

Findings, Facts in Support of Findings and Statement of Overriding Considerations Regarding the Environmental Impact Report for the 2009 Countywide Comprehensive Transportation Plan Adopted by the Contra Costa Transportation Authority

1. Introduction

ROLE OF THE FINDINGS

These Findings and Facts in Support of Findings relate to the approval of the *2009 Countywide Comprehensive Transportation Plan* (2009 CTP) for Contra Costa County. The Contra Costa Transportation Authority (the Authority) is the Lead Agency for the proposed Project pursuant to the California Environmental Quality Act (CEQA).

The Findings state the Authority's conclusions regarding the significance of the proposed Project's potential environmental impacts after all feasible mitigation measures have been adopted. The Findings are based on information in the Environmental Impact Report (EIR) for the proposed Project and on other relevant information contained in the administrative record for the proposed Project. Findings are made for all potentially significant impacts and impacts that are cumulatively significant where the proposed Project has a considerable contribution. However, some cumulatively significant impacts were also identified in which the project did not have a considerable contribution, and therefore are not discussed here. Details on cumulative impacts can be found in Chapter 3.2 of the Draft EIR, page 3.2-11.

The Facts in Support of Findings state the Agency's reasons for making each finding. They also set forth the evidence which supports the Agency's conclusions. Like the Findings, the Facts in Support of Findings are based on the administrative record for the proposed Project, including information contained in the Draft EIR. All records and materials, which constitute the record of the proceedings, upon which these findings are made, are located at the offices of the Contra Costa Transportation Authority, 1340 Treat Blvd, Suite 150, Walnut Creek, California.

The Statement of Overriding Considerations explains the Authority's reasons for approving the 2009 CTP despite the fact that the 2009 CTP will have significant impacts on the environment.

STATE LAW

The EIR identifies significant effects on the environment, which may occur as a result of the projects in the 2009 CTP. The State Guidelines adopted pursuant to CEQA provide as follows:

(a) No public agency shall approve or carry out a project for which an EIR has been completed which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The findings are:

(1) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the EIR.

This finding shall be referred to as “Finding (1).”

(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This finding shall be referred to as “Finding (2).”

(3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers make infeasible the mitigation measures or project alternatives identified in the Final EIR.

This finding shall be referred to as “Finding (3).”

SCOPE OF THE ENVIRONMENTAL ANALYSIS

This program EIR analyzes the potential significant effects of the adoption and implementation of the proposed 2009 CTP. This assessment, which fulfills the requirements of the California Environmental Quality Act (CEQA), is designed to inform decision-makers, other responsible agencies and the general public of the proposed action and the range of potential environmental impacts of that action. CEQA provides that a program EIR should focus on the secondary effects that can be expected to follow the adoption of the 2009 CTP, but need not be as detailed as an EIR on the specific construction projects that might follow. In accordance with CEQA, the 2009 CTP EIR identifies countywide effects of the implementation of projects, which could follow adoption of the 2009 CTP.

The 2009 CTP, prepared by the Contra Costa Transportation Authority, is a long-range transportation planning document and is an integral part of the County's transportation improvements and Growth Management Program.

ORGANIZATION OF THIS DOCUMENT

Section 2 of this document identifies each potentially significant environmental effect of the proposed Project by issue area in the order they appear in the Draft EIR, the mitigation measures identified for each potentially significant impact in the EIR, the CEQA finding or findings applied by the Authority, and the facts in support of each finding. Section 3 summarizes the alternatives discussed in the EIR and makes findings with respect to their feasibility. Section 4 consists of the Statement of Overriding Considerations.

2. Impact Findings and Facts in Support of Findings

AIR QUALITY

Impact

- 2.2-1 The construction of proposed projects in the 2009 CTP could result in significant short-term direct impacts on air quality near construction sites (Draft EIR Page 2.2-25).

Mitigation Measure 2.2-1: Where construction of proposed projects could result in significant short-term direct impacts on air quality near construction sites, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures could be drawn from or be consistent with the BAAQMD approach and Caltrans' Highway Design Manual and, where appropriate, based on consultation with BAAQMD staff. Typical mitigation measures include:

- Appropriate dust abatement programs as described in the BAAQMD approach, which calls for “basic” control measures that should be implemented at all construction sites, “enhanced” control measures that should be implemented at construction sites greater than four acres in area, and “optional” control measures that should be implemented on a case-by-case basis at construction sites that are large in area, located near sensitive receptors or which, for any other reason, may warrant additional emissions reductions (BAAQMD, 1999);
- Use of Caltrans policies for dust abatement during construction at construction sites. There are far-reaching measures such as the use of special contract provisions to require that material, borrow and disposal sites as well as temporary haul roads be restored to a condition such that their potential as sources of blowing dust or other pollution is no greater than that of their original condition. The checklist of on-site measures includes provisions for control measures such as planting, stabilizing emulsion, protective blankets or use of other control measures to prevent erosion; and
- Project sponsors of specific projects entailing the demolition of a building containing asbestos materials shall consult with BAAQMD staff concerning the specific requirements of Regulation 11, Rule 2 (Asbestos Demolition, Renovation and Manufacturing) of BAAQMD's regulations.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of the Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are expected to be reliable because they rely on standards developed by existing agencies (BAAQMD and Caltrans) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

GEOLOGY AND SEISMICITY

Impact

- 2.4-1 Seismic events could damage proposed transportation infrastructure through surface rupture, ground shaking, liquefaction, landslides and tsunamis, causing impacts on property and public safety (Draft EIR Page 2.4-19).

Mitigation Measure 2.4-1: Where seismic events could significantly affect a project, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation meas-

ures could be drawn from or be consistent with the California Building Code, Caltrans' standards for construction, and the California Geological Survey Guidelines for Evaluation the Hazard of Earthquake Fault Rupture and, where appropriate, based on a review or investigation by a State licensed geotechnical professional. Typical mitigation measures include:

Minimization of tsunami inundation hazards through designs to diminish wave inundation and associated damage. For example, precautionary measures such as specifying final foundation or roadbed elevations higher than the expected height of a tsunami with a given return frequency would be effective.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of the Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are expected to be reliable because they rely on standards developed by existing agencies (California Building Code, Caltrans, California Geological Survey) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.4-2 Highway and rail construction could require significant earthwork and road cuts, increasing the potential for short-term and long-term soil erosion and slope failure (Draft EIR Page 2.4-23).

Mitigation Measure 2.4-2: Where highway and rail construction could require significant earthwork and road cuts that increase the potential for short term and long term soil erosion and slope failure, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures could be drawn from or be consistent with the California Building Code and Caltrans' standards for construction, and, where appropriate, based on a review or investigation by a State licensed geotechnical professional. Typical mitigation measures include:

Project designs shall provide adequate slope drainage and appropriate landscaping to minimize potential future occurrences of slope instability and erosion. Design features shall include measures to reduce erosion from storm water. Road cuts shall be designed to maximize the potential for revegetation.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of the Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are expected to be reliable because they rely on standards developed by existing agencies (California Building Code, Caltrans) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors, rather than the efforts of the Authority.

- (c) For project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.4-3 Projects built on highly compressible or expansive soils could become damaged and weakened over time (Draft EIR Page 2.4-24).

Mitigation Measure 2.4-3: Where projects would be built on highly compressible or expansive soils, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Typical mitigation measures include:

- A site-specific geotechnical investigation conducted by qualified professionals (California registered civil and geotechnical engineers, or California registered engineering geologists) to identify potential geologic hazards associated with soils underlying proposed improvements; and
- Recommended corrective measures, such as structural reinforcement, soil treatment, or replacing existing soil with engineered fill, in accordance with recommendations of the geotechnical investigation and the most recent version of the California Building Code.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of the Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are expected to be reliable because they rely on standards developed by existing agencies (California Building Code) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.

- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

BIOLOGICAL RESOURCES

Impact

- 2.5-1 Projects included in the 2009 CTP could adversely affect rare, threatened or endangered, candidate, sensitive, or other special-status species of plants and animals and their habitats, including potential interference with the movement of wildlife species (Draft EIR Page 2.5-17).

