessary to avoid or reduce impacts associated with air quality, noise, traffic, biological resources, cultural resources, greenhouse gas emissions, hydrology and water quality and others that apply to specific construction or expansion of water or wastewater treatment and collection facilities projects.

PSU-4(b) Stormwater Facilities. During the CEQA review process for individual facilities, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies, and cities and counties in the AMBAG region and special districts with responsibility for the construction of new stormwater drainage facilities or the expansion of existing facilities to adequately meet projected capacity needs can and should apply necessary mitigation measures to avoid or reduce significant environmental impacts associated with the construction or expansion of such facilities. The environmental impacts associated with such construction or expansion should be avoided or reduced through the imposition of conditions required to be followed by those directly involved in the construction or expansion activities. Such conditions should include those necessary to avoid or reduce impacts associated with air quality, noise, traffic, biological resources, cultural resources, greenhouse gas emissions, hydrology and water quality, and others that apply to specific construction or expansion of storm water drainage facilities projects.

PSU-4(c) Stormwater Control Methods. During the CEQA review process for individual facilities, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following measures where feasible: For transportation projects, incorporate stormwater control, retention, and infiltration features, such as detention basins, bioswales,
vegetated median strips, and permeable paving, early into the design process to ensure such features are analyzed during environmental review. Implement mitigation measures identified for such features on a project specific basis, where feasible and necessary based on project and site-specific considerations.

**PSU-4(d) Electric Power, Natural Gas, or Telecommunications Facilities.** During the CEQA review process, cities, counties, and AMBAG region energy and telecommunications providers and regulatory agencies with responsibility for the construction or approval of new electric power, natural gas, or telecommunications facilities or the expansion of existing facilities to adequately meet projected capacity needs can and should apply necessary mitigation measures to avoid or reduce significant environmental impacts associated with the construction or expansion of such facilities. The environmental impacts associated with such construction or expansion should be avoided or reduced through the imposition of conditions required to be followed by those directly involved in the construction or expansion activities. Such conditions should include those necessary to avoid or reduce impacts associated with air quality, noise, traffic, biological resources, cultural resources, greenhouse gas emissions, hydrology and water quality, and others that apply to specific construction or expansion of natural gas and electric facilities projects.

b. **Findings and Rationale** – The AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs, which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt them. The AMBAG 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 counties, which can and should adopt them. Implementation of Mitigation Measure PSU-4(a) through PSU-4(d) would reduce impacts associated with the construction of additional water and wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities because it would require implementing agencies to apply necessary mitigation measures to avoid or reduce significant environmental impacts associated with the construction or expansion of such facilities. However, due to the variety of project-specific circumstances, these mitigation measures may not be feasible or effective for every project. Therefore, this impact would be significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.14-41 through 4.14-45 of the Final EIR.

4. **Impact PSU-5.** Proposed transportation improvements and land use projects envisioned by the 2045 MTP/SCS would generate solid waste in excess of the capacity of local infrastructure. This impact would be significant and unavoidable.

   a. **Mitigation** – For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that result in impacts related to solid waste, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

   **PSU-5 Solid Waste Generation and Disposal.** During the CEQA review process for individual facilities, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies, and cities and counties in the AMBAG region can and should implement, the following measures where feasible:
   - Provide an easily accessible area that is dedicated to the collection and storage of non-hazardous recycling materials.
   - Maintain or reuse existing building structures and materials during building renovations and redevelopment.
   - Use salvaged, refurbished, or reused materials to help divert such items from landfills.
   - Divert construction waste from landfills, where feasible, through means such as:
     - Submitting and implementing a construction waste management plan that identifies materials to be diverted from disposal;
     - Establishing diversion targets, possibly with different targets for different types and scales of development;
     - Helping project sponsors and implementing agencies share information on available materials with one another, to aid in the transfer and use of salvaged materials.

   b. **Findings and Rationale** – The AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs, which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt them. The AMBAG 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 counties, which can and should adopt them. Implementation of Mitigation Measure PSU-5 would reduce impacts associated with solid waste generation because it would require that land use and transportation projects apply landfill diversion strategies including reusing
building materials, maintaining structures where applicable, and developing construction waste management plans. However, due to the variety of project-specific circumstances, these mitigation measures may not be feasible or effective for every project. Therefore, this impact would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.14-46 and 4.14-47 of the Final EIR.

5. Impact PSU-7. Implementation of proposed transportation improvements and future projects included in the land use scenario envisioned in the 2045 MTP/SCS would increase water demand in the AMBAG region such that water supplies may be insufficient to serve envisioned development. Impacts would be significant and unavoidable.

a. Mitigation – For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that have water supply impacts, where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

PSU-7(a) General Conservation Measures. Agencies implementing land use and transportation projects that could increase water demand shall, or can and should, coordinate with relevant water services to ensure demand can be accommodated and identify a water consumption budget. Any existing water conservation measures that reduce demand for potable water, such as reducing water use for landscape irrigation for transportation projects or use of water-conserving fixtures in envisioned land use projects, should be employed. Reclaimed water should be used when possible.

PSU-7(b) Construction Dust Suppression Water Supply. Implementing agencies shall, or can and should, ensure that for all 2045 MTP/SCS projects, where feasible, reclaimed and/or desalinated water is used for dust suppression during construction activities. This measure shall, or can and should, be noted on construction plans and shall be spot checked by the implementing agency.
PSU-7(c) **Landscape Watering.** In jurisdictions that do not already have an applicable local regulatory program related to landscape watering, implementing agencies shall, or can and should, design 2045 MTP/SCS projects that would 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 and/or desalinated water when feasible.

PSU-7(d) **Porous Pavement and Bioswale Installation.** In jurisdictions that do not already have an appropriate local regulatory program related to porous pavement, implementing agencies for a 2045 MTP/SCS project that involves streetscaping, parking, transit and/or land use improvements shall, or can and should, ensure that porous pavement materials are utilized, where feasible, to allow for groundwater percolation. Additionally, if a project would substantially increase impervious surfaces the sponsor shall ensure that bioswales are installed, where feasible, to facilitate groundwater recharge using stormwater runoff from the project site while improving water quality if not already required by the appropriate jurisdiction’s local regulatory programs.

b. **Findings and Rationale** – The AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs, which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt them. The AMBAG 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 counties, which can and should adopt them. Implementation of the above measures would reduce impacts from water supply in the AMBAG region. However, the population growth forecast coupled with existing groundwater over-drafting and regular droughts indicate that demand may outpace supply in certain areas. The land use scenario envisioned by the 2045 MTP/SCS along with 2045 MTP/SCS transportation projects would result in the need for additional water supply, even with the implementation of mitigation measures listed above. Given the overdraft conditions of area groundwater basins and other regional water supply concerns, impacts would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.14-48 and 4.14-51 of the Final EIR.
I. TRANSPORTATION

1. Impact T-2. The 2045 MTP/SCS would result in an increase to Daily VMT per capita between the baseline 2020 conditions and 2045 conditions. Per capita VMT impacts from implementation of the 2045 MTP/SCS would be significant and unavoidable. The induced travel impact at the regional level would be less than significant.

a. Mitigation – For transportation projects under their jurisdiction, TAMC, SbtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that would increase the capacity of a roadway, and where feasible and necessary based on project and site specific considerations. For land use projects under their jurisdiction, the cities and counties in the AMBAG region shall implement the following mitigation measure. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

T-2(a) Land Use Project VMT Analysis and Reduction. Regionally, implementing agencies shall require implementation of VMT reduction strategies through transportation demand management (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 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. At a project level, implementing agencies shall evaluate VMT as part of project specific CEQA review and discretionary approval decisions for land use projects. Where project level significant impacts are identified, implementing agencies shall identify and implement measures that reduce VMT. Examples include but are not limited to:

- Provide car-sharing, vanpool, bike sharing, and ride-sharing programs
- Implement or provide access to commute reduction programs
- Encourage telecommute programs
- Incorporate affordable housing into the project
- Increase density, infill, and transit oriented development
- 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
- Orient the project toward transit, bicycle, and pedestrian facilities
Implement complete streets  
Provide traffic calming  
Provide bicycle parking  
Reduce parking requirements  
Separate out parking costs  
Provide parking cash-out programs

T-2(b) Transportation Project VMT Analysis and Reduction. Transportation project sponsor agencies shall evaluate transportation projects that involve increasing roadway capacity for their potential to increase VMT. Where project level increases are found to be potentially significant, implementing agencies shall, or can and should, identify and implement measures that reduce VMT. Examples of measures that reduce the VMT associated with increases in roadway capacity include, but are not limited to:

- Tolling new lanes to encourage carpools and fund transit improvements
- Converting existing general purpose lanes to high occupancy vehicle lanes
- VMT banks
- Implementing or funding offsite travel demand management
- Providing a bus rapid transit system
- Improving pedestrian or bicycle networks, or transit service
- Providing transit passes
- Incorporating neighborhood electric vehicle network

b. Findings and Rationale – The AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs, which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt them. The AMBAG 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 counties, which can and should adopt them. If implementing agencies adopt and require this mitigation, impacts would be reduced because less VMT would be added to the AMBAG 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 no procedures or policies in place to establish such programs. Therefore, this impact would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.15-26 through 4.15-30 of the Final EIR.

**J. TRIBAL CULTURAL RESOURCES**

1. **Impact TCR-1.** Implementation of proposed transportation improvements and future projects included in the land use scenario envisioned in the 2045 MTP/SCS would cause a substantial adverse change in the significance of a tribal cultural resource. Impacts would be significant and unavoidable.

a. **Mitigation** – For transportation projects under their jurisdiction, TAMC, SBtCOG, and SCCRTC shall, and transportation project sponsor agencies can and should, implement the following mitigation developed for the 2045 MTP/SCS program where applicable for transportation projects that result in impacts to tribal cultural resources, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**TCR-1 Tribal Cultural Resources Impact Minimization.** Implementing agencies shall, or can and should, comply with AB 52, which may require formal tribal consultation. If the implementing agency determines that a project may cause a substantial adverse change to a tribal cultural resource, they shall, or can and should, implement mitigation measures identified in the consultation process required under PRC Section 21080.3.2, or shall, or can and should, implement the following measures where feasible to avoid or minimize the project specific significant adverse impacts:

- Avoidance and preservation of the resources in place, including, but not limited to planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity considering the tribal cultural values and meaning of the resource, including, but not limited to, the following:
  - Protecting the cultural character and integrity of the resource
  - Protecting the traditional use of the resource
  - Protecting the confidentiality of the resource
  - Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places
• Native American monitoring by the appropriate tribe for all projects in areas identified as sensitive for potential tribal cultural resources and/or in the vicinity (within 100 feet) of known tribal cultural resources
• If potential tribal cultural resources are encountered during ground-disturbing activities; work in the immediate area must halt and the appropriate tribal representative(s), the implementing agency, and an archaeologist meeting the Secretary of the Interior’s Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find and determine the proper course of action

b. Findings and Rationale – The AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs, which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt them. The AMBAG 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 counties, which can and should adopt them. Mitigation Measure TCR-1 would require AB 52 compliance and would result in necessary mitigation being identified through tribal consultation to avoid impacts to tribal cultural resources. These measures would protect the resource’s character, traditional use, and confidentiality. With such protection, implementation of the above measure would reduce impacts to tribal cultural resources. However, it cannot be guaranteed that all future project-level impacts can be mitigated and as such, impacts would be significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.16-6 through 4.16-8 of the Final EIR.

K. WILDFIRE

1. Impact W-1. Proposed transportation improvements and land use projects envisioned by the 2045 MTP/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 would occur. Impacts would be significant and unavoidable.

a. Mitigation – For transportation projects under their jurisdiction, TARC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that result in impacts related to wildland fire, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures,
where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**W-1 Wildfire Risk Reduction.** If an individual transportation or land use project included in the 2045 MTP/SCS is within or less than two miles from an SRA or VHFHSZ, the implementing agency shall require appropriate mitigation to reduce the risk. Examples of mitigation to reduce risk of loss, injury or death from wildlife include, but are not limited to:

- 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 Santa Cruz, Monterey, and San Benito counties 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 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 should be prohibited during red-flag warnings include welding and grinding outside of enclosed buildings.
- Require fire extinguishers to be on site 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.
- Encourage the use of external sprinklers for new development mapped within Very High Fire Hazard Severity Zones.
b. **Findings and Rationale** – The AMBAG Board of Directors finds that these mitigation measures are partially within the responsibility and jurisdiction of the RTPAs, which as CEQA responsible agencies for the 2045 MTP/SCS, will adopt them. The AMBAG 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 counties, which can and should adopt them. With implementation of this mitigation, 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 2045 MTP/SCS projects to inadvertently ignite a wildfire. However, it is possible that mitigation measures will not prevent a significant risk of wildfires or fully protect people and structures from the risks of wildfires in all cases. Thus, this impact would remain significant and unavoidable. The AMBAG Board of Directors finds that no other mitigation measures or alternatives are feasible that would reduce this impact to less than significant levels. The AMBAG 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 4.17-14 through 4.17-19 of the Final EIR.
VI. FINDINGS REGARDING ALTERNATIVES

A. 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 Findings of Fact do consider the ability of potentially feasible alternatives to substantially reduce all of the project’s significant impacts, even those impacts reduced to less-than-significant levels through 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. (Pub. Res. Code Section 21002, 21002.1; CEQA Guidelines Section 15092.)

The proposed 2045 MTP/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 in more detail in Chapter 7 of the 2045 MTP/SCS Final EIR.

The three alternatives considered for the proposed 2045 MTP/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 Metropolitan Transportation Improvement Program (MTIP);
- **Alternative 2: Alternative Transportation Modes**, which includes the same land use pattern as the 2045 MTP/SCS and prioritizes pedestrian, bicycle, and transit projects; and
- **Alternative 3: Infill and Transit Focus**, which includes a more compact land use pattern and increased use of regional and interregional transit. Alternative 3 was determined to be environmentally superior to the proposed 2045 MTP/SCS. However, all of the alternatives are rejected for the reasons stated below in Section VI.C.

**B. 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 primary objective of the 2045 MTP/SCS is to comply with applicable regulatory requirements, including California Transportation Commission Guidelines and SB 375 regional GHG reduction targets. AMBAG’s specific objectives for the 2045 MTP/SCS are to additionally ensure that the transportation system planned for the AMBAG 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.

**C. FINDINGS ON ALTERNATIVES EVALUATED IN THE EIR**

1. **No Project Alternative (Alternative #1)**

   a. **Description** – The No Project Alternative assumes that the transportation network would be comprised of committed transportation projects fully programmed through construction included in the AMBAG’s Fiscal Years 2020-2021 to 2023-2024 Metropolitan Transportation Improvement Program MTIP only (AMBAG 2021). The growth in population, jobs, and homes would be the same as the growth forecast for the proposed 2045 MTP/SCS. This alternative assumes the same housing and employment growth as the 2045 MTP/SCS, but that growth would occur based on existing land use trends in the
AMBAG region as opposed to more compact development envisioned by the 2045 MTP/SCS.

b. **Findings and Rationale** – The No Project Alternative would result in a less dense development pattern compared to the 2045 MTP/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 2045 MTP/SCS. Consequently, compared to the 2045 MTP/SCS, the No Project Alternative would have greater overall impacts to aesthetics and visual resources, agricultural and forestry resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, land use, noise, transportation, tribal cultural resources, and wildfire. It would have similar impacts as the 2045 MTP/SCS to energy, greenhouse gas emissions, hazards and hazardous materials, population and housing, and public services, recreation, and utilities. Please refer to pages 7-5 through 7-14 of the Final EIR.

The AMBAG 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. Also, it would not reduce any of the project’s significant impacts to less than significant levels, would increase many of these impacts, and would not meet basic objectives of the proposed 2045 MTP/SCS listed in Section VI.B.

2. **Alternative Transportation Modes Alternative (Alternative #2)**

a. **Description** – The Alternative Transportation Modes Alternative was designed to reduce VMT by providing or promoting alternative transportation modes in advance of or in conjunction with projected population and employment growth in the AMBAG region through 2045. Alternative transportation includes walking, bicycling, and transit. This alternative assumes the same growth in population, jobs, and housing numbers, and the same land use pattern, as the 2045 MTP/SCS. However, unlike the 2045 MTP/SCS, this alternative focuses on prioritizing transportation investments toward all alternative modes of transportation projects first, such as local transit projects and active transportation projects. Active transportation projects would include construction of bicycle lanes and bicycle/pedestrian amenities. The goal of this alternative is to build these projects first and to use as much of the transportation funding available for these alternative transportation modes projects. Under this alternative, investment would be focused on closing transit gaps by enhancing local transit bus service rather than interregional or long-distance services. This alternative includes more than $1.4 billion more funding for active transportation and transit projects than the proposed 2045 MTP/SCS. These include active transportation projects that were not included in the proposed 2045 MTP/SCS as well as additional local bus, bus rapid transit, and light rail...
projects. This alternative includes fewer local streets and roads and highway projects than the proposed 2045 MTP/SCS.

b. **Findings and Rationale** – Alternative 2 would result in the same development pattern as the 2045 MTP/SCS. As shown in Table 7-7 of the Final EIR, Alternative 2 would result in mostly similar impacts, with some reduced impacts related to aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, population and housing, and tribal cultural resources. Please refer to pages 7-14 through 7-26 of the Final EIR.

