

7 Alternatives

As required by Section 15126(d) of the State CEQA Guidelines, this EIR examines a reasonable range of alternatives to the proposed 2040 MTP/SCS. Section 15126.6 of the CEQA Guidelines requires that an EIR “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.”

Additionally, the CEQA Guidelines state the following:

- An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly discuss the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency’s determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are (i) failure to meet most of the basic project objectives, (ii), infeasibility, or (iii) inability to avoid significant environmental impacts. (CEQA Guidelines Section 15126.6(a)(c).)
- “Feasible” means capable of being accomplished within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. (CEQA Guidelines Section 15364.)

The primary objective of the MTP/SCS is to comply with applicable regulatory requirements, including CTC Guidelines and SB 375. including SB 375’s regional GHG reduction targets. AMBAG’s specific objectives for the 2040 MTP/SCS are to additionally ensure that the transportation system planned for the AMBAG region accomplishes the following:

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

The analysis of alternatives focuses on the various land use and transportation scenarios that incorporate different assumptions regarding the combinations of future land uses and transportation system improvements. The 2040 MTP/SCS is specifically intended for the AMBAG region; therefore, an alternative location for the 2040 MTP/SCS as a whole is not possible. However, within the AMBAG region, the 2040 MTP/SCS considers different patterns of land use and transportation investments to accommodate forecast future growth and regional housing needs.

The alternative land use and transportation scenarios modeled and analyzed by AMBAG are described in Appendix E of the 2040 MTP/SCS and the preferred scenario (proposed project) is

described in detail within Chapter 2, *Transportation Investments* and Chapter 4, *Sustainable Communities Strategy*, of the 2040 MTP/SCS. Scenarios were based on policies and goals adopted by the AMBAG Board of Directors and the RTPA Boards of Directors. Performance measures were then developed in coordination with the RTPAs to measure the effectiveness of any given scenario in meeting the goals and objectives for the region. The policies and goals are described in Chapter 1 of the 2040 MTP/SCS whereas the performance measures are described in Chapter 5. Scenarios also were selected based on their ability to meet GHG reduction targets required by SB 375. The performance measures were calculated for each scenario using AMBAG's land use model and recently updated regional travel demand model (RTDM), as well as the EMFAC 2014 model.

7.1 Alternatives Development and Screening Process

During the development of the 2035 MTP/SCS, AMBAG developed and evaluated scenarios that included various land use assumptions and transportation system improvements and investments to see how each scenario could achieve the GHG targets established by CARB for the tri-county region as well as other performance measures. Extensive outreach with partner agencies, local jurisdictions, key stakeholders and the public was ongoing throughout the 2035 MTP/SCS planning process through workshops and meetings, surveys and interactive tools.

Beginning in 2015, AMBAG began the technical update to the 2035 MTP/SCS. This planning effort began by gathering and updating critical data as well as working with local jurisdictions on growth forecasts for 2020, 2035 and 2040. The regional growth forecast was then used as the growth parameter for the updating the various transportation and land use scenarios for the 2040 MTP/SCS.

Utilizing input from the public and stakeholders, AMBAG updated the land use and transportation scenarios through 2040. AMBAG evaluated these scenarios using a set of transportation, environmental and equity performance measures approved by the Board of Directors. These MTP/SCS scenarios were refined with continued extensive input from partner agencies and key stakeholders as well as from community workshops held in spring 2017. Ultimately, the AMBAG Board selected a single preferred scenario in June 2017. The preferred scenario, or the 2040 MTP/SCS, is summarized in Section 2.0, *Project Description*, of this EIR and the environmental effects of this scenario are addressed in Sections 4.1 through 4.15.

This alternatives analysis herein includes the following alternatives to the proposed 2040 MTP/SCS:

- **Alternative 1: No Project Alternative.** The No Project Alternative is comprised of a land use pattern that reflects existing land use trends and a transportation network comprised of transportation projects that are currently in construction or are funded in the short range Metropolitan Transportation Improvement Program (MTIP).
- **Alternative 2: Livable Communities Alternative.** The Livable Communities Alternative includes a land use pattern that further concentrates forecasted population and employment growth in urban areas with a focus on infill, mixed use and transit oriented development (TOD) in and around commercial corridors. The transportation network under this alternative includes transit investments in addition to other alternative modes of transportation to serve a more concentrated growth pattern. Specifically, active transportation investments such as bicycle facilities, sidewalks, traffic calming measures and intersection safety improvements would be prioritized in this alternative. A greater level of investment would be focused on closing transit gaps by expanding local transit, rather than interregional or long distance services.

- **Alternative 3: Maintained Mobility Alternative.** The Maintained Mobility Alternative includes a land use pattern comprised of existing land use plans and a transportation network that includes more transportation projects focused on mobility, rehabilitation and safety. A greater level of investment is focused on local street and road projects combined with investment in long distance transit service such as rail to increase mobility within the region. Operations and maintenance projects are included to improve safety on the region’s local streets and roads and transit system also are given a higher priority.

Each alternative is described and analyzed below to determine whether environmental impacts would be similar to, less than, or greater than those of the preferred scenario in the 2040 MTP/SCS. As required by CEQA, this section also includes a discussion of the “environmentally superior alternative” among those studied.

7.2 Alternatives Eliminated from Detailed Consideration

The CEQA Guidelines state that an EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency’s determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are (i) failure to meet most of the basic project objectives, (ii), infeasibility, or (iii) inability to avoid significant environmental impacts. (CEQA Guidelines Section 15126.6(a)(c).)

For this EIR, there were no alternatives that were considered by the lead agency and rejected as infeasible during the scoping process.

7.3 Alternative 1: No Project Alternative

7.3.1 Description

The No Project Alternative includes a land use pattern comprised of existing land use trends. In other words, it assumes that current sub-regional growth trends would continue, but it updates the total growth to be consistent with the updated AMBAG Draft 2018 Regional Growth Forecast. Rather than focusing on coordinating transportation projects that serve infill and transit oriented development, the transportation network would be comprised of committed transportation projects included in the MTIP.

7.3.2 Impact Analysis

a. Aesthetics/Visual Resources

Implementation of this alternative would result in fewer visual impacts as compared to the 2040 MTP/SCS, because many of the proposed interchanges, bridges and roadway extensions, as well as transit and rail facilities would not be constructed. Nevertheless, many capital improvements would still be constructed under this alternative with the potential to impact scenic vistas on designated scenic highways, along with the gradual transformation toward a more urban/suburban character would occur in many parts of the AMBAG region. In fact, because this alternative would continue current sub-regional growth trends rather than emphasizing an infill approach to land use and housing, more development would occur outside of existing urban areas, which may result in

greater impacts to scenic resources in the less developed portions of the AMBAG region. Thus, impacts related to visual character would be significant and unavoidable as with the 2040 MTP/SCS. The overall level of impact resulting from combined transportation improvement and land use projects would be similar when compared to the 2040 MTP/SCS with some impacts greater while other impacts less, but would remain significant and unavoidable.