Mitigation Measure 2.5-1: Where projects included in the 2009 CTP could adversely affect rare, threatened or endangered, candidate, sensitive, or other special-status species of plants and animals and their habitats, including potential interference with the movement of wildlife species, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures shall be consistent with federal, state, regional and local regulatory requirements, as discussed in the Regulatory Setting above. Typical mitigation measures include:

- Select alignments to avoid areas of resource sensitivity and to minimize the need for large areas of cut and fill that would remove vegetation and habitat;
- Avoid construction in aquatic habitats and control runoff so that litter, solvents, greases and other chemicals do not pollute these habitats. Keep disruption of soils

within streambeds to a minimum and implement erosion controls around support pillars;

- Preserve existing and mature trees and snags as nesting and roosting habitat to the extent feasible, except when trees are diseased, over-aged, or otherwise constitute a hazard to persons or property;
- Conduct field surveys for rare and endangered plants, sensitive species, and nesting birds where suitable habitat exists. Such surveys provide critical information for assessing impacts and determining if effective mitigation is possible;
- Protect rare and endangered animal species through controlling or eliminating development in primary habitat areas. Where wildlife habitat is disturbed, undertake relocation efforts where feasible;
- Where possible, avoid known animal movement corridors when designing new road and rail alignments, pedestrian/ bike paths, and other transportation facilities. Place pass-through-culverts under highways to allow wildlife movement; consider fencing to prevent wildlife from entering highways. Schedule construction activities to avoid disturbance to wildlife by implementing seasonal or circadian avoidance measures. Design lighting to be responsive to wildlife sensitivities; and
- Require appropriate erosion control measures in conjunction with new development to minimize wildlife habitat destruction. Stabilize cut-and-fill slopes and revegetate immediately following construction. Remove topsoil, stockpile and re-spread to preserve natural vegetation. To the extent possible, use native vegetation to landscape project sites and minimize the need for fertilizers and pesticides. Avoid introducing invasive species and monitor and control weedy plants. Additional erosion control measures are detailed in Section 2.6 *Hydrology and Water Resources*, Mitigation Measure 2.6-2.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of the Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are expected to be reliable because they are consistent with standards developed by existing agencies (federal, state, regional and local regulatory requirements) that are integral parts of the project development, review, and permitting processes. The

Authority will work with project sponsors to implement appropriate mitigation measures.

- (b) Project sponsors will also be governed by Federal and State laws and regulations protecting rare, threatened or endangered species of plants and animals.
- (c) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (d) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.5-2 Projects included in the 2009 CTP could adversely affect wetlands and other aquatic resources (Draft EIR Page 2.5-19).

Mitigation Measure 2.5-2: Where projects could adversely affect wetlands and other aquatic resources, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Project proponents shall implement measures to avoid, *minimize, and compensate for significant impacts on jurisdictional wetlands and other aquatic resources within or adjacent to the project area.* Potential mitigation measures should be drawn from or be consistent with guidelines of the Corps, RWQCB, BCDC, and CDFG. Typical mitigation measures include:

- In accordance with guidelines of the Corps, RWQCB, BCDC, and CDFG, a goal of “no net loss” of wetland acreage and value will be implemented, wherever possible, through avoidance of the resource;

- Wetlands and other aquatic resources in the project area shall be inventoried and project components sited to avoid and minimize direct and indirect impacts to wetlands and stream drainage channels;
- The number and area of stream channel and wetland crossings should be reduced, where feasible;
- Mitigation for wetland impacts due to proposed transportation projects would be based on project-specific wetland mitigation plans at a minimum 1:1 replacement ratio and subject to approval by the Corps and commenting agencies; and
- Avoidance, compensatory restoration, or creation of new wetland communities to offset the conversion of wetlands for proposed transportation improvements would achieve “no net loss” of wetland acreage and value.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are expected to be reliable because they rely on standards developed by existing agencies (Corps, RWQCB, BCDC, CDFG) that are integral parts of the project development, review, and permitting processes. Furthermore, federal and state laws (Clean Water Act, Porter-Cologne Act) do not allow fill of wetlands or other waters without a permit. The mitigation measures help to ensure that these existing standards and regulations are met. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines

Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

2.5-4 Projects included in the 2009 CTP could adversely impact riparian habitat or other sensitive natural communities (Draft EIR Page 2.5-22).

Mitigation Measure 2.5-4: Where projects could adversely affect riparian habitat or other sensitive natural communities, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures could be drawn from or be consistent with CDFG guidelines. Typical mitigation measures include:

- Conformance, where applicable, with the provisions of special area-management or restoration plans outlining specific measures to protect sensitive vegetation communities, including preserving habitats in their natural state, respecting setback areas, and limiting the removal of trees and vegetation.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are particularly reliable because they rely on standards developed by existing agencies (CDFG) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details

about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.

- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.5-5 Projects included in the 2009 CTP could result in the removal of trees protected by local ordinances.

Mitigation Measure 2.5-5: Where projects could result in the removal of trees protected by local ordinances, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures should be drawn from or be consistent with Contra Costa County or City Ordinances. Typical mitigation measures include:

- Avoiding work activities within the drip-line of protected or designated heritage trees. In the event that it is infeasible to avoid the drip-line of protected or heritage trees, the project proponents shall apply for any applicable permits and comply with local City or County replacement mitigation guidelines for impacts on protected trees specified in the permits.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are particularly reliable because they are consistent with standards developed by existing agencies (Contra Costa County or City Ordinances) that are integral parts of the

project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.

- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.5-6 Implementation of the 2009 CTP combined with regional growth and development could contribute to cumulative impacts on special-status plant and animal species or wetlands, riparian habitat, and related resources (Draft EIR Page 2.5-23).

Mitigation Measure 2.5-6: Where projects could contribute to cumulative impacts on special-status plant and animal species or wetlands, riparian habitat, and related resources, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA, as discussed in Mitigation Measures 2.5-1 through 2.5-5.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

HYDROLOGY AND WATER RESOURCES

Impact

- 2.6-1 Construction of transportation improvements would increase impervious surface areas causing an increase in storm water runoff volume and rate, nonpoint-source pollutant levels and decreased rates of groundwater recharge (Draft EIR Page 2.6-1).

Mitigation Measure 2.6-1: Where construction of transportation improvements would increase impervious surface areas, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures should be drawn from or be consistent with Caltrans' design requirements, the Bay Area Stormwater Management Agencies Association's (BASMAA) Start at the Source Design Guidance Manual for Stormwater Quality Protection, and the California Storm Water Best Management Practice Handbook for New Development and Redevelopment. These measures may include:

- Preservation of existing pervious surfaces to minimize the amount of storm runoff to the greatest extent possible;
- Incorporation of appropriate water pollution and storm water runoff control measures;
- Design projects to allow lateral transmission of storm water flows across transportation corridors with no increased risk of upstream flooding; and
- Culverts and bridges designed to adequately carry drainage waters through project sites.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are particularly reliable because they rely on standards developed by existing agencies (Caltrans, BASMAA Start at the Source Design Guidance Manual for Stormwater Quality Protection, and the California Storm Water Best Management Practice Handbook for New Development and Redevelopment) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation

of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.6-2 Construction activities could result in erosion and cause subsequent sedimentation of storm water runoff, or introduce pollutants to runoff from the use of automotive fluids and hazardous materials (Draft EIR Page 2.6-17).