The AMBAG Board of Directors finds that specific economic, financial, legal, social, technological or other considerations make the Alternative Transportation Modes Alternative infeasible and rejects this alternative for the following reasons. It would not reduce any of the project’s significant impacts to less than significant levels, and would not meet project mobility goals, which help achieve the basic objectives of the proposed 2045 MTP/SCS listed in Section VI.B. Specifically, the Alternative Transportation Modes Alternative would increase truck delay, and substantially increase congested VMT in the AMBAG region. The inability to meet project mobility goals also makes this alternative undesirable from a policy standpoint.

3. **Infill and Transit Focus Alternative (Alternative #3)**

a. **Description** – The Infill and Transit Focus Alternative was designed to reduce VMT by locating the places where people work and live within urban centers and close to regional transit. This alternative assumes the same total growth in population, jobs, and housing numbers as the 2045 MTP/SCS, but with more compact and mixed land uses. Overall, this alternative incorporates less dispersed land use and development than the proposed MTP/SCS. This alternative includes a more compact growth footprint and increased use of regional and interregional transit service to generate an increase in regional and interregional transit ridership and corresponding decrease in VMT. For instance, this alternative relies on a higher amount of housing, especially near regional and interregional transit, than the market currently supports. This alternative also assumes increased telecommuting for those industries where telecommuting is feasible, such as in financial and professional services and/or public sector jobs. This alternative assumes more investment ($2.2 billion) in transit infrastructure and services and less investment in local streets, roads, and highways compared to the proposed 2045 MTP/SCS.

b. **Findings and Rationale** – Alternative 3 is the environmentally superior alternative, assuming all environmental issue areas are weighted equally. Under Alternative 3, land use patterns would be concentrated in infill and TOD areas. Alternative 3 would result in a higher density development pattern than the 2045 MTP/SCS. Alternative 3 could be considered environmentally superior to the 2045 MTP/SCS primarily because, as shown in Table 7-7 of the Final EIR, overall impacts to the following resources would be less: aesthetics, agriculture and forestry resources, air quality, biological resources, cultural
resources, energy, geology and soils, and tribal cultural resources. GHG emissions and VMT would also decrease under this alternative, though this decrease would be negligible (less than a one percent change). Please refer to pages 7-26 through 7-36 of the Final EIR.

The AMBAG Board of Directors finds that specific economic, financial, legal, social, technological or other considerations make the Infill and Transit Focus Alternative infeasible and rejects this alternative for the following reasons. It would not reduce any of the project’s significant impacts to less than significant levels, and would not meet project mobility goals, which help achieve the basic objectives of the proposed 2045 MTP/SCS listed in Section VI.B. Specifically, the Infill and Transit Focus Alternative would increase truck delay, and substantially increase congested VMT in the AMBAG region. The inability to meet project mobility goals also makes this alternative undesirable from a policy standpoint. Lastly, Alternative 3 is not feasible because AMBAG does not have land use authority and cannot require local agencies to make major changes to their general plans that would be required in order for Alternative 3 to be implemented.

D. FINDINGS ON ALTERNATIVES CONSIDERED IN THE EIR BUT REJECTED

Section 7.2 of the Final EIR describes two alternatives that were considered but rejected from detailed consideration: an Aggressive VMT Reduction Alternative and a Road Pricing Alternative. The AMBAG Board of Directors adopts and incorporates by reference the specific reasons for rejecting these alternatives contained in Final EIR Section 7.2 as the grounds for rejecting these measures.
VII. FINDINGS REGARDING ALTERNATIVES AND MITIGATION MEASURES PROPOSED IN DRAFT EIR COMMENTS.

Some comments on the Draft EIR suggested additional mitigation measures and/or alternatives to the project. In response to Draft EIR comments, some mitigation measures were revised, including Mitigation Measures BIO-3(a).

However, where the suggestions requested minor modifications or variations in adequate mitigation measures or alternatives or components of alternatives analyzed in the Draft EIR, or requested mitigation measures or alternatives that were too vague or speculative to be addressed, these requests were declined as unnecessary. Similarly, suggestions that were specific to individual transportation improvement projects included in the 2045 MTP/SCS were declined because the EIR is a programmatic-level analysis of the 2045 MTP/SCS in its entirety, and individual projects would undergo separate future environmental review. The AMBAG Board of Directors adopts and incorporates by reference the specific reasons for declining such measures or alternatives contained in the responses to comments in the Final EIR as one ground for rejecting these measures. The responses to comments are provided as Appendix H to the Final EIR.

Additionally, certain alternatives and mitigation measures suggested in Draft EIR comments ostensibly could reduce impacts, but implementation of these mitigation alternatives and mitigation measures would be infeasible. The AMBAG Board of Directors finds that specific economic, legal, social, technological, or other considerations make infeasible the following project alternatives and mitigation measures identified in the Final EIR, for the reasons explained below. For supporting evidence, see the responses to comments on these rejected alternatives and mitigation measures set forth in Appendix H to the Final EIR.

A. FINDINGS ON COMMENTERS’ SUGGESTED PROJECT ALTERNATIVES

1. Campaign for Sensible Transportation: Comment 6.22

This comment states that Alternative 2 and Alternative 3 evaluated in the Draft EIR should be combined into a single alternative that would further reduce GHG emissions and substantially help to meet State GHG reduction goals.

Findings and Rationale – The AMBAG Board of Directors finds that specific economic, legal, social, technological, or other considerations make infeasible the alternative(s) to the project suggested above. It is not possible for AMBAG to develop a feasible alternative to the proposed 2045 MTP/SCS that would achieve the GHG reductions goals of State policies and initiatives, such as SB 32 and EO-S-3-05. See Final EIR Response 6.22 for a detailed explanation of this finding, which is summarized below.

As shown in Table 4.8-2 on page 4.8-17 of the Draft EIR, the majority of GHG emissions in the AMBAG region in 2045, regardless of the potential implementation of the 2045 MTP/SCS, would be from emissions related to land development and growth. AMBAG has no authority to adopt local land use General Plans or land use regulations, or approve local land use...
projects that would further reduce GHG emissions. SB 375 specifically provides that nothing in SB 375 supersedes the land use authority of cities and counties, and that cities and counties are not required to change their land use plans and policies, including general plans, to be consistent with MTP/RTP or SCS (Government Code Section 65080(b)(2)(K). Local governments are the main agencies responsible for mitigation of the impacts of land use plans and projects that implement the SCS, and AMBAG has no concurrent authority to mitigate the impacts of land use plans and projects, including GHG emissions impacts, as described on page 4-2 of the Draft EIR.

Regarding mobile source GHG emissions created by increased VMT, it is highly unlikely that any feasible alternative could avoid an increase in VMT above existing conditions in 2045, due to factors unrelated to discretionary approvals, such as population growth in the region. See Section V of these Findings of Fact. Therefore, it is highly unlikely that any feasible alternative could avoid an increase in mobile source GHG emissions above existing conditions in 2045. Implementation of an MTP/SCS alternative that substantially reduces mobile source GHG emissions is also considered infeasible because such an alternative would likely require major changes in land use policies, parking policies, transit funding, road pricing, and vehicle fuels and technology that are beyond AMBAG’s ability to implement.

Regarding a new alternative that is a combination of Alternative 2 and Alternative 3, the commenter provides insufficient detail on how these two alternatives should be combined to form a new alternative that would reduce GHG more than either Alternative 2 or Alternative 3, alone. Neither Alternative 2 nor Alternative 3 substantially reduce GHG emissions compared to the proposed project, and so it is unclear how combining the two alternatives would result in substantial reductions in GHG emissions. Additionally, the EIR only need evaluate a range of alternatives, not every conceivable permutation of alternatives. The Final EIR already evaluates Alternative 2 and Alternative 3, and therefore it is unnecessary to evaluate another similar alternative that would be a combination of these two alternatives.

Additionally, using its RTDM, AMBAG modeled a modified version of Alternative 3, referred to as Alternative 3A at the suggestion a different commenter than the Campaign for Sensible Transportation. Although Alternative 3A is a modified version of Alternative 3, the modifications incorporate some aspects of Alternative 2. In other words, Alternative 3A is representative of a combination of Alternative 3 and Alternative 2. As discussed below, Alternative 3A would not substantially decrease GHG emissions. Accordingly, an alternative consisting of a combination of Alternative 2 and Alternative 3 in the Draft EIR would not reduce the significance of GHG impacts as suggested by the commenter. This alternative suggested by the commenter was not analyzed in the EIR because it is similar to alternatives already evaluated in the EIR, fails to meet some objectives of the project, and is not environmentally superior.
2. Land Watch Monterey County: Comment 7.4

This comment suggests several modifications to Alternative 3, including increasing the amount of money allocated toward transportation projects and placing more emphasis on bus rapid transit projects rather than rail projects. The commenter suggests these modifications as a way to achieve reduced VMT impacts compared to the proposed project while also better meeting the 2045 MTP/SCS objective of improving freight mobility.

Findings and Rationale – The AMBAG Board of Directors finds that specific economic, legal, social, technological, or other considerations make infeasible the alternative to the project suggested above. An EIR must discuss alternatives to a project in its entirety but is not required to discuss alternatives to each particular component of a project (see California Oak Foundation v. Regents of University of California (2010) 188 Cal.App.4th 227, 276-277). Therefore, an alternative to the 2045 MTP/SCS that would address only freight mobility projects and bus rapid transit is not required by CEQA. In addition, this suggested alternative would was rejected because it would result in greater VMT impacts than the proposed project and other alternatives evaluated in the Draft EIR, is similar to an alternative (Alternative 3) already evaluated in the EIR, and fails to meet some objectives of the project which makes it undesirable on policy grounds. In addition, the funding needed to implement an alternative such as Alternative 3A is infeasible given limits and restrictions on types of investments/improvements funded by transportation funding programs; many transportation funds are limited in scope to funding certain capital investments or modes of transportation.

AMBAG modeled the commenter’s suggested modifications to Alternative 3 using its RTDM. For purposes of the Final EIR, AMBAG referred to this potential alternative as “Alternative 3A.” Based on the RTDM output, the commenter’s suggested Alternative 3A would increase transit ridership by approximately 1.5 percent compared to the proposed project and by approximately 0.2 percent compared to Alternative 3. This is expected given that the suggested modifications emphasizes bus rapid transit projects. However, the suggested modifications in Alternative 3A would also increase daily hours of truck delay compared to the proposed project. The increase would be approximately 197 daily hour of truck delay compared with the proposed project, which would also be a slight decrease of approximately 34 hours compared to Alternative 3. Thus, the commenter’s suggested Alternative 3A would not better achieve freight mobility objectives compared with Alternative 3 as it is evaluated in the EIR.

Additionally, compared to both the 2045 MTP/SCS and Alternative 3, the commenter’s suggested modifications would increase VMT, thereby slightly increasing the severity of VMT impacts rather than reducing impacts.

Additionally, Alternative 3A would also not substantially decrease GHG emissions, regardless of whether emissions are quantified as a total or per capita. Per capita GHG emissions from the full vehicle fleet would be 12.7 if the 2045 MTP/SCS is implemented and 12.8 if Alternative 3A is implemented, which is a negligible increase of approximately 0.1.
Accordingly, the modifications to Alternative 3 suggested by the commenter, which is presented here as Alternative 3A, would not substantially reduce GHG emissions compared with the proposed project, and impacts would be similar.

3. Jack Nelson: Comment 8.2

This comment states that Alternative 2 and Alternative 3 evaluated in the Draft EIR should be combined into a single alternative that would further reduce GHG emissions and substantially help to meet State GHG reduction goals.

Findings and Rationale – The AMBAG Board of Directors finds that specific economic, legal, social, technological, or other considerations make infeasible the alternative to the project suggested above. Please see Section VII.a1 of these Findings of Fact for an explanation as to why an MTP/SCS alternative that would achieve deep regional reductions in GHG emissions consistent with State GHG reduction goals is infeasible for AMBAG to implement, including through a combination of Alternative 2 and Alternative 3 in the EIR.

B. FINDINGS ON COMMENTERS’ SUGGESTED MITIGATION MEASURES

1. Center for Biological Diversity: Comment 4.2

This comment suggests additional mitigation be provided to reduce the adverse impacts of the 2045 MTP/SCS on mountain lions, including by designing projects to allow passage of mountain lions; reducing or eliminating conflicts with mountain lions; directing exterior lights away from open space areas; limiting noise; securing domestic animals; and reducing the risk of wildfire ignition and spread.

Findings and Rationale – The AMBAG Board of Directors finds that specific economic, legal, social, and technological, or other considerations make infeasible portions of the mitigation measure suggested above. The commenter’s suggestion to include mitigation measures that reduce conflicts with mountain lions, including measures to reduce noise conflicts, light pollution conflicts, and conflicts with domestic animals, are closely correlated with circumstances of specific projects, such as the type of lighting proposed for a project or the project location in proximity to mountain lion habitat. The EIR is a programmatic analysis of impacts of the 2045 MTP/SCS and does not provide project level analysis or mitigation measures, generally because individual projects are not yet designed to a level allowing a detailed analysis. Additionally, the EIR already contains mitigation measures that would achieve the same outcome or effects as the suggested mitigation, such as reducing light pollution, preventing excessive noise, and reducing wildlife risks. However, in response to this comment, Mitigation Measure BIO-3(a) on page 4.4-47 of the Draft EIR has been revised to include the following language:

“Vegetative buffers, consisting of California native plant and tree species, shall be installed where feasible to provide a natural noise barrier between roadway projects and sensitive
wildlife habitat, including movement corridors. The buffer shall be maintained in perpetuity to ensure noise levels from the roadway are minimized within adjacent sensitive habitat.”

Other components of the comment are outside the control of AMBAG. For example, AMBAG and the RTPAs are unable to control whether domesticated animals are permissible in areas or on property they do not own. Animal husbandry and domestication is generally regulated through local zoning codes and ordinances, which AMBAG does not control or administer.

2. **Center for Biological Diversity: Comment 4.16**

This comment suggests an additional mitigation measure which requires the lead agency to design projects to include multiple connections between wildlife habitat patches and ensure wildlife passage for projects.

**Findings and Rationale** – The AMBAG Board of Directors finds that specific economic, legal, social, and technological, or other considerations make infeasible portions of the mitigation measure suggested above. The comment provides insufficient detail to develop additional mitigation measure or measures because the commenter gives no examples or suggestions of mitigation or actions that could be taken to connect habitat patches. However, in response to this comment, the fourth bullet point under Mitigation Measure BIO-3(a) on page 4.4-47 of the Draft EIR has been revised to include the following language:

“If fencing or other project components must be designed in such a manner that wildlife passage would not be permitted, wildlife crossing structures such as overpasses, underpasses, culverts, etc., shall be incorporated into the project design as appropriate; and...”
VIII. FINDINGS ON RESPONSES TO COMMENTS ON THE DRAFT EIR AND REVISIONS TO THE FINAL EIR

Findings and Rationale – Appendix H of the Final EIR includes the comments received on the Draft EIR and responses to those comments. The focus of the responses to comments is on the disposition of significant environmental issues as raised in the comments, as specified by CEQA Guidelines Section 15088(b). The Final EIR also incorporates information obtained and produced after the Draft EIR was completed, including additions, clarifications and modifications. The AMBAG Board of Directors has reviewed and considered the Final EIR and all information that was added to the Draft EIR.

The AMBAG Board of Directors finds that responses to comments made on the Draft EIR and revisions 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 the Draft EIR per CEQA Guidelines Section 15088.5(b). None of the comments made on the Draft EIR or revisions to the Final EIR constitute “significant new information,” as defined in CEQA Guidelines Section 15088.5(b), that would trigger Draft EIR recirculation.
IX. FINDINGS ON CUMULATIVE IMPACTS

A. INTRODUCTION

Section 6.4 of Chapter 6 of the Final EIR includes an analysis of direct, indirect and cumulative impacts of the proposed project, as required by CEQA.

