

7.0 OTHER CONSIDERATIONS REQUIRED BY CEQA

As required by CEQA, this chapter provides an overview of other CEQA considerations based on the analyses presented in Chapters 4.0 and 6.0. The topics covered in this chapter include growth inducement, maximum theoretical buildout scenario, significant irreversible impacts, significant and unavoidable impacts, and effects found not to be significant.

7.1 GROWTH INDUCEMENT

7.1.1 BACKGROUND

A project is defined as growth inducing when it directly or indirectly fosters economic growth, population growth, or additional housing; when it removes obstacles for growth; and/or when it encourages or facilitates other activities that could significantly affect the environment (CEQA Guidelines Section 15126.2). Growth inducement is generally dependent on the presence or lack of existing utilities, and municipal or public services. Examples of growth-inducing actions include developing water, wastewater, fire, or other types of services in previously unserved areas; extending transportation routes into previously undeveloped areas; and establishing major new employment opportunities. Once services are extended into a project area, economic pressures to develop are anticipated.

7.1.2 ECONOMIC GROWTH, POPULATION GROWTH

Although the San Diego region is projected to grow with or without implementation of the 2050 RTP/SCS, the 2050 RTP/SCS focuses population and economic growth in strategic areas near transit and transportation services and in areas with existing utilities and municipal or public services. The long-term growth pattern included in the 2050 RTP/SCS would decrease environmental impacts in vacant or undisturbed lands or open space.

The proposed project features included in the 2050 RTP/SCS are intended to expand upon the current transportation network and enhance the transit-oriented transportation opportunities to improve the mobility of people and goods in and around the region, while reducing GHG emissions and other environmental impacts. The 2050 RTP/SCS does include the expansion of existing transportation and transit routes, which would remove obstacles to growth in some areas of the region and support additional housing, population, and economic growth. Section 4.13, Population and Housing, discusses projected regional population and employment growth associated with the 2050 RTP/SCS.

7.1.3 CONSTRUCTION OF ADDITIONAL HOUSING

One of the primary objectives of the 2050 RTP/SCS is to provide an environmentally sustainable transportation system and Sustainable Communities Strategy fostering efficient concentrated land development patterns, thereby increasing the number of housing units within specific areas identified in the land use plans of local jurisdictions. Therefore, by its very nature (increasing the density of development), the 2050 RTP/SCS is growth inducing. However, the area the 2050 RTP/SCS targets for construction of these additional housing units is within existing developed areas. Therefore, it is likely that many of these areas have already established roadways and utilities, as well as water and sewer services. The placement of additional housing units in established areas may require upgrading and resizing of existing infrastructure, including water facilities. Therefore, implementation of the 2050

RTP/SCS would cause significant construction of additional housing. Section 4.13, Population and Housing, discusses projected housing development to meet the needs of regional population growth.

7.2 MAXIMUM THEORETICAL BUILDOUT SCENARIO

7.2.1 BACKGROUND

The theoretical buildout scenario is included in this EIR to disclose the theoretical impacts of theoretical full development of the 2050 RTP/SCS land use forecast. The theoretical buildout scenario demonstrates residential and nonresidential development levels that could theoretically be achieved by the 2050 RTP/SCS land use forecast. Due to regulatory constraints, physical constraints, and foreseeable market conditions, realization of this scenario is not reasonably foreseeable and is highly unlikely, but the program EIR nevertheless includes an analysis of this scenario because the jurisdictional land use plans associated with the 2050 RTP/SCS land use forecast do provide the theoretical capacity for residential units and nonresidential building square feet to allow the buildout estimates presented in Table 7.2-1.

**Table 7.2-1
Maximum Theoretical Buildout**

	Housing Units	Jobs (Military and Civilian)
2010 Baseline	1,149,426	1,501,080*
Estimated Maximum Theoretical Buildout Capacity (2010 to 2050)	427,113	624,303
2050 Estimated Maximum Theoretical Buildout (2010 Baseline plus Capacity)	1,576,539	2,125,383

Source: SANDAG 2011

*SANDAG collects address-level employer records from the California Employment Development Department (EDD) and supplements those data with business license records from the local jurisdictions as well as uniformed military jobs numbers from Navy Region Southwest. SANDAG uses 2008 employment data from EDD for planning purposes in the 2050 RTP/SCS. At this time, 2010 employment data are not available from EDD.

Theoretical buildout assumes full development of the capacity of all land use plans associated with the 2050 RTP/SCS, pursuant to the maximum density and/or intensity specified in the Land Use elements of each general plan. Such development would represent a substantial change in the level of residential and nonresidential development described for existing conditions. Under the theoretical buildout scenario, when compared to existing conditions, there would be a 38 percent increase in total housing units and a 42 percent increase in the number of jobs by 2050. By comparison, the 2050 Regional Growth Forecast projects a 34 percent increase in total housing units and a 33 percent increase in the number of jobs by 2050.