Mitigation Measure 2.6-2: Where construction activities could result in erosion and cause subsequent sedimentation of storm water runoff or introduce pollutants to runoff from the use of automotive fluids and hazardous materials, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures should be drawn from or be consistent with the California Stormwater Quality Association (CASQA), Stormwater Best Management Practice Handbook for Construction, NPDES permit regulations, SWRCB NPDES General Construction Permitting for construction projects that incorporate over one acre, the Manual of Standards for Erosion and Sedimentation Control by the Association of Bay Area Governments, policies and recommendations of the local city or county urban runoff programs, and the recommendations of the applicable RWQCB. Under NPDES permit regulations, the project proponent would be required to prepare and implement a SWPPP, consistent with the above agencies, guidelines, programs and permits. Implementation of the SWPPP shall be enforced by inspecting agencies during the construction period. Typical elements of an SWPPP include:

- Excavation and grading activities will be scheduled for the dry season only (April 15 to October 15), to the extent possible. This will reduce the chance of severe erosion from intense rainfall and surface runoff, as well as the potential for soil saturation in swale areas;
- If excavation occurs during the rainy season, regulation of storm runoff from the construction area through a storm water management/erosion control plan that may include temporary onsite silt traps and/or basins with multiple discharge points to natural drainages and energy dissipaters. Stockpiles of loose material will be covered and runoff diverted away from exposed soil material. If work is stopped due to rain, a positive grading away from slopes will be provided to carry the surface runoff to areas where flow can be controlled, such as the temporary silt basins. Sediment basin/traps will be located and operated to minimize the amount of offsite sediment transport. Any trapped sediment will be removed from the basin or trap and placed at a suitable location onsite, away from concentrated flows, or removed to an approved disposal site;

- Use of temporary erosion control measures until perennial revegetation or landscaping is established and can minimize discharge of sediment into nearby waterways. For construction within 500 feet of a water body, straw bales will be placed upstream adjacent to the water body;
- After completion of grading, installation of erosion protection on all cut-and-fill slopes. Revegetation will be facilitated by mulching, hydroseeding, or other methods and should be initiated as soon as possible after completion of grading and prior to the onset of the rainy season (by October 15);
- Permanent revegetation/ landscaping that emphasizes drought-tolerant perennial ground coverings, shrubs, and trees to improve the probability of slope and soil stabilization without adverse impacts to slope stability due to irrigation infiltration and long-term root development;
- BMPs selected and implemented for the project will be in place and operational prior to the onset of major earthwork on the site. The construction phase facilities will be maintained regularly and cleared of accumulated sediment as necessary; and
- Storage of hazardous materials such as fuels and solvents used on the construction sites in covered containers and protected from rainfall, runoff, and vandalism. A stockpile of spill cleanup materials will be readily available at all construction sites. Employees will be trained in spill prevention and cleanup, and individuals will be designated as responsible for prevention and cleanup activities.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are particularly reliable because they are consistent with standards developed by existing agencies (CASQA, NPDES permit regulations, applicable RWQCB) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted

and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.

- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

VISUAL RESOURCES

Impact

- 2.7-1 Construction of new transportation projects in the 2009 CTP could affect visual resources in Contra Costa during construction (Draft EIR Page 2.7-9).

Mitigation Measure 2.7-1: Where new transportation projects could affect visual resources during construction, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures could be drawn from or be consistent with Caltrans' standards for construction. Typical mitigation measures include:

- Minimize the visibility of construction staging areas where possible; use fencing and screening materials that are low contrast and consistent with the surrounding landscape; and
- Revegetate graded slopes and exposed earth surfaces at the earliest opportunity.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are particularly reliable because they are consistent with standards developed by existing agencies (Caltrans' standards for construction) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.7-2 Construction or expansion of certain transportation projects included in the 2009 CTP could adversely alter views in the County over the long-term by adding incongruous elements to the existing landscape, thereby blocking view or altering the scale, character, and quality of rural or open space areas, important vistas along roadways, and urban communities (Draft EIR Page 2.7-10).

Mitigation Measure 2.7-2: Where construction or expansion of transportation projects could adversely alter views over the long-term, sponsors shall consider measures to minimize or eliminate significant visual impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures could be drawn from or be consistent with Caltrans' standards for construction. Typical mitigation measures include:

- Design projects to minimize contrast in scale and massing between the project and surrounding natural forms and urban development;
- Site or design projects to minimize their intrusion into important view sheds;
- Use natural landscaping to minimize contrasts between the projects and existing natural and human-made features. Wherever possible, develop interchanges and transit lines at the grade of the surrounding land to limit view blockage. Contour the edges of major cut and fill slopes to provide a more natural looking finished profile;
- Design landscaping along highway corridors to add significant natural elements and visual interest to soften the hard edges and linear travel experience that would otherwise occur; and
- Complete design studies for projects in designated or eligible State Scenic Highway corridors. Consider the “complete” highway system and develop mitigation measures to minimize the impacts on the quality of the views of visual experience that originally qualified the highway for Scenic Highway designation.

Impact Conclusion: The impact may remain significant and unavoidable after implementing feasible mitigation measures.

Findings: The Authority hereby makes findings (1), (2), and (3).

Facts in Support of Findings:

- (a) The Authority will work with State and local agencies to minimize any adverse impacts on views resulting from the construction of new or expanded transportation facilities. While the potential for any impacts, and required mitigation, would be addressed at the project-specific EIR stage, the above mitigation measures should be considered for mitigation of such impacts.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) The nature of the program-level evaluation of impacts is such that not enough is known about the specific project-level conditions to determine the exact extent of

the potential impact or if the proposed mitigation measures will in fact be feasible and effective. It is likely that, with proper design and planning, many of the identified impacts can be avoided or minimized. However, social, economic, legal, and technological conditions related to the ultimate design of individual projects will be factors in the feasibility of proposed mitigation measures at the project level.

Impact

2.7-3 The construction of soundwalls along arterials proposed in the 2009 CTP could significantly alter views (Draft EIR Page 2.7-11).

Mitigation Measure 2.7-3: Where construction of soundwalls could significantly alter views, sponsors shall consider measures to minimize or eliminate significant visual impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures could be drawn from or be consistent with Caltrans' standards for construction. Typical mitigation measures include:

- Develop new or expanded roadways below the grade of surrounding areas to minimize the need for tall soundwalls;
- Use transparent panels to preserve views where soundwalls would block views from residences;
- Use landscaped earth berm or a combination wall and berm to minimize the apparent soundwall height;
- Construct soundwalls of materials whose color and texture complements the surrounding landscape and development;
- Design soundwalls to increase visual interest, reduce apparent height, and be visually compatible with the surrounding area; and
- Landscape the soundwalls with plants that screen the soundwall, preferably with either native vegetation or landscaping that complements the dominant landscaping of surrounding areas.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are particu-

larly reliable because they are consistent with standards developed by existing agencies (Caltrans' standards for construction) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.

- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.7-4 The impact of 2009 CTP projects in conjunction with regional population growth and urban development could have a cumulatively significant impact on visual resources (Draft EIR Page 2.7-16).

Mitigation Measures: Mitigation measures 2.7-1 through 2.7-3, listed in regard to the above impacts, also apply to this impact.

Impact Conclusion: The overall cumulative impact will remain significant. However, implementation of the above mitigation measures is expected to reduce the project's contribution to a less than considerable level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) Regardless of implementation of the 2009 CTP, cumulative population growth will occur in Contra Costa, contributing substantially to the identified significant

cumulative impact. The above mitigation measures 2.7-1 through 2.7-3 are expected to reduce the contribution of the proposed Project to a less than considerable level.

- (b) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are particularly reliable because they are consistent with standards developed by existing agencies (Caltrans' standards for construction) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (c) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (d) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

NOISE

Impact

- 2.8-1 Construction of the projects proposed in the 2009 CTP would have short-term noise impacts on surrounding areas (Draft EIR Page 2.8-14).