The 2045 MTP/SCS addresses cumulative conditions within the AMBAG 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 2045 MTP/SCS presented throughout the EIR is essentially a cumulative analysis consistent with CEQA requirements. Furthermore, this Draft EIR contains detailed analysis of regional (cumulative) impacts, which are differentiated from localized impacts that may occur at the county level.

In Chapter 6.4, 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 IV and V of these Findings of Fact also are feasible measures for mitigating the proposed project’s incremental contribution to significant cumulative effects. (See CEQA Guidelines Section 15130(b)(5).)

B. FINDINGS FOR SIGNIFICANT CUMULATIVE IMPACTS FOR WHICH PROJECT’S INCREMENTAL CONTRIBUTION HAS NOT BEEN MITIGATED TO LESS THAN SIGNIFICANT LEVELS

For the following impacts, the AMBAG Board of Directors hereby finds that in Section V of these Findings of Fact, mitigation measures have been identified in the EIR that will reduce the proposed project’s incremental contribution to the following significant cumulative impacts, but not to a less than significant (i.e., less than cumulatively considerable) level. The significant impacts and the mitigation measures that will reduce them, but not to a less than cumulatively considerable level are as follows:

1. Impact AES-C-1. Development in the Cumulative Impact Analysis Area would affect night sky lighting and degrade existing visual character. Cumulative impacts would be significant and the contribution of the 2045 MTP/SCS would be cumulatively considerable.
   a. Mitigation – Mitigation Measures AES-1(a), AES-1(b), AES-2, and AES-3(a), AES-3(b), and AES-3(c)
   b. Findings and Rationale – The combination of forecasted development in the AMBAG region and planned development in neighboring counties will result in a different visual environment than currently exists. The cumulative impacts from development in the cumulative impact analysis on night sky lighting and visual character are considered
significant, and the contribution of the 2045 MTP/SCS to these impacts is cumulatively considerable. Implementation of Mitigation Measures AES-1(a), AES-1(b), AES-2, and AES-3(a), AES-3(b), and AES-3(c) would reduce potential impacts to aesthetic resources. However, even with implementation of mitigation measures, impacts would be significant and would be cumulatively considerable, and therefore significant and unavoidable.

c. **Supportive Evidence** – Please refer to pages 6-10 through 6-11 of the Final EIR.

2. **Impact AG-C-1.** Development in the Cumulative Impact Analysis Area would result in conversion of agricultural land to non-agricultural uses. Cumulative impacts would be significant and the contribution of the 2045 MTP/SCS would be cumulatively considerable.

   a. **Mitigation** – Mitigation Measure AG-1

   b. **Findings and Rationale** – Future development within the cumulative impact analysis area would convert agricultural land 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 farmland 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. Implementation of Mitigation Measure AG-1 would reduce the contribution of the proposed 2045 MTP/SCS to cumulative agricultural land impacts. However, the mitigation would not ensure that the future land use development pattern and transportation projects could feasibly relocate or realign to avoid impacts, and impacts would remain significant and unavoidable. The contribution of the proposed 2045 MTP/SCS to cumulative impacts would therefore remain cumulatively considerable post-mitigation, and therefore significant and unavoidable.

   c. **Supportive Evidence** – Please refer to pages 6-11 through 6-12 of the Final EIR.

3. **Impact AQ-C-1.** Development in the Cumulative Impact Analysis Area would result in an increase of regional PM$_{10}$ emissions and would expose sensitive receptors to diesel particulates and toxic air contaminants. Cumulative impacts would be significant and the contribution of the 2045 MTP/SCS would be cumulatively considerable.

   a. **Mitigation** – Mitigation Measures AQ-1 through AQ-5

   b. **Findings and Rationale** – Future development within the cumulative impact analysis area would generate cumulative construction emissions that could impact air quality. Given existing air pollution conditions in surrounding areas, the 2045 MTP/SCS would have a cumulatively considerable contribution to regional air quality impacts. Implementation of Mitigation Measures AQ-1 through AQ-5 would reduce the contribution to cumulative air quality impacts. However, the 2045 MTP/SCS contribution would remain cumulatively considerable, and therefore significant and unavoidable, after mitigation because PM$_{10}$ emissions reductions cannot be guaranteed.
c. **Supportive Evidence** – Please refer to pages 6-12 through 6-13 of the Final EIR.

4. **Impact BIO-C-1.** Development in the Cumulative Impact Analysis Area would have substantial adverse impacts on special-status plant and animal species, sensitive natural communities, and interfere with wildlife movement. Cumulative impacts would be significant and the contribution of the 2045 MTP/SCS would be cumulatively considerable.
   
a. **Mitigation** – Mitigation Measures BIO-1 through BIO-5 set requirements for surveys and actions to be taken if biological resources have potential to be impacted by the 2045 MTP/SCS transportation and land use projects.
   
b. **Findings and Rationale** – 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. Given the extent of future development anticipated in the cumulative impact analysis area, these cumulative impacts would likely be significant. Due to the potential direct and indirect impacts that may occur as a result of the 2045 MTP/SCS, the proposed 2045 MTP/SCS contribution to this impact would be cumulatively considerable. Mitigation Measures BIO-1 through BIO-5 would reduce impacts, but impacts would remain significant and unavoidable. The contribution of the proposed 2045 MTP/SCS to cumulative impacts would therefore remain cumulatively considerable, and therefore significant and unavoidable, post-mitigation.
   
c. **Supportive Evidence** – Please refer to pages 6-13 through 6-14 of the Final EIR.

5. **Impact CR-C-1.** Implementation of the proposed transportation improvements and the land use scenario envisioned under the 2045 MTP/SCS would cause substantial impacts to known and unknown cultural, historical, or archaeological resources. Cumulative impacts would be significant and the contribution of the 2045 MTP/SCS would be cumulatively considerable.
   
a. **Mitigation** – Mitigation Measures CR-1, CR-2(a), and CR-2(b)
   
b. **Findings and Rationale** – Cumulative impacts to known and unknown cultural, historical, or archaeological resources would be significant, and the 2045 MTP/SCS contribution to them would be cumulatively considerable. Mitigation Measures CR-1, CR-2(a), and CR-2(b) would reduce impacts associated with 2045 MTP/SCS projects through impact minimization for historical and archaeological resources. However, it cannot be guaranteed that all future project level impacts can be mitigated to a less than significant level. As such, the 2045 MTP/SCS contribution would remain cumulatively considerable, and therefore significant and unavoidable, after mitigation.
   
c. **Supportive Evidence** – Please refer to page 6-14 of the Final EIR.

6. **Impact GEO-C-1.** The 2045 MTP/SCS would have cumulatively considerable contributions to significant cumulative impacts related to paleontological resources.
a. **Mitigation** — Mitigation Measure GEO-5.

b. **Findings and Rationale** — The 2045 MTP/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 in Section 4.7, *Geology and Soils*, would reduce paleontological resource impacts associated with 2045 MTP/SCS projects. However, the 2045 MTP/SCS contribution would remain cumulatively considerable after mitigation because it cannot be guaranteed that all future project level impacts can be mitigated to a less than significant level. As such, the 2045 MTP/SCS contribution to cumulative impacts to paleontological resources would be cumulatively considerable, and therefore significant and unavoidable.

c. **Supportive Evidence** — Please refer to pages 6-15 through 6-17 of the Final EIR.

7. **Impact GHG-C-1.** Development in the cumulative impacts analysis area, as well as projects implementing the 2045 MTP/SCS, would generate temporary short-term GHG emissions which would result in a significant cumulative impact, and the 2045 MTP/SCS contribution would be cumulatively considerable. Total operational GHG emissions would not result in a significant cumulative impact. Implementation of the 2045 MTP/SCS would have a cumulatively considerable contribution to a significant cumulative impact related to exceeding State GHG reduction targets.

a. **Mitigation** — Mitigation Measures GHG-1, GHG-4(a), and GHG-4(b)

b. **Findings and Rationale** — Construction activities associated with transportation improvement projects and future land use projects envisioned by the 2045 MTP/SCS would generate temporary GHG emissions. Construction-related GHG emissions of the 2045 MTP/SCS would be significant, even after implementation of Mitigation Measure GHG-1. Therefore, when construction emissions are combined with other ongoing emissions, the cumulative impact would be significant and the contribution of the 2045 MTP/SCS would be cumulatively considerable. The transportation projects and land use scenario envisioned in the 2045 MTP/SCS would also generate operational GHG emissions. Implementation of Mitigation Measure GHG-4(a), transportation-related greenhouse gas reduction measures, and Mitigation Measures GHG-4(b), project level energy consumption and water use reduction, would reduce impacts related to GHG emissions. Overall, implementation of the 2045 MTP/SCS would reduce total region wide mobile and land use emissions compared to existing conditions, so the cumulative impact of total GHG emissions would not be significant. Other ongoing land uses and operation of future development in the cumulative impact analysis area would also generate GHG emissions. Combined, the GHG emissions from operational activities in the cumulative impact analysis area could exceed State reduction targets; the resulting cumulative impact would be significant, the 2045 MTP/SCS would have a cumulatively considerable contribution to this cumulative impact, both pre- and post- mitigation, and therefore the cumulative impact would be significant and unavoidable.
8. **Impact HAZ-C-1.** Development in the cumulative impacts analysis area, as well as projects implementing the 2045 MTP/SCS, could result in hazards and exposure to hazardous materials. The 2045 MTP/SCS would have cumulatively considerable contributions to significant cumulative impacts related to hazards and hazardous materials.

a. **Mitigation** – Mitigation Measure HAZ-3  

b. **Findings and Rationale** – Land use development envisioned as part of the 2045 MTP/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 2045 MTP/SCS would result in cumulatively considerable, and therefore significant and unavoidable, impacts.

c. **Supportive Evidence** – Please refer to page 6-18 of the Final EIR.

9. **Impact N-C-1.** Development in the cumulative impact analysis area would result in cumulative significant and unavoidable impacts related to construction and operational noise and excessive noise in proximity to airports. The 2045 MTP/SCS contribution to cumulative impacts would be cumulatively considerable.

a. **Mitigation** – Mitigation Measures N-1, N-2, N-3, N-4, N-5  

b. **Findings and Rationale** – Construction noise resulting from either the transportation projects or the land use scenario could combine with other ongoing noise or additional construction noise within the AMBAG region, resulting in localized construction noise levels exceeding local standards. Cumulative impacts of construction noise would be significant. Implementation of Mitigation Measure N-1 would reduce some construction noise impacts; however, the 2045 MTP/SCS contribution to the cumulative impact would be cumulatively considerable, and therefore significant and unavoidable.

c. **Supportive Evidence** – Please refer to pages 6-21 through 6-23 of the Final EIR.

10. **Impact PSU-C-1.** Development in the cumulative impact analysis area would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental effects. The 2045 MTP/SCS contribution to cumulative impacts would be cumulatively considerable.

a. **Mitigation** – Mitigation Measures PSU-1, PSU-2, PSU-3, PSU-4
b. **Findings and Rationale** – Future transportation improvements and land use projects throughout the cumulative impact analysis area would require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which would cause significant environmental effects. This development would also generate solid waste in excess of the capacity of local infrastructure and increase water demand in the AMBAG region such that water supplies may be insufficient to serve envisioned development. Cumulative impacts to public services, recreation, and utilities would be cumulatively considerable pre- and post-mitigation, and therefore the cumulative impact would be significant and unavoidable.

c. **Supportive Evidence** – Please refer to pages 6-24 through 6-25 of the Final EIR.

11. **Impact TRA-C-1.** Development in the cumulative impact analysis area would result in significant and unavoidable increase in daily VMT per capita from baseline 2020 conditions. The 2045 MTP/SCS contribution to cumulative impacts would be cumulatively considerable.

a. **Mitigation** – No mitigation measures are feasible

b. **Findings and Rationale** – Per capita VMT in the cumulative impact area would be unlikely to reach 15 percent below existing VMT per capita by 2035 due to increased VMT in the region even without implementation of the 2045 MTP/SCS. 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 no procedures or policies in place to establish such programs. Thus, cumulative impacts on VMT would be significant and the 2045 MTP/SCS contribution to VMT impacts in adjoining areas would be cumulatively considerable, and therefore significant and unavoidable.

c. **Supportive Evidence** – Please refer to pages 6-25 through 6-26 of the Final EIR.

12. **Impact TCR-C-1.** Development in the cumulative impact analysis area could result in significant impacts to tribal cultural resources that would result in a significant cumulative impact. The 2045 MTP/SCS contribution to this impact would be cumulatively considerable.

a. **Mitigation** – Mitigation Measure TCR-1

b. **Findings and Rationale** – Development in the AMBAG area would increase under the 2045 MTP/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 AMBAG region, and there could be several minor impacts to tribal cultural
resources that together would result in a significant cumulative impact. The cumulative impact would be significant, and the overall contribution of the 2045 MTP/SCS to significant cumulative tribal cultural resources impacts would be cumulatively considerable, and therefore significant and unavoidable, despite implementation of Mitigation Measure TCR-1.

c. **Supportive Evidence** – Please refer to pages 6-26 through 6-27 of the Final EIR.

13. **Impact W-C-1.** Development in the cumulative impact analysis area could be located in or near a state responsibility area or a very high fire hazard severity zone. As significant risk of loss, injury, or death could occur, impacts related to wildfire would be significant. The 2045 MTP/SCS contribution to this impact would be cumulatively considerable.

a. **Mitigation** – Mitigation Measure W-1

b. **Findings and Rationale** – The combination of cumulative projects being constructed concurrently could substantially increase the frequency of fire in the area above natural conditions. Cumulative impacts would be significant. Implementation of Mitigation Measure W-1 would minimize the contribution to this cumulative impact. However, the overall cumulative increase in fire frequency would continue to be substantial and impacts for risks exacerbated by construction and from the aftermath of wildfires would remain cumulatively considerable, and therefore significant and unavoidable.

c. **Supportive Evidence** – Please refer to pages 6-27 through 6-28 of the Final EIR.

**X. STATEMENT OF OVERRIDING CONSIDERATIONS**

The AMBAG Board of Directors adopts and makes this statement of overriding considerations concerning the project’s unavoidable significant impacts to explain why the project’s benefits override and outweigh its unavoidable impacts.