The capacity of the theoretical buildout scenario was estimated by analyzing potential plan density on a parcel level. The capacity analysis takes into account estimated developmental constraints on each parcel, such as steep slopes, floodplains, and zoning restrictions, which would limit maximum allowable development under land use plans.

Given the generalized, highly theoretical nature of this buildout analysis, the analysis did not account for variations due to the implementation of additional regulations or site-specific conditions that could affect attainment of density. For example, parking requirements, slope and other land suitability characteristics, and implementation of environmental regulations may make attainment of maximum densities and/or intensities infeasible, and site-specific easements may restrict development of certain properties to levels below what is permitted by the zoning. Another variable is that decision makers in each jurisdiction have the authority to approve, deny, or modify discretionary projects based on numerous site-specific factors.

7.2.2 VISUAL RESOURCES/AESTHETICS

Under the theoretical buildout scenario, neighborhoods that are below maximum buildout could be subject to redevelopment to achieve buildout. As such, the neighborhood character and the aesthetic quality of many areas could be dramatically altered. Development in commercial areas would also be enlarged to meet maximum buildout potential, which would be strikingly different from the current environment. View corridors, as well as views from state designated scenic highways, would be substantially altered if not blocked completely in some areas based on the construction of higher new buildings compared to existing structures. Impacts would be greater than with implementation of the 2050 RTP/SCS. The greater amount of development under the theoretical buildout scenario would also have the potential to substantially degrade the existing character of areas of the region, including adding a visual element of urban character to an existing rural or open space area. Due to the magnitude of change in intensity of development under the theoretical buildout scenario, impacts to aesthetics and visual resources would be significant and unavoidable.

7.2.3 AGRICULTURE AND FOREST RESOURCES

Implementation of the 2050 RTP/SCS would cause significant and unavoidable impacts to agricultural lands, including areas with existing agricultural uses, FMMP-designated lands, lands with Williamson Act contracts, or lands designated under the California Farmland Conservancy Act. Under the theoretical buildout scenario, lands with existing low-density residential uses that encourage or sustain agricultural operations may be developed to achieve maximum buildout and may no longer support agricultural operations. Additionally, a greater number of lands used for agricultural operations may be impacted by encroaching residential or commercial development. Areas adjacent to lands zoned for agricultural uses may be developed to achieve maximum density in such a way as to cause land use conflicts, as the non-agricultural uses would be in proximity to odors, runoff, and other effects. Impacts to agricultural lands would be greater than with implementation of the 2050 RTP/SCS and much greater than existing conditions, and would be significant and unavoidable under the maximum development scenario.

The 2050 RTP/SCS would result in significant impacts to forest lands. Under the theoretical buildout scenario, lands with existing low-density residential uses that include forest lands may be developed to achieve maximum buildout, and the theoretical buildout scenario may decrease acreage of forest lands in the region. Therefore, impacts to agriculture and forest resources would be significant and unavoidable.

7.2.4 AIR QUALITY

Under theoretical buildout conditions, the increased development capacity and density would add a substantial number of automobile or transit trips and stationary source emissions, which would affect the region's ability to meet regional, state, and federal clean air standards, including the RAQS or SIP.

This increase in development could also create air emissions that could substantially degrade ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations. The construction needed to create this increase in density would be a considerable source of NO_x, CO₂, and ROG from the diesel fuel used to operate construction equipment. In addition, construction activities associated with the theoretical buildout scenario would generate additional vehicle trips by construction workers traveling to and from construction sites. Therefore, implementation of the theoretical buildout scenario would result in localized short-term air quality impacts. Although the 2050 RTP/SCS includes policies and implementation programs that would lessen impacts, the magnitude of change in the level of residential and nonresidential development under the theoretical buildout scenario would result in

substantial numbers of new residents, visitors, and workers in the region. Increasing the density of development in the region could potentially increase the share of trips completed by alternative modes, including pedestrian, bike, and transit trips, and result in lower per capita energy use compared to existing conditions or the anticipated development under the 2050 RTP/SCS. However, the volume of emissions would still be expected to increase and would result in impacts to air quality that could not be mitigated without major advancements in technology or restrictions on travel. Therefore, impacts to air quality would be significant and unavoidable.

7.2.5 BIOLOGICAL RESOURCES

Impacts to biological resources would be greater under the theoretical buildout scenario. Under this scenario, areas that are vacant and not preserved or protected, or areas of low density would be developed to allow higher density uses. Some of these areas, specifically those designated for “spaced rural residential land use” in rural areas, currently support biological resources such as native habitat, sensitive plants, sensitive wildlife, and wildlife corridors. Increased development would cause permanent direct impacts to these biological resources by removal of habitat, corridors, and direct losses to sensitive species. Additionally, indirect impacts would occur due to the following: habitat fragmentation and isolation; edge effects; increased noise from construction and operation of higher density uses; habitat degradation from changes in hydrology, runoff, and sedimentation; increased lighting; increased exotic species; fugitive dust from construction; and alteration of fire regimes. Therefore, impacts to biological resources would be significant and unavoidable.