Mitigation Measure 2.8-1: Where construction of the projects would have short-term noise impacts on surrounding areas, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures could be drawn from or be consistent with Caltrans'

standards for construction, and shall be consistent with federal, state, regional and local regulatory requirements, as discussed in the Regulatory Setting above. Typical mitigation measures include:

- Requiring mufflers on heavy construction equipment;
- Specifying time restrictions consistent with local noise ordinances and with the activities of sensitive land uses in the vicinity. It is noted that limitations on allowable hours for construction could also result in significant adverse impacts on traffic movement if construction is limited to the daylight hours and prohibited during nighttime hours. Project level analysis will determine the level of mitigation;
- Using equipment and trucks for project construction with the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible);
- Use of hydraulically or electrically powered impact tools (e.g., jack hammers, pavement breakers, and rock drills) for project construction wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment whenever feasible;
- Locating stationary noise sources as far from sensitive receptors as possible, and they shall: be muffled and enclosed within temporary sheds; incorporate insulation barriers; or apply other measures to the extent feasible;
- To reduce the potential for noise impacts from pile driving, use of alternate methods of driving, if feasible. Alternate measures may include pre-drilling of piles or the use of more than one pile driver to lessen the total time required for driving piles;
- Erect temporary plywood noise barriers around the entire construction site if necessary to buffer noise from sensitive land uses;
- Use noise control blankets on any structure as it is erected to reduce noise emission from the site where applicable;
- Evaluate the feasibility of noise control at the receivers (i.e., nearby sensitive receptors such as residences, schools, hospitals, etc.) by temporarily improving the noise reduction capability of adjacent buildings;

- Monitor the effectiveness of noise attenuation measures with noise measurements; and
- Establish a process for responding to and tracking complaints pertaining to construction noise with the following components:
 - A procedure for notifying local jurisdictions, sheriff and/or police department staff, and building division staff throughout Contra Costa;
 - A plan for posting signs on-site pertaining to permitted construction days and hours and complaint procedures and who to notify in the event of a problem;
 - A listing of telephone numbers (during regular construction hours and off-hours);
 - The designation of a construction complaint manager for the project; and
 - Notify neighbors within 300 feet of the project construction area at least 30 days in advance of pile-driving activities about the estimated duration of the activity.

Impact Conclusion: The impact may remain significant and unavoidable after implementing feasible mitigation measures.

Findings: The Authority hereby makes findings (1), (2), and (3).

Facts in Support of Findings:

- (a) The Authority will work with State and local agencies to minimize short-term noise impacts on surrounding areas. While the potential for any impacts, and required mitigation, would be addressed at the project-specific EIR stage, the above mitigation measures should be considered for mitigation of such impacts.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors. Because reduction of the identified effect is not within the Authority's control, the Authority finds that the impact might not be mitigated to below a level of significance.
- (c) The nature of the program-level evaluation of impacts is such that not enough is known about the specific project-level conditions to determine the exact extent of the potential impact or if the proposed mitigation measures will in fact be feasible

and effective. It is likely that, with proper design and planning, many of the identified impacts can be avoided or minimized. However, social, economic, legal, and technological conditions related to the ultimate design of individual projects will be factors in the feasibility of proposed mitigation measures at the project level. In particular, noise impacts are highly localized and related to the unique interaction between physical environmental conditions at the project location, other undetermined noise sources in the vicinity, and the specific locations and characteristics of sensitive receptors.

Impact

- 2.8-2 Transportation improvements proposed as part of the 2009 CTP could result in noise levels that approach or exceed the FHWA and FTA Noise Abatement Criteria or could cause noise levels to increase by 3 dBA or more when compared to existing conditions (Draft EIR Page 2.8-17).

Mitigation Measure 2.8-2: Where transportation improvements could result in noise levels that approach or exceed the FHWA and FTA Noise Abatement Criteria or could cause noise levels to increase by 3 dBA or more, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures could be drawn from or be consistent with Caltrans' standards for construction. Typical mitigation measures include:

- Adjustments to proposed roadway or transit alignments to reduce noise levels in noise sensitive areas;
- Construction of sound walls adjacent to new or modified roads or transit lines, especially when projects are located in the vicinity of sensitive receptors. Noise level increases could, in most cases, be mitigated to levels at or below existing levels if soundwalls were constructed along the rights-of-way. A determination of the specific heights, lengths and feasibility of soundwalls must be part of the project-level environmental assessment;
- Adjustments to proposed roadway or transit alignment to reduce noise levels in noise sensitive areas. Depressed roadway alignments are effective at mitigating roadside noise levels;
- Insulation of buildings or construction of noise barriers around sensitive receptors
- Vibration isolation of track segments; and
- Adoption of policies and development standards by local jurisdictions that reduce the exposure of sensitive receptors to noise generated by new or expanded trans-

portation facilities, if they have not already done so in their General Plan Noise Elements and implementing ordinances. Such policies and standards may include noise attenuation by design when residential, educational, and other sensitive uses are to be developed near major transportation facilities or corridors. Locally-adopted noise reduction standards should correspond with the best guidance available from Caltrans and other responsible agencies, without thwarting efforts to create transit-oriented and affordable development.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are particularly reliable because they are consistent with standards developed by existing agencies (Caltrans' standards for construction) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Per US HUD Department of Housing and Urban Development, *The Noise Guidebook*, updated August 20, 2004, berms or other solid, continuous barriers that block the line of sight between the receptor and the source will attenuate noise levels by at least 3 dBA
- (c) Depressed alignments effectively create a berm between the receptor and the source.
- (d) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (e) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines

Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.8-3 Transportation improvements proposed as part of the 2009 CTP together with regional growth and development could contribute to cumulative noise levels (Draft EIR Page 2.8-24).

Mitigation Measure: Mitigation measures 2.8-1 and 2.8-2, as listed above, would contribute to reducing the cumulative impact. However, these mitigation measures are not assumed to fully reduce the potentially significant cumulative noise to a less-than-significant level due to the uncertainty of the cumulative future noise environment, the localized nature of noise impacts, and community perceptions of noise.

Impact Conclusion: The overall cumulative impact will remain significant and unavoidable after the incorporation of feasible mitigation. The project's contribution will also remain cumulatively considerable after the incorporation of feasible mitigation.

Findings: The Authority hereby makes findings (1), (2), and (3).

Facts in Support of Findings:

- (a) Cumulative population growth and development will occur in the county, regardless of implementation of the 2009 CTP, resulting in the identified significant cumulative impact. The above mitigations measures 2.8-1 and 2.8-2 are expected to contribute to reducing the significant cumulative impact though will not necessarily reduce the impact to a less-than-significant level.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors. Because reduction of the identified effect is not within the Authority's

control, the Authority finds that the impact might not be mitigated to below a level of significance.

- (c) The nature of the program level evaluation of impacts is such that not enough is known about the specific project-level conditions to determine if the proposed mitigation measures will in fact be feasible and effective. It is likely that, with proper design and planning, many of the identified impacts can be avoided or minimized. However, social, economic, legal, and technological conditions related to the ultimate design of individual projects will be factors in the feasibility of proposed mitigation measures at the project level. In particular, noise impacts are highly localized and related to the unique interaction between physical environmental conditions at the project location, other undetermined noise sources in the vicinity, and the specific locations and characteristics of sensitive receptors. Thus, while the mitigations proposed are reasonably suited to maximally reduce noise attributable to the proposed Plan projects, it is still possible that these outside factors could create a situation in which noise mitigation is either infeasible or ineffective.

CULTURAL RESOURCES

Impact

- 2.9-1 Construction of new transportation projects supported by the 2009 CTP has the potential to adversely affect archaeological or paleontological resources or buried human remains through damage or destruction of those resources (Draft EIR Page 2.9-15).

Mitigation Measure 2.9-1: Where construction of new transportation projects has the potential to adversely affect archaeological or paleontological resources or buried human remains through damage or destruction of those resources, sponsors shall consider measures to minimize or eliminate significant paleontological and archeological resource impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures could be drawn from or be consistent with review or investigation by the Native American Heritage Commission where appropriate. Typical mitigation measures include:

- Preparation of a research design and testing plan in advance of implementation of the construction of the project, in order to efficiently facilitate the avoidance of cultural sites all together;

- Preservation in place. This is the preferred manner of mitigating impacts to archeological sites because it maintains the relationship between artifacts and the archeological context, and it may also avoid conflict with religious or cultural values of groups associated with the site. This may be achieved through incorporation within parks, green-space, or other open space by re-designing projects using open space or undeveloped lands. This may also be achieved by following procedures for capping the site underneath a paved area; and
- When avoiding and preserving in place are infeasible, a data recovery plan may be prepared according to CEQA Section 15126.4. A data recovery plan consists of: the documentation and removal of the archeological deposit from a project site in a manner consistent with professional (and regulatory) standards; the subsequent inventorying, cataloguing, analysis, identification, dating, and interpretation of the artifacts; and the production of a report of findings.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are expected to be reliable because they rely on standards developed by existing agencies (Native American Heritage Commission) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that

project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.9-2 Construction of new transportation projects supported by the 2009 CTP has the potential to adversely affect historic architectural resources through demolition or significant changes to the historical setting (Draft EIR Page 2.9-17).