The EIR has identified and discussed significant effects that may occur as a result of the project. As set forth in these CEQA Findings, AMBAG has made a reasonable and good faith effort to eliminate or substantially mitigate the significant impacts resulting from the project and has made specific findings on each of the project’s significant impacts and on mitigation measures and alternatives. With implementation of the mitigation measures discussed in the EIR, many of the project’s effects cannot be mitigated to a level of less than significant. Even with implementation of all feasible mitigation, the project will result in significant and unavoidable impacts as follows:

1. Implementation of the 2045 MTP/SCS would alter views of scenic vistas or substantially damage scenic resources along designated scenic corridors, including state scenic highways. (Impact AES-1)
2. Implementation of the 2045 MTP/SCS would substantially degrade existing visual character in the AMBAG region. (Impact AES-2)
3. Implementation of the 2045 MTP/SCS would create new sources of substantial light and
glare that would adversely affect day or nighttime views in the area. (Impact AES-3)

4. Implementation of the 2045 MTP/SCS could directly or indirectly convert Important Farmland to non-agricultural uses or conflict with agricultural zoning or Williamson Act contracts. (Impact AG-1)

5. Implementation of the 2045 MTP/SCS would create dust and ozone precursor emissions and violate air quality standards, contribute substantially to existing or projected air quality violations, or result in a cumulatively considerable net increases in PM$_{10}$ or ozone precursor emissions. (Impact AQ-2)

6. Implementation of the 2045 MTP/SCS would increase PM$_{10}$ emissions in the region, which could contribute substantially to a projected air quality violation. (Impact AQ-3)

7. Implementation of the 2045 MTP/SCS land use scenario could expose sensitive receptors to substantial hazardous air pollutant concentrations and objectionable odors. (Impact AQ-4)

8. Implementation of the 2045 MTP/SCS would expose sensitive receptors to substantial hazardous air pollutant concentrations. (Impact AQ-5)

9. Implementation of the 2045 MTP/SCS could adversely impact special-status plant and animal species, either directly or through habitat modifications. (Impact BIO-1)

10. Implementation of the 2045 MTP/SCS could adversely impact natural communities and federally protected wetlands. (Impact BIO-2)

11. Implementation of the 2045 MTP/SCS could impede wildlife movement, including fish migration and/or impede the use of a native wildlife nursery. (Impact BIO-3)

12. Implementation of the 2045 MTP/SCS would cause a substantial adverse change in or disturb known and unknown historical resources. (Impact CR-1)

13. Implementation of the 2045 MTP/SCS would cause a substantial adverse change in or disturb known and unknown archaeological resources. (Impact CR-2)

14. Implementation of the 2045 MTP/SCS would directly or indirectly destroy a unique paleontological resource or site or unique geological feature. (Impact GEO-5)

15. Implementation of the 2045 MTP/SCS would generate a net increase GHG emissions by 2045 compared to baseline 2020 conditions. (Impact GHG-1)

16. Implementation of the 2045 MTP/SCS would conflict with the State’s ability to achieve the AB 32, SB 32 and EO-S-3-05 GHG emission reduction goals. (Impact GHG-4)

17. Implementation of the 2045 MTP/SCS would involve land use and transportation projects that could occur on sites on the list of hazardous material sites compiled by Government Code Section 65962.5. (Impact HAZ-3)

18. Implementation of the 2045 MTP/SCS would create temporary substantial noise level increases in discrete locations throughout the AMBAG region. Noise levels could exceed standards in local General Plans or noise ordinances. (Impact N-1)

19. Implementation of the 2045 MTP/SCS would create temporary substantial groundborne vibration level increases throughout the AMBAG region. (Impact N-2)

20. Implementation of the 2045 MTP/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. (Impact N-3)

21. Implementation of the 2045 MTP/SCS would encourage infill development near transit and other transportation facilities, which would generate a substantial increase in ambient noise levels in excess of standards or over existing noise levels. (Impact N-4)

22. Implementation of the 2045 MTP/SCS would result in new truck, bus and train traffic that
would generate excessive vibration levels. Impacts would be significant and unavoidable. (Impact N-5)

23. Implementation of the 2045 MTP/SCS would include projects that would be located in close proximity to existing airports such that applicable exterior and interior noise thresholds would be exceeded. (Impact N-6)

24. Implementation of the 2045 MTP/SCS result in new or expanded governmental facilities, the implementation of which would result in substantial physical impacts. (Impact PSU-1)

25. Implementation of the 2045 MTP/SCS increase the use of existing parks and recreational facilities, resulting in substantial physical deterioration, and would include recreational facilities that would have an adverse physical effect on the environment. (Impact PSU-3)

26. Implementation of the 2045 MTP/SCS would require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which would cause significant environmental effects. (Impact PSU-4)

27. Implementation of the 2045 MTP/SCS would generate solid waste in excess of the capacity of local infrastructure. (Impact PSU-5)

28. Implementation of the 2045 MTP/SCS would increase water demand in the AMBAG region such that water supplies may be insufficient to serve envisioned development. (Impact PSU-7)

29. Implementation of the 2045 MTP/SCS result in an increase to Daily VMT per capita between the baseline 2020 conditions and 2045 conditions. (Impact T-2)

30. Implementation of the 2045 MTP/SCS would cause a substantial adverse change in the significance of a tribal cultural resource. (Impact TCR-1)

31. Implementation of the 2045 MTP/SCS would involve transportation and land use projects located in or near an SRA or very high fire hazard severity zone, and significant risks of loss, injury, or death from wildfires would occur. (Impact W-1)

32. Development in the Cumulative Impact Analysis Area would affect night sky lighting and degrade existing visual character. Cumulative impacts would be significant and the contribution of the 2045 MTP/SCS would be cumulatively considerable. (Impact AES-C-1)

33. Development in the Cumulative Impact Analysis Area would result in conversion of agricultural land to non-agricultural uses. Cumulative impacts would be significant and the contribution of the 2045 MTP/SCS would be cumulatively considerable. (Impact AG-C-1)

34. Development in the Cumulative Impact Analysis Area would result in an increase of regional PM10 emissions and would expose sensitive receptors to diesel particulates and toxic air contaminants. Cumulative impacts would be significant and the contribution of the 2045 MTP/SCS would be cumulatively considerable. (Impact AQ-C-1)

35. Development in the Cumulative Impact Analysis Area would have substantial adverse impacts on special-status plant and animal species, sensitive natural communities, and interfere with wildlife movement. Cumulative impacts would be significant and the contribution of the 2045 MTP/SCS would be cumulatively considerable. (Impact BIO-C-1)

36. Implementation of the proposed transportation improvements and the land use scenario envisioned under the 2045 MTP/SCS would cause substantial impacts to known and unknown cultural, historical, or archaeological resources. Cumulative impacts would be significant and the contribution of the 2045 MTP/SCS would be cumulatively considerable. (Impact CR-C-1)
37. The 2045 MTP/SCS would have cumulatively considerable contributions to significant cumulative impacts related to paleontological resources. (Impact GEO-C-1)

38. The 2045 MTP/SCS would have cumulatively considerable contributions to short term construction GHG emissions, and to inability to meet long-term State GHG reduction targets. (Impact GHG-C-1)

39. Development in the cumulative impacts analysis area, as well as projects implementing the 2045 MTP/SCS, could result in hazards and exposure to hazardous materials. The 2045 MTP/SCS would have cumulatively considerable contributions to significant cumulative impacts related to hazards and hazardous materials. (Impact HAZ-C-1)

40. Development in the cumulative impact analysis area would result in Cumulative significant and unavoidable impacts related to construction and operational noise and excessive noise in proximity to airports. The 2045 MTP/SCS contribution to cumulative impacts would be cumulatively considerable. (Impact N-C-1)

41. Development in the cumulative impact analysis area would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental effects. The 2045 MTP/SCS contribution to cumulative impacts would be cumulatively considerable. (Impact PSU-C-1)

42. Development in the cumulative impact analysis area would result in significant and unavoidable increase in daily VMT per capita from baseline 2020 conditions. The 2045 MTP/SCS contribution to cumulative impacts would be cumulatively considerable. (Impact TRA-C-1)

43. Development in the cumulative impact analysis area could result in significant impacts to tribal cultural resources that would result in a significant cumulative impact. The 2045 MTP/SCS contribution to this impact would be cumulatively considerable. (Impact TCR-C-1)

44. Development in the cumulative impact analysis area could be located in or near a state responsibility area or a very high fire hazard severity zone. As significant risk of loss, injury, or death could occur, impacts related to wildfire would be significant. The 2045 MTP/SCS contribution to this impact would be cumulatively considerable. (Impact W-C-1)

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

a. The implementation of 2045 MTP/SCS transportation projects will provide for a comprehensive transportation system of facilities and services that meets the public's need for the movement of people and goods and that is consistent with the social, economic and environmental goals and policies of the region. (See Final EIR Chapter 2.)
b. The SCS will contribute to a reduction in per capita GHG emissions from passenger vehicles and light trucks, helping the Monterey Bay region achieve the regional GHG reduction targets set by the CARB. (See Impact GHG-3.)

c. The project will promote consistency between the California Transportation Plan 2050, the 2045 MTP/SCS, county-level regional transportation plan and other plans developed by cities, counties, districts, Native American tribal governments and state and federal agencies in responding to Statewide and interregional transportation issues and needs. (See Final EIR Chapter 5.)

d. The construction of transportation projects will result in both short-term and long-term economic benefits to the AMBAG region and its residents. Transportation projects will indirectly provide for a number of jobs relating to construction and maintenance. The 2045 MTP/SCS program includes $13.5 billion of transportation investments in the region (see 2045 MTP/SCS Table 3-1) which will result in direct and indirect employment benefits.
XI. MITIGATION MONITORING AND REPORTING PROGRAM

The AMBAG Board of Directors finds that a Mitigation Monitoring and Reporting Program (MMRP) for the 2045 MTP/SCS has been prepared for the project and has been adopted concurrently with these Findings of Fact (Public Resources Code, Section 21081.6(a)(1)).

CEQA requires that an agency adopt an MMRP prior to approving a project that includes mitigation measures. The MMRP for the project 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 the MMRP is to ensure the adopted mitigation measures adopted in the Findings of Fact for 2045 MTP/SCS are implemented, in accordance with CEQA requirements. The Findings of Fact adopt feasible mitigation measures to reduce the significant environmental impacts of the 2045 MTP/SCS. The mitigation measures adopted in the 2045 MTP/SCS EIR Findings are listed in Section V of these Findings of Fact.
2045 Metropolitan Transportation Plan/ Sustainable Communities Strategy and Regional Transportation Plans for Monterey, San Benito and Santa Cruz Counties

Mitigation Monitoring and Reporting Program
SCH#2020010204

prepared by

Association of Monterey Bay Area Governments
24580 Silver Cloud Court
Monterey, California 93940
Contact: Heather Adamson, Director of Planning

prepared with the assistance of

Rincon Consultants, Inc.
2511 Garden Road, Suite C-250
Monterey, California 93940

June 2022
This report prepared on 50% recycled paper with 50% post-consumer content.
Mitigation Monitoring and Reporting Program

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 to reduce or avoid significant effects on the environment. This document is the MMRP for the 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) and Regional Transportation Plans (RTPs) for Monterey, San Benito and Santa Cruz Counties. This MMRP has been prepared in compliance with the requirements of CEQA, including Section 21081.6 of the California Public Resources Code and Sections 15091(d) and 15097 of the CEQA Guidelines.

This MMRP lists in tabular format the mitigation measures for each issue area identified in the Final EIR for the 2045 MTP/SCS and RTPs (SCH #2020010204) and proposed for adoption in the CEQA Findings of Fact. This MMRP is designed to ensure adopted mitigation measures are implemented. This MMRP clarifies the process for the Association of Monterey Bay Area Governments (AMBAG) and responsible agencies to ensure these mitigation measures are implemented, and designates responsibility for implementing, monitoring, and reporting mitigation.

AMBAG has lead agency status, and the Transportation Agency for Monterey County (TAMC), Council of San Benito County Governments (SBtCOG), and Santa Cruz County Regional Transportation Commission (SCCRTC) have responsible agency status; and therefore, authority to enforce mitigation measures for projects for which they have discretionary authority. However, AMBAG, TAMC, SBtCOG and SCCRTC do not have authority to require recommended mitigation measures be implemented by other implementing agencies (e.g., Caltrans, counties, cities, transit agencies, etc.) that will be lead agencies for future transportation and land use development projects.

Implementing agencies or project sponsors considering approval of future projects under the 2045 MTP/SCS and RTPs for Monterey, San Benito and Santa Cruz Counties would utilize the EIR as a basis in determining mitigation measures for subsequent activities. Implementing agencies or project sponsors may be one of the following agencies:

- California Department of Transportation (Caltrans)
- Association of Monterey Bay Area Governments (AMBAG)
- Council of San Benito County Governments (SBtCOG)
- Santa Cruz County Regional Transportation Commission (SCCRTC)
- Transportation Agency for Monterey County (TAMC)
- Monterey County and its incorporated cities:
  - Carmel-by-the-Sea
  - Del Rey Oaks
  - Gonzales
  - Greenfield
San Benito County and its incorporated cities:
  o Hollister
  o San Juan Bautista

Santa Cruz County and its incorporated cities:
  o Capitola
  o Santa Cruz
  o Scotts Valley
  o Watsonville

The Final EIR mitigation measures are programmatic first-tier mitigation that will be implemented by AMBAG and the Regional Transportation Planning Agencies (RTPAs), which consists of SBtCOG, SCCRTC and TMC. The MMRP for the Program EIR may be used as a tool for incorporating mitigation measures into future second-tier projects, as provided for in CEQA Guidelines Section 15168(c)(3). As such, the mitigation measures can and should be implemented by the above implementing and project sponsor agencies during future project-specific design and second-tier environmental review. When the RTPAs are the direct source of funding for transportation network improvement projects, RTPAs will require as a grant condition the implementation of those 2045 MTP/SCS mitigation measures that are applicable to, and feasible for, the project type being funded. The implementing agency or project sponsor agency for each future project will be responsible for assuring the project-specific mitigation measures it adopts are enforceable and will be responsible for monitoring those mitigation measures.

AMBAG will designate a staff person to serve as Coordinator for overall implementation and administration of the MMRP, and its application to future projects. The Coordinator will prepare an annual progress report on mitigation measure implementation.
For transportation projects under their jurisdiction, TAMC, SBTCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that would degrade scenic vistas or scenic resources within a state scenic highway, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**AES-1 (a) Discouragement of Architectural Features that Block Scenic Views:** Implementing agencies 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.

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review.

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
<th>Action Required</th>
<th>Implementation Timing</th>
<th>Monitoring Frequency</th>
<th>Responsible Agency or Party</th>
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</thead>
<tbody>
<tr>
<td>AES-1 (a) Discouragement of Architectural Features that Block Scenic Views</td>
<td>Confirm that architectural plans and building plans satisfy the design standards, components and materials listed in the mitigation measure. Confirm structures and walls are constructed consistent with plans.</td>
<td>During project permitting and environmental review.</td>
<td>Once.</td>
<td>Implementing agencies/project sponsor.</td>
</tr>
</tbody>
</table>

**AES-1(b) Tree Protection and Replacement.** New roadways and extensions and widenings of existing roadways shall avoid the removal of existing mature trees to the extent possible. The implementing agency of a particular 2045 MTP/SCS project shall, or can and should, replace any trees lost at a minimum 2:1 basis and incorporate them into the

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<tbody>
<tr>
<td>AES-1(b) Tree Protection and Replacement</td>
<td>Grading and site plans shall avoid the removal of existing mature trees to the extent possible. Place conditions of approval on project to</td>
<td>During project permitting and environmental review for roadway extensions and widening projects.</td>
<td>Monitor survivability of replacement trees periodically following construction.</td>
<td>Implementing agencies/project sponsor.</td>
</tr>
</tbody>
</table>
## AES-2 Design Measure for Visual Compatibility

The implementing agency shall 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);
- Protecting or replacing trees in the project area;
- 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.

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<tbody>
<tr>
<td>landscaping design for the roadway when feasible. The implementing agency also shall ensure the continued vitality of replaced trees through periodic maintenance.</td>
<td>require tree replacement at a minimum 2:1 ratio. Maintain replacement trees to ensure their success.</td>
<td>During project permitting and environmental review.</td>
<td>Once.</td>
<td>Implementing agencies/project sponsor.</td>
</tr>
</tbody>
</table>
### AES-3(a) Roadway Lighting

Roadway lighting shall be minimized 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 hoods, low intensity lighting and using as few lights as necessary to achieve the goals of the project.

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction, as applicable.

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<tr>
<td>Interchange modifications, re-alignment, or construction of ancillary facilities. The implementing agency shall provide a performance security equal to the value of the landscaping/irrigation installation to ensure compliance with landscaping plans; and</td>
<td>Confirm that site plans satisfy the lighting requirements listed in the mitigation measure. Confirm lights are installed as described and shown on site plans.</td>
<td>During project permitting and environmental review.</td>
<td>Once during plan review.</td>
<td>Implementing agencies/project sponsor.</td>
</tr>
<tr>
<td>Designing new structures to be compatible in scale, mass, character and architecture with existing structures.</td>
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<td>Once at completion of construction.</td>
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</table>

For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures for transportation projects that would result in light and glare impacts, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.
### AES-3(b) Lighting Design Measures

As part of planning, design and engineering for projects, implementing agencies shall 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.

### Implementing Agencies

Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction, as applicable.

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<tbody>
<tr>
<td>AES-3(b) Lighting Design Measures</td>
<td>Confirm that development and building plans satisfy the lighting requirements listed in the mitigation measure. Confirm lights are installed as described and shown on plans.</td>
<td>During project permitting and environmental review.</td>
<td>Once during plan review. Once at completion of construction.</td>
<td>Implementing agencies/project sponsor.</td>
</tr>
</tbody>
</table>
AES-3(c) Glare Reduction Measures. Implementing agencies shall minimize and control glare from transportation and infill development 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 where feasible; and
- Complying with applicable general plan policies or local controls related to glare.

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.

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction, as applicable.

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</thead>
<tbody>
<tr>
<td>AES-3(c) Glare Reduction Measures</td>
<td>Confirm that development and building plans satisfy the glare reduction requirements listed in the mitigation measure. Confirm measures are installed as described and shown on plans.</td>
<td>During project permitting and environmental review.</td>
<td>Once during plan review. Once at completion of construction.</td>
<td>Implementing agencies/project sponsor.</td>
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_Agriculture and Forestry Resources_
Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
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For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that would result in impacts to Important Farmland, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**AG-1 Impact Avoidance and Minimization.** Implementing agencies shall implement measures, where feasible 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, agriculturally-zoned land and/or land under Williamson Act contract;**
- **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 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 projected land use pattern included as a part of the MTP/SCS;**
- **Maintain and expand agricultural land protections such as urban growth boundaries;**
- **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;**
- **Require acquisition of conservation easements on land in the same jurisdiction, if feasible, and at**

| Require project relocation or corridor realignment into project-specific design plans or environmental review. | During project permitting and environmental review. | Once. | Implementing agencies/project sponsor. |
### Mitigation Measures

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<tr>
<td>least equal in quality and size to converted Important Farmland, to offset the loss of Important Farmland; and/or Institute new protection of farmland in the project area or elsewhere through the use of long-term restrictions on use, such as 20-year Farmland Security Zone contracts (Government Code Section 51296 et seq.) or 10-year Williamson Act contracts (Government Code Section 51200 et seq.).</td>
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**Implementing Agencies**

Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.