7.2.6 CULTURAL RESOURCES AND PALEONTOLOGY

Development required under the theoretical buildout scenario would result in extensive ground disturbance that would occur during redevelopment of most of the region. The area of ground disturbance would be similar to that which is anticipated under the 2050 RTP/SCS. Because the majority of these projects would be infill and redevelopment, this grading would occur on previously graded surfaces. The likelihood of encountering archaeological resources is greatest on sites that have been minimally excavated in the past (e.g., undeveloped parcels, vacant lots, and lots containing surface parking, etc.). Previously excavated areas are generally considered to have a low potential for archaeological or historic resources, since the soil containing such resources has been removed. However, projects required to create the theoretical buildout scenario likely would involve underground parking areas, underground tanks, new pipelines, or replacement of pipelines, all at a lower depth than the previous development. The theoretical buildout scenario would result in more construction than under the 2050 RTP/SCS, which would increase potential impacts to paleontological resources and unique geological features.

Section 4.5, Cultural Resources and Paleontology, describes mitigation measures that would reduce all cultural resources impacts to a less than significant level. These mitigation measures would apply under the theoretical buildout scenario. Impacts would be less than significant with mitigation.

7.2.7 ENVIRONMENTAL JUSTICE

As discussed above, the theoretical buildout scenario would result in areas that are currently below maximum buildout experiencing a level of development that would result in full buildout. This buildout would occur in areas throughout the region, undoubtedly occurring in areas identified as environmental justice communities of concern. The impacts of the theoretical buildout scenario would likely cut across all environmental issue areas, including aesthetics and visual resources, transportation, land use, population and housing, noise, air quality, and hazardous materials. The development that would be expected to occur under the buildout scenario would likely alter the landscape in a manner quite different

from existing conditions, resulting in higher density, reduced transportation LOS, changes in community character and demographics, impaired view corridors, increased noise, harmful air quality levels, and the straining of natural resources and public services. It is unknown at this time what development projects would occur, or the associated project-level mitigation. However, it is possible that the impacts associated with the buildout scenario would accrue disproportionately to identified environmental justice communities of concern depending on the nature of the project; its specific location; and the direct, indirect, and cumulative impacts the project may have on the surrounding environmental quality and/or job opportunities afforded to environmental justice community stakeholders (which would have the potential to raise some environmental impacts to a level of significance (per CEQA Guideline 15131[b])). The environmental justice impacts associated with the theoretical buildout scenario would be considered significant and unavoidable.

7.2.8 GEOLOGY, SOILS, AND MINERALS

Although buildout of the maximum development scenario would result in larger numbers of people and structures potentially exposed to seismic and soil hazards, new buildings and utilities would be constructed according to existing state and local regulations to minimize geologic hazards. Geologic and seismic impacts would be less than significant for the theoretical buildout scenario, such as with the 2050 RTP/SCS. However, soil erosion and loss of topsoil would be significant under the theoretical buildout scenario, as a result of the construction of large development projects located in erosion-prone areas. Impacts would be greater than impacts associated with the 2050 RTP/SCS, as a greater number of projects would be constructed. The 2050 RTP/SCS includes mitigation measures described in 4.7, Geology, Soils, and Minerals, that would reduce impacts associated with erosion and loss of topsoil to a less than significant level. These mitigation measures would apply under the theoretical buildout scenario. Although the potential for impacting soil erosion and loss of topsoil would be greater than under the 2050 RTP/SCS, impacts would be less than significant with mitigation.

Under the theoretical buildout scenario, vacant or undeveloped land in areas with known mineral resources or MRZ-2 locations would be developed, decreasing the potential for extraction of mineral resources. Impacts would be greater under the theoretical buildout scenario than the 2050 RTP/SCS. As with the 2050 RTP/SCS, impacts to the availability of known mineral resources would be reduced with mitigation to preserve MRZ-2 locations, but impacts would remain significant and unavoidable.

7.2.9 GREENHOUSE GAS EMISSIONS

Increased development and transportation impacts under the theoretical buildout scenario would create an overall increase in GHG emissions, although per capita GHG emissions may remain the same if the type and location of development continue to be compact, mixed-use, and near transit options as identified in the 2050 RTP/SCS. Therefore, the theoretical buildout scenario would likely still achieve SB 375's per capita GHG emission reduction targets set by CARB for the San Diego region.

Although mass GHG emissions would increase under this scenario, it is likely that GHG emissions would not impede the transportation-related AB 32 emissions reduction goal in the San Diego region. Substantial GHG reductions will be achieved through the 2050 RTP/SCS and state legislation such as Pavley and LCFS, which would help to achieve the goals of AB 32. In addition, development under the theoretical buildout scenario would likely continue in a similar pattern as under the 2050 RTP/SCS, which encourages compact development, supporting rather than impeding the CAS. Impacts to GHG emissions and conflicts with applicable plans would be greater than under the 2050 RTP/SCS and but still less than significant.