Mitigation Measure 2.9-2: Where construction of new transportation projects supported by the 2009 CTP has the potential to adversely affect historic architectural resources through demolition or significant changes to the historical setting, sponsors shall consider measures to minimize or eliminate significant historic resource impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures could be drawn from or be consistent with State, federal, or local historic preservation criteria, the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings and Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. Typical mitigation measures include:

- Assessment by a qualified professional of structures greater than 40 years in age within the area of potential effect to determine their eligibility for recognition under State, federal, or local historic preservation criteria; and
- The treatment of identified historic resources in accordance with either the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are expected to be reliable because they rely on standards developed by existing agencies (state, federal, or local historic preservation criteria) that are integral parts of the

project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.

- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

HAZARDOUS MATERIALS

Impact

- 2.10-1 Hazardous materials used during construction and operation of the 2009 CTP, such as petroleum products, fuels, spent oil, and solvents, could be released to the environment through improper handling or storage and expose humans and the environment to potentially hazardous conditions (Draft EIR Page 2.10-7).

Mitigation Measure 2.10-1: Where hazardous materials used during construction and operation of the 2009 CTP could be released to the environment through improper handling or storage and expose humans and the environment to potentially hazardous conditions, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures shall be consistent with federal, state, regional and local regulatory requirements, as discussed in the Regulatory Setting above. Typical mitigation measures include:

- Utilization of construction best management practices that are typically implemented as part of construction. The use of construction best management prac-

tices would minimize the potential negative effects on groundwater and soils. Best management practices could include the following:

- Follow manufacturer's recommendations on use, storage and disposal of chemical products used in construction;
- Avoid overtopping construction equipment fuel gas tanks; and
- During routine maintenance of construction equipment, properly contain and remove grease and oils;
- In the event of an inadvertent release of hazardous materials during project operations, cleanup shall occur in accordance with all applicable regulatory requirements; and
- Spent oil and other solvents used during maintenance of transportation facilities and equipment shall be recycled or disposed of in accordance with all applicable regulatory requirements. All hazardous materials shall be transported, handled, and disposed of in accordance with all applicable regulatory requirements.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are particularly reliable because they are consistent with standards developed by existing agencies (federal, state, regional and local regulatory requirements) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.

- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.10-2 Disturbance of impacted soils or groundwater during project construction and excavation work could expose construction workers, the public, or the environment to hazardous conditions (Draft EIR Page 2.10-8).

Mitigation Measure 2.10-2: Where disturbance of impacted soils or groundwater during project construction and excavation work could expose construction workers, the public, or the environment to hazardous conditions, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures shall be consistent with federal, state, regional and local regulatory requirements, as discussed in the Regulatory Setting above. Typical mitigation measures include:

- Preparation and implementation of a soil sampling plan along construction corridors to determine the presence or absence of soil contamination. If soil contamination is found, the contaminated soil shall be removed and disposed of in accordance with all applicable regulatory requirements;
- In the event that soil contamination is encountered, project sponsors shall require that one competent professional with HAZWOPER (OSHA Hazardous Waste Operations and Emergency Response Standard) training is onsite at all times during construction phases to perform soil analyses. All construction shall cease until the contaminated soil is reused or removed and disposed of in accordance with all applicable regulatory requirements. A competent professional shall collect verification soil samples to ensure complete removal of contaminated soil; and
- If any underground storage tanks are discovered during construction, all construction in the immediate area shall stop until the UST is removed under the guidance of the Contra Costa Environmental Health (CCEH) or other regulatory agency. If required by the regulatory agency, removal may include the over-excavation and disposal of any impacted soil that may be associated with such tanks to a degree considered sufficient by the CCEH.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are particularly reliable because they are consistent with standards developed by existing agencies (federal, state, regional and local regulatory requirements) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.10-3 Disturbance of structural and building components (i.e., asbestos, lead, PCBs, and PAHs) could expose construction workers, the public, or the environment to hazardous conditions (Draft EIR Page 2.10-12).

Mitigation Measure 2.10-3: Where disturbance of structural and building components could expose construction workers, the public, or the environment to hazardous condi-

tions, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures shall be consistent with federal, state, regional and local regulatory requirements, as discussed in the Regulatory Setting above. Typical mitigation measures include:

- Prior to the demolition of any building, a pre-demolition asbestos containing material (ACM) and lead-based paint (LBP) survey shall be performed by the project proponent. Abatement of known or suspected ACMs and loose or peeling LBP shall occur prior to demolition or construction activities that would disturb those materials; and
- In the event that PCB-containing materials are identified prior to demolition activities they shall be removed, and shall be disposed of by a licensed transportation and disposal facility in Class I hazardous waste landfill cells

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The mitigation measures are particularly reliable because they are consistent with standards developed by existing agencies (federal, state, regional and local regulatory requirements) that are integral parts of the project development, review, and permitting processes. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines

Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

LAND USE AND HOUSING

Impact

- 2.11-1 The construction of new or expanded transportation facilities in the 2009 CTP could result in the conversion of important agricultural lands to transportation uses (Draft EIR Page 2.11-30).

Mitigation Measure 2.11-1: Where construction of new or expanded transportation facilities could result in the conversion of important agricultural lands to transportation uses, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Typical mitigation measures include:

- Corridor realignment, where feasible, to avoid agricultural land areas;
- Conservation easements on land at least equal in quality and size as partial compensation for the direct loss of agricultural land;
- Buffer zones and setbacks to protect the functional aspects of agricultural land areas; and
- Berms and fencing to reduce conflicts between transportation uses and agricultural land uses.

Impact Conclusion: The impact may remain significant and unavoidable after implementing feasible mitigation measures.

Findings: The Authority hereby makes findings (1), (2), and (3).

Facts in Support of Findings:

- (a) The Authority will work with State and local agencies to minimize any adverse impacts on resource lands in the county resulting from the construction of new or expanded transportation facilities. While the potential for any impacts, and required mitigation, would be addressed at the project-specific EIR stage, the above mitigation measures should be considered for mitigation of such impacts.

- (b) The potential conversion of farmland is a conservative estimate. The EIR land use analysis took a “worst case” approach (Draft EIR, page 2.11-25), meaning that it assumed that farmland would be converted to transportation uses within a substantial swath along proposed transportation projects, despite the large number of projects proposed with work largely within the existing right-of-way. In doing so, the severity of the potential impacts may be overstated.
- (c) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (d) The nature of the program-level evaluation of impacts is such that not enough is known about the specific project-level conditions to determine the exact extent of the potential impact or if the proposed mitigation measures will in fact be feasible and effective. It is likely that, with proper design and planning, many of the identified impacts can be avoided or minimized. However, social, economic, legal, and technological conditions related to the ultimate design of individual projects will be factors in the feasibility of proposed mitigation measures at the project level. In particular, because the location of specific construction projects in relation to agricultural land is still unknown, this analysis cannot be sure of the ultimate effectiveness of the proposed mitigation measures.

Impact

- 2.11-2 Construction-related activities associated with projects comprising the 2009 CTP are likely to cause short-term disruption of adjoining land uses (Draft EIR Page 2.11-37).

Mitigation Measure 2.11-2: Where construction-related activities are likely to cause short-term disruption of adjoining land uses, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Typical mitigation measures include:

- Regulate construction operations on existing facilities to minimize traffic disruptions and detours, and to maintain safe traffic operations;

- Ensure construction operations are limited to regular business hours where feasible; and
- Control construction dust and noise.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) The potential conversion of land uses is a conservative estimate. The EIR land use analysis took a “worst case” approach (Draft EIR, page 2.11-26), meaning that it assumed that farmland would be converted to transportation uses within a substantial swath along proposed transportation projects, despite the large number of projects proposed with work largely within the existing right-of-way. In doing so, the severity of the potential impacts may be overstated.
- (c) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (d) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

Impact

- 2.11-3 The construction of new or expanded transportation projects in the 2009 CTP could result in long-term division or displacement of existing housing, businesses, and neighborhoods (Draft EIR Page 2.11-38).