### Air Quality and Health Impacts/Risks

For transportation projects under their jurisdiction, TAMC, SBtCOG, and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that result in fugitive dust and ozone precursor emissions, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

### AQ-2(a) Application of MBARD Feasible Mitigation Measures

For all projects, the implementing agency shall incorporate the most recent MBARD feasible mitigation measures and/or technologies for reducing inhalable particles based on analysis of individual sites and project circumstances. Current MBARD feasible mitigation measures include the following measures. Additional and/or modified measures may be adopted by MBARD prior to implementation of individual projects under the 2045 MTP/SCS. The most current list of feasible mitigation measures at the time of project implementation shall be used.

| Construction plans shall show MBARD’s standard dust control measures; implementing agency shall ensure implementation. | During project permitting and environmental review. Prior to issuance of grading permits; during construction | Once during plan review; periodically during construction | Implementing agencies/project sponsor. |
### Mitigation Measures

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<tr>
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<td>▪ Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil and wind exposure.</td>
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<td>▪ Prohibit all grading activities during periods of high wind (over 15 mph).</td>
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<td>▪ Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).</td>
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<td>▪ Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydro seed area.</td>
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<td>▪ Haul trucks shall maintain at least 2’0” of freeboard.</td>
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<td>▪ Cover all trucks hauling dirt, sand, or loose materials.</td>
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<td>▪ Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.</td>
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<td>▪ Plant vegetative ground cover in disturbed areas as soon as possible.</td>
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<td>▪ Cover inactive storage piles.</td>
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<td>▪ Install wheel washers at the entrance to construction sites for all exiting trucks.</td>
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<td>▪ Pave all roads on construction sites.</td>
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<td>▪ Sweep streets if visible soil material is carried out from the construction site.</td>
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<td>▪ Limit the area under construction at any one time.</td>
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<td>▪ Post a publicly visible sign which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Air Resources District shall be visible to ensure compliance with Rule 402 (Nuisance).</td>
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**Implementing Agencies**

Implementing agencies for AMBAG transportation
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<th>Mitigation Measures</th>
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<tr>
<td>projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be implemented during construction where appropriate.</td>
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<tr>
<td><strong>AQ-2(b) Diesel Equipment Emissions Standards.</strong> 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, and engines shall be retrofitted with CARB Level 3 Verified Diesel Emissions Control Strategy (VDECS) if available for the equipment. These measures shall be noted on all construction plans and the implementing agency shall perform periodic site inspections. <strong>Implementing Agencies</strong> Implementing agencies for AMBAG transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be implemented during construction where appropriate.</td>
<td>Construction plans shall ensure that construction equipment is subject to the CARB Regulation for In-use Off-road Diesel Vehicles and, if feasible, construction equipment meets Tier 4 standards or at least Tier 2 standards with retrofitted Level 3 VDECS, if available; and perform periodic site inspections.</td>
<td>During project permitting and environmental review. Prior to issuance of grading permits; during construction.</td>
<td>Once during project plan review; periodically during construction</td>
<td>Implementing agencies/project sponsor.</td>
</tr>
<tr>
<td><strong>AQ-2(c) Electric Construction Equipment.</strong> The implementing agency shall ensure that to the extent possible, construction equipment utilizes electricity from power poles rather than temporary diesel power generators and/or gasoline power generators. <strong>Implementing Agencies</strong> Implementing agencies for AMBAG transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be implemented during construction where appropriate.</td>
<td>Construction plans shall ensure that electricity from power poles is used to the extent possible.</td>
<td>During project permitting and environmental review. Prior to issuance of grading permits; during construction</td>
<td>Once during project plan review; periodically during construction</td>
<td>Implementing agencies/project sponsor.</td>
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<tr>
<td>Mitigation Measures</td>
<td>Action Required</td>
<td>Implementation Timing</td>
<td>Monitoring Frequency</td>
<td>Responsible Agency or Party</td>
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<tr>
<td>AMBAG, in partnership with MBARD and implementing agencies, shall implement Mitigation Measure AQ-3(a) to reduce PM$<em>{10}$ emissions. For land use projects under their jurisdiction, the cities and counties in the AMBAG region can and should implement Mitigation Measure AQ-3(b) to reduce PM$</em>{10}$ emissions, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.</td>
<td>Evaluate PM$_{10}$ emissions and ensure reduction of emissions below MBARD standards by reduction measures listed in this mitigation measure or other measures of equivalent effectiveness.</td>
<td>During project permitting and environmental review; during operation.</td>
<td>Once during project-level environmental review; periodically during operation.</td>
<td>Implementing agencies/project sponsor.</td>
</tr>
<tr>
<td>AQ-3(a) PM$<em>{10}$ Emissions Reduction. To help reduce regional PM$</em>{10}$ emissions, AMBAG and the RTPAs, in partnership with MBARD and implementing agencies, shall:</td>
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<td>▪ Support the use of existing air quality and transportation funds and seek additional funds to continue the implementation of the CARB Carl Moyer Program, which is intended to retrofit and replace trucks and locomotives to reduce particulate matter.</td>
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<td>▪ Incentivize the reduction of mobile PM emissions from mobile exhaust and entrained PM sources such as tire wear, brake wear, and roadway dust through funding.</td>
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<td>▪ Hold forums and workshops to encourage land use projects to incorporate transportation demand management (TDM) strategies as part of the project design to reduce the number of vehicular trips across the transportation network. Potential strategies could include ridesharing, carpooling, subsidized public transit, flexible work hours, and parking management measures.</td>
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<tr>
<td>Implementing Agencies</td>
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<tr>
<td>AMBAG and the RTPAs in partnership with MBARD, are responsible for implementing this measure. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during operation where appropriate.</td>
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<tr>
<td>AQ-3(b) Long term Regional Operational Emissions</td>
<td>Require coatings compliant with MBARD Rule 426.</td>
<td>During project permitting and environmental review. Periodically during operation.</td>
<td>Once during project-level environmental review; periodically during operation.</td>
<td>Implementing agencies/project sponsor.</td>
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<tr>
<td>Implementing agencies including transportation project sponsors, counties, and cities shall, or can and should, implement long-term operational</td>
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### Mitigation Measures

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<th>Mitigation Measures</th>
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<tbody>
<tr>
<td>Emissions reduction measures. Such reduction measures include the following:</td>
<td>Require energy efficient project design features. Require location of sensitive receptors, and if applicable implement listed mitigation to reduce pollution exposure. Require project design features that encourage alternative modes of transportation and ride sharing.</td>
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<tr>
<td>- Require that all interior and exterior architectural coatings for all developments utilize coatings following MBARD Rule 426, <em>Architectural Coatings</em>.</td>
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<td>- Increase building envelope energy efficiency standards in excess of applicable building standards and encourage new development to achieve zero net energy use.</td>
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<td>- Install energy-efficient appliances, interior lighting, and building mechanical systems. Encourage installation of solar panels for new residential and commercial development.</td>
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<tr>
<td>- 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.</td>
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<td>- 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:</td>
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<td>- Install air filtration (as part of mechanical ventilation systems or stand-alone air cleaners) to reduce indoor pollution exposure for residents and other sensitive populations in buildings that are close to transportation network improvement projects.</td>
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<td>- Use air filtration devices rated MERV-13 or higher.</td>
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<td>- 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</td>
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<td>Mitigation Measures</td>
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<tr>
<td>the canopy. Install higher efficacy public street and exterior lighting</td>
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<td>▪ Use daylight as an integral part of lighting systems in buildings.</td>
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<td>▪ Use passive solar designs to take advantage of solar heating and natural cooling.</td>
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<td>▪ Install light colored “cool” roofs, cool pavements.</td>
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<td>▪ Install solar and tankless hot water heaters.</td>
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<td>▪ Exclude wood-burning fireplaces and stoves.</td>
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<td>▪ 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.</td>
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<td>▪ 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).</td>
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</table>

**Implementing Agencies**

AMBAG and the RTPAs in partnership with MBARD, are responsible for implementing this measure. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during operation where appropriate.

For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects. Cities and
<table>
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<tr>
<th>Mitigation Measures</th>
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</thead>
<tbody>
<tr>
<td>AQ-5 Health Risk Reduction Measures</td>
<td>Retain air quality consultant to conduct project-level hot spot analysis.</td>
<td>During project permitting and environmental review; during construction as applicable; during operation.</td>
<td>Once during project-level environmental review; periodically during construction; following construction, during operation.</td>
<td>Implementing agencies/project sponsor.</td>
</tr>
<tr>
<td>Transportation implementing agencies shall, or can and should, implement the following measures:</td>
<td>Ensure a project-level HRA is prepared by a qualified air quality consultant.</td>
<td>Ensure project-level environmental review and site plans incorporate the measures to reduce particulate impacts, as listed in this mitigation measure.</td>
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<tr>
<td>▪ 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 sensitive receptors to TAC concentrations.</td>
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<td>▪ If impacts result in increased risks to sensitive receptors above the MBARD significance thresholds, then design features or control measures must be included that will reduce the health risks at the location of the off-site sensitive receptors to a level below the MBARD significance threshold. For example, plant trees and/or vegetation suited to trapping TACs and/or sound walls between sensitive receptors and the pollution source would be recommended. This measure would trap TACs emitted from pollution sources such as highways, reducing the amount of TACs to which residents and other sensitive populations would be exposed.</td>
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<td>▪ AMBAG will partner with MBARD and other implementing agencies to develop a program to retrofit existing residential buildings and other sensitive land uses (as defined by CARB) near freeways or roadways where health risk impacts exceed MBARD significance thresholds with air filtration devices rated minimum efficiency report value (MERV) 13.</td>
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<td>▪ Implement air pollution reduction strategies as described in Table 1 from the CARB Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways technical advisory (2017) when reasonable and feasible for transportation system projects associated with the 2045 MTP/SCS.</td>
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</table>
In addition, consistent with the general guidance contained in CARB’s *Air Quality and Land Use Handbook* (April 2005) and *Technical Advisory on Strategies to Reduce Air pollution Exposure Near High-Volume Roadways* (April 2017), appropriate measures shall include one or more of the following methods, as determined by a qualified professional, as applicable. The implementing agency shall incorporate health risk reduction measures based on analysis of individual land use 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 the freeway 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, that meets or exceeds the efficiency standard of the MERV 13. The HV system should include the following:

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<td>Features: Installation of a high efficiency filter and/or carbon filter-to-filter</td>
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<td>particulates and other chemical matter from entering the building. Either HEPA</td>
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<td>filters or ASHRAE 85 percent supply filters should be used. Ongoing maintenance</td>
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<td>should occur. Retain a qualified HV consultant or Home Energy Rating Systems</td>
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<td>(HERS) rater during the design phase of the project to locate the HV system</td>
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<td>based on exposure modeling from the mobile and/or stationary pollutant sources.</td>
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<td>Maintain positive pressure within the building.</td>
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<td>Achieve a performance standard of at least one air exchange per hour of fresh</td>
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<td>outside filtered air. Achieve a performance standard of at least four air</td>
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<td>exchanges per hour of recirculation. Achieve a performance standard of 0.25 air</td>
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<td>exchanges per hour of in unfiltered infiltration if the building is not</td>
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<td>positively pressurized. Require project owners to provide a disclosure statement</td>
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<td>to occupants and buyers summarizing technical studies that reflect health</td>
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<td>concerns about exposure to highway exhaust emissions. Implement feasible</td>
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<td>attenuation measures needed to reduce potential air quality impacts to sensitive</td>
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<td>receptors such as air filtration systems.</td>
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<td>Implementing Agencies</td>
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<td>AMBAG and the RTPAs in partnership with MBARD, are responsible for implementing</td>
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<td>this measure. This mitigation measure shall, or can and should, be applied</td>
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<td>during permitting and environmental review and implemented during operation where</td>
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<td>appropriate. Biological Resources</td>
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<td>For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC</td>
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<td>shall, and transportation project sponsor agencies can and should, implement the</td>
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<td>following mitigation measures for applicable transportation projects identified in</td>
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<td>Appendix B, and where feasible and necessary based on project and site specific</td>
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<td>considerations. Cities and counties in the AMBAG region can and should implement</td>
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| these measures, where relevant to land use.
Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
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projects implementing the 2045 MTP/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, or can and should, 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, the implementing agency shall retain a qualified biologist to conduct a biological resources assessment (BRA) to document the existing biological resources and to determine the potential impacts to those resources. Depending on 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(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.

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.

**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 require surveys for special-status plants to be performed as part of the environmental review process. If there is a potential for special-status plant species to occur on site, surveys for special status plants shall be performed during project permitting and environmental review; prior to construction but no earlier than one year.

<table>
<thead>
<tr>
<th>BIO-1(a) Biological Resources Screening and Assessment</th>
<th>Ensure preliminary biological resource screening to determine whether the project has any potential to impact biological resources and incorporate measures listed in this mitigation measure if impacts are found. Retain a qualified biologist to conduct a biological resources assessment (BRA) if the project would have potential to impact biological resources.</th>
<th>During project permitting and environmental review.</th>
<th>Once.</th>
<th>Implementing agencies/project sponsor.</th>
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<tbody>
<tr>
<td>BIO-1(b) Special Status Plant Species Surveys</td>
<td>If there is a potential for special-status plant species to occur on site, surveys for special status plants shall be performed during project permitting and environmental review; prior to construction but no earlier than one year.</td>
<td>During project permitting and environmental review.</td>
<td>Once.</td>
<td>Implementing agencies/project sponsor.</td>
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<td>Mitigation Measures</td>
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<td>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. 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.</td>
<td>status plants shall be completed. Ensure a report of the survey is provided to the implementing agency for review.</td>
<td>before construction commences.</td>
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**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review, prior to project construction but no earlier than one year before construction commences.

**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 redesigned to avoid impacting these plant species to the maximum extent feasible. 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 2045 MTP/SCS, 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 during project permitting and environmental review; prior to issuance of project construction permits and approvals. Once. Implementing agencies/project sponsor.
and submitted to implementing agency overseeing the project for approval.

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be implemented prior to issuance of project construction permits and approvals.

**BIO-1(d) Endangered/Threatened Animal Species Habitat Assessment and Protocol Surveys.** If the BRA determines that suitable habitat may be present for federally and/or state endangered or threatened animal species, the implementing agency shall require protocol habitat assessments/surveys to 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.

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be implemented prior to issuance of project construction permits and approvals.

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<tr>
<td>and submitted to implementing agency overseeing the project for approval.</td>
<td>Ensure a restoration plan be developed for the project.</td>
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</table>
| **Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be implemented prior to issuance of project construction permits and approvals. | If suitable habitat for federally and/or state endangered or threatened animal species exists, protocol habitat assessments/surveys shall be completed in accordance with CDFW and/or USFWS/NMFS protocols. | During project permitting and environmental review; prior to commencement of project construction. | Once. | Implementing agencies/project sponsor. |
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<th>Mitigation Measures</th>
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<tbody>
<tr>
<td><strong>BIO-1 (e) Endangered/Threatened Animal Avoidance and Compensatory Mitigation.</strong></td>
<td>If habitat is occupied by federal and/or state listed species, implementing agency shall require project plans include project-specific mitigation measures to avoid and minimize impacts to habitat for endangered or threatened species. If avoidance is not possible, credits shall be purchased according to the mitigation measure, and a qualified biologist must provide a HMMP.</td>
<td>During project permitting and environmental review; prior to issuance of construction permits and approvals.</td>
<td>In accordance with project HMMP, as applicable.</td>
<td>Implementing agencies/project sponsor.</td>
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</table>
Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
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submitted to the agency overseeing the project for approval. Implementing Agencies Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. This mitigation measure shall, or can and should, be implemented prior to issuance of project construction permits and approvals.

**BIO-1(f) Endangered/Threatened Species Avoidance and Compensatory Mitigation.** The following measures shall be applied 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 B-1[a]).

- Pre-construction 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.

If applicable, project plans shall include project-specific mitigation measures to avoid and minimize impacts to endangered or threatened species. During project permitting and environmental review; prior to and ongoing throughout project construction. Periodically through construction. Implementing agencies/project sponsor.
Mitigation Measures

- 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/NMFS.
- 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...
Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
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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 work day, 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.