b. Agricultural Resources

This alternative would result in fewer transportation infrastructure projects being constructed, including roadway widening and other projects that could directly convert agricultural land to non-agricultural use. However, because this alternative would continue current sub-regional growth trends rather than emphasizing an infill approach to land use and housing, more development would be expected to occur outside of existing urbanized areas, including within areas currently used for agricultural production. Given the extent of Important Farmland in Monterey, San Benito and Santa Cruz counties, impacts related to converting Important Farmland to non-agricultural use, conflicts between urban and agricultural land uses, and conflicts with existing agricultural zoning and/or Williamson Act contracts would be worse under this alternative than for the proposed 2040 MTP/SCS. Mitigation would not be required for this alternative; as such, mitigation would not be available to reduce impacts to a less than significant level. Therefore, this impact would be significant and unavoidable for the No Project Alternative, compared to significant but mitigable for the 2040 MTP/SCS. The overall impact to agricultural resources resulting from the No Action Alternative would be greater than under the 2040 MTP/SCS.

c. Air Quality and Health Impacts/Risks

Implementation of this alternative would result in reduced short-term air quality impacts from construction activity. As discussed in Section 4.3, *Air Quality and Health Impacts/Risks*, total regional emissions of ROG would be 0.01 ton per day higher and NO_x would be 0.02 ton per day higher under this alternative than emissions anticipated with implementation of the 2040 MTP/SCS. The higher emissions would be due to higher VMT expected under this alternative. The SCS is intended to increase residential and commercial land use capacity within existing transit corridors which would shift a greater share of future growth to these corridors, ultimately increasing density and improving circulation and multimodal connections. If this alternative were selected, improvements in the transportation infrastructure and infill development projects anticipated under the 2040 MTP/SCS would not occur. Since these developments would not occur, sensitive receptors would not be exposed to health risks from TACs during construction or operation. Overall air quality impacts would therefore be reduced under this alternative when compared to the 2040 MTP/SCS. However, long term operational impacts related to PM₁₀ and exposing sensitive receptors to substantial hazardous air pollutant concentrations and objectionable odors would remain significant and unavoidable.

d. Biological Resources

Implementation of this alternative may result in less impact to biological resources resulting from transportation improvement projects, as fewer roadway extensions, widening projects and creek crossings would occur under this alternative. However, because this alternative would continue current sub-regional growth trends rather than emphasizing an infill approach to land use and housing, more development would be expected to occur outside of existing urbanized areas, including in areas providing habitat for special status plant and animal species. Overall impacts to

special status plants, animals, wetlands and/or riparian habitat and wildlife movement outside developed urban areas would therefore be greater than under the 2040 MTP/SCS. Impacts would remain significant and unavoidable.

e. Cultural and Historic Resources

As described in Section 4.5, *Cultural and Historic Resources*, some of the 2040 MTP/SCS projects may be located in proximity to historical resources or include repair or replacement of potentially historical structures (e.g. bridges). Because these projects would not be developed under the No Project Alternative, these impacts would be eliminated unless determined to be required due to safety or seismic issues. In addition, because less infill development would occur under this alternative, fewer impacts involving redevelopment or demolition of existing structures resulting from land use development would occur. Impacts to historical resources would therefore be reduced when compared to the 2040 MTP/SCS. However, project-specific impacts may still be significant.

Implementation of this alternative would involve less ground disturbance associated with transportation improvements than would occur under the 2040 MTP/SCS. However, because more land use development could occur outside of existing urbanized areas, more ground disturbance would be expected to occur in previously undeveloped areas. As such, the potential for uncovering known or unknown archaeological resources or paleontological deposits would increase under this alternative for new development but decrease for transportation projects. The overall level of impact resulting from combined transportation improvement and land use projects would be similar when compared to the 2040 MTP/SCS. Impacts to archaeological and paleontological resources would remain significant and unavoidable.

f. Energy

Because this alternative would result in less construction of transportation infrastructure, overall energy use associated with construction activities would be reduced when compared to the 2040 MTP/SCS. However, this alternative would not include many of the capital improvements envisioned under the proposed 2040 MTP/SCS that would improve transportation efficiency and reduce regional energy demand. Energy use will increase over time as the result of regional socioeconomic (population and employment) growth, regardless of implementation of the 2040 MTP/SCS. The No Project Alternative would result in higher total and per capita energy use as compared to the 2040 MTP/SCS. As discussed in Section 4.6, *Energy*, the 2040 MTP/SCS would not result in inefficient, unnecessary, or wasteful direct or indirect consumption of energy, and would be consistent with applicable energy conservation policies. Because the No Project Alternative would slightly reduce both total and per capita energy use, impacts would be reduced when compared to the 2040 MTP/SCS and impacts related to inefficient, unnecessary, or wasteful direct or indirect energy consumption would be less than significant.

The 2040 MTP/SCS would generate energy demand that may require construction of new energy facilities; this impact, as discussed in Section 4.6, *Energy*, would be significant and unavoidable. Although the No Project Alternative would reduce the amount of energy consumed overall, it too may require the construction of expansion of energy facilities to meet future demand. This impact would therefore be significant and unavoidable, and the overall impact would be similar to the 2040 MTP/SCS.

g. Geology and Soils

Impacts related to erosion and loss of topsoil would be less than significant pursuant to compliance with existing regulations, similar to the 2040 MTP/SCS. Because this alternative does not include as many new interchanges, bridges, roads and fixed facilities, there would be less exposure of new structures to hazardous geologic conditions, including liquefaction, expansive soils, landslides, ground-shaking and flooding. Conversely, if inadequate structures are not replaced, the potential for these existing structures and people using these structures to be harmed by geologic hazards could be greater than under the proposed 2040 MTP/SCS than under the No Project Alternative. However, because mitigation for impacts related to seismic hazards and unstable soils would not be required under this alternative, mitigation is not available to reduce the impacts to less than significant levels. Therefore, seismic hazard and unstable soil related impacts would be significant and unavoidable under the No Project Alternative. Compared to the 2040 MTP/SCS, the overall impact of the No Project Alternative would be slightly greater to unmitigated risks of geologic hazards.

h. Greenhouse Gas Emissions/Climate Change

The No Project Alternative would result in fewer impacts associated with GHG emissions during construction activities as fewer transportation infrastructure projects would be constructed. GHG emissions under the No Project Alternative would be higher than GHG emissions with the 2040 MTP/SCS. This is primarily a result of more VMT with the No Project Alternative. Although this alternative would continue existing land use trends and would not include adoption of an SCS. Therefore, the overall impact of this alternative would be greater than what would occur under the 2040 MTP/SCS.

i. Hazards and Hazardous Materials

This alternative would result in fewer infrastructure projects being constructed, thereby reducing hazardous material use, storage and transportation resulting from construction of those projects. However, the amount of hazardous materials being transported to support land use development in the region would remain the same. Because the No Project Alternative would be subject to existing regulations and programs, impacts relating to routine transport, use, or disposal of hazardous materials; risk of upset and accident conditions; emissions within one-quarter mile of a school; airport hazards; and interference with emergency response and evacuation plans would be less than significant, similar to 2040 MTP/SCS. Because this alternative would allow more housing near wildlands, it would increase the vulnerability of people and structures to wildland fire. This impact, which is significant and unavoidable for the 2040 MTP/SCS, would be greater under the No Project Alternative and would remain significant and unavoidable. Due to the increased severity of this significant impact, overall hazards and hazardous materials impacts would be greater under this alternative than under the 2040 MTP/SCS.

j. Hydrology and Water Quality

This alternative would result in fewer transportation infrastructure projects being constructed. Therefore, this alternative would reduce water quality impacts resulting from construction-related erosion and sedimentation and would generate less water demand for dust suppression activities. These impacts would remain less than significant pursuant to compliance with existing regulations, similar to the 2040 MTP/SCS.