Mitigation Measure 2.11-3: Where construction of new or expanded transportation projects could result in long-term division or displacement of existing housing, businesses, and neighborhoods, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Typical mitigation measures include:

- Preparation and execution of relocation assistance plans. At a minimum, relocation assistance plans will include:
 - Criteria for replacement housing;
 - Reimbursement levels for moving costs and differential housing costs to those eligible for displacement;
 - Construction schedules that allow adequate time for all commercial and industrial businesses to find and relocate to adequate substitute sites; and
 - Reimbursement levels for the costs associated with relocating a business to an acceptable facility, including search costs and criteria for payment in lieu of relocation if a business cannot be relocated without a substantial loss of existing patronage.
- Corridor realignment should be considered by the project sponsor, where feasible, to avoid displacement and division of neighborhoods, and to maintain or improve accessibility.

Impact Conclusion: Implementation of the above mitigation measures is expected to reduce the significant impact to a less than significant level.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) The recommended mitigation measures are expected to be effective in reducing the impacts identified at the program level. The Authority will work with project sponsors to implement appropriate mitigation measures.
- (b) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or ex-

ceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.

- (c) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented. With implementation of these measures, the impact will be reduced to a level that is less than significant.

GLOBAL WARMING AND GREENHOUSE GASES

Impact

- 2.12-1 Implementation of the 2009 CTP, combined with forecast countywide growth, would contribute to GHG emissions (Draft EIR Page 2.12-14).

Mitigation Measure 2.12-1: Where projects could contribute to GHG emissions, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures could be drawn from or be consistent with the Global Warming Measures published by the Attorney General's Office, the Bay Area Regional Agency Climate Protection Program – Consolidated Recommendations, other guidance from State and federal agencies or similar policy guidance. Typical mitigation measures include:

- Adopt and implement “green building” practices for any public buildings funded by CCTA to achieve a LEED™ Silver or better or equivalent certification;
- Adopt “green construction” policies and practices for all CCTA- funded projects, These should include but not be limited to requirements for use of the lowest emitting construction equipment and fuels (e.g. diesel-powered vehicles with EPA Tier 3 or better engines or retrofitting to meet equivalent emission standards as Tier 3 engines);

- Require use of light colored pavement for solar reflectivity and reduced heat island effects wherever construction costs are no higher than 5 or 10 percent of the least cost alternative paving material;
- Require installation of solar photovoltaic systems or use of renewable sources of energy for transportation buildings and maintenance facilities, wherever “feasible”, as the term is defined in CEQA;
- Require shade tree planting as part of specified types of construction projects or wherever CCTA-funded construction results in loss of tree cover because trees have “carbon sequestration capacity”;
- Establish or update minimum standards for construction management for CCTA-funded transportation projects, including specifying minimum content for recycled products in aggregate, concrete, etc. and construction waste management;
- Establish standards or incentives for light pollution reduction related to street lighting and lighting of transportation and parking facilities funded by CCTA to promote low-energy use for permanent as well as temporary fixtures.

Impact Conclusion: The overall cumulative impact will remain significant. However, the project’s contribution is not cumulatively considerable.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) Regardless of the implementation of the 2009 CTP, cumulative population growth and development will occur in the county, contributing substantially to the identified significant cumulative impact. However, total greenhouse gas emissions decrease with the proposed Project when considered with Pavley phases 1 and 2 rules enforced. This indicates the proposed Project has a beneficial rather than detrimental impact on the significant cumulative impact.
- (b) Mitigation of these impacts is largely beyond the authority of the CCTA. The most significant mitigation measure would be the adoption and implementation of AB 1493 and Pavley 1 and 2 (described in detail on DEIR Page 2.3-10 and 2.3-13) fuel standards for passenger vehicles, light-duty trucks, and other vehicles used for noncommercial personal transportation in California.
- (c) Because the Plan’s contribution to the cumulative impact is not considerable, the mitigation measures provided were not required according to the EIR analysis, but rather provided as a supplementary good faith effort to further reduce the

overall cumulative impact. (Draft EIR p. 2.12-17 under Mitigation Measures explains why additional measures are recommended despite the analysis).

- (d) Proposed mitigation measures, along with conformity with existing federal, State, and local regulations, are expected to reduce the overall cumulative effect, as well as the Plan's less-than-significant incremental contribution to the overall cumulative effect. The mitigation measures are expected to be reliable because they rely on standards developed by existing agencies (Attorney General) that are integral parts of the project development, review, and permitting processes.
- (e) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.
- (f) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented.

Impact

- 2.12-2 Implementation of the 2009 CTP projects would have the potential to result in a significant cumulative increase in exposure to a risk related to sea level rise (Draft EIR Page 2.12-18).

Mitigation Measure 2.12-2: Where projects could have the potential to result in a significant cumulative increase in exposure to a risk related to sea level rise, sponsors shall consider measures to minimize or eliminate impacts as part of the design of the project and its environmental review under CEQA and NEPA. Potential mitigation measures could be drawn from or be consistent with the Global Warming Measures published by the Attorney General's Office, the Bay Area Regional Agency Climate Protection Program – Consolidated Recommendations, other guidance from State and federal agencies or similar policy guidance. Typical mitigation measures include:

- To determine the likely impacts of sea level rise on transportation infrastructure and to identify the appropriate adaptation strategies to reduce or avoid these impacts, conduct a vulnerability assessment for the transportation infrastructure projects and identify the appropriate adaptation strategies to protect those transportation resources that are likely to be affected and are a priority to protect;
- Consider sea level rise and potential increases in storm surge inundation in engineering designs, and incorporate mitigation measures where applicable. These mitigation measures should consider the effects on Bay resources and avoid or reduce future risk to the infrastructure and adjoining areas; and
- For those transportation projects that do not involve new infrastructure but rather invest in increasing capacity of existing infrastructure, demonstrate that they have investigated the vulnerability of their existing facilities to sea level rise and storm surge inundation and are budgeting for mitigation measures to adapt to projected sea level rise and storm surge. These mitigation measures should consider the effects on Bay resources and avoid or reduce future risk to the infrastructure and the region.

Impact Conclusion: The overall cumulative impact will remain significant. However, the project's contribution is not cumulatively considerable.

Findings: The Authority hereby makes findings (1) and (2).

Facts in Support of Findings:

- (a) Regardless of the implementation of the 2009 CTP, cumulative population growth and development will occur in the county, contributing substantially to the identified significant cumulative impact.
- (b) Because the Plan's contribution to the cumulative impact is not considerable, the mitigation measures provided were not required according to the EIR analysis, but rather provided as a supplementary good faith effort to further reduce the overall cumulative impact. (Draft EIR p. 2.12-17 under Mitigation Measures explains why additional measures are recommended despite the analysis).
- (c) Proposed mitigation measures, along with conformity with existing federal, State, and local regulations, are expected to reduce the overall cumulative effect, as well as the Plan's contribution to the overall cumulative effect. The mitigation measures are expected to be reliable because they rely on standards developed by existing agencies (Attorney General) that are integral parts of the project development, review, and permitting processes.

- (d) Mitigation measures address site-specific factors that must be considered for each individual transportation project. Specific mitigation measures that meet or exceed the requirements of these recommended measures will have to be adopted and implemented by project sponsors for impacts identified during the environmental evaluation of individual projects, particularly as they relate to details about the project location. Therefore, effective implementation of the identified mitigation measures relies on the efforts of other agencies, namely the project sponsors.

- (e) For a project-level environmental review to tier off the program EIR for the Plan, it must incorporate the mitigation measures set forth therein (CEQA Guidelines Section 15168, subd. (c)(3)). Thus, the use of this EIR by project sponsors in preparing environmental documents for specific projects will help ensure that project-specific mitigation measures will be implemented.

2. Findings Regarding Alternatives

INTRODUCTION

CEQA requires an EIR to consider a reasonable range of potentially feasible alternatives to a proposed project or to the location of the proposed project. These alternatives must “feasibly attain the basic objectives of the project (CEQA Guidelines, §15126(a)).” Section 15126.6, subdivision (f) of the CEQA Guidelines limits the alternatives that must be considered in the EIR to those “that would avoid or substantially lessen any of the significant effects of the project.” “Feasible” means that the alternatives “are capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (CEQA Guidelines, §15364).”