7.2.10 HAZARDS AND HAZARDOUS MATERIALS

During redevelopment at the maximum permitted density, construction could occur on contaminated sites located throughout the region. Increased development would also lead to an increase in the use, transport, and disposal of hazardous materials, and potentially more leaking underground storage tanks as the number of underground storage tanks would increase overall. These conditions would create a much more substantial risk of exposing people or sensitive receptors (including schools) to potential health hazards than under the 2050 RTP/SCS because of the amount of development that would occur to create theoretical buildout conditions. Additionally, additional development projects would be located next to public or private airstrips, and would also have the potential to interfere with emergency plans and procedures. However, associated development projects under the theoretical buildout scenario would be required to comply with existing regulations to reduce such hazards, as described in Section 4.9, Hazards and Hazardous Materials, and would not be considered significant.

Considerable population growth associated with the increased density under the theoretical buildout scenario would occur in areas located in proximity to wildlife urban interface (WUI) and Fire Hazard Severity zones. As such, more people and structures would be at risk of significant loss, injury, or death from wildland fires, and impacts would be significant and unavoidable.

7.2.11 HYDROLOGY AND WATER QUALITY

The theoretical buildout scenario would result in development and redevelopment throughout the region, at a greater level than under the 2050 RTP/SCS. New areas of impermeable surface would be created as vacant or undisturbed areas would be paved; there would be substantial changes in absorption rates, drainage patterns, groundwater infiltration, or the rate of surface runoff. Because new construction would be required to comply with federal, state, and local regulations governing water quality and pollution prevention as described in Section 4.10, Hydrology and Water Quality, most water quality impacts would be less than significant, as with the 2050 RTP/SCS. However, the construction of projects associated with the theoretical buildout scenario would substantially alter the existing drainage pattern of the site or area, resulting in impacts to soil erosion. Impacts would be significant under the theoretical buildout scenario, as a result of the construction of large development projects located in erosion-prone areas. Impacts would be greater than impacts associated with the 2050 RTP/SCS, as a greater number of projects would be constructed. The 2050 RTP/SCS includes mitigation measures described in Section 4.10, Hydrology and Water Quality, which would reduce impacts associated with runoff and erosion to a less than significant level. These mitigation measures would apply under the theoretical buildout scenario. Although the potential for impacting runoff and soil erosion would be greater than under the 2050 RTP/SCS, impacts would be less than significant with mitigation.

All projects associated with the 2050 RTP/SCS in regional growth and transportation improvements must be evaluated for the potential for damage from flooding and other hazards. Existing planning and design standards and regulations, such as project-specific technical studies, existing and updated emergency evacuation plans, water tank safety requirements, and other similar and applicable safety design considerations, would serve to address and minimize the associated potential impacts. Although a greater number of projects would be constructed under the theoretical buildout scenario, and therefore a greater number of projects would be at risk from seiche, tsunami, or mudflow, existing standards and regulations would continue to apply. Therefore, impacts associated with hydrology and water quality would also be considered less than significant under the theoretical buildout scenario.

7.2.12 LAND USE

The extensive redevelopment required to achieve the theoretical buildout scenario could create substantial alteration to existing community character in terms of bulk, shading, and noise as existing buildings are removed and replaced with more dense or intense development. Additionally, the expansion of the land use into locations of undeveloped land that previously maintained areas with nonurban character would likely be inconsistent with the goals and policies of land use plans aimed at maintaining rural character and limiting urban types of development. As with impacts for the 2050 RTP/SCS, mitigation measures outlined in Section 4.11, Land Use, would reduce impacts under the theoretical buildout scenario, but there would be no assurance that impacts would not be reduced to a less than significant level. Therefore, impacts related to deterioration of community character due to changes in both urban and rural communities, as well as substantial conflicts with existing land use plans and policies, would remain significant and unavoidable. Due to the magnitude of growth under the theoretical buildout scenario and the lack of specific development projects and associated project-level mitigation, impacts related to land use and planning would be significant and unavoidable under the theoretical buildout scenario.

7.2.13 NOISE

The increase of noise from the construction related to the development required for the theoretical buildout scenario, as well as noise generated by the increased number of automobile, transit, and air trips from the associated population increase, would cause exposure of sensitive receptors to future noise levels that would exceed established standards. Increased noise related to construction activities and population growth would also cause a substantial increase in the existing ambient noise levels and would create land use incompatibilities associated with increased noise. Although mitigation measures outlined in Section 4.12, Noise, would reduce impacts, the magnitude of change in the level of residential and nonresidential development under the theoretical buildout scenario would result in significant and unavoidable impacts.