Because this alternative would continue current sub-regional growth trends rather than emphasizing an infill approach to land use and housing, more development would be expected to occur outside of existing urbanized areas. As such, impervious surfaces would be expected to increase under this alternative. Because projects would be located in less developed areas, runoff would include fewer urban pollutants such as heavy metals from auto emissions, oil and grease than projects under the 2040 MTP/SCS. However, because more development would occur in and therefore be adjacent to agricultural areas, runoff from those adjacent agricultural areas would contain more fertilizers and pesticides. While projects under this alternative may require more grading and vegetation removal, including in proximity to creeks, less urban development may result in less disturbance of soils on previously contaminated sites. As such, water quality in creeks may be more impacted, but water quality within urban areas may be less impacted. Because of these tradeoffs, the No Project Alternative would be anticipated to result in impacts to water quality that are overall comparable to the 2040 MTP/SCS with some impacts greater while other impacts would be less; water quality impacts would remain less than significant, pursuant to compliance with existing regulations.

Increases to water demand are primarily associated with increased population levels. The No Project Alternative would result in the same population increase in 2040 as the MTP/SCS. However, this alternative would result in less dense land use development, which would result in a less efficient water supply system (e.g., greater areas of irrigated landscaping). As such, future water demand associated with this alternative would be greater than water demand for the 2040 MTP/SCS. This impact, which is significant and unavoidable for the 2040 MTP/SCS, would be greater under the No Project Alternative, particularly because mitigation would not apply to this alternative. Impacts would remain significant and unavoidable.

Overall hydrology and water quality impacts would be greater under the No Project Alternative than the 2040 MTP/SCS.

k. Land Use

As with the 2040 MTP/SCS, this alternative would not be anticipated to divide an established community. As noted in Section 4.11, *Land Use*, the 2040 MTP/SCS includes a list of planned and programmed projects including local and regional capital improvements that have been anticipated or accounted for in local general plans and regional, statewide and federal transportation improvement programs. In addition, the objective of the 2040 MTP/SCS is to provide for a comprehensive transportation system of facilities and services that meets public need for the movement of people and goods, and that is consistent with the social, economic and environmental goals and policies of the region. The No Project Alternative would not provide capital improvements anticipated within applicable general plans and transportation improvement programs, nor would it guide development to explicitly meet social, economic, and environmental goals and policies of the region as anticipated under the 2040 MTP/SCS. The amount of undeveloped land impacted would therefore be greater under this alternative. Although the No Project Alternative would continue existing land use patterns and trends, it would increase the severity of several environmental impacts, as discussed herein. As such, it would have greater conflicts with State and local policies and regulations adopted for the purpose of avoiding or mitigating environmental effects. Because environmental effects would generally increase under this alternative, the overall impacts on land use would be greater under this alternative when compared to the 2040 MTP/SCS and would remain significant and unavoidable.

I. Noise

Because noise is a site-specific issue, noise studies would be prepared for each project to determine whether impacts would occur. From a programmatic perspective, fewer transportation infrastructure projects would result in less construction activity under the No Project Alternative. This would reduce temporary noise impacts throughout the AMBAG region. In addition, because the number of infill or TOD projects would be less under the No Project Alternative, construction-related noise impacts on adjacent sensitive receptors would also decrease. However, construction noise would still occur and impacts would continue to be significant.

Although the number of transportation projects would be reduced as compared to the 2040 MTP/SCS, increased traffic volumes resulting from regional growth would continue to occur. Whether noise impacts would be greater or less than those anticipated under the 2040 MTP/SCS remains dependent on site-specific considerations that cannot currently be known. Regionally, the difference in VMT between the No Project Alternative and the 2040 MTP/SCS is not enough to noticeably change overall noise levels in the region. Mobile source noise levels resulting from traffic would therefore be similar under the No Project Alternative when compared to the 2040 MTP/SCS.

Because most rail and transit improvements planned under the 2040 MTP/SCS would not be implemented under this alternative, the potential for increased rail and transit noise would be reduced under the No Project Alternative.

Overall, noise-related impacts across the region would be similar to the 2040 MTP/SCS, and would continue to be significant and unavoidable.

m. Population and Housing

The No Project Alternative would result in the same population increase in the region by 2040 as the proposed 2040 MTP/SCS. As such, impacts related to population growth would be similar to the 2040 MTP/SCS and would continue to be significant and unavoidable. Because fewer transportation projects would be implemented and land uses would be less dense (thus resulting in less demolition and redevelopment of existing housing), displacement-related impacts would be reduced under this alternative when compared to the 2040 MTP/SCS. This impact would be less than significant. Overall population and housing impacts would be less than the 2040 MTP/SCS.

n. Transportation and Circulation

This alternative would not include many of the projects envisioned under the proposed 2040 MTP/SCS, including new highway and intersection projects, new bikeway and pedestrian projects (active transportation), new railroad projects, new transit projects, new intelligent transportation system/transportation demand management projects and aviation projects. Many of these projects are intended to address traffic congestion, and in many cases would serve as mitigation measures to reduce potential impacts associated with planned long-term development.

Overall, VMT within the AMBAG region would increase as a result of regional population growth. As discussed in Section 4.14, *Transportation and Circulation*, daily VMT in the AMBAG region in 2040 would be 19,741,921 without implementation of the 2040 MTP/SCS. This would be 54,413 VMT more than the 19,687,508 VMT that would be generated with implementation of the 2040 MTP/SCS. Thus, under the No Project Alternative, there would be greater daily VMT in 2040 compared to conditions with the 2040 MTP/SCS.

Additionally, there would be an increase in daily CVMT compared to daily CVMT under the 2040 MTP/SCS. CVMT, as it is used in this EIR, is equivalent to the VMT on facilities that operate unacceptably during peak traffic hours. This is because the 2040 MTP/SCS projects increase capacity of roadways and transit services in the AMBAG region, as well as improve circulation at facilities that operate unacceptably during peak hours. Without these projects, the No Project Alternative would result in more miles travelled on congested facilities during the most congested periods of the day.

Under the No Project Alternative, projects to increase bus capacity on congested facilities and the frequency of bus lines would not be implemented. Additionally, the 2040 MTP/SCS projects that are intended to ensure a reliable bus fleet would not be implemented under the No Project Alternative. Without these types of projects, operation of public transit may be unreliable or fail to meet the frequency and performance standards established by MST, Santa Cruz METRO and San Benito County Express. Thus, compared to the 2040 MTP/SCS, the No Project Alternative would have a greater adverse impact on transit service in the AMBAG region.

Overall, the No Project Alternative would result in increased daily VMT in the AMBAG region compared to the 2040 MTP/SCS, it would also increase CVMT and adverse impacts to public transit. Thus, overall, impacts to transportation and circulation would be greater under the No Project Alternative.

o. Tribal Cultural Resources

Implementation of this alternative would involve less ground disturbance associated with transportation improvements than would occur under the 2040 MTP/SCS. However, because more land use development could occur outside of existing urbanized areas, more ground disturbance would be expected to occur in previously undeveloped or open space areas. As such, the potential to disturb tribal cultural resources, including ancestral remains and sacred sites, would increase under this alternative. Although mitigation would not apply to this alternative, future projects would be required to comply with AB 52, which may require formal tribal consultation. Compliance with this requirement would reduce impacts to a less than significant level, similar to the 2040 MTP/SCS. However, because of the increased potential to disturb tribal cultural resources from development outside of urbanized areas and no mitigation applicable to this alternative, the overall impact of the No Action Alternative would be greater than under the 2040 MTP/SCS.