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be implemented prior to and ongoing through project construction.

**BIO-1(g) Non-Listed Special Status Animal Species Avoidance and Minimization.** Depending on the species identified in the BRA, the following measures shall be selected from among the following to reduce the potential for impacts to non-listed special status animal species:
- Pre-construction clearance surveys shall be conducted within 14 days prior to the start of construction (including staging and mobilization) to identify all special-status animal species that may occur on-site. All non-listed special-status species shall be relocated from the site. A report

If applicable, project plans shall include project-specific mitigation measures to reduce impacts to non-listed special status species.

During project permitting and environmental review; prior to, during and after project construction.

During all initial ground disturbance, as applicable.

Implementing agencies/project sponsor.
Mitigation Measures

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<th>Mitigation Measures</th>
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<th>Monitoring Frequency</th>
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<tr>
<td>of the pre-construction survey shall be submitted to the implementing agency for their review and approval prior to the start of construction.</td>
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<td>▪ 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.</td>
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<td>▪ Upon completion of the project, a qualified biologist shall prepare a final compliance report documenting all compliance activities implemented for the project, including the pre-construction survey results.</td>
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<td>▪ 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. If active bat roosts or colonies are present, the biologist shall evaluate the type of roost to determine the next step.</td>
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<td>o 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.</td>
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<td>o 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</td>
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## 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 Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act shall be conducted by a qualified biologist retained by the implementing agency 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 ranging from 250 to 500 feet based on the species biology and the current and anticipated disturbance levels occurring in vicinity of the nest.

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<tr>
<td>BIO-1(h) Preconstruction Surveys for Nesting Birds</td>
<td>If applicable, a survey for nesting birds shall be completed; if necessary, a buffer shall be created.</td>
<td>During project permitting and environmental review; prior to construction activities; during construction activities if required.</td>
<td>Once prior to construction; as needed during construction activities.</td>
<td>Implementing agencies/project sponsor.</td>
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### Mitigation Monitoring and Reporting Program

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<th>Mitigation Measures</th>
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<tr>
<td>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 August 31; however, buffers may be relaxed earlier than August 31 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.</td>
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<tr>
<td><strong>Implementing Agencies</strong> Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be implemented once prior to commencement of project construct and then during construction activities if needed.</td>
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<td><strong>BIO-1(i) Worker Environmental Awareness Program.</strong> Prior to initiation of construction activities, 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.</td>
<td>Construction personnel shall attend WEAP training prior to construction.</td>
<td>During project permitting and environmental review.</td>
<td>Once prior to construction.</td>
<td>Implementing agencies/project sponsor.</td>
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Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
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**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented prior to construction.

For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall, and transportation project sponsor agencies can and should, implement the following mitigation measures for applicable transportation projects identified in Appendix B, where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/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.** If the results of measure BIO-1(a) indicates projects implemented under the 2045 MTP/SCS occur within or adjacent to wetland, drainages, riparian habitats, or other areas that may fall under the jurisdiction of the CDFW, USACE, RWQCB and/or CCC, 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, CDFW and/or CCC, as appropriate, for review and approval, and the project shall be designed to 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 B-2(f).

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be implemented during permitting and environmental review.

If applicable, a jurisdictional delineation shall be completed and submitted to the applicable agencies listed in this mitigation measure. During project permitting and environmental review. Once. Implementing agencies/project sponsor.
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| **BIO-2(b) Wetlands, Drainages and Riparian Habitat Restoration.** 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, and shall occur on-site or as close to the impacted habitat as possible. A mitigation and monitoring plan shall be developed by a qualified biologist and submittal to the agency overseeing the project for approval. Alternatively, mitigation shall be accomplished through purchase of credits from an approved wetlands mitigation bank.  
**Implementing Agencies**  
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.  
**Ensure, if applicable, project plans mitigate impacts to jurisdictional wetlands and riparian habitats at a ratio to fully offset project impacts, as determined by a qualified biologist. Ensure a mitigation and monitoring plan is developed by a qualified biologist.** | Ensure, if applicable, project plans mitigate impacts to jurisdictional wetlands and riparian habitats at a ratio to fully offset project impacts, as determined by a qualified biologist. Ensure a mitigation and monitoring plan is developed by a qualified biologist. | During project permitting and environmental review. | Once. | Implementing agencies/project sponsor. |
| **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.  
**Implementing Agencies**  
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation | Retain a qualified biologist/landscape architect, if applicable, to prepare a landscaping plan that includes all requirements in this mitigation measure; species shall be regionally appropriate native species found in adjacent native habitats. | During project permitting and environmental review. | Once. | Implementing agencies/project sponsor. |
### BIO-2(d) Sensitive Vegetation Community Avoidance and Mitigation

If the results of measure BIO-1(a) indicates projects implemented under the 2045 MTP/SCS would impact sensitive natural communities in addition to riparian habitat which is addressed by Measure BIO-2(b), 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.

#### Implementing Agencies
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.

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<tr>
<td>BIO-2(d) Sensitive Vegetation Community Avoidance and Mitigation</td>
<td>If applicable, project plans shall include final project design modifications shall be developed to avoid impacts to sensitive vegetation communities. If avoidance is not possible, impacts shall be mitigated at a ratio to fully offset project impacts, as determined by a qualified biologist. Ensure temporarily impacted areas are restored to pre-project conditions. Ensure a qualified biologist develops a Restoration Plan.</td>
<td>During project permitting and environmental review.</td>
<td>Once following construction and then, when applicable, in accordance with the Restoration Plan.</td>
<td>Implementing agencies/project sponsor.</td>
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### 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

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<tr>
<td>BIO-2(e) Invasive Weed Prevention and Management Program</td>
<td>Retain a qualified biologist to develop an Invasive Weed Prevention and Management Program if project is in or next to native habitats.</td>
<td>During project permitting and environmental review; prior to construction activities; during construction activities.</td>
<td>Once prior to construction; ongoing during construction.</td>
<td>Implementing agencies/project sponsor.</td>
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Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party |
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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.
- The erosion control/restoration plans for the project must emphasize the use of sensitive species that are expected to occur in the area and that are considered suitable for use at the project site.
- 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.

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and...
### BIO-2(f) Wetlands, Drainages and Riparian Habitat

**Best Management Practices During Construction.** The following best management practices shall be required 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**

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<tr>
<td>implemented prior to project construction and during construction activities.</td>
<td>If applicable, ensure project plans incorporate the best management practices listed in this mitigation measure.</td>
<td>During project permitting and environmental review; prior to construction activities; during construction activities.</td>
<td>Once prior to construction; ongoing during construction.</td>
<td>Implementing agencies/project sponsor.</td>
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Mitigation Monitoring and Reporting Program

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<td>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.</td>
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**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented prior to project construction and during construction activities.

For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall, and transportation project sponsor agencies can and should, implement the following mitigation measures for applicable transportation projects identified in Appendix B, where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/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.**
The implementing agency shall implement the following measures. All projects including long segments of fencing and lighting shall be designed to minimize impacts to wildlife. 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

| Project plans for projects with fencing and lighting shall be designed to minimize impacts to wildlife. Project plans shall incorporate wildlife crossing structures, when a crossing is applicable. | During project permitting and environmental review. | Once. | Implementing agencies/project sponsor. |
### Mitigation Measures

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<tr>
<td>Mitigation Measures</td>
<td>BIO-3(b) Maintain Connectivity in Drainages. The implementing agency shall implement the following measures. Permanent structures shall be avoided to the extent feasible within any drainage or river that serves as a wildlife migration corridor that would impede wildlife movement. 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</td>
<td>Ensure construction plans and building plans avoid placement of permanent structures in drainages or rivers such that wildlife movement would be impeded.</td>
<td>During project permitting and environmental review. Ensure temporary impacts to stream channels are restored after construction is completed.</td>
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<td>Mitigation Measures</td>
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<td>allows for unimpeded passage through the area once the work has been complete.</td>
<td>Ensure temporary impacts to stream channels are restored. If applicable, ensure a diversion plan is provided for the project.</td>
<td>Periodically during construction</td>
<td>Implementing agencies/project sponsor, and onsite construction manager.</td>
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<td>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.</td>
<td>Implementing Agencies Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.</td>
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<td><strong>BIO-3(c) Construction Best Management Practices to Minimize Disruption to Wildlife.</strong></td>
<td>The following construction best management practices shall be incorporated into all grading and construction plans to minimize temporary disruption of wildlife, which could hinder wildlife movement:</td>
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<td>▪ Designation of a 20 mile per hour speed limit in all construction areas.</td>
<td>Ensure construction plans incorporate best management practices to minimize disruption to wildlife.</td>
<td>During project permitting and environmental review; prior to issuance of grading and construction permits.</td>
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<td>▪ Daily construction work schedules shall be limited to daylight hours only.</td>
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<td>Periodically during construction</td>
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<td>▪ Mufflers shall be used on all construction equipment and vehicles shall be in good operating condition.</td>
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<td>Implementing agencies/project sponsor, and onsite construction manager.</td>
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<td>▪ All trash shall be placed in sealed containers and shall be removed from the project site a minimum of once per week.</td>
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<td>▪ No pets are permitted on project site during construction.</td>
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<td><strong>Implementing Agencies</strong></td>
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<td>Implementing agencies for transportation projects</td>
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Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
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are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction. |  |  |  |  

### Cultural and Historic Resources

To minimize impacts to historical resources for transportation projects under AMBAG jurisdiction, working with TAMC, SBICOG, and SCCRTC shall, and transportation project sponsor agencies can and should, implement the following mitigation developed for the 2045 MTP/SCS program where applicable for transportation projects that result in impacts to historic resources, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG planning region can and should implement these measures, where relevant to land use projects implementing under the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

| CR-1 Historical Resources Impact Minimization. | Prepare a map defining the Area of Potential Effects. Retain an architectural historian, or historical architect, to determine eligibility of structure for recognition under state, federal, or local historic preservation criteria, if applicable. | During project permitting and environmental review. | Once. | Implementing agencies/project sponsor. 
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Prior to individual project permit issuance, the implementing agency of a 2045 MTP/SCS project involving earth disturbance or construction of permanent above ground structures or roadways shall prepare a map defining the Area of Potential Effects (APE). This map shall indicate the areas of primary and secondary disturbance associated with construction and operation of the facility and will help in determining whether known historical resources are located within the impact zone. If a structure greater than 45 years in age is within the identified APE, a survey and evaluation of the structure(s) to determine their eligibility for recognition under State, federal, or local historic preservation 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. The evaluation shall comply with State CEQA Guidelines section 15064.5(b). Study recommendations shall be implemented, which may include, but would not be limited to, the following:
Mitigation Monitoring and Reporting Program

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<td>Realign or redesign projects to avoid impacts on known historic resources where possible.</td>
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<td>If avoidance of a significant architectural/built environment resource is not feasible, additional mitigation options include, but are not limited to, specific design plans for historic districts, or plans for alteration or adaptive re-use of a historical resource that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitation, Restoring, and Reconstructing Historic Buildings.</td>
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<tr>
<td>Comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect historic resources.</td>
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</table>

**Implementing Agencies**

Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review.

To minimize impacts to cultural resources for transportation projects under AMBAG jurisdiction, working with TMC, SBtCOG, and SCCRTC shall, and transportation project sponsor agencies can and should, implement the following mitigation developed for the 2045 MTP/SCS program where applicable for transportation projects that result in impacts to archaeological resources, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG planning region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**CR-2(a) Archeological Resources Impact Minimization.** Before construction activities, implementing agencies shall, or can and should, retain a qualified archaeologist to conduct a record search at the Northwest 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, or can and

Retain a qualified archaeologist to conduct a record search to determine whether the project area has been previously surveyed and whether

During project permitting and environmental review; prior to construction activities; during construction activities.

Ongoing throughout construction.

Implementing agencies/project sponsor.
Mitigation Measures

should, 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. Recommended mitigation measures will be consistent with State 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.

Implementing Agencies

Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.

CR-2(b) Unanticipated Discoveries During Construction. If evidence of any prehistoric or historic-era subsurface archaeological features or deposits are discovered during construction-related earthmoving activities (e.g., ceramic shard, trash scatters, lithic scatters), implementing agencies shall, or can and should, halt all ground-disturbing activity proximate to the discovery until a qualified archaeologist (36 CFR Section 61) can assess the significance of the find. If the find is a prehistoric resource was identified.

Implement recommendations identified in the survey.

Project construction plans shall include required components to stop work if archaeological resources are uncovered.

Place conditions of approval on project to ensure that if archaeological resources are uncovered work is halted until the procedures described in this mitigation

During project permitting and environmental review; prior to construction activities; during construction activities.

Ongoing throughout construction.

Implementing agencies/project sponsor.
<table>
<thead>
<tr>
<th>Mitigation Measures</th>
<th>Action Required</th>
<th>Implementation Timing</th>
<th>Monitoring Frequency</th>
<th>Responsible Agency or Party</th>
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</thead>
<tbody>
<tr>
<td>archaeological site, the culturally affiliated California Native American Tribe</td>
<td>measure have been completed.</td>
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<td>shall be notified. If the archaeologist determines that the find does not</td>
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<td>meet the CRHR standards of significance for cultural resources, construction may</td>
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<td>proceed. If the archaeologist determines that further information is needed to</td>
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<td>evaluate significance, a testing plan shall be prepared and implemented. If the</td>
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<td>find is determined to be significant by the qualified archaeologist (i.e., because</td>
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<td>the find is determined to constitute either an historical resource or a unique</td>
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<td>archaeological resource), the archaeologist shall work with the implementing</td>
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<td>agency to avoid disturbance to the resources, and if complete avoidance is not</td>
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<td>feasible in light of project design, economics, logistics and other factors, shall</td>
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<td>recommend additional measures such as the preparation and implementation of a data</td>
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<td>recovery plan. Recommended mitigation measures will be consistent with State CEQA</td>
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<tr>
<td>Guidelines Section 15126.4(b)(3) recommendations and may include but not be</td>
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<td>limited to preservation in place and/or data recovery. All cultural resources work</td>
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<td>shall follow accepted professional standards in recording any find including</td>
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<td>information to the appropriate California Historical Resources Information System</td>
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<td>office for the project area. If the find is a prehistoric archaeological site, the</td>
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<td>culturally affiliated California Native American tribe shall be notified and</td>
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<td>afforded the opportunity to monitor mitigative treatment. During evaluation or</td>
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<td>mitigative treatment, ground disturbance and construction work may continue in</td>
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<td>other parts of the project area that are distant enough from the find not to</td>
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<td>impact it, as determined by the qualified archaeologist.</td>
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</table>

**Implementing Agencies**

Implementing agencies for transportation projects.
### Mitigation Measures

<table>
<thead>
<tr>
<th>Action Required</th>
<th>Implementation Timing</th>
<th>Monitoring Frequency</th>
<th>Responsible Agency or Party</th>
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</thead>
<tbody>
<tr>
<td>Retain a qualified paleontologist to conduct a PRA. Place conditions of approval on project to ensure procedures described in this mitigation measure are completed before and throughout construction, if the project area is underlying high sensitivity or unique geologic features. During project permitting and environmental review; prior to construction activities; during construction activities.</td>
<td>Ongoing throughout construction.</td>
<td>Implementing agencies/project sponsor.</td>
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</tbody>
</table>

### GEO-5 Paleontological and Geologic Resources Impact Minimization

The implementing agency of a 2045 MTP/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 geological features. If avoidance practices...
Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
---|---|---|---|---
 cannot be implemented, the following measures shall apply.
  - **Paleontological Mitigation and Monitoring Program.** A qualified paleontologist shall prepare a Paleontological Mitigation and Monitoring Program to be implemented during ground disturbance activity. This program shall outline the procedures for construction staff training, paleontological monitoring extent and duration (i.e., in what locations and at what depths paleontological monitoring shall be required), salvage and preparation of fossils, the final mitigation and monitoring report and paleontological staff qualifications.
  - **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.** Ground disturbing activity with the potential to disturbed geologic units with high paleontological sensitivity shall be monitored on a full-time basis by a qualified paleontological monitor. Should no fossils be observed during the first 50 percent of such excavations, paleontological monitoring could be reduced to weekly spot-checking under the discretion of the qualified paleontologist. 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.
  - **Salvage of Fossils.** If 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
Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
--- | --- | --- | --- | ---
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 should 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, along with all pertinent field notes, photos, data and maps.
- **Final Paleontological 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 mitigation and monitoring program. 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.

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.