7.2.14 POPULATION AND HOUSING

To achieve the theoretical buildout scenario, there would be major changes in the overall level of housing and nonresidential development regionwide, much more than projected under the 2050 RTP/SCS scenario. The theoretical buildout scenario would induce substantially greater population growth as the population would increase. Greater levels of development and conversion to higher densities would lead to substantial displacement of residents as older existing residential units are replaced. These impacts would be greater than under the 2050 RTP/SCS and considered significant and unavoidable.

The theoretical buildout scenario would provide additional capacity for housing. Therefore, it is likely that the theoretical buildout scenario would not impede implementation of the RHNA allocation or the housing element of local jurisdictions. Impacts would be less than significant.

7.2.15 PUBLIC SERVICES, UTILITIES, AND ENERGY

Buildout of the region at the theoretical maximum would lead to considerably larger populations of residents and employees within the region, well beyond anticipated growth scenarios. This growth in population would require an increase of public services, which would in turn necessitate the construction of additional or improved public facilities. These new and upgraded facilities could cause significant environmental impacts in order to construct the facilities and services necessary to maintain service ratios, response times, or other performance objectives.

Additionally, all public utility planning has not been written in anticipation of the growth that would occur with the theoretical buildout condition. Almost all utility planning documents in the region rely heavily on population growth and development projection data provided by SANDAG and other agencies. No population growth analysis has projected the population within the region similar to that of the theoretical buildout scenario. As such, excessive amounts of electrical power, fuel, or other forms of energy would result. In addition, with increased population and development, there would be more demand for utilities under the theoretical buildout scenario and the construction of new or physically altered utilities could cause significant environmental impacts in order to maintain service ratios, response times, or other performance objectives. Due to the magnitude of change in the level of residential and nonresidential development under the theoretical buildout scenario and the lack of specific development projects and associated project-level mitigation, impacts to public services and utilities would be significant and unavoidable under the theoretical buildout scenario.

7.2.16 RECREATION

Assuming a constant level of maintenance, buildout of the region at the theoretical maximum would lead to considerably larger populations of residents and decreased parkland per capita. This situation would result in significant and unavoidable substantial deterioration of existing parks and recreation facilities, as it is unknown whether it would be financially or environmentally feasible to acquire new parkland or recreation facilities to maintain jurisdictional standards. If the expansion or construction of new recreation facilities were feasible, significant environmental impacts would occur as a result of construction practices. Mitigation measures outlined in Section 4.15, Recreation, would reduce construction-related impacts on a project level, which would continue to apply under the theoretical buildout scenario. Therefore, this impact would be reduced to a less than significant level with mitigation.

7.2.17 TRANSPORTATION AND TRAFFIC

The theoretical buildout scenario would substantially affect roadway volumes and intersection LOS, which would impact average commute time for work, non-work, and education trips; vehicle miles traveled; and emergency response times. Although the use of transit within the urban core area of the region would likely increase due to the increased density of the maximum buildout scenario, this increase in development and population density would likely have a significant adverse impact on transportation and traffic. Due to the magnitude of change in the level of residential and nonresidential development under the theoretical buildout scenario, impacts related to transportation and circulation would be greater than under the 2050 RTP/SCS and would be considered significant and unavoidable.

7.2.18 WATER SUPPLY

The theoretical buildout scenario would substantially affect water supply, as population growth would demand a much larger amount of water than the 2050 RTP/SCS or existing conditions. A greater amount of water would also be needed for construction of residential and nonresidential development, developed park space, and other necessary developments to accommodate this regional growth. Water supply is planned by water districts that rely on forecasted population growth. Regional water supply planning has not been based on the growth that would occur with the theoretical buildout condition. Therefore, population growth under the theoretical buildout scenario would increase the use of existing available water supplies or water treatment facilities such that water supplies or facilities would be inadequate to serve existing and projected future demand. Impacts would be significant and unavoidable.

This increased population growth would require or result in the construction of new water treatment or distribution facilities or the expansion of existing facilities to adequately meet projected demand or

capacity needs, the construction of which could cause significant environmental effects. Implementation of mitigation measures discussed in Section 4.17, Water Supply, would reduce impacts associated with the construction of water treatment facilities to a level less than significant through CEQA review of specific facilities. This mitigation would continue to apply under the theoretical buildout scenario. Therefore, impacts related to the construction of water supply facilities would be reduced to a less than significant level with mitigation.

7.3 SIGNIFICANT IRREVERSIBLE IMPACTS

Implementation of the 2050 RTP/SCS would result in permanent changes to the existing environment, which has been described throughout this EIR. While the 2050 RTP/SCS focuses development into existing urban areas and along existing or future transportation corridors, there will still be some conversion of undeveloped land to urbanized uses. These conversions are considered to be a permanent change and would occur directly through construction of development on undeveloped land. Land use changes and transportation network improvements would result in significant irreversible impacts to aesthetics and visual resources, including changes to existing community character and views. Future development projects associated with the 2050 RTP/SCS would result in a direct irreversible loss of native habitat that supports rare, threatened, or endangered species, and impacts to these resources would represent a significant and irreversible environmental change.