7.4 Alternative 2: Livable Communities Alternative

7.4.1 Description

The Livable Communities Alternative includes a land use pattern similar to the 2040 MTP/SCS, but that is even more concentrated in urban areas with a focus on mixed use and infill development along and adjacent to existing commercial corridors. The proposed 2040 MTP/SCS land use scenario emphasizes infill and TOD projects that would locate both residents and jobs closer to existing and planned high quality transit, thereby encouraging the use of alternative modes of transit, walking and bicycling. Improvements that would occur under Alternative 2 would serve a similar purpose; however, the density and intensity of infill development along commercial corridors would be increased regardless of the presence of high quality transit. The transportation network in this alternative includes additional transit investments in alternative modes intended to serve shorter, local trips given the more concentrated growth pattern. Specifically, active transportation investments such as bicycle facilities, sidewalks, traffic calming measures and intersection safety

improvements would be prioritized. Under this alternative, investment would be focused on closing transit gaps by enhancing local transit bus service rather than interregional or long distance services. In addition, active transportation projects such as bicycle facilities, trails and pedestrian improvements are programmed throughout the region under this alternative.

7.4.2 Impact Analysis

a. Aesthetics/Visual Resources

Implementation of Alternative 2 would result in compact urban development patterns similar to the 2040 MTP/SCS as it emphasizes infill and TOD and enhanced local transit service along existing commercial corridors. To the extent that infill and TOD would be visually consistent with the surrounding urbanized environment, this alternative would result in impacts similar to those described for the 2040 MTP/SCS. As projects in this alternative would be emphasized in denser, urban areas along commercial corridors, projects within suburban or rural areas would not occur to the extent proposed in the 2040 MTP/SCS; thus, visual/aesthetic impacts in these areas would be less. However, similar to the 2040 MTP/SCS, many capital improvements would be constructed that could impact scenic views on scenic routes, and the gradual transformation toward a more urban/suburban character throughout the AMBAG region would continue. Overall, aesthetic impacts under this alternative would be similar to the 2040 MTP/SCS with some impacts greater while other impacts less. Identified impacts would remain significant and unavoidable even with all mitigation measures in Section 4.1, *Aesthetics/Visual Resources*, still being required.

b. Agricultural Resources

Alternative 2 would further concentrate land use development within existing urbanized areas and would construct fewer transportation infrastructure projects such as roadway widening. As such, this alternative would have less potential to directly convert Important Farmland to non-agricultural use, conflicts with existing agricultural zoning and/or Williamson Act contracts, or otherwise convert agricultural land. As some transportation projects and land use development could occur in agricultural areas throughout the AMBAG region, some Important Farmland could still be converted to non-agricultural use. As such, mitigation measures identified in Section 4.2, *Agriculture and Forestry Resources*, would still be required and impacts would be significant but mitigable. Overall, however, the severity of this impact would be less than for the proposed 2040 MTP/SCS.

c. Air Quality and Health Impacts/Risks

Implementation of this alternative would result in higher short-term air quality impacts compared to the proposed 2040 MTP/SCS because urban construction activities would expose higher numbers of people to construction-related air emissions. Under this alternative, ROG, NO_x and PM₁₀ emissions would remain the same as compared to the proposed 2040 MTP/SCS, and emissions of CO and PM_{2.5} would slightly decrease (see Modeling Methodology in 2040 MTP/SCS Appendix F). The overall VMT would be slightly less in Alternative 2 than the 2040 MTP/SCS by approximately 9,176 VMT as there would be shorter distance trips between residential and commercial areas and those trips would likely be made using enhanced local transit services or by walking and bicycling rather than the single occupant vehicle. Although VMT and overall regional emissions would remain the same or slightly decrease depending on the pollutant, sensitive receptors would be exposed to greater concentrations of TACs based on the land use pattern. Therefore, compared to the proposed project, some air quality-related impacts would be greater while other impacts would be less. All

mitigation measures identified in Section 4.3, *Air Quality and Health Impacts/Risks*, would be required. Long term operational impacts related to PM₁₀ and exposing sensitive receptors to substantial hazardous air pollutant concentrations and objectionable odors would remain significant and unavoidable. Overall, air quality and health risk impacts of Alternative 2 would be similar to impacts under the 2040 MTP/SCS.

d. Biological Resources

Alternative 2 would further concentrate land use development within existing urbanized areas and would construct fewer transportation infrastructure projects such as roadway widening. As such, less overall ground disturbance outside of already-developed areas would occur. Because of the reduced ground disturbance, fewer impacts to biological resources impacts would occur, including impacts to special status plant and animal species, sensitive habitats and wildlife movement. As some transportation projects and land use development could occur in previously undeveloped or otherwise sensitive areas throughout the AMBAG region, some biological resources impacts could still occur. Mitigation measures identified in Section 4.4, *Biological Resources*, would still be required and impacts would remain significant and unavoidable. Overall, however, the severity of this impact would be less than for the proposed 2040 MTP/SCS.

e. Cultural and Historic Resources

As discussed previously, this alternative would result in less overall ground disturbance outside of existing urbanized areas. As a result, Alternative 2 would generate fewer impacts to archaeological and paleontological resources than the 2040 MTP/SCS, but impacts resulting from the transportation projects would remain similar. Mitigation identified in Section 4.5, *Cultural and Historic Resources*, would continue to be required and impacts would remain significant and unavoidable, similar to the 2040 MTP/SCS. However, the overall severity of these impacts would decrease under this alternative.

Although archaeological and paleontological impacts would decrease under this alternative, impacts to historical resources may increase. This is because more development would occur within existing urban areas, where historical buildings and structures are more likely to be located. Redevelopment or demolition that may be required to implement transportation improvements and/or infill development under this alternative may result in the permanent loss of more historic structures than the 2040 MTP/SCS. While implementation of Mitigation Measure CR-1 would reduce impacts to the extent feasible, some project-specific impacts may be unavoidable. Overall, impacts would be similar to 2040 MTP/SCS with some impacts being greater, while other impacts would be less, but impacts to historic, archaeological and paleontological resources would remain significant and unavoidable.

f. Energy

The proposed 2040 MTP/SCS land use scenario emphasizes infill and TOD projects that would locate both residents and jobs closer to existing and planned high quality transit, thereby encouraging the use of alternative modes of transit (e.g. buses, rail), walking and bicycling. Improvements that would occur under Alternative 2 would serve a similar purpose; however, the density and intensity of infill development would increase. In addition, this alternative would include greater investments in transit and alternative transportation modes. Given the increased density and focus on transit, this alternative would decrease VMT as compared to the 2040 MTP/SCS: from 19,687,508 daily VMT to 19,678,332 daily VMT, a decrease of approximately 0.04 percent (see Modeling Methodology in

Appendix F to the 2040 MTP/SCS). As discussed in Section 4.6, *Energy*, the 2040 MTP/SCS would not result in inefficient, unnecessary, or wasteful direct or indirect consumption of energy. The same is true for this alternative, and when compared to the 2040 MTP/SCS, this alternative would serve to reduce the overall consumption of energy, such that impacts would be reduced when compared to the 2040 MTP/SCS. Impacts related to inefficient, unnecessary, or wasteful direct or indirect energy consumption would continue to be less than significant.