**Greenhouse Gas Emissions/Climate Change**
For all transportation projects under their jurisdiction, TAMC, SBtCOG, and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects.
Mitigation Measures   | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
---|---|---|---|---
Generating construction GHG emissions, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Implementation of Mitigation Measures AQ-2(b) and AQ-2(c) in Section 4.3, Air Quality, would also reduce GHG emissions from the 2045 MTP/SCS.

| GHG-1 Construction GHG Reduction Measures. The project sponsor shall incorporate the most recent GHG reduction measures and/or technologies for reducing GHG emissions measures for off-road construction vehicles during construction. The measures shall be noted on all construction plans and the project sponsor shall perform periodic site inspections. Current GHG-reducing measures include the following: |
|---|---|---|---|---|
|  Use of on-road heavy-duty trucks that meet the CARB’s 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation; |
| Ensure construction plans specify construction equipment is subject to the CARB Regulation for In-use Off-road Diesel Vehicles and, if feasible, construction equipment meets Tier 4 standards; or at least Tier 2 standards; and perform periodic site inspections. Ensure periodic site inspections are conducted. |
| During project permitting and environmental review. |
| Once during project plan review; periodically during construction. |
| Implementing agencies/project sponsor. |
|  All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the five-minute idling limit; |
| Substitute gasoline-powered in place of diesel-powered equipment, where feasible; |
| Use of alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, in place of diesel-powered equipment for 15 percent of the fleet, to the extent electric powered equipment is not feasible; |
| Use of materials sourced from local suppliers; |
| Recycling of at least 75 percent of construction waste materials; and |
| Project proponents shall incentivize that construction workers carpool, and/or use electric vehicles to commute to and from the project site. |
Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
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Projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.

For all transportation projects under their jurisdiction, SBTCOG, SCCRTC, and TAMC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects generating construction GHG emissions, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions. Implementation of Mitigation Measures T-2(a) and T-2(b) in Section 4.15, Transportation, would also reduce GHG emissions from the 2045 MTP/SCS.

**GHG-4(a) Transportation-Related GHG Reduction Measures.** The implementing agency shall incorporate the most recent GHG reduction measures and/or technologies for reducing VMT and associated transportation related GHG emissions. GHG-reducing mitigation 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 new or improved transit amenities (e.g., covered turnouts, bicycle racks, covered benches, signage, lighting, sidewalk connectivity, and accessible crosswalks) if project site is located along an existing transit route
- Expansion of existing transit routes
- 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

Place conditions of approval on the requirement of implementation of GHG and/or VMT reduction measures described in this mitigation. During project permitting and environmental review. Once during project-level environmental review and discretionary approval decisions for land use projects. Implementing agencies/project sponsor.
<table>
<thead>
<tr>
<th>Mitigation Measures</th>
<th>Action Required</th>
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<tr>
<td>▪ Implementation of transportation demand management programs to educate and incentivize residents and/or employees to use transit, smart commute, and alternative transportation options</td>
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<tr>
<td><strong>Implementing Agencies</strong></td>
<td>Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during operation where appropriate.</td>
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<td><strong>GHG-4(b) Land Use Project Energy Consumption and Water Use Reduction Measures</strong></td>
<td>Use project-level analysis of energy consumption, solid waste generation, and water use and incorporate mitigation measures as needed to specifications described in measure. Place conditions of approval on the project requiring energy- and water-saving measures.</td>
<td>During project permitting and environmental review.</td>
<td>Once during project-level environmental review and discretionary approval decisions for land use projects. Once prior to issuance of an occupancy permit.</td>
<td>Implementing agencies/project sponsor.</td>
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<td>▪ Require new commercial construction to install solar energy systems or be solar-ready</td>
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<td>▪ Require new residential and commercial development to install low flow water fixtures</td>
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<td>▪ Require new residential and commercial development to install water-efficient drought-tolerant landscaping, including the use of compost and mulch</td>
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<td>▪ Require new development to exceed the applicable Title 24 energy-efficiency requirements</td>
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<td>▪ Require new development to be fully electric</td>
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Exhibit B
## Hazards and Hazardous Materials

For transportation projects under their jurisdiction, TAMC, SBCoG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that result in hazardous materials impacts, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/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 2045 MTP/SCS is located on or near a hazardous materials and/or waste site pursuant to 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.

### Implementing Agencies

Implementing agencies for transportation projects

<table>
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<tr>
<th>Mitigation Measures</th>
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<tr>
<td>Environmental review and implemented during operation where appropriate.</td>
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Mitigation Measures

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<tr>
<td>are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.</td>
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**Noise**

For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that result in construction noise impacts, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures 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.
  - Implementing agencies of 2045 MTP/SCS projects shall ensure that, where residences or other noise sensitive uses are located within 750 feet of construction sites, appropriate measures shall be implemented to ensure compliance with local ordinance requirements relating to construction noise. 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.
  - Designate an on-site construction complaint and enforcement manager for projects within 750 feet of sensitive receivers.
  - Implementing agencies of the 2045 MTP/SCS 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.
  - Ensure consistency with local noise ordinance requirements relating to construction for sensitive uses.
  - Place conditions of approval on project to require construction noise reduction measures detailed in this mitigation.
  - Ensure project permitting and environmental review; prior to construction; during construction activities.
  - Ongoing throughout construction.
  - Implementing agencies/project sponsor.
### Mitigation Measures

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<td>For any project within 6,000 feet of sensitive receptors that requires pilings, the implementing agencies shall require caisson drilling or sonic pile driving as opposed to impact pile driving, where feasible. This shall be accomplished through the placement of conditions on the project during its individual environmental review.</td>
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<td>Implementing agencies of 2045 MTP/SCS projects shall ensure that equipment and trucks used for project construction utilize the best available noise and vibration control techniques, including mufflers, intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds.</td>
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<tr>
<td>Implementing agencies of 2045 MTP/SCS projects 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.</td>
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<td>The following timing restrictions shall apply to MTP/SCS project construction activities located within 2,500 feet of a dwelling unit, except where timing restrictions are already established in local codes or policies.</td>
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<td>Construction activities shall be limited to:</td>
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<td>- Monday through Friday: 7 a.m. to 6 p.m.</td>
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<td>- Saturday: 9 a.m. to 5 p.m.</td>
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<td>Implementing agencies of 2045 MTP/SCS projects shall locate stationary noise and vibration</td>
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### Mitigation Measures

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<tr>
<td>sources as far from sensitive receptors as feasible. Stationary noise sources that must be located near existing receptors will be adequately muffled.</td>
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<tr>
<td><strong>Implementing Agencies</strong></td>
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<tr>
<td>Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.</td>
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<tr>
<td>For transportation projects under their jurisdiction, TAMC, SBtCOG, and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that result in construction noise impacts, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement Mitigation Measure N-1, listed under Impact N-1, and Mitigation Measure N-2, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.</td>
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<td><strong>N-2 Physical Impacts Due to Vibration.</strong></td>
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<td>If construction equipment would generate vibration levels exceeding acceptable levels as established by Caltrans (65 VdB to 80 VdB depending on frequency of the event and 0.1 to 0.6 PPV in/sec depending on building type), implementing agencies of the 2045 MTP/SCS shall, or can and should, complete the following tasks:</td>
<td>If applicable, place conditions of approval on project to require construction noise reduction measures detailed in this mitigation.</td>
<td>During project permitting and environmental review; prior to construction; during construction activities.</td>
<td>Ongoing throughout construction.</td>
<td>Implementing agencies/project sponsor.</td>
</tr>
<tr>
<td>- 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.</td>
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<tr>
<td>- Prepare and submit a report to the lead agency that contains the results of the geological testing.</td>
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</table>
Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
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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 within 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

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.
Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
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For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measure developed for the 2045 MTP/SCS program where applicable for transportation projects that result in significant mobile source noise levels, and where feasible and necessary based on project and site specific considerations. The measure below does not apply to land use projects. Project specific environmental documents may adjust this mitigation measure as necessary to respond to site specific conditions.

**N-3 Noise Assessment and Control for Mobile and Point Sources.** Sponsor agencies of 2045 MTP/SCS transportation projects shall complete detailed noise assessments using applicable guidelines (e.g., FTA Transit Noise and Vibration Impact Assessment for rail and bus projects and the Caltrans Traffic Noise Analysis Protocol) for roadway projects that may impact noise sensitive receivers. 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)

Where new or expanded roadways, rail, or transit projects are found to expose receivers to noise exceeding normally acceptable levels, the implementing agency shall implement techniques as recommended in the project specific noise assessment. The preferred methods for mitigating noise impacts will be the use of appropriate setbacks (design adjustments) and sound

Prior to issuance of grading or building permits, ensure noise assessments have been completed. Place conditions of approval to require implementation of recommendations in project-specific noise assessments.

During project permitting and environmental review.

Once.

Implementing agencies/project sponsor.
<table>
<thead>
<tr>
<th>Mitigation Measures</th>
<th>Action Required</th>
<th>Implementation Timing</th>
<th>Monitoring Frequency</th>
<th>Responsible Agency or Party</th>
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</thead>
<tbody>
<tr>
<td>attenuating building design, including retrofit of existing structures with sound</td>
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<td>attenuating building materials where feasible. In instances where use of these</td>
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<td>techniques is not feasible, the use of sound barriers (earthen berms, sound walls,</td>
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<td>or some combination of the two) shall be considered. Long expanses of walls or</td>
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<td>fences shall be interrupted with offsets and provided with accents to prevent</td>
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<td>monotony. Landscape pockets and pedestrian access through walls should be provided.</td>
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<td>Whenever possible, a combination of elements shall be used, including solid fences,</td>
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<td>walls, and landscaped berms. Other techniques such as rubberized asphalt or</td>
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<tr>
<td>“quiet pavement” can be used where feasible to reduce road noise for new roadway</td>
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<td>segments or modifications requiring repaving. The effectiveness of noise reduction</td>
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<td>measures shall be monitored by taking noise measurements and installing adaptive</td>
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<tr>
<td>mitigation measures to achieve applicable standards.</td>
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</table>

**Implementing Agencies**

Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. This mitigation measure shall, or can and should be applied during permitting and environmental review and implemented during construction and operation, as applicable.

Cities and counties in the AMBAG region can and should implement the following measures, where relevant to land use projects implementing the 2045 MTP/SCS, and where feasible and necessary based on project and site specific considerations. The mitigation measure outlined below does not apply to transportation projects. Project specific environmental documents may adjust this mitigation measure as necessary to respond to site specific conditions.

**N-4 Noise Mitigation for Land Uses.** If a 2045 MTP/SCS land use project is located in an area with exterior ambient noise levels above local noise standards, the implementing agency can and should 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

| If applicable, ensure a noise study is conducted. If the project would be impacted, place conditions of approval on implementation of noise reduction | During project permitting and environmental review. | Once. | Implementing agencies/project sponsor. |
Mitigation 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 inapplicable 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.

**Implementing Agencies**
Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction and operation, as applicable.

For transportation projects under their jurisdiction, TAMC, SBTCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that could generate excessive vibration impacts, and where feasible and necessary based on project and site specific considerations. These measures can and should also be implemented for future infill projects near transit pursuant to the 2045 MTP/SCS that would result in vibration impacts. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

### N-5 Vibration Mitigation for Transportation Projects

Where local vibration and groundborne noise standards do not apply, implementing agencies of 2045 MTP/SCS projects shall comply with guidance provided by the FTA in the most recent version of the Transit Noise and Vibration Impact Assessment 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 would be considered to reduce vibration and groundborne noise impacts include, but are not limited to:

- **Rail Traffic**

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
<th>Action Required</th>
<th>Implementation Timing</th>
<th>Monitoring Frequency</th>
<th>Responsible Agency or Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail Traffic</td>
<td>Comply with all applicable local and/or FTA vibration and groundborne noise standards.</td>
<td>During project permitting and environmental review.</td>
<td>Ongoing during project operation.</td>
<td>Implementing agencies/project sponsor.</td>
</tr>
<tr>
<td>Mitigation Measures</td>
<td>Action Required</td>
<td>Implementation Timing</td>
<td>Monitoring Frequency</td>
<td>Responsible Agency or Party</td>
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<tr>
<td>○ Maximizing the distance between tracks and sensitive uses</td>
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<td>○ Conducting rail grinding on a regular basis to keep tracks smooth</td>
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<td>○ Conducting wheel truing to re-contour wheels to provide a smooth-running surface and removing wheel flats</td>
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<td>○ Providing special track support systems such as floating slabs, resiliently supported ties, high-resilience fasteners and ballast mats;</td>
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<tr>
<td>○ Implementing operational changes such as limiting train speed and reducing nighttime operations.</td>
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<td>▪ Bus and Truck Traffic</td>
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<td>○ Constructing of noise barriers</td>
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<td>○ Use noise reducing tires and wheel construction on bus wheels</td>
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<td>○ Use vehicle skirts (i.e. a partial enclosure around each wheel with absorptive treatment) on freight vehicle wheels</td>
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</tbody>
</table>

**Implementing Agencies**

Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction and operation, as applicable.

These measures can and should also be implemented for future land use development projects near existing public or public use airports. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions.

**N-6 Noise Mitigation Near Airports.** Local lead agencies for all new development proposed to be located within an existing airport influence zone, as defined by the locally adopted airport land use compatibility plan or local general plan, or within two miles of a private use airport, shall require a site-specific noise compatibility study. Place conditions of approval on adherence to during project permitting and environmental review. Once. Implementing agencies/project sponsor.
Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
--- | --- | --- | --- | ---
site specific noise compatibility study. The study shall consider and evaluate existing aircraft noise, based on specific aircraft activity data for the airport in question, and shall include recommendations for site design and building construction. 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, such as dual paneled windows. The noise study and determination of appropriate mitigation measures shall be completed during the project’s individual environmental review. **Implementing Agencies**
Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction and operation, as applicable.

**Public Services, Recreation, and Utilities**
Cities and counties in the AMBAG region, as well as other public service providers, can and should implement this measure, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**PSU-1 Increased Public Service Demand.** During the CEQA review process for individual facilities, the implementing agency with responsibility for construction of new public service facilities or the expansion of existing facilities, including those of fire and police services, parks, and other public facilities, can and should apply necessary mitigation measures to avoid or reduce significant environmental impacts associated with the construction or expansion of such facilities. The environmental impacts associated with such construction or expansion should be avoided or reduced through the imposition of conditions required to be followed by those directly involved

- Require mitigation to avoid or reduce significant environmental impacts related to project-specific construction and expansion of public service facilities.
- During project permitting and environmental review.
- Once.
- Implementing agencies/project sponsor.
### Mitigation Measures

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
<th>Action Required</th>
<th>Implementation Timing</th>
<th>Monitoring Frequency</th>
<th>Responsible Agency or Party</th>
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</thead>
<tbody>
<tr>
<td>in the construction or expansion activities. Such conditions should include those necessary to avoid or reduce significant impacts associated with air quality, noise, transportation, biological resources, cultural resources, greenhouse gas emissions, hydrology and water quality, and others that apply to specific construction or expansion of new public or expanded public service facilities. <strong>Implementing Agencies</strong> Implementing agencies are cities, counties, and/or implementing agencies for land use projects, and other public service providers. This mitigation measure shall, or can and should, be applied during project permitting and environmental review.</td>
<td>Require mitigation to avoid or reduce significant environmental impacts related to project-specific construction and expansion of recreation facilities, including recreational trails.</td>
<td>During project permitting and environmental review.</td>
<td>Once.</td>
<td>Implementing agencies/project sponsor.</td>
</tr>
</tbody>
</table>

Cities and counties in the AMBAG region, and recreation agencies, can and should implement the following measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**PSU-3 Impact Reduction from New Recreational Facilities.** During project specific design and CEQA review, the cities and counties in the AMBAG region, and other agencies with responsibility for the construction of new or expanded recreation facilities, can and should apply necessary mitigation measures to avoid or reduce significant environmental impacts associated with the construction of such facilities. The environmental impacts associated with such construction should be avoided or reduced through the imposition of conditions required to be followed by those directly involved in the construction or expansion activities. Such conditions should include those necessary to avoid or reduce significant impacts associated with air quality, noise, transportation, biological resources, cultural resources, greenhouse gas emissions, hydrology and water quality, and others that apply to specific construction of new or expanded recreation facilities, including recreational trails.
<table>
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<tr>
<th>Implementing Agencies</th>
<th>Action Required</th>
<th>Implementation Timing</th>
<th>Monitoring Frequency</th>
<th>Responsible Agency or Party</th>
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<tbody>
<tr>
<td>Implementing agencies for transportation projects, including recreation trails, are cities, counties, and recreation agencies. This mitigation measure shall, or can and should, be applied during project permitting and environmental review.</td>
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</table>

For transportation projects under their jurisdiction, TMC, SBBCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that require new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region, and other utility providers, can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**PSU-4(a) Water and Wastewater Treatment Facilities.** During the CEQA review process for individual facilities, TMC, SBBCOG and SCCRTC shall implement, and transportation project sponsor agencies, and cities and counties in the AMBAG region and other utility providers with responsibility for the construction of new water or wastewater treatment and collection facilities or the expansion of existing facilities can and should apply necessary mitigation measures to reduce significant environmental impacts associated with the construction or expansion of such facilities. The environmental impacts associated with such construction or expansion should be avoided or reduced through the imposition of conditions required to be followed by those directly involved in the construction or expansion activities. Such conditions should include those necessary to avoid or reduce impacts associated with air quality, noise, traffic, biological resources, cultural resources, greenhouse gas emissions, hydrology and water quality and others that apply to specific construction or expansion of water or wastewater treatment and collection facilities projects.