The development of currently undeveloped land and other land use changes would result in significant irreversible impacts to agricultural resources and forest lands, and the availability of known mineral resources. The 2050 RTP/SCS would substantially induce irreversible population growth. This growth would displace existing houses and businesses, and result in additional people that would be susceptible to noise impacts. As development occurs at urban edges, additional people and structures would be at risk from wildland fires. GHG emissions would substantially increase.

Development pursuant to the 2050 RTP/SCS land use policy would result in the irreversible consumption of nonrenewable resources. This use will have an incremental and irreversible effect on such resources. The irreversible commitment of limited resources is inherent in any development project or, in the case of the 2050 RTP/SCS, cumulative development projects. Resources anticipated to be irreversibly committed over the 40-year timespan of the 2050 RTP/SCS include, but are not limited to, lumber and other related forest products; sand, gravel, and concrete; petrochemicals; construction materials; steel, copper, lead, and other metals; and water. Development associated with the 2050 RTP/SCS represents a long-term commitment to the consumption of fossil fuel oil and natural gas. These increased energy demands relate to construction, lighting, heating, and cooling of residences and buildings, and construction and operation of transit systems.

7.4 ~~SIGNIFICANT UNAVOIDABLE SUMMARY OF IMPACTS~~ IMPACT CONCLUSIONS

Based on the analysis throughout Chapter 4.0 of this EIR, implementation of the 2050 RTP/SCS would result in significant and unavoidable environmental impacts in the following environmental issue areas shown in Table 7-2. Impacts are summarized in Table 7-2 and provided for each horizon year and project component (i.e., regional growth/land use change and transportation network improvements). It should be noted that significance conclusions for each environmental issue area/significance criteria can vary by horizon year. Therefore, some environmental issue areas/significance criteria may appear in more than one of the following impact categories: significant and unavoidable (SU), significant but mitigated (SM), less than significant (LTS). Significant and unavoidable impacts are called out in bold text. Impacts would be the same for 2020, 2035, and 2050, unless otherwise noted.

Table 7-2
Summary of Impact Conclusions

<u>Environmental Resource Impact</u>	<u>2020</u>		<u>2035</u>		<u>2050</u>	
	<u>Regional Growth/Land Use change</u>	<u>Transportation Network Improvements</u>	<u>Regional Growth/Land Use change</u>	<u>Transportation Network Improvements</u>	<u>Regional Growth/Land Use change</u>	<u>Transportation Network Improvements</u>
4.1 Aesthetics and Visual Resources						
<u>VIS-1</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>
<u>VIS-2</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>
4.2 Agricultural and Forest Resources						
<u>AG-1</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>
<u>AG-2</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>
<u>FR-1</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>
<u>FR-2</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>
4.3 Air Quality						
<u>AQ-1</u>	<u>SU</u>	<u>LTS</u>	<u>SU</u>	<u>LTS</u>	<u>SU</u>	<u>LTS</u>
<u>AQ-2</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>
<u>AQ-3</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>
<u>AQ-4</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>
<u>AQ-5</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>
4.4 Biological Resources						
<u>BIO-1</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>
<u>BIO-2</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>
<u>BIO-3</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>
<u>BIO-4</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>
4.5 Cultural Resources						
<u>CULT-1</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>
<u>CULT-2</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>
<u>PALEO-1</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>
4.6 Environmental Justice						
<u>EJ-1</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>
<u>EJ-2</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>
4.7 Geology, Soils, and Mineral Resources						
<u>GEO-1</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>
<u>GEO-2</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>
<u>GEO-3</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>	<u>SM</u>
<u>GEO-4</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>
<u>MR-1</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>	<u>SU</u>
4.8 Greenhouse Gas Emissions						
<u>GHG-1</u>	<u>LTS</u>	<u>LTS</u>	<u>SU</u>	<u>LTS</u>	<u>SU</u>	<u>SU</u>
<u>GHG-2</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>*</u>	<u>*</u>
<u>GHG-3</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>
4.9 Hazards and Hazardous Materials						
<u>HM-1</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>
<u>HM-2</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>
<u>HM-3</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>
<u>HM-4</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>
<u>HM-5</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>	<u>LTS</u>