The 2040 MTP/SCS would generate energy demand that may require construction of new energy facilities; this impact, as discussed in Section 4.6, *Energy*, would be significant and unavoidable. Although Alternative 2 would reduce the amount of energy consumed overall, it too may require the construction of expansion of energy facilities to meet future demand. This impact would therefore be significant and unavoidable, similar to the 2040 MTP/SCS. Overall, because Alternative 2 would reduce the amount of energy consumed compared to the 2040 MTP/SCS, impacts would be less than the 2040 MTP/SCS.

g. Geology and Soils

This alternative would concentrate land use development in infill areas and would focus transportation investments on transit and active transportation modes, rather than new or expanded roadways. As a result, development would be more compact in general, and fewer highway and road projects would be constructed. As such, fewer large-scale infrastructure projects would be at risk of both fault rupture and ground-shaking hazards. Although land development would be more compact, such development would accommodate the same number of residents and employees in the future. Therefore, the same number of people would potentially be exposed to the risk of injury or death from structural failure. Impacts related to seismic hazards, liquefaction, unstable soils and landslides would therefore be similar to or slightly less than the 2040 MTP/SCS. Mitigation identified in Section 4.7, *Geology and Soils*, would continue to apply and impacts would be significant but mitigable.

Because future land use and capital improvement projects under this alternative would be more dense and concentrated, less overall ground disturbance would occur. Construction-related soil erosion impacts would therefore be reduced, and would be less than significant, as with the 2040 MTP/SCS. Overall, geology and soils impacts would be less than under the 2040 MTP/SCS.

h. Greenhouse Gas Emissions/Climate Change

Construction-related GHG emissions under this alternative would be similar to the proposed 2040 MTP/SCS because the number and types of projects constructed would be similar. Annual GHG emissions during operations of Alternative 2 would be slightly lower (0.01 percent) than the proposed project (see Modeling Methodology in Appendix F to the 2040 MTP/SCS), primarily due to the decrease of VMT and the focus towards TOD and infill development near high quality transit. Because long-term emissions of GHGs would be lower under this alternative, the overall impact would be less than under the 2040 MTP/SCS. This alternative is expected to meet the GHG emission reduction requirements associated with SB 375 due to lower VMT, increased transit and other measures. All mitigation measures included in Section 4.8, *Greenhouse Gas Emissions/Climate Change*, would be required.

i. Hazards and Hazardous Materials

This alternative would concentrate land use development in infill areas and would focus transportation investments on transit and active transportation modes, rather than new or

expanded roadways. These changes in the type and location of transportation and land use development projects would not substantially alter the amount of hazardous materials that are used, stored, or transported in the AMBAG region. Overall, the amount of hazardous materials being transported in the region would remain the same. Because Alternative 2 would be subject to existing regulations and programs, impacts relating to routine transport, use, or disposal of hazardous materials; risk of upset and accident conditions; emissions within one-quarter mile of a school; airport hazards; and interference with emergency response and evacuation plans would be less than significant, similar to 2040 MTP/SCS. Because this alternative would reduce the amount of housing near wildlands, it would decrease the vulnerability of people and structures to wildland fire. However, this impact would remain significant and unavoidable given the fire hazard across much of the AMBAG region. Compared to the 2040 MTP/SCS, the overall impact of Alternative 2 would be less.

j. Hydrology and Water Quality

As discussed previously, this alternative would result in less overall ground disturbance outside of existing urbanized areas. As a result, Alternative 2 would introduce fewer impervious surfaces than the 2040 MTP/SCS and would therefore generate less runoff. Because projects would be concentrated in urban areas, runoff would include more urban pollutants such as heavy metals from auto emissions, oil and grease than projects under the 2040 MTP/SCS. However, because less development would occur in agricultural areas, there would not be agricultural runoff onto adjacent urban areas containing fertilizers and pesticides. While projects under this alternative may require less grading and vegetation removal, including in proximity to creeks, the urban nature of this alternative may result in more disturbance of soils on previously contaminated sites. As such, water quality in creeks may be less impacted, but water quality within urban areas may be more impacted. Because of these tradeoffs, Alternative 2 would be anticipated to have comparable water quality impacts in that water quality impacts would be greater in some areas while less in other areas compared to the 2040 MTP/SCS. Compliance with existing regulations would reduce impacts to a less than significant level, similar to the 2040 MTP/SCS.

In terms of water supply, this alternative would have less potential to reduce groundwater recharge and would result in less landscaping due to the denser development pattern. The types of projects under this alternative may generate demand for water during construction and operation, similar to the 2040 MTP/SCS projects. While groundwater recharge would be slightly better under this alternative, this alternative would still generate water demand. Given that overdraft conditions of area groundwater basins and other regional water supply concerns would still occur under Alternative 2, impacts regarding water supply and demand would remain significant and unavoidable. All related mitigation measures identified in Section 4.10, *Hydrology and Water Quality*, would be required.

Overall hydrology and water quality impacts would be similar to the 2040 MTP/SCS.

k. Land Use

As with the 2040 MTP/SCS, this alternative would not be anticipated to divide an established community. As noted in Section 4.11, *Land Use*, the 2040 MTP/SCS includes a list of planned and programmed projects including local and regional capital improvements that have been anticipated or accounted for in local general plans and regional, statewide and federal transportation improvement programs. In addition, the objective of the 2040 MTP/SCS is to provide for a comprehensive transportation system of facilities and services that meets public need for the

movement of people and goods, and that is consistent with the social, economic and environmental goals and policies of the region. Alternative 2 would continue to provide capital improvements planned within the region. In addition, given the increased focus on infill, TOD, transit and active modes of transportation, this alternative would do more to achieve social, economic and environmental goals and policies in the region. Land use impacts would therefore be less under this alternative.

Because Alternative 2 is similar to the 2040 MTP/SCS, it would result in the same significant and unavoidable impacts to the identified environmental issue areas, potentially creating inconsistencies with city or county policies intended to protect these resources but for several resources these impacts would be less than under the 2040 MTP/SCS. Therefore, impacts related to consistency with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating environmental effects under this alternative would be less than under the 204 MTP/SCS, and continue to be significant and unavoidable.

I. Noise

Because transportation and land use projects would be more concentrated in already-developed areas under this alternative, more construction could occur within close proximity to sensitive receptors. Because more receptors would be exposed to construction noise under this alternative, these impacts would be greater than those for the 2040 MTP/SCS. Construction-related mitigation measures in Section 4.12, *Noise*, would continue to be required, and the impact would remain significant and unavoidable.