GOALS OF THE PROPOSED PROJECT

The following goals were established for the 2009 CTP:

- Enhance the movement of people and goods on the highways and arterial roads.
- Manage the impacts of growth to sustain Contra Costa’s economy and preserve its environment.
- Provide and expand safe, convenient and affordable alternatives to the single-occupant automobile.
- Maintain the transportation system.

SUMMARY OF ALTERNATIVES ANALYZED BY THE EIR

The 2009 CTP EIR considers four alternatives to the proposed 2009 CTP, including the No Project Alternative as required by CEQA. The alternatives are outlined here.

No Project Alternative

The No Project alternative, required by CEQA, addresses the effects of not implementing the 2009 CTP. The No Project alternative describes both the existing conditions and the conditions that are “reasonably expected to occur in the foreseeable future if the project were not approved.” In the case of a revision of an existing plan or policy, the alternative describes the continuation of the existing plan, policy or operation. Therefore, the No Project alternative for this EIR includes a set of highway, transit, local roadway, bicycle, and pedestrian projects that are in advanced planning stages and slated to go forward since they already have full funding commitments. Specifically, this alternative includes projects that are:

- included in the adopted 2008 State Transportation Improvement Program (STIP);
- not yet in the STIP but are specifically named projects in the Measure J Expenditure Plan;
- included in the most recent Measure C and Measure J Strategic Plans; or
- within Contra Costa or the Tri-Valley that have specifically committed funding.

The “specifically named” projects include the Caldecott Tunnel Fourth Bore, State Route 4 East widening, eBART to Antioch, Capitol Corridor improvements at Martinez and Hercules, and the school bus program in San Ramon Valley. The Measure J Strategic Plan includes several phases of the State Route 4 Bypass, safety improvements on Vasco Road, and improvements to several interchanges, including I-680/SR 4, I-80/Central, I-80/San Pablo Dam Road, and SR 242/Clayton Road.

Alternative 1—Freeway Performance Initiative (FPI)

This alternative uses the approach that MTC used in its Vision analysis (MTC 2007). Called the “Freeway Performance Initiative” (FPI), this alternative assumes implementation of a variety of “intelligent transportation systems” (ITS) and operational improvements such as ramp metering, changeable message signs and variable speed limits. According to MTC and Caltrans, these improvements could result in an increase in freeway capacity of approximately eight percent.

The proposed Project already includes ITS on the I-80 corridor in West Contra Costa County through the Integrated Corridor Management (ICM) Project on that route. This alternative assumes implementation of an ICM project on all freeways within Contra Costa. The FPI alternative is modeled by increasing hourly freeway capacity on all freeways within Contra Costa by eight percent. This theoretical increase in freeway capacity only has a beneficial impact on freeway segments that are at or above capacity.

Alternative 2—Frequent Service Transit Network

This alternative uses the Frequent Service Transit Network (FSTN) that MTC developed in consultation with transit agency staff throughout the region. The FSTN focuses on an expanded HOV lane network and enhanced express bus service in the region.

Generally speaking, in addition to increasing transit frequency, this alternative would add HOV lanes, based on MTC’s HOV Master Plan (MTC 2002). MTC is also proposing a HOT lane network, where SOVs could use the HOV lanes by paying a toll. Tolls for lanes would increase over time and would vary with congestion levels. The viability of HOT lanes is currently being analyzed by MTC. Because operating strategies will vary by time-of-day, roadway location and qualifying minimum occupancy of 2 or 3 persons, the proposal for HOT lanes is not analyzed here.

To increase the attractiveness of transit service, this alternative incorporates a Frequent Transit Service network in the travel model for analysis in this EIR. To do this, some transit routes in countywide model (which contains fixed-route transit routes and headways) were given a more frequent day-long headway of 15 minutes. While the actual routes in such a program may vary, this provides a tool by which to simulate the effects of running buses more frequently. Those routes assumed with enhanced day-long frequencies were County Connection Routes 107, 116, 121 and 115, as well as Tri-Delta Transit Route 391. Another key route, AC Transit Route 72R, was al-

ready operating at a headway of less than 15 minutes. Furthermore, this alternative adds HOV lanes on I-80, I-680, and SR4.

Alternative 3—Greenhouse Gas Reduction Alternative

This alternative incorporates measures to limit conditions that increase emissions of greenhouse gases (GHG) such as carbon dioxide (CO₂) and methane (CH₄). The California Attorney General's (AG) office has identified a long list of measures that lead agencies can take to reduce greenhouse gas emissions.¹ Several of the transportation measures identified by the Attorney General's Office are already part of the Measure J Expenditure Plan, including funding intermodal stations, supporting school bus programs, funding bicycle and pedestrian facilities, and providing TDM support through the 511 Contra Costa program.

This alternative considers additional listed measures that could apply to the 2009 CTP. One measure that is applicable – to “increase the cost of driving and parking private vehicles by, e.g., imposing tolls and parking fees” – forms the basis for this alternative. It is reflected in the County-wide Model by assuming higher parking costs in several commercial districts in the county. Specifically, these were added in the “downtown” sections of Richmond, El Cerrito, Walnut Creek, Concord, Pleasant Hill, Martinez, Pittsburg and Antioch. Another AG-suggested measure, an increase in tele-work, was reflected in the modeling for upper income workers and their response to forecast congestion, higher driving costs and improved communications technology. The Countywide Model contains four home-to-work trip purpose tables, which are stratified by household income. A reduction of seven percent was applied to the top two income category tables. Under this alternative, CCTA would also incorporate additional measures, based on the Attorney General's comments on RTPs, Draft EIRs on RTPs, and on General Plan policies related to GHGs and climate change. These measures are included in the full text description of the Alternative found on Page 3.1-9 of the DEIR.

ALTERNATIVES ANALYSIS

The alternative analysis indicated tradeoffs among the various issue areas between Alternatives. In several cases, the overall difference between the proposed Project and Alternatives is very minor. For instance, the proposed Project and Alternatives 1 through 3 include the same network improvements involving expansion and construction, and therefore their impacts are similar for many of the issue areas, including biological resources, hydrology and water resources, geology and seismicity, visual resources, noise, cultural resources, hazardous materials, and land use. Many of the impacts for these issue areas include short-term construction effects that are localized and temporary. While the network is the same, the programmatic elements of Alternatives 1, 2, and 3 provide additional congestion management that may result in fewer construction

¹ The Attorney General published a document *The California Environmental Quality Act: Addressing Global Warming Impacts at the Local Agency Level*, updated May 21, 2008 and available at <http://ag.ca.gov/globalwarming/ceqa.php>

projects, thereby reducing impacts due to expansion and construction. However, this potential reduction was not found to reduce any of the significant unavoidable impacts to a less than significant level.

For many of the areas that are largely impacted by changes in the use of the transportation system, such as increases in VMT, and decreases in congestion, Alternatives 1, 2 and 3 would result in slightly less congestion and fewer VMT than the proposed Project and so have preferred outcomes. This applies in particular to the issue areas of air quality, noise, greenhouse gases, and energy. The proposed Project offers environmental advantages over the No Project in transportation, air quality, noise, and greenhouse gases. It also offers environmental advantages over the Greenhouse Gas Reduction Alternative in Land Use and Housing, and environmental advantages over the Freeway Performance Initiative in visual resources, noise, and cultural resources.

Because the No Project Alternative has fewer roadway and rail improvements, it would have the fewest direct physical impacts. The No Project Alternative, however, also results in less favorable transportation, air quality, and greenhouse gas emissions impacts when compared to the proposed Project or Alternatives 1 through 3. Conversely, Alternative 3 results in the greatest transportation, air quality, and greenhouse gas emission benefits compared to the proposed Project and the other Alternatives, but given that it includes more projects than the No Project, it would also have greater direct physical impacts than the No Project.