Environmental Resource Impact	2020		2035		2050	
	Regional Growth/Land Use change	Transportation Network Improvements	Regional Growth/Land Use change	Transportation Network Improvements	Regional Growth/Land Use change	Transportation Network Improvements
HM-6	LTS	LTS	LTS	LTS	LTS	LTS
HM-7	LTS	LTS	LTS	LTS	LTS	LTS
HM-8	SU	SU	SU	SU	SU	SU
4.10 Hydrology and Water Quality						
WQ-1	LTS	LTS	LTS	LTS	LTS	LTS
WQ-2	SM	SM	SM	SM	SM	SM
WQ-3	LTS	LTS	LTS	LTS	LTS	LTS
WQ-4	LTS	LTS	LTS	LTS	LTS	LTS
WQ-5	LTS	LTS	LTS	LTS	LTS	LTS
4.11 Land Use						
LU-1	LTS	SU	LTS	SU	SU	SU
LU-2	LTS	SU	LTS	SU	SU	SU
4.12 Noise						
N-1	SU	SU	SU	SU	SU	SU
N-2	SU	SU	SU	SU	SU	SU
N-3	SU	SU	SU	SU	SU	SU
N-4	SU	SU	SU	SU	SU	SU
N-5	LTS	LTS	LTS	LTS	LTS	LTS
N-6	LTS	LTS	LTS	LTS	LTS	LTS
4.13 Population and Housing						
PH-1	SU	SU	SU	SU	SU	SU
PH-2	SU	SU	SU	SU	SU	SU
PH-3	LTS	LTS	LTS	LTS	LTS	LTS
4.14 Public Services, Utilities, and Energy						
PS-1	SM	LTS	SM	LTS	SM	LTS
US-1	SM	LTS	SM	LTS	SM	LTS
US-2	SM	SM	SM	SM	SM	SM
US-3	SM	LTS	SM	LTS	SM	LTS
US-4	LTS	LTS	LTS	LTS	LTS	LTS
US-5	SM	SM	SM	SM	SM	SM
4.15 Recreation						
REC-1	SU	LTS	SU	LTS	SU	LTS
REC-2	SM	LTS	SM	LTS	SM	LTS
4.16 Transportation and Traffic						
T-1	LTS	LTS	LTS	LTS	LTS	LTS
T-2	LTS	LTS	LTS	LTS	LTS	LTS
T-3	LTS	LTS	LTS	LTS	SU	SU
T-4	LTS	LTS	LTS	LTS	SU	SU
T-5	LTS	LTS	LTS	LTS	LTS	LTS
4.17 Water Supply						
WS-1	SU	LTS	SU	LTS	SU	SU
WS-2	SM	LTS	SM	LTS	SM	SM

~~**4.1 Aesthetics and Visual Resources**~~

~~**VIS 1** Block panoramic views or views of significant landscape features or landforms.~~

~~**VIS 2** Substantially degrade the character of an area.~~

~~**4.2 Agricultural and Forest Resources**~~

~~○ **AG 1** Convert FMMP designated farmland to non-agricultural uses.~~

~~○ **AG 2** Conflict with existing agricultural uses, Williamson Act contract lands, and lands designated under the California Farmland Conservancy Act.~~

~~○ **AG 3** Result in loss of forest land.~~

~~● **4.3 Air Quality**~~

~~○ Violate air quality standards or contribute substantially to an existing or projected air quality violation.~~

~~○ Conflict with or obstruct the implementation of applicable air quality plans.~~

~~○ Expose sensitive receptors to substantial pollutant concentrations.~~

~~○ Result in a cumulatively considerable net increase of emissions of nonattainment pollutants.~~

~~● **Biological Resources**~~

~~○ Impact any sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; or on federally protected wetlands.~~

~~○ Impact any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.~~

~~○ Impact the movement of any native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites.~~

~~● **Geology, Soils, and Mineral Resources**~~

~~○ Result in the loss of availability of known mineral resources.~~

~~● **Greenhouse Gas Emissions**~~

~~○ **GHG1** Increase GHG emissions. Significant and unavoidable impacts occur in horizon years of 2035 and 2050.~~

~~● **Hazards and Hazardous Materials**~~

~~○ Expose people or structures to a significant risk of loss, injury, or death involving wildland fires.~~

~~● **Land Use**~~

~~○ Directly or indirectly cause substantial deterioration of community cohesion or character, including substantial residential or business displacement.~~

~~○ Substantially conflict or impede the implementation of existing land use plans, including general plans, specific plans, and applicable regional plans.~~

~~● **Noise**~~

~~○ Expose persons to or generate noise levels in excess of standards established in local general plans or noise ordinances or applicable standards of other agencies.~~

- — Expose persons to or generate vibration levels in excess of applicable standards.
- — Cause a permanent substantial increase in ambient noise levels.
- — Cause a substantial temporary or periodic increase in ambient noise levels.
- — **Population and Housing**
- — Induce substantial population growth.
- — Displace existing housing or businesses.
- — **Public Services, Utilities, and Energy**
- — Be served by landfills with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- — **Recreation**
- — Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated.
- — **Transportation and Traffic**
- — Substantially increase average work trip travel time (3 minutes or greater) (2035 and 2050).
- — Substantially decrease the percentage of non-work related trips accessible within 15 minutes (2035 and 2050).
- — Substantially increase the congested vehicle miles travelled (LOS E and F) in peak periods (3 percent or greater) (2050).
- — **Water Supply**
- — Increase the use of existing available water supplies or water treatment and other facilities such that water supplies or facilities would be inadequate to serve existing and projected future demand.