As discussed under *Transportation and Circulation* below, this alternative would reduce VMT when compared to the 2040 MTP/SCS. Therefore, operational noise generated by passenger vehicles would decrease. Given the nominal reduction in VMT, this overall reduction would likely not be noticeable. While this alternative would increase the use of alternative modes, including transit, bus and shuttle services would likely occur primarily within urbanized areas, which already experience high ambient noise levels. However, sensitive receptors would be more concentrated in urban areas. Mitigation measures identified in Section 4.12, *Noise*, would continue to be required and impacts would remain significant and unavoidable, similar to the 2040 MTP/SCS. Overall impacts to noise under Alternative 2 would be similar to impacts of the 2040 MTP/SCS.

m. Population and Housing

This alternative would result in the same population increase in the region by 2040 as the proposed 2040 MTP/SCS. As such, impacts related to population growth would be similar to the 2040 MTP/SCS and would continue to be significant and unavoidable. Because of the higher density development pattern, potential for displacement would be higher under this alternative. However, the net increase in housing units by 2040 would offset this temporary impact, similar to the 2040 MTP/SCS. This impact would be less than significant. Overall population and housing impacts would be similar to the 2040 MTP/SCS.

n. Transportation and Circulation

Alternative 2 would include a similar range of transportation improvement projects as identified for the proposed 2040 MTP/SCS, with greater priority given to bicycle, pedestrian and local transit connections. Many of these projects are intended to address traffic congestion identified by local agencies in the RTPs, and in many cases would mitigate potential impacts associated with planned long-term development projects. However, others are intended to support improvements along

commercial corridors to facilitate access to alternative transportation modes. Thus, this alternative would decrease daily VMT from 19,687,508 VMT for the 2040 MTP/SCS to 19,678,332 VMT for Alternative 2 – a decrease of approximately 0.04 percent (see Modeling Methodology in Appendix F to the 2040 MTP/SCS). Based on this reduction in daily VMT, potential impacts to transportation and circulation would be less under Alternative 2 and those impacts that do occur may be focused in urban areas rather than suburban or rural areas. Regardless, impacts related to an increase in CVMT and VMT would remain significant and unavoidable. All mitigation measures included in Section 4.14, *Transportation and Circulation*, would be applicable to Alternative 2. Overall transportation impacts would be less than the 2040 MTP/SCS.

o. Tribal Cultural Resources

As discussed previously, this alternative would result in less overall ground disturbance outside of existing urbanized (disturbed) areas. As such, there would be less potential to disturb tribal cultural resources, including ancestral remains and sacred sites outside the urbanized areas. It should be noted, however, that such resources could be located within urbanized areas, and may be disturbed with relatively minor amounts of ground disturbance. As such, mitigation identified in Section 4.15, *Tribal Cultural Resources*, would continue to apply and the impact would be significant but mitigable. Overall impacts to tribal cultural resources under Alternative 2 would be similar to impacts of the 2040 MTP/SCS.

7.5 Alternative 3: Maintenance Mobility Alternative

7.5.1 Description

The Maintained Mobility Alternative incorporates the AMBAG Draft 2018 Regional Growth Forecast (AMBAG, 2017d) and includes a land use pattern comprised of more traditional suburban development compared to the land development envisioned in the 2040 MTP/SCS. The land use pattern in the 2040 MTP/SCS emphasize TOD and development of infill sites in existing urbanized areas of the AMBAG region. The suburban development included under Alternative 3 is less concentrating in urbanized areas or within proximity to transit services, but instead allows for development of open or vacant parcels or parcels with very little existing development on the site, often outside of but near urbanized areas. Suburban residential development is typically at lower density than residential infill development on a dwelling unit per acre basis.

Alternative 3 also includes a transportation network that consists of more traditional roadway and transit enhancements/projects focused on mobility and safety. Specifically, more emphasis is given to operations, maintenance projects and long distance transit service options to increase mobility within the region, including new rail service in Monterey and Santa Cruz County. The alternative would also include many operations and maintenance projects that are intended to improve safety on the region's local streets and roads. In comparison, the 2040 MTP/SCS focuses on mixed use infill development in commercial corridors with high quality transit and development of active transportation corridors to encourage biking or walking for shorter distance trips. Alternative 3 would seek to improve local roads and long distance transit service, but would not focus on reducing overall VMT in the region with more concentrated infill, TOD and local active travel options.

7.5.2 Impact Analysis

a. Aesthetics/Visual Resources

Alternative 3 would include a land use pattern consistent with existing general plans and a transportation network that includes more traditional roadway and transit enhancements/projects with more emphasis on operations and maintenance. Compared to the 2040 MTP/SCS, land use development would be less concentrated in infill and TOD areas. As such, land use under this alternative may result in greater impacts to scenic resources in the less developed portions of the AMBAG region. While this alternative would concentrate on operation and maintenance of the existing roadway network, capital improvement projects would still be implemented, continuing the gradual transformation toward a more urban/suburban character throughout the region and potential impacts to scenic vistas on designated scenic routes. Impacts related to scenic vistas, scenic resources and visual character would therefore be slightly greater under this alternative and all mitigation measures discussed in Section 4.1, *Aesthetics/Visual Resources*, would continue to be required.

b. Agricultural Resources

This alternative would result in more land use development outside of existing urbanized areas, including within areas currently used for agricultural production. In addition, more traditional roadway and transit projects under this alternative could result in more road widenings or extensions than the 2040 MTP/SCS. Given the extent of active and Important Farmland in Monterey, San Benito and Santa Cruz counties, impacts related to converting Important Farmland to non-agricultural use, conflicts between urban and agricultural land uses and conflicts with existing agricultural zoning and/or Williamson Act contracts would be greater under this alternative than for the proposed 2040 MTP/SCS. Impacts would remain significant and unavoidable and related mitigation measures referenced in Section 4.2, *Agricultural Resources*, would apply.

c. Air Quality and Health Impacts/Risks

This alternative would include a land use pattern comprised of existing general plans and a transportation network that includes more traditional roadway and transit enhancements/projects focused on mobility and safety. Because of the less-dense land use pattern, implementation of this alternative would result in more short-term construction-related air quality impacts as compared to the proposed 2040 MTP/SCS. Although traditional development patterns would increase construction and construction-related emissions, fewer sensitive receptors would be exposed to TACs, as most construction would occur outside of urbanized areas. Under this alternative, ROG, NO_x and PM₁₀ emissions would be higher compared to the proposed 2040 MTP/SCS (see Modeling Methodology in Appendix F to the 2040 MTP/SCS). The overall VMT would be higher in Alternative 3 than the 2040 MTP/SCS by approximately 97,664 VMT. All mitigation measures identified in Section 4.3 *Air Quality* would be required. Long term operational impacts related to PM₁₀ and exposing sensitive receptors to substantial hazardous air pollutant concentrations and objectionable odors would remain significant and unavoidable. Overall air quality and health risk impacts under Alternative 3 would be greater than the impacts of the 2040 MTP/SCS.

d. Biological Resources

This alternative would include a land use pattern comprised of existing general plans and a transportation network that includes more traditional roadway and transit enhancements/projects

focused on mobility and safety. The land use pattern would therefore be less dense than the 2040 MTP/SCS, and the more traditional roadway and transit projects under this alternative could result in more road widenings or extensions than the 2040 MTP/SCS. As a result, more development would be expected to occur outside of existing urbanized areas, including in areas providing habitat for special status plant and animal species. Overall impacts to special status plants, animals, wetlands and/or riparian habitat and wildlife movement outside developed urban areas would therefore be greater than under the 2040 MTP/SCS. Impacts would remain significant and unavoidable, and all related mitigation measures referenced in Section 4.3, *Biological Resources*, would apply.

e. Cultural and Historic Resources

As discussed previously, this alternative would result in more overall ground disturbance outside of existing urbanized areas. As a result, Alternative 3 would generate more impacts to archaeological and paleontological resources than the 2040 MTP/SCS. Mitigation identified in Section 4.5, *Cultural and Historic Resources*, would continue to be required and impacts would be significant and unavoidable, similar to the 2040 MTP/SCS.