Based on the analysis in the DEIR, **the Greenhouse Gas Reduction alternative is the environmentally superior alternative**, primarily because it provides environmental advantages relative to the proposed Project, No Project, and Alternatives 1 and 2 in the key issue areas of transportation, air quality, and greenhouse gas emissions. Also, it provides environmental advantages over the proposed Project and Alternatives 1 and 2 in energy. The only area in which the Greenhouse Gas Reduction Alternative does not provide environmental advantages is in land use, due to potential impacts on accessibility associated with increased costs, though its impacts related to the evaluated criteria were similar to the other alternatives. Given the potential for overall environmental advantages, the Greenhouse Gas Reduction Alternative is considered the environmentally superior alternative.

FINDINGS OF ALTERNATIVES ANALYSIS

Public Resources Code Section 21081, subdivision (a)(3) provides that when approving a project for which an EIR has been prepared, a public agency may find that “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.”

Alternatives analyzed in the EIR need not be actually feasible, but rather need only be “potentially feasible.” (CEQA Guidelines 15126.6(a)); see also *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 489 (although the respondent city ultimately rejected as infeasible several alternatives that were evaluated in an EIR, “this conclusion does not imply these

alternatives were improperly included for discussion”; “alternatives included in an EIR need only be potentially feasible”).

The Authority makes findings (2) and (3) in regard to the No Project alternative, the Freeway Performance Initiative Alternative, the Frequent Service Transit Network Alternative, and the Greenhouse Gas Reduction Alternative. The following facts are provided in support of these findings:

- The *No Project Alternative* does not provide additional transportation infrastructure beyond that which is already funded. As such, this alternative would not accommodate, as well as the proposed Project, the projected growth in the Bay Area’s population and employment and the concomitant increased demand for transportation infrastructure, as noted in the DEIR chapter on Transportation and Circulation. The increased congestion and delay associated with limited investments in transportation infrastructure would impede economic growth and vitality. The No Project alternative is therefore legally, socially, and economically infeasible.
- The *Frequent Service Transit Network Alternative* has similar outcomes to the proposed Project, although it is preferable to the proposed Project in some issue areas; it would still have fewer environmental benefits than the Greenhouse Gas Reduction Alternative, however.
- The *Freeway Performance Initiative Alternative* would improve freeway capacity throughout Contra Costa and reduce congestion. However, this alternative would require more operations infrastructure than the proposed Project, thereby imposing additional costs and increased potential impacts on visual and cultural resources.
- In issues areas that the Freeway Performance Initiative Alternative was found to be preferable to the proposed Project, it would still have fewer environmental benefits than the Greenhouse Gas Reduction Alternative.
- The *Greenhouse Gas Reduction Alternative* would perform better than the No Project Alternative, the proposed Project, and Alternatives 1 and 2 in many impact areas. This Alternative would also meet the majority of the goals of the proposed Project. However, the heightened performance of this alternative presumes that the Authority has the authority to impose new pricing strategies, most of which are subject to legislative or voter approval or the actions of many separate jurisdictions and agencies, especially the imposition of parking costs. For those strategies that require legislative or voter approval, any economic downturn reduces public support for “taxing” schemes that intentionally raise the price of driving.
- The Greenhouse Gas Reduction Alternative included a variety of actions to reduce emissions of greenhouse gases. Perhaps, the most significant of these — increasing parking costs and tele-work — rely on the actions of other agencies and jurisdictions or would re-

quire legislation to give the Authority new responsibilities and powers to implement. The majority of benefits identified in the EIR for this alternative come from those actions that the Authority does not have the power to implement. Effective implementation of this alternative, although “potentially feasible”, would not be feasible unless carried out through the efforts of these other agencies.

- The projects, programs and implementation actions in the 2009 CTP are derived from the Authority’s “bottom-up” planning process. This process relies on input from local jurisdictions and the Regional Transportation Planning Committees that develop Action Plans and which are comprised of representatives from those jurisdictions and transit agencies. (Those plans have been incorporated directly into the 2009 CTP.) All of the projects in the 2009 CTP were defined and suggested by those local communities and regional committees.

3. Statement of Overriding Considerations

CEQA requires the Authority to balance the benefits of the proposed Project against its unavoidable environmental risks in determining whether to approve the proposed Project. Because the EIR identifies significant impacts of the proposed Project that cannot feasibly be mitigated to below a level of significance, the Authority must state in writing its specific reasons for approving the project (CEQA Guidelines, section 15093). This Statement of Overriding Considerations sets forth the specific reasons supporting the Authority's action in approving the proposed Project, based on this EIR and other information in the record.

The 2009 Countywide Comprehensive Transportation Plan (2009 CTP) is intended to address the transportation impacts of existing and projected growth in the country while meeting the goals established by the Authority:

- Enhance the movement of people and goods on the highways and arterial roads.
- Manage the impacts of growth to sustain Contra Costa's economy and preserve its environment.
- Provide and expand safe, convenient and affordable alternatives to the single-occupant automobile.
- Maintain the transportation system.

This EIR examined the environmental impacts of the 2009 CTP in the areas of Transportation and Circulation, Air Quality, Noise, Energy, Geology and Seismicity, Biological Resources, Hydrology and Water Resources, Visual Resources, Noise, Cultural Resources, Hazardous Materials, Land Use and Housing, and Greenhouse Gases and Climate Change. The Authority has identified significant environmental impacts that cannot be feasibly mitigated if the proposed Project is adopted, including:

- *Alteration of views* — Construction or expansion of some transportation projects included in the 2009 CTP could adversely alter views in the County over the long-term by adding incongruous elements to the existing landscape, thereby blocking view or altering the scale, character, and quality of rural or open space areas, important vistas along roadways, and urban communities;
- *Construction noise* — Construction of the projects proposed in the 2009 CTP would have short-term noise impacts on surrounding areas;
- *Cumulative noise levels* — Transportation improvements proposed as part of the 2009 CTP together with regional growth and development could contribute to cumulative noise levels; and
- *Conversion of non-urban land to transportation uses* — Conversion of agricultural lands to transportation uses would remain a significant impact despite the limitations on the extent of conversion provided by the proposed mitigation measures.

This EIR examined four alternatives in addition to the proposed Project, including the No Project Alternative; Alternative 1 – Freeway Performance Initiative; Alternative 2 – Frequent Service Transit Network; and Alternative 3 – Greenhouse Gas Reduction Alternative. Alternatives 1, 2 and 3 would have the similar impacts as the proposed Project on alteration of views, construction noise, cumulative noise levels, and potential conversion of agricultural lands to transportation uses.

While Alternative 3 (Greenhouse Gas Reduction Alternative) was found to have the fewest significant environmental impacts, all the above alternatives have significant impacts that can't be mitigated. The Authority's decision to choose the proposed Project, rather than any of the alternatives, was based on a balancing of proposed Project objectives and environmental effects, both of the proposed Project and of the various alternatives considered, and on the Authority's ability to carry out the actions outlined in that alternative. Specifically, the Authority considered the following in making its decision:

1. The proposed Project best meets the goals of the Authority listed above. While all Alternatives (except for the No Project) would meet the basic goals of the 2009 CTP, there are tradeoffs in the varying degrees of success at achieving the objectives of the proposed Project.
2. The proposed Project is intended to be consistent with and reflect adopted regional transportation plans (2005 Regional Transportation Plan) and to respond to the concerns of local governments.
3. The proposed Project and its transportation program come from the cooperative, local planning recommendations of the Regional Transportation Planning Committees and their Action Plans for Routes of Regional Significance. These subarea Action Plans are a key element of the cooperative, multi-jurisdictional planning process called for by the Measure C and J Growth Management Program.
4. The proposed Project reduces traffic congestion, vehicle miles traveled (VMT), and vehicle hours traveled (VHT), increases average speeds, and increases transit use in comparison to the No Project alternative. By reducing traffic congestion, the proposed Project will improve the quality of life of county residents.
5. The proposed Project results in less energy use per capita and fewer greenhouse gas emissions (when Pavley Phase 1 and Phase 2 rules are enforced) compared to existing conditions, improving long-term environmental quality for the county.
6. While the Greenhouse Gas Reduction Alternative was found to be the environmentally superior alternative, concerns regarding social impacts of imposing pricing schemes and potential reliance on voter support make this alternative less feasible than the proposed Project, as noted in Findings of Alternatives Analysis (e) and (f).