Cumulatively considerable and unavoidable impacts would occur for the following resources: Visual Resources/Aesthetics; Agriculture and Forest Resources; Air Quality; Biological Resources; Geology, Soils, and Mineral Resources; GHG Emissions; Hazards and Hazardous Materials; Land Use; Noise; Population and Housing; Public Services and Utilities; Recreation; Transportation and Traffic; and Water Supply.

Mitigation measures included in this EIR are listed in Table ES-1. Even with implementation of mitigation measures, the above environmental impacts would remain significant and unavoidable.

~~7.5 SIGNIFICANT IMPACTS THAT CAN BE MITIGATED~~

Based on the analysis throughout Chapter 4.0 of this EIR, implementation of the 2050 RTP/SCS would result in the significant impacts that can be mitigated to a level less than significant in the following environmental issue areas:

- — **Biological Resources**
- — Conflict with the provisions of an adopted Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, state, or federal regulations, policies, ordinances, or plans.
- — **Cultural Resources and Paleontology**

- Cause a substantial adverse change in the significance of a cultural resource.
- Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.
- **Environmental Justice**
- **RESULT IN DISPROPORTIONATELY HIGH HUMAN HEALTH OR ENVIRONMENTAL IMPACTS.**
- **Geology, Soils, and Mineral Resources**
- Result in substantial soil erosion or the loss of topsoil.
- **Hydrology and Water Quality**
- Substantially alter the existing drainage pattern of the site or area
- **Public Services, Utilities, and Energy**
- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services.
- Require or result in the construction of new wastewater treatment facilities or the expansion of existing facilities to adequately meet projected capacity needs, the construction of which could cause a significant environmental effect.
- Require or result in the construction of new storm water drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.
- Require or result in the construction of new natural gas, electricity, or transportation fuel facilities or the expansion of existing facilities to adequately meet projected capacity needs, the construction of which could cause a significant environmental effect.
- **Recreation**
- Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.
- **Water Supply**
- New water treatment or distribution facilities or the expansion of existing facilities.

7.6 Effects Not Found to be Significant

Based on the analysis throughout Chapter 4.0 of this EIR, implementation of the 2050 RTP/SCS would result in less than significant impacts without mitigation in the following environmental issue areas:

- **Agricultural and Forest Resources**
- Result in the loss of timberland.
- **Air Quality**
- Expose a substantial number of people to objectionable odors.

- ~~Cultural Resources and Paleontology~~

- ~~Disturb any human remains.~~

- ~~Environmental Justice~~

- ~~Result in substantially fewer mobility benefits to environmental justice communities.~~

- ~~Geology, Soils, and Mineral Resources~~

- ~~Expose people or structures to potential substantial significant impacts, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, liquefaction, and landslides.~~

- ~~Locate projects on a geologic unit or soil that is unstable.~~

- ~~Locate projects on expansive soil.~~

- ~~Greenhouse Gas Emissions~~

- ~~Conflict with applicable GHG reduction plans.~~

- ~~Conflict with SB 375 GHG emission reduction targets.~~

- ~~Hazards and Hazardous Materials~~

- ~~Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.~~

- ~~Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.~~

- ~~Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.~~

- ~~Be located on hazardous materials sites.~~

- ~~Result in a safety hazard for people residing or working in the project area for projects located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport.~~

- ~~Result in a safety hazard for people residing or working in the project area for projects within the vicinity of a private airstrip or helipad.~~

- ~~Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.~~

- ~~Hydrology and Water Quality~~

- ~~Violate any water quality standards or waste discharge requirements.~~

- ~~Place within a 100-year flood hazard area structures that would impede or redirect flood flows.~~

- ~~Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.~~

- ~~Expose people or structures to a significant risk of inundation by seiche, tsunami, or mudflow.~~

- ~~Noise~~

- ~~Expose people residing or working in the project area to excessive noise levels for a project located within an airport land use plan or where such a plan has not been adopted within 2 miles of a public airport or public use airport.~~

~~○ Expose people residing or working in the project area to excessive noise levels for a project within the vicinity of a private airstrip.~~

~~● **Population and Housing**~~

~~○ Impede implementation of the regional housing share allocation, including any local jurisdiction's adopted housing element.~~

~~● **Public Services, Utilities, and Energy**~~

~~○ Cause noncompliance with federal, state, and local statutes and regulations related to solid waste.~~

~~● **Transportation and Traffic**~~

~~○ Substantially decrease the percentage of work and higher education trips accessible within 30 minutes in peak periods.~~

~~○ Impede times for emergency access and response.~~