Although archaeological and paleontological impacts would increase under this alternative, impacts to historical resources may decrease. This is because less development would occur within existing urban areas, where historical buildings and structures are more likely to be located. Redevelopment or demolition that may be required to implement transportation improvements and/or infill development under the 2040 MTP/SCS may result in the permanent loss of more historic structures. While this could still occur under Alternative 3, depending on the location and specific features of projects, the potential for this to occur would decrease. Implementation of Mitigation Measure CR-1 would reduce impacts to the extent feasible. However, overall, impacts would be similar to 2040 MTP/SCS with some impacts being greater, while other impacts would be less, with impacts remaining significant and unavoidable.

f. Energy

As discussed under *Transportation and Circulation* below, Alternative 3 would have similar transportation benefits, particularly related to highway/street operations, as envisioned under the 2040 MTP/SCS. However, it would result in less compact development than the 2040 MTP/SCS. In combination, these changes would result in an increase in VMT: from 19,687,508 daily VMT to 19,785,172 daily VMT, an increase of approximately 0.4 percent (see Modeling Methodology in Appendix F to the 2040 MTP/SCS). More vehicle trips would translate to higher total and per capita energy use as compared to the 2040 MTP/SCS. As discussed in Section 4.6, *Energy*, the 2040 MTP/SCS would not result in inefficient, unnecessary, or wasteful direct or indirect consumption of energy. When compared to the 2040 MTP/SCS, this alternative would serve to slightly increase the overall consumption of energy, such that impacts would be increased when compared to the 2040 MTP/SCS. However, this alternative would not result in inefficient, unnecessary, or wasteful direct or indirect energy consumption, and impacts would continue to be less than significant.

The 2040 MTP/SCS would generate energy demand that may require construction of new energy facilities; this impact, as discussed in Section 4.6, *Energy*, would be significant and unavoidable. Alternative 3 would increase the amount of energy consumed overall, and may require the construction of expansion of energy facilities to meet future demand. This impact would therefore be significant and unavoidable, similar to the 2040 MTP/SCS. However, because this alternative

would consume more energy compared to the 2040 MTP/SCS, overall energy impacts would be greater.

g. Geology and Soils

While this alternative would include more traditional roadway improvements, such as widening projects, the emphasis would be on operations and maintenance. As such, fewer large-scale capital improvement projects would be expected, such that fewer projects would be at risk of both fault rupture and ground-shaking hazards. While land use development under this alternative would be more likely to occur outside of existing urbanized areas, such development would accommodate the same number of residents and employees in the future as the 2040 MTP/SCS. Therefore, the same number of people would potentially be exposed to the risk of injury or death from structural failure. Impacts related to seismic hazards, liquefaction, unstable soils, and landslides would therefore be similar to the 2040 MTP/SCS. Mitigation identified in Section 4.7, *Geology and Soils*, would continue to apply.

h. Greenhouse Gas Emissions/Climate Change

Construction-related GHG emissions under this alternative would be greater than compared to those associated with the 2040 MTP/SCS because the land use pattern comprises of existing general plans and a transportation network that includes more traditional roadway and transit enhancements/projects focused on mobility and safety. Since less infill and TOD is anticipated, implementation of this alternative would result in higher VMT when compared to the proposed 2040 MTP/SCS as Alternative 3. Due to the increase of approximately 97,664 VMT, this alternative would increase operational GHG emissions by 0.21 percent compared to the 2040 MTP/SCS (see Modeling Methodology in Appendix F to the 2040 MTP/SCS). Therefore, this alternative would have a greater impact on GHG emissions compared to the proposed project.

i. Hazards and Hazardous Materials

This alternative would include more traditional roadway improvements, such as widening projects, with the emphasis on operations and maintenance. As such, fewer large-scale capital improvement projects would be expected, resulting in fewer infrastructure projects being constructed. This would reduce hazardous material use, storage and transportation resulting from construction of those projects. However, the amount of hazardous materials being transported to support land use development in the region would remain the same. Because Alternative 3 would be subject to existing regulations and programs, impacts relating to routine transport, use, or disposal of hazardous materials; risk of upset and accident conditions; emissions within one-quarter mile of a school; airport hazards; and interference with emergency response and evacuation plans would be less than significant, similar to 2040 MTP/SCS. Because this alternative would allow more housing near wildlands, it would increase the vulnerability of people and structures to wildland fire. This impact, which is significant and unavoidable for the 2040 MTP/SCS, would be greater under the No Project Alternative and would remain significant and unavoidable. Due to the increased severity of this significant impact, overall hazards and hazardous materials impacts would be greater under this alternative than under the 2040 MTP/SCS.

j. Hydrology and Water Quality

As discussed previously, this alternative would result in more overall ground disturbance areas as compared to the proposed 2040 MTP/SCS. As a result, Alternative 3 would introduce more

impervious surfaces than the 2040 MTP/SCS and would therefore generate more runoff. Pollutants would include a mix of urban runoff, including heavy metals and oil, and rural area runoff, including fertilizers and pesticides. Because of the increase in impervious surfaces and associated runoff, water quality impacts would be greater under this alternative compared to the 2040 MTP/SCS. Existing regulations identified in Section 4.10, *Hydrology and Water Quality*, would continue to apply and impacts related to water quality would be less than significant.

Increases to water demand are primarily associated with increased population levels. Alternative 3 would result in the same population increase in 2040 as the MTP/SCS. However, this alternative would result in less dense land use development, which would result in a less efficient water supply system (e.g., greater areas of irrigated landscaping). As such, future water demand associated with this alternative would be greater than water demand for the 2040 MTP/SCS. This impact, which is significant and unavoidable for the 2040 MTP/SCS, would be greater under alternative. Mitigation would continue to apply and impacts would remain significant and unavoidable. Overall hydrology and water quality impacts would be greater than the 2040 MTP/SCS.

k. Land Use

As with the 2040 MTP/SCS, this alternative would not be anticipated to divide an established community. As noted in Section 4.11, *Land Use*, the 2040 MTP/SCS includes a list of planned and programmed projects including local and regional capital improvements that have been anticipated or accounted for in local general plans and regional, statewide and federal transportation improvement programs. In addition, the objective of the 2040 MTP/SCS is to provide for a comprehensive transportation system of facilities and services that meets public need for the movement of people and goods, and that is consistent with the social, economic and environmental goals and policies of the region. Alternative 3 would continue to provide capital improvements planned within the region. However, given that development would be less concentrated within existing urbanized areas, this alternative would do less to achieve social, economic and environmental goals and policies in the region. In addition, this alternative would increase the severity of several environmental impacts, as discussed herein. As such, it would conflict with State and local policies and regulations adopted for the purpose of avoiding or mitigating environmental effects. Because environmental effects would generally increase under this alternative and result in more potential conflicts with policies and regulations to prevent or reduce environmental effects, the overall land use impact would be greater under this alternative when compared to the 2040 MTP/SCS. Impacts would remain significant and unavoidable

l. Noise

Because this alternative would result in construction of more traditional roadway improvements, such as road extensions and widening, construction-related noise may increase. However, the land use pattern under this alternative would be less dense overall, such that construction-related noise would be less concentrated within areas with existing sensitive receptors. However, construction noise would still occur and impacts would continue to be significant and unavoidable. All related mitigation measures specified in Section 4.12, *Noise*, would be required.