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor
### PSU-4(b) Stormwater Facilities

During the CEQA review process for individual facilities, TAMC, SBTCOG and SCCRTC shall implement, and transportation project sponsor agencies, and cities and counties in the AMBAG region and special districts with responsibility for the construction of new stormwater drainage facilities or the expansion of existing facilities to adequately meet projected capacity needs can and should apply necessary mitigation measures to avoid or reduce significant environmental impacts associated with the construction or expansion of such facilities. The environmental impacts associated with such construction or expansion should be avoided or reduced through the imposition of conditions required to be followed by those directly involved in the construction or expansion activities. Such conditions should include those necessary to avoid or reduce impacts associated with air quality, noise, traffic, biological resources, cultural resources, greenhouse gas emissions, hydrology and water quality, and others that apply to specific construction or expansion of stormwater facilities projects.

### Implementing Agencies

Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects. This mitigation measure shall, or can and should, be applied during project permitting and environmental review.

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<tr>
<th>Mitigation Measures</th>
<th>Action Required</th>
<th>Implementation Timing</th>
<th>Monitoring Frequency</th>
<th>Responsible Agency or Party</th>
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</thead>
<tbody>
<tr>
<td>PSU-4(b) Stormwater Facilities</td>
<td>Require mitigation to avoid or reduce significant environmental impacts related to project-specific construction and expansion of stormwater facilities.</td>
<td>During project permitting and environmental review.</td>
<td>Once.</td>
<td>Implementing agencies/project sponsor.</td>
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</table>
Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
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**PSU-4(c) Stormwater Control Methods.** During the CEQA review process for individual facilities, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following measures where feasible:
- For transportation projects, incorporate stormwater control, retention, and infiltration features, such as detention basins, bioswales, vegetated median strips, and permeable paving, early into the design process to ensure such features are analyzed during environmental review. Implement mitigation measures identified for such features on a project specific basis, where feasible and necessary based on project and site specific considerations.

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. This mitigation measure shall, or can and should, be applied during project permitting and environmental review.

**PSU-4(d) Electric Power, Natural Gas, or Telecommunications Facilities.** During the CEQA review process, cities, counties, and AMBAG region energy and telecommunications providers and regulatory agencies with responsibility for the construction or approval of new electric power, natural gas, or telecommunications facilities or the expansion of existing facilities to adequately meet projected capacity needs can and should apply necessary mitigation measures to avoid or reduce significant environmental impacts associated with the construction or expansion of such facilities. The environmental impacts associated with such construction or expansion should be avoided or reduced through the imposition of conditions required to be followed by those directly involved

- Require mitigation to avoid or reduce significant environmental impacts related to project-specific construction and expansion of electric power, natural gas, or telecommunications facilities.

Implementing agencies/project sponsor.
### PSU-5 Solid Waste Generation and Disposal

During the CEQA review process for individual facilities, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies, and cities and counties in the AMBAG region can and should implement, the following measures where feasible:

- Provide an easily accessible area that is dedicated to the collection and storage of non-hazardous recycling materials.
- Maintain or reuse existing building structures and materials during building renovations and redevelopment.
- Use salvaged, refurbished, or reused materials to help divert such items from landfills.
- Divert construction waste from landfills, where feasible, through means such as:
  - Submitting and implementing a construction waste management plan that identifies materials to be diverted from disposal;

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<tr>
<th>Mitigation Measures</th>
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<th>Monitoring Frequency</th>
<th>Responsible Agency or Party</th>
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<tbody>
<tr>
<td>In the construction or expansion activities. Such conditions should include those necessary to avoid or reduce impacts associated with air quality, noise, traffic, biological resources, cultural resources, greenhouse gas emissions, hydrology and water quality, and others that apply to specific construction or expansion of natural gas and electric facilities projects.</td>
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<tr>
<td><strong>Implementing Agencies</strong></td>
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<tr>
<td>Implementing agencies are cities, counties, and utility agencies for land use projects. This mitigation measure shall, or can and should, be applied during project permitting and environmental review.</td>
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<tr>
<td>For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that result in impacts related to solid waste, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.</td>
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<tr>
<td><strong>PSU-5 Solid Waste Generation and Disposal.</strong></td>
<td>Place conditions of approval of individual projects on the implementation of mitigation detailed in this measure.</td>
<td>During project permitting and environmental review.</td>
<td>Once.</td>
<td>Implementing agencies/project sponsor.</td>
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**Mitigation Measures**

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<tr>
<td>Establishing diversion targets, possibly with different targets for different types and scales of development;</td>
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<td>Helping project sponsors and implementing agencies share information on available materials with one another, to aid in the transfer and use of salvaged materials</td>
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</table>

**Implementing Agencies**

Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies are cities, counties, and utility agencies for land use projects. This mitigation measure shall, or can and should, be applied during project permitting and environmental review.

For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that have water supply impacts, where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**PSU-7(a) General Conservation Measures.** Agencies implementing land use and transportation projects that could increase water demand shall, or can and should, coordinate with relevant water services to ensure demand can be accommodated and identify a water consumption budget. Any existing water conservation measures that reduce demand for potable water, such as reducing water use for landscape irrigation for transportation projects or use of water-conserving fixtures in envisioned land use projects, should be employed. Reclaimed water should be used when possible.

**Implementing Agencies**

Implementing agencies are cities and counties for land use projects. This mitigation measure shall, or can and should, be applied during project permitting and environmental review.

<table>
<thead>
<tr>
<th>PSU-7(a) General Conservation Measures</th>
<th>Coordinate with water services to ensure demand can be accommodated, identify a water consumption budget, and implement the use of water conservation measures identified in this mitigation.</th>
<th>During project permitting and environmental review.</th>
<th>Once.</th>
<th>Implementing agencies/project sponsor.</th>
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</table>

Exhibit B
### Mitigation Measures

<table>
<thead>
<tr>
<th>PSU-7(b) Construction Dust Suppression Water Supply</th>
<th>Action Required</th>
<th>Implementation Timing</th>
<th>Monitoring Frequency</th>
<th>Responsible Agency or Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementing agencies shall, or can and should, ensure that for all 2045 MTP/SCS projects, where feasible, reclaimed and/or desalinated water is used for dust suppression during construction activities. This measure shall, or can and should, be noted on construction plans and shall be spot checked by the implementing agency.</td>
<td>Place conditions of approval of individual projects on the implementation of mitigation detailed in this measure.</td>
<td>During project permitting and environmental review; during construction.</td>
<td>Ongoing throughout construction.</td>
<td>Implementing agencies/project sponsor.</td>
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</tbody>
</table>

**Implementing Agencies**
Implementing agencies for transportation and land use projects are RTPAs, transportation project sponsor agencies, and Metropolitan Planning Organizations. This mitigation measure shall, or can and should, be applied during project permitting and environmental review.

<table>
<thead>
<tr>
<th>PSU-7(c) Landscape Watering</th>
<th>Action Required</th>
<th>Implementation Timing</th>
<th>Monitoring Frequency</th>
<th>Responsible Agency or Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>In jurisdictions that do not already have an applicable local regulatory program related to landscape watering, implementing agencies shall, or can and should, design 2045 MTP/SCS projects that would 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 and/or desalinated water when feasible.</td>
<td>If applicable, place conditions of approval on the inclusion of landscaping features described in this mitigation.</td>
<td>During project permitting and environmental review.</td>
<td>Once.</td>
<td>Implementing agencies/project sponsor.</td>
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</tbody>
</table>

**Implementing Agencies**
Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during project permitting and environmental review.

<table>
<thead>
<tr>
<th>PSU-7(d) Porous Pavement and Bioswale Installation</th>
<th>Action Required</th>
<th>Implementation Timing</th>
<th>Monitoring Frequency</th>
<th>Responsible Agency or Party</th>
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</thead>
<tbody>
<tr>
<td>In jurisdictions that do not already have an appropriate local regulatory program</td>
<td>If applicable, place conditions of approval on utilization of</td>
<td>During project permitting and environmental review; during construction.</td>
<td>Ongoing throughout construction.</td>
<td>Implementing agencies/project sponsor.</td>
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<tr>
<td>Mitigation Measures</td>
<td>Action Required</td>
<td>Implementation Timing</td>
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<td>related to porous pavement, implementing agencies for a 2045 MTP/SCS project that involves streetscaping, parking, transit and/or land use improvements shall, or can and should, ensure that porous pavement materials are utilized, where feasible, to allow for groundwater percolation. Additionally, if a project would substantially increase impervious surfaces the sponsor shall ensure that bioswales are installed, where feasible, to facilitate groundwater recharge using stormwater runoff from the project site while improving water quality if not already required by the appropriate jurisdiction’s local regulatory programs.</td>
<td>porous pavement and/or bioswales. Construction plans shall show use of these materials.</td>
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<tr>
<td><strong>Implementing Agencies</strong></td>
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<tr>
<td>Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during project permitting and environmental review.</td>
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<tr>
<td>For transportation projects under their jurisdiction, TAMC, SBtCOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that would increase the capacity of a roadway, and where feasible and necessary based on project and site specific considerations. For land use projects under their jurisdiction, the cities and counties in the AMBAG region shall implement the following mitigation measure. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.</td>
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<td><strong>T-2(a) Land Use Project VMT Analysis and Reduction.</strong> Regionally, implementing agencies shall require implementation of VMT reduction strategies through transportation demand management (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 shall focus on VMT reduction</td>
<td>Require the inclusion VMT reduction strategies included in this mitigation measure at a program and project-level.</td>
<td>During project permitting and environmental review.</td>
<td>Once.</td>
<td>Implementing agencies/project sponsor.</td>
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</table>
Mitigation Measures | Action Required | Implementation Timing | Monitoring Frequency | Responsible Agency or Party
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strategies that increase travel choices and improve the comfort and convenience of sharing rides in private vehicles, using public transit, biking, or walking. At a project level, implementing agencies shall evaluate VMT as part of project specific CEQA review and discretionary approval decisions for land use projects. Where project level significant impacts are identified, implementing agencies shall identify and implement measures that reduce VMT. Examples include but are not limited to:  
- Provide car-sharing, vanpool, bike sharing, and ride-sharing programs  
- Implement or provide access to commute reduction programs  
- Encourage telecommute programs  
- Incorporate affordable housing into the project  
- Increase density, infill, and transit oriented development  
- 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  
- Orient the project toward transit, bicycle, and pedestrian facilities  
- Implement complete streets  
- Provide traffic calming  
- Provide bicycle parking  
- Reduce parking requirements  
- Separate out parking costs  
- Provide parking cash-out programs

**Implementing Agencies**
Implementing agencies for land use projects are cities and counties. Mitigation shall, or can and should, be applied during project permitting and
### Mitigation Measures

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<tr>
<th>Environmental review and implemented during project operation, as applicable.</th>
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<tr>
<td><strong>T-2(b) Transportation Project VMT Analysis and Reduction</strong></td>
<td>Evaluate the potential for projects to increase VMT. Where project-level significant impacts are identified, develop and implement mitigation measures to reduce VMT.</td>
<td>During project permitting and environmental review.</td>
<td>Once.</td>
<td>Implementing agencies/project sponsor.</td>
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<tr>
<td>Transportation project sponsor agencies shall evaluate transportation projects that involve increasing roadway capacity for their potential to increase VMT. Where project level increases are found to be potentially significant, implementing agencies shall, or can and should, identify and implement measures that reduce VMT. Examples of measures that reduce the VMT associated with increases in roadway capacity include, but are not limited to:</td>
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<td>- Tolling new lanes to encourage carpools and fund transit improvements</td>
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<td>- Converting existing general purpose lanes to high occupancy vehicle lanes</td>
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<td>- VMT banks</td>
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<td>- Implementing or funding offsite travel demand management</td>
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<td>- Providing a bus rapid transit system</td>
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<td>- Implement bus on shoulder operations during peak congestion periods</td>
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<td>- Improving pedestrian or bicycle networks, or transit service</td>
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<td>- Providing transit passes</td>
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<td>- Incorporating neighborhood electric vehicle network</td>
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**Implementing Agencies**

Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Mitigation shall, or can and should, be applied during project permitting and environmental review and implemented during project operation, as applicable.

**Tribal Cultural Resources**

For transportation projects under their jurisdiction, TAMC, SBtCOG, and SCCRTC shall, and transportation project sponsor agencies can and should, implement the following mitigation developed for the 2045 MTP/SCS program where applicable for transportation projects that result in impacts to...
tribal cultural resources, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

### TCR-1 Tribal Cultural Resources Impact Minimization

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

- Avoidance and preservation of the resources in place, including, but not limited to planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity considering the tribal cultural values and meaning of the resource, including, but not limited to, the following:
  - Protecting the cultural character and integrity of the resource
  - Protecting the traditional use of the resource
  - Protecting the confidentiality of the resource
  - Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places
- Native American monitoring by the appropriate tribe for all projects in areas identified as sensitive for potential tribal cultural resources

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<td>tribal cultural resources, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.</td>
<td>Ensure compliance with AB 52; and when applicable, implement measures identified in this mitigation measure.</td>
<td>During project permitting and environmental review. Additional measures listed should be implemented prior to and during construction.</td>
<td>Ongoing throughout project construction.</td>
<td>Implementing agencies/project sponsor.</td>
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<tr>
<td>Mitigation Measures</td>
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<td>and/or in the vicinity (within 100 feet) of known tribal cultural resources</td>
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<tr>
<td>▪ If potential tribal cultural resources are encountered during ground-disturbing activities; work in the immediate area must halt and the appropriate tribal representative(s), the implementing agency, and an archaeologist meeting the Secretary of the Interior’s Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find and determine the proper course of action</td>
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Implementing agencies for transportation projects are RTPAs and transportation project sponsor agencies. Implementing agencies for land use projects are cities and counties. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.

**Wildfire**
For transportation projects under their jurisdiction, TAMC, SBICOG and SCCRTC shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures developed for the 2045 MTP/SCS program where applicable for transportation projects that result in impacts related to wildland fire, and where feasible and necessary based on project and site specific considerations. Cities and counties in the AMBAG region can and should implement these measures, where relevant to land use projects implementing the 2045 MTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

**W-1 Wildfire Risk Reduction.** If an individual transportation or land use project included in the 2045 MTP/SCS is within or less than two miles from an SRA or VHFHSZ, the implementing agency shall require appropriate mitigation to reduce the risk. Examples of mitigation to reduce risk of loss, injury or death from wildlife include, but are not limited to:
- Enforce defensible space regulations to keep overgrown and unmanaged vegetation,
- If a project is within two miles of an SRA or VHFHSZ, implement mitigation described in this measure, such as maintaining and enforcing defensible space.
- During project permitting and environmental review.
- Ongoing throughout project construction.
- Implementing agencies/project sponsor.
### Mitigation Measures

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<tr>
<td>accumulations of trash and other flammable material away from structures.</td>
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<td>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.</td>
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<td>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.</td>
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<td>Ensure sufficient emergency water supply</td>
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<td>Encourage the use of fire-resistant vegetation native to Santa Cruz, Monterey, and San Benito counties and/or the local microclimate of the project site and discourage the use of fire-prone species especially non-native, invasive species.</td>
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<td>Require a fire safety plan be submitted to and approved by the local fire protection agency. The fire safety plan shall include all 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.</td>
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<td>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 should be prohibited during red-flag warnings include welding and grinding outside of enclosed buildings.</td>
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<td>Require fire extinguishers to be on site during construction of projects. Fire extinguishers shall be maintained to function according to manufacturer specifications. Construction</td>
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<td>personnel shall receive training on the proper methods of using a fire extinguisher</td>
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<td>▪ Encourage the use of external sprinklers for new development mapped within Very High Fire Hazard Severity Zones.</td>
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**Implementing Agencies**

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