As discussed under *Transportation and Circulation* below, this alternative would increase VMT when compared to the 2040 MTP/SCS. Therefore, operational noise generated by passenger vehicles would increase, although the nominal increase would likely not be noticeable. Mobile source noise levels resulting from traffic would therefore be similar under Alternative 3 when compared to the 2040 MTP/SCS. Mitigation measures identified in Section 4.12, *Noise*, would continue to be required

and impacts would remain significant and unavoidable, similar to the 2040 MTP/SCS. Overall, Alternative 3 would result in similar noise impacts as the 2040 MTP/SCS.

m. Population and Housing

Alternative 3 would result in the same population increase in the region by 2040 as the proposed 2040 MTP/SCS. As such, impacts related to population growth would be similar to the 2040 MTP/SCS and would continue to be significant and unavoidable. Because fewer transportation projects would be implemented and land uses would be less dense (thus resulting in less demolition and redevelopment of existing housing), displacement-related impacts would be reduced under this alternative when compared to the 2040 MTP/SCS. This impact would be less than significant. Overall population and housing impacts would be slightly less than the 2040 MTP/SCS.

n. Transportation and Circulation

Alternative 3 would involve a similar range of transportation improvement projects as compared to the 2040 MTP/SCS. However, there is a greater emphasis on roadway improvements in this alternative. Many of these projects would expand capacity, relieve traffic congestion, maintain the local and regional roadways, and in many cases are intended as mitigation measures to reduce potential impacts associated with planned long-term development. Therefore, Alternative 3 would have similar transportation benefits, particularly related to highway/street operations as envisioned under the 2040 MTP/SCS. This alternative does not involve modifications to land use patterns; and therefore, would result in less compact development than the 2040 MTP/SCS. In combination, these changes to the transportation project list and land use scenario would result in slightly higher VMT when compared to the 2040 MTP/SCS: from 19,687,508 daily VMT to 19,785,172 daily VMT, an increase of approximately 0.4 percent (see Modeling Methodology in Appendix F to the 2040 MTP/SCS).

Nonetheless, both VMT and CVMT would increase between 2015 and 2040 as a result of population and employment growth, regardless of the alternative implemented. Based on VMT, potential impacts to transportation and circulation could be reduced under Alternative 3, although potential impacts would remain significant and unavoidable. All mitigation measures included in Section 4.14, *Transportation and Circulation*, would be applicable to Alternative 2. Overall transportation impacts would be similar to the 2040 MTP/SCS.

o. Tribal Cultural Resources

As discussed previously, this alternative would result in more overall ground disturbance outside of existing urbanized (disturbed) areas. As such, there would be more potential to disturb tribal cultural resources, including ancestral remains and sacred sites. Mitigation identified in Section 4.15, *Tribal Cultural Resources*, would continue to apply and the impact would be significant but mitigable. However, because of the increased potential to disturb tribal cultural resources from development outside of urbanized areas, the overall impact of the Alternative 3 would be greater than under the 2040 MTP/SCS.

7.6 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6 requires that an EIR identify the environmentally superior alternative among the alternatives analyzed. CEQA Guidelines Section 15126.6(d)(2) states that if the No Project Alternative is identified as the environmentally superior alternative, the EIR shall also

identify an environmentally superior alternative from among the other alternatives analyzed. This section compares the impacts of the three alternatives under consideration to those of the 2040 MTP/SCS, in compliance with the CEQA Guidelines.

Table 54 shows whether each alternative would have impacts that are less than, similar to, or greater than the 2040 MTP/SCS for each of the issue areas studied.

In conducting the alternatives analysis, consideration must be given as to how, and to what extent, an alternative can meet the project's basic objectives. As discussed in Section 2.0, *Project Description*, the primary objective of the MTP/SCS is to comply with applicable regulatory requirements, including CTC RTP Guidelines and SB 375, including SB 375's regional GHG reduction targets. AMBAG's specific objectives for the 2040 MTP/SCS are to additionally ensure that the transportation system planned for the AMBAG region accomplishes the following:

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

Based on the above analysis and summary in Table 54, Alternative 2 is the environmentally superior alternative, assuming all environmental issue areas are weighted equally. Under Alternative 2, land use patterns would further concentrate forecasted population and employment growth in urban areas with a focus on infill, mixed use and TOD in and around commercial corridors. Alternative 2 could be considered environmentally superior to the 2040 MTP/SCS primarily because, as shown in Table 54, overall impacts to the following resources would be less: agricultural resources, biological resources, energy, geology and soils, greenhouse gases, hazards and hazardous materials, land use and transportation and circulation.

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

The No Project Alternative (Alternative 1) would result in a less dense development pattern compared to the 2040 MTP/SCS, with Alternative 1 continuing existing land use trends. Because of the increased land development outside of existing urbanized areas, Alternative 1 would result in more ground disturbance than the 2040 MTP/SCS. Consequently, compared to the 2040 MTP/SCS, Alternative 1 would have greater overall impacts to agricultural resources, biological resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, transportation and circulation and tribal cultural resources. As shown in Table 54, the total overall impact of Alternative 1 would be greater than the 2040 MTP/SCS.

Alternative 1 would implement committed transportation projects in the MTIP, but would not include other transportation infrastructure projects identified by the RTPAs. This alternative would not meet the SB 375 requirement for preparation of an SCS. Alternative 1 does not meet the key implementation strategies of the MTP/SCS regarding *Economic Development* to encourage infill housing; *Land Use and Environment* to prioritize corridor investment projects along high quality transit corridors that serve multiple modes of travel, and prioritize projects for funding that are consistent with the Sustainable Communities Strategy goals; or *Transportation* to facilitate local jurisdiction adoption and implementation of a complete streets policy and provide local community shuttles or circulators that serve transit oriented development, high quality transit stops and neighborhood commercial centers.

Alternative 3 would result in a less dense development pattern than the 2040 MTP/SCS.

Alternative 3 would promote a land use pattern comprising of existing general plans. Because of the increased land development outside of existing urbanized areas, this alternative would result in more ground disturbance than the 2040 MTP/SCS, and as shown in Table 54, greater overall impacts to aesthetics/visual resources, agricultural resources, air quality, biological resources, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, and tribal cultural resources. As shown in Table 54, the total overall impact of Alternative 3 would be greater than the 2040 MTP/SCS.

Alternative 3 would meet project objectives, but not to the extent of the 2040 MTP/SCS. Alternative 3 would include transportation investments and would adopt an SCS, thus meeting the fundamental objective of complying with applicable regulatory requirements. However, because development would be less focused on infill and TOD areas, and because fewer transportation improvements focused on alternative and active modes would be provided, Alternative 3 would not promote energy efficient, environmentally sound modes of travel, nor promote efficiency in the distribution of transportation projects and services, to the same extent as the 2040 MTP/SCS.

Table 54 Impact Comparison of Alternatives

Issue	Alternative 1: No Project	Alternative 2: Livable Communities	Alternative 3: Maintained Mobility
Aesthetics/Visual Resources	=	=	-
Agriculture and Forestry Resources	-	+	-
Air Quality and Health Impacts/Risks	+	=	-
Biological Resources	-	+	-
Cultural and Historic Resources	=	=	=
Energy	=	+	-
Geology and Soils	-	+	=
Greenhouse Gas Emissions/Climate Change	-	+	-
Hazards and Hazardous Materials	-	+	-
Hydrology and Water Quality	-	=	-
Land Use	-	+	-
Noise	=	=	=
Population and Housing	+	=	+
Transportation and Circulation	-	+	=
Tribal Cultural Resources	-	=	-
Total	-	+	-

Note: Comparison of impacts is based on the overall impact of the alternative on the resource or issue.

+ Alternative would result in less impacts than the 2040 MTP/SCS

= Alternative would result in impacts similar to the 2040 MTP/SCS

- Alternative would result in greater impacts than the 2040 MTP/SCS

This page intentionally left